

Shenandoah Community School District Board of Directors  
Shenandoah Administrative Board Room  
February 14, 2020 – 2:30 p.m.  
Special Meeting

Board Agenda

1. Call to Order
2. Roll Call and Determination of Quorum
3. Action Items
  - a. Motion to Rescind Action Item 8.a - Reject Bids from the February 10, 2020 board meeting in order to clarify language
    - i. Bid Package 1: General Construction; Building Crafts, Inc. \$853,000
    - ii. Bid Package 2: Site Work; Cornerstone Commercial Contractors, Inc. \$259,755
  - b. Motion to Rescind Action Item 8.b - Authorize Rebidding from the February 10, 2020 board meeting in order to clarify language
    - i. Bid Package 1: General Construction, and Bid Package 2: Site Work combined
    - ii. Bid Package 5: Electrical
  - c. Motion to Reject Bids from the January 23<sup>rd</sup> Bid Opening
    - i. Bid Package 1: General Construction; Building Crafts, Inc. \$853,000
    - ii. Bid Package 2: Site Work; Cornerstone Commercial Contractors, Inc. \$259,755
  - d. Motion to Authorize Rebidding from the January 23<sup>rd</sup> Bid Opening
    - i. Bid Package 1: General Construction, and Bid Package 2: Site Work combined
    - ii. Bid Package 5: Electrical
  - e. Approve Public Hearing Date Set for February 24, 2020 at 5:00 p.m. for Asbestos Abatement, Renovation Phase 2, and Bid Packages for General Construction & Site Work, and Electrical
  - f. Approve 95% Construction Design and Budget for Renovation Bid Documents – Phase 2
4. Informational Items
  - Special Meeting – February 24, 2020 at 5:00 P.M.
  - Next Regular Meeting – March 9, 2020 at 5:00 P.M.
5. Adjournment

PROJECT MANUAL FOR:

## **SHENANDOAH HIGH SCHOOL RENOVATION – PHASE 2**

SHENANDOAH COMMUNITY SCHOOL DISTRICT  
SHENANDOAH, IOWA

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**BID DOCUMENTS – Bid Package 8**

**February 17, 2020**

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**CARL A. NELSON & CO.**

**NELSON**

**Nelson Design, Inc.**

1815 Des Moines Ave.

Burlington, Iowa 52601

319-754-8415

319-753-2208 (fax)

[www.carlnelsonconstruction.com](http://www.carlnelsonconstruction.com)

Project # 19-023

**SECTION 00 01 05**

**PROJECT CONTACTS PAGE**

**ARCHITECT**

Nelson Design, Inc  
1815 Des Moines Ave.  
Burlington, Iowa 52601  
Contact Ellen McCulley  
Office 319-754-8415  
Direct 319-754-4016  
Email [emcculley@carlanelsonco.com](mailto:emcculley@carlanelsonco.com)

**CONSTRUCTION MANAGER**

Carl A. Nelson & Company  
1815 Des Moines Ave.  
Burlington, Iowa 52601  
Contact Cindy Larson  
Office 319-754-8415  
Direct 319-754-6037  
Email [clarson@carlanelsonco.com](mailto:clarson@carlanelsonco.com)

**END OF SECTION 00 01 05**

**SECTION 00 01 07**  
**SEALS AND SIGNATURES**

**END OF SECTION 00 01 07**

## SECTION 000110

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Document 001005	Notice of Public Hearing
Document 002113	Instructions to Bidders
Document 002600	Substitution Request Form
Document 003126	Existing Hazardous Material Information Asbestos Report
Document 004100	Bid Form Resident Bidder Status Form Certification of Compliance with Iowa Code Section 692A.113 Sample Bid Bond Form
Document 005200	Agreement Forms AIA A132 Document Agreement Between Owner and Contractor, Construction Manager as Advisor Edition
Document 007200	General Conditions AIA Document A232-2009 General Conditions of the Contract for Construction, Construction Manager as Advisor Edition

#### **DIVISION 01 – GENERAL REQUIREMENTS**

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Section 064023 Interior Architectural Woodwork

**DIVISION 08 – OPENINGS**

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SECTION 00 10 01

NOTICE OF BID LETTING

**CONTRACTORS/SUPPLIERS/VENDORS: NOTICE OF PUBLIC BID LETTING FOR THE SHENANDOAH COMMUNITY SCHOOL DISTRICT, SHENANDOAH HIGH SCHOOL RENOVATION PHASE 2, SHENANDOAH, IOWA AND THE TAKING OF BIDS THEREFORE.**

**NOTICE IS HEREBY GIVEN:** BIDS FOR THE SHENANDOAH COMMUNITY SCHOOL DISTRICT FOR THE SHENANDOAH HIGH SCHOOL RENOVATION PHASE 2 WILL BE ACCEPTED FOR REVIEW AND CONSIDERATION.

Sealed bids for the Shenandoah Community School District, Shenandoah High School Renovation - Phase 2 will be received before 3:00 p.m., CST according to the designated clock in the District Administrative Office on March 4, 2020, at the Office of the Superintendent, 304 West Nishna Road, Shenandoah, IA 51601, – Attention: Dr. Kerri Nelson, Superintendent, Shenandoah Community School District. **The Proposals will be publicly opened and read by the Construction Manager shortly after 3:00 p.m., March 4, 2020, at the Shenandoah Community School District, Administrative Board Room.** Neither the District nor its agents will assume liability for the inability of a bidder to submit a bid in a timely manner. Bidders bear full and complete responsibility for the timely submission of such bid. Bids received after the deadline will be rejected.

Owner will issue an authorization letter and tax exemption certificate to the contractor and/or subcontractors for the purchase of building materials, supplies, and equipment to be incorporated into the work, for this project only. DO NOT INCLUDE THIS SALES TAX ON YOUR BID FORM.

No bid may be withdrawn for a period of 45 calendar days after the date of the scheduled closing time for the receipt of bids.

**Scope of work includes, but is not limited to the following:** The work includes improvements to the existing Shenandoah High School facility located at 1000 Mustang Drive, Shenandoah, Iowa 51601. The work will include new cabinets, new flooring, new paint, and new doors through-out the school. The concrete parking lot will also be repaired.

**Architect:**  
Nelson Design, Inc.  
1815 Des Moines Avenue  
Burlington, Iowa 52601  
Telephone: 319-754-8415

**Construction Manager as Agent:**  
Carl A. Nelson & Company  
1815 Des Moines Avenue  
Burlington, Iowa 52601  
Telephone: 319-754-8415

**Pre-Bid Meeting and Tour:** A pre-bid meeting will be held on Wednesday, February 19, 2020 at 3:30 p.m. at 1000 Mustang Drive, Shenandoah, Iowa 51601, in the lower level of the auditorium, May Room. A tour will follow the meeting. Attendance is recommended but is not mandatory.

**Contracts:**

Construction work will be provided through a single prime contract with the Shenandoah Community School District. Phase 1 work will occur concurrently.

Bids must be on a lump sum basis. Mobilization of the site is to start on May 18, 2020 with work to commence on or about June 3, 2020 and be substantially complete in accordance with the Construction Manager's Master Schedule contained in the Project Manual.

**Schedule**

Notice of Award will be issued within 45 days of the receipt of the bids.

Construction Period: Approximately 3 months

### **Examination of the Documents**

The Bid Documents may be examined at the following: online websites for iSqFt <https://go.isqft.com/IA.html> or Beeline and Blue <https://www.beelineandblue.com/eplanroom/>.

Bid Documents may be ordered by contacting Beeline and Blue which is located at 2507 Ingersoll Avenue, Des Moines, IA 50312. Contact Bill Pitts ([bill@beelineandblue.com](mailto:bill@beelineandblue.com)) or by phone: 515-244-1611. There will be a \$150 refundable deposit required on the plans and specifications. Unsuccessful bidders must return their drawings and specifications to Beeline and Blue or Carl A. Nelson & Company, 1815 Des Moines Ave., Burlington, Iowa 52601 in good condition, and within 14 days of the award of contracts in order to receive a refund of their deposit.

### **Bidding Requirements**

Each Bid shall be submitted on the Bid Form provided with the Bidding Documents. No oral, facsimile or telephonic bids or modifications will be considered. Bids shall be addressed and delivered to the Shenandoah Community School District Administration Office, 304 West Nishna Road, Shenandoah, IA 51601 — Attention Dr. Kerri Nelson, Superintendent, in sealed envelopes marked with the Project Name, Bid Package #8 and name and address of Bidder. All bids shall be sealed and plainly marked. Any alteration of the Bid Form may be cause for rejection of the bid. A signed copy of the Bidder Status Form shall be included with the bid.

All bids shall be accompanied by a bid security in a separate sealed envelope, in the amount not less than five percent (5%) of the bid submitted, as allowed by Section 26.14A of the Iowa Code. The lowest responsible bidder(s) will be required to furnish satisfactory Certificates and Policies of Insurance, Labor and Material Payment Bond and Performance Bond in the amount of 100% of the contract amount, and any other documents as stated in the Construction Documents.

### **Owner's Right to Reject Bids**

The Shenandoah Community School District reserves the right to reject any and all bids, to waive informalities and technicalities, and to enter such contracts as it deems in the best interest of the District.

Bidders shall be prepared to submit a performance bond and payment bond conditioned on the faithful performance of the contract. Out-of-state bidders shall be prepared to submit an Out-of-State Contractor Bond to the Iowa Division of Labor in accordance with Chapter 91C of the Code of Iowa.

By virtue of statutory authority, a preference will be given to products and provisions grown and produced within the State of Iowa, and to Iowa labor to the extent lawfully required under Iowa law.

Iowa law provides that on public improvements a resident bidder shall be allowed preference as against a nonresident bidder from a state or foreign country which gives or requires a preference to bidders from that state or foreign country. The preference so allowed shall be equivalent to the preference given or required by the state or foreign country in which the nonresident bidder is a resident.

It is the intent of the Owner to award a contract or multiple contracts to the lowest responsible, responsive bidder provided the bid has been submitted in accordance with the bidding requirements. The Owner reserves the right to waive informalities or irregularities. The Owner reserves the right to reject any or all bids.

Published by order of the School Board of the Shenandoah Community School District, Shenandoah, Iowa.

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Dr. Kerri Nelson, Superintendent  
Shenandoah Community School District



**SECTION 00 10 05**

**NOTICE OF PUBLIC HEARING**

NOTICE IS GIVEN: The Shenandoah Community School District Board of Directors will meet at the Shenandoah District Office, Administrative Board Room, located at 304 West Nishna Road, on February 24, 2020 at 5:00 PM local time, whereat said Board of Directors will hold a hearing and may resolve to adopt plans, specifications, form of contract, and estimated cost of the following improvements:

- **Shenandoah High School Renovation - Phase 2**
- **Shenandoah High School Asbestos Abatement**

Scope of work includes, but is not limited to the following:

The work includes improvements to the existing Shenandoah High School facility located at 1000 Mustang Drive, Shenandoah, Iowa 51601. Renovation - Phase 2 is to include reconfiguration to the Family Consumer Science classroom. The following finishes will be upgraded throughout the school including new doors, new paint, and new flooring will be updated. The concrete parking lot will also be repaired.

The asbestos abatement contract is to include abatement of items being disturbed during the Phase 1 and Phase 2 Renovations including but not limited to removal of asbestos containing material such as pipe insulation, specified floor tile and mastic.

At said hearing, the Board of Directors will consider the proposed plans, specifications, form of contract and estimate cost for said project, the same being on file in the office of Superintendent, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said Board will also receive and consider any comments/objections to said plans, specifications and form of contract or to the estimated cost of said improvements made by any interested party.

Given by order of the Board of Directors of the Shenandoah Community School District.

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Dr. Kerri Nelson, Superintendent  
Shenandoah Community School District

**SECTION 00 21 13  
INSTRUCTIONS TO BIDDERS**

**PART 1 – GENERAL**

To be considered, Bids shall be made in accordance with these Instructions to Bidders.

**1.01 DEFINITIONS**

- A. **Definitions set forth** in General Conditions of Contract for Construction, 2009 Construction Manager – Adviser Edition, per Section 00 72 00.
- B. **ARCHITECT** refers to Nelson Design, Inc.
- C. **OWNER** refers to Shenandoah Community School District of Shenandoah, Iowa.
- D. **CONSTRUCTION MANAGER (CM)** refers to Carl A. Nelson & Company.
- E. **BIDDING DOCUMENTS** include Instructions to Bidders, Bid Form, other sample bidding and contract forms, the Contract Documents, and any Addenda issued.
- F. **ADDENDA** are written or graphic instruments issued prior to execution of Contract which modify or interpret Bidding Documents. Addenda will become part of Contract Documents.
- G. **BID** refers to complete and properly signed proposal to do Project or designated portion thereof for sums stipulated therein, submitted in accordance with Bidding and Contract Documents.
- H. **BASE BID** refers to sum stated in Bid for which Bidder offers to perform the Work.
- I. **ALTERNATE** is an amount stated in Bid to be added and or deducted from Base Bid if corresponding change in Work, as described in Bidding Documents, is accepted.
- J. **UNIT PRICE** is an amount stated in Bid as a price per unit of measure for materials, equipment or services, or a portion of Work as described in Bidding Documents.
- K. **BIDDER** refers to a person or entity invited to submit a Bid. Any reference herein to Prime Bidder or Prime Contractor is to mean Bidder or Contractor, respectively.
- L. **SUB-BIDDER** refers to person or entity that submits a Bid to a Bidder for materials, equipment or labor for a portion of the Work.

**1.02 PROCUREMENT OF DOCUMENTS**

- A. **Procurement of Documents by Bidders:** (See Section Notice of Bid Letting.)

**1.03 EXAMINATION OF DOCUMENTS AND SITE**

- A. **Examination of Documents:** Bidders shall carefully examine entire contents of Contract Documents prepared for the Work to become thoroughly familiar with all requirements.

The Plans for this improvement and the Specifications accompanying them shall be considered

as a whole, and anything shown or called for in one and omitted in the other is as binding as if called for or shown by both. Figure dimensions shall in all cases be used in preference to scale dimensions. Any work not herein specified which may be fairly implied as included in this improvement shall be done by this Contractor without extra pay.

- B. Examination of the Site: Bidders should visit construction site to obtain first-hand knowledge of existing conditions, and conditions relative to the Work to be performed.
- C. Additional Compensation: Contractors shall not receive extra payments for conditions, which can be determined by examining site and Contract Documents.
- D. Pre-Bid Conference:
  - 1. **Time and location** are as stipulated in the Advertisement for Bid.
  - 2. **Attendance:**
    - a. Contractors
    - b. Subcontractors and suppliers
    - c. Owner
    - d. Architect/engineers
    - e. Construction Manager
  - 3. **Tentative Agenda:**
    - a. General overview of owner's team
    - b. General overview of documents
    - c. General overview of schedule
    - d. General overview of site logistics plan
    - e. Questions and answers.

#### 1.04 RESOLUTION OF DISCREPANCIES AND AMBIGUITIES

- A. **General Requirements:** Submit written questions concerning Bidding Documents and existing site conditions at the construction site to the CM. Fax questions to Carl A. Nelson & Company, Attn: Cindy Larson @ fax number 319-753-2208 or email [clarson@carlanelsonco.com](mailto:clarson@carlanelsonco.com). Replies will be issued to Bidders and Plan Rooms in the form of an Addendum to the Drawings and Specifications, and will become part of the Contract. The Architect, CM and Owner will not be responsible for oral clarifications. In no case shall a Bid be submitted in uncertainty. Questions received less than 7 business days before bid opening may not be answered. Sub-Bidders are responsible for contacting Bidders prior to bid date for Addenda relating to their work.

#### 1.05 SUBSTITUTION OF MATERIALS

- A. General Requirement: To obtain approval to use unspecified products, Bidders shall have written requests submitted not less than 10 work days before bid date. Requests received after this time will not be considered. Requests shall be submitted to the CM in accordance with Specification Section 01 25 00, Substitution Request Form. If the product is acceptable, the Architect will approve the substitution and notice of approval will be noted in an Addendum issued to "Plan Rooms" and Bidders on record.

#### 1.06 PREPARATION OF BIDS

- 1. BIDDING PROCEDURE
  - a. Bids shall be submitted on unaltered Bid Form furnished in the Project Manual.

- b. Each Bid shall include the legal name of the Bidder, and shall show whether the Bidder is a corporation, a partnership, sole proprietor, or a joint venture.
    - i. Corporation – Signature of a duly authorized signing officer, their capacity in which the signing officer acts along with the corporate seal affixed to page.
    - ii. Partnership – Signature of all partners in the presence of a witness who will also sign. Affix seal.
    - iii. Joint Venture – Each party to the Joint Venture shall execute the Bid Form under their respective seals similar to the requirements of Partnership.
    - iv. Sole Proprietor – Signature of Sole Proprietor in the presence of a witness who will also sign.
  - c. Fill in all blank spaces for bid prices in ink or typewritten words, and submit one (1) copy. **No qualified or segregated bids will be accepted.**
  - d. Bid shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A Bid submitted by an agent shall have a current Power of Attorney attached certifying the agent’s authority to bind the Bidder.
  - e. Bid shall be submitted in an opaque, sealed envelope bearing on the outside the Bid Package #, Bidder’s name, address and the Project’s name.
  - f. Bid Security shall be enclosed in a separate opaque envelope bearing on the outside the Bidder’s name, address, Project’s name and the words “BID SECURITY”.
  - g. Bids submitted by mail shall be submitted in a separate envelope with the words “BID ENCLOSED” on the outside.
  - h. Bids shall be deposited at the designated location prior to the time and date of receipt of Bids indicated in the Advertisement for Bids. Bids received after the time and date for receipt of Bids will not be considered for award.
2. BID SECURITY
- a. Bid shall be accompanied by a Bid Bond, AIA A310-2010, or a Cashier’s check of a sum no less than five (5) percent of Bid Sum/Price.
  - b. Endorse Bid Bond in name of Owner as obligee, signed and sealed by principal and surety authorized to do business in the State of Iowa.
  - c. Bid Bond of accepted Bidder will be returned after delivery to the Owner of the required Payment and Performance Bond by the accepted Bidder.
3. PERFORMANCE AND PAYMENT BONDS
- a. A Performance and Payment Bond in the amount of 100 percent of the Contract Sum shall be submitted in duplicate to the Construction Manager, together with the executed Owner-Contractor Agreement within seven days after the award of the Contract. Such bonds shall be issued by a surety company acceptable to the Owner and properly licensed in the State of Iowa, and shall be on AIA Document A312.

**1.07 MODIFICATION AND WITHDRAWAL OF BIDS**

A. General Requirements:

- 1. A Bid may not be modified, withdrawn, or canceled by Bidder, without consent of Owner, during the 45 day period following time and date designated for receipt of Bids, and each Bidder so agrees in submitting its Bid.
- 2. Prior to time and date designated for receipt of Bids, a Bid submitted may be modified or withdrawn by notice to party receiving Bids at place designated for receipt of Bids. Such notice shall be in writing over signature of Bidder or by facsimile; if by facsimile, written confirmation over signature of Bidder shall be mailed and postmarked on or before date and time set for receipt of Bids. A change shall be so worded as not to reveal amount of original Bid.

3. Withdrawn Bids may be resubmitted up to date and time for receipt of Bids, provided that they are fully in conformance with these Instructions to Bidders.

#### **1.10 DISQUALIFICATION OF BIDDERS**

- A. **General Requirements:** Owner reserves the right to accept or reject any or all Bids, or parts of Bids, and to waive formalities or informalities therein. For the purpose of determining the successful Bidder in the consideration of all Bids submitted, Owner reserves the right to accept or reject any or all alternates in any order as may appear in the best interests of the Owner. Owner reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of Bidder.

#### **1.11 EXECUTION OF CONTRACT**

- A. **Qualifications of Bidders:** Bidders shall be prepared, if so requested by Owner, to present evidence of his experience, qualifications and financial ability to carry out terms of the Contract.
- B. **Withdrawal of Bids:** Bid may not be withdrawn for a period of 45 days after Bids are received and opened.

#### **1.12 SALES TAX**

##### **A. Payment of Sales Tax:**

1. The Owner shall furnish Contractor and all lower tier subcontractors with an Exempt Sale Certificate Form for items incorporated into the Work and considered by State of Iowa to be exempt from Sales Tax. Taxpayer identification numbers will be required from all companies in order to issue the Exempt Sale Certificate.
2. This Exempt Sale Certificate does not apply to:
  - a. Purchase of materials to be used but not incorporated into the Contract work, including but not limited to concrete form lumber, scaffolding, etc.
  - b. Purchase or rental of machinery, equipment, or tools owned or leased by Contractor and used in performing the work.

#### **1.13 EVALUATIONS OF BIDS**

- A. **Voluntary Alternates:** Voluntary alternates are encouraged but will not be considered in the determination of low responsive bidder.
- B. **Consideration of Bids:** All properly identified bids and properly submitted bids received on time will be opened publicly and will be read aloud. An abstract of the bids will be made available to all bidders.

Shenandoah Community School District shall have the right to reject any and all bids, reject a bid not accompanied by the required check or security, reject a bid which is in any way incomplete or irregular, and to waive informalities.

Shenandoah Community School District will award the contract to the lowest responsible bidder, which will be based on factors pertinent to the matter, which may include the following:

1. The bidder's adherence to all conditions and requirements of the bid specifications.
2. The total bid price.
3. The bidder's general reputation and experience.
4. Evaluation of the bidder's ability to service the Shenandoah Community School District.
5. Prior knowledge of and experience with the bidder.
6. The needs and requirements of the Shenandoah Community School District.
7. The bidder's ability to meet delivery requirements.
8. All maintenance costs and warranty provisions.

***Unless otherwise stated in the specifications, the Shenandoah Community School District reserves the right to award the contract in whole or in part, whichever is in the best interests of the Shenandoah Community School District.*** All tied bids shall be resolved in a manner, which is in the best interests of Shenandoah Community School District. Shenandoah Community School District reserves the right to waive informalities in the bid and to award to the bidder the Shenandoah Community School District determines is in the Shenandoah Community School District's best interest.

- C. Examination of Bids:** All bids submitted shall be made available for examination by interested parties, immediately following the bid opening. Each interested party is requested to initial each page reviewed, indicating that the Proposal was examined.

All bids will be placed in the custody of the Shenandoah Community School District until the Contract for the project has been awarded.

- D.** The Contractor shall comply with Iowa Code 692A.113, and shall certify that it is not managed, operated or owned by a person who is a registered sex offender convicted of a sex offense against a minor. Contractor shall also prohibit any employee who is such a sex offender from being on Owner's school property. The Contractor shall not permit any Subcontractor, Vendor or Supplier which is owned, managed or operated by a sex offender convicted of a sex offense against a minor, or any such sex offender employee of any of them to be present on Owner's school property. The Contractor shall further acknowledge and certify services provided under this contract comply with Iowa Code 692A.113, and shall execute and deliver a copy of "Certificate of Compliance" within ten (10) days of the execution of the Agreement or before any Company workers are on the Project site.

END OF SECTION 00 21 13

**SECTION 01 25 00**  
**SUBSTITUTION REQUEST FORM**

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

Specified Item: \_\_\_\_\_  
                            Section    Page    Description

The undersigned requests consideration of the following product substitution:

**PROPOSED SUBSTITUTION:** \_\_\_\_\_

1. Confirm no changes will be required to the Contract Documents for its proper installation. \_\_\_\_\_
2. Description of changes to the Contract Documents that the substitution will require for its proper installation. \_\_\_\_\_

The undersigned states that the following paragraphs, unless modified by attachments, are correct:

1. The proposed substitution does not affect dimensions shown on the drawings.
2. No changes to the building design, engineering design, or detailing are required by the proposed substitution.
3. The proposed substitution will have no adverse effect on other trades, the construction schedule, or specified warranty requirements.
4. No additional maintenance is required by the proposed substitution.

The undersigned further states that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified item.

Submitted by: \_\_\_\_\_

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

Company: \_\_\_\_\_

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

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

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

**For use by Architect/Project Engineer:**

Approved

Approved as noted

Not Approved

Received too late

Remarks

**END OF SECTION 01 25 00**

## SECTION 00 31 26

### EXISTING HAZARDOUS MATERIAL INFORMATION

#### PART 1 - GENERAL

##### 1.1 EXISTING HAZARDOUS MATERIAL INFORMATION

- A. This Document with its referenced attachment is part of the Procurement and Contracting Requirements for Project. They provide Owner's information for Bidders' convenience and are intended to supplement rather than serve in lieu of Bidders' own investigations. They are made available for Bidders' convenience and information, but are not a warranty of existing conditions. This Document and its attachments are not part of the Contract Documents.
- B. An existing hazardous materials report entitled "NESHAP PRE-RENOVATION ASBESTOS SURVEY" for the Shenandoah High School Renovation projects and prepared by ATC dated February 5, 2020, is available for viewing as appended to this Document.
- C. Related Requirements:
  - 1. Document 002213 "Instructions to Bidders" for the Bidder's responsibilities for examination of Project site and existing conditions.

END OF SECTION 00 31 26





ENVIRONMENTAL • GEOTECHNICAL  
BUILDING SCIENCES • MATERIALS TESTING

N E S H A P P R E - R E N O V A T I O N A S B E S T O S  
S U R V E Y

**PREPARED FOR:**

Shenandoah Community School District  
304 West Nishna Road  
Shenandoah, Iowa 51601

**PROJECT LOCATION:**

Shenandoah High School  
1000 Mustang Drive  
Shenandoah, Iowa 51601

Project Date(s): January 27-29, 2020

Report Date: February 5, 2020

ATC Project ID: 204BS02862

ATC Group Services LLC  
11117 Mockingbird Drive  
Omaha, Nebraska 68137

February 5, 2020

Shenandoah Community School District  
304 West Nishna Road  
Shenandoah, Iowa

Re: NESHAP Pre-Renovation Asbestos Survey  
Shenandoah High School Renovations – Phase 2  
1000 Mustang Drive  
Shenandoah, Iowa 51601  
ATC Project Number: 204BS02862

ATC Group Services, LLC (ATC) is pleased to submit the attached NESHAP Pre-Renovation Asbestos Survey conducted at the above-referenced site. This report includes procedures, methodologies and analytical laboratory results.

ATC appreciates the opportunity to perform these services for Shenandoah Community School District, and we look forward to working with you in the future. If you need any assistance with the implementation of the recommendations contained in this report, please feel free to give us a call at (402) 697-9747 and we will respond promptly to your needs.

Sincerely,

**ATC GROUP SERVICES LLC**



Johnny Thor  
Iowa Inspector

**T A B L E O F C O N T E N T S**

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APPENDIX B      INSPECTOR ACCREDITATIONS

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**N E S H A P   P R E - R E N O V A T I O N  
A S B E S T O S   S U R V E Y**

Shenandoah High School  
1000 Mustang Drive  
Shenandoah, Iowa 51601  
ATC Project Number: 204BS02862

### **1.0 SCOPE OF SERVICES**

The purpose of this project was to perform a NESHAP Pre-Renovation Asbestos Survey at the above-referenced property for Phase 2 renovations.

ATC Group Services LLC (ATC) provided a representative asbestos survey at the identified building in accordance with the referenced agreement and as outlined below:

1. Review any existing asbestos reports relating to the site, if available.
2. Survey the site building(s), as limited to areas identified by Carl A Nelson documents for the upcoming Phase 2 renovations as identified during the RFP walk through and RFP documents.
3. Identify accessible suspect asbestos-containing materials (ACM) in accordance with the USEPA National Emission Standard for Hazardous Air Pollutants (NESHAP), (ref.: 40 CFR, Part 61).
4. Collect and analyze bulk samples of suspect materials.
5. Quantify any asbestos-containing materials and record location.

### **2.0 ASBESTOS SURVEY REPORT**

On January 27-29, 2020, the site located at 1000 Mustang Drive in Shenandoah, Iowa, was inspected for asbestos-containing building materials by inspector Johnny Thor of ATC and Jerod Frost. Mr. Thor has completed the requisite training for asbestos accreditation as an inspector at a state approved training provider under TSCA Title II. Mr. Thor's AHERA accreditation and license is in the Appendix.

The site was visually inspected for the presence of suspect asbestos-containing materials (ACM). Materials that were hidden, not accessible, or when sampled would damage the integrity of the structure, were not sampled as part of this survey. Materials visibly identified as non-asbestos (fibrous glass, foam rubber, wood, etc.) were not sampled. The asbestos survey consisted of three basic steps: **1)** a visual inspection of the proposed site; **2)** a determination of homogeneous areas with suspect surfacing, thermal system insulation, and miscellaneous materials; and **3)** sampling accessible, friable and non-friable, suspect materials.

## 2.1 Regulation Review

The U.S. EPA qualifies asbestos-containing materials (ACM) as materials with an asbestos content greater than 1%. According to Iowa OSHA, ACM is any material found to contain asbestos, regardless of its concentration, and shall be regulated as hazardous waste. The following definitions are taken from Section 61.141 of Subpart M, Part 61 of Title 40: Protection of Environment of the Code of Federal Regulations (CFR).

- “Category I non-friable asbestos-containing material (ACM)” is defined as asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy (PLM).
- “Category II non-friable ACM” is defined as any material, excluding Category I non-friable ACM, containing more than 1% asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, PLM that, when dry, *cannot* be crumbled, pulverized, or reduced to powder by hand pressure.
- “Friable asbestos material” is defined as any material containing more than 1% asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, PLM that when dry, *can* be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10% as determined by a method other than point counting by PLM, verify the asbestos content by point counting using PLM.

## 2.2 Homogeneous Areas

Prior to sampling, homogeneous areas were identified in order to facilitate a sampling strategy. A homogeneous sampling area can be described as one or more areas with suspect material similar in appearance and texture that have the same installation date and function. The actual number of samples collected from each homogeneous sampling area may vary, dependant upon material type and the professional judgment of the inspector.

## 2.3 Sampling Strategy

The sampling strategy incorporated AHERA requirements, quantities of suspect material, and the inspector’s judgment to aid in the identification of suspect asbestos-containing materials. ATC’s sampling strategy was to identify and collect accessible suspect asbestos-containing materials (ACM) in accordance with the USEPA National Emission Standard for Hazardous Air Pollutants (NESHAP), (ref.: 40 CFR, Part 61). If the analytical results indicated that all the samples collected per homogeneous area did not contain asbestos, then the homogeneous area (material) was considered non-asbestos-containing. However, if the analytical results of one or more of the samples collected per homogeneous area indicated that asbestos was present in quantities greater than one percent

asbestos (as defined by EPA), all of the homogeneous area (material) was treated as an asbestos-containing material regardless of any other analytical results. Materials which were visually determined to be non-asbestos (i.e. fibrous glass, foam rubber, etc.) by the accredited inspector were not required to be sampled. Actual collection of a bulk asbestos sample involves physically removing approximately one square inch (1 in<sup>2</sup>) of material and placing it in an airtight sample container. Sample containers were marked with a unique identification number, which was documented in the field notes.

## 2.4 Suspect Asbestos-Containing Materials

The following table contains a list of the sampled accessible building materials suspected of containing asbestos and that may be impacted by the renovation work:

TABLE 1: SUSPECT BUILDING MATERIALS		
MATERIAL	LOCATION	SAMPLE NUMBER
6" TSI Mudded Fitting (painted green)	Boiler Room D107	1
6" TSI Mudded Fitting (painted blue)	Boiler Room D107	2
6" TSI Mudded Fitting (painted yellow)	Boiler Room D107	3
Plaster Ceiling (gray)	Men's/Women's Locker Room	4
Plaster Ceiling (gray)	Men's/Women's Locker Room	5
Plaster Ceiling (gray)	Men's/Women's Locker Room	6
2'x2' Ceiling Tile (white)	Room B134/Throughout School	7
2'x2' Ceiling Tile (white)	Room B134/Throughout School	8
2'x2' Ceiling Tile (white)	Room B134/Throughout School	9
4" Baseboard (black) w/Glue (tan)	Corridor B131	10
12" Floor Tile (cream) w/Mastic (black/yellow)	Corridor B131	11
12" Floor Tile (tan marble) w/Glue (yellow)	B119 Top Layer	12
Floor Tile (gray) w/Mastic (black)	B119 Bottom Layer	13
3" Baseboard (black) w/Mastic (brown)	B119/Throughout	14
12" Floor Tile (tan) w/Mastic (black)	B119/Main Tile in all Classrooms	15
12" Floor Tile (tan marble) w/Mastic (black)	B134 Top Layer near Windows	16
12" Floor Tile (tan) w/Mastic (black)	B135 Main Tile	17
12" Floor Tile (tan) w/Mastic (black)	B132 Physical Science Hallway	18
12" Floor Tile (beige w/blue spots) w/Glue (brown)	B145 Main Tile	19
Carpet Glue (brown)	Lobby A101	20
4" Baseboard (gray) w/Glue (brown)	A108 Orchestra Pit	21
Wallpaper (tan)	Lobby A101, Bathrooms	22
Wallpaper (blue)	Lobby A101, Bathrooms	23
12" Floor Tile (tan) w/Mastic (black)	Main Hallways Original	24
Sink Undercoat (gray)	Home Economics R. B119	25
12" Floor Tile (beige) w/Mastic (black)	R. B120, B132 Physical Science	26

<b>TABLE 1: SUSPECT BUILDING MATERIALS</b>		
<b>MATERIAL</b>	<b>LOCATION</b>	<b>SAMPLE NUMBER</b>
Caulk (gray)	R. B120 Near Floor Exterior Wall	27
12" Floor Tile (white w/blue spots) w/Glue (tan)	R. B145 & B143	28
12" Floor Tile (tan w/brown streaks) w/Mastic (black)	Corridor D-126 (not C-124)	29
Sink Caulk (gray/white)	R. B150 Bathrooms	30
Wall Caulk (gray)	Vestibule B100	31
Floor Caulk (gray)	Vestibule B100	32

The following table is a summary of the suspect asbestos-containing materials that have been determined, through laboratory analysis, to contain asbestos:

<b>TABLE 2: ASBESTOS - CONTAINING MATERIALS</b>				
<b>MATERIAL</b>	<b>LOCATION</b>	<b>SAMPLE NUMBER</b>	<b>APPROX. QUANTITY</b>	<b>ASBESTOS CONTENT</b>
6" TSI MF (painted green)	Boiler Room D107	1	~100 fittings in Boiler room	60% Chrysotile
6" TSI MF (painted blue)	Boiler Room D107	2		20% Chrysotile
6" TSI MF (painted yellow)	Boiler Room D107	3		70% Chrysotile
12" Floor Tile Mastic (black/yellow)	B130A Vestibule	11-Mastic	50 SF	Tile – Negative Mastic - 4% Chrysotile
12" Floor Tile Mastic (black)	B119 Bottom Layer	13-Mastic	See drawings	Tile – Negative Mastic – 5% Chrysotile
Cove Base Mastic (brown)	B119 (Home Ec Room)	14-Mastic	225 LF	Mastic - <1% Chrysotile
12" Floor Tile (tan) w/Mastic (black)	B119 Main Tile in All Classrooms	15	See drawings	Tile – 3% Chrysotile Mastic – 4% Chrysotile
12" Floor Tile Mastic (black)	B134 Top Layer	16-Mastic	See drawings	Tile – Negative Mastic – 4% Chrysotile
12" Floor Tile (tan) w/Mastic (black)	B135 Main Tile	17	See drawings	Tile – 3% Chrysotile Mastic – 4% Chrysotile
12" Floor Tile (tan) w/Mastic (black)	B132 Physical Science	18	See drawings	Tile – 3% Chrysotile Mastic – 5% Chrysotile
12" Floor Tile (tan) w/Mastic (black/yellow)	Main Hallways Original	24	See drawings	Tile – 3% Chrysotile Mastic – 3% Chrysotile
Sink Undercoat (gray)	Home Economics R. B119	25	10 SF	10% Chrysotile

**TABLE 2 : ASBESTOS - CONTAINING MATERIALS**

MATERIAL	LOCATION	SAMPLE NUMBER	APPROX. QUANTITY	ASBESTOS CONTENT
12" Floor Tile Mastic (black)	R. B120 near Floor Exterior Wall	26-Mastic	See drawings	Tile – Negative Mastic – 5% Chrysotile
12" Floor Tile (tan w/brown streaks) w/Mastic (black/yellow)	Corridor D-126 (not C-124)	29	See drawings	Tile – 3% Chrysotile Mastic – 5% Chrysotile

SF = Square Feet, LF = Linear Feet

## 2.5 Laboratory Analytical Results

Bulk samples were analyzed by EMSL Analytical, Inc. located at 200 Route 130 North, Cinnaminson, NJ 08077. Polarized Light Microscope analysis, utilizing dispersion staining techniques (ref.: EPA Method 600/M4-82-020), was performed to determine the asbestos content of the bulk samples collected at the site. This laboratory is currently a proficient participant in the American Industrial Hygiene Association (AIHA) Bulk Asbestos Proficiency Analytical Testing Program; a quality assurance program for polarized light microscopy analysis. Any material that contains greater than one percent asbestos is considered an ACM and must be handled according to Occupational Safety and Health Administration (OSHA), EPA, and all applicable state and local regulations.

Details of sample analysis are included in Appendix A, which contains a listing of all analyzed samples, sample locations, and analytical results relating to the site. Asbestos analytical results are reported as percentage and type. Other common non-asbestos components may also be noted in the analytical report.

## 3.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are summarized as follows:

- Asbestos was detected in fourteen (14) of the bulk material samples collected from the High School.
- ATC recommends the abatement of all ACM-containing materials located within the inspection area if those building materials are to be disturbed during any future renovation/demolition activities. All abatement work shall be completed in accordance with local, state, and federal regulation.
- If renovation work outside the scope of this asbestos survey is needed, additional inspection and testing is required or the materials shall be assumed to contain asbestos.
- Any hard-packed insulations on pipe fittings, joints or valves shall be assumed asbestos-containing based on the results of the boiler room pipe fitting insulation.



#### 4.0 ASSUMPTIONS AND LIMITATIONS

The results, findings, conclusions, and recommendations expressed in this report are based solely on conditions noted during the January 27-29, 2020, ATC inspection of the site located at 1000 Mustang Drive in Shenandoah, Iowa.

ATC did not perform destructive sampling -- it was not within ATC's scope of work to remove surface materials to investigate portions of the structure or materials that may lay beneath the surface -- thus, any materials that could not be visually identified on the surface were not inspected and would not be noted in this report. ATC's selection of sample locations and frequency of sampling was based on the inspector's assumption that like materials in the same area are homogeneous in content.

The report is designed to aid the building owner, architect, construction manager, general contractor, and potential asbestos abatement contractor in locating ACM. Under no circumstances is the report to be utilized as a bidding document or as a project specification document since it does not have all the components required to serve as an Asbestos Project Design document or an Abatement Work plan.

Our professional services have been performed, our findings obtained, and our conclusions and recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. This statement is in lieu of other statements either expressed or implied. This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

This report is intended for the sole use of Shenandoah Community School District. The scope of services performed in execution of this evaluation may not be appropriate to satisfy the needs of other users, and use or re-use of this document or the findings, conclusions, or recommendations is at the risk of said user.

APPENDIX A

LABORATORY ANALYTICAL REPORT



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042002262

Customer ID: ATC55

Customer PO:

Project ID:

**Attention:** Tim Jacobsen  
ATC Group Services LLC  
11117 Mockingbird Drive  
Omaha, NE 68137

**Phone:** (402) 320-8396

**Fax:** (402) 597-8532

**Received Date:** 01/28/2020 9:25 AM

**Analysis Date:** 01/28/2020 - 01/29/2020

**Collected Date:** 01/27/2020

**Project:** 204B502862 - Shenandoah

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1 042002262-0001	Boiler Room D107 - 6" TSI MF - Green	White/Green Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
2 042002262-0002	Boiler Room D107 - 6" TSI MF - Blue	White/Blue Fibrous Homogeneous		80% Non-fibrous (Other)	20% Chrysotile
3 042002262-0003	Boiler Room D107 - 6" TSI MF - Yellow	White/Yellow Fibrous Homogeneous		30% Non-fibrous (Other)	70% Chrysotile
4 042002262-0004	Mens / Womens Locker Rooms - Plaster Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5 042002262-0005	Mens / Womens Locker Rooms - Plaster Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6 042002262-0006	Mens / Womens Locker Rooms - Plaster Ceiling	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7 042002262-0007	Room B134 - Throughout School - 2'x2' Ceiling Tile	White Fibrous Homogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (Other)	None Detected
8 042002262-0008	Room B134 - 2'x2' Ceiling Tile	White Fibrous Homogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (Other)	None Detected
9 042002262-0009	Room B135 - 2'x2' Ceiling Tile	White Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
10-Baseboard 042002262-0010	Corridor B131 - 4" Black Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10-Glue 042002262-0010A	Corridor B131 - Tan Glue	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11-Tile 042002262-0011	B130A - Vestibule - 12" Tile Cream	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11-Mastic 042002262-0011A	B130A - Vestibule - Black Mastic	Black/Yellow Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
12-Tile 042002262-0012	B119 - Top Layer - 12" Tile Tan Marble	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Glue 042002262-0012A	B119 - Top Layer - Tan Glue	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13-Tile 042002262-0013	B119 - Bottom Layer - Floor Tile	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Sample appears to be Leveler

Initial report from: 01/29/2020 11:20:04



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

**EMSL Order:** 042002262  
**Customer ID:** ATC55  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
13-Mastic <small>042002262-0013A</small>	B119 - Bottom Layer - Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
14-Baseboard <small>042002262-0014</small>	B119 - Throughout - 3" Black Baseboard	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14-Mastic <small>042002262-0014A</small>	B119 - Throughout - Brown Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
15-Tile <small>042002262-0015</small>	B119 - Main Tile in All Classrooms - 12" Tan Main Tile	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
15-Mastic <small>042002262-0015A</small>	B119 - Main Tile in All Classrooms - Black Mastic	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
16-Tile <small>042002262-0016</small>	B134 - Top Layer near Windows - 12" Tan Marble	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16-Mastic <small>042002262-0016A</small>	B134 - Top Layer near Windows - Black Mastic	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
16-Leveler <small>042002262-0016B</small>	B134 - Top Layer near Windows - Black Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17-Tile <small>042002262-0017</small>	B135 - Main Tile - 12" Tan Main Tile	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
17-Mastic <small>042002262-0017A</small>	B135 - Main Tile - Black Mastic	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
18-Tile <small>042002262-0018</small>	B132 - Physical Science - 12" Tan Tile	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
18-Mastic <small>042002262-0018A</small>	B132 - Physical Science - Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
19-Tile <small>042002262-0019</small>	B145 - Main Tile - 12" Beige w/Blue Spots	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
19-Glue <small>042002262-0019A</small>	B145 - Main Tile - Brown Glue	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)  
 Keishla Vazquez Caraballo (23)  
 Tyler Hurwitt (7)

*Samantha Rundstrom*  
 Samantha Rundstrom, Laboratory Manager  
 or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 01/29/2020 11:20:04



EMSL ANALYTICAL, INC.  
LABORATORY-PRODUCTS-TRAINING

### Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

042002262

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

2020 JAN 28 AM 9:35

Company: ATC Group Services		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 11117 Mockingbird Dr		Third Party Billing requires written authorization from third party	
City: Omaha	State/Province: NE	Zip/Postal Code: 68137	Country:
Report To (Name): Tim Jacobsen		Telephone #: 402-697-9747	
Email Address: tim.jacobsen@atcas.com		Fax #: —	Purchase Order:
Project Name/Number: 2048502262 - Shenandoah		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: IA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options\* - Please Check

3 Hour   
  6 Hour   
  24 Hour   
  48 Hour   
  72 Hour   
  96 Hour   
  1 Week   
  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PLM - Bulk (reporting limit)	TEM - Bulk
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input type="checkbox"/> TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass - EPA 600/R-93/116 Section 2.5.5.2
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	<u>Other</u>
<input type="checkbox"/> OSHA ID-191 Modified	<input type="checkbox"/>
<input type="checkbox"/> Standard Addition Method	

Check For Positive Stop - Clearly Identify Homogenous Group    Date Sampled: 1/27/20

Samplers Name: Jerod Frost    Samplers Signature: *[Signature]*

Sample #	HA #	Sample Location	Material Description
1		Boiler Room D107	6" TSI MF - Green
2		↓	6" TSI MF - Blue
3		↓	6" TSI MF - Yellow
4		Mens/Womens locker rooms	Plaster Ceiling
5		↓	↓
6		↓	↓
7		Room B134 - Throughout school	2'x2' Ceiling Tile
8		Room B134	↓
9		Room B135	↓
10		Corridor B131	4" baseboard - Black w/ tan glue

Client Sample # (s): 1-19    Total # of Samples: 19

Relinquished (Client): *[Signature]*    Date: 1/27/20    Time: 1600

Received (Lab): *[Signature]*    Date: 1-26-20    Time: 9:25

Comments/Special Instructions:



ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM Page 1 of 1

ENVIRONMENTAL • GEOTECHNICAL  
BUILDING SCIENCES • MATERIALS TESTING

11117 Mockingbird Drive  
Omaha, NE 68137

Phone (402) 697-9747  
Fax (402) 597-8532

09da02262

RECEIVED  
EMSL  
CINNAMINSON, N.J.  
2020 JAN 28 AM 9:35

Project Information

Client:	Project Description:	Project Manager: Inspector:
Date:	Site Location:	ATC PROJECT NUMBER:

**BULK SAMPLE LOCATION**

Sample #	Material Description	Sample Location	Quantity
11	12" Tile cream w/ black mastic	B130A - Vestibule	50 SF
12	12" Tile Tan marble w/ tan glue	B119 - Top layer	
13	Floor tile w/ black mastic	B119 - Bottom layer	
14	3" baseboard black w/ brown mastic	B119 - throughout	
15	12" Tan main tile w/ black mastic	B119 - Main tile in all classrooms	
16	12" Tile tan marble w/ black mastic	B134 - Top layer near windows	
17	12" tile tan main tile w/ black mastic	B135 - Main tile	
18	12" tile tan w/ black mastic	B132 - Physical Science	
19	12" beige w/ blue spots w/ brown glue	B145 - main tile	

**CHAIN OF CUSTODY**

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Method of Submittal:	
						FED EX	
						US Mail	
Turn Around Time						Hand	



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

EMSL Order: 042002528

Customer ID: ATC55

Customer PO:

Project ID:

**Attention:** Tim Jacobsen  
ATC Group Services LLC  
11117 Mockingbird Drive  
Omaha, NE 68137

**Phone:** (402) 320-8396

**Fax:** (402) 597-8532

**Received Date:** 01/30/2020 9:30 AM

**Analysis Date:** 01/30/2020

**Collected Date:** 01/29/2020

**Project:** 204BS02861 - Shenandoah

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
20 <i>042002528-0001</i>	Lobby A101 - Brown Carpet Glue	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21-Baseboard <i>042002528-0002</i>	A108 - Orchestra Pit - 4" Grey Baseboard	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21-Glue <i>042002528-0002A</i>	A108 - Orchestra Pit - Brown Glue	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22 <i>042002528-0003</i>	Lobby A101 and Bathroom 1 - Tan Wallpaper	Tan Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected
23 <i>042002528-0004</i>	Lobby A101 and Bathroom 1 - Blue Wallpaper	Blue Fibrous Homogeneous	30% Synthetic	70% Non-fibrous (Other)	None Detected
24-Floor Tile <i>042002528-0005</i>	Main Hallways Original - 12" Tan Floor Tile	Tan Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
24-Mastic <i>042002528-0005A</i>	Main Hallways Original - Black Mastic	Black/Yellow Non-Fibrous Heterogeneous		97% Non-fibrous (Other)	3% Chrysotile
25 <i>042002528-0006</i>	Hme Economics RB119 - Gray Sink Undercoat	Gray Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
26-Floor Tile <i>042002528-0007</i>	R.B120 and B132 Physical Science - 12" Beige Floor Tile	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26-Mastic <i>042002528-0007A</i>	R.B120 and B132 Physical Science - Black Mastic	Black Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
27 <i>042002528-0008</i>	R.B120 near Floor Exterior Wall - Gray Caulk	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28-Floor Tile <i>042002528-0009</i>	R.B145 and B143 Same as #19 Maybe - 12" White with Blue Spots Floor Tile	White/Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
28-Glue <i>042002528-0009A</i>	R.B145 and B143 Same as #19 Maybe - Tan Glue	Red/Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
29-Floor Tile <i>042002528-0010</i>	Corridor C124 - 12" Tan with Brown Streaks Floor Tile	Brown Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
29-Mastic <i>042002528-0010A</i>	Corridor C124 - Black Mastic	Black/Yellow Non-Fibrous Heterogeneous		95% Non-fibrous (Other)	5% Chrysotile
30 <i>042002528-0011</i>	R.B150 Bathrooms - Sink Caulk	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 01/31/2020 07:14:05



# EMSL Analytical, Inc.

200 Route 130 North Cinnaminson, NJ 08077

Tel/Fax: (800) 220-3675 / (856) 786-5974

<http://www.EMSL.com> / [cinnasblab@EMSL.com](mailto:cinnasblab@EMSL.com)

**EMSL Order:** 042002528  
**Customer ID:** ATC55  
**Customer PO:**  
**Project ID:**

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
31 <small>042002528-0012</small>	Vestibule B100 - Wall Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32 <small>042002528-0013</small>	Vestibule B100 - Floor Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)

Daniel Blake (18)

Samantha Rundstrom, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Cinnaminson, NJ NVLAP Lab Code 101048-0, AIHA-LAP, LLC-IHLAP Lab 100194, NYS ELAP 10872, NJ DEP 03036, PA ID# 68-00367, LA #04127

Initial report from: 01/31/2020 07:14:05





EMSL ANALYTICAL, INC.  
LABORATORY-PRODUCTS-TRAINING

### Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

042002528

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

2020 JAN 30 AM 10:28

Company: ATC Group Services		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: 11117 Mockingbird Dr		Third Party Billing requires written authorization from third party	
City: Omaha	State/Province: NE	Zip/Postal Code: 68137	Country:
Report To (Name): Tim Jacobson		Telephone #: 402-697-9747	
Email Address: tim.jacobson@atcgs.com		Fax #:	Purchase Order:
Project Name/Number: 204BS02862 - Shenandoah		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken: IA		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options\* - Please Check

3 Hour  6 Hour  24 Hour  48 Hour  72 Hour  96 Hour  1 Week  2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<b>PLM - Bulk (reporting limit)</b>		<b>TEM - Bulk</b>	
<input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)	<input type="checkbox"/> TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1		
<input type="checkbox"/> PLM EPA NOB (<1%)	<input type="checkbox"/> NY ELAP Method 198.4 (TEM)		
Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> Chatfield Protocol (semi-quantitative)		
Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)	<input type="checkbox"/> TEM % by Mass - EPA 600/R-93/116 Section 2.5.5.2		
<input type="checkbox"/> NIOSH 9002 (<1%)	<input type="checkbox"/> TEM Qualitative via Filtration Prep Technique		
<input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)	<input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique		
<input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)	<b>Other</b>		
<input type="checkbox"/> OSHA ID-191 Modified			
<input type="checkbox"/> Standard Addition Method			

Check For Positive Stop - Clearly Identify Homogenous Group

Date Sampled: 1/29/20

Samplers Name: Jerod Frost

Samplers Signature: *[Signature]*

Sample #	HA #	Sample Location	Material Description
20		Lobby A 101	Carpet glue - brown
21		A108 - Orchestra pit	4" baseboard - gray w/ brown glue
22		Lobby A 101 + bathroom 1	Tan wallpaper
23		Lobby A 101 + bathroom 1	Blue wallpaper
24		Main Hallways Original	12" floor tile Tan w/ black mastic
25		Home Economics R B119	Sink undercoat - gray
26		R. B120 + B132 physical science	12" floor tile - Beige w/ black mastic
27		R. B120 near floor exterior wall	Caulk - Gray
28		R. B145 + B143 Same as #19 maybe	12" Floor tile white w blue spots + tan glue
29		Corridor C124	12" floor tile Tan w brown streaks + Black mastic

Client Sample # (s): 20 - 32 Total # of Samples: 13

Relinquished (Client): *[Signature]* Date: 1/29/20 Time: 1:00

Received (Lab): *[Signature]* Date: 1-30-20 Time: 9:15

Comments/Special Instructions:

(13) EL



ASBESTOS BULK SAMPLE CHAIN OF CUSTODY FORM Page 1 of 1

ENVIRONMENTAL • GEOTECHNICAL  
BUILDING SCIENCES • MATERIALS TESTING

11117 Mockingbird Drive  
Omaha, NE 68137

FA# 042002528

Phone (402) 697-9747  
Fax (402) 597-8532

RECEIVED  
FMSL  
JAN 30 AM 10:28  
VINCE WILSON, H.J.

Project Information

Client:	Project Description:	Project Manager: Inspector:
Date:	Site Location:	ATC PROJECT NUMBER:

BULK SAMPLE LOCATION

Sample #	Material Description	Sample Location	Quantity
30	R B150 bathrooms	Sink caulk	
31	Vestibule B100	Wall caulk	
32	Vestibule B100	Floor caulk	

CHAIN OF CUSTODY

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Method of Submittal:
	1/29/20	1600				FED EX
Turn Around Time						US Mail
						Hand

APPENDIX B  
INSPECTOR ACCREDITATIONS

**JOHNNY VONG THOR**


**DOB: 12-08-1987**

**Issued: 04-04-2019**



This person is licensed to perform asbestos work in the State of Iowa. ID card is intended for official use only and must be present on jobsite.

License Type	Number	Expires
INSPECTOR	19-2207	03-26-2020

 *Rod A. Roberts*  
**Rod A. Roberts**  
**Labor Commissioner**

Asbestos

APPENDIX C  
SCHEMATICS




The existing school was built in three major sections 1966, 1984, and 2011 with a major mechanical renovation in 2005.

Renovations during the summer will include:

- a nearly complete demolition of the equipment in the Boiler Room D107 **except for the domestic hot and cold water system including hot water heaters and storage tank which will remain in operation;**
- removal of insulation from chilled water pipes as needed to get rid of mold;
- new carpet will be laid over VCT tile in good condition;
- complete demolition of three administration restrooms (B112, B113, B150);
- demolition of casework and some flooring in Family Consumer Science B119;
- demolition of Data/Com B143;
- complete demolition of Shower Rooms C120, C125, C129 including plaster, fixtures, and finishes;
- complete demolition of Classroom areas C103, C104, C105 with limited disturbance in C102;
- demolition of floor tile in Toilets C119, C124, and C128;
- demolition of all ceiling tile;
- demolition of all wood doors;
- demolition of storefront and doors in vestibule B100;

FOR MORE DETAIL, REFER TO DRAWING SET, SHENANDOAH HIGH SCHOOL RENOVATIONS, DATED 12/18/2020. However, DLR's set does not include all demolition.

For access to the 3D scan of the building, email Mike Kros, mkros@DLRgroup.com

-  PHASE 1 and 2: Major demolition - walls, floors, ceiling
-  PHASE 1 - MEP demolition - equipment, piping, insulation
-  Not specifically drawn: removal of all ceiling tile and all wood doors

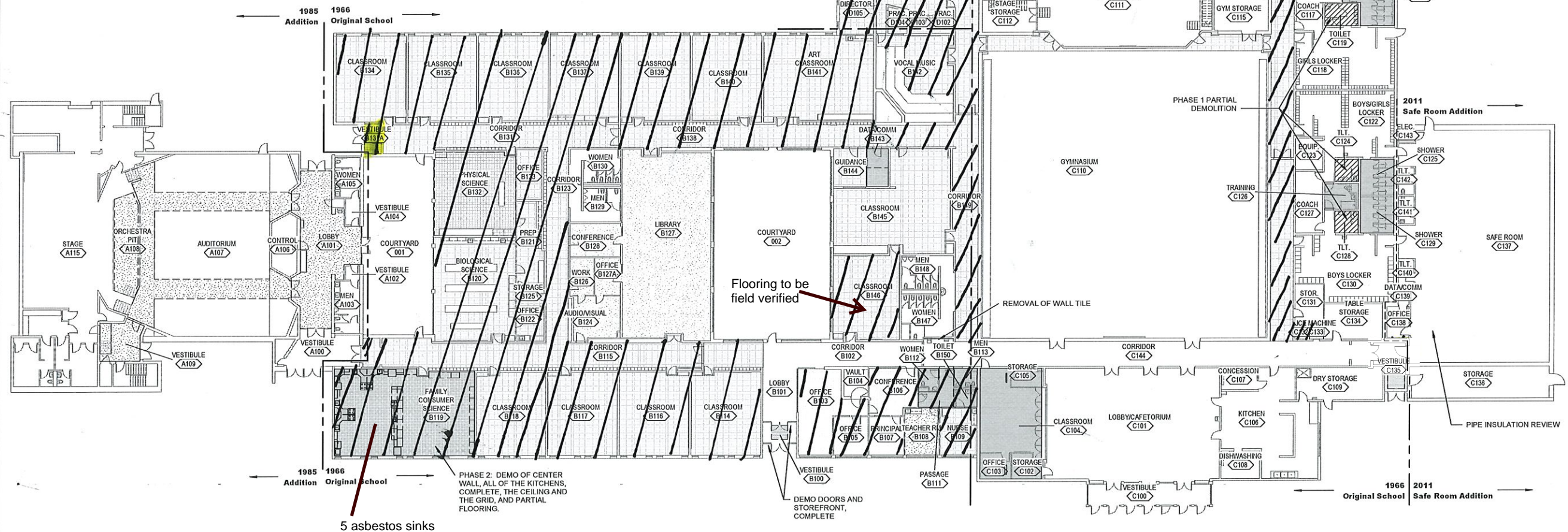
No removal of VCT unless noted or loose tile are discovered. (See Demo Finish Plans)

*Asbestos*  
*11/11 12" Floor tile and black mastic*

*Vestibules + B132, B120 have only black mastic - ACM*

Stainless steel sink undercoat in B119

PIPE INSULATION REVIEW INCLUDING THESE ROOMS, BUT NOT LIMITED TO ONLY THESE ROOMS



**OVERALL FLOOR PLAN**


SCALE: 1" = 20'-0"

PROJECT  
**SHENANDOAH HIGH SCHOOL RENOVATIONS - PHASE 2**  
 1000 MUSTANG DRIVE  
 SHENANDOAH, IOWA 51601

OWNER  
 SHENANDOAH COMMUNITY SCHOOL DISTRICT  
 304 WEST NISHNA ROAD  
 SHENANDOAH, IOWA 51601

DESIGN BUILDER:  
**NELSON**  
 CARL A. NELSON & CO.

CARL A. NELSON & COMPANY  
 1815 DES MOINES AVENUE  
 BURLINGTON, IA 52601  
 P: 319-754-8415  
 F: 319-753-2208  
 WWW.CARLNELSONCO.COM

KEY PLAN:  
  
 PROJECT NORTH

SHEET PRINTED AT FULL SCALE: 1 2 in

ISSUE/REVISION	DATE

ISSUED FOR: DATE: 01/27/20

SHEET NAME: **ASBESTOS RFP - FLOOR PLAN OVERVIEW**

SHEET NUMBER: **GO.3**

DOCUMENT 00 41 00

BID FORM - CONTRACT BASED ON A STIPULATED SUM

PROJECT: Shenandoah Community Schools Renovation – Phase 2

OWNER: Shenandoah Community School District

SUBMITTED TO: Shenandoah Community Schools  
304 West Nishna Road  
Shenandoah, IA 51601

DATE: \_\_\_\_\_ (Bidder to enter date)

SUBMITTED BY: (Bidder to enter name and address)

\_\_\_\_\_ (Contractor)

\_\_\_\_\_ (Address)

\_\_\_\_\_ (City, State, Zip)

- a corporation organized and existing under laws of the State of \_\_\_\_\_.
- a partnership
- a sole proprietor

OFFER:

Having examined the Place of the Work and all matters referred to in the Instructions to Bidders and the Contract Documents prepared by Nelson Design, Inc. for the above-mentioned project **excluding Alternate #1**, we, the undersigned, hereby offer to enter into a Contract to perform the Bid Package 8 Work for the Sum of:

Base Price: \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_) in lawful money of the United States of America.

BID ALTERNATE

Alternate #1: **Add alternate** to provide all sitework as described on C1.2, C1.3, C2.2, C3.2, C4.2.

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

We have included the Bid security as required by the Instructions to Bidders.

All Iowa State Sales and Use Tax on materials incorporated into the Work are not included in the Bid Sum and a Sales Tax Exemption Certificate will be provided by the Owner. Sales tax for all materials not incorporated into the Work have been included in the Bid Sum.

Accompanying this proposal in a separate sealed envelope is the Bid Security required by the Bidding Documents, the same being subject of forfeiture, in the event of default by the undersigned, in accordance with terms of the Bidding Documents.

Bidder understands that the Owner reserves the right to reject any and all proposals, waive irregularities or technicalities in any proposal, and accept any proposal in whole or in part which it deems to be in its best interest, and understands the Owner reserves the right to request Contractor to complete AIA Document A305 Contractor's Qualification Statement.

A non-resident corporation certified by submittal of this proposal that the corporation has complied with Section 496A.103 of the Code of Iowa. The corporation certifies it shall comply with Chapter 73 of the Code and give preference to use of Iowa domestic labor and products and provisions produced or grown within the state of Iowa.

We have included the Bid security as required by the Instructions to Bidders.

All Iowa State Sales and Use Tax on materials incorporated into the Work are not included in the Bid Sum and a Sales Tax Exemption Certificate will be provided by the Owner. Sales tax for all materials not incorporated into the Work have been included in the Bid Sum.

**ACCEPTANCE:**

This offer shall be open to acceptance and is irrevocable for (45) forty-five days from the bid closing date.

If this offer is accepted by the Shenandoah Community School District within the time period stated above, we will:

- Execute a Contract Agreement within seven days of receipt of Notice of Award.
- Commence work in strict accordance with the Construction Manager's master schedule.
- Furnish the required Bonds and Insurance Certificates within seven days of receipt of Notice of Award in the forms described in General Conditions.

**CONTRACT TIME:**

We will complete the Work in accordance with the Construction Manager's master schedule.

**ADDENDA:**

The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Price.

Addendum(s) \_\_\_\_ through \_\_\_\_.



**SUBCONTRACTS:**

The following Work will be performed by Subcontractors and coordinated by us:

SCOPE OF WORK

SUBCONTRACTOR

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**BID FORM SIGNATURE(S)**

\_\_\_\_\_  
*(Bidder – print the full name of your firm)*

\_\_\_\_\_  
*(Authorized signing officer, Title)*

End of Bid Form

# Bidder Status Form

INCLUDE IN BID ENVELOPE

## To be completed by all bidders

## Part A

Please answer "Yes" or "No" for each of the following:

- Yes  No My company is authorized to transact business in Iowa.  
*(To help you determine if your company is authorized, please review the worksheet on the next page).*
- Yes  No My company has an office to transact business in Iowa.
- Yes  No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.
- Yes  No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.
- Yes  No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

## To be completed by resident bidders

## Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ to \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Dates: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ to \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Dates: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ to \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Address: \_\_\_\_\_

*You may attach additional sheet(s) if needed.* City, State, Zip: \_\_\_\_\_

## To be completed by non-resident bidders

## Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company's home state or foreign country offer preferences to resident bidders, resident labor force preferences or any other type of preference to bidders or laborers?  Yes  No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ *You may attach additional sheet(s) if needed.*

## To be completed by all bidders

## Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

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

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

**You must submit the completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156. This form has been approved by the Iowa Labor Commissioner.**

## Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- Yes  No      My business is currently registered as a contractor with the Iowa Division of Labor.
- Yes  No      My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.
- Yes  No      My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- Yes  No      My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- Yes  No      My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.
- Yes  No      My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- Yes  No      My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- Yes  No      My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.
- Yes  No      My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- Yes  No      My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- Yes  No      My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.





# AIA<sup>®</sup> Document A310<sup>™</sup> – 2010

## Bid Bond

**CONTRACTOR:**  
(Name, legal status and address)

**SURETY:**  
(Name, legal status and principal place of business)

**OWNER:**  
(Name, legal status and address)

**BOND AMOUNT:**

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

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

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

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

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

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

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_

_____	(Contractor as Principal)	(Seal)
(Witness)	_____	(Title)
_____	(Surety)	(Seal)
(Witness)	_____	(Title)

**CAUTION:** You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

**SECTION 00 52 00**  
**AGREEMENT FORMS**

**FORM OF AGREEMENT**

**1.01 THE TRADE CONTRACTOR AGREEMENT IS ATTACHED FOLLOWING THIS PAGE.**

END OF SECTION 00 52 00



# AIA<sup>®</sup> Document A132<sup>™</sup> – 2009

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

AGREEMENT made as of the      day of                      in the year 2020  
*(In words, indicate day, month and year.)*

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

Shenandoah Community School District  
304 West Nishna Road  
Shenandoah, IA 51601  
Phone: (712)246-1581  
Fax: (712)246-3722

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

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

Shenandoah Community School District  
Shenandoah High School Renovation – Phase 2  
Shenandoah, IA 51601

Construction Manager:  
*(Name, legal status, address and other information)*

Carl A. Nelson & Company  
1815 Des Moines Avenue  
Burlington, IA 52601

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

Nelson Design, Inc.  
1815 Des Moines Avenue  
Burlington, IA 52601

The Owner and Contractor agree as follows.

### ADDITIONS AND DELETIONS:

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

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

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

AIA Document A232<sup>™</sup>–2009 is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

Init. / **AIA Document A132<sup>™</sup> – 2009 (formerly A101<sup>™</sup>CMA – 1992).** Copyright © 1975, 1980, 1992 and 2009 by The American Institute of Architects. **All rights reserved.** WARNING: This AIA<sup>®</sup> Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AIA<sup>®</sup> Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. This document was produced by AIA software at 16:16:39 ET on 02/12/2020 under Order No. 3124882494 which expires on 04/20/2020, and is not for resale.

User Notes:

(3B9ADA4A)

**TABLE OF ARTICLES**

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

**EXHIBIT A DETERMINATION OF THE COST OF THE WORK**

**ARTICLE 1 THE CONTRACT DOCUMENTS**

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

**ARTICLE 2 THE WORK OF THIS CONTRACT**

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

Bid Package No. \_\_\_\_\_

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

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

If, prior to the commencement of the Work, the Owner requires time to file mortgages, mechanics' liens and other security interests, the Owner's time requirement shall be as follows:

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

**§ 3.3** The Contractor shall achieve Substantial Completion of the entire Work not later than ( ) days from the date of commencement, or as follows:



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

See Construction Project Schedule in the Project Manual.

**Portion of the Work**

**Substantial Completion Date**

, subject to adjustments of this Contract Time as provided in the Contract Documents.

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

**ARTICLE 4 CONTRACT SUM**

**§ 4.1** The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be one of the following:

*(Check the appropriate box.)*

Stipulated Sum, in accordance with Section 4.2 below

Cost of the Work plus the Contractor's Fee without a Guaranteed Maximum Price, in accordance with Section 4.3 below

Cost of the Work plus the Contractor's Fee with a Guaranteed Maximum Price, in accordance with Section 4.4 below

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

**§ 4.2 Stipulated Sum**

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

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

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

**§ 4.2.3** Unit prices, if any:

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

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

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

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

Item	Allowance
As described in Spec Section 01 1000 "Summary of Work"	

| *(Paragraphs Deleted)*

| *(Paragraph Deleted)*

| *(Paragraph Deleted)*

| *(Paragraphs Deleted)*

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## **ARTICLE 5 PAYMENTS**

### **§ 5.1 Progress Payments**

**§ 5.1.1** Based upon Applications for Payment submitted to the Construction Manager by the Contractor, and upon certification of the Project Application and Project Certificate for Payment or Application for Payment and Certificate for Payment by the Construction Manager and Architect and issuance by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

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

**§ 5.1.3** Provided that an Application for Payment is received by the Construction Manager not later than the last day of a month, the Owner shall make payment of the certified amount in the Application for Payment to the Contractor not later than the thirtieth day of the following month. If an Application for Payment is received by the Construction Manager after the application date fixed above, payment shall be made by the Owner not later than thirty ( 30 ) days after the Construction Manager receives the Application for Payment.

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

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

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

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

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

- .1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of five percent ( 5 %). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute may be included as provided in Section 7.3.9 of the General Conditions;
- .2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of five percent ( 5 %);

- .3 Subtract the aggregate of previous payments made by the Owner; and
- .4 Subtract amounts, if any, for which the Construction Manager or Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of the General Conditions.

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

- .1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to one hundred percent ( 100 %) of the Contract Sum, less such amounts as the Construction Manager recommends and the Architect determines for incomplete Work, retainage applicable to such work and unsettled claims or as otherwise required under Iowa Code Chapters 26 and 573 ; and
- .2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of the General Conditions.

§ 5.1.4.5 Reduction or limitation of retainage, if any, shall be as follows:

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

Retainage to be reduced in accordance with the laws of the State of Iowa, as applicable

§

*(Paragraphs Deleted)*

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

*(Paragraph Deleted)*

*(Paragraph Deleted)*

*(Paragraphs Deleted)*

*(Paragraphs Deleted)*

**§ 5.2 Final Payment**

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

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2 of AIA Document A232-2009, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a Final Certificate for Payment has been issued by the Architect

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**§ 5.2.2 The Owner's Final Payment to the Contractor shall be made no earlier than 31 days following approval and final acceptance of the Project by the Board of Directors (Owner) upon receipt and review of the Construction Manager's and/or Architect's Certificate and Recommendation for Final Payment.**

**Final Payment may be contingent upon receipt of all lien waivers/Chapter 573 claim releases and other closeout documents and shall be subject to the conditions of and shall be paid in accordance with the provisions of Iowa Code Chapter 573 and Iowa Code Chapter**

**26.**

**ARTICLE 6 DISPUTE RESOLUTION**

**§ 6.1 Initial Decision Maker**

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

Construction Manager

**§ 6.2 Binding Dispute Resolution**

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

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

Arbitration pursuant to Section 15.4 of AIA Document A232–2009.

Litigation in a court of competent jurisdiction.

Other: *(Specify)*

**ARTICLE 7 TERMINATION OR SUSPENSION**

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

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

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

*(Paragraphs Deleted)*

**ARTICLE 8 MISCELLANEOUS PROVISIONS**

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

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§ 8.2 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate equal to the rate specified by rule pursuant to Iowa Code Section 74A.2 or Iowa Code Section 573.14, whichever is less (Insert rate of interest agreed upon, if any.)

%

§ 8.3 The Owner's representative:  
(Name, address and other information)

Dr. Kerri Nelson, Superintendent  
Shenandoah Community School District  
304 West Nishna Road  
Shenandoah, IA 51601

§ 8.4 The Contractor's representative:  
(Name, address and other information)

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

§ 8.6 Other provisions:

To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Owner, its agents, representatives, and employees of any of them (Indemnitees) from and against any and all claims, damages, causes of action, losses and expenses, including, but not limited to, attorney's fees, arising out of or resulting from or in connection with the performance of the Work, 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 an Indemnity. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity or contribution which would otherwise exist, as to any party or person described in Contract Documents.

In the event the Owner should prevail in any legal action arising out of the performance or non-performance of this Agreement, the Contractor shall pay, in addition to any damages, all expenses of such action including reasonable attorney's fees, all expert witness fees, costs, and litigation expenses incurred by the Owner, including those incurred on appeal. The term "legal action" shall be deemed to include any arbitration, administrative proceedings, and all actions at law or in equity, including appeals.

The Contractor shall not be owned, operated, or managed by a registered sex offender who has been convicted of a sex offense against a minor in accordance with Iowa Code 692A.113. In addition, the Contractor shall not permit an employee, Subcontractor (Company) owned, operated, or managed by, or Subcontractor employee who is a registered sex offender convicted of a sex offense against a minor on real property of the Owner's schools in

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accordance with Iowa Code 692A.113. The Contractor shall further acknowledge and certify, by execution of this Agreement, that the services provided under this Contract comply with Iowa Code 692A.113.

**ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS**

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

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

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

§ 9.1.3 The Supplementary and other Conditions of the Contract:

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

§ 9.1.4 The Specifications:

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

EXHIBIT A – Specifications: Project Manual – Table of Contents dated February 12, 2020

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

§ 9.1.5 The Drawings:

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

EXHIBIT B – Drawing List, dated February 12, 2020

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

§ 9.1.6 The Addenda, if any:

Number	Date	Pages
--------	------	-------

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

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

- .1 AIA Document A132™–2009, Exhibit A, Determination of the Cost of the Work, if applicable.
- .2 AIA Document E201™–2007, Digital Data Protocol Exhibit, if completed, or the following:

.3 AIA Document E202™–2008, Building Information Modeling Protocol Exhibit, if completed, or the following:

.4 Other documents, if any, listed below:

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

- Notice to Bidders
- Instruction to Bidders
- Specifications
- Drawings
- General Conditions (as modified)
- Supplementary Conditions (if applicable)
- Certificate of Insurance
- Performance of Bond
- Payment Bond

**ARTICLE 10 INSURANCE AND BONDS**

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

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

Type of Insurance or Bond	Limit of Liability or Bond Amount (\$0.00)
Performance Bond	100% of contract
Payment Bond	100% of contract

See Section 11.1.2 of A232 General Conditions for Insurance Requirements

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

Shenandoah Community School District

OWNER *(Signature)*

Board President

*(Printed name and title)*

CONTRACTOR *(Signature)*

*(Printed name and title)*

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**SECTION 00 72 00**  
**GENERAL CONDITIONS**

**FORM OF GENERAL CONDITIONS**

**1.01 THE GENERAL CONDITIONS APPLICABLE TO THIS CONTRACT IS ATTACHED FOLLOWING THIS PAGE.**

END OF SECTION 00 72 00



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

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

**for the following PROJECT:**

*(Name, and location or address)*

Shenandoah Community School District  
Shenandoah High School Renovation – Phase 2  
Shenandoah, IA 51601

**THE CONSTRUCTION MANAGER:**

*(Name, legal status and address)*

Carl A. Nelson & Company  
1815 Des Moines Avenue  
Burlington, IA 52601

**THE OWNER:**

*(Name, legal status and address)*

Shenandoah Community School District  
304 West Nishna Road  
Shenandoah, IA 51601

**THE ARCHITECT:**

*(Name, legal status and address)*

Nelson Design, Inc.  
1815 Des Moines Avenue  
Burlington, IA 52601

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- 3 CONTRACTOR**
- 4 ARCHITECT AND CONSTRUCTION MANAGER**
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- 8 TIME**
- 9 PAYMENTS AND COMPLETION**
- 10 PROTECTION OF PERSONS AND PROPERTY**
- 11 INSURANCE AND BONDS**

**ADDITIONS AND DELETIONS:**

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

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

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

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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. The Contract Documents also include the bidding requirements (advertisement or invitation to bid and Instruction to Bidders). Unless specifically enumerated in the agreements, the Contract Documents do not include sample forms and the Contractor's Bid.

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

**§ 1.1.2.1 The Contract Documents shall be signed by the Owner and Contractor. If either the Owner or Contractor or both do not sign all the Contract Documents, the Construction Manager or Architect shall identify such unsigned Documents. No Contract shall be formed between the parties until all Contract Documents are executed by both parties.**

**§ 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 other Multiple Prime Contractors and by the Owner's own forces, including persons or entities under separate contracts not administered by the Construction Manager.

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

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

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

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

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## § 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 in proper operating condition.

§ 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. In case of disputes over words and abbreviations which have well known or trade meanings, Architect's interpretation of terms shall be final. In case of Work or materials that are specified in the Contract Documents to be provided or supplied by more than one Contractor, each such Contractor shall be deemed to have included the Work and the Construction Manager shall determine who shall furnish Work and who shall submit a credit to Owner for the Work.

- .1 Products: Means new material, machinery, components, equipment, fixtures, and systems forming the Work, but does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.
- .2 Provide: To furnish or supply, plus install complete in place, tested and approved.
- .3 Furnish or Supply: To supply and deliver, unload, inspect for damage.
- .4 Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, and ready for use.
- .5 The terms "approved," "required," and "as directed" refer to and indicate the work or materials that may be approved, required, or directed by the Architect acting as the Owner's representative.
- .6 The terms "shown," "indicated," "noted," "scheduled," and terms of similar import, refer to requirements contained in the Contract Documents.
- .7 The term "Trade Contractor" used in the Contract Documents shall mean Contractor.

§ 1.2.4 In the case of an inconsistency between Drawings and Specifications, or within either Document itself, not clarified by Addendum, the better quality or greater quantity of Work shall be provided in accordance with the Architect's interpretation.

## § 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.

§ 1.4.1 In the event of conflict among the various provisions of the Contract Documents, the terms shall be interpreted in the following order of propriety:

1. Modifications to the Contract;
  1. The Contract;
  2. Special Conditions; and
  3. General Conditions.

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

§ 1.5.1 The Construction Documents, regardless of the media or format, as instruments of service, are the property of the Owner, whether the work for which they are made is executed or not. The Owner reserves the right to use the Construction Documents developed for the Project in such manner as the Owner may desire, subject to the provisions herein. The Owner shall not use or alter the Construction Documents without first notifying the Architect

of its intended use or alteration of the Construction Documents. If Owner uses or alters the Construction Documents it shall be at the Owner's sole risk and without liability or legal exposure of any type or kind to the Architect. Nothing contained herein shall be construed as in derogation of the Architect's copyrights.

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

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

The Architect may, with the concurrence of the Owner, furnish to the Contractor versions of Instruments of Service in electronic form. At Contractor's written request, copies of Architect's, or Architect's Consultant's, CAD files may be provided to the Contractor for the Contractor's exclusive use in connection with Project, subject to the following:

- .1 Electronic copies of plan-type Drawings will be made available for each requested Drawing.
- .2 Contractor making request shall not distribute files to other parties.
- .3 Contractor making request shall sign copy of CAD/electronic file transfer request form and return to Architect, or Architect's Consultant, prior to receipt of CAD/electronic files. Architect, or Architect's Consultant will provide request form for Contractor's signature.

**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 Article 4, the Construction Manager and the Architect do not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

*(Paragraph Deleted)*

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

**§ 2.2.1** Intentionally Left Blank.

**§ 2.2.2** Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities. Unless otherwise provided under the Contract Documents, the Owner, through the Construction Manager, shall secure and pay for the building permit.

**§ 2.2.3** The Contractor shall compare information furnished by the Owner (including surveys and soil tests with observable physical conditions) and the Contract Documents and on the basis of such review, shall report to the Owner and Architect, in writing, any conflicts, errors or omissions. Contractor shall be responsible for any additional costs, delays and damages resulting from the Contractor's failure to immediately report any such errors, inconsistencies or omissions.

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

**§ 2.2.5** Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2. Additional sets will be furnished by Owner at Contractor's expense in the amount of cost for reproduction, postage, and handling.

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

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

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

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

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seventy-two hour period after receipt of written notice from the Owner, to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order or Construction Change Directive shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the Construction Manager's and Architect's and their respective consultants' additional services and any attorney's fees made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

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

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

§ 3.1.3.1 **The Contractor shall supervise and direct the Work in an excellent and workmanlike manner, complete the work and everything properly incidental thereto as stated in the Project Manual and Drawings or reasonably implied therefrom and otherwise in accordance with Contract Documents.**

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

§ 3.1.5 **The Work for this Project is being completed under multiple prime Agreements between Trade Contractors and the Owner. Specification section 01 10 00 Summary of Work identifies the specific requirements for each of the prime Trade Contractors.**

### § 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. The Contractor also represents that all Contract Documents for the Project have been examined; including those intended for work of trades not normally performed by the Contractor's own forces, and that it has become thoroughly familiar with all conditions which may pertain to or affect the Work under the Contract.

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

**§ 3.2.3** The Contractor must make frequent inspections during the progress of the Work to confirm that Work previously performed by the Contractor is in compliance with the Contract Documents and applicable laws and regulations bearing on the performance of the Work and Referenced Standards and that portion of Work previously performed by the Contractor or by others are in proper condition to receive subsequent Work.

**§ 3.2.4** If the Contractor believes that any portions of the Contract Documents do not comply with applicable laws, statutes, ordinances, building codes, and rules and regulations, or any orders by code enforcement officials or the Owner or its designees acting in the capacity of building code inspectors or Referenced Standards, the Contractor must promptly notify the Owner, Construction Manager and the Architect of the non-compliance as provided in Section 3.2.6 and request direction before proceeding with the affected Work.

**§ 3.2.5** The Contractor must promptly notify the Owner, Construction Manager and the Architect in writing of any apparent errors, inconsistencies, omissions, ambiguities, construction impracticalities or code violations discovered as a result of the Contractor's review of the Contract Documents including any differences between actual and indicated dimensions, locations and descriptions, and must give the Owner, Construction Manager and the Architect timely notice in writing of same and of any corrections, clarifications, additional Drawings or Specifications, or other information required to define the Work in greater detail or to permit the proper progress of the Work. The Contractor must provide similar notice with respect to any variance between its review of the Site and physical data and Site conditions observed.

**§ 3.2.6** If the Contractor performs any Work involving an apparent error, inconsistency, ambiguity, construction impracticality, omission or code violation in the Contract Documents of which the Contractor is aware, or which could reasonably have been discovered by the review required by Section 3.2, without prompt written notice to the Owner, Construction Manager and the Architect and request for correction, clarification or additional information, as appropriate, the Contractor does so at its own risk and expense and all claims relating thereafter are specifically waived.

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

**§ 3.2.8** The Owner is entitled to reimbursement from the Contractor for amounts paid to the Construction Manager and/or Architect for evaluating and responding to the Contractor's requests for information where the requested information is available to the Contractor from a careful study and comparison of the Contract Documents, field conditions, other Owner-provided information, Contractor-prepared coordination drawings, or prior Project correspondence or documentation.

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### **§ 3.3 Supervision and Construction Procedures**

**§ 3.3.1** The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instruction concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the jobsite safety thereof and, except as stated below, shall be fully and solely responsible for the jobsite safety of such means, methods, techniques, sequences or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely written notice to the Owner, the Construction Manager, and the Architect and shall not proceed with that portion of the Work without further written instructions from the Architect, through the Construction Manager. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

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

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

**§ 3.3.4** The Contractor acknowledges that it is the Contractor's responsibility to hire all personnel for the proper and diligent prosecution of the Work and the Contractor shall use its best efforts to maintain labor peace for the duration of the Project. In the event of a labor dispute, the Contractor shall not be entitled to any increase in the Contract Sum or extension of contract time.

**§ 3.3.5** Manufacturer's printed instructions covering details of installation shall be followed where not in conflict with these Specifications. If there is a conflict, notify the Architect and obtain his approval before proceeding.

**§ 3.3.6** Unless otherwise specified, all pieces of material shall be as large a stock size as is in conformity with standard good practice of the trade.

**§ 3.3.5** The Owner reserves the right to retain ownership to any materials or equipment that are a part of the existing facility. If material or equipment is to be removed from the site, the Contractor shall detach such items and before removing from site, obtain permission from the Owner, or his designee, to do so. All items not retained by Owner shall be removed and disposed of in a proper manner by the Contractor.

**§ 3.3.6** The Contractor shall submit one copy of Safety Data Sheets of hazardous substances to be stored or used on the Owner's premises or incorporated into the Work to the Construction Manager before bringing such substances on site. The Contractor shall also keep Safety Data Sheets posted at the work site for all hazardous substances while these substances are on the Owner's premises. Hazardous substances for the purposes of this section shall be any substance which is covered by Right to Know rules or laws.

### **§ 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. Work required by the Contract Documents to be performed after "normal" working hours or work the Contractor elects to perform after "normal" working hours shall be completed at no additional cost to the Owner.

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

**§ 3.4.2.1 After the Contract has been executed, the Owner, Construction Manager and Architect will consider requests for the substitution of products in place of those specified only under the conditions set forth in the General Requirements (Division 1 of the Specifications). By making requests for substitutions, the Contractor:**

- .1 Represents that it has personally investigated the proposed substitute product and determined that it is equal or superior in all respects to that specified;**
- .2 Represents that it will provide the same warranty for the substitution as it would have provided for the product specified;**
- .3 Certifies that the cost data presented is complete and includes all related costs for the substituted product and for Work that must be changed as a result of the substitution, except for the Architects redesign costs, and waives all claims for additional costs related to the substitution that subsequently become apparent; and**
- .4 Shall coordinate the installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.**
- .5 Agrees to compensate the Architect for any redesign fees or costs necessitated by and associated with the product substitution.**

**§ 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. Persons permitted to perform Work under Contractor or any Subcontractor or Sub-Subcontractor shall meet all employment eligibility, safety training, security or drug/alcohol testing requirements required by law or by Owner. Any person not complying with all such requirements shall be immediately removed from the site.

**§ 3.4.3.1** The Contractor shall be responsible for conducting a criminal background check and a check of the Iowa Sex Offender Registry as to all persons working on Owner property or in Owner buildings. This includes all employees of the Contractor or any sub-contractor, all Independent Contractors, Casual Laborers, Workers obtained through Union Halls or Hiring Halls, and all other individuals present on Owner property at any time during the performance of the Contract. No person shall be permitted to work on Owner property is on the Sex Offender Registry as a result of a conviction of a crime against a minor. The Contractor will notify the Owner in advance for any proposed Contractor employee with a felony conviction and such person will not be placed on-site without prior Owner approval. The Contractor must have records available for the Owner to inspect upon request to verify that background/sex offender checks have been performed as required herein. The Owner reserves the right to order the Contractor to remove any person from the Owner's Work who the Owner determines to be a threat to safety of students, Owner employees, other workers, parents, visitors, or otherwise. All workers must follow Owner regulations and rules as to building access and security.

**§ 3.4.3.2** The Contractor (Company) shall not be owned, operated, or managed by a registered sex offender who has been convicted of a sex offense against a minor in accordance with Iowa Code 692A.113. In addition, the Contractor shall not permit an employee, Subcontractor (Company) owned, operated, or managed by, or Subcontractor employee who is a registered sex offender convicted of a sex offense against a minor on real property of the schools of the Owner in accordance with Iowa Code 692A.113. The Contractor further acknowledges and certifies, by execution of the Contract with the Owner, that the services provided under this Contract comply with Iowa Code 692A.113, and shall fully execute and deliver copy of 'Acknowledgment and Certification' with Bid Form. Refer to Document 00 4100.

**§ 3.4.3.3** The Contractor shall also keep its employees and those of its subcontractor from socializing upon the site of the work after normal work hours and from fraternizing at any time with staff, students, parents and other persons who are at the school or the site of the work.

**§ 3.4.3.4** The Owner shall be entitled to deduct from the Contract Sum amounts paid to the Architect or Architect's Consultants, to evaluate the Contractor's proposed substitutions and to make agreed upon changes in the Contract Documents made necessary by the Owner's acceptance of such substitutions.

**§ 3.4.3.5** The Contractor, and those working under their jurisdiction, shall be licensed to perform business in the State of Iowa and provide a copy of their Iowa Workforce Development Division of Labor Services

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**Contractor Registration, conform to local labor laws of the State of Iowa and all other laws, ordinances and legal requirements affecting the Work. Prior to starting Work, the Contractor shall become familiar with local labor and trade conditions, skilled and unskilled, and shall conform to local conditions. The Contractor shall consider the availability of labor in the area and import labor as may be required to meet the schedule for the Work.**

**§ 3.4.3.6 Contractor shall strictly abide by all laws relating to employment eligibility verifications and shall employ only persons who are legally able to work.**

### **§ 3.5 Warranty**

**§ 3.5.1** The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the workmanship will be free from defects not inherent in the quality required or permitted, that the workmanship will comply with all applicable laws, building codes, rules and regulations, and that the workmanship will conform to the requirements of the Contract Documents.

**§ 3.5.2** The Contractor's general warranty and any additional or special warranties are not limited by the Contractor's obligations to specifically correct defective or nonconforming Work as provided in Article 12, or are they limited by any other remedies provided in the Contract Documents. The Contractor shall also be liable for any damage to property or persons (including death) including consequential and direct damages relating to any breach of the Contractor's general warranty or any additional or special warranties required by the Contract Documents.

**§ 3.5.3** The Contractor must furnish all special warranties required by the Contract Documents to the Owner no later than Substantial Completion. The Owner may require additional special warranties in connection with approval of "Or-Equals" or Substitutions, Allowance items, Work that is defective or nonconforming, or the acceptance of nonconforming Work pursuant to Article 12.

**§ 3.5.4** In case of work performed by Subcontractors and where warranties are required, secure warranties from said Subcontractors addressed to and in favor of the Owner. Deliver copies of same to Architect through the Construction Manager upon completion of work. Delivery of said warranties shall not relieve the Contractor from any obligations assumed under any other provision of Contract.

### **§ 3.6 Taxes**

Pursuant to Iowa Code, at the time this Agreement is issued, the Owner will issue an "Exemption Authorization Letter" and a "Designated Exemption Entity, Iowa Construction Sales Tax Exemption Certificate" for the purchase or use of building materials, supplies and equipment that will be incorporated into the Work of this Agreement. Other requirements with respect to this provision are set forth within the Project Manual.

**§ 3.6.1** Bidders shall be responsible for informing themselves of tax laws, requirements, regulations, and interpretations as they apply to this Project.

**§ 3.6.2** The Contractor shall not include in the bid State of Iowa and Local Option Sales and Use Tax for building materials that will be incorporated into real property for this project. Each Bid Package Contractor shall provide a list of Subcontractors and Sub-subcontractors with their Federal Identification Number to the Owner. The Owner will issue exemption certificates to Contractors, Subcontractors and Sub-subcontractors in order to eliminate tax from the construction materials following award of contract. If material is purchased outside the State of Iowa and the other state requires that the Contractors, Subcontractors, Sub-subcontractors and suppliers pay sales tax, they are recommended to include this price in their bid unless they are able to obtain a sales tax refund from said state.

**§ 3.6.3** The Contractor shall submit required sales tax exemption information within ten (10) days of the date of the Agreement between Owner and Contractor.

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

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

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

§ 3.7.3 If the Contractor or any of its Subcontractors 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. The Contractor shall take note and comply with all governing laws, rules and regulations affecting the performance of the Work. This may include such laws, rules and regulations as: (1) Licensing of Contractors for special requirements, e.g. hazardous waste removal; (2) Requirements for special construction permits; (3) Exemption from sales tax, if applicable; (4) Wage rates and employment requirements when required by law or by Owner; (5) Local labor requirements; and (6) Non-discriminatory hiring practices. Contractor shall participate in all equal employment opportunity programs applicable to the Project.

§ 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, Construction Manager, and the Architect before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Architect and Construction Manager will promptly investigate such conditions and, if the Architect, in consultation with the Construction Manager, determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Architect, in consultation with the Construction Manager, 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, Construction Manager, and Contractor in writing, stating the reasons. If the Owner or Contractor disputes the Architect's determination or recommendation, either party may proceed as provided in Article 15.

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

§ 3.7.6 The Contractor is responsible for scheduling inspections related to the performance of its Work and ensuring Work is complete for inspections. Any costs associated with re-inspection caused by irregularities, deficiencies or non-conforming Work will be borne by the responsible contractor including compensation for the Architect's, Architect's Consultant's and Construction Manager's Additional Services related to evaluation of the problem and development of an acceptable solution.

§ 3.7.7 **The State of Iowa, its agencies, and its political subdivisions, including cities, school district and public utilities are required by Iowa Code 73A.21 to require a reciprocal resident bidder and resident labor force preference.**

§ 3.7.7.1 **A "resident bidder" means a person or entity authorized to transact business in the State of Iowa and having a place of business for transacting business with the state at which it is conducting and has conducted business for at least three (3) years prior to the date of the first advertisement for the public improvement. If any other state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign county.**

§ 3.7.7.2 **A Resident Bidder shall be allowed a preference as against a nonresident bidder from a state or foreign country other than Iowa if that state or foreign country gives or requires any preference to bidders from that state or foreign country, gives or requires any preference to bidders from that state or foreign**

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country, including, but not limited to, any preference to bidders the imposition of any type of force preference, or any other form of preferential treatment to bidders or laborers from the state or foreign country. The preference allowed shall be equal to the preference given or required by the state or foreign country in which the nonresident bidder is a resident.

**§ 3.7.7.3** If the Contractor is a nonresident bidder the Contractor is required to specify in the Agreement between the Owner and Contractor whether any preference is in effect in the nonresident bidder's state or country at the time of this bid and identify the source of the regulations.

**§ 3.7.7.4** Compliance with Law Provision: the Contractor agrees that it will comply with all applicable Federal, State and local laws, statutes, codes, rules, and regulations having jurisdiction over Contractor's performance of the Work for the Project. Contractor shall take all necessary precautions to keep the site and work in compliance with the safety and health regulations for construction issued by the Bureau of Labor Standards of the U.S. Department of Labor as well as the Occupational Safety and Health Standards, as amended and as enforced by the State of Iowa.

### **§ 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 at all times during performance of the Work, including work of the Contractor's subcontractors. Any change in superintendent personnel must be approved by the Owner **in writing**. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

Other communications shall be similarly confirmed on written request in each case. This individual shall be fluent in all languages necessary to communicate with Contractor's employees and subcontractors. Owner and Construction Manager shall be furnished with the e-mail address and pager, home and cell phone numbers for the Superintendent. The approved superintendent will work in this position until completion of the Work unless he shall no longer be in the Contractor's employ, or shall be released at the request of the Architect, Construction Manager and/or Owner.

**§ 3.9.2** The Contractor, within ten (10) days of the date of the Agreement between Owner and Contractor, shall furnish in writing to the Owner and Architect through the Construction Manager, the name and qualifications of a proposed superintendent and key personnel in regular attendance at the Project site. The Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager, or the Architect has reasonable objection to the proposed superintendent or other key personnel, or (2) that any of them require additional time to review. Failure of the Construction Manager to reply within the 14 day period shall constitute notice of no reasonable objection.

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

§ 3.9.3.1 The Superintendent or Superintendents shall be thoroughly competent with full experience in all phases of the Work to be performed under this Contract. Anyone not deemed capable of directing all trades involved in the Work shall be replaced or supplemented immediately upon request, by someone who is satisfactory. After a satisfactory Superintendent has been assigned, they shall not be withdrawn without the consent of the Construction Manager, Architect and/or Owner.

### § 3.10 Contractor's Construction Schedules

§ 3.10.1 The Contractor, within fourteen (14) days of the award of the Contract, shall prepare and submit for the Owner's and Architect's information and the Construction Manager's approval a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised monthly or as otherwise requested by the Owner, Construction Manager or Architect, shall be related to the entire Project schedule to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. The Contractor shall cooperate with the Construction Manager in scheduling and performing the Contractor's Work to avoid conflict with, and as to cause no delay in, the work or activities of other Multiple Prime Contractors or the construction or operations of the Owner's own forces. Each monthly update shall include a narrative including:

- .1 A description of the status of the schedule;
- .2 A discussion of current and anticipated delays;
- .3 A discussion of progress of critical path activities;
- .4 A discussion of the critical path for the remainder of the Project; and
- .5 A listing and discussion of logic changes and duration changes.

§ 3.10.2 The Contractor shall prepare a submittal schedule, within fourteen (14) days of the award of Contract and thereafter update it as necessary to maintain a current submittal schedule, and shall submit the schedule(s) for the Construction Manager's and Architect's approval. The Architect and Construction Manager's approval shall not unreasonably be delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Construction Manager and Architect reasonable time to review submittals. If the Contractor fails to submit a submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

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

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

### § 3.11 Documents and Samples at the Site

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

### § 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.

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**§ 3.12.2** Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

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

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

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

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

**§ 3.12.7** The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed and approved by the Architect. The Contractor must correct at its cost, and without any adjustment in Contract Time, any Work the correction of which is required due to the Contractor's failure to obtain approval of a submittal required to have been obtained prior to proceeding with the Work, including, but not limited to, correction of any conflicts in the Work resulting from such failure.

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

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

**§ 3.12.10** The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. The Contractor shall not be required to provide professional services in violation of applicable law. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of the

Contractor by the Contract Documents, the Owner and the Architect will specify all performance and design criteria that such services must satisfy. The Contractor shall cause such services or certifications to be provided by a properly licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Architect. The Owner and the Architect shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals, provided the Owner and Architect have specified to the Contractor all performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Architect will review, approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Contractor shall not be responsible for the adequacy of the performance and design criteria specified in the Contract Documents.

§3.12.11 The Architect's and Construction Manager's review of the Contractor's submittals will be limited to examination of an initial submittal plus one re-submittal. The Owner is entitled to obtain reimbursement from the Contractor for amounts paid the Architect and/or Construction Manager for evaluation of additional re-submittals.

### § 3.13 Use of Site

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

§ 3.13.2 Except as may be specifically provided in the Contract Documents, the Contractor shall provide all necessary temporary facilities, including power, water, sanitation, scaffolding, storage, and security. If Owner makes any such facilities available to Contractor, it is without representation or warranty as to their adequacy for Contractor's use and Contractor shall indemnify, defend, and hold Owner harmless from and against any claims arising out of Contractor's use of such facilities.

§ 3.13.3 Contractor shall perform the Work so as to cause a minimum of inconvenience to and interruption of the Owner's operations. Any and all interruptions of the operations of the Owner necessary for the performance of the Work shall be noted in the progress schedule and the Contractor shall additionally give the Owner sufficient advance notice, through communication with the Construction Manager, of such interruption as to allow the Owner to adjust operations accordingly. Contractor's failure to give the Owner timely notice of such intentions shall place the responsibility of any resulting delays or additional costs solely with the Contractor.

§ 3.13.4 The Contractor shall not bring or permit any Subcontractor, supplier or anyone else for whom the Contractor is responsible, to bring on the site any asbestos, PCB's petroleum, hazardous waste or radioactive materials (except for proper use in performing the Work).

**§ 3.13.5 The Contractor shall return all improvements on, or about the site, streets, and adjacent properties which are not indicated to be altered, removed, or otherwise changed, to the conditions which existed prior to start of Work. The Contractor shall protect existing structures or other features from damage by any operation in connection with the Contract.**

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

**§3.13.3 Before making any shipment of materials to the project site, Contractor shall ascertain that the Project site is in a condition to receive the shipment. If material is delivered to the Project site and the Project is not in condition to receive the materials, the materials shall be removed from the site and properly stored off-site at the expense of the Contractor or its Subcontractor. All deliveries must be coordinated in advance through the Construction Manager. The Construction Manager will not provide any labor or equipment to unload deliveries for any Contractor or its Subcontractor.**

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### § 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. Contractors shall be responsible for cutting and patching not specifically indicated on the drawings but required for completion of their Work. Cutting and patching shall be kept to a minimum by careful planning and through providing holes, sleeves, anchors, inserts, or other built-in items as Work progresses and then only to the extent required to properly place, support, hang, anchor, or install materials and equipment. All areas requiring cutting, fitting and patching shall be restored to the condition existing prior to the cutting, fitting and patching, unless otherwise required by the Contract Documents. All patching is subject to Architect and Construction Manager's acceptance. Unauthorized or careless cutting will not be permitted. No structural member shall be cut unless approved by the Architect or Architect's Consultants.

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

**§ 3.14.3 Cutting and patching of construction work, or excavation and backfilling in or about the building shall be done under the direct supervision of the Contractor for that portion of Work being altered, who shall be responsible to see that patching and backfilling is accomplished by using proper labor, material, equipment and methods consistent with the requirements for other similar construction.**

§ 3.14.4 Each Contractor is responsible for all cutting, fitting, patching, excavation and backfill required to complete its Work, including uncovering portions of the Work to provide for installation of ill-timed work; removing and replacing defective work; removing and replacing work not conforming to the requirements of the Contract Documents; and removing samples of installed work as specified for testing.

§ 3.14.5 The Contractor shall provide:

2. all necessary shoring, bracing and other supports to assure the structural safety of that portion of the work;
3. all necessary devices and methods to protect other portions of the project from damage including, but not limited to, temporary partitions and dust enclosures as required.
4. all necessary protection from the elements for that portion of the project which may be exposed by cutting and patching work, and pumping to maintain excavations free from water.

§ 3.14.6 The Contractor shall restore work which has been cut or removed and install new products to provide completed Work in accordance with the requirements of the Contract Documents. The Contractor shall refinish entire surfaces as necessary to provide an even finish to match adjacent finishes. For continuous surfaces, the Contractor shall refinish to the nearest intersection and for an assembly, and shall refinish the entire unit.

**§ 3.14.7 If a dispute arises between Trade Contractors as to their responsibility for cutting, fitting, patching, excavation or backfill, as required by the foregoing sections or elsewhere in the Contract Documents, the Construction Manager may have such work completed and charge the cost thereof to the appropriate Contractors. § 3.15 Cleaning Up**

§ 3.15.1 The Contractor and their subcontractors shall at all times keep the premises and surrounding area free from accumulation of waste materials, fire hazards, or rubbish caused by operations under the Contract and shall keep their work area neat and orderly through the construction period. 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. The Prime Contractor shall police all daily clean-up assigning clean up to related subcontract work. All clean-up not done in one (1) days, shall be done by the Prime Contractor. The Project shall be kept neat and free of debris at all times.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, within twenty four (24) hours after notice the Owner, or Construction Manager, may clean the Site and back charge the Contractor for all costs associated with the cleaning and the Owner shall be entitled to reimbursement from the Contractor.

### **§ 3.16 Access to Work**

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

**§ 3.16.1 Work will be performed in accordance with the Contract Documents, the Applicable Building Code, and other applicable law governing the Contractor's performance of the Work. No delays resulting from compliance with applicable laws or regulations may form the basis for any claim by the Contractor for delay damages or additional compensation or for any claim by the Contractor for delay damages or additional compensation or for any extensions of the Contract Time. The Contractor must not permit work outside of hours established in the Contract Documents on a Saturday, Sunday or State or federal holiday without the written consent of the Owner, given after prior written notice to the Architect and any other applicable consultants, such consent, if given, may be conditioned upon payment by the Contractor of the Owner's, Construction Manager and Architect's and any other applicable consultants' additional costs and fees, testing or regulatory agency costs incurred in monitoring such off-hours Work. The Contractor must notify the Owner and/or Construction Manager as soon as possible if Work must be performed outside such times in the interest of the safety and protection of persons or property at the Site or adjacent thereto, or in the event of any emergency. In no event shall the Contractor permit Work to be performed at the Site without the presence of the Contractor's superintendent and person responsible for the protection of persons and property at the Site and compliance with all applicable laws and regulations, if different from the superintendent.**

### **§ 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, Construction Manager and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner, Architect, or Construction Manager. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect through the Construction Manager.

### **§ 3.18 Indemnification**

**§ 3.18.1** To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Owner, its agents, representatives, and employees of any of them (Indemnitees) from and against any and all claims, damages, causes of action, losses and expenses, including, but not limited to, attorney's fees, arising out of or resulting from or in connection with the performance of the Work, 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 an Indemnity. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity or contribution which would otherwise exist, as to any party or person described in Contract Documents.

**§ 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 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.

**§ 3.18.3** In the event the Owner should prevail in any legal action arising out of the performance or non-performance of this Agreement, the Contractor shall pay, in addition to any damages, all expenses of such action including reasonable attorney's fees, all expert witness fees, costs, and litigation expenses incurred by the Owner, including those incurred on appeal. The term "legal action" shall be deemed to include any arbitration, administrative proceedings, and all actions at law or in equity, including appeals.

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### **§3.19 MISCELLANEOUS CONTRACTOR RESPONSIBILITIES**

**§3.19.1** The Contractor agrees to adhere to the Federal Occupational Safety Act, State and local safety regulations, and the Construction Manager's Safety Program, so as to avoid injury or damage to persons or property, and to be directly responsible for damage to persons and property resulting from failure to do so.

**§3.19.2** If the Construction Manager issues a safety notice to the Contractor and the Contractor fails to take corrective action immediately to insure compliance with said safety regulations and/or removal of rubbish and debris resulting from his Work that is creating a hazard, the Construction Manager shall rectify the hazard(s) with the cost of same to be reimbursed to the Owner without further notice to the Contractor.

**§3.19.3** The Contractor agrees to notify the Construction Manager's representative on the job site of all accidents resulting in bodily injury or property damage shall provide the Construction Manager's representative with a copy of all accident reports on appropriate forms. All reports shall be signed by the Contractor or his authorized representative and submitted within twenty-four (24) hours of occurrence.

**§3.19.4** The Contractor agrees to adequately and properly protect its Work during construction and after completion of a task until substantial completion.

**§3.19.5** The Contractor agrees that all disputes concerning the jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes which may be in effect, either nationally or in the locality in which the Work is being done.

**§3.19.6** The Contractor shall submit to the Construction Manager upon request, copies of orders placed for the various materials required for the Project, or authentic stock lists if such material is normally a stock item. Order copies need not reflect prices, but should indicate type of material, quantity, vendor name and address, etc. The Contractor shall be required to submit to the Construction Manager a monthly Material Status Report, or more often if required by the Construction Manager, as a prerequisite for the monthly progress payment. The Contractor shall notify the Construction Manager immediately upon learning of a change in status of any material, equipment or supplies.

**§3.19.7** The Contractor agrees to maintain an adequate force of experienced workers and the necessary materials, supplies and equipment to meet the requirements of the Construction Manager and other trades in order to maintain construction progress schedules, as established by the Construction Manager and Owner. In the event that its force is, in the judgment of the Construction Manager, inadequate to meet the established schedules during the regular work hours, the Contractor agrees to work sufficient overtime hours or increase its work force to meet such schedules at no extra cost to the Owner.

**§3.19.8** The Contractor agrees to employ competent administrative, supervisory and field personnel to accomplish the Work, including layout and engineering and preparation and checking of shop drawings.

**§3.19.9** The Contractor shall insure that construction tools, equipment, temporary facilities, and other items used in accomplishing the Work, whether purchased, rented or otherwise provided by the Contractor or provided by others, are in a safe, sound and good condition, they must be capable of performing the functions for which they are intended, and maintained in conformance with applicable laws and regulations.

**§3.19.10** Contractor shall use, at all times on the Work, only such labor as will in no way whatsoever disturb or affect labor employed by the Owner or other contractors on the site, and Contractor's employees shall work in harmony with all such employees and contractors. Contractor shall consult with Construction Manager before making any disputed work assignments.

**§3.19.11** Contractor shall assign to and maintain on the Work, a force of experienced employees, equipment and tools in first class operating condition, adequate to complete the Work within the prescribed time schedule, and shall furnish careful, efficient and experienced business administration and supervision of the work force.

**§3.19.12** Any of Contractor's assigned personnel or subcontractors whom the Owner may consider to be incompetent, careless, insubordinate or otherwise objectionable, or whose conduct or presence is considered to be detrimental to the best interests of the Project, or who are not required for the Work, shall be removed at Owner's

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request. Owner shall not incur any liability, responsibility or obligation whatsoever in regard to exercising its rights herein either to Contractor or any other person.

**§3.19.13** Contractor shall in all respects comply with, and shall cooperate with the Owner in enforcing, all site procedures, conditions and rules established by the Owner which affect any of the Work being performed for the Project or at the Jobsite, including, but not limited to: Project schedules; access; security; traffic and solicitation; work and storage areas; utilities; safety; medical and first aid facilities; fire and explosion precautions; pollution; sanitation; cleanup and work conditions. Contractor shall be required to attend all Jobsite or Project meetings held by the Owner in regard to site control, procedures, schedule or coordination.

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

##### **§ 4.1 General**

**§ 4.1.1** The “Architect” is defined in this Contract as the Engineer or Architect lawfully licensed by the State to practice architecture or engineering or an entity, licensed by the State to lawfully practice architecture or engineering identified as such in this Contract and as is referred to throughout the Contract documents as if singular in number.

The term “Engineer,” “Architect/Engineer,” “Engineer/Architect,” “Architect’s authorized representative,” “Engineer’s authorized representative,” or “Architect/Engineer’s authorized representative” shall mean “Architect” as defined in this paragraph.

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

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

*(Paragraph Deleted)*

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

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

**§ 4.2.2** The Architect, as a representative of the Owner, shall attend regular monthly construction meetings and shall visit the site at intervals appropriate to the stage of construction, or as otherwise agreed to by Owner and Architect and/or as otherwise required in Section 4.3.3, to observe and evaluate the Work to become generally familiar with the progress and quality of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, is proceeding in accordance with the Contract Documents. However, the Architect shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the Architect shall keep the Owner and the Construction Manager reasonably informed about the progress and quality of the Work, and report to the Owner and Construction Manager in writing any (1) known deviations from the Contract Documents and from the most recent construction schedule, and (2) defects and deficiencies observed in the Work. The Architect will provide the Owner with monthly written observation reports and construction update minutes as the Project Progress”

**§ 4.2.2.1** **The Owner is entitled to reimbursement from the Contractor for amounts paid to the Architect for site visits made necessary by the fault of the Contractor or by defects and deficiencies of the Work.**

**§ 4.2.3** The Construction Manager shall provide a staffing plan to include one or more representatives who shall be in attendance at the Project site whenever the Work is being performed and when otherwise necessary even when work is not being performed as mutually determined by the Owner and Construction Manager. The Construction Manager will determine in general if the Work observed is being performed in accordance with the Contract Documents, will keep the Owner reasonably informed of the progress of the Work, and will report to the Owner and

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Architect (1) known deviations from the Contract Documents and the most recent Project schedule, and (2) defects and deficiencies observed in the Work.

**§ 4.2.4** The Construction Manager will schedule and coordinate the activities of the Contractor and other Multiple Prime Contractors in accordance with the latest approved Project schedule.

**§ 4.2.5** The Construction Manager, except to the extent required by Section 4.2.4, and Architect will not have control over, or charge of, construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents, and neither will be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. Neither the Construction Manager nor the Architect will have control over or charge of or be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons or entities performing portions of the Work. The Architect shall report to the Owner known deviations from the Contract Documents **in writing**.

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

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

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

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

**§ 4.2.10** The Architect will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect's action will be taken in accordance with the submittal schedule approved by the Architect or, in the absence of an approved

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submittal schedule, with reasonable promptness while allowing sufficient time in the Architect's professional judgment to permit adequate review. Upon the Architect's completed review, the Architect shall transmit its submittal review to the Construction Manager.

**§ 4.2.11** Review of the Contractor's submittals by the Construction Manager and Architect is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Construction Manager and Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5 and 3.12. The Construction Manager and Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Construction Manager and Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component. The Architect and Construction Manager will review the initial submittal and one (1) re-submittal. If further review is required on more than one (1) re-submittal (i.e. second, third or more re-submittal) the Architect will do so on an hourly basis. The Architect and Construction Manager will then charge the Owner for this additional service (as provided in the Agreement between the Architect and Owner and Construction Manager and Owner) and the Owner will then deduct the sum due for those additional services occasioned by excessive re-submittals from the amount due to the Contractor at the next application for payment. In addition, if submittals are provided either incomplete or requiring other submittals in order to conduct an appropriate review, and the Contractor requests review of these "incomplete" submittals, they will be reviewed on an hourly basis as set forth above.

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

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

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

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

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

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

**§ 4.2.18** Interpretations 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, and will not be liable for results of interpretations or decisions so rendered in good faith.

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

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

## ARTICLE 5 SUBCONTRACTORS

### § 5.1 Definitions

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

§ 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 The Contractor, within 10 days after the award of the Contract shall furnish in writing to the Construction Manager for review by the Owner, Construction Manager and Architect the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) along with a list of actual materials or equipment they will be furnishing, proposed for each principal portion of the Work. The Construction Manager may reply within 14 days to the Contractor in writing stating (1) whether the Owner, the Construction Manager or the Architect has reasonable objection to any such proposed person or entity or, (2) that the Construction Manager, Architect or Owner requires additional time for review. Failure of the Construction Manager, Owner, or Architect to reply within the 14-day period shall constitute notice of no reasonable objection. The Contractor shall update this list throughout the Project and keep Owner, Architect and Construction Manager advised of any new Subcontractors employed.

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

§ 5.2.3 If the Owner, Construction Manager or Architect has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner, Construction Manager or Architect has no reasonable objection. If the proposed but rejected Subcontractor met all criteria set forth in the Contract Documents 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. Acceptance or rejection of any subcontractor shall not relieve the Contractor of performance of Work as called for under the Contract Documents, nor shall acceptance of a particular subcontractor be construed as acceptance of any particular process or material.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person or entity previously selected if the Owner, Construction Manager or Architect makes reasonable objection to such substitution.

### § 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

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

#### **§ 5.4 Contingent Assignment of Subcontracts**

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

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

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

*(Paragraph Deleted)*

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

### **ARTICLE 6 CONSTRUCTION BY OWNER OR BY OTHER CONTRACTORS**

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

**§ 6.1.1** The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, which include persons or entities under separate contracts not administered by the Construction Manager, and to award other contracts in connection with other portions of the Project or other construction or operations on the site under Conditions of the Contract identical or substantially similar to these including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such Claim as provided in Article 15. The Contractor shall give notification of the potential of a claim in writing to the Owner and/or Separate Contractor within forty-eight (48) hours of the occurrence or discovery of the potential of an occurrence of the delay or action that will result in making a claim.

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

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

#### **§ 6.2 Mutual Responsibility**

**§ 6.2.1** Each Contractor and their Subcontractors shall cooperate with and coordinate their Work with all other Multiple Prime Contractors and their Subcontractors, Construction Manager and Owner to facilitate the general

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progress of the Project and to prevent delay of others. The Contractor shall afford the Owner's own forces, Construction Manager and other Multiple Prime Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents. Each Contractor or Subcontractor shall provide and obtain layout drawings, rough-in detail sheets and other pertinent information directly from the Construction Manager to coordinate all phases of the Work. For coordination with the Owner's equipment or materials, information shall be obtained from the Owner, through the Construction Manager. After timely notification by the Contractor of the need to accomplish a particular phase or element of the Work, other contractors shall, within reasonable time, perform their Work so as not to delay or impede the Contractor.

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

**§ 6.2.3** The Contractor shall reimburse the Owner for costs the Owner incurs, including costs that are payable to a separate contractor or to other Multiple Prime Contractors because of the Contractor's delays, improperly timed activities, defective construction or lack of coordination with other Contractor's. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of delays, improperly timed activities, damage to the Work, defective construction, or lack of coordination by the Owner's own forces or other Multiple Prime Contractors.

**§ 6.2.4** The Contractor shall promptly remedy damage the Contractor causes to completed or partially completed construction or to property of the Owner, separate contractors, or other Multiple Prime Contractors as provided in Section 10.2.5.

**§ 6.2.5** The Owner and other Multiple Prime Contractors 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, other Multiple Prime Contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Construction Manager, with notice to 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. No claim for an addition to the maximum Contract sum shall be considered a valid claim unless a written change order procedure is followed as outlined in this Article. Verbal authorization for changes must be supported by written approval before being considered valid.

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

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

## § 7.2 Change Orders

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

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum (Methods used in determining adjustments to the Contract Sum shall include those listed in Subparagraph 7.3.3.); and
- .3 The extent of the adjustment, if any, in the Contract Time.

**§ 7.2.1 The Contractor must submit change proposals covering a contemplated Change Order within seven (7) days after request of the Owner, or the Construction Manager or within seven (7) days of the event giving rise to the Contractor's claim for a change in the Contract Sum or Contract time. No increase in the Contract Sum or extension of the Contract Time will be allowed the Contractor for the cost or time involved in making change proposals. Change proposals will define or confirm in detail the Work which is proposed to be added, deleted, or changed and must include any adjustment which the Contractor believes to be necessary in (i) the Contract Sum, or (ii) the Contract Time. Any proposed adjustment must include detailed documentation including, but not limited to: cost, properly itemized and supported by sufficient substantiating data to permit evaluation including cost of labor, materials, supplies and equipment, rental cost of machinery and equipment, additional bond cost, plus a fixed fee for profit and overhead (which includes office overhead and site-specific overhead and general conditions) of ten percent (10%) if the Work is performed by the Contractor, or five percent (5%) if the Work is performed by a Subcontractor or Sub-Subcontractor. The Subcontractors or Sub-Subcontractors overhead and profit in turn must not exceed a total aggregate of ten percent (10%). Change proposals will be binding upon the Contractor and may be accepted or rejected by the Owner in its discretion. The Owner may, at its option, instruct the Contractor to proceed with the Work involved in the change proposal in accordance with this Section 7.2.2 without accepting the change proposal in its entirety.**

**§ 7.2.2 If the Owner determines that a change proposal is appropriate, the Construction Manager will prepare and submit a request for a Change Order or Contract Amendment providing for an appropriate adjustment in the Contract Sum or Contract Time, or both, for further action by the Owner. No such change is effective until the Owner, Construction Manager and Architect sign the Change Order.**

**§ 7.2.3 The forms used to process a Change Order will Include AIA Document G701/CMA, Change Order.**

**§ 7.2.4 The Contractor's signature on a Change Order shall constitute a full, final, and complete waiver and settlement of any and all claims, demands, and causes of action that Contractor has, or may have in the future, arising out of or relating to the Change Order and the occurrences, acts, omissions, or events upon which the Change Order is based. No "reservation of rights" or other attempt by Contractor to preserve present or future claims arising out of or relating to the Change Order (or arising out of or relating to the cumulative effect of the Change Order in combination with other Change Orders) shall be effective unless Owner and Contractor shall both agree, in a separate writing signed by both parties contemporaneously with Contractor's execution of the Change Order, to the specific terms, conditions, scope, and duration of such reservation of rights.**

## **§ 7.3 Construction Change Directives**

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

**§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order, and upon prior written approval of the Owner.**

**§ 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;

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- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.7.

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

§ 7.3.5 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Construction Manager and Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

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

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

- .1 Costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers compensation insurance;
- .2 Costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and
- .5 Additional costs of supervision and field office personnel directly attributable to the change.
- .6 **Cost of subcontracted work, computed in the same way as provided for under this Section.**

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

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost 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 Construction Manager and 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 Construction Manager shall prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

**§ 7.3.11 The maximum that will be allowed for overhead and profit or commission shall be (values are expressed as a percentage of the basic cost of the change) ten percent (10%) maximum mark-up for work**

performed by employees of the Contractor, Subcontractor, or Sub-Subcontractor; and five percent (5%) maximum Contractor mark-up for work performed by a Subcontractor.

**§ 7.3.12** In any proposal with material, equipment and supply credits, the credit shall be based on the actual Contract cost of the material (including trade and quantity discounts) less any charges actually incurred for handling or returning a material which has been delivered. No cancellation, restocking or similar charge will be allowed unless actually incurred by the purchaser and generally will not be allowed when the product has not been shipped.

**§ 7.3.13** Cost changes shall be computed by determining the basic costs indicated under Subparagraph 7.3.7, to which the overhead and profit or commission may be added.

**§ 7.3.14** Subcontractors or Sub-subcontractors shall compute their costs in the same way and are subject to the same conditions of what may be included in the cost and same maximum percentages for overhead and profit or commission. To the Sub-Subcontractor's proposal, the Subcontractor may add bond cost, if applicable, and up to five percent (5%) commission. To the Subcontractors proposal, the Contractor may add bond cost and up to five percent (5%) commission.

**§ 7.3.15** For changes involving work self-performed by the Contractor and work by a Subcontractor or Sub-Subcontractor, the commission shall be applied directly to the Subcontractor's proposal with the overhead and profit figure applied only to the Work self-performed by the Contractor.

**§ 7.3.16** In the event individual credits exceed \$5,000, a reasonable credit for bond expense and overhead and profit or commission shall be provided to the Owner.

**§ 7.3.17** 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 Construction Manager and Architect will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Construction Manager and Architect determine to be reasonably justified. The interim determination of cost 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.

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

**§ 7.3.19** For changes in the Work under Clauses 7.3.3.1, 7.3.3.2, 7.3.3.3 and 7.3.3.4, the change request shall be itemized as provided under this Subparagraph 7.3.19. The Contractor shall submit an itemized list of quantities with the applicable unit costs and extended price for each, in such form and detail as required by the Construction Manager.

**§ 7.3.19.1** As a minimum, the detailed breakdown shall include and indicate the items enumerated below. Items (a) and (b) constitute the cost of labor, and items (a), (b), (c) and (d) constitute the basic costs referred to under this Article 7.

(a) Labor costs, itemized by each trade involved, showing the hourly rates for each, and the hours required for the change. Labor rates shall be the same for extra and credit computations and shall be the actual rate paid to the workmen in accordance with established management labor agreements.

(b) Burden on labor, which shall be only the actual costs of mandatory fringe benefits required by established agreements, taxes on labor, workmen's compensation, insurance on labor as affected by payroll, unemployment taxes and insurance, including FICA and FUTA. No other costs will be allowed as burden on labor.

(c) Quantities of materials, equipment and supplies, at their actual costs, with unit costs indicated.

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(d) The cost of subcontracted work computed in the same way as provided for under this Subparagraph 7.3.19.

(e) Overhead, profit and commission.

(f) Applicable sales tax on materials, if any, added after the above computations are complete.OK

#### **§ 7.4 Minor Changes in the Work**

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

### **ARTICLE 8 TIME**

#### **§ 8.1 Definitions**

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

**§ 8.1.2** The date of commencement of the Work shall be the earliest date when all required paperwork, bonds and insurance certificates are in place and all Contract Documents have been executed by all parties.

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

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

#### **§ 8.2 Progress and Completion**

**§ 8.2.1** Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

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

**§ 8.2.3** The Contractor shall proceed expeditiously with adequate forces and shall achieve both Substantial Completion and Final Completion within the Contract Time specified. If Contractor’s Work shall fall behind schedule for reasons that are not excused under the terms of the Contract, Contractor shall add additional workers or shifts, and/or work overtime as necessary to maintain the Construction Schedule. The Work shall not be suspended or shut down but shall progress continuously with sufficient labor and supervision at all times unless otherwise approved by the Owner.

**§ 8.2.4** **The Contractor must conform to the most recently approved Construction Schedule. The Contractor must complete the indicated Work or achieve the required percentage of completion, as applicable, within any interim completion dates established in the most recently approved Construction Schedule.**

**§ 8.2.5** **The Contractor represents that its bid includes all costs, overhead and profit which may be incurred throughout the Contract Time and the period between Substantial and Final Completion. Accordingly, the Contractor may not make any claim for delay damages based in whole or in part on the premise that the Contractor would have completed the Work prior to the expiration of the Contract Time but for any claimed delay.**

**§ 8.2.6** **If the Contractor’s progress is not maintained in accordance with the approved Construction Schedule, or the Owner determines that the Contractor is not diligently proceeding with the Work or has evidence reasonably indicating that the Contractor will not be able to conform to the most recently approved Construction Schedule, the Contractor must, promptly and at no additional cost to the Owner, take all**

measurers necessary to accelerate its progress to overcome the delay and ensure that there will be no further delay in the progress of the Work and notify the Owner.

**§ 8.2.7** The Owner reserves the right to issue a written directive, through the Construction Manager, to accelerate the Work that may be subject to an appropriate adjustment, if any, in the Contract Sum. If the Owner requires an acceleration of the Construction Schedule and no adjustment is made in the Contract Sum, or if the Contractor disagrees with any adjustment made, the Contractor must file a claim as provided in Article 15 or the same will be deemed to be conclusively waived.

**§ 8.3 Delays and Extensions of Time**

**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner, Owner's own forces, Construction Manager, Architect, any of the other Multiple Prime Contractors or an employee of any of them, or by changes ordered in the Work, or by fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation, or by other causes that the Architect, based on the recommendation of the Construction Manager, determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine. A time extension shall be Contractor's sole remedy and compensation for all such delays other than those resulting from the acts or negligence of the Owner, the Architect, the Construction Manager or the Owner's separate contractors (collectively "Owner Caused Delays"). For proven Owner Caused Delays, the Contractor may recoup the actual costs resulting from such delays, but not for any additional profit or fee.

**§ 8.3.1.1** If in the opinion of the Construction Manager and Architect the Work is behind where it is supposed to be in the Project Time Schedule or it is likely that the Work will not be substantially complete by the applicable date for Substantial Completion, the Contractor, upon written notice from the Construction Manager and without additional cost or compensation, will increase its work force and, if requested by the Construction Manager, work such overtime to make up for the delay. Should the Contractor fail to increase its work force, work overtime, or proceed to make up for the delay to the satisfaction of the Construction Manager or the Owner, the Construction Manager or Owner, in addition to other remedies under this Agreement and other Contract Documents, will have the right to cause other Contractors to work overtime and to take whatever other action is deemed necessary to avoid delay in the Substantial Completion of the Work and of the Project, and the cost and expense of such overtime and other action will be borne by the Contractor and may be set off against sums due the Contractor.

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

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

**ARTICLE 9 PAYMENTS AND COMPLETION**

**§ 9.1 Contract Sum**

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

**§ 9.2 Schedule of Values**

Where the Contract is based on a Stipulated Sum, the Contractor shall submit to the Construction Manager, within thirty (30) days before the first Application for Payment, a schedule of values allocating the entire Contract Sum to the various portions of the Work and prepared in such form and supported by such data to substantiate its accuracy as the Construction Manager and Architect may require. This schedule, unless objected to by the Construction Manager or Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment. In the event there is one Contractor, the Construction Manager shall forward to the Architect the Contractor's schedule of values. If there are Multiple Prime Contractors responsible for performing different portions of the Project, the Construction Manager shall forward the Multiple Prime Contractors' schedules of values only if requested by the Architect.

**§ 9.3 Applications for Payment**

**§ 9.3.1** At least thirty (30) days before the date established for each progress payment, the Contractor shall submit to the Construction Manager an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be on AIA Document G732 CMA and by AIA Document G703 or such other form as may be prescribed by the Owner and shall be notarized and supported by such data substantiating the

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Contractor's right to payment as the Owner or Construction Manager may require, such as copies of requisitions from Subcontractors and material suppliers. If the Contract Documents required the Owner to retain a portion of the payments until some future time, the Applications for Payment shall clearly state the percentage and the amount to be retained. Once the Application is approved by the Construction Manager and Architect, the Application for Payment must be submitted for approval to the Shenandoah Community School District Board of Directors at their next regularly scheduled meeting. The application must be received at the Board Secretary's office at least one week prior to the scheduled meeting for it to be included in that meeting's scheduled business.

**§ 9.3.1.1** As provided in Section 7.3.17, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives, or by interim determinations of the Construction Manager and Architect, but not yet included in Change Orders.

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

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

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

**§ 9.3.4** The Owner, in making partial payment, will retain five percent (5%) of the approved value of the Work performed under the Contract as of the date of the application for payment until final completion and acceptance of all Work covered by the Contract, or as otherwise required by law.

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

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

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

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

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

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

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

**§ 9.4.7** The issuance of a separate Certificate for Payment or a Project Certificate for Payment will not be a representation that the Construction Manager or Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed the Contractor's construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor's right to payment or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

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

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

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a separate contractor;

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- .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.
- .8 **service work not attended to;**
- .9 **evidence of lack of careful workmanship;**
- .10 **unworkmanlike or over expeditious construction;**
- .11 **lack of attention to the special field duties specified.**

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

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

### § 9.6 Progress Payments

§ 9.6.1 After the Construction Manager has issued a Certificate for Payment and after the Architect has reviewed and authorized the issued a Certificate for Payment or Project Certificate for Payment to the Owner, the Owner shall approve payment with Contractor to receive payment by the last day of the following month. Until Substantial Completion, the Owner will pay ninety-five percent (95%) of the amount due the Contractor on account of progress payments and the Owner will withhold five percent (5%) retainage as allowed by Iowa law.

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

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

§ 9.6.4 Before the Contractor receives a progress payment, the Contractor must certify in writing that, in accordance with contractual arrangements, Subcontractors and suppliers:

- .1 Have been paid from the proceeds of previous progress payments; and
- .2 Will be paid in a timely manner from the proceeds of the progress payment currently due.

In the event the Contractor has not paid or does not pay as certified, such failure constitutes a ground for termination under Section 14.2 of the Contract. Contractor shall submit Applications for Payment to Construction Manager on a monthly basis or as otherwise specified in the Contract Documents. Once the Construction Manager submits a completed Application for Payment with its Certificate of Payment to the Owner, the Owner within thirty (30) days after its receipt of a Request for Payment from the Construction Manager shall pay the approved amount contained in the Request for Payment to the Contractor.

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

§ 9.6.6 Issuance of 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. The Contractor and its Surety agree any issuance of a project certificate for payment, payment on the Contract Sum, or any use or occupancy of the Work will in no way relieve them of the obligation to completely fulfill or accomplish all obligations of the Contract, including warranty of the Work, and that they waive any actual or alleged rights of subrogation or action against the Owner, Architect, or Construction Manager as a result of any such occupancy. At any time the Surety shall have the right to examine the status of the Work, as well as any payments, and may request the Owner to withhold additional sums as it considers appropriate to protect its interests.

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

**§ 9.6.8** Payment to the Contractor will be made by the Owner from cash on hand from such sources as may be legally available.

### **§ 9.7 Failure of Payment**

If Owner does not pay the Contractor within sixty (60) days after the Contractor submits an Application for Payment to the Construction Manager, the Contractor may file a claim in accordance with Article 15 of this Contract.

### **§ 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 the Owner can occupy or utilize the Work for its intended use, subject only to completion of minor punch list items, the absence of which does not interfere with the Owner's intended use of the Project. The Contractor assumes the responsibility for notifying the Construction Manager in writing when ready for final review of the Work. This letter to the Construction Manager shall include the date after which the Contractor will be ready for final review of the Work. Designated portions of the Work will be reviewed separately.

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

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

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

**§ 9.8.5** After Substantial Completion the Contractor shall coordinate its activities with the Owner's use of the substantially completed Work and shall diligently complete the remaining Work, without delay or interruption, within sixty days of the issuance of the Substantial Completion Certificate. If the Contractor fails to complete its Work with the allotted sixty (60) days, the Owner may invoke its right to carry out the work under Article 2, Subparagraph 2.4 of the Owner may invoke its right to terminate the contract under Article 14, Subparagraph 14.2.

**§ 9.8.6** The Certificate of Substantial Completion and accompanying Punch List must be submitted to the Owner and Contractor for execution, which will constitute their written acceptance of responsibilities assigned to them in such

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Certificate. The Contractor shall reimburse the Owner for any Architect's and Construction Manager's additional services or attorney's fees incurred as a result of Contractor's failure to finally complete the Work within sixty (60) days after the date specified in the Contract Documents for Project Substantial Completion, or subsequently modified by change orders or dates established in the Certificate of Substantial Completion. For purposes of this paragraph "incurred as a result of" includes any architectural fees charged to Owner as Additional Fees under the Contract due to the fact that the services were performed sixty (60) days (or some other amount of time specified in the Owner/Architect Agreement and/or Owner/Construction Manager Agreement) after Substantial Completion. The nature of the services performed (and whether they would have otherwise been performed as normal closeout services at some point under Basic Services) is not relevant to the Contractor's obligations for reimbursement under this section if the Contract between the Owner and Architect or Contract between Owner and Construction Manager states that any and all services and related fees are defined as Additional Services solely because they were performed more than sixty (60) days (or some other amount of time specified in the Owner/Architect Agreement and/or Owner/Construction Manager Agreement) after Substantial Completion.

**§ 9.8.6.7** Unless otherwise required by Iowa law, Retainage shall be released no earlier than thirty-one (31) days after completion and final acceptance by the Owner of all Work required by the Contract. **§ 9.8.8** If the Owner withholds an amount from the retainage payment to the Contractor, the Owner will provide a reason the request is being denied to the Contractor within thirty (30) calendar days of the receipt of the request.

**§ 9.8.9** Warranties required by the Contract Documents will commence on the Date of Substantial Completion of the Work unless otherwise provided in the Certificate of Substantial Completion or the Contract Documents.

**§ 9.8.10** Upon execution of the Certificate of Substantial Completion, the Contractor will deliver custody and control of such Work to the Owner. The Owner will thereafter provide the Contractor reasonable access to such Work to permit the Contractor to fulfill the correction, completion and other responsibilities remaining under the Contract and the Certificate of Substantial Completion.

**§ 9.8.11** Unless otherwise provided in the Certificate of Substantial Completion, the Contractor must complete or correct all items included in the final Punch List within sixty (60) days, subject to the availability of special order parts and materials, after the Date of Substantial Completion.

**§ 9.8.12** At the time of Substantial Completion, in addition to removing rubbish and leaving the building "broom clean," the Contractor must replace any broken or damaged materials, remove stains, spots, marks and dirt from decorated Work, clean all fixtures, vacuum all carpets and wet mop all other floors, replace HVAC filters, clean HVAC coils, and comply with such additional requirements, if any, which may be specified in the Contract Documents.

#### **§ 9.9 Partial Occupancy or Use**

**§ 9.9.1** The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer as required under Section 11.3.1.5 and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, or reduction in liquidated damages, if appropriate, 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 and Construction Manager shall jointly 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 after consultation with the Construction Manager.

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

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

**§ 9.10 Final Completion and Final Payment**

§ 9.10.1 When the Contractor has completed or corrected all items on the final Punch List and considers that the Work is complete and ready for final acceptance, the Contractor must give written notice to the Owner, Architect and Construction Manager and request a final inspection of the Work as provided in Section 9.10.2. The Contractor's notice and request for a final inspection must be accompanied by a final Application for Payment and the Submittals required by Section 9.10.3.

§ 9.10.2 Upon receipt of the Contractor's notice and request for final inspection, the Owner, Construction Manager and the Architect will promptly make such inspection and, when the Owner, Construction Manager and the Architect concur that the Work has been fully completed and is acceptable under the Contract Documents, the Construction Manager will issue a Certificate of Final Completion to the Owner. The Contractor's notice and request for final inspection constitutes a representation by the Contractor to the Owner that the work has been completed in full and strict accordance with terms and conditions of the Contract Documents. The Construction Manager will promptly notify the Contractor if the Owner or the Architect do not concur that the Work is finally complete. In such case, the Contractor must bear the cost of any additional services of the Owner, Construction Manager or the Architect until the Work is determined to be finally complete.

§ 9.10.3 Final payment will be made no earlier than thirty-one (31) days following approval by the School Board at a regularly scheduled meeting upon receipt of all Lien Waiver and/or Chapter 573 Claim Releases, Sales Tax information, and all other required closeout documents, and subject to the conditions of and in accordance with the provisions of Iowa Code Chapter 573 and Iowa Code Chapter 26. Owner may withhold from final payment any and all amounts required to reimburse the Owner for all costs, fees (including reasonable attorney's fees) it incurred as a result of any Chapter 573 Claims filed on the Project. Neither final payment nor any remaining retained percentage will become due until the Contractor submits the following documents to the Construction Manager and/or 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, submitted on AIA Document G706, Affidavit of Payment of Debts and Claims (latest edition) or such other form as may be prescribed by the Owner;
- .2 A release or waiver of liens on behalf of the Contractor and a similar release or waiver on behalf of each Subcontractor and supplier, accompanied by AIA Document G706A, Affidavit of Release of Liens (latest edition) or such other form as may be prescribed by the Owner;
- .3 A certificate evidencing that the Contractor's liability insurance and Performance Bond remain in effect during the one-year correction period following Substantial Completion as set forth in Section 12.2.2.1 and 12.2.2.2;
- .4 A written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Document;
- .5 Consent of surety to final payment, submitted on AIA Document G707 (latest edition) or other form prescribed by the Owner;
- .6 Other data required by the Owner establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be prescribed by the Owner;
- .7 All warranties and bonds required by the Contract Documents; and  
*(Paragraph Deleted)*
- .8 Record Documents as provided in Section 3.11 and return of Contract Documents as provided therein.

*(Paragraph Deleted)*

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

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the time of final Application for Payment. § 9.11 No assignment by the Contractor of any principal contract or any part thereof, or of the funds to be received thereunder by the Contractor, will be recognized unless such assignment has had the written approval of the Owner and the Surety has been given due notice of such assignment and has furnished written consent thereto. In addition to the usual recitals in the Assignment Contract, the following language must be set forth:

“It is agreed that the funds to be paid to the Assignee under this Assignment are subject to prior lien/claims for services rendered on materials supplied for the performance of all Work called for in said Contract, in favor of all persons, firms or corporations rendering such services supplying such materials.”

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

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

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall submit the Contractor’s safety program to the Construction Manager for review and coordination with the safety programs of other Contractors. The Construction Manager’s responsibilities for review and coordination of safety programs shall not extend to direct control over or charge of the acts or omissions of the Contractors, Subcontractors, agents or employees of the Contractors or Subcontractors, or any other persons performing portions of the Work and not directly employed by the Construction Manager.

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

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

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

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

§ 10.2.2.1 Contractors shall comply with the Iowa Smoke Free Air Act while on Property and shall not smoke or use any tobacco product while on Owner property. Owner’s property shall include, but not be limited to, inside private Contractor or employee owned vehicles while parked on Owner property.

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

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

§ 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, 10.2.1.3 and 10.2.1.4 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2, 10.2.1.3 and 10.2.1.4, except damage or loss attributable to acts or omissions of the Owner, Construction Manager or Architect or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, and not attributable to the fault, acts, operations, methods, or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor’s obligations under Section 3.18.

§ 10.2.5.1 Contractor's required remedial actions for damage and loss to property referred to in Clauses 10.2.1.2 and 10.2.1.3 shall repair the damaged materials and surfaces to their original condition, or better, to the satisfaction of the Owner. All such repairs are the responsibility of the Contractor and shall be accomplished at no additional cost to the Owner.

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

§ 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 The Contractor shall have a written safety program for the protection of persons and property. Contractor's safety program shall be submitted to the Construction Manager within ten (10) days of the date of the Agreement between Owner and Contractor. The Construction Manager will review the safety program and monitor Contractor implementation. The Contractor, not the Owner, shall be entirely responsible and liable for the safety of persons and property. The review of the safety program and monitoring of Contractor implementation by the Construction Manager does not shift that responsibility and liability to the Owner or Construction Manager.

- .1 The Construction Manager reserves the right to suspend work activity or deny access to the site of the work Contractor's, Subcontractor's, Sub-subcontractor's and their employees for repeated safety program rules violations.

§ 10.2.9 **This is a hard hat and safety glasses project. Use of personal protective equipment (PPE) will be required at all times and shall be modified to protect against hazards associated with certain Work activities.**

- .1 **The Construction Manager reserves the right to stop or suspend work for Contractor's, Subcontractor's, Sub-subcontractor's and their employees failure to properly use PPE.**

#### § 10.2.10 Injury or Damage to Person or Property

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

#### § 10.3 Hazardous Materials

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

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

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

**§ 10.3.4** The Owner shall not be responsible under this Section 10.3 for materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances. No product containing asbestos, Polychlorinated Biphenyl (PCB), lead-based materials or any other hazardous material identified by the United States Environmental Protection Agency shall be knowingly incorporated into the Work.

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

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

#### **§ 10.4 Emergencies**

In an emergency affecting safety of persons or property, the Contractor must take all necessary action, without the necessity for any special instruction or authorization from the Owner, Construction Manager or Architect, to prevent threatened damage, injury or loss. The Contractor must promptly, but in all events with twenty-four (24) hours of the emergency, report such action in writing to the Owner, Construction Manager and Architect. If the Contractor incurs additional costs on account of or is delayed by such emergency, the Contractor may request a change in the Contract Sum or Contract Time to account for such additional costs or delay in accord with Articles 7, 8 and 15.

The Contractor must file any such request within ten (10) days of the emergency or it is deemed waived. Any adjustment in the Contract Sum or Contract time shall be limited to the extent that the emergency work is not attributable to the fault or neglect of the Contractor or otherwise the responsibility of the Contractor under the Contract Documents.

### **ARTICLE 11 INSURANCE AND BONDS**

#### **§ 11.1 Contractor's Liability Insurance**

**§ 11.1.1** The Contractor shall purchase from an insurer that has a current A.M. Best Rating of A-VI or better and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations and completed operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- .1 Claims under workers' compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed;
- .2 Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 Claims for damages insured by usual personal injury liability coverage;
- .5 Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;

- .6 Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle;
- .7 Claims for bodily injury or property damage arising out of completed operations; and
- .8 Claims involving contractual liability insurance applicable to the Contractor's obligations under Section 3.18.

§ 11.1.2 The Contractor shall have the following insurance coverage. The Contractor shall supply the Owner with Certificate(s) of Insurance, in triplicate, which shows that the minimum coverages are provided. All coverage shall be on an occurrence basis.

A. Comprehensive Commercial General Liability Combined Single Limits covering Bodily Injury, Property Damage and Personal Injury:

The General Liability policy shall have the Designated Construction Project General Aggregate Limit endorsement attached – ISO form CG 2503 or its equivalent.

General Aggregate Limit	\$2,000,000
Products-Completed Operations Aggregate Limit:	\$2,000,000
Personal and Advertising Injury Limit:	\$1,000,000
Each Occurrence Limit:	\$1,000,000
Fire Damage Limit (for any one fire)	\$ 50,000
Medical Damage Limit (any one person)	\$ 5,000

B. Contractor shall furnish Excess/Umbrella Liability coverage, in an amount not less than \$2,000,000. This policy shall provide equal coverage to that stipulated in (A) above, and (C) and (D) below, and shall have complete concurrency with underlying coverages.

C. Workers' Compensation and Employers' Liability Insurance:

Bodily Injury by Accident:	\$500,000 per accident
Bodily Injury by Disease	\$500,000 each employee
Bodily Injury by Disease	\$500,000 policy limit

Workers' Compensation shall meet State of Iowa statutory limits. The Contractor's workers compensation policy must include form WC 000313, Waiver of Our Right to Recover from Others.

D. Commercial Automobile Liability insurance, covering all owned, non-owned, hired and leased vehicles with a minimum combined single limit for Bodily Injury and Property Damage of \$1,000,000. Insurance must include Contractual Liability.

E. The Owner's property insurance shall only cover portions of the Work installed on the site. All portions of the Work off-site shall be covered by the Contractor's insurance policies. The Contractor shall furnish an "Installation Floater" as a part of their insurance coverage, which shall cover materials destined for the jobsite, on the jobsite and materials not yet installed as part of the Project. The Owner shall not make payment on any portions of the Work and/or materials not on the site, except under written stipulations and conditions as set forth by the Owner's legal counsel and insurance carrier and/or representative.

F. The Certificates of Insurance shall be issued on AIA Document G705, Accord Form 25-S current form, or a form that provides, in a similar manner, the same information.

G. The Contractor and their insurance carrier must fully disclose, in writing, along with the submission of their Certificates of Insurance, any and all judgments which have been, are in the process of pending claims filed, or knowledge of any or all potential claims which may, will be or already have reduced the available limits of coverage to be afforded and extended to the Owner. The Contractor will be responsible for purchasing additional coverage in order to provide the Owner with the insurance coverages as required.

H. Builders Risk Insurance: See Article 11.3.

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I. All policies must include a waiver of subrogation clause.

**§ 11.1.3** The insurance required by Section 11.1.1 shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater. Coverages, whether written on an occurrence or claims-made basis, shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment and, with respect to the Contractor's completed operations coverage, until the expiration of the period for correction of Work or for such other period for maintenance of completed operations coverage as specified in the Contract Documents.

**§ 11.1.4** Certificates of insurance acceptable to the Owner shall be submitted to the Construction Manager for transmittal to the Owner with a copy to the Architect prior to commencement of the Work and thereafter upon renewal or replacement of each required policy of insurance. These certificates and the insurance policies required by this Section 11.1 shall contain a provision that coverages afforded under the policies will not be canceled or allowed to expire until at least 30 days' prior written notice has been given to the Owner. An additional certificate evidencing continuation of liability coverage, including coverage for completed operations, shall be submitted with the final Application for Payment as required by Section 9.10.2 and thereafter upon renewal or replacement of such coverage until the expiration of the time required by Section 11.1.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness.

**§ 11.1.5** The Contractor shall cause the commercial liability coverage required by the Contract Documents to include (1) the Construction Manager, the Construction Manager's consultants, the Owner, the Architect, and the Architect's consultants as additional insureds on a primary and noncontributory basis for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor's negligent acts or omissions during the Contractor's completed operations. The Owner, Construction Manager and the Architect shall be named as Additional Insured on all liability coverages with respect to liability caused in whole or in part by the Contractor, and shall be shown as such on the Certificate. Said Certificate must be provided to the Owner before commencement of any aspect of the Work. All liability policies except Worker's Comp shall be endorsed as follows: "The insurance company and the insured expressly agree and state that the purchase of this policy of insurance by the insured does not waive any of the defense of governmental immunity available to the insured under Iowa Code section 670.4 as it now exists or may be amended from time to time. The company and the insured further agree that this policy of insurance shall cover only its claims not subject to the defense of governmental immunity under Iowa Code section 670.4 as it now exists or may be amended from time to time" The certificate of insurance relating to all liability coverages shall state: "The insurance company and the insured expressly agree and state that granting additional insured status on this policy of insurance does not waive any of the defense of governmental immunity available to the school district under Iowa Code chapter 670 as it now exists or may be amended from time to time".

### **§ 11.2 Owner's Liability Insurance**

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

### **§ 11.3 Property Insurance**

**§ 11.3.1** Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance written on a builder's risk "all risk" or equivalent policy form in the amount of the initial Contract Sum, plus value of subsequent Contract modifications and cost of materials supplied or installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 11.3 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Project.

**§ 11.3.1.1** Property insurance shall be on an "all-risk" or equivalent policy form and shall include, without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, windstorm, falsework, testing and startup, temporary buildings and debris removal including demolition occasioned by enforcement of any

applicable legal requirements, and shall cover reasonable compensation for the Architect's, Contractor's, and Construction Manager's services and expenses required as a result of such insured loss.

§ 11.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverages in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then effect insurance that will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order the cost thereof shall be charged to the Owner. If the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor in writing, then the Owner shall bear all reasonable costs properly attributable thereto.

§ 11.3.1.3 If the property insurance requires deductibles, the Owner shall pay costs not covered because of such deductibles.

§ 11.3.1.4 This property insurance shall cover portions of the Work stored off the site, and also portions of the Work in transit.

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

§ 11.3.2 **Boiler and Machinery Insurance.** The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Construction Manager, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insureds.

§ 11.3.3 **Loss of Use Insurance.** The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives all rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.

§ 11.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or other special causes of loss be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate Change Order.

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

§ 11.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverages required by this Section 11.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days' prior written notice has been given to the Contractor.

§ 11.3.7 **Waivers of Subrogation.** The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees each of the other, and (2) the Construction Manager, Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to this Section 11.3 or other property insurance applicable to the Work, except such rights as the Owner and Contractor may have to the proceeds of such insurance held by the Owner as

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fiduciary. The Owner or Contractor, as appropriate, shall require of the Construction Manager, Construction Manager's consultants, Architect, Architect's consultants, Owner's separate contractors described in Article 6, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

**§ 11.3.8** A loss insured under the Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

**§ 11.3.9** If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account insurance proceeds so received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach, or as determined in accordance with the method of binding dispute resolution selected in the Agreement between the Owner and Contractor. If after such loss no other special agreement is made and unless the Owner terminates the Contract for convenience, replacement of damaged property shall be performed by the Contractor after notification of a Change in the Work in accordance with Article 7.

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

#### **§ 11.4 Performance Bond and Payment Bond**

**§ 11.4.1** The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. The cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to one hundred percent (100%) of the Contract Sum for Performance and Payment.

**§ 11.4.1.1** The Contractor shall deliver the required bonds to the Owner not later than three (3) days following the date of the Agreement, or if the Work is to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished.

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

**§ 11.4.1.3** The Contractor shall comply with any other maintenance and warranty bond requirements required elsewhere in the project manual.

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

### **ARTICLE 12 UNCOVERING AND CORRECTION OF WORK**

#### **§ 12.1 Uncovering of Work**

**§ 12.1.1** If a portion of the Work is covered contrary to the Construction Manager's or Architect's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Architect or Construction Manager upon written authorization from Owner, be uncovered for their observation and be replaced at

the Contractor's expense without change in the Contract Time. The Contractor shall give timely notice to the Architect through the Construction Manager of the readiness of the Work to be observed.

**§ 12.1.2** If a portion of the Work has been covered which the Construction Manager or Architect has not specifically requested to observe prior to its being covered, the Construction Manager or Architect may request upon written authorization from the Owner to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncovering and replacement shall, by appropriate Change Order, be at the Owner's expense. If such Work is not in accordance with the Contract Documents, such costs and the cost of correction shall be at the Contractor's expense unless the condition was caused by the Owner or one of the other Contractors in which event the Owner or such separate Contractor providing work not in accordance with the Contract Documents shall be responsible for payment of such costs.

## **§ 12.2 Correction of Work**

### **§ 12.2.1 Before or After Substantial Completion**

The Contractor shall promptly correct Work rejected by the Construction Manager or Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed unless the Owner elects to accept the Work as provided for under Section 12.3. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Construction Manager's and Architect's services and expenses made necessary thereby, shall be at the Contractor's expense. Work rejected before final completion shall be corrected prior to processing of the Contractor's Final Application and Certificate for Payment.

### **§ 12.2.2 After Substantial Completion**

**§ 12.2.2.1** In addition to the Contractor's obligations under Section 3.5, if, within one (1) year after the date of Substantial Completion of the Work or designed portion thereof or after the date for commencement of warranties established under any other provision of the Contract Documents, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. Before commencing correction of the Work, Contractor shall submit to the Owner a written description of its proposed repair. This proposal must be approved by the Construction Manager and Architect before the Contractor commences the repair. Once the Contractor has completed the repair work, it shall notify the Owner, Construction Manager and Architect who shall promptly review the corrected Work. If the Construction Manager, Architect or the Owner rejects the corrected Work, the Contractor shall continue with the repairs until such time as the Construction Manager, Architect and the Owner accept the correct Work. Where the Contractor corrects defective work during the initial one (1) year period after Substantial Completion, if the Owner discovers defects in the corrected Work within one (1) year after the repairs are made, then the Contractor shall be obligated, upon written notice from the Owner, to correct such defects within one (1) year from the date that repairs were made.

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

*(Paragraph Deleted)*

**§12.2.2.4** Prior to the expiration of one year from the date of Substantial Completion, the Architect will conduct and the Contractor shall attend a meeting with the Owner to review the facility operations and performance.

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

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

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§ 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.

§ 12.2.6 If the Contractor fails or refuses to correct the Work in accordance with its obligations under the Contract Documents after written notice from the Owner, then the Owner may correct the Work and the Contractor shall be liable for the costs to correct the Work, any related architectural, engineering or other consulting costs, attorney's fees and expenses, and fines or penalties, if any. Any amounts due to the Owner from the Contractor under this Section may be withheld from the balance of the Contract Sum not yet paid.

**ARTICLE 13 MISCELLANEOUS PROVISIONS**

**§ 13.1 Governing Law**

The Contract shall be governed by and construed in accordance with the laws of the State of Iowa.

**§ 13.2 Successors and Assigns**

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

*(Paragraph Deleted)*

**§ 13.3 Written Notice**

Written notices are to be provided to the representatives of the parties designated in this Contract. Written notices are deemed to have been duly served if delivered in person to the addressee for whom it was intended, or if delivered by overnight courier. The date of any notice is deemed to be the earlier of the date of personal delivery or the delivery by overnight courier.

**§ 13.4 Rights and Remedies**

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

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

**§ 13.5 Tests and Inspections**

§ 13.5.1 Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities, unless provided otherwise in the Contract Documents. 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 must schedule all tests, inspections or specific approvals required by law or the Contract Documents so as to avoid any delay in the Work. The Contractor shall give the Construction Manager and Architect timely notice of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures.

§ 13.5.2 If the Construction Manager, Architect, Owner or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Section 13.5.1, the Construction Manager and Architect will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Construction Manager and Architect of when and where tests and inspections are to be made so that the Construction Manager and Architect may be present for such procedures. Such costs except as provided in Section 13.5.3, shall be at the Owner's expense.

§ 13.5.3 If such procedures for testing, inspection or approval under Sections 13.5.1 and 13.5.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure including those of repeated procedures and compensation for the Construction Manager's and Architect's services and expenses shall be at the Contractor's expense.

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

§ 13.5.5 If the Construction Manager or Architect is to observe tests, inspections or approvals required by the Contract Documents, the Construction Manager or Architect will do so promptly and, where practicable, at the normal place of testing.

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

§ 13.5.7 In addition to the tests required by this Section 13.5, the Owner may at any time arrange for other tests, inspections and specific approvals to be performed by others selected by the Owner, at the Owner's expense. The Contractor must cooperate with the Owner and provide access to the Work for such tests, inspections and approvals.

**§ 13.6 Interest**

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due and shall bear interest from the date the payment is due at the then current interest rate for stamped warrants pursuant to Iowa Code Section 74A.2 or the rate established under Iowa Code Section 573.14 Code of Iowa, whichever is less.

**§ 13.7 Time Limits on Claims**

The Owner and the Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the time period specified by applicable law.

**§ 13.8 CONFORMANCE WITH LAWS**

13.8.1 The Contractor shall conform in all respects with the provisions of the Federal Civil Rights Act, the Code of Iowa, Chapter 216 Civil Rights Commission and the rules and  
*(Paragraph Deleted)*

**regulations adopted thereto by the**

Iowa Civil Rights Commission. The Contractor shall not discriminate against any employee or applicant because of race, color, creed, religion, sex, national origin, ancestry, age, familial status, sexual orientation, gender identity, ethnic background, genetic information, physical or mental handicap or any other protected class under state or federal law. The Contractor shall comply with all applicable federal, state and local, laws, rules, regulations, ordinances, policies and procedures, including the Shenandoah Community School District policies and procedures and the

Iowa Smoke Free Air Act. The Contractor shall require similar clauses in all of its subcontracts for service or materials.

**§ 13.9 OWNER'S RIGHT TO OCCUPY**

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§13.9.1 Owner shall have the right to occupy, without prejudice to rights of either party, any completed or largely completed portion of structure or Work, notwithstanding the fact that time for completing entire Work, or such portion thereof, may not have expired. Such occupancy and use shall not be an acceptance of Work taken or used.

#### § 13.10 REBATES

§13.10.1 Owner shall have the right to apply for, and secure all rebates which are available when Bids are received. Contractor shall provide invoices, itemizations, and cooperation to the Owner in this regard.

§ 13.11 **DRUG FREE AND SMOKE FREE ZONE**The Shenandoah Community School District is a drug-free and tobacco-free zone. In furtherance of this standard, the Contractor shall establish and maintain a safe and efficient work environment for all employees, free from the effects of smoke, alcohol, controlled substances and illicit drugs.

- .1 Smoking and the use of smokeless tobacco shall be prohibited at all times on school property, including parking lots and inside of any private vehicles on school property.
- .2 The manufacture, distribution, dispensing, possession, or use of alcohol, controlled substances and illicit drugs is prohibited on or adjacent to the project site and all of the Owner's property at all times.
- .3 Illicit drug use is the use of illegal drugs and the abuse of alcohol and other drugs, including anabolic steroids.
- .4 Controlled substances are drugs specifically identified and regulated under state and federal law and include, but are not limited to, opiates, narcotics, cocaine, methamphetamines, and other stimulants, depressants, hallucinogenic substances and marijuana.
- .5 The Contractor will strictly enforce these prohibitions among its own employees and its Subcontractor's and their employees at all times. Employees who violate these prohibitions will be subject to disciplinary action by their employers up to and including termination and may be denied access to the site of the Work.
- .6 Violation of Section 13.11 shall also constitute sufficient grounds for termination of the Contract or any subcontract without damage or penalty to Owner.

### ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

#### § 14.1 Termination by the Contractor

§ 14.1.1 The Contractor has no right to stop Work as a consequence of non-payment. In the event of any disagreement between the Contractor and Owner involving the Contractor's entitlement to payment, the Contractor's only remedy is to file a Claim in accordance with Article 15. The Contractor must diligently proceed with the Work pending resolution of the Claim. If, however, an Application for Payment has been approved for payment by the Owner, and the Owner fails to make payment within sixty (60) days of the approval for payment by the Owner, the Contractor may upon ten (10) days written notice to the Owner, stop Work if payment is not made by the Owner within ten (10) days following the notice.

#### § 14.2 Termination by the Owner for Cause

§ 14.2.1 The Owner may terminate the Contract if the Contractor

- .1 Fails to supply adequate properly skilled workers or proper materials;
- .2 fails to make payment to Subcontractors or Suppliers for materials or labor in accordance with respective agreements between the Contractor and the Subcontractors and Suppliers;
- .3 fails to comply with any laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or
- .4 fails to perform the Work in accordance with the Contract Documents or otherwise breaches any provision of the Contract Documents;
- .5 anticipatorily breaches or repudiates the Contract;
- .6 **fails to make satisfactory progress in the prosecution of the Work required by the Contract; or**
- .7 **endangers the performance of this Contract.**

#### § 14.2.2

The Owner may terminate the Contract, in whole or in part, whenever the Owner determines that sufficient grounds for termination exist as provided in Subsection 14.2.1. The Owner will provide the Contractor with a written notice to cure the default. If the default is not cured, the termination for default is effective on the date specified in the

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Owner's written notice. However, if the Owner determines that default contributes to the curtailment of an essential service or poses an immediate threat to life, health, or property, the Owner may terminate the Contract immediately upon issuing oral or written notice to the Contractor without any prior notice or opportunity to cure. In addition to any other remedies provided by law or the Contract, the Contractor must compensate the Owner for additional costs that foreseeably would be incurred by the Owner, whether the costs are actually incurred or not, to obtain substitute performance. A termination for default is a termination for convenience if the termination for default is later found to be without jurisdiction.

**§ 14.2.3** Upon receipt of written notice from the Owner of termination, the Contractor must:

- .1 Cease operations as directed by the Owner in the notice and, if required by the Owner, City and County, participate in an inspection of the Work with the Owner, City, County, Construction Manager and the Architect to record the extent of completion thereof, to identify the Work remaining to be completed or corrected, and to determine what temporary facilities, tools, equipment and construction machinery are to remain at the Site pending completion of the Work;
- .2 Complete or correct the items directed by the Owner, and take actions necessary, or that the Owner may direct, for the protection and preservation of any stored materials and equipment and completed Work;
- .3 Unless otherwise directed by the Owner, remove its tools, equipment and construction machinery from the Site, and
- .4 Except as directed by the Owner, terminate all existing subcontracts and purchase orders and enter into no further subcontracts or purchase orders.

**§ 14.2.4** Following written notice from the Owner of termination, the Owner may:

- .1 Take possession of the Site and of all materials and equipment thereon, and at the Owner's option, such temporary facilities, tools, construction equipment and machinery thereon owned or rented by the Contractor that the Owner elects to utilize in completing the Work;
- .2 Accept assignment of subcontracts and purchase orders, and
- .3 Complete the Work by whatever reasonable method the Owner may deem expedient.

**§ 14.2.5** Upon termination for cause, the Contractor must take those actions described in Section 14.2.3, and the Owner may take those actions described in Section 14.2.4, subject to the prior rights of the Contractor's Surety.

**§ 14.2.6** When the Owner terminates the Contract for cause, the Contractor is not entitled to receive further payment until the Work is completed and the costs of completion have been established.

**§ 14.2.7** If the unpaid balance of the Contract Sum less amounts which the Owner is entitled to offset from the unpaid Contract balance, including actual or Liquidated Damages, if applicable, compensation for the Construction Manager and the Architect's services and expenses made necessary thereby, and other damages and expenses incurred by the Owner, including reasonable attorney's fees, exceeds the costs of completing the Work, including compensation for the Owner's, Construction Manager's and the Architect's services made necessary thereby, such excess will be paid to the Contractor or Surety, as directed by the Surety. If such costs exceed the unpaid Contract balance, the Contractor must pay the difference to the Owner upon written demand. This obligation for payment survives termination of the Contract.

**§ 14.2.8** In completing the Work following termination for cause, the Owner is not required to solicit competitive bids or to award completion work to the lowest bidder, but may obtain such completion work and related services on the basis of sole source procurement and negotiated compensation.

**§ 14.2.9** If the Contractor files for protection, or a petition is filed against it, under the Bankruptcy laws, the Contractor wishes to affirm the Contract, Contractor shall immediately file with the Bankruptcy Court a motion to affirm the Contract and shall provide satisfactory evidence to Owner and to the Court of its ability to cure all present defaults and its ability to timely and successfully complete the Work. If Contractor does not make such an immediate filing, Contractor accepts that Owner shall petition the Bankruptcy Court to lift the Automatic Stay and permit Owner to terminate the Contract.

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

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

**§ 14.3.2** The Contract Sum and the Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay or interruption as described in Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent:

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

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

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

**§ 14.4.2** Upon receipt of written notice from the Owner of termination, the Contractor must:

- .1 Cease operations as directed by the Owner in the notice and, if required by the Owner, participate in an inspection of the Work with the Owner, Construction Manager and the Architect to record the extent of completion thereof, to identify the Work remaining to be completed or corrected, and to determine what temporary facilities, tools, equipment and construction machinery are to remain at the Site pending completion of the Work;
- .2 Complete or correct the items directed by the Owner, and take actions necessary, or that the Owner may direct, for the protection and preservation of any stored materials and equipment and completed Work; and
- .3 Unless otherwise directed by the Owner, remove its tools, equipment and construction machinery from the Site, and
- .4 Except as directed by the Owner, terminate all existing subcontracts and purchase orders related to the Work and enter into no further subcontracts or purchase orders therefor.

Following written notice from the Owner of termination, the Owner may:

- .1 Take possession of the Site and of all facilities, tools, construction equipment and machinery thereon owned or rented by the Contractor that the Owner elects to utilize in completing the Work;
- .2 Accept assignment of subcontracts and purchase orders; and
- .3 Complete the Work by whatever reasonable method the Owner may deem expedient.

**§ 14.4.4** In case of termination for the Owner's convenience, the Contractor will be entitled to compensation only for the following items:

- .1 **Payment for acceptable Work performed up to the date of termination;**
- .2 **The costs of preservation and protection of the Work if requested to do so by the Owner;**
- .3 **The cost of terminating the following contracts including:**
  - a. **Purchased materials but only if not returnable and provided to the Owner, or the restocking or return charge, if any, if returnable at the Owner's written election;**
  - b. **Equipment rental contracts if not terminable at no cost but not to exceed an amount equal to thirty (30) days rental;**
  - c. **Documented transportation costs associated with removing Contractor-owned equipment;**
  - d. **Documented demobilization and close-out costs; and**
  - e. **Overhead and profit on the foregoing not to exceed ten percent (10%).**
- .4 **The Contractor will not be compensated for the cost of any idled employees unless the employee is under a written employment contract entitling the employee to continued employment after termination of the Contract and the employee cannot be assigned to other work provided that in all events the Contractor's costs must be limited to thirty (30) days of employment costs from the date of the notice of termination. The Contractor is not entitled to any other costs or compensation (including lost or expected profit, uncompensated overhead or related expenses, or the cost of preparing and documenting its compensable expenses under this Section 14.4.4 as a consequence of the Owner's termination of the Contract for convenience. The Contractor conclusively and irrevocably waives its right to any other compensation or damages**

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(compensatory or punitive) arising from termination of the Contract. If the Owner and the Contractor are unable to agree upon the amounts specified in this subsection, the Contractor may submit a Claim as provided in Article 15. The Claim must be limited to resolution of the amounts specified in Subsections 14.4.4.1, 14.4.4.2, 14.4.4.3 and 14.4.4.4 of this Subsection 14.4.4. No other cost, damages or expenses may be claimed or paid to the Contractor or considered as part of the Claim, the same being hereby conclusively and irrevocably waived by the Contractor. Any such Claim must be delivered to the Owner within thirty (30) days of the termination of the Contract and must contain a written statement setting forth the specific reasons and supporting calculations and documentation as to the amounts the Contractor claims to be entitled to under this Subsection as a result of the termination of the Contract.

**§ 14.4.5** The Contractor's obligations surviving final payment under the Contract, including without limitation those with respect to insurance, indemnification, and correction of Work that has been completed at the time of termination, remains effective notwithstanding termination for convenience of the Owner.

## **ARTICLE 15 CLAIMS AND DISPUTES**

### **§ 15.1 Claims**

**§ 15.1.1 Definition.** A Claim is a written demand or assertion by the Contractor seeking, as a matter of right, payment of money, or other relief with respect to the terms of the Contract. The responsibility to substantiate Claims shall rest with the Contractor. Nothing contained herein in this Subsection 15.1.1 is intended to apply to or in any way limit the Owner's right to make claims related to or arising out of this Contract.

**§ 15.1.2 Notice of Claims.** Claims by the Contractor must be initiated by written notice to the Owner, the Construction Manager 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 the Contractor must be initiated within fourteen (14) days after occurrence of the event giving rise to such Claim or within fourteen (14) days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. As a condition to making a claim for additional costs, the Contractor shall maintain and produce accurate records to substantiate all additional costs actually incurred. If a Claim for actual costs is approved, the Owner shall pay the Contractor actual costs incurred, plus either (a) ten percent (10%) for overhead and profit for work performed by the Contractor, or (b) five percent (5%) overhead and profit for work performed by a Subcontractor, as applicable.

**§ 15.1.3 Continuing Contract Performance.** Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents. The Construction Manager will prepare Change Orders and the Architect will issue a Certificate for Payment or Project Certificate for Payment in accordance with the decisions of the Initial Decision Maker.

**§ 15.1.4 Claims for Additional Cost.** If the Contractor wishes to make a Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.3.

### **§ 15.1.5 Claims for Additional Time**

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

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

*(Paragraphs Deleted)*

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**§ 15.2 Initial Decision**

**§ 15.2.1** Claims, excluding those arising under Sections 10.3, 10.4, 11.3.9, and 11.3.10, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim arising prior to the date final payment is due, unless 30 days have passed after the Claim has been referred to the Initial Decision Maker with no decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

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

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

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

**§ 15.2.5** The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect and Construction Manager, if the Architect or Construction Manager is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be 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**

*(Paragraph Deleted)*

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.

*(Paragraph Deleted)*

**§ 15.3 Mediation**

**§ 15.3.1** Not Applicable.

**§ 15.3.2** The parties shall endeavor in good faith to resolve claims, disputes and other matters in question between them by mutual agreement and may, by mutual agreement and in their discretion, submit same to non-binding mediation (mediation) which shall be in accordance with Iowa Code Chapter 679C unless otherwise agreed to by the parties. Requests for mediation shall be given in writing to the other party to this Agreement. If the Owner and Contractor are unable to mutually agree upon a mediator in writing within sixty (60) days of receiving the written request for mediation, either party may then institute legal or equitable proceedings. Mediation shall be voluntary only and shall not be a prerequisite to litigation or other means of dispute resolution.

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

§ 15.4 **Litigation**

§ 15.4.1 Any legal claim brought under this Agreement shall be filed in the Iowa District Court in and for Fremont County, unless otherwise mutually agreed to by the parties.

*(Paragraphs Deleted)*

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## SECTION 01 10 00

### SUMMARY

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Description of construction delivered under multiple prime contracts.
  - 2. Restrictions that affect construction operations.
  - 3. Use of buildings, premises, and site.
  - 4. Concurrent work by the Owner.

##### 1.2 GENERAL SUMMARY OF WORK AND ADDITIONAL DEFINITIONS

- A. Owner: Shenandoah Community School District
- B. Project Location: Shenandoah, Iowa
- C. General Scope: The Project consists of Construction Activities required for the Renovation of the Shenandoah High School Renovation – Phase 2 as described in the Contract Documents.
  - 1. Work Included: Provide labor, materials, articles, equipment, incidentals, items, tools, services, supplies, methods, operations, skills in such quantities as may be necessary to complete Project within intent of Contract Documents.
  - 2. Singular notations shall be considered plural where plural application is reasonably inferable. Mention or indication of extent of work under work Division or Specification Section is done only for convenience of Contractor and shall not be construed as describing all work required under that Division or Section.
- D. Construction Contract: Construction will be accomplished under multiple Prime Contracts.
- E. Construction Limits: Except as specifically indicated or as may be necessary to complete the Work under the Contract, activities of the Contract shall be limited to within the limits designated on Drawings.

##### 1.3 SUBCONTRACTORS

- A. The Trade Contractor shall not award any portion of the Work to a Subcontractor without prior written approval of the Construction Manager. (Refer to Section 01 3300 – Submittal Procedures and Section 00 7200 – General Conditions Paragraph 5.2).

##### 1.4 USE BY OWNER

- A. Owner reserves the right to let other contracts in connection with this Project or in connection with existing buildings. This Contractor must afford other contractors' reasonable opportunity for the introduction and storage of their materials and execution of their work, and shall properly connect and coordinate the contractor's work with theirs. The Owner intends on hiring contractors to replace the central plant, HVAC controls, upgrade technology, modify the locker room showers, update the staff restrooms, replace existing lights, install new ceiling tile and grid, replace electrical panels, replace aluminum storefront at the main entrance at the same time as this project. On the site, a partial replacement of the parking lot's northern area that is not shown on the Contract

Documents is planned.

- B. Owner reserves the right to jointly occupy the premises with Contractor in performance of Owner's construction related duties and functions. Owner also reserves the right to: enter into the Project and premises; make installations of materials and equipment at appropriate times as the Work progresses; install equipment, furniture and furnishings when spaces are at appropriate stages of completion. Coordinate work with Owner and cooperate with Owner to minimize undue interferences.
- C. If any part, unit, phase, or the entire Project is substantially complete or ready for occupancy, Owner may, upon notice to Contractor, and without prejudice to rights of Owner or Contractors, enter into and make use of work that is substantially complete.

## 1.5 FIELD CONDITIONS

- A. Owner will occupy portions of building adjacent to selective demolition area. Conduct selective demolition so Owner's operations will have minimal disruptions.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before selective demolition, Owner will remove the following items unless otherwise noted in the construction documents to be by contractor:
    - a. Items stored off-site:
      - 1) Free-standing desks, chairs, carts, tables, bookshelves, file cabinets, classroom equipment, coat trees, office equipment and furniture
      - 2) Items stored on open shelves including but not limited to janitorial supplies, musical instruments and equipment
      - 3) Storage totes and supplies
      - 4) Wall mounted shelves
      - 5) All items in the "Hall of Fame" trophy case in the cafeteria. Other trophy case in cafeteria to remain in place with contents.
      - 6) All contents stored under the stage in Classroom C104
      - 7) All contents in Storage C102, Classroom C104, Storage C105, Office C103, Storage C136, Office B103, and Home Economics B119
      - 8) Relocate all non-essential items in Ag instructional classroom D109
      - 9) All items that need refrigeration in the Kitchen C106
      - 10) Flags and banners either mounted on the wall or hanging from the ceiling
      - 11) Science chemicals not locked in a cabinet or closet.
      - 12) Wrestling floor pads
      - 13) Miscellaneous wall mounted items such as televisions, small markerboards, project screens, pencil sharpeners, mirrors, wall hangings, pictures, posters, signage, and room signs that can be easily removed without tools beyond a screwdriver will be relocated and stored so not to hamper construction efforts.
      - 14) Wireless access points, switch equipment and ceiling mounted projectors
      - 15) Remove all toilet accessories, from the walls to be painted, for future reinstallation including but not limited to soap dispensers, paper towel dispensers, mirrors, grab bars, and shelves. However, toilet accessories in Toilet C119, C124, C128, C126, B112, B113, B150 will be removed by the contractors, as needed.
    - b. Items remaining in-place that need to be protected and remain undamaged:
      - 1) Ceiling mounted projection screens and ceiling mounted projector supports

- 2) Wall clocks
- 3) Library books
- 4) Piano
- 5) All items in Auditorium A107 including fixed seating
- 6) Equipment in Control A106
- 7) All items in Orchestra Pit A108, Stage A115, Make-up A114, Boys Dressing A113, Girls Dressing A110, Vestibule A109, Vestibule A118, Shop A117, Misc. A116
- 8) All items in Meeting Room 007, Data/Comm 009, Coats 008, Multi-Use 005, Women 002, Men 003, Kitchen 004
- 9) All items in CTE Classrooms D110, D111, D114
- 10) Ag instructional classroom D109 will still have furniture in it necessary for teaching class
- 11) All non-perishable items in the kitchen rooms Concession C107, Kitchen C106, Dishwashing C108, Dry Storage C109
- 12) All items in Weight Room C111, Storage C113, Equip Storage C114, Gym Storage C115, and Stage Storage C112, Storage C200, Storage C201
- 13) Full sized markerboards except in classroom C104, marker board in C104 is to be removed by contractor.
- 14) Tack boards
- 15) Emergency shower in Physical Science B132
- 16) Built-in storage cabinets with doors and contents with-in
- 17) Wrestling room wall pads
- 18) Cafeteria tables on wheels to be folded and stored in the center of the room
- 19) Gym bleachers, score boards, and wall pads
- 20) Fiberoptic data/com backbone wiring between IT-D and IT-A and between IT-A and IT-B.
- 21) RapidRun AV wiring between the ceiling mounted projectors and the teacher desks.
- 22) Central phone equipment in room B143

## 1.6 MAINTAINING SERVICES AND FUNCTIONS

### A. Work in Partially Occupied Facilities (Summer):

1. Auditorium Lower Level (Meeting Room 007, Data/Comm 009, Coats 008, Multi-Use 005, Women 002, Men 003, Kitchen 004): The school administrative staff will occupy the lower level of the Auditorium during the summer of 2020.
2. Gym (C110): The gym will be occupied all of the months of June and August 2020.
3. Weight Room (C111): The weight room will be occupied during the entire summer.
4. Auditorium (A107): Drivers Ed will be taught in the auditorium and that space will be occupied with access through the auditorium lobby from June 2, 2020 through June 19, 2020.
5. Classrooms (D109, D110, D111, D114): Ag Classrooms and Industrial Tech will be occupied during the summer of 2020.
6. Construction Trailers: Temporary construction trailers will be connected to the existing school power and internet services. Disruptions shall be as limited as possible with notice of disruption as is required for the Owner.

### B. The school staff will allow the Contractors into the areas they need to complete the project in a timely and orderly manner. However, the Contractor is responsible to notify the Owner



when work will take place in the Owner's occupied space, and when mechanical, electrical, or communication systems outages will affect the Owner's occupied space.

1. Notification is required a minimum of one (1) week in advance of occupied areas being disturbed for more than one (1) hour.
  2. Disturbances of one (1) hour or less requires 24 hour notice to the designated Owner's representative.
  3. The Contractor is responsible to meet the requirements of specification 01 51 00 Temporary Facilities and Controls for controlling dust through-out the facility.
- B. Work in Fully Occupied Facilities (before June 2, 2020 and after August 24, 2020): Work remaining to be accomplished during the school year, including the punch list, shall occur during nights and weekends and shall be done in cooperation with, and approval by, Owner and scheduled in advance with the Owner.

#### **1.7 OTHER BONDS, PERMITS, FEES**

- A. The overall Building Permit will be paid for the by the Owner.
- B. The Trade Contractor shall provide and pay for bonds, fees, and trade specific permits that may be required including bonds, permits and fees required by municipalities, including connecting fees, to accomplish the specified work for this project. Connection fees, if any, shall be paid for by Trade Contractor installing the utility.
- C. Request proper authorities to apply for permits and fees for sewer availability charge (SAC) and water availability charge (WAC). Owner will pay sewer and water availability charges, if any.

#### **1.8 WARRANTIES**

- A. In the event of conflict, inconsistency, or difference between a warranty issued by a supplier or contractor and terms of specifications, the Owner, if it becomes necessary to enforce terms and provisions of warranty or specifications, may elect to enforce either submitted warranty or specifications.

#### **1.9 ELECTRONIC FILES**

- A. Upon request, one copy of electronic files of the Contract Documents, in Architect's current file format, will be provided as specified in paragraph 1.6 of Section 00 7200 – General Conditions.
- B. Architect, Owner, and Construction Manager provide no warranties express or implied with respect to electronic files, including but not limited to, Spear in type warranties, warranties of merchantability and/or fitness for a particular purpose.

#### **1.10 COPIES OF DRAWINGS AND SPECIFICATIONS**

- A. Each Trade Contractor will be provided with one paper and one portable document format (.pdf) file copy of the Drawings and Specifications free of charge. Dedicate one set for the on-site set to record changes as Record Set.

#### **1.11 SAFETY**

- A. Each Trade Contractor shall submit their written safety program as specified in Section 00 7200 – General Conditions Paragraph 10.2.8 which shall comply with the minimum project

requirements specified in Section 01 3150 – Site Safety Policy.

- B. Each Trade Contractor shall appoint a responsible employee to act as Site Safety Officer (fire and accident or separate individuals for each) whose duty it shall be to prevent accidents and minimize fire hazards and to enforce safety precautions. Site Safety Officer shall implement procedures and regulations to guide Contractor, subcontractors and workers. With particular respect to existing buildings, facilities, and Owner's staff, Site Safety Officer shall consult with and be guided by directions of Owner.
- C. Compliance: The Trade Contractor and Subcontractors shall conform to and abide by requirements of their safety program and their Site Safety Officer.
- D. Inspection: Site Safety Officer shall periodically inspect spaces of work under this Contract and operations of Contractor and shall promptly remove or correct hazards and provide written documentation of the inspections and corrections to the CM.
- E. The project will be utilizing the existing convenience power receptacles in the building which are not GFCI protected for temporary power. Each Trade Contractor will need to provide their own GFCI pigtailed for their extension cord to maintain electrical safety compliance.

## **PART 2 SCOPE OF WORK**

### **2.1 SUMMARY**

- A. Contractor shall be responsible for identifying, and bringing to the attention of the Construction Manager, potential conflicts in scheduling or the interface with the work of others.
- B. Unless specifically stated otherwise, incidental work required to accomplish the work of each Bid Package shall be included in the Bid for that package. This would include, but not be limited to, temporary facilities, protection of the work, security of equipment, etc.
- C. Each Contractor shall be responsible for repairing and/or replacing all items of the Project damaged as a result of its operations.

### **2.2 PROJECT MILESTONES**

- A. It is anticipated that this project will occur during 2020 summer break and be substantially complete by the end of summer break. See Section 01 3200 – Preliminary Schedule and Section 00 72 00 – General Conditions Paragraph 3.10 for more details regarding schedule requirements.
  - 1. Trade Contract Award: March 9, 2020
  - 2. Anticipated Mobilization: May 18, 2020
  - 3. Anticipated Start: June 3, 2020
  - 4. Partial Substantial Completion to allow furniture installation: August 14, 2020
  - 5. Substantial Completion: August 21, 2020
  - 6. Final Completion: September 18, 2020

### **2.3 BID PACKAGES**

- A. Separate Contracts: The Owner reserves the right and fully intends to enter into separate prime contracts for work to be completed for this Project and other concurrent projects. The Bid Packages are as follows:

<u>Bid Package #</u>	<u>Description</u>
1 & 2	General and Site Work
3	Mechanical
4	HVAC Controls
5	Electrical
6	Technology
7	Asbestos Abatement
<b>8</b>	<b>Finishes and Pavement</b>

B. General Notes:

1. Cutting and Patching: Each bid package is responsible for their own concrete and/or block cutting/coring for utilities through walls and floors unless otherwise noted. Provide patching to match existing and sleeves as required. Fire stopping to be by each trade for penetrations by their scope of work.
2. All contractors are responsible for keeping their tools, equipment, and materials neat and organized. All contractors are to participate in a daily cleaning program. There will be one day each week dedicated to a composite cleanup where everyone on site will participate.

**2.4 BID PACKAGES 1 THROUGH 6 - PREVIOUSLY BID.**

**2.5 BID PACKAGE 7 – ASBESTOS ABATEMENT IS EXPECTED TO BE MOSTLY COMPLETED PRIOR TO START OF TRADE CONTRACTOR’S WORK. REFER TO SCHEDULE BELOW.**

A. Schedule:

- a. Classrooms and B111, B112, B113, and B150: March 16, 2020 thru March 20, 2020
- b. Boiler room: Spring 2020
- c. Administration Area: B103, B105, B106, B107; and FCS B119: June 8, 2020 thru June 12, 2020

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## SECTION 01 10 00

### SUMMARY

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Description of construction delivered under multiple prime contracts.
  - 2. Restrictions that affect construction operations.
  - 3. Use of buildings, premises, and site.
  - 4. Concurrent work by the Owner.

##### 1.2 GENERAL SUMMARY OF WORK AND ADDITIONAL DEFINITIONS

- A. Owner: Shenandoah Community School District
- B. Project Location: Shenandoah, Iowa
- C. General Scope: The Project consists of Construction Activities required for the Renovation of the Shenandoah High School Renovation – Phase 2 as described in the Contract Documents.
  - 1. Work Included: Provide labor, materials, articles, equipment, incidentals, items, tools, services, supplies, methods, operations, skills in such quantities as may be necessary to complete Project within intent of Contract Documents.
  - 2. Singular notations shall be considered plural where plural application is reasonably inferable. Mention or indication of extent of work under work Division or Specification Section is done only for convenience of Contractor and shall not be construed as describing all work required under that Division or Section.
- D. Construction Contract: Construction will be accomplished under multiple Prime Contracts.
- E. Construction Limits: Except as specifically indicated or as may be necessary to complete the Work under the Contract, activities of the Contract shall be limited to within the limits designated on Drawings.

##### 1.3 SUBCONTRACTORS

- A. The Trade Contractor shall not award any portion of the Work to a Subcontractor without prior written approval of the Construction Manager. (Refer to Section 01 3300 – Submittal Procedures and Section 00 7200 – General Conditions Paragraph 5.2).

##### 1.4 USE BY OWNER

- A. Owner reserves the right to let other contracts in connection with this Project or in connection with existing buildings. This Contractor must afford other contractors' reasonable opportunity for the introduction and storage of their materials and execution of their work, and shall properly connect and coordinate the contractor's work with theirs. The Owner intends on hiring contractors to replace the central plant, HVAC controls, upgrade technology, modify the locker room showers, update the staff restrooms, replace existing lights, install new ceiling tile and grid, replace electrical panels, replace aluminum storefront at the main entrance at the same time as this project. On the site, a partial replacement of the parking lot's northern area that is not shown on the Contract

Documents is planned.

- B. Owner reserves the right to jointly occupy the premises with Contractor in performance of Owner's construction related duties and functions. Owner also reserves the right to: enter into the Project and premises; make installations of materials and equipment at appropriate times as the Work progresses; install equipment, furniture and furnishings when spaces are at appropriate stages of completion. Coordinate work with Owner and cooperate with Owner to minimize undue interferences.
- C. If any part, unit, phase, or the entire Project is substantially complete or ready for occupancy, Owner may, upon notice to Contractor, and without prejudice to rights of Owner or Contractors, enter into and make use of work that is substantially complete.

## 1.5 FIELD CONDITIONS

- A. Owner will occupy portions of building adjacent to selective demolition area. Conduct selective demolition so Owner's operations will have minimal disruptions.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before selective demolition, Owner will remove the following items unless otherwise noted in the construction documents to be by contractor:
    - a. Items stored off-site:
      - 1) Free-standing desks, chairs, carts, tables, bookshelves, file cabinets, classroom equipment, coat trees, office equipment and furniture
      - 2) Items stored on open shelves including but not limited to janitorial supplies, musical instruments and equipment
      - 3) Storage totes and supplies
      - 4) Wall mounted shelves
      - 5) All items in the "Hall of Fame" trophy case in the cafeteria. Other trophy case in cafeteria to remain in place with contents.
      - 6) All contents stored under the stage in Classroom C104
      - 7) All contents in Storage C102, Classroom C104, Storage C105, Office C103, Storage C136, Office B103, and Home Economics B119
      - 8) Relocate all non-essential items in Ag instructional classroom D109
      - 9) All items that need refrigeration in the Kitchen C106
      - 10) Flags and banners either mounted on the wall or hanging from the ceiling
      - 11) Science chemicals not locked in a cabinet or closet.
      - 12) Wrestling floor pads
      - 13) Miscellaneous wall mounted items such as televisions, small markerboards, project screens, pencil sharpeners, mirrors, wall hangings, pictures, posters, signage, and room signs that can be easily removed without tools beyond a screwdriver will be relocated and stored so not to hamper construction efforts.
      - 14) Wireless access points, switch equipment and ceiling mounted projectors
      - 15) Remove all toilet accessories, from the walls to be painted, for future reinstallation including but not limited to soap dispensers, paper towel dispensers, mirrors, grab bars, and shelves. However, toilet accessories in Toilet C119, C124, C128, C126, B112, B113, B150 will be removed by the contractors, as needed.
    - b. Items remaining in-place that need to be protected and remain undamaged:
      - 1) Ceiling mounted projection screens and ceiling mounted projector supports

- 2) Wall clocks
- 3) Library books
- 4) Piano
- 5) All items in Auditorium A107 including fixed seating
- 6) Equipment in Control A106
- 7) All items in Orchestra Pit A108, Stage A115, Make-up A114, Boys Dressing A113, Girls Dressing A110, Vestibule A109, Vestibule A118, Shop A117, Misc. A116
- 8) All items in Meeting Room 007, Data/Comm 009, Coats 008, Multi-Use 005, Women 002, Men 003, Kitchen 004
- 9) All items in CTE Classrooms D110, D111, D114
- 10) Ag instructional classroom D109 will still have furniture in it necessary for teaching class
- 11) All non-perishable items in the kitchen rooms Concession C107, Kitchen C106, Dishwashing C108, Dry Storage C109
- 12) All items in Weight Room C111, Storage C113, Equip Storage C114, Gym Storage C115, and Stage Storage C112, Storage C200, Storage C201
- 13) Full sized markerboards except in classroom C104, marker board in C104 is to be removed by contractor.
- 14) Tack boards
- 15) Emergency shower in Physical Science B132
- 16) Built-in storage cabinets with doors and contents with-in
- 17) Wrestling room wall pads
- 18) Cafeteria tables on wheels to be folded and stored in the center of the room
- 19) Gym bleachers, score boards, and wall pads
- 20) Fiberoptic data/com backbone wiring between IT-D and IT-A and between IT-A and IT-B.
- 21) RapidRun AV wiring between the ceiling mounted projectors and the teacher desks.
- 22) Central phone equipment in room B143

## 1.6 MAINTAINING SERVICES AND FUNCTIONS

- A. Work in Partially Occupied Facilities (Summer):
  1. Auditorium Lower Level (Meeting Room 007, Data/Comm 009, Coats 008, Multi-Use 005, Women 002, Men 003, Kitchen 004): The school administrative staff will occupy the lower level of the Auditorium during the summer of 2020.
  2. Gym (C110): The gym will be occupied all of the months of June and August 2020.
  3. Weight Room (C111): The weight room will be occupied during the entire summer.
  4. Auditorium (A107): Drivers Ed will be taught in the auditorium and that space will be occupied with access through the auditorium lobby from June 2, 2020 through June 19, 2020.
  5. Classrooms (D109, D110, D111, D114): Ag Classrooms and Industrial Tech will be occupied during the summer of 2020.
  6. Construction Trailers: Temporary construction trailers will be connected to the existing school power and internet services. Disruptions shall be as limited as possible with notice of disruption as is required for the Owner.
- B. The school staff will allow the Contractors into the areas they need to complete the project in a timely and orderly manner. However, the Contractor is responsible to notify the Owner

when work will take place in the Owner's occupied space, and when mechanical, electrical, or communication systems outages will affect the Owner's occupied space.

1. Notification is required a minimum of one (1) week in advance of occupied areas being disturbed for more than one (1) hour.
  2. Disturbances of one (1) hour or less requires 24 hour notice to the designated Owner's representative.
  3. The Contractor is responsible to meet the requirements of specification 01 51 00 Temporary Facilities and Controls for controlling dust through-out the facility.
- B. Work in Fully Occupied Facilities (before June 2, 2020 and after August 24, 2020): Work remaining to be accomplished during the school year, including the punch list, shall occur during nights and weekends and shall be done in cooperation with, and approval by, Owner and scheduled in advance with the Owner.

#### **1.7 OTHER BONDS, PERMITS, FEES**

- A. The overall Building Permit will be paid for the by the Owner.
- B. The Trade Contractor shall provide and pay for bonds, fees, and trade specific permits that may be required including bonds, permits and fees required by municipalities, including connecting fees, to accomplish the specified work for this project. Connection fees, if any, shall be paid for by Trade Contractor installing the utility.
- C. Request proper authorities to apply for permits and fees for sewer availability charge (SAC) and water availability charge (WAC). Owner will pay sewer and water availability charges, if any.

#### **1.8 WARRANTIES**

- A. In the event of conflict, inconsistency, or difference between a warranty issued by a supplier or contractor and terms of specifications, the Owner, if it becomes necessary to enforce terms and provisions of warranty or specifications, may elect to enforce either submitted warranty or specifications.

#### **1.9 ELECTRONIC FILES**

- A. Upon request, one copy of electronic files of the Contract Documents, in Architect's current file format, will be provided as specified in paragraph 1.6 of Section 00 7200 – General Conditions.
- B. Architect, Owner, and Construction Manager provide no warranties express or implied with respect to electronic files, including but not limited to, Spear in type warranties, warranties of merchantability and/or fitness for a particular purpose.

#### **1.10 COPIES OF DRAWINGS AND SPECIFICATIONS**

- A. Each Trade Contractor will be provided with one paper and one portable document format (.pdf) file copy of the Drawings and Specifications free of charge. Dedicate one set for the on-site set to record changes as Record Set.

#### **1.11 SAFETY**

- A. Each Trade Contractor shall submit their written safety program as specified in Section 00 7200 – General Conditions Paragraph 10.2.8 which shall comply with the minimum project

requirements specified in Section 01 3150 – Site Safety Policy.

- B. Each Trade Contractor shall appoint a responsible employee to act as Site Safety Officer (fire and accident or separate individuals for each) whose duty it shall be to prevent accidents and minimize fire hazards and to enforce safety precautions. Site Safety Officer shall implement procedures and regulations to guide Contractor, subcontractors and workers. With particular respect to existing buildings, facilities, and Owner's staff, Site Safety Officer shall consult with and be guided by directions of Owner.
- C. Compliance: The Trade Contractor and Subcontractors shall conform to and abide by requirements of their safety program and their Site Safety Officer.
- D. Inspection: Site Safety Officer shall periodically inspect spaces of work under this Contract and operations of Contractor and shall promptly remove or correct hazards and provide written documentation of the inspections and corrections to the CM.
- E. The project will be utilizing the existing convenience power receptacles in the building which are not GFCI protected for temporary power. Each Trade Contractor will need to provide their own GFCI pigtailed for their extension cord to maintain electrical safety compliance.

## **PART 2 SCOPE OF WORK**

### **2.1 SUMMARY**

- A. Contractor shall be responsible for identifying, and bringing to the attention of the Construction Manager, potential conflicts in scheduling or the interface with the work of others.
- B. Unless specifically stated otherwise, incidental work required to accomplish the work of each Bid Package shall be included in the Bid for that package. This would include, but not be limited to, temporary facilities, protection of the work, security of equipment, etc.
- C. Each Contractor shall be responsible for repairing and/or replacing all items of the Project damaged as a result of its operations.

### **2.2 PROJECT MILESTONES**

- A. It is anticipated that this project will occur during 2020 summer break and be substantially complete by the end of summer break. See Section 01 3200 – Preliminary Schedule and Section 00 72 00 – General Conditions Paragraph 3.10 for more details regarding schedule requirements.
  - 1. Trade Contract Award: March 9, 2020
  - 2. Anticipated Mobilization: May 18, 2020
  - 3. Anticipated Start: June 3, 2020
  - 4. Partial Substantial Completion to allow furniture installation: August 14, 2020
  - 5. Substantial Completion: August 21, 2020
  - 6. Final Completion: September 18, 2020

### **2.3 BID PACKAGES**

- A. Separate Contracts: The Owner reserves the right and fully intends to enter into separate prime contracts for work to be completed for this Project and other concurrent projects. The Bid Packages are as follows:



<u>Bid Package #</u>	<u>Description</u>
1 & 2	General and Site Work
3	Mechanical
4	HVAC Controls
5	Electrical
6	Technology
7	Asbestos Abatement
<b>8</b>	<b>Finishes and Pavement</b>

B. General Notes:

1. Cutting and Patching: Each bid package is responsible for their own concrete and/or block cutting/coring for utilities through walls and floors unless otherwise noted. Provide patching to match existing and sleeves as required. Fire stopping to be by each trade for penetrations by their scope of work.
2. All contractors are responsible for keeping their tools, equipment, and materials neat and organized. All contractors are to participate in a daily cleaning program. There will be one day each week dedicated to a composite cleanup where everyone on site will participate.

**2.4 BID PACKAGES 1 THROUGH 6 - PREVIOUSLY BID.**

**2.5 BID PACKAGE 7 – ASBESTOS ABATEMENT IS EXPECTED TO BE MOSTLY COMPLETED PRIOR TO START OF TRADE CONTRACTOR’S WORK. REFER TO SCHEDULE BELOW.**

A. Schedule:

- a. Classrooms and B111, B112, B113, and B150: March 16, 2020 thru March 20, 2020
- b. Boiler room: Spring 2020
- c. Administration Area: B103, B105, B106, B107; and FCS B119: June 8, 2020 thru June 12, 2020

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**

## SECTION 012300

### ALTERNATES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

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

##### 1.2 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. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
  - 2. 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.

##### 1.3 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 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

##### 3.1 SCHEDULE OF ALTERNATES

**Alternate No. 1:** All sitework as described on C1.2, C1.3, C2.2, C3.2, C4.2.

**END OF SECTION 012300**

## SECTION 01 29 00

### PRICE AND PAYMENT PROCEDURES

#### PART 1 - GENERAL

##### 1.1 SECTION INCLUDES

- A. Procedural requirements for processing the following:
  - 1. Schedule of Values.
  - 2. Cash flow projections for the project.
  - 3. Unit Prices (if any).
  - 4. Payment applications.
  - 5. Payments at substantial completion.
  - 6. Payment at final completion.
  - 7. Identification of substitutions and alternatives in payment requests.
  - 8. Accounting of Change Order amounts and allowances, and similar cost and payout related requirements.

##### 1.2 SCHEDULE OF VALUES

- A. General:
  - 1. Prepare the Schedule of Values, as required by General Conditions, in coordination with the preparation of the progress schedule.
  - 2. Correlate the line items of the Schedule of Values with other administrative schedules and forms required for the work, including the following:
    - a. Progress schedule.
    - b. Payment request form.
    - c. Listing of subcontractors.
    - d. Schedule of alternates.
    - e. Listing of products and principal suppliers and fabricators.
    - f. Schedule of submittals.
  - 3. Provide breakdown of Contract Sum in sufficient detail to facilitate continued evaluation of payment requests and progress reports.
  - 4. A breakdown of principal subcontract amounts will be required (several line items).
  - 5. At Contractor's option, values may be rounded off to nearest whole dollar, but total must equal the Contract Sum.
  - 6. Submit 1 digital copy of Schedule of Values to Construction Manager.
- B. Time Coordination:
  - 1. In the coordination of initial submittals and other administrative "start-up" activities, submit the Schedule of Values to the Construction Manager no later than 7 days before the initial payment request is to be submitted.

##### 1.3 PAYMENT REQUESTS

- A. General:
  - 1. Except as otherwise indicated in the Contract Documents, comply with the procedures and requirements of the General Conditions, including the submittal of supporting documentation and waivers or releases of lien.
  - 2. Refer to General Conditions for requirements concerning "retainage" by Owner on payment.
  - 3. Except as otherwise indicated, sequence of progress payments shall be made on a regular basis, and each must be consistent with previous applications and payments.

4. Payment for stored materials off-site will only be made if approved in advance by the Owner and follows requirements of the General Conditions and 01 66 00 Product Storage and Handling Requirements.
- B. Payment Application Times:
1. The period of construction work covered by each payment request is the period indicated in the Standard Form of Agreement between Owner and Contractor.
- C. Application Preparation:
1. Payment Application Forms: AIA Document G732-2009 and G703-1992 Continuation Sheet.
  2. Except as otherwise indicated, complete every entry provided for on the form, including the notarization and execution by authorized persons.
  3. Incomplete applications shall be returned by the Construction Manager without action.
  4. Entries must match current data of both the Schedule of Values and Progress Schedule and Report.
  5. Listing must include amounts of Change Orders approved prior to the last day of the "period of construction" of the application.
- D. Initial Payment Application: The following must be received by the Construction Manager prior to submittal of the first payment application.
1. Listing of subcontractors and principal suppliers and fabricators.
  2. Schedule of values.
  3. Progress schedule.
  4. Schedule of submittals.
- E. Application at Time of Substantial Completion:
1. Following the issuance of the Architect's "Certificate of Substantial Completion", and also in part as applicable to prior certificates on portions of completed work as designated, a "special" payment application may be prepared and submitted by the Contractor.
  2. The principal administrative actions and submittals which must precede or coincide with such special applications are specified in the General Condition, and elsewhere in the Contract Documents.
- F. Final Payment Application:
1. The administrative actions and submittals which must proceed or coincide with submittal of the final payment application can be summarized as follows, but not necessarily limited to these:
    - a. Completion of project closeout requirements.
    - b. Completion of items specified for payment application at time of substantial completion (regardless of whether such application was made).
    - c. Assurance, satisfactory to Construction Manager, that unsettled claims will be settled and that work not actually completed and accepted will be completed without undue delay.
    - d. Transmittal of required project construction records to Construction Manager.
    - e. Proof, satisfactory to Construction Manager, that taxes, fees and similar obligations of the Contractor have been paid.
    - f. Removal of temporary facilities, services, surplus materials, rubbish and similar provisions.
    - g. Change over of door locks and other Contractor access to Owner's property.
    - h. Consent of Surety for Final Payment.

G. Application Transmittal:

1. Submit scanned copy of each payment application via email.
2. Mail one (1) hard copy of each payment application with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Construction Manager.

**PART 2-PRODUCTS**

Not Used

**PART 3 - EXECUTION**

Not Used

**END OF SECTION**

## SECTION 01 31 00

### PROJECT MANAGEMENT AND COORDINATION

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Coordination of Work of Contract from beginning of construction activity through
- B. Related Sections:
  - 1. General Conditions.
  - 2. Section 011100 - Summary of Work.
  - 3. Section 013200 – Construction Progress Documentation and Preliminary Schedule
  - 4. Section 015100 - Temporary Facilities and Controls.
  - 6. Section 017329 - Cutting and Patching.
  - 7. Section 017800 - Closeout Submittals.
  - 8. Section 024119 - Selective Demolition.

##### 1.2 SUBMITTALS

- A. Coordination Drawings: Submit in accordance with Section 013300, and as specified herein.

##### 1.3 COORDINATION SCHEDULING

- A. Schedule Coordination: Special coordination and cooperation efforts are required for certain interrelated phases of the work, such as:
  - 1. Sequencing of work.
  - 2. Construction of temporary spaces and facilities;
  - 3. Removals and relocations of existing services and facilities;
  - 4. Ceiling work;
  - 5. Connecting the Owner's equipment;
  - 5. Installation of and connections to new utilities;
  - 6. Providing and maintaining temporary heat and other temporary facilities; and similar work.
- B. Coordinate scheduling, work activities, submittals, including deferred approvals (if any), Owner's separate contracts (if any), Owner's material/product direct purchase (if any), and work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
- C. Coordinate sequence of Work to accommodate any Owner's separate contracts and Owner Occupancy as specified in Section 015100 Temporary Facilities and Controls and Section 011000 Summary of Work.
- D. General: The nature of the Project makes it imperative that the Contractor and all subcontractors coordinate their work and cooperate with each other and the CM as the agent of the Owner from the start of the Project to completion.
  - 1. The CM shall establish the overall schedule for the progress of the Project, the sequence of completion and general use of the site.
- E. Notice: Give adequate and timely notice of various work phases and operations which will affect the work of, or will require installations or other action by others.

1. After timely notification by the CM of the need to accomplish a particular phase or element of the Work, the Contractors shall, within a reasonable time, perform their work as not to delay or impede others or the progress of the Project.
- F. Set up control procedures so that approved schedules are adhered to. Contractor's responsibility is to properly notify the CM of anticipated and actual time delays.
  1. Refer to General Conditions.
- G. Contractor's job superintendent shall be on the job continuously during the execution of the work of the contract. This includes supervision of subcontractors.
  1. Refer to General Conditions.

## **PART 2 PRODUCTS**

### **2.1 MATERIALS AND EQUIPMENT - Not used.**

## **PART 3 EXECUTION**

### **3.1 COORDINATION/ENGINEERING DRAWINGS:**

- A. Review of Coordination/Engineering Drawings is for design intent only and shall not relieve the Contractor from overall responsibility for coordination of all work performed pursuant to the Contract, or from any other requirements of the Contract.

### **3.2 EQUIPMENT COORDINATION**

- A. Equipment Coordination: With respect to mechanical and electrical features of Contractor and Owner supplied equipment, complete data must be exchanged directly between the Contractor and those vendors and subcontractors involved as the progress of the Project requires.
  1. The person requesting the information shall advise when it will be required.
  2. Examine Owner's existing equipment and determine the rough-in data. Owner will furnish data for equipment purchased by Owner. Owner will disconnect equipment and relocate to new space for connections by Contractor.
  3. Consult Owner to verify status of rough-in data.
  4. If rough-in details are not available at the time service systems are being installed, postpone final rough-in until data is available.
- C. Contractors for casework are expressly required to provide large scale layout drawings for casework and equipment showing the required rough-in locations of all services (dimensioned from building features) service characteristics, and locations of studs where the location is critical to mounting or otherwise installing equipment.
  1. Furnish sizes and spacing required for mechanical and electrical cutouts, and a complete brochure of fittings, sinks, outlets, or other information to provide complete data on the items and accessories being furnished.
- D. In the event of incorrect, incomplete, delayed or improperly identified information, the entity causing the delay or error shall be responsible and pay for any modifications or replacements necessary to provide a correct, proper and new installation, including relocations required.
- E. Services: Rough-in sleeves for waste and other services passing through the floor shall be installed prior to pouring the floors if data is available.

### **3.3 FIELD DIMENSIONS FOR CASEWORK AND EQUIPMENT**

- A. Accurate field dimensions are required in ample time to permit fabrication of casework and equipment for delivery and installation in accordance with the schedule.

1. To obtain dimensions and to prevent fabrication delay, cooperate in completing work phases to accommodate the schedule.
- B. Be responsible for obtaining correct field dimensions and informing the various fabricators before start of construction.

### **3.4 MEETINGS**

- A. Pre-Construction Meeting: After award of contract, at time designated by the CM, the Contractors shall attend a Pre-Construction Meeting.
  1. Procedures to be followed, critical work sequencing, coordination efforts and similar matters will be reviewed.
- B. Progress Meetings: During construction, periodic site meetings will be held with the Contractors and major Subcontractors.
  1. These meetings will be held weekly and may be held more frequently if job progress and needs indicate.
  2. Contractors and major Subcontractors shall have one or more responsible representatives in attendance.

### **3.5 COORDINATION OF SPACE**

- A. Coordinate use of Project space and sequence of installation of mechanical and electrical work which is indicated diagrammatically on Drawings.
  1. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building.
  2. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- B. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.
- C. Off-Site Fabrication: Off-site fabrication is encouraged as much as possible and deliveries scheduled so materials and equipment can be installed immediately after delivery.
  1. Alert and advise others of the need to hold deliveries until they are notified the materials are required on the site.
- D. Notice: Give adequate and timely notice of various work phases and operations which will affect the work of, or will require installations or other action by others.
  1. After timely notification by the Contractor of the need to accomplish a particular phase or element of the Work, the Contractor shall, within a reasonable time, perform their work as not to delay or impede others or the progress of the Project.
- E. Coordination of phases of the work: Special coordination and cooperation efforts are required for certain interrelated phases of the work, such as:
  1. Sequencing of remodeling work; construction of temporary spaces and facilities; removals and relocations of existing services and facilities; ceiling work; connecting the Owner's equipment; installation of and connections to new utilities; connections to existing buildings; demolition work; providing and maintaining temporary heat and other temporary facilities; and similar work.

### **3.6 LABELS, NAMEPLATES AND TRADEMARKS**

- A. Provide permanent nameplate on each item of service-connected or power-operated equipment. Locate nameplate on easily accessible surface.
  1. Nameplate shall indicate manufacturer, model number, serial number, capacity, speed, electrical characteristics and similar essential operating



data.

- B. UL fire rating labels and other labels which must be visible after installation shall be located on inconspicuous surfaces.
  - 1. Other labels and trademarks shall be located on concealed surfaces or shall be removable without damaging surfaces.
  - 2. Do not permanently attach or imprint labels or trademarks on surfaces which will be exposed to view in occupied spaces.
- C. Do not paint, deface or conceal required nameplates or labels.

### **3.7 COORDINATION OF CLOSEOUT PROCEDURES**

- A. Coordinate completion and cleanup of work of separate trades in preparation for Owner occupancy.
- B. After Owner occupancy of premises, coordinate access to site by various trades for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- C. Assemble and coordinate closeout submittals specified in Section 017700.

**END OF SECTION 01 31 00**

**SECTION 01 31 50**  
**SITE SAFETY POLICY**

1. GENERAL SAFETY AND HEALTH PROVISIONS

- 1.1. All contractors assume the responsibility for complying with 29 CFR 1926, OSHA Standards for the Construction Industry for their portion of the work, including any portion of their work which is subcontracted.
- 1.2. Each contractor shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury. Contractors shall maintain records of all employees' safety training.
- 1.3. The use of any machinery, tool, material or equipment which is not in compliance with any applicable OSHA requirement is prohibited. Such machine, tool, material or equipment shall either be immediately repaired, identified as unsafe by tagging or locking the controls to render them inoperable or shall be physically removed from the job site.
- 1.4. In order to maintain the highest levels of safety, the Construction Manager (CM) will conduct and document at least one weekly job site safety audit. Safety observations will be made during all work activities. Contractor site management will be notified of identified hazards or unsafe behavior. Failure to correct the identified hazards or unsafe behavior will result in the following:
  - 1.4.1. 1<sup>st</sup> repeat - A letter being sent to the contractor's main office requesting follow up; any individual not complying with the Site Safety Policy can be removed for the job site at the CM's request.
  - 1.4.2. 2<sup>nd</sup> repeat - A letter to the owner recommending that all pay requests be withheld until the contractor corrects all identified hazards and unsafe behavior observed and has provided details of the corrective action in writing.
  - 1.4.3. 3<sup>rd</sup> repeat - A letter to the owner recommending a 3 day contract termination notice be issued to the contractor.
- 1.5. Accident Reporting
  - 1.5.1. All employees shall be instructed to report all injuries or damage to equipment or property to their Supervisor immediately. Supervisors shall contact the Owner's Representative as soon as practical once they have been notified of an employee injury. The supervisor shall report:
    - 1.5.1.1. Name of injured employee
    - 1.5.1.2. Accident location
    - 1.5.1.3. Witnesses, if any
    - 1.5.1.4. Nature of injury
  - 1.5.2. All accidents that result in injury to workers, regardless of their nature, shall be investigated and reported. Written accident investigation reports shall be submitted to the CM. If the contractor does not have their own form, they shall use an Accident Investigation form which can be provided by the CM.
  - 1.5.3. Each contractor shall have emergency contact information posted on-site. As a minimum, it will include emergency numbers, the name and phone number for a doctor and hospital designated for treatment by the Company.
  - 1.5.4. Contractor supervisors, managers, directors and officers shall participate in incident analysis as requested by the CM.
- 1.6. All contractors shall provide and maintain a first-aid kit on site for employee use.

- 1.7. Work areas must be kept clean and free from hazards. Housekeeping shall be conducted at the end of each shift or more frequently as requested by the CM.
- 1.8. AM/FM Radios, CD players, MP3 players, DVD players and similar audio-visual equipment with or without ear buds are prohibited on site.
- 1.9. Prior to taking any photos on site, each contractor shall get approval from the Owner.
- 1.10. Tobacco is prohibited on all jobsite grounds, including the use of E and Vape type cigarettes.
- 1.11. Contractors shall provide an adequate supply of drinking water for all of their employees. Disposable drinking cups shall be provided for the employees and a trash receptacle for the disposable drinking cups shall be provided by the contractor.
- 1.12. The CM shall provide toilet facilities for contractor employees.
- 1.13. Contractor employees are prohibited from using the owner's lavatory/bathroom, eating or drinking facilities unless directed otherwise.
- 1.14. Contractors shall maintain a copy of all Safety Data Sheets (SDS) for all applicable chemicals brought on site. Contractors are responsible for employee training in accordance with 29 CFR 1926.59, Hazard Communication.
- 1.15. All contractor employees must attend a jobsite safety orientation and sign an attendance sheet prior to starting work onsite. Orientations will be scheduled by the CM.

## 2. PERSONAL PROTECTIVE EQUIPMENT

- 2.1. Basic PPE requirements shall be in accordance with 29 CFR 1926 Subpart E and contract documents.
- 2.2. Dress Code - All employees shall wear a minimum of 3" sleeve on shirts. Sleeveless shirts and tank tops are prohibited. Employees shall wear long pants made of denim or equivalent material; shorts are prohibited. All clothing shall be free of large holes and offensive language or illustrations. Type 2 Hi-Vis clothing to be worn while construction equipment is operating, bright or "Hi-Vis" (ex: safety orange or green) for all other activities. The CM has the sole discretion to determine if clothing meets the requirements of this rule.
- 2.3. The worksite requirements are 100% use of hard hats, safety glasses and appropriate work boots, no sneakers or sandals. Appropriate gloves are to be worn for assigned work activity and materials to be handled. Full-face shields are required when operating chop saws or similar power tools. Hard hats shall meet ANSI standards, no backwards hard hats or ball caps under hard hats; they must be free of offensive language or illustrations. The CM has the sole discretion to determine if PPE meets the requirements of this rule.
- 2.4. Safety glasses and hard hats will be issued to contractor employees who do not have them at the beginning of the shift. The contractor shall be charged \$25 for each pair of safety glasses and \$50 for each hard hat issued to their employee(s). Once issued, safety glasses and hard hats cannot be turned in for credit.
- 2.5. Additional PPE requirements may be required based on the hazards present when performing a specific task. The CM may identify additional PPE requirements as necessary for OSHA compliance.

## 3. FIRE PREVENTION AND PROTECTION

- 3.1. Basic Fire Prevention and Protection requirements shall be in accordance with 29 CFR 1926 Subpart F and contract documents. Each contractor shall provide the number and type of fire extinguishers appropriate for their type of work activity. After the building is enclosed the General Contractor (GC) will provide according to the standard.
- 3.2. A Hot Work Permit shall be submitted by the contractor to and approved by the CM for any activity or operation which produces a source of ignition (spark or flame). Such activities include but are not limited to:

- 3.2.1. Gas welding and cutting
- 3.2.2. Electric arc welding
- 3.2.3. Heating torches and other open flames
- 3.2.4. Soldering
- 3.2.5. Thawing
- 3.2.6. Portable heaters (electric or gas)
- 3.2.7. Tar pots or kettles
- 3.2.8. For any work involving flame, or high heat, producing equipment used in any area of moderate fire exposure.
- 3.2.9. For any work involving flame, or high heat, producing equipment used in any area of high fire exposure.

3.3. The following fire prevention actions shall be completed before hot work begins:

- 3.3.1. Combustibles shall be moved at least 35 feet from the hot work operation. If combustibles cannot be moved, they shall be protected by fire blankets.
- 3.3.2. Flammable liquids shall be removed from the area or totally isolated from the vicinity of the hot work operation.
- 3.3.3. Floor wall and other openings shall be closed or covered, this includes floor drains.
- 3.3.4. Combustible dust shall be cleaned from the vicinity of the hot work operations.
- 3.3.5. Where surrounding floors are of combustible construction, they shall be protected by fire blankets.

3.4. Disabling existing fire or smoke detection equipment is prohibited except by a certified contractor in coordination with the CM.

3.5. Disabling existing fire suppression equipment (sprinklers) is prohibited except by a certified contractor in coordination with the CM.

3.6. Fire watches shall be required whenever:

- 3.6.1. Hot work is performed in locations where other than a minor fire might develop.
- 3.6.2. Hot work is performed inside of or any portion of the existing buildings.
- 3.6.3. Appreciable combustible materials are closer than 25' to the point of operation.
- 3.6.4. There are wall or floor openings within 35 ft of the point of operation.

3.7. When required, Fire Watches shall be maintained for at least 30 minutes after completion of the hot work to look out for any smoldering or other fire.

3.8. The Contractor shall coordinate flammable storage area locations with the CM. Flammable Storage Areas shall be fenced in with orange snow fence. Signage for flammable storage area and no smoking shall be placed on all four sides of the fence.

3.9. Oxygen and other incompatible materials shall not be stored within 25 feet of the flammable storage area.

#### 4. SIGNS, SIGNAL AND BARRICADES

4.1. Basic sign, signal and barricade requirements shall be in accordance with 29 CFR 1926 Subpart G and contract documents. The Contractor shall provide the number and type of signs, signals and barricades appropriate for their type of work.

#### 5. MATERIAL HANDLING, STORAGE, USE AND DISPOSAL

5.1. Basic Material Handling requirements shall be in accordance with 29 CFR 1926 Subpart H and contract documents.

5.2. No material shall be stored within 6 feet of an access or egress of the existing building.

- 5.3. All lay down areas and staging areas shall be approved by the CM. All Material Handling Equipment (MHE) operators shall be trained and/or certified on the equipment they operate in accordance with applicable OSHA standards.
- 5.4. Rigging equipment shall be used only for its intended use and shall not be loaded in excess of its rated capacity.
- 5.5. Free rigging from fork lift tines is prohibited unless the contractor has written approval from the rigging and forklift manufacturer.
- 5.6. Contractor must follow all EPA, DNR and other applicable regulations relating to the handling and disposal of all hazardous or other regulated material and waste.

## 6. TOOLS - HAND AND POWER

- 6.1. Basic Material Handling requirements shall be in accordance with 29 CFR 1926 Subpart I and contract documents.
- 6.2. The contractor shall not restrict the operation of, remove or otherwise disable the guard or other safety device on any tool.
- 6.3. The T-handle must be installed on all ½" or larger portable drills.
- 6.4. All pneumatic hose line connections must be secured with cotter pins and whip lines or equivalent.
- 6.5. Air used for cleaning shall be regulated, by the user, to a maximum of 30 psig.
- 6.6. Hand tools shall be kept in good condition - sharp, clean, oiled, dressed. Damaged or defective tools shall be taken out of service and tagged "DO NOT USE" until properly repaired, removed from job or disposed of.

## 7. WELDING AND CUTTING

- 7.1. Basic Welding and Cutting requirements shall be in accordance with 29 CFR 1926 Subpart J and contract documents.
- 7.2. Prior to starting any welding or cutting operation, a Hot Work Permit shall be completed and approved as described in Section F, Fire Protection and Prevention
- 7.3. All welding equipment shall be inspected daily prior to use. Damaged or defective equipment shall be taken out of service and tagged "DO NOT USE" until repaired.
- 7.4. A minimum one 10 lb. ABC rated fire extinguisher shall be readily accessible (within 25 feet of travel distance) to all welding and cutting operations.
- 7.5. Arc welding and cutting operations shall be shielded by noncombustible or flameproof screens which will protect employees and other persons working in the vicinity from the direct rays of the arc.
- 7.6. Spark containment shall be utilized during all welding, burning and grinding operations. Spark containment may include laying fire blankets, placing barricades, totally enclosing the spark producing operation, or by the use of a fire watch. Employees working around or below the welding, burning or grinding operation shall be protected from falling or flying sparks
- 7.7. Areas where welding or cutting operations are performed shall be monitored for 30 minutes after the last welding or cutting operation to check for smoldering or fires which may have gone undetected during the welding or cutting operation. All welding and cutting must be completed 30 minutes prior to the end of a shift.
- 7.8. All oxygen and acetylene equipment shall have a check valve between the torch and the regulator.
- 7.9. Acetylene shall not be adjusted above 15 psig.

## 8. ELECTRICAL SAFETY

- 8.1. Basic Electrical Safety requirements shall be in accordance with 29 CFR 1926 Subpart K and contract documents.
- 8.2. All temporary 120 VAC outlets on the job site shall be protected by GFCI.
- 8.3. All temporary electrical installations, including temporary lighting shall meet the requirements of latest edition of NFPA 70 National Electric Code.
- 8.4. All electrical work shall be performed in accordance with NFPA 70E, Electrical Safety Related Work Practices.
- 8.5. All extension cords shall have a permanent and continuous path to ground. They shall be rated for hard or extra hard usage and shall be a rated S, SJO, SJT, SJTO, SO, ST and STO. Cords shall be inspected daily; damaged or defective cords will be tagged "DO NOT USE" and removed from use for repair, removed from job or disposed of.
- 8.6. All electrical equipment shall be listed and labeled as to its intended use and purpose. Electrical equipment shall only be used in accordance with its listing and labeling.

## 9. SCAFFOLDS

- 9.1. Basic Scaffold Safety requirements shall be in accordance with 29 CFR 1926 Subpart L and contract documents.
- 9.2. Rolling scaffolding shall have all wheels locked when personnel are aloft. Moving rolling scaffold with personnel on board is prohibited.
- 9.3. Ladders rungs shall not be used to support scaffold planking.
- 9.4. Contractor employees must know the capacity of the scaffold they are working on and must not exceed the rated capacity of the scaffolding.

## 10. FALL PROTECTION

- 10.1. Basic Fall Protection requirements shall be in accordance with 29 CFR 1926 Subpart M and contract documents.
- 10.2. 100% Fall Protection at 6 feet is required.
- 10.3. At the CM's request the contractor shall provide a Site Specific Fall Protection Plan which contains all the details and requirements in Appendix E to Subpart M. When required, the contractor shall not start work until the Site Specific Fall Protection Plan has been reviewed and approved by the Owner's and the contractor employees have been trained on the Site Specific Fall Protection Plan. Documentation of the training must be available on site.

## 11. HELICOPTERS, HOISTS, ELEVATORS AND CONVEYORS

- 11.1. Basic requirements for Helicopters, Hoists, Elevators and Conveyors shall be in accordance with 29 CFR 1926 Subpart N and contract documents.
- 11.2. Contractors shall operate and maintain elevators and hoisting equipment in accordance with equipment manufacturer's specifications and limitations applicable to its operation.

## 12. MOTOR VEHICLES AND MECHANIZED EQUIPMENT

- 12.1. Basic requirements for Motor Vehicles and Mechanized Equipment shall be in accordance with 29 CFR 1926 Subpart O and contract documents.

- 12.2. The use of seat belts is mandatory in all motor vehicles and mechanized equipment.
- 12.3. A minimum of a 2 lb ABC rated fire extinguisher shall be maintained in all mechanized equipment.
- 12.4. All bi-directional equipment with an obstructed view to the rear shall be equipped with a back-up alarm.
- 12.5. Contractors who track mud or other debris onto public roadways and walkways shall be responsible for the immediate clean-up of the roadway(s).
- 12.6. Motor vehicles and mechanized equipment shall not be left unattended while engines are running.

### 13. EXCAVATIONS

- 13.1. Basic requirements for Excavations shall be in accordance with 29 CFR 1926 Subpart P and contract documents.
- 13.2. The excavating contractor shall be responsible for obtaining underground utility locates prior to the start of excavation operations. Underground locates must be updated every 20 days.
- 13.3. A Competent Person shall daily evaluate the soil and document the inspection to assure proper sloping, benching or protective systems and egress are in place for the safety of personnel in and around the excavation.
- 13.4. Refer to Item 22 of this document for more indepth information.

### 14. CONCRETE AND MASONRY CONSTRUCTION

- 14.1. Basic requirements for Concrete and Masonry shall be in accordance with 29 CFR 1926 Subpart Q and contract documents.
- 14.2. Employees should wear appropriate clothing, boots and gloves to avoid contact with skin of hands and feet while working with concrete.
- 14.3. When concrete is being pumped, employees on the discharge end of the hose shall be provided with and wear a full face shield.
- 14.4. Power trowels must be equipped with "dead man" switch.
- 14.5. A Limited Access Zone (LAZ) shall be established in accordance with Subpart Q, whenever a masonry wall is being constructed.
- 14.6. Temporary bracing shall be provided in accordance with Subpart Q for all masonry walls over 8 feet high. Temporary bracing shall meet the design requirements detailed in the Standard Practice for Bracing Masonry Walls Under Construction developed by the Council for Masonry Wall Bracing, July 1999. Temporary bracing may be omitted if approved in writing by the Project Engineer of Record.
- 14.7. An independent testing agency shall confirm the concrete has met a minimum of 75% of its design strength based on cylinder testing and that there were no field modifications to any anchor bolts. If there was a field modification to any of the anchor bolts, the contractor shall acknowledge the modification and provide approval for the modification by the Project Engineer of Record.

### 15. STEEL ERECTION

- 15.1. Basic Fall Protection requirements shall be in accordance with 29 CFR 1926 Subpart R and contract documents.
- 15.2. The contractor shall provide a Site Specific Steel Erection and Fall Protection Plan which contains all the details and requirements in Appendix A to Subpart R.

15.3. The contractor shall not start work until the Site Specific Steel Erection and Fall Protection Plan has been reviewed and approved by the CM and the contractor employees have been trained on the Site Specific Erection and Fall Protection Plan. Documentation of the training must be available on site.

15.4. The contractor shall not begin erection until they receive written approval to begin erection from the CM.

## 16. DEMOLITION

16.1. Basic Demolition requirements shall be in accordance with 29 CFR 1926 Subpart T and contract documents.

## 17. POWER TRANSMISSION AND DISTRIBUTION

17.1. Basic Power Transmission and Distribution requirements shall be in accordance with 29 CFR 1926 Subpart V and contract documents.

## 18. ROLLOVER PROTECTIVE STRUCTURES; OVERHEAD PROTECTION

18.1. Basic requirements for Rollover Protective Structures and Overhead Protection shall be in accordance with 29 CFR 1926 Subpart W and contract documents.

## 19. STAIRWAYS AND LADDERS

19.1. Basic requirements for stairways and ladders shall be in accordance with 29 CFR 1926 Subpart X and contract documents.

19.2. Stepladders must be set level on all four feet, with spreaders locked in place. Do not use as a straight ladder.

19.3. When stepladders are used close to the edge of an elevated platform, roof or floor opening, and when location requirements so specify, they must be tied off.

19.4. All trailers and other temporary field facilities that employees must access that have a change of elevation of 19" or more shall have a temporary stairway installed.

## 20. TOXIC AND HAZARDOUS SUBSTANCES

20.1. Basic requirements for Toxic and Hazardous Substances shall be in accordance with 29 CFR 1926 Subpart Z and contract documents.

20.2. Contractors must have approval prior to bringing and hazardous or toxic substances listed in Subpart Z on site or prior to disturbing any of these substances if found on site.

## 21. CRANES AND DERRICKS

21.1. Basic requirements for Cranes and Derricks in construction shall be in accordance with 29 CFR 1926 Subpart CC and contract documents.

21.2. Contractors will only use trained and qualified operators and riggers as per the standard and will supply any documentation including but not limited to operator training documents and maintenance records as requested by the CM.

21.3. Contractor will operate crane within the manufacturer's specifications during all activities.

21.4. Contractor will assure the ground conditions have the ability to support the equipment and the equipment will not be assembled or used unless the ground conditions are firm, drained and grade is adequate for use.

21.5. No part of the crane, support equipment or rigging will be within 20 feet of a power line during operations, assembly or disassembly; unless power line in question is verified to be de-energized.



- 21.6. Critical lifts are lifts that exceed 75% of the rated crane capacity or multi crane lifts; they must have the CM approval before the lifting activity. Lifts greater than 95% of the load capacity in any configuration are NOT permitted.

This is not intended to be an all inclusive list of health, safety or environmental regulations and is intended to be an overview for the health and safety of each person on the jobsite. Any changes or deviations from this policy must have prior written permission from the CM safety department.

## 22. EXCAVATION SAFETY PROGRAM

### 22.1. Purpose

- 22.1.1. To assist with compliance of the OSHA Excavation and Trenching Standard and reduce or eliminate the injury potential of excavation hazards.

### 22.2. Scope

- 22.2.1. This section of the Safety and Health Program describes requirements for trenching and excavation safety for any trench or excavation that employees may enter on Carl A. Nelson and Company (CANCO) Projects.

### 22.3. Definitions

- 22.3.1. **Benching (Benching system)** is a method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.
- 22.3.2. **Cave-in** is the separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.
- 22.3.3. **Competent person** is one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- 22.3.4. **Excavation** is any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.
- 22.3.5. **Face or side** is the vertical or inclined earth surfaces formed as a result of excavation work.
- 22.3.6. **Failure** is the breakage, displacement, or permanent deformation of a structural member or connection so as to reduce its structural integrity and its supportive capabilities.
- 22.3.7. **Hazardous atmosphere** is an atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.
- 22.3.8. **Locate** is the act of identifying underground utilities and their path through an excavation by marking the surface with paint, flags or "whiskers" which are color coded by the type of utility being identified.
- 22.3.9. **Potholing** or daylighting is a term used to describe the process of hand digging or vacuum digging one or more small scale holes to positively locate a utility or other underground item.
- 22.3.10. **Shield (Shield system)** is a structure that is able to withstand the forces imposed on it by a cave-in and thereby protect employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses. Additionally, shields can be either pre-manufactured or job-built in accordance with 1926.652(c)(3) or (c)(4). Shields used in trenches are usually referred to as "trench boxes" or "trench shields."
- 22.3.11. **Sloping (Sloping system)** is a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.
- 22.3.12. **Stable rock** is a natural solid mineral material that can be excavated with vertical sides and will remain intact while exposed. Unstable rock is considered to be stable when the rock material on the side or sides of the excavation is secured against caving-in or movement by rock bolts or by another protective system that has been designed by a registered professional engineer.
- 22.3.13. **Surface Encumbrances** are those things on top of the ground that could pose a hazard to employees in as excavation. Examples include: sidewalks, slabs on grade, electrical transformers or similar equipment, trees, telephone poles, above ground gas tanks, other items on the surface that could fall into or pour into an excavation.

- 22.3.14. **Structural ramp** is a ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock is not considered structural ramps.
- 22.3.15. **Support system** is a structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.
- 22.3.16. **Tolerance Zone** is the approximate location of an underground utility facility defines as a strip of land at least 3 feet wide but not wider than the width of the underground utility plus 18 inches on either side of the utility based on the markings made by the locator or the owner or operator of the facility.
- 22.3.17. **Trench (Trench excavation)** is a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.
- 22.3.18. **Utilities** refer to the set of services consumed by the public: electricity, natural gas, water, communication lines and sewage. Steam, processing lines and other systems associated with our customers' processes are also considered utilities.

#### 22.4. Responsibilities

##### 22.4.1. Director of Safety or Designee

- 22.4.1.1. To verify compliance with this policy on a periodic basis.
- 22.4.1.2. To update this program as regulatory bodies or company needs arise.

##### 22.4.2. Site Superintendent

- 22.4.2.1. To assure that all site employees are trained in excavation awareness in accordance with Carl A. Nelson & Company training requirements.
- 22.4.2.2. To periodically review the implementation of this program.

#### 22.5 Implementation

##### 22.5.1 Utilities Locating

- 22.5.1.1. Prior to any excavation work, utilities must be located to prevent hitting or damaging any live utilities in the area. Making any excavations without first having made reasonable attempts to have a utility locate performed, a site inspection and a review of existing drawings will result in disciplinary action up to and including termination of employment (employees) or contract termination (subcontractors).
- 22.5.1.2. Each excavating contractor is required to request their own utility locate. Locates cannot be shared between contractors. A locate that is more than 2 weeks old and where no excavation operations have been started, is classified as expired. A new locate shall be called in when an original locate has expired.
- 22.5.1.3. A minimum of forty-eight (48) hours or longer (check local codes) prior to starting an excavation, the local One Call service or private utility owner shall be contacted and a utility locate shall be completed. 811 has been established as a National One Call number. When you dial 811, it is suppose to contact you with the responsible locator within your area code. Prior to the locate activity the area of excavation must be marked with white paint or a meet must be scheduled to identify excavation area to the utility locate company or utility owner.
- 22.5.1.4 Utilities must be marked according to following color codes:
  - 22.5.1.4.1. Communication/fiber optic lines will be denoted with **orange** flags or paint.
  - 22.5.1.4.2. Power/electrical lines will be denoted with **red** flags or paint.
  - 22.5.1.4.3. Water lines will be denoted with **blue** flags or paint.
  - 22.5.1.4.4. Gas lines will be denoted with **yellow** flags or paint.
  - 22.5.1.4.5. Sewer lines will be denoted with **green** flags or paint.
  - 22.5.1.4.6. Reclaimed or landscaping water will be denoted with **purple** flags or paint.
  - 22.5.1.4.7. Proposed excavations will be denoted with white flags or paint.
  - 22.5.1.4.8. Survey marking will be denoted with **pink** flags or paint.

- 22.5.2. If possible, the foreman or operator of the excavation crew should meet with the public or private utility locate personnel to review the locate results.

- 22.5.3. In addition to locates, the CANCO site supervisor shall conduct a site inspection and review existing drawings, if any. The site inspection shall consist of identifying gas meters, sanitary sewer clean outs, manholes, or any other visible evidence of underground utilities which may not be located or show on existing drawings. A review of existing drawings shall also be conducted to anticipate the location of underground utilities.
- 22.5.4. One call locators typically will not locate privately owned utilities. Therefore, private utilities shall be located and marked by the private owner of the facilities. If CANCO is required by contract to locate and mark private underground utilities, we shall obtain drawings of underground utilities from the owner and utilize these in the locating and marking process. In cases where we are required by contract to locate and mark utilities owned by others, we shall limit our responsibility by contract to only those underground utilities that are shown on existing drawings provided by the owner of the utility.
- 22.5.5. When digging within 10 feet of marked and buried underground electrical lines, the excavator shall be treated the same as if it were operating within 10 feet of an overhead power line. To minimize the possibility of electrical shock, employees shall not be allowed within 10 feet of the excavating equipment
- 22.5.6. Determining the Exact Location of Underground Utilities
- 22.5.6.1. Determining *Exact* Location Utilities Marked in the Tolerance Zone - All utilities in the Tolerance Zone shall be located by air/water-vacuum excavation or by hand.
- 22.5.6.2. Determining the Exact Location by Hand.
- 22.5.6.2.1. In the case of a parallel utility, a pilot trench shall be hand dug and perpendicular to the utility marking the width of the tolerance zone. A pilot trench shall be repeated every 10 feet along the length of the trench being excavated. The pilot trench shall be as deep as necessary until the marked utility(s) has been exposed or 1'-0" below the planned excavation depth.
- 22.5.6.2.2. In the case of a crossing utility, a pilot trench shall be hand dug perpendicular to the utility marking the width of the tolerance zone. A pilot trench shall be as long as the width of the underground utility plus 1- 1/2 feet on either side of the utility centered on the markings. The pilot trench shall be as deep as necessary until the marked utility(s) has been exposed or 1'-0" below the planned excavation depth.
- 22.5.6.3. Machine Digging inside of Tolerance Zones - Procedures for machine digging excavations in the tolerance zone are listed below:
- 22.5.6.3.1. The marked utility(s) shall be exposed by hand or water/air vacuum.
- 22.5.6.3.2. The excavation bucket shall either not have teeth or shall have a flat plate installed over the teeth to create a smooth cutting surface.
- 22.5.6.3.3. In the case of a crossing utility, machine excavation shall not extend deeper than 1 foot above what has been hand or air-vacuum excavated.
- 22.5.6.3.4. In the case of a parallel utility, machine excavation may be made between the pilot trenches but shall be no deeper than 1 foot above what has been hand or air-vacuum excavated in the pilot trenches.
- 22.5.6.3.5. Machine excavations shall not be made within 1 foot of exposed crossing underground utilities or within 12" of parallel exposed underground utilities.
- 22.5.6.4. Unknown Utilities in the Tolerance Zone - If at any time during excavation operations a utility is encountered that was not identified during the locate and is not identified on site drawings, the following procedures shall be followed:
- 22.5.6.4.1. Every attempt shall be made to identify the utility and contact the facility owner or owner of the utility to see if the utility is still in service.
- 22.5.6.4.2. If the utility is undamaged and its status cannot be determined, it shall be treated as a live utility and procedures in 3. and 4. above shall apply.
- 22.5.6.4.3. If the utility is damaged, its status shall be determined. If it is an abandoned utility, excavation operations may proceed and the utility shall be removed or shored up so as not to present a hazard to employees. If the utility is live, the owner shall be contacted for repair and the utility shall be de-energized and shored up inside the excavation so as not to be a hazard to employees.
- 22.5.6.4.4. Never drill or cut into an unknown utility to try to determine it's content of status. To do so will result in disciplinary action up to and including termination of employment (employees) or contract termination (subcontractors).

22.5.6.5. Driving Piles or Stakes and Drilling Holes - Piles or stakes shall not be driven or holes drilled in the ground in the Tolerance Zone until the underground facilities have been physically located. Once physically located, piles shall not be driven or holes drilled in the ground within 6" of exposed underground utilities. The procedure for physically locating unknown utilities in the Tolerance Zone shall be as specified above.

22.5.7 Required Actions at Given Trench and Excavation Depths

22.5.7.1. 4 Feet or Deeper:

22.5.7.1.1. Proper access must be established for any worker who enters into the trench/excavation. This could be a ladder, stair or ramp.

22.5.7.1.2. Maximum travel distance to an access/egress point is 25 feet.

22.5.7.2. A confined space assessment must be conducted by a Competent Person to determine whether or not entrants require ventilation, air monitoring and protective equipment. NOTE: this assessment is only necessary for excavations made in soil that is suspect for atmospheric or other contaminants (ex. A previously existing landfill, chemical plant, etc.).

22.5.7.3. 5 Feet or Deeper:

22.5.7.3.1. Cave-in protection is required. NOTE: if the Competent Person notices signs of cave-in potential before 5 feet depth, a protective system must be utilized as well. Cave-in protection systems include sloping, benching, shielding and shoring.

22.5.7.3.2. Solid Rock does not require cave in protection, but must be thoroughly inspected to ensure compliance.

22.5.7.4. 6 Feet or Deeper:

22.5.7.4.1. Fall Protection and/or Perimeter Protection is Required.

22.5.7.4.2. Anyone who will cross over an excavation or trench that is 6 feet or more in depth must be protected from falls. A common practice would be to guardrail a crossover ramp. Trenches or excavations 6 feet or more in depth that have edges which cannot be readily seen due to sudden drop-offs, excessive plant growth or other obstructions require barricades, guardrails or another system that warns others of the fall hazard.

22.5.7.4.3. Anyone who must approach or inspect an excavation or trench that is 6 feet or more in depth with vertical or near vertical sides must be protected by perimeter protection or positive personal fall protection.

22.5.8. Competent Persons

22.5.8.1. A Competent Person must be on site at all times when workers are reasonably anticipated to be working within excavations/trenches. Subcontractor Competent Persons' identities and qualifications must be revealed ahead of time to CANCO's site management team and their photos will be taken and posted in the site office.

22.5.9. Barricades

22.5.9.1. All excavation and trenches must be barricaded at the end of the day. A visual barricade of caution tape, rope with flagging, or equivalent may be used for excavations less than 6' in depth. Excavations that are greater than or equal to 6' in depth shall be barricaded by both a visual and physical barricade. (i.e. Chain link, orange fence, standard guardrail, Jersey barrier.)

22.5.10. Excavation and Trenching Hazards

22.5.10.1. The following list of potential hazards must be evaluated and acted upon by a Competent Person before workers are allowed to enter:

22.5.10.1.1. Cave-in hazards

22.5.10.1.2. Access and egress problems

22.5.10.1.3. Water seeping, running into or pre-existing in the soil

22.5.10.1.4. Vibration sources that could make the soil unstable

22.5.10.1.5. Underground utilities

22.5.10.1.6. Undermining of structures above and/or nearby the excavation

22.5.10.1.7. Struck-by hazards from falling and/or rolling rocks and debris above

22.5.10.1.8. Confined spaces issues, including hazardous atmospheres and chemical exposures

22.5.11. Corrective and Preventative Measures for Excavation and Trench Hazards

- 22.5.11.1. Cave-ins will be prevented or shielded to ensure workers do not become buried or struck by falling objects. The Competent Person will perform the following duties:
- 22.5.11.2. Testing the soil of the excavation or trench or pre-determining the soil to be Class C, therefore requiring the highest burden of protection under OSHA law. Once the soil type has been determined, the protective system options can be reviewed.

**NOTE:** Competent Persons may NOT classify soil as Class A or stable rock without the pre-approval of the Safety Director or designee.

- 22.5.11.3. Determine the appropriate cave-in protective system based on soil type and existing or predictable hazards within or around the excavation. All cave-in protection systems must meet OSHA standard requirements.

**NOTE:** A Registered Professional Engineer must be utilized for the protective system design for any excavation or trench that exceeds 20 feet in depth.

- 22.5.11.4. Daily inspections of excavations, the adjacent areas, and protective systems shall be made by a Competent Person for evidence of a situation that could result in possible cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. Where the Competent Person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions, exposed employees shall be removed from the hazardous area until the necessary precautions have been taken to ensure their safety.

- 22.5.11.4.1. An inspection shall be conducted by the Competent Person prior to the start of work and as needed throughout the shift.
- 22.5.11.4.2. Inspections shall also be made after every rainstorm or other hazard increasing occurrence.
- 22.5.11.4.3. These inspections are only required when employee exposure can be reasonably anticipated.

- 22.5.11.5. Proper access and egress is required for any excavation/trench that is 4 feet or deeper. The access methods must comply with OSHA requirements and shall not be placed in a manner that would create greater than a 25 foot travel distance for the entrants.

- 22.5.11.6. Employees cannot work in excavations or trenches that contain water unless they are properly protected. The precautions necessary to protect employees adequately vary with each situation, but could include special support or shield systems to protect from cave-ins, water removal to control the level of accumulating water, or use of a safety harness and lifeline.

- 22.5.11.7. If water is controlled or prevented from accumulating by the use of water removal equipment, the water removal equipment and operations shall be monitored by a competent person to ensure proper operation.

- 22.5.11.8. If excavation work interrupts the natural drainage of surface water (such as streams), diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering the excavation and to provide adequate drainage of the area adjacent to the excavation. Excavations subject to runoff from heavy rains will require appropriate inspections by a Competent Person as conditions change.

- 22.5.11.9. Employees exposed to public vehicular traffic or mobile construction equipment shall be provided with, and shall wear ANSI Class II warning vests at a minimum. Other suitable garments such as shirts and jackets are acceptable provided they meet the minimum ANSI standard.

- 22.5.11.10. Concrete barricades/Jersey barriers/K-rail, should be used whenever possible to separate employees from vehicular traffic.

- 22.5.11.11. No employee shall be permitted underneath loads handled by lifting or digging equipment. Employees shall be required to stand away from any vehicle being loaded or unloaded to avoid

being struck by any spillage or falling materials.

- 22.5.11.12. Operators may remain in the cabs of vehicles being loaded or unloaded when the vehicles are equipped with adequate protection for the operator during loading and unloading operations.
- 22.5.11.13. When mobile equipment is operated adjacent to an excavation, or when such equipment is required to approach the edge of an excavation, and the operator does not have a clear and direct view of the edge of the excavation, a warning system shall be utilized such as barricades, hand or mechanical signals, or stop logs. If possible, the grade should be away from the excavation.
- 22.5.11.14. Excavations/trenches that are exposed to excessive vibration may require additional safeguards for appropriate protection.
- 22.5.11.15. Where the stability of adjoining buildings, walls, or other structures is endangered by excavation operations, support systems such as shoring, bracing, or underpinning shall be provided to ensure the stability of such structures for the protection of employees.
- 22.5.11.16. Excavation below the level of the base or footing of any foundation or retaining wall that could be reasonably expected to pose a hazard to employees shall not be permitted except when:
- 22.5.11.16.1. A support system, such as underpinning, is provided to ensure the safety of employees and the stability of the structure; or
  - 22.5.11.16.2. The excavation is in stable rock; or
  - 22.5.11.16.3. A registered professional engineer has approved the determination that the structure is sufficiently removed from the excavation so as to be unaffected by the excavation activity; or
  - 22.5.11.16.4. A registered professional engineer has approved the determination that such excavation work will not pose a hazard to employees.
- 22.5.11.17. Sidewalks, pavements and structures shall not be undermined unless a support system or another method of protection is provided to protect employees from the possible collapse of such structures.
- 22.5.11.18. Employees shall be protected from loose rock or soil that could pose a hazard by falling or rolling from an excavation face. Such protection shall consist of:
- 22.5.11.18.1. Scaling to remove loose material;
  - 22.5.11.18.2. Installation of protective barricades at intervals as necessary on the face to stop and contain falling material; or other means that provide equivalent protection.
- 22.5.11.19. Falling or rolling debris protection shall be provided by:
- 22.5.11.19.1. Placing and keeping such materials or equipment at least 2 feet from the edge of excavations,
  - 22.5.11.19.2. Use of retaining devices that are sufficient to prevent materials or equipment from falling or rolling into excavations, or a combination of both if necessary.
- 22.5.11.20. The estimated location of utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground installations that reasonably may be expected to be encountered during excavation work, shall be determined prior to opening an excavation.
- 22.5.11.20.1. Contractors must use the proper procedures and amount of notice time as required by state and local laws.

22.5.12. Soils Testing

- 22.5.12.1. The classification of soil shall be made based on the results of at least one visual and at least one manual analysis. Such analyses shall be conducted by a Competent Person using tests approved by the OSHA regulations. Both visual and manual analyses shall be designed and conducted to provide sufficient quantitative and qualitative information as may be necessary to identify properly the properties, factors, and conditions affecting the classification of the soil:
- 22.5.12.1.1. In a layered soil system, the system shall be classified in accordance with its

weakest layer. However, each layer may be classified individually where a more stable layer lies under a less stable layer.

22.5.12.1.2. If, after classifying a deposit, the properties, factors, or conditions affecting its classification change in any way, the changes shall be evaluated by a competent person. The deposit shall be reclassified as necessary to reflect the changed circumstances.

22.5.12.2. Visual analysis is conducted to determine qualitative information regarding the excavation site in general, the soil adjacent to the excavation, the soil forming the sides of the open excavation, and the soil taken as samples from excavated material. Things to look for are as follows:

22.5.12.2.1. The range of particle sizes and the relative amounts of the particle sizes.

22.5.12.2.1.1. Soil that is primarily composed of fine-grained material is usually cohesive material.

22.5.12.2.1.2. Soil composed primarily of coarse-grained sand or gravel is granular material and not cohesive.

22.5.12.2.2. Soil that remains in clumps when excavated is cohesive. Soil that breaks up easily and does not stay in clumps is granular.

22.5.12.2.3. Crack-like openings such as tension cracks in the face of the excavation and spalling.

22.5.12.2.4. Existing utility and other underground structures, and previously disturbed soil.

22.5.12.2.5. Layered systems that slope toward the excavation and show evidence of previous shifting.

22.5.12.2.6. Surface water, water seeping from the sides of the excavation, or the location of the level of the water table.

22.5.12.2.7. Sources of vibration that may affect the stability of the excavation face.

22.5.12.3. Manual analysis of soil samples is conducted to determine quantitative as well as qualitative properties of soil and to provide more information in order to classify soil properly. Examples of some manual tests are as follows:

22.5.12.3.1. Mold a moist or wet sample of soil into a ball and attempt to roll it into threads as thin as 1/8-inch in diameter. Cohesive material can be successfully rolled into threads without crumbling. For example, if at least a two inch (50 mm) length of 1/8-inch thread can be held on one end without tearing, the soil is cohesive.

22.5.12.3.2. If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand, or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broken with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.

22.5.12.3.3. The thumb penetration test can be used to estimate the unconfined compressive strength of cohesive soils. The more easily or difficult the thumb penetrates, the weaker or stronger the soil's cohesiveness.

22.5.12.3.4. Estimates of unconfined compressive strength of soils can also be obtained by use of a pocket penetrometer or by using a hand-operated shear vane. Multiple samples must be taken from different areas of the excavation's spoils pile and their sum averaged.

22.5.12.4. The Competent Person bears the burden of proof for any soils classification. Written documentation must be used to back this up. REMEMBER: Competent Persons may NOT classify soil as Class A or stable rock without the pre-approval of the Director of Safety and Health or designee.

#### 22.5.13. Cave-In Protection: Sloping, Benching and Shielding

22.5.13.1. The maximum allowable slope for excavations/trenches based on soil type is as follows:

22.5.1.13.1.1. Stable rock = vertical (90°)

22.5.1.13.1.2. Type A = 3/4:1 (53°)

22.5.1.13.1.3. Type B = 1:1 (45°)

22.5.1.13.1.4. Type C = 1 ½:1 (34°)

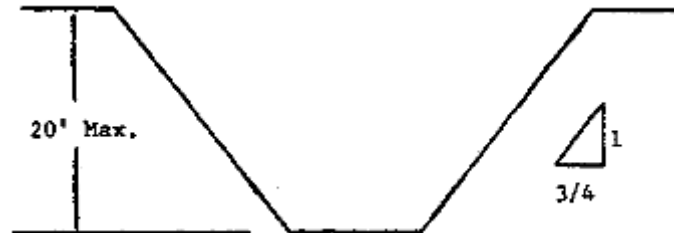
22.6 Attachments

- 22.6.1 Excavations Made in Type A Soil
- 22.6.2 Excavations Made in Type B Soil
- 22.6.3 Excavations Made in Type C Soil
- 22.6.4 Excavations Made in Layered Soil
- 22.6.5 Excavation Checklist
- 22.6.6 Excavation Visual – Manual Soil Tests



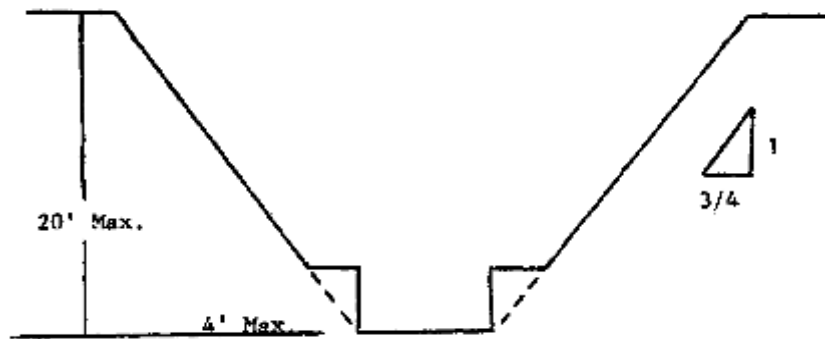
## Excavations made in Type A Soil

All simple slope excavation 20 feet or less in depth shall have a maximum allowable slope of  $\frac{3}{4}$ :1.

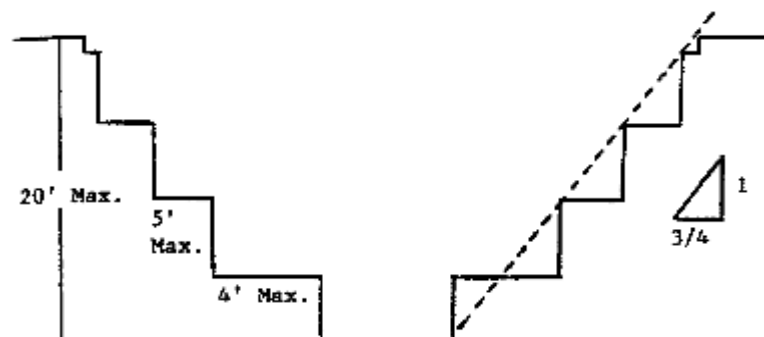


All benched excavations 20 feet or less in depth shall have a maximum allowable slope of  $\frac{3}{4}$  to 1 and maximum bench dimensions as follows:

### SIMPLE BENCH



### MULTIPLE BENCH

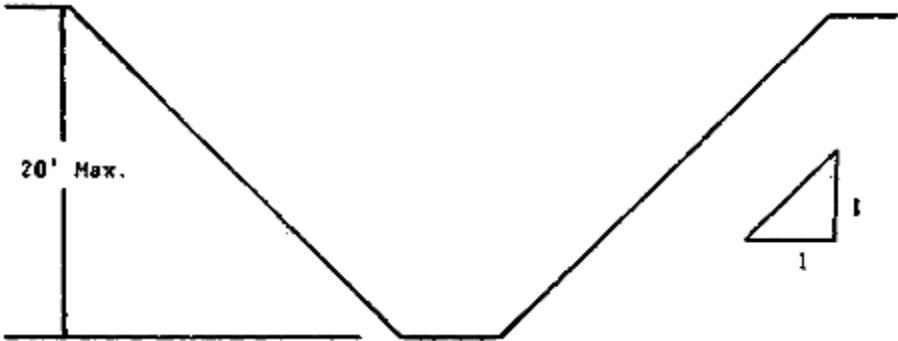


All excavations 8 feet or less in depth which have unsupported vertically sided lower portions shall have a maximum vertical side of  $3\frac{1}{2}$  feet.

# Excavations Made in Type B Soil

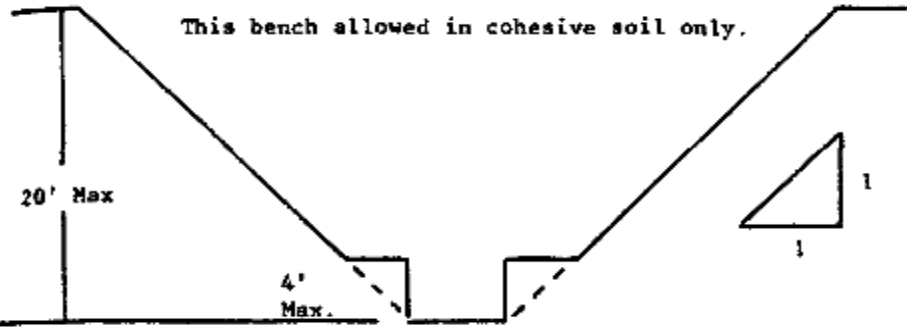
All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.

## SIMPLE SLOPE

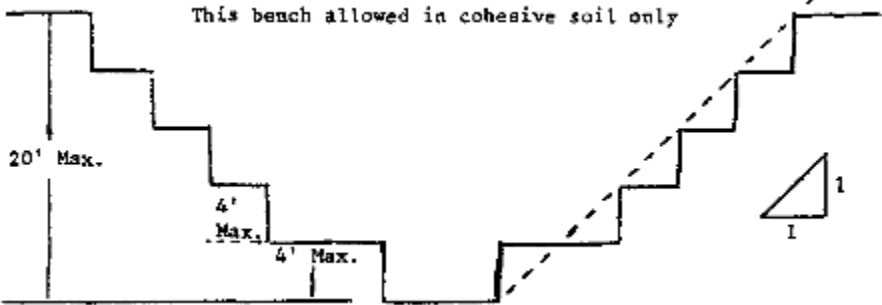


All benched excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1 and maximum bench dimensions as follows:

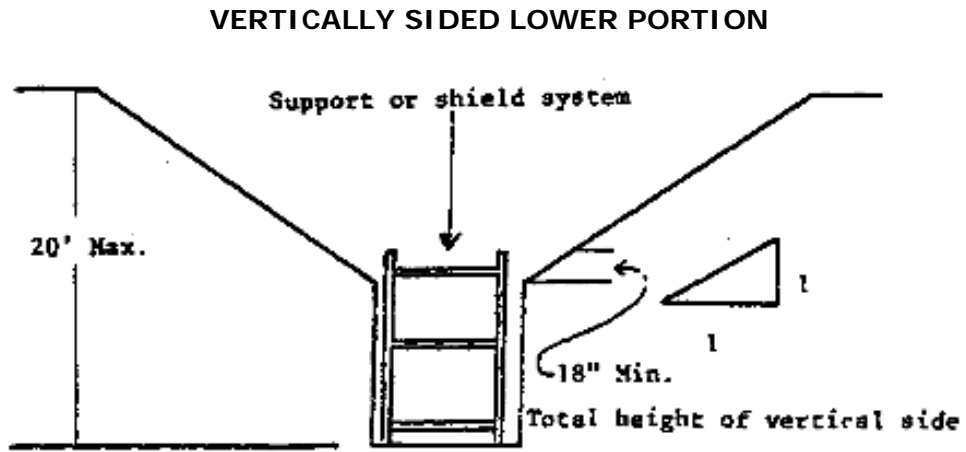
## SINGLE BENCH



## MULTIPLE BENCH



All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1:1.



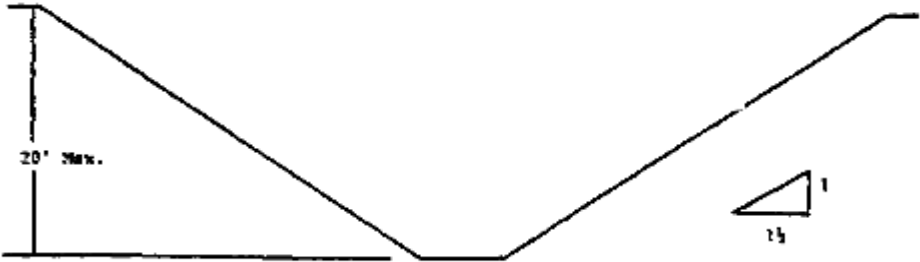
All other sloped excavations shall be in accordance with the other options permitted in 1926.652(b).

# Excavations Made in Type C Soil

All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1½:1.

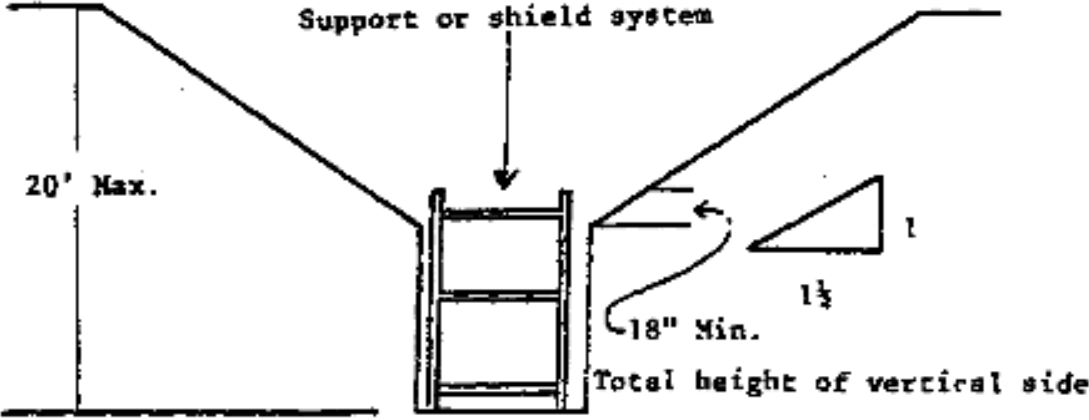
Benching is not permitted in Type C soil.

## SIMPLE SLOPE



All excavations 20 feet or less in depth which have vertically sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1½:1.

## VERTICAL SIDED LOWER PORTION

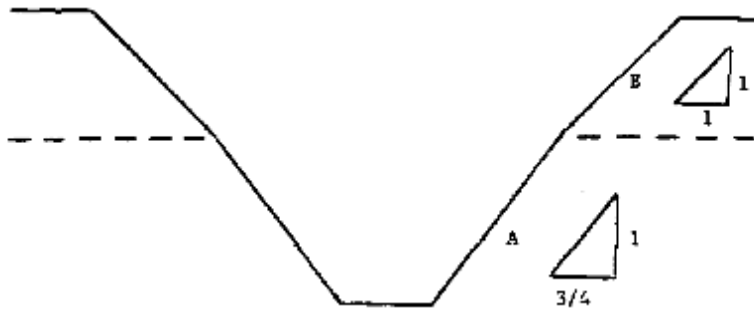


All other sloped excavations shall be in accordance with the other options permitted in 1926.652(b).

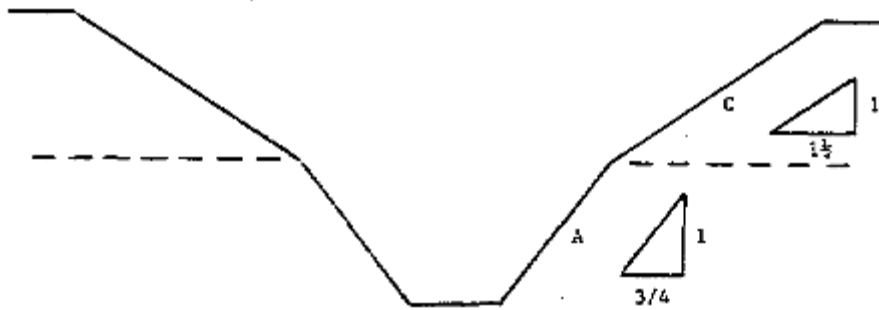
# Excavations Made in Layered Soils

All excavations 20 feet or less in depth made in layered soils shall have a maximum allowable slope for each layer as set forth below.

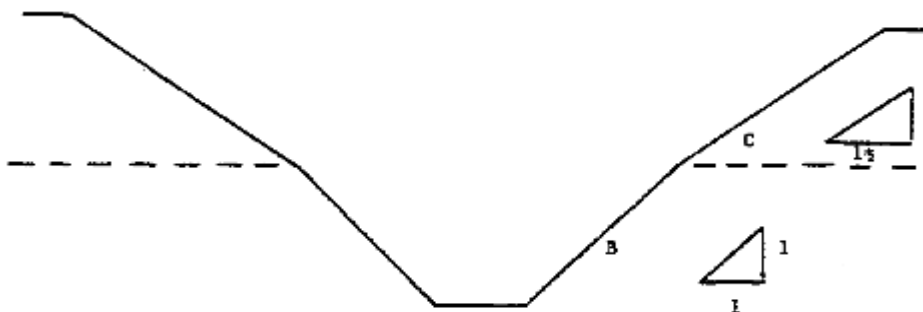
**B OVER A**



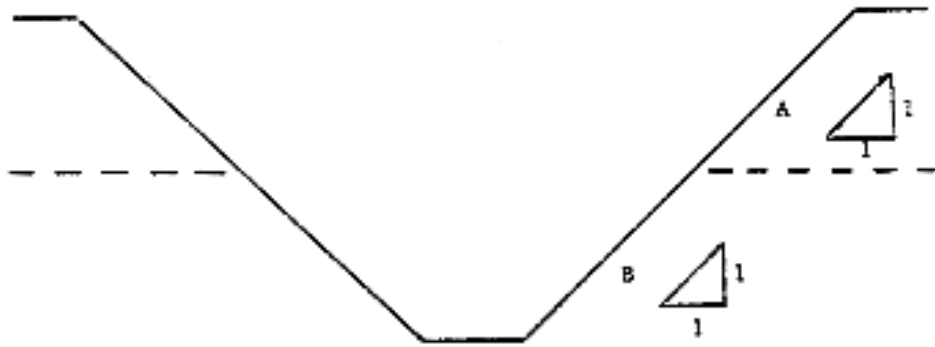
**C OVER A**



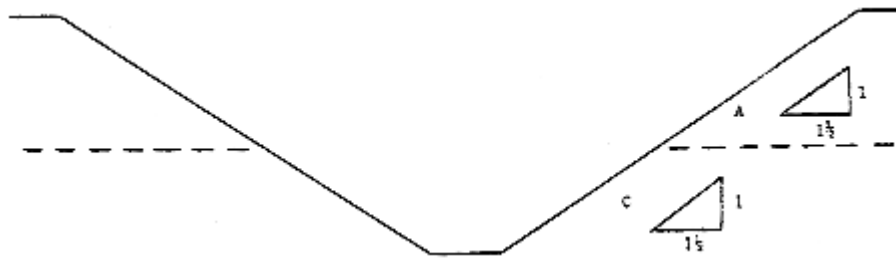
**C OVER B**



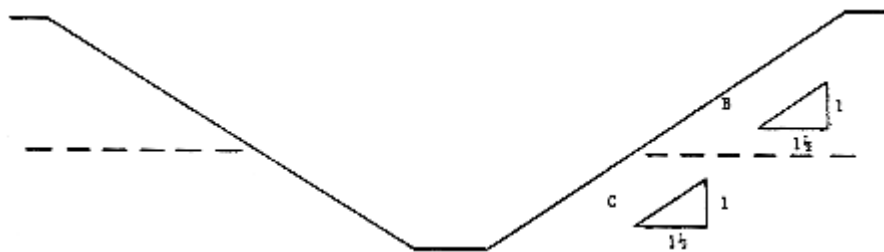
A OVER B



A OVER C



B OVER C



# Excavation Daily Checklist

Date: _____	Job Name: _____	Job #: _____	Initial Inspection Time: _____
Competent Person Name: _____		Signature: _____	
Current Weather Conditions: _____		Excavation Location: _____	
Width & Depth of Excavation: _____ W _____ D _____			

**All underground utilities, Public & Private, located & marked?**  Yes  No

Soil Classification			
Soil has Been Classified as: <input type="checkbox"/> Stable Rock <input type="checkbox"/> A Soil			
Condition: <input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet <input type="checkbox"/> Saturated <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> Submerged			
<u>Manual Test(s) Performed by Competent Person (check all that apply)</u>			
<input type="checkbox"/> Sedimentation (Jar) Test	<input type="checkbox"/> Thumb Penetration	<input type="checkbox"/> Ribbon Test	
<input type="checkbox"/> 2" Strand Test	<input type="checkbox"/> Penetrometer or Shear vane	<input type="checkbox"/> Dry Strength	
<u>Inspector Visual Tests Checklist</u>			
Are particulate sizes Fine grained (cohesive) or Coarse grained	<input type="checkbox"/> F	<input type="checkbox"/> C	<input type="checkbox"/> N/A
Does excavated material stay in clumps?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is water standing, seeping or running into the excavation?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is there layered soils system in excavation?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has the soil been previously disturbed (utilities, backfill, etc.)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are areas of the excavation fissured, cracked, have vertical spalls or	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are sources of vibration present that could affect stability?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Safety Systems for Known Hazards			
Were confined space hazards found during the inspection?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If so, what protective systems have been utilized?			
<input type="checkbox"/> air monitor <input type="checkbox"/> ventilation <input type="checkbox"/> respirators <input type="checkbox"/> rescue equip. <input type="checkbox"/> other _____			
Is cave-in protection required (5' or deeper) or needed?			<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If so, which cave-in protection system(s) will be utilized?			
<input type="checkbox"/> sloping <input type="checkbox"/> shielding (trench box) <input type="checkbox"/> shoring <input type="checkbox"/> other _____			
Safety Inspection Items			
Proper barricades, cones, warning vests or other devices in use?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
When 4' or deeper, ladders in place with travel distance < or = 25'?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Spoils piles at least 2' from edge and appear stable?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Adjoining buildings or structures are adequately supported?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Walkways to or around excavation 6' or deeper have fall protection?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Has Competent Person inspected excavation prior to worker entry?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Cave-in protection systems designed, installed and used properly?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

2<sup>nd</sup> inspection time: \_\_\_\_\_ 3<sup>rd</sup> inspection time: \_\_\_\_\_

**NOTE: Only a Registered Professional Engineer can design protective systems for excavations deeper than 20 feet.**

# Excavation Visual-Manual Soil Tests

## Testing

When making a site soil classification, the competent person conducts both visual and manual tests. Factors to examine are:

- **Soil particle size** – Usually there is a mixture of sizes. The percentage of sand to silt and clay determines the soil type.
- **Grain size** – If a grain of soil is larger than a #2 pencil lead, it is classified as gravel. If it is smaller, but can be seen by the unaided eye, it is classified as sand. Clay and silt particle cannot be seen without the use of a microscope. A general statement is the larger the grain size the less stable the soil.
- Soil that clumps and holds together when dug out is most likely to be clay or silt.
- Cracks in walls of the excavation, with material spilling off (slabs of soil falling off the sides) indicate Type B or C soil.
- Standing water or water seeping out of the bottom or trench walls automatically classifies the soil as Type C.
- Layered soil adjacent to roadways or buildings, disturbed soil, or soil exposed to a source of vibration, requires a soil classification to be made by a registered professional engineer.

## Manual Testing

Protective system requirements are based on the results of testing. **Never** enter an unprotected excavation to obtain a soil sample. Take the soil sample from freshly dug material in the spoil pile. The tests should be done as soon as possible to preserve the sample's natural moisture.

## Dry Strength

If the soil is dry and crumbles on its own or with moderate pressure into individual grains or fine powder, it is granular (any combination of gravel, sand or silt). If the soil is dry and falls into clumps which break up into smaller clumps, but the smaller clumps can only be broken up with difficulty, it may be clay in any combination with gravel, sand or silt. If the dry soil breaks into clumps which do not break up into small clumps and which can only be broke with difficulty, and there is no visual indication the soil is fissured, the soil may be considered unfissured.

## Thread test (plasticity)

This determines whether a sample is cohesive. Roll a sample of the soil between the palms of your hands to about one-eighth inch diameter thread at least several inches long.

Place the rolled soil thread on a flat surface and pick up by one end. If the sample holds together for two inches without breaking, it is considered cohesive.

## Ribbon Test

This is another test for cohesiveness and is used as a back-up test for the thread test. Roll a representative soil sample into a cylinder about three-fourths inch in diameter and several inches in length. Then squeeze this sample between thumb and forefinger into a flat unbroken ribbon one-fourth to one-eighth inch thick, which is allowed to fall freely over the fingers. If the ribbon does not break off before several inches are squeezed out, the soil is considered cohesive.

## Thumb Penetration Test

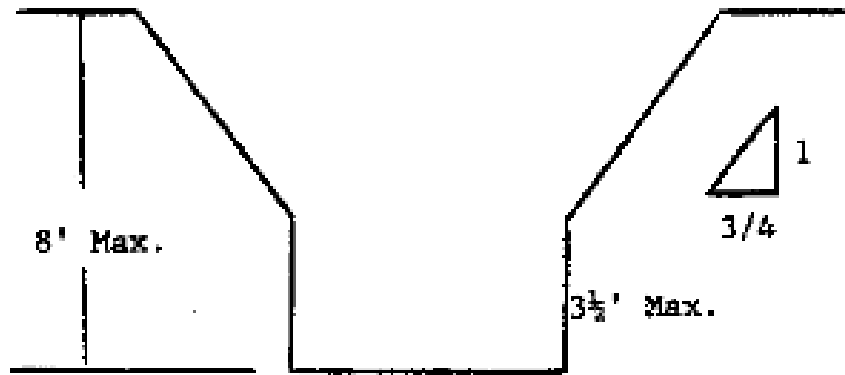
The thumb penetration test estimates the unconfined compressive strength of cohesive soils and is based on testing described in the American Society for Testing and Materials (ASTM) standard D2488. Take a soil sample collected from a freshly dug soil clump from the spoil pile. Press your thumb against the sample. If the sample is readily indented by your thumb but penetration can be done by using great effort, then the spoil is classified as Type A. If penetration occurs to the base of the thumb nail and is accomplished with moderate difficulty, then it is Type B. If the sample can be penetrated easily several inches by the thumb, and if it can be molded by light finger pressure, then the soil is Type C. Drying the sample can greatly influence the results of this test. Perform this test immediately after taking the sample.

## Mechanical Devices

Mechanical devices for determining soil type include the pocket penetrometer and hand-operated vane shear penetrometer. Operation of the device and interpretation of the results are found in the manual or literature furnished by the manufacturer of these devices. For a complete discussion of soils and testing, refer to the *29 CFR 1926 Subpart P, Appendix A*.

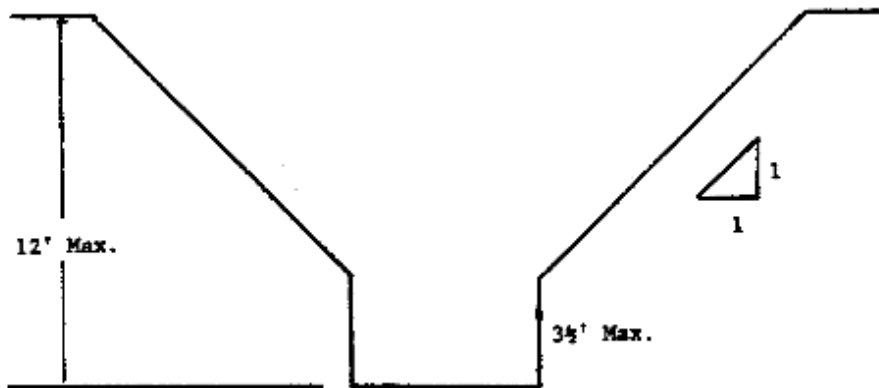


**UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 8 FEET IN DEPTH**



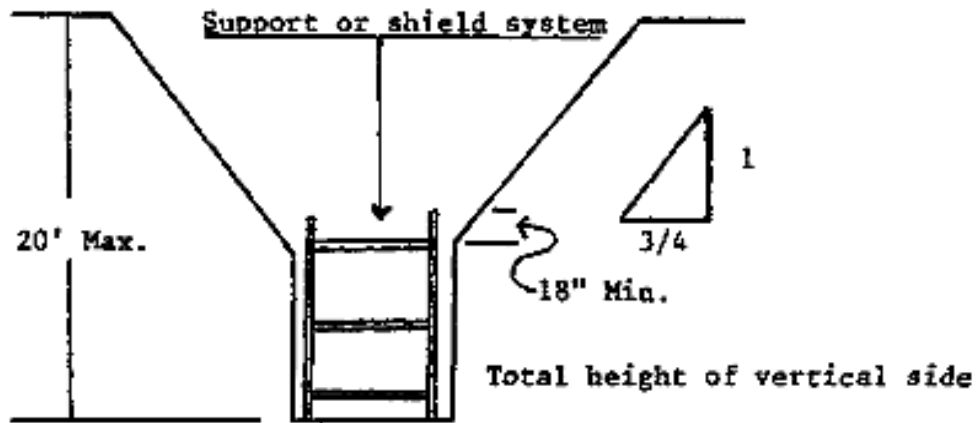
All excavations more than 8 feet but not more than 12 feet in depth with unsupported vertically sided lower portions shall have a maximum allowable slope of 1:1 and a maximum vertical side of 3½ feet.

**UNSUPPORTED VERTICALLY SIDED LOWER PORTION -- MAXIMUM 12 FEET IN DEPTH**



All excavations 20 feet or less in depth which have vertically sided lower portions that are supported or shielded shall have a maximum allowable slope of ¾:1. The support or shield system must extend at least 18 inches above the top of the vertical side.

**SUPPORTED OR SHIELDED VERTICALLY SIDED LOWER PORTION**



All other simple slope, compound slope, and vertically sided lower portion excavations shall be in accordance with the other options permitted under 1926.652(b).

## SECTION 01 32 00

### CONSTRUCTION PROGRESS DOCUMENTATION

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section consists of Construction Schedule requirements including but not limited to the following:
  - 1. Construction Schedule Requirements.
  - 2. Construction Schedule Updates.
  - 3. Preliminary Construction Schedule
- B. Purpose: The purpose of the Construction Schedule is to ensure adequate planning, coordination, scheduling, and reporting during execution of the work by the Contractor. The Construction Schedule will assist the Contractor and Construction Manager in monitoring the progress of the work, evaluating proposed changes, and processing the Contractor's monthly progress payment

##### 1.2 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.
  - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times to avoid delays in the project completion.
  - 2. Predecessor Activity: An activity that precedes another activity in the network.
  - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and consists of activities with no total float.
- D. Float: The measure of leeway in starting and completing an activity.
  - 1. Float: Float is not for the exclusive use or benefit of either the Owner or the Contractor but is jointly owned.
  - 2. Free float is the amount of time an activity can be delayed without adversely affecting the early start of the successor activity.
  - 3. Total float is the measure of leeway in starting or completing an activity without adversely affecting the planned Project completion date.

### 1.3 SUBMITTALS

- A. Construction Schedule: After contract award and before the Pre-Construction conference, submit one (1) copy of the initial schedule including dates and durations for submittals, mobilization, material delivery, and tasks for that trade contractor's work. This schedule shall consider and enhance the Preliminary Schedule prepared by the Construction Manager.

### 1.4 QUALITY ASSURANCE

- A. The Contractor shall meet with the Construction Manager on the day of the preconstruction conference to go over the following:
  - 1. Discuss constraints, including phasing, material and equipment deliveries, etc.
  - 2. Review schedule for work of separate trade contracts.
  - 3. Review time required for review of submittals and re-submittals.
  - 4. Review requirements for tests and inspections by independent testing and inspecting agencies.
  - 5. Review requirements for HVAC Test and Balance and Commissioning activities.
  - 6. Review time required for completion and startup procedures.
  - 7. Review and finalize list of construction activities to be included in schedule.
  - 8. Review initial schedule comments, resolve issues and progress on incorporating them
  - 9. Review procedures for updating schedule.
- B. Contractor's Schedule Representative: Before the preconstruction conference, designate in writing an authorized representative in the Contractor's organization who shall be responsible for coordinating with the Construction Manager.

### 1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Construction Schedule with the list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
  - 1. In developing the Construction Schedule, ensure that subcontractor work at all tiers, as well as the prime contractor's work, is included and coordinated in the Construction Schedule.
  - 2. Secure time commitments for performing critical elements of the Work from parties involved.
  - 3. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

## PART 2 - PRODUCTS

### 2.1 CONSTRUCTION SCHEDULE REQUIREMENTS

Commented [LCL1]: This is in Spec 012900

#### A. Joint Review, Revision, and Acceptance:

1. The Construction Manager and Contractor shall meet for joint review, correction, or adjustment of the initial Construction Schedule. Any areas which, in the opinion of the Construction Manager, conflict with timely completion of the project shall be subject to revision by the Contractor.
2. Within seven (7) calendar days after the joint review between the Contractor and Construction Manager, the Contractor shall revise and resubmit the Construction Schedule in accordance with agreements reached during the joint review.
3. In the event the Contractor fails to define any element of work, activity, or logic, and the Construction Manager review does not detect this omission or error, such omission or error, when discovered by the Contractor or Construction Manager, shall be corrected by the Contractor within seven calendar days and shall not affect the contract time.
4. Upon acceptance of the Construction Schedule by the Construction Manager, the Construction Schedule will be used to evaluate the Contractor's monthly applications for payment based upon information developed at the monthly Construction Schedule update meeting.

### 2.2 PRELIMINARY CONSTRUCTION SCHEDULE

- #### A.
- The Construction Manager's preliminary schedule is included this specification section. **Refer to "BPIR" for schedule items related to this bid package.**

## PART 3 - EXECUTION

### 3.1 CONSTRUCTION SCHEDULE UPDATES

#### A. Weekly Schedule Updates:

1. Procedure: The Contractor shall meet with the Construction Manager each week at a Construction Schedule update meeting to review actual progress made through the status date of the Construction Schedule update, including dates activities were started and/or completed and the percentage of work completed on each activity started and/or completed.
2. Reports: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:
  - a. Identification of activities that have changed.
  - b. Changes in early and late start dates.
  - c. Changes in early and late finish dates.
  - d. Changes in activity durations in workdays.
  - e. Changes in the critical path.
  - f. Changes in total float or slack time.
  - g. Changes in the Contract Time.


3. As the Work progresses, indicate Actual Completion percentage for each activity.
  4. Progress Payments: The weekly updating of the Construction Schedule shall be an integral part of the process upon which progress payments will be made under this contract. If the contractor fails to provide schedule updates or revisions, then a portion of his monthly payment may be retained until such corrections have been made.
- B. Distribution: Distribute copies of accepted schedule to the Construction Manager's Representative.
- C. Construction Schedule Revisions:
1. Required Revisions: If, as a result of the weekly schedule update, it appears the Construction Schedule no longer represents the actual prosecution and progress of the work, the Construction Manager will request, and the Contractor shall submit, a revision to the Construction Schedule. The Contractor may also request reasonable revisions to the Construction Schedule in the event the Contractor's planning for the work is revised. If the Contractor desires to make changes in the Construction Schedule, the Contractor shall notify the Construction Manager in writing, stating the reason for the proposed revision. Accepted revisions will be incorporated into the Construction Schedule at the next monthly schedule update.
  2. Procedure: If revision to the Construction Schedule is contemplated, the Contractor or Construction Manager shall so advise the other in writing describing the revision and reasons for the revision. Owner-requested revisions to the Construction Schedule will be presented in writing to the Contractor, who shall respond in writing within seven calendar days.

### 3.2 TIME IMPACT ANALYSIS FOR CONTRACT MODIFICATIONS CHANGES DELAYS AND CONTRACTOR REQUESTS:

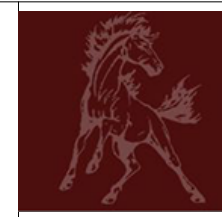
1. Requirements: When contract modifications or changes are initiated, delays are experienced, or the Contractor desires to revise the Construction Schedule, the Contractor shall submit to the Construction Manager a written time impact analysis illustrating the influence of each modification, change, delay, or Contractor request on the contract time.
2. Time Extensions: Activity delays shall not automatically mean that an extension of the contract time is warranted or due the Contractor. It is possible that a modification, change, or delay will not affect existing critical path activities or cause non-critical activities to become critical. A modification, change, or delay may result in only absorbing a part of the available total float that may exist within an activity chain of the Construction Schedule, thereby not causing any effect on the contract time. Time extensions will be granted in accordance with the terms of the contract.
3. Extension of the contract time will be granted only to the extent the equitable time adjustments to the activity or activities affected by the modification, change, or delay exceeds the total (positive or zero) float available on a particular activity.
4. Procedure: Each time impact analysis shall be submitted within the time period stated in a request for proposal, or the time period designated under the clauses entitled Changes or Default. In cases where the Contractor does not submit a written request for extension of time and a time impact analysis within the designated time, it is mutually agreed that the particular modification, change, delay, or Contractor request does not require an extension of the contract time. Upon acceptance, the time impact analysis shall be incorporated into the Construction Schedule at the next monthly schedule update.

Resp	ID	Description	Work Days	Early Start	Early Finish	2020																			
						MAY			JUN			JUL			AUG			SEP							
						11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21
<b>Design &amp; Preconstruction</b>																									
OWN	1240	Award renovations trade contracts	13	24JAN20	11FEB20																				
OWN	1250	Award asbestos abatement trade contract	4	05FEB20	10FEB20																				
OWN	2060	Award ind. renovations	4	04MAR20	09MAR20																				
<b>Procurement</b>																									
<b>Bid Package #1 General Construction</b>																									
BP1	2011	Prepare and submit submittals	20	12FEB20	10MAR20																				
DLR	2051	Approve submittals	10	11MAR20	24MAR20																				
BP1	2061	Man. & deliver materials	50	25MAR20	02JUN20	[Green bar]																			
<b>Bid Package #2 Site Work</b>																									
BP2	2022	Prepare and submit submittals	20	12FEB20	10MAR20																				
DLR	2062	Approve submittals	10	11MAR20	24MAR20																				
BP2	2072	Man. & deliver materials	40	25MAR20	19MAY20	[Red bar]																			
<b>Bid Package #3 Mechanical</b>																									
BP3	2000	Prepare & submit HVAC equipment shop drawings	15	12FEB20	03MAR20																				
DLR	2001	Approve HVAC equipment shop drawings	10	04MAR20	17MAR20																				
BP3	2002	Man. & deliver HVAC equipment	70	18MAR20	23JUN20	[Red bar]																			
<b>Bid Package #4 HVAC Controls</b>																									
BP4	1880	Prepare & submit HVAC controls shop drawings	20	04MAR20	31MAR20																				
DLR	1890	Approve HVAC controls shop drawings	17	01APR20	23APR20																				
BP4	1140	Man. & deliver HVAC controls equipment	50	24APR20	02JUL20	[Red bar]																			
BP4	1900	Develop & test HVAC controls programs	50	24APR20	02JUL20	[Green bar]																			
<b>Bid Package #5 Electrical</b>																									
BP5	2003	Prepare & submit electric gear shop drawings	10	12FEB20	25FEB20																				
BP5	2006	Prepare & submit light fixture shop drawings	10	12FEB20	25FEB20																				
BP5	2021	Prepare & submit lighting controls shop drawings	15	12FEB20	03MAR20																				
BP5	2036	Prepare & submit cable tray shop drawings	15	12FEB20	03MAR20																				
DLR	2004	Approve electric gear shop drawings	10	26FEB20	10MAR20																				
DLR	2016	Approve light fixture shop drawings	10	26FEB20	10MAR20																				
DLR	2031	Approve lighting controls shop drawings	10	04MAR20	17MAR20																				
DLR	2046	Approve cable tray shop drawings	10	04MAR20	17MAR20																				
BP5	2005	Man. & deliver electric gear equipment	65	11MAR20	09JUN20	[Green bar]																			
BP5	2026	Man. & deliver light fixtures	75	11MAR20	23JUN20	[Red bar]																			
BP5	2056	Man. & deliver cable tray	40	18MAR20	12MAY20	[Green bar]																			
BP5	2041	Man. & deliver lighting controls	65	18MAR20	16JUN20	[Green bar]																			
<b>Bid Package #6 Technology</b>																									
BP6	3000	Prepare & submit data/com equip. shop drawings	15	12FEB20	03MAR20																				
BP6	3010	Prepare & submit paging equip. shop drawings	15	12FEB20	03MAR20																				
DLR	3001	Approve data/com equip. shop drawings	10	04MAR20	17MAR20																				
DLR	3011	Approve paging equip. shop drawings	10	04MAR20	17MAR20																				
BP6	3002	Man. & deliver data/com equip.	40	18MAR20	12MAY20	[Green bar]																			
BP6	3012	Man. & deliver paging equip.	75	18MAR20	30JUN20	[Green bar]																			
<b>Bid Packages for Independent Renovations</b>																									
BPIR	3020	Prepare & submit shop drawings	10	10MAR20	23MAR20																				
CM	3030	Approve shop drawings	10	24MAR20	06APR20																				
BPIR	3040	Man. & deliver ind. renovation materials	45	07APR20	08JUN20	[Green bar]																			

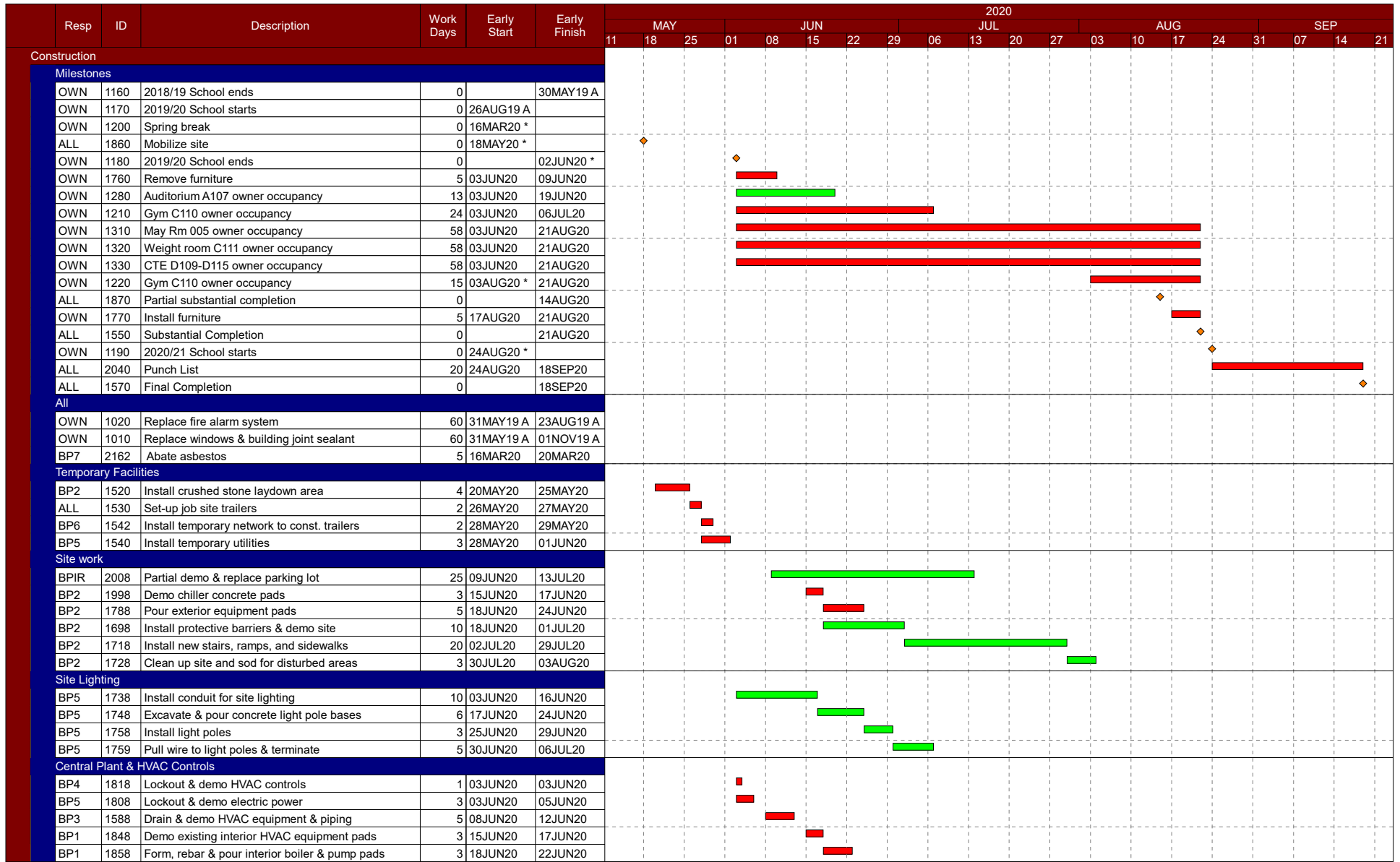
**BPIR = Bid Package Independent Renovation  
Phase 2 Contractor's Schedule - Bid Package 8**


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**Shenandoah Community School District  
High School Renovation  
Preliminary Schedule**

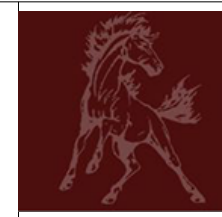


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- Summary bar
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- ◆ Finish milestone point



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Resp	ID	Description	Work Days	Early Start	Early Finish	2020																			
						MAY			JUN			JUL			AUG			SEP							
						11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21
BP5	1821	Install light fixtures & lighting control	2	24JUN20	25JUN20																				
BP3	1618	Install chiller, boilers, flues, c air & pumps	4	25JUN20	30JUN20																				
BP3	1809	Fabricate, install & test hydronic piping	10	01JUL20	14JUL20																				
BP5	1799	Install pump VFDs	1	15JUL20	15JUL20																				
BP4	1628	Wire central plant HVAC controls	5	15JUL20	21JUL20																				
BP5	1798	Wire boilers, chillers & pumps	5	15JUL20	21JUL20																				
BP3	1819	Startup chiller, boilers & pumps	5	22JUL20	28JUL20																				
BP4	1828	Final startup & test building HVAC controls	5	29JUL20	04AUG20																				
OWN	1648	Test and balance HVAC water side	5	05AUG20	11AUG20																				
OWN	1658	Central plant HVAC functional performance test	3	12AUG20	14AUG20																				
<b>HVAC Controls</b>																									
BP4	1948	Remove existing controls & wire	5	04JUN20	10JUN20																				
BP4	1838	Install new building HVAC control wiring	15	04JUN20	24JUN20																				
BP3	1829	Replace FCU, UV & AHU heating control valves	10	03JUL20	16JUL20																				
BP4	1868	Replace FCU, UV & AHU control mod. & thermostat	15	03JUL20	23JUL20																				
OWN	1839	Test & balance FCU, UV & AHU air side	15	24JUL20	13AUG20																				
OWN	1849	Functional performance test FCU, UV & AHU	4	17AUG20	20AUG20																				
<b>Data/Com Rooms (009, A106, B143 &amp; C139)</b>																									
BP3	1930	Install weatherheads at mini split HVAC units	1	03JUN20	03JUN20																				
BP6	1960	Install rack & patch panels in IT-B	2	03JUN20	04JUN20																				
BP3	1910	Install mini split HVAC units	2	04JUN20	05JUN20																				
BP5	1920	Wire mini split HVAC units	2	08JUN20	09JUN20																				
BP1	1610	Demo doors, walls and ceiling	1	10JUN20	10JUN20																				
BP3	1940	Startup mini split HVAC units	1	10JUN20	10JUN20																				
BP1	1630	Frame walls & lay CMU	3	11JUN20	15JUN20																				
BP1	1640	Install and finish drywall & plywood B143	4	16JUN20	19JUN20																				
BP6	2050	Remove all existing data/com wire in building	5	18JUN20	24JUN20																				
BP1	1980	Paint drywall & plywood B143	3	22JUN20	24JUN20																				
BP5	1820	Install light fixtures & lighting control	1	24JUN20	24JUN20																				
BP1	1830	Install ceiling tile and grid in rm. B144	1	25JUN20	25JUN20																				
BP6	1970	Install rack & patch panel in data/com IT-A	2	25JUN20	26JUN20																				
BP6	1620	Install head-end for paging system	2	01JUL20	02JUL20																				
BP6	1810	Install cameras	3	28JUL20	30JUL20																				
OWN	2030	Install wireless access points	3	28JUL20	30JUL20																				
BP6	1950	Startup & test data/com network	5	31JUL20	06AUG20																				
BP6	2020	Startup & test paging system	3	06AUG20	10AUG20																				
<b>Corridors East of Corridor B149</b>																									
BP1	1652	Demo ceiling tile East	2	10JUN20	11JUN20																				
BP5	1598	Demo electrical panelboards	6	10JUN20	17JUN20																				
BPIR	1692	Repair concrete floors	5	12JUN20	18JUN20																				
BP5	1561	Install cable tray & raceway/boxes East	8	12JUN20	23JUN20																				
BP5	1608	Install new electric panelboards	11	18JUN20	02JUL20																				
BP5	1621	Install light fixtures & lighting controls East	8	24JUN20	03JUL20																				
BP6	1990	Install structured cabling from data/com IT-B	11	25JUN20	09JUL20																				
BP6	1850	Install paging East	5	01JUL20	07JUL20																				
BP5	1611	Pull panelboard feeders & reconnect branch circ.	6	03JUL20	10JUL20																				
BP1	1632	Install ceiling tile East	3	10JUL20	14JUL20																				
BP1	1768	Repair walls at new panelboards	5	13JUL20	17JUL20																				


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## Shenandoah Community School District High School Renovation Preliminary Schedule

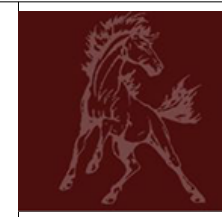


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Resp	ID	Description	Work Days	Early Start	Early Finish	2020																			
						MAY			JUN			JUL			AUG			SEP							
						11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21
BP1	1778	Cure CMU at new panelboards	5	20JUN20	24JUN20																				
BPIR	1672	Paint walls	5	27JUN20	31JUN20																				
BPIR	1682	Lay carpet & base	5	03AUG20	07AUG20																				
BPIR	1702	Install new doors & hardware	5	10AUG20	14AUG20																				
<b>Corridor B149 and West of Corridor B149</b>																									
BP1	2018	Replace admin entrance doors & operator	5	10JUN20	16JUN20																				
BP5	1908	Wire new door operators	3	11JUN20	15JUN20																				
BP1	1662	Demo ceiling tile West	2	12JUN20	15JUN20																				
BP6	1670	Wire access control system	2	12JUN20	15JUN20																				
BP5	1622	Install light fixtures & lighting controls West	8	24JUN20	03JUL20																				
BP5	1560	Install cable tray & raceway/boxes West	10	24JUN20	07JUL20																				
BP6	2010	Install paging West	5	08JUL20	14JUL20																				
BPIR	1978	Repair concrete floors	5	10JUL20	16JUL20																				
BP6	1840	Install structured cabling from data/com IT-A	12	10JUL20	27JUL20																				
BP5	1938	Add convenience outlets	5	20JUL20	24JUL20																				
BPIR	1958	Paint walls	5	27JUL20	31JUL20																				
BP1	1642	Install ceiling tile West	3	28JUL20	30JUL20																				
BPIR	1968	Lay carpet & base	5	31JUL20	06AUG20																				
BPIR	1988	Install new doors & hardware	5	07AUG20	13AUG20																				
<b>Classrooms &amp; Misc. West</b>																									
BP1	1650	Demo ceiling tile	3	15JUN20	17JUN20																				
BP5	1700	Install light fixtures & lighting controls	15	24JUN20	14JUL20																				
BPIR	1901	Repair concrete floors	5	03JUL20	09JUL20																				
BP5	1680	Add convenience outlets	5	13JUL20	17JUL20																				
BP6	1851	Install paging	10	15JUL20	28JUL20																				
BPIR	1881	Paint walls	5	20JUL20	24JUL20																				
BP1	1590	Install ceiling tile	8	29JUL20	07AUG20																				
BPIR	1891	Lay carpet & base	5	10AUG20	14AUG20																				
<b>Classrooms &amp; Misc. East</b>																									
BP1	1750	Demo ceiling tile	3	10JUN20	12JUN20																				
BPIR	1800	Repair concrete floors	5	26JUN20	02JUL20																				
BP6	1852	Install paging	10	01JUL20	14JUL20																				
BPIR	1780	Paint walls	5	03JUL20	09JUL20																				
BP5	1600	Install light fixtures & lighting controls	15	03JUL20	23JUL20																				
BP1	1690	Install ceiling tile	10	24JUL20	06AUG20																				
BPIR	1790	Lay carpet & base	5	07AUG20	13AUG20																				
<b>Locker Rooms</b>																									
BP1	1359	Install dust partitions, temp doors, etc	4	10JUN20	15JUN20																				
BP1	1479	Demo misc. ceilings, accessories	1	16JUN20	16JUN20																				
BP1	1439	Demo concrete floors	4	17JUN20	22JUN20																				
BP3	1449	Rough-in underfloor plumbing	5	23JUN20	29JUN20																				
BP3	1579	Install DOAS, ductwork & gas piping	10	25JUN20	08JUL20																				
BP1	1459	Pour new concrete floors	3	30JUN20	02JUL20																				
BP6	1499	Install paging	2	01JUL20	02JUL20																				
BP3	1669	Rough-in above floor plumbing	5	03JUL20	09JUL20																				
BP1	1679	Cure concrete floor	10	03JUL20	16JUL20																				
BP5	1489	Wire DOAS	3	09JUL20	13JUL20																				


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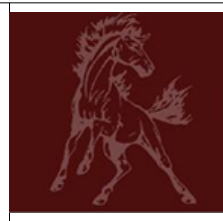


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Resp	ID	Description	Work Days	Early Start	Early Finish	2020																			
						MAY			JUN			JUL			AUG			SEP							
						11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21
BP1	1529	Lay CMU block wall	2	10JUL20	13JUL20																				
BP3	1639	Startup DOAS	1	14JUL20	14JUL20																				
BP1	1509	Install and finish hard ceilings	7	14JUL20	22JUL20																				
BP1	1689	Cure CMU	10	14JUL20	27JUL20																				
OWN	1649	DOAS test & balance	1	15JUL20	15JUL20																				
OWN	1659	DOAS functional performance test	1	16JUL20	16JUL20																				
BP5	1559	Install light fixtures & lighting controls	3	23JUL20	27JUL20																				
BP1	1519	Paint using high performance coating	4	28JUL20	31JUL20																				
BP1	1699	Install fluid applied floor finish	5	03AUG20	07AUG20																				
BP1	1569	Install shower partitions and benches	3	10AUG20	12AUG20																				
BPIR	1709	Paint existing walls in locker areas	3	10AUG20	12AUG20																				
BP3	1539	Install plumbing fixtures	4	10AUG20	13AUG20																				
BP1	1589	Install or reinstall existing doors	1	13AUG20	13AUG20																				
BP1	1549	Install toilet partitions	2	14AUG20	17AUG20																				
BP1	1609	Final cleaning	1	18AUG20	18AUG20																				
BP1	1599	Remove temporary partitions	1	19AUG20	19AUG20																				
<b>Staff Restrooms (B111-B113 &amp; B150)</b>																									
BP1	1260	Install dust partitions, temp doors, etc	2	16JUN20	17JUN20																				
BP1	1380	Demo misc. ceilings, accessories	1	18JUN20	18JUN20																				
BP1	1370	Demo concrete block walls	1	19JUN20	19JUN20																				
BP1	1340	Demo concrete floors	3	22JUN20	24JUN20																				
BP3	1350	Rough-in underfloor plumbing	3	25JUN20	29JUN20																				
BP1	1360	Pour new concrete floors	2	30JUN20	01JUL20																				
BP1	1390	Frame new walls and backing	1	02JUL20	02JUL20																				
BP5	1400	Rough-in electrical	1	03JUL20	03JUL20																				
BP3	1580	Rough-in above grade plumbing	2	03JUL20	06JUL20																				
BP1	1410	Hang & finish gwb	1	07JUL20	07JUL20																				
BP1	1420	Set wall and floor tile	1	08JUL20	08JUL20																				
BP1	1470	Paint new walls	1	08JUL20	08JUL20																				
BP1	1430	Install ceiling grid	1	09JUL20	09JUL20																				
BP3	1440	Install plumbing fixtures	1	09JUL20	09JUL20																				
BP1	1450	Install toilet accessories	1	10JUL20	10JUL20																				
BP5	1460	Install light fixtures & lighting controls	1	10JUL20	10JUL20																				
BP1	1455	Install ceiling tile	1	13JUL20	13JUL20																				
BPIR	1480	Lay carpet and base	1	14JUL20	14JUL20																				
BP1	1490	Install or reinstall existing doors	1	15JUL20	15JUL20																				
BP1	1510	Final cleaning	1	16JUL20	16JUL20																				
BP1	1500	Remove temporary partitions	1	22JUL20	22JUL20																				
<b>At-risk Classroom (C102-C105)</b>																									
BP1	1705	Remove doors to be reused	2	18JUN20	19JUN20																				
BP1	1708	Support trophy case	3	22JUN20	24JUN20																				
BP1	1730	Install perm dust partition below trophy case	1	25JUN20	25JUN20																				
BP1	1720	Demo ceiling and grid.	1	26JUN20	26JUN20																				
BP1	1710	Demo stage, walls, doors, and interior window	2	29JUN20	30JUN20																				
BP6	1715	Install paging	1	01JUL20	01JUL20																				
BP1	1691	Install new walls and backing	2	01JUL20	02JUL20																				
BP5	1740	Install conduit and outlets	1	03JUL20	03JUL20																				


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## Shenandoah Community School District High School Renovation Preliminary Schedule



- Early bar
- Progress bar
- Critical bar
- Summary bar
- ◆ Start milestone point
- ◆ Finish milestone point

Resp	ID	Description	Work Days	Early Start	Early Finish	2020																				
						MAY			JUN			JUL			AUG			SEP								
						11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21	
BP1	1751	Install and finish gwb	3	06JUL20	08JUL20																					
BP1	1781	Paint gwb	3	09JUL20	13JUL20																					
BP1	1731	Install ceiling grid	1	14JUL20	14JUL20																					
BP5	1761	Install light fixtures & lighting controls	1	15JUL20	15JUL20																					
BP1	1756	Install ceiling tile	1	16JUL20	16JUL20																					
BPIR	1782	Install carpet and base	1	17JUL20	17JUL20																					
BP1	1791	Install or reinstall existing doors	1	20JUL20	20JUL20																					
BP1	1811	Final cleaning	1	21JUL20	21JUL20																					
<b>Food &amp; Consumer Science (B119)</b>																										
BP1	1651	Demo ceiling tile and grid	3	18JUN20	22JUN20																					
BPIR	1721	Demo casework	3	23JUN20	25JUN20																					
BPIR	1711	Repair concrete floors	2	26JUN20	29JUN20																					
BP1	1568	Reinforce structure for MAU	5	30JUN20	06JUL20																					
BP3	1637	Install MAU & exhaust roof curb	1	07JUL20	07JUL20																					
BP3	1627	Patch roof at MAU & exhaust	2	08JUL20	09JUL20																					
BP3	1638	Install make-up air unit and duct	5	10JUL20	16JUL20																					
BPIR	1661	Install casework	5	17JUL20	23JUL20																					
BP3	1678	Install hoods, fans & ductwork	5	24JUL20	30JUL20																					
BPIR	1681	Install vinyl floor tile & base	5	24JUL20	30JUL20																					
BP1	1668	Install new ceiling tile and grid	2	31JUL20	03AUG20																					
BPIR	1671	Paint walls	3	31JUL20	04AUG20																					
BP5	1898	Wire MAU & hoods	4	31JUL20	05AUG20																					
BP6	1657	Install paging	2	04AUG20	05AUG20																					
BP5	1667	Install light fixtures & lighting controls	2	04AUG20	05AUG20																					
OWN	1701	Install appliances	2	05AUG20	06AUG20																					
BP3	1878	Startup MAU & hoods	2	06AUG20	07AUG20																					
OWN	1888	Test & balance MAU & hoods	1	10AUG20	10AUG20																					
OWN	1647	MAU & hoods functional performance testing	1	11AUG20	11AUG20																					
<b>Science rooms (B120 &amp; B132)</b>																										
BP1	1763	Demo ceiling tile	1	23JUN20	23JUN20																					
BP5	1703	Disconnect exhaust fans	1	24JUN20	24JUN20																					
BPIR	1743	Repair concrete floors	2	24JUN20	25JUN20																					
BP3	1688	Demo exhaus fans	1	25JUN20	25JUN20																					
BP3	1693	Install exhaust fans	1	26JUN20	26JUN20																					
BPIR	1723	Paint walls	2	26JUN20	29JUN20																					
BP5	1713	Reconnect exhaust fans	1	29JUN20	29JUN20																					
BP1	1753	Install ceiling tile	2	30JUN20	01JUL20																					
BPIR	1733	Lay vinyl floor tile & base	3	02JUL20	06JUL20																					
<b>Auditorium Addition</b>																										
BP6	1803	Install structured cabling from data/com IT-D	3	03JUN20	05JUN20																					
BP6	1843	Install paging Lower Level	3	08JUN20	10JUN20																					
BP1	1918	Install new door operators	1	10JUN20	10JUN20																					
BP1	1928	Install access control hardware	2	10JUN20	11JUN20																					
BP5	1861	Unhook ADA lift electrical	1	22JUN20	22JUN20																					
BP1	1823	Demo ceiling tile & grid in lobby	2	22JUN20	23JUN20																					
BP1	1660	Install ADA lift	5	23JUN20	29JUN20																					
BP6	1813	Install structured cabling from data/com IT-C	3	24JUN20	26JUN20																					

Company name	Carl A. Nelson & Co.
Data date	09DEC19
Start date	26APR19
Finish date	18SEP20
Page number	6A
Number/Version	11 ADD 1
	
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							MAY			JUN			JUL			AUG			SEP							
							11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24	31	07	14	21
	BPIR	1793	Paint walls	5	29JUN20	03JUL20																				
	BP5	1871	Reconnect electrical to ADA lift	1	30JUN20	30JUN20																				
	BP1	1833	Install new ceiling	3	06JUL20	08JUL20																				
	BP6	1853	Install paging First Floor	3	09JUL20	13JUL20																				
	BPIR	1783	Demo & lay carpet	3	14JUL20	16JUL20																				

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## SECTION 01 33 00

### SUBMITTAL PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Procedures for submittals.
- B. Related Sections:
  - 1. General Conditions: General Requirements.
  - 2. Section 011000 - Summary of Work.
  - 3. Section 013100 - Project Management and Coordination.
  - 4. Section 017700 - Closeout Procedures.
  - 5. Section 017800 - Closeout Submittals.

##### 1.2 SUBMITTAL SCHEDULE

- A. Prepare and submit "Submittal Schedule" within 10 days after award of Contract, and prior to execution of Contract. Include following information.
  - 1. Specification Section Number.
  - 2. Type of submittal required.
  - 3. Estimated time for submittal.
- B. Coordinate, organize and plan submittal schedule so submittals are sent with appropriate time allowed for review and so submittals do not accumulate into unreasonably large groups.
- C. Some submittals may require additional time for routing and review including, but not limited to, following:
  - 1. Unreasonably large groups of submittals.

##### 1.3 TRANSMITTAL FORM

- A. Send submittals with "Submittal Transmittal Form" completely filled out with appropriate information. Submittals shall be sent to CM. CM will forward onto Architect
- B. Submittals sent without properly completed "Submittal Transmittal Form" may be considered incomplete and marked "Not Accepted" and returned without review.
- C. Send separate transmittal forms for each Section and separate transmittals for each type listed:
  - 1. Shop Drawings.
  - 2. Product Data.
  - 3. Samples.
- D. If shop drawings, samples or product data describe the same product or item, send submittals together under same transmittal otherwise send each type submittal under separate transmittals.

##### 1.4 SUBMITTAL ACCEPTANCE

- A. Refer to General Conditions for scope of submittal review and acceptance.
- B. Maintain copies of "Reviewed" and "Furnished as Corrected" submittals with record set per 017800.

- C. "Reviewed" submittals have no exceptions noted. One set of accepted submittals will be returned to Contractor. Make appropriate copies for use and distribution.
- D. "Furnished as Corrected" submittals have exceptions noted but resubmission is not required. Make appropriate copies for use and distribution.
- E. "Rejected" submittals are incomplete and/or need corrections. Complete and/or correct and resubmit until final acceptance is obtained.
- F. "Not Reviewed" means submittals were not required or were provided for information only.
- G. Revise and Resubmit: When submittal is marked "Revise and Resubmit," do not proceed with that part of the Work covered by the submittal, including purchasing, fabrication, delivery or other activity. Revise or prepare a new submittal in accordance with the notations; resubmit without delay. Repeat if necessary to obtain a different action mark.
  - a. Do not permit submittals marked "Revise and Resubmit" to be used at the Project site, or elsewhere where Work is in progress.

## 1.5 CONTRACTOR'S PLAN OF OPERATION

- A. Submit at Pre-Construction Conference. See 013100.
- B. Outline in writing approach to meeting schedule for completing Work.
- C. Plan to include, but not limited to, following:
  - 1. Sequence of Work.
  - 2. Construction Schedule.
  - 3. Schedule of Submittals.
  - 4. Schedule of Temporary Utilities.
  - 5. Staging requirements/street permits.
  - 6. Normal work hours.
  - 7. Parking exceptions
  - 8. Material delivery coordination.
  - 9. Name of person to be liaison to adjacent property Owners.
  - 10. Name of duly authorized representative with whom business may be conducted in connection with administration of Contract.
  - 11. Name of duly authorized superintendent written notices may be given in accordance with Conditions of the Contract.
  - 12. Labor and equipment availability
  - 13. List of Subcontractors
  - 14. Names of contact persons with Owner, Architect and Contractor
  - 15. Proposed schedule of Progress Meetings in accordance with 013100 and schedule of submittals per 013200 and payment requests per 012900 and other reports required by Contract Documents.

## 1.6 COORDINATION

- A. Send submittals in logical groups of related items including but not limited to the following groups:
  - 1. Submittal schedule, list of materials, list of subcontractors, schedule of values
  - 2. Doors, frames and hardware.
  - 3. Closeout submittals: Refer to Section 017800.

## 1.7 DISTRIBUTION

- A. Contractor is responsible for duplication and distribution of accepted submittals including shop drawings. Exchange directly with subcontractors and others involved, not through Owner or Architect.
- B. Provide and exchange submittals as needed to coordinate Work.
- C. Provide copies to Owner if Owner requests copies during construction. Otherwise Owner will receive accepted submittals as part of Record Set submitted during project closeout.

## 1.8 SHOP DRAWINGS

- A. Use of Architect's Drawings: Do not reproduce Architect's drawings (whether CADD files, electronic files, hard copy drawings or other publication method) to serve as shop drawings until Architect's written permission is received and then only under following conditions.
- B. Drawings that include unnecessary information will be marked "Not Reviewed" or "Not Accepted" and returned.
- C. Shop drawings submitted without requested information and without Contractor's approval will not be reviewed and will be returned to Contractor marked "Not Accepted."
- D. Drawings Submittal Requirements:
  - 1. Submit electronic copy of each drawing unless otherwise specified.
  - 2. Provide additional copies for other contractors for purposes of information and coordination.
  - 3. Number in submittal sequence.
  - 4. Include contractor's stamp of approval, as evidence that drawings are approved in accordance with General Conditions except that field dimensions must be verified prior to approval and submittal.
  - 5. Show field verified dimensions on final shop drawings and identify verified dimensions.
  - 6. Show actual adjacent construction and how each item coordinates with other contractors, subcontractors, trades and suppliers.
  - 7. Drawings must be original file (not scanned) and acceptable to Architect/Engineer.
  - 8. Provide clear space on each drawing of not less than 40 square inches for Architect's stamp.
  - 9. Transmit shop drawings, product data, and other appropriate electronically.
- E. Maintain accepted shop drawings as part of "Record Set." See 017800.

## 1.9 PRODUCT DATA AND EQUIPMENT BROCHURES

- A. Provide multiple originals of brochures, cuts, etc., if they are multi-page bound catalogs which would be difficult to photocopy or if they are intended to illustrate color or other appearance characteristics which cannot be adequately represented by photocopies.
- B. Scans of original brochures are acceptable except as specified above. Scans must be clear and readable. Unreadable or unclear photocopies will be returned "Not Accepted." Electronic copy of the original document is preferred over scanned or faxed copies as long as the items being proposed are clearly marked.
- C. Provide layout drawings where necessary for field use or as required by Architect.
- D. Number of Copies of Product Data:
  - 1. Submit electronically in original format (not scanned or faxed) unless otherwise specified.
  - 2. Submit additional copies required for 2 Owner's manuals per 017800.
  - 3. Additional copies for other contractors for purposes of information and coordination.



4. Number in submittal sequence.
  5. Include contractor's stamp of approval, as evidence that drawings are approved in accordance with General Conditions (including field dimensions).
  6. Indicate field verified information as applicable.
- E. Provide an index of each page in submittal with space for notes and acceptance stamps.
- F. Warranties:
1. Where warranty is indicated, submit manufacturers' sample warranty with shop drawings.
  2. Submit actual executed warranties or guarantees per Section 017700 and 017800.

#### **1.10 SAMPLES**

- A. Deliver samples of materials, equipment, assemblies and components as required by specifications to Construction Manager with delivery costs prepaid. At Architect's/Engineer's direction, remove samples after approval.
1. Provide samples representative of actual product including finishes and other specified characteristics.
  2. Indicate type of construction and quality proposed for installation in Project.
- B. Number Samples:
1. Submit a minimum of 3 samples unless otherwise specified.
    - a. One set of samples to be retained by Architect, one by CM, and one returned to the Contractor.
  2. Provide additional samples for other contractors for purposes of information and coordination.
- C. Maintain record samples of accepted samples with other record documents at project site.
- D. Provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.
- a. Contractor shall take digital photos of samples where no digital image file exists from the manufacturer and post submittal to the project web site.

#### **1.12 LIST OF SUBCONTRACTORS**

- A. Submit within 10 days after award of Contract, and prior to execution of Contract.
- B. Submit with List of Materials.
- C. Submit electronic copies of a complete list.
- D. Do not execute subcontracts until proposed list of subcontractors is accepted by CM and Owner.
- E. List to include the following information.
1. Description of work proposed to be done by subcontract.
  2. Names of subcontractors and major material suppliers proposed to perform portions of Work.
  3. Names of sub-subcontractors.
  4. Include proposed sub-subcontractors for other trades as requested by Architect and Engineers.
- F. Proposed subcontractors or sub-subcontractors (and material supplier installers) shall be established, reputable firms of recognized standing with a record of successful and satisfactory past performance with type work and/or items proposed to be provided or installed by them.

1. Only those subcontractors (and sub-subcontractor when appropriate) who CM and Owner have no reasonable objection to shall be used on Work.
- G. Reasonable objection may arise when, in opinion of CM or Owner, there exists a rational belief that proposed subcontractor, sub-subcontractor or material supplier:
1. Cannot provide materials, equipment, facilities or other products as specified or required by Contract Documents;
  2. Cannot provide labor and skill necessary to accomplish part of Work for which they are proposed, including but not limited to quality of work;
  3. Lacks adequate and appropriate experience for that part of Work proposed, including materials or methods required;
  4. Has previously failed to perform in timely or satisfactory manner, including in cooperation and in necessary services after project completion;
  5. Proposes deviations in materials or methods that are unacceptable to Architect or Owner, such as proposing materials or products that were not specified or not listed in addenda;
  6. Cannot satisfactorily perform part of Work for which contractor is proposed, within time schedule, due to size of organization or existing work load.
  7. Cannot demonstrate ability through quality of representative work to perform part of Work for which contractor is being considered;
  8. Of questionable integrity;
  9. Shows evidence of similar considerations bearing on possibility of unsatisfactory performance.
- H. If Owner or CM has a reasonable objection to person or entity proposed by Contractor to do portion of Work, Contractor must submit substitute to whom neither Owner nor CM has reasonable objection; no increase in Contract Sum shall be allowed as a result of such substitution.
- I. After acceptance of proposed list, no change of subcontractor, sub-subcontractor or supplier not objected to by CM or Owner, shall be made, except for cause acceptable to CM and Owner.
1. In event of a proposed change, submit reasons for change, in writing, along with alternate proposed subcontractor, sub-subcontractor or material supplier.
  2. Proposed change is subject to conditions of this Article and requirements of General Conditions.

### **1.13 CLOSE-OUT SUBMITTALS**

- A. Submit documents specified under Section 017700 and 017800.
- B. Submit 3 hard copies and 1 electronic copy of operating instructions and maintenance manuals to CM at time of CM's instructions. Electronic copy shall be of the original document (scanned or faxed copies will not be accepted).

### **1.14 OTHER SUBMITTALS**

- A. Provide other required submittals as specified.

## **PART 2 PRODUCTS**

Not Used

## **PART 3 EXECUTION**

Not Used

END OF SECTION 01 33 00

# SUBMITTAL

PROJECT NAME            Shenandoah High School Renovation - Phase 2  
PROJECT LOCATION      1000 Mustang Drive, Shenandoah, IA 51601  
DATE TRANSMITTED  
JOB NUMBER             19-023  
SPEC SECTION TITLE  
DESCRIPTION

---

**CONTRACTOR**

**NOTES**

ACTION STAMP

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**CONSTRUCTION MANAGER**

**NOTES**

Carl A. Nelson & Co.

ACTION STAMP

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**ARCHITECT**

**NOTES**

Nelson Design, Inc

ACTION STAMP

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**CONSULTANT**

**NOTES**

ACTION STAMP

## SECTION 01 40 00

### QUALITY CONTROL

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Procedures to measure and report the quality and performance of construction.
- B. Related Sections:
  - 1. Refer to the General Conditions for general requirements, and technical specifications for specific testing requirements and methods.
  - 2. Section 013300 - Submittal Procedures.

##### 1.2 REFERENCES

- A. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- B. ASTM E329 – Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction.

##### 1.3 QUALIFICATIONS OF TESTING AGENCY

- A. "Approved independent testing laboratory" shall mean an independent testing agency acceptable to the Owner and the Architect and possessing the professional qualifications and equipment to perform the specified tests and to evaluate and report the results.

##### 1.4 QUALITY ASSURANCE

- A. Comply with requirements of ASTM E329 and ASTM D3740.
- B. Laboratory shall maintain a full-time registered Engineer on staff to review services.
- C. Laboratory authorized to operate in State in which Project is located.
- D. Testing equipment shall be calibrated at reasonable intervals with devices of an accuracy traceable to either NBS Standards or accepted values of natural physical constants.

#### PART 2 PRODUCTS - Not used

#### PART 3 EXECUTION

##### 3.1 TESTING AND SPECIAL TESTING

- A. Unless otherwise provided in the specifications, provide all materials, samples, mock-ups or assemblies for all tests specified in various sections of specifications, or as directed by the Architect, and pay shipping costs of such samples to laboratory or other testing location and facility.
  - 1. Unless specified otherwise, all tests shall be made by an approved independent testing laboratory and reports provided to CM and Architect.
- B. Tests shall be provided and accomplished in accordance with the standard used as the reference for the particular material or product, unless other test methods or criteria are specified.

- C. In the absence of a referenced standard, tests shall be accomplished in accordance with applicable ASTM Standards or Test Methods, current at the date of the Contract Documents.

### **3.2 PAYMENT FOR TESTS**

- A. Except for the types of tests specified as being paid for by the Owner, the cost of other tests shall be paid by the Contractor. Tests to be paid for by the Owner will be paid directly to the testing laboratory by the Owner.
- B. The Owner will not pay for tests to determine if a proposed material will initially meet the specified requirements, which will include but not be limited to, analysis of paving aggregate, paving mix designs, and similar tests.
- C. In general, it is intended the Owner will pay for those field tests to determine the quality of materials and quality of installation at site. The following is the list of the type of tests the Owner will pay for, where tests are specified or later determined as necessary:
  - concrete compressive strength
  - concrete air entrainment
  - soil compaction
  - welding or brazing of piping
  - paving samples

### **3.3 TESTS TO DEMONSTRATE QUALIFICATION**

- A. In addition to tests specified, should the Contractor propose a product, material, method or assembly that is of unknown or questionable quality to the Architect, the Architect may require and order suitable tests to establish a basis for acceptance or rejection.
  - 1. Such tests will be paid for by the Contractor, or by the Subcontractor requesting approval. "Standard" test reports on "similar" material will not be acceptable.
- B. The Owner and Architect reserve the right to require certification or other proof that the material, assembly, equipment, system or other product furnished or proposed to be furnished, for this Project is in compliance with any test or standard called for.
  - 1. The certificate shall be signed by a representative of the independent testing laboratory.
- C. Any tests required to qualify the Contractor or any workmen for any phase of the work, and any test of a method, system or equipment that may be required by specification or law to qualify the item for use, shall be made or taken without additional reimbursement.
- D. If exploratory work is required to determine the cause of defects, the cost of such work shall be borne by the Contractor responsible for such work if the work is found, in the judgment of the CM to be defective.
  - 1. If the Contractor responsible for the work is adjudged by the Architect to be not at fault, exploratory testing will be paid by the Owner.

### **3.4 INSPECTIONS**

- A. Should the specifications, Architect's instruction, laws, codes, ordinances or any public authority require any work to be inspected or approved, give timely notice of its readiness for inspection and a reasonable date fixed for such inspection. If any work requiring inspection should be covered up without approval or consent of the approving agency, it must be uncovered for examination at Contractor's expense.

### **3.5 CERTIFICATES**

- A. Except for test reports provided and signed by approved independent testing laboratories,

all certificates required by the specification shall be signed by an authorized official of the firm providing the certificate, with the signature notarized, when such certificates by the producer are acceptable to the Architect.

**3.6 RETEST RESPONSIBILITY**

- A. Where results of required inspections, tests or similar prove unsatisfactory and do not indicate compliance of related work with requirements of the contract documents, then retests are responsibility of Contractor, regardless of whether original test was Contractor's responsibility.
- B. Retesting of work revised or replaced by Contractor is Contractor's responsibility, where required tests were performed on original work.

**END OF SECTION 00 40 00**

## SECTION 01 42 00

### REFERENCES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Reference to standards and codes.
- B. Related Sections:
  - 1. General Conditions.

##### 1.2 DEFINITIONS

- A. "Reviewed": The term "reviewed," when used to convey Architect's action on Contractor's submittals, applications, and requests, is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.
- B. "Directed": Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean directed by Architect, requested by Architect, and similar phrases.
- C. "Indicated": The term "indicated" refers to graphic representations, notes, or schedules on Drawings or to other paragraphs or schedules in Specifications and similar requirements in the Contract Documents. Terms such as "shown," "noted," "scheduled," and "specified" are used to help the user locate the reference.
- D. "Regulations": The term "regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work.
- E. "Furnish": The term "furnish" means to supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.
- F. "Install": The term "install" describes operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.
- G. "Provide": The term "provide" means to furnish and install, complete and ready for the intended use.
- H. "Installer": An installer is the Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
- I. The term "experienced," when used with an entity, means having successfully completed previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.
- J. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.

- K. "Project site" is the space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

### 1.3 APPLICABLE GOVERNING STANDARDS

- A. Code Overview: See Code Plans

### 1.4 INDUSTRY STANDARDS

- A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.
- B. Publication Dates: Comply with standards in effect as of date of the Contract Documents, unless otherwise indicated.
- C. Conflicting Requirements: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
  - 1. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.
  - 2. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Architect, bear all costs and damages arising there from.
- D. Copies of Standards: Each entity engaged in construction on Project must be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.
  - 1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source and make them available on request.
- E. Certificate: For products specified in accordance with a Federal Specification, ASTM Standard, American National Standards Institute or similar association standards, upon request by Architect, the Contractor must provide an acceptable affidavit by independent testing laboratory, or other source approved by the Architect, certifying that product furnished for this Project complies with the particular standard specifications.
  - 1. Where necessary, requested or specified, supporting test data shall be submitted to substantiate compliance. The manufacturer is subject to Architect's acceptance.
- F. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Gale Research's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."
- G. Abbreviations and Acronyms for Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of



the date of the Contract Documents.

AA	Aluminum Association, Inc. (The) <a href="http://www.aluminum.org">www.aluminum.org</a>	(202) 862-5100
AAADM	American Association of Automatic Door Manufacturers <a href="http://www.taol.com/aaadm">www.taol.com/aaadm</a>	(216) 241-7333
AABC	Associated Air Balance Council <a href="http://www.aabchq.com">www.aabchq.com</a>	(202) 737-0202
AAMA	American Architectural Manufacturers Association <a href="http://www.aamanet.org">www.aamanet.org</a>	(847) 303-5664
AAN	American Association of Nurserymen (See ANLA)	
AASHTO	American Association of State Highway and Transportation Officials <a href="http://www.aashto.org">www.aashto.org</a>	(202) 624-5800
AATCC	American Association of Textile Chemists and Colorists (The) <a href="http://www.aatcc.org">www.aatcc.org</a>	(919) 549-8141
ABMA	American Bearing Manufacturers Association <a href="http://www.abma-dc.org">www.abma-dc.org</a>	(202) 429-5155
ACI	American Concrete Institute/ACI International <a href="http://www.aci-int.org">www.aci-int.org</a>	(248) 848-3700
ACPA	American Concrete Pipe Association <a href="http://www.concrete-pipe.org">www.concrete-pipe.org</a>	(972) 506-7216
ADC	Air Diffusion Council	(312) 201-0101
AEIC	Association of Edison Illuminating Companies, Inc. (The) <a href="http://www.aeic.org">www.aeic.org</a>	(205) 257-2530
AFPA	American Forest & Paper Association (See AF&PA)	
AF&PA	American Forest & Paper Association  <a href="http://www.afandpa.org">www.afandpa.org</a>	(800) 878-8878  (202) 463-2700
AGA	American Gas Association <a href="http://www.aga.org">www.aga.org</a>	(202) 824-7000
AHA	American Hardboard Association <a href="http://www.ahardbd.org">www.ahardbd.org</a>	(847) 934-8800
AHAM	Association of Home Appliance Manufacturers <a href="http://www.aham.org">www.aham.org</a>	(202) 872-5955

AI	Asphalt Institute <a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a>	(606) 288-4960
AIA	American Institute of Architects (The) <a href="http://www.aiaonline.org">www.aiaonline.org</a>	(202) 626-7300
AISC	American Institute of Steel Construction, Inc. <a href="http://www.aisc.org">www.aisc.org</a>	(800) 644-2400 (312) 670-2400
AISI	American Iron and Steel Institute <a href="http://www.steel.org">www.steel.org</a>	(202) 452-7100
AITC	American Institute of Timber Construction	(303) 792-9559
ALA	American Laminators Association (See LMA)	
ALCA	Associated Landscape Contractors of America <a href="http://www.alca.org">www.alca.org</a>	(800) 395-2522 (703) 736-9666
ALSC	American Lumber Standard Committee	(301) 972-1700
AMCA	Air Movement and Control Association International, Inc. <a href="http://www.amca.org">www.amca.org</a>	(847) 394-0150
ANLA	American Nursery & Landscape Association (Formerly: AAN - American Association of Nurserymen) <a href="http://www.anla.org">www.anla.org</a>	(202) 789-2900
ANSI	American National Standards Institute <a href="http://www.ansi.org">www.ansi.org</a>	(212) 642-4900
AOSA	Association of Official Seed Analysts <a href="http://www.zianet.com/AOSA">www.zianet.com/AOSA</a>	(402) 476-3852
APA	APA-The Engineered Wood Association <a href="http://www.apawood.org">www.apawood.org</a>	(253) 565-6600
APA	Architectural Precast Association <a href="http://www.archprecast.org">www.archprecast.org</a>	(941) 454-6989
API	American Petroleum Institute <a href="http://www.api.org">www.api.org</a>	(202) 682-8000
ARI	Air-Conditioning & Refrigeration Institute <a href="http://www.ari.org">www.ari.org</a>	(703) 524-8800
ASCA	Architectural Spray Coaters Association <a href="http://www.ascassoc.com">www.ascassoc.com</a>	(856) 848-6120
ASCE	American Society of Civil Engineers <a href="http://www.asce.org">www.asce.org</a>	(800) 548-2723 (703) 295-6300
ASHRAE	American Society of Heating, Refrigerating and	(800) 527-4723

	Air-Conditioning Engineers www.ashrae.org	(404) 636-8400
ASME	ASME International (The American Society of Mechanical Engineers International) www.asme.org	(800) 843-2763
ASSE	American Society of Sanitary Engineering www.asse-plumbing.org	(440) 835-3040
ASTM	American Society for Testing and Materials www.astm.org	(610) 832-9585
AWCI	AWCI International (Association of the Wall and Ceiling Industries International)  www.awci.org	(703) 534-8300
AWCMA	American Window Covering Manufacturers Association (See WCMA)	
AWI	Architectural Woodwork Institute <a href="http://www.awinet.org">www.awinet.org</a>	(800) 449-8811 (703) 733-0600
AWPA	American Wood-Preservers' Association www.awpa.com	(817) 326-6300
AWS	American Welding Society www.aws.org	(800) 443-9353 (305) 443-9353
AWWA	American Water Works Association www.awwa.org	(800) 926-7337 (303) 794-7711
BHMA	Builders Hardware Manufacturers Association www.buildershardware.com	(212) 661-4261
BIA	Brick Industry Association (The) www.bia.org	(703) 620-0010
BIFMA	BIFMA International (Business and Institutional Furniture Manufacturer's Association International) www.bifma.com	(616) 285-3963
CCC	Carpet Cushion Council www.carpetcushion.org	(203) 637-1312
CCFSS	Center for Cold-Formed Steel Structures www.umn.edu/~ccfss	(573) 341-4471
CDA	Copper Development Association Inc.	(800) 232-3282

	<a href="http://www.copper.org">www.copper.org</a>	(212) 251-7200
CEA	Canadian Electricity Association (The) <a href="http://www.canelect.ca">www.canelect.ca</a>	(613) 230-9263
CFFA	Chemical Fabrics & Film Association, Inc. <a href="http://www.taol.com/cffa">www.taol.com/cffa</a>	(216) 241-7333
CGA	Compressed Gas Association <a href="http://www.cganet.com">www.cganet.com</a>	(703) 412-0900
CGSB	Canadian General Standards Board <a href="http://www.pwgsc.gc.ca/cgsb">www.pwgsc.gc.ca/cgsb</a>	(819) 956-0425
CIMA	Cellulose Insulation Manufacturers Association <a href="http://www.cellulose.org">www.cellulose.org</a>	(888) 881-2462 (937) 222-2462
CISCA	Ceilings & Interior Systems Construction Association <a href="http://www.cisca.org">www.cisca.org</a>	(630) 584-1919
CISPI	Cast Iron Soil Pipe Institute <a href="http://www.cispi.org">www.cispi.org</a>	(423) 892-0137
CLFMI	Chain Link Fence Manufacturers Institute <a href="http://www.chainlinkinfo.com">www.chainlinkinfo.com</a> (under construction)	(301) 596-2584
CPA	Composite Panel Association (Formerly: National Particleboard Association) <a href="http://www.pbmdf.com">www.pbmdf.com</a>	(301) 670-0604
CPPA	Corrugated Polyethylene Pipe Association Division of Plastics Pipe Institute <a href="http://www.cppa-info.org">www.cppa-info.org</a>	(800) 510-2772 (419) 241-2221
CRI	Carpet and Rug Institute (The) <a href="http://www.carpet-rug.com">www.carpet-rug.com</a>	(800) 882-8846 (706) 278-3176
CRSI	Concrete Reinforcing Steel Institute <a href="http://www.crsi.org">www.crsi.org</a>	(847) 517-1200
CSA	CSA International (Formerly: IAS - International Approval Services) Division of Canadian Standards Association <a href="http://www.iasapprovals.org">www.iasapprovals.org</a>	(216) 524-4990
CSI	Construction Specifications Institute (The) <a href="http://www.csinet.org">www.csinet.org</a>	(800) 689-2900 (703) 684-0300
CSSB	Cedar Shake & Shingle Bureau <a href="http://www.cedarbureau.org">www.cedarbureau.org</a>	(604) 462-8961
CTI	Cooling Tower Institute <a href="http://www.cti.org">www.cti.org</a>	(281) 583-4087
DHI	Door and Hardware Institute	(703) 222-2010

	www.dhi.org	
EIA/TIA	Electronic Industries Alliance/Telecommunications Industry Association	(703) 907-7500
EIMA	www.eia.org EIFS Industry Members Association www.eifsfacts.com	(800) 294-3462 (770) 968-7945
EJMA	Expansion Joint Manufacturers Association, Inc. www.ejma.org	(914) 332-0040
FCI	Fluid Controls Institute www.fluidcontrolsinstitute.org	(216) 241-7333
FGMA	Flat Glass Marketing Association (See GANA)	
FM	Factory Mutual System (See FMG)	
FMG	FM Global (Formerly: FM - Factory Mutual System) www.fmgglobal.com	(401) 275-3000
GA	Gypsum Association www.gypsum.org	(202) 289-5440
GANA	Glass Association of North America (Formerly: FGMA - Flat Glass Marketing Association) www.glasswebsite.com/gana	(785) 271-0208
GRI	Geosynthetic Research Institute www.drexel.edu/gri	(610) 522-8440
GTA	Glass Tempering Division of Glass Association of North America (See GANA)	
HI	Hydraulic Institute	(888) 786-7744 (973) 267-9700
HI	Hydronics Institute Division of Gas Appliance Manufacturers Association www.gamanet.org	(908) 464-8200
HMMA	Hollow Metal Manufacturers Association Division of National Association of Architectural Metal Manufacturers (See NAAMM)	
HPVA	Hardwood Plywood & Veneer Association www.hpva.org	(703) 435-2900
HPW	H. P. White Laboratory, Inc.	(410) 838-6550

IAS	International Approval Services (See CSA International)	
ICEA	Insulated Cable Engineers Association, Inc. www.icea.net	(508) 394-4424
ICRI	International Concrete Repair Institute	(703) 450-0116
IEC	International Electrotechnical Commission www.iec.ch	41 22 919 02 11
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The) www.ieee.org	(212) 419-7900
IESNA	Illuminating Engineering Society of North America (The) www.iesna.org	(212) 248-5000
IGCC	Insulating Glass Certification Council www.igcc.org	(315) 938-7444
ILI	Indiana Limestone Institute of America, Inc. www.iliai.com	(812) 275-4426
IRI	HSB Industrial Risk Insurers www.industrialrisk.com	(800) 520-7300 (860) 520-7300
ITS	Intertek Testing Services www.itsglobal.com	(800) 345-3851 (607) 753-6711
IWS	Insect Screening Weavers Association (Now defunct)	
KCMA	Kitchen Cabinet Manufacturers Association www.kcma.org	(703) 264-1690
LGSI	Light Gage Structural Institute www.loseke.com	(972) 625-4560
LMA	Laminating Materials Association (Formerly: ALA - American Laminators Association) www.lma.org	(201) 664-2700
LPI	Lightning Protection Institute www.lightning.org	(800) 488-6864 (847) 577-7200
LSGA	Laminated Safety Glass Association (See GANA)	
MBMA	Metal Building Manufacturers Association www.mbma.com	(216) 241-7333
MFMA	Maple Flooring Manufacturers Association www.maplefloor.org	(847) 480-9138
MFMA	Metal Framing Manufacturers Association	(312) 644-6610

MHIA	Material Handling Industry of America www.mhia.org	(800) 345-1815 (704) 676-1190
MIA	Marble Institute of America www.marble-institute.com	(614) 228-6194
ML/SFA	Metal Lath/Steel Framing Association (See SSMA)	
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry, Inc. www.mss-hq.com	(703) 281-6613
NAAMM	National Association of Architectural Metal Manufacturers www.naamm.org	(312) 332-0405
NAAMM	North American Association of Mirror Manufacturers (See GANA)	
NACE	NACE International (National Association of Corrosion Engineers International) www.nace.org	(281) 228-6200
NAIMA	North American Insulation Manufacturers Association (The)  www.naima.org	(703) 684-0084
NAMI	National Accreditation and Management Institute, Inc.	(304) 258-5100
NAPM	National Association of Photographic Manufacturers (See PIMA)	
NBGQA	National Building Granite Quarries Association, Inc. www.nbgqa.com	(800) 557-2848
NCMA	National Concrete Masonry Association www.ncma.org	(703) 713-1900
NCPI	National Clay Pipe Institute www.ncpi.org	(414) 248-9094
NCTA	National Cable Television Association www.ncta.com	(202) 775-3669
NEBB	National Environmental Balancing Bureau www.nebb.org	(301) 977-3698
NECA	National Electrical Contractors Association www.necanet.org	(301) 657-3110
NeLMA	Northeastern Lumber Manufacturers' Association	(207) 829-6901

	www.nelma.org	
NEMA	National Electrical Manufacturers Association www.nema.org	(703) 841-3200
NETA	InterNational Electrical Testing Association www.electricnet.com/neta	(303) 697-8441
NFPA	National Fire Protection Association www.nfpa.org	(800) 344-3555 (617) 770-3000
NFRC	National Fenestration Rating Council www.nfrc.org	(301) 589-6372
NGA	National Glass Association www.glass.org	(703) 442-4890
NHLA	National Hardwood Lumber Association www.natlhardwood.org	(901) 377-1818
NLGA	National Lumber Grades Authority www.nlga.org	(604) 524-2393
NOFMA	National Oak Flooring Manufacturers Association www.nofma.org	(901) 526-5016
NPA	National Particleboard Association (See CPA)	
NRCA	National Roofing Contractors Association www.nrca.net	(800) 323-9545 (847) 299-9070
NRMCA	National Ready Mixed Concrete Association www.nrmca.org	(301) 587-1400
NSA	National Stone Association www.aggregates.org	(800) 342-1415 (202) 342-1100
NSF	NSF International (National Sanitation Foundation International) www.nsf.org	(800) 673-6275 (734) 769-8010
NTMA	National Terrazzo & Mosaic Association (The) www.ntma.com	(800) 323-9736 (703) 779-1022
NWWDA	National Wood Window and Door Association (See WDMA)	
PCI	Precast/Prestressed Concrete Institute www.pci.org	(312) 786-0300
PDCA	Painting and Decorating Contractors of America www.pdca.com	(800) 332-7322 (703) 359-0826
PDI	Plumbing & Drainage Institute	(800) 589-8956



	www.pdionline.org	(508) 230-3516
PGI	PVC Geomembrane Institute/Technology Program University of Illinois-Urbana Champaign //pgi-tp.ce.uiuc.edu	(217) 333-3929
PIMA	Photographic & Imaging Manufacturers Association (Formerly: NAPM - National Association of Photographic Manufacturers) www.pima.net	(914) 698-7603
RCSC	Research Council on Structural Connections c/o AISC www.boltcouncil.org	
RFCI	Resilient Floor Covering Institute	(Contact by mail only)
RIS	Redwood Inspection Service Division of the California Redwood Association www.calredwood.org	(888) 225-7339 (415) 382-0662
RMA	Rubber Manufacturers Association www.rma.org	(800) 220-7620 (202) 682-4800
SAE	SAE International www.sae.org	(724) 776-4841 (724) 776-4960 (publications)
SDI	Steel Deck Institute www.sdi.org	(847) 462-1930
SDI	Steel Door Institute www.steeldoor.org	(440) 899-0010
SEFA	Scientific Equipment and Furniture Association www.sefalabfurn.com	(843) 689-6878
SGCC	Safety Glazing Certification Council www.sgcc.org	(315) 938-7444
SIGMA	Sealed Insulating Glass Manufacturers Association www.sigmaonline.org/sigma	(312) 644-6610
SJI	Steel Joist Institute www.steeljoist.org	(843) 626-1995
SMA	Screen Manufacturers Association	(561) 533-0991
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association www.smacna.org	(703) 803-2980
SPI	The Society of the Plastics Industry, Inc. www.plasticsindustry.org	(202) 974-5200

SPIB	Southern Pine Inspection Bureau (The) www.spib.org	(850) 434-2611
SPI/SPFD	The Society of the Plastics Industry, Inc. Spray Polyurethane Foam Division (See SPI)	
SPRI	SPRI (Single Ply Roofing Institute) www.spri.org	(781) 444-0242
SSINA	Specialty Steel Industry of North America www.ssina.com	(800) 982-0355 (202) 342-8630
SSMA	Steel Stud Manufacturers Association (Formerly: ML/SFA - Metal Lath/Steel Framing Association) www.ssma.com	(312) 456-5590
SSPC	SSPC: The Society for Protective Coatings www.sspc.org	(800) 837-8303 (412) 281-2331
STI	Steel Tank Institute www.steeltank.com	(847) 438-8265
SWI	Steel Window Institute www.steelwindows.com	(216) 241-7333
SWRI	Sealant, Waterproofing & Restoration Institute www.swrionline.org	(816) 472-7974
TCA	Tile Council of America, Inc. www.tileusa.com	(864) 646-8453
TPI	Truss Plate Institute	(608) 833-5900
TPI	Turfgrass Producers International www.turfgrassod.org	(800) 405-8873 (847) 705-9898
UFAC	Upholstered Furniture Action Council www.ufac.org	(336) 885-5065
UL	Underwriters Laboratories Inc. www.ul.com	(800) 704-4050 (847) 272-8800
UNI	Uni-Bell PVC Pipe Association //members.aol.com/unibell	(972) 243-3902
USG	United States Gypsum Company A Subsidiary of USG Corporation www.usg.com	(800) 874-4968 (312) 606-4000
USITT	United States Institute for Theatre Technology, Inc. www.culturenet.ca/usitt	(800) 938-7488 (315) 463-6463

USP	U.S. Pharmacopeia www.usp.org	(800) 822-8772 (301) 881-0666
WASTEC	Waste Equipment Technology Association www.wastec.org	(800) 424-2869 (202) 244-4700
WCLIB	West Coast Lumber Inspection Bureau www.wclib.org	(800) 283-1486 (503) 639-0651
WCMA	Window Covering Manufacturers Association (Formerly: AWCMA - American Window Covering Manufacturers Association) www.windowcoverings.org	(212) 661-4261
WDMA	Window & Door Manufacturers Association (Formerly: NWWDA - National Wood Window and Door Association) www.wdma.com	(800) 223-2301 (847) 299-5200
WIC	Woodwork Institute of California www.wicnet.org	(916) 372-9943
WMMPA	Wood Moulding & Millwork Producers Association www.wmmpa.com	(800) 550-7889 (530) 661-9591
WWPA	Western Wood Products Association www.wwpa.org	(503) 224-3930

H. Abbreviations and Acronyms for Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

BOCA	BOCA International, Inc. www.bocai.org	(708) 799-2300
CABO	Council of American Building Officials (See ICC)	
IAPMO	International Association of Plumbing and Mechanical Officials (The) www.iapmo.org	(909) 595-8449
ICBO	International Conference of Building Officials www.icbo.org	(800) 284-4406 (562) 699-0541
ICC	International Code Council (Formerly: CABO - Council of American Building Officials) www.intlcode.org	(703) 931-4533
SBCCI	Southern Building Code Congress International, Inc. www.sbcci.org	(205) 591-1853

I. Abbreviations and Acronyms for Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list. Names, telephone numbers, and Web site addresses are subject to change and are believed to be accurate and up-to-date as of the date of the Contract Documents.

CE	Army Corps of Engineers CRD Standards	(601) 634-2355
CFR	Code of Federal Regulations <a href="http://www.access.gpo.gov/nara/cfr">www.access.gpo.gov/nara/cfr</a>	(202) 512-1800
CPSC	Consumer Product Safety Commission <a href="http://www.cpsc.gov">www.cpsc.gov</a>	(800) 638-2772 \\ (301) 504-0990
DOC	Department of Commerce <a href="http://www.doc.gov">www.doc.gov</a>	(202) 482-2000
DOD DOD	Department of Defense Specifications and Standards <a href="http://astimage.daps.dla.mil/online">//astimage.daps.dla.mil/online</a>	(215) 697-6257
EPA	Environmental Protection Agency <a href="http://www.epa.gov">www.epa.gov</a>	(202) 260-2090
FAA	Federal Aviation Administration Department of Transportation <a href="http://www.faa.gov">www.faa.gov</a>	(202) 366-4000
FCC	Federal Communications Commission <a href="http://www.fcc.gov">www.fcc.gov</a>	(202) 418-0190
FDA	Food and Drug Administration <a href="http://www.fda.gov">www.fda.gov</a>	(888) 463-6332
FED-STD	Federal Standard (See FS)	
FS	Federal Specification (Available from DOD, GSA, and NIBS)	
FTMS	Federal Test Method Standard (See FS)	
GSA	General Services Administration <a href="http://www.gsa.gov">www.gsa.gov</a> (Federal Specifications)	(202) 708-5082 (202) 619-8925

END OF SECTION 00 42 00

## SECTION 01 51 00

### CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

#### PART 1 GENERAL

##### 1.1 GENERAL REQUIREMENTS

- A. Procedures:
1. Contractor shall clean all tires of vehicles prior to leaving project site and entering public roadways. Any mud tracked onto the owners paving or city streets shall be immediately cleaned by the Contractor.
  2. No vehicles or equipment with oil leaks, fuel leaks, or other contaminates will be allowed on site.
  3. All construction support and staging areas shall be in areas designated by the CM.
  4. Hard hats, safety glasses, long pants, shirts with sleeves, and OSHA approved work boots are required at all times. Clothing with objectionable language or symbolism will not be permitted.
  5. All visitors to the project site must have a legitimate purpose connected with the construction activity and have specific approval of the CM.
  6. Parking areas for construction workers will be designated by the CM. Vehicles that stain any pavement will not be allowed on site.

##### 1.2 PROJECT IDENTIFICATION AND CONSTRUCTION SIGNS

- A. Size and Layout.
1. The CM will provide a project sign.
  2. Each Contractor is responsible for furnishing signs specific to the safety at the work site (i.e. caution, warning, danger, etc.).
  3. No other signs will be permitted at the site unless approved by the CM.

##### 1.3 SITE ACCESS

- A. Site access and egress shall be as designated by the CM.
- B. Key card access will be provided to contractor supervisors as needed. The building will be open during defined working hours.

##### 1.4 TEMPORARY UTILITIES

- A. Temporary Electricity and Lighting
1. The Electrical Bid Package shall provide for and maintain temporary power outlet locations inside the building footprint spaced periodically such that extension cords will not exceed 100' in length. Temporary electrical shall be equipped with GFCI protection and shall be installed in accordance with NE Code Article 590. Provide adequate distribution equipment, wiring, and outlets to provide single phase branch circuits for power. Duplex outlets shall be 20 Amp circuits. The temporary power locations shall be installed before outages for the permanent power systems. Contractor requiring same shall provide and pay for power in excess of 120/2208 volt/single phase. There will not be any temporary power installed for Work outside the building.
  2. The Electrical Bid Package shall provide for (4) 100 Amp 208/120 disconnects for the Construction Manager, General Trades Contractor, Mechanical Contractor and Electrical Contractor trailers and connect the CM trailer to the 100 Amp disconnect. Each contractor shall arrange for and pay for connections from these disconnects.

3. The Owner will pay for electrical consumption.
  4. The Electrical Bid Package shall provide and maintain temporary lighting as required to meet OSHA guidelines at all work locations. At a minimum, each room shall have one light operable at all times. Contractor requiring task lighting in excess of the OSHA guidelines shall provide for the same.
  5. Each contractor shall provide lighting for exterior work as needed.
  6. The Electrical Bid Package shall remove all temporary power and temporary lighting upon completion.
- C. Temporary Water
1. A hose bib adjacent to the building will be designated for supplying water during construction work.
  2. Drinking water and wash facilities shall be provided for and paid for by Contractor requiring same.
- D. Temporary Fire Protection
1. The General Construction Bid Package shall provide an adequate number of temporary fire extinguishers placed around the work area once the building is enclosed.
  2. Contractor requiring same shall provide for temporary fire extinguishers prior to building enclosure.
- E. Temporary Sanitary Facilities
1. The CM will provide temporary construction toilets directly outside the building and construction areas. The contractors are not allowed to use the school's restrooms facilities. Any employee caught will be given a warning, and will be asked to leave the jobsite in the event of a second violation.
- F. Temporary Cooling, Heating, and Venting
1. General Construction package shall provide temporary and security enclosures as work disturbs the building envelope during construction. See attachment at the end of this specification for examples of temporary partition locations.
  2. No open flame direct heating sources which introduce moisture into the building shall be used on the project.
  3. The HVAC Bid Package is responsible for the operation and maintenance of the permanent system for testing and in use for temporary heating and cooling. The equipment warranty shall not start until the Date of Substantial Completion.
  4. Temporary ventilation shall be provided by Contractor requiring same.
  5. If conditions in building do not meet manufacturer's requirements for temperature, humidity, or other parameters, the installing contractor shall be responsible to notify the CM, in writing, a minimum of 10 work days prior to the scheduled installation start date. If conditions become unacceptable after installation begins, immediate written notification is required.
- G. Temporary Parking and Storage
1. The CM will designate approved areas for storage trailers and parking. A few parking spots near the construction trailers will be reserved for superintendents and foreman requiring access to vehicles for tools and equipment. All other craftsmen and construction personnel will be required to park in approved parking spaces.
- H. Jobsite Fence
1. Fencing and barricades required for excavations, special work activities, etc. shall be provided by contractors requiring the same. Open excavation inside fenced

areas will still be required to be barricaded or fenced by the contractor perform the activity.

### **1.5 TEMPORARY PROTECTION**

- A. Each Contractor shall provide temporary coverings and/or enclosures to protect materials and finishes provided under their own Contract from damaging conditions, including damaging conditions caused by other trades.
- B. General Construction Contractor (BP 1) to provide floor protection and temporary partition as noted in attachment at the end of this spec section.
- C. Work damaged by inadequate protection from damaging conditions shall be repaired or replaced as directed and approved by CM and Architect at no cost to Owner. This includes damage to existing public roads, school access roads, existing flooring materials, existing concrete drives and sidewalks, etc.

### **1.6 REMOVAL**

- A. All existing conditions on and off the immediate project site which are disturbed due to the Contractor's activities must be repaired to equal or better condition, as determined and approved by CM.
- B. Clean and repair any damage caused by installation or use of construction facilities and temporary controls. Cleaning and repair shall be acceptable to the CM.

### **1.7 TRAFFIC BARRICADES**

- A. Barricades and/or other traffic directing devices shall be provided by Contractor requiring same.

### **1.8 CLEANING DURING CONSTRUCTION**

- A. Dumpsters will be provided by the Construction Manager. Dumpster facilities shall not be used for disposal of concrete, soil or masonry debris or rubble, or complete building demolition.
- B. All Contractors shall execute daily cleaning to keep the work, the site, the building, and adjacent properties free from accumulation of waste materials, rubbish, and windblown debris resulting from construction operations.
- C. A clean worksite is required. Each Contractor working on site shall participate in the daily composite cleanup program. Floors shall be swept clean. Dust shall be contained. During finishing stages of the project, surfaces shall be wiped down. Participation shall be allocated to each Contractor, or Subcontractor, based on the proportional number of workers at the site and the nature of the work being performed.
- D. Cleaning operations shall be scheduled as appropriate to the stage of the project. The more finishes installed, the cleaner the building shall be kept. The building shall be maintained dust free when the HVAC system is operating.

### **1.9 SECURITY**

- A. Contractors are responsible for security of its own equipment, materials, and property.
- B. The General Construction Bid Package (BP 1) shall provide for lockable temporary doors at each exterior door opening until the final doors are installed. Keys shall be provided to the CM for distributing to the Contractors.
- C. The contractor to provide a construction fence around their own work not inside the job-site fence.

**1.10 DUST CONTROL**

- A. Contractors shall execute work by methods to eliminate raising dust from construction operations. Contractors shall provide their own sweeping compound and vacuums.
- B. Temporary dust partitions shall be installed by contractor requiring same.

**1.11 SNOW REMOVAL**

- A. No snow removal should be required for this project.

**1.12 FUEL STORAGE**

- A. The CM will designate a specific area for fuel storage. All fuel shall be contained in accordance with all current laws, codes, requirements, and authorities having jurisdiction.

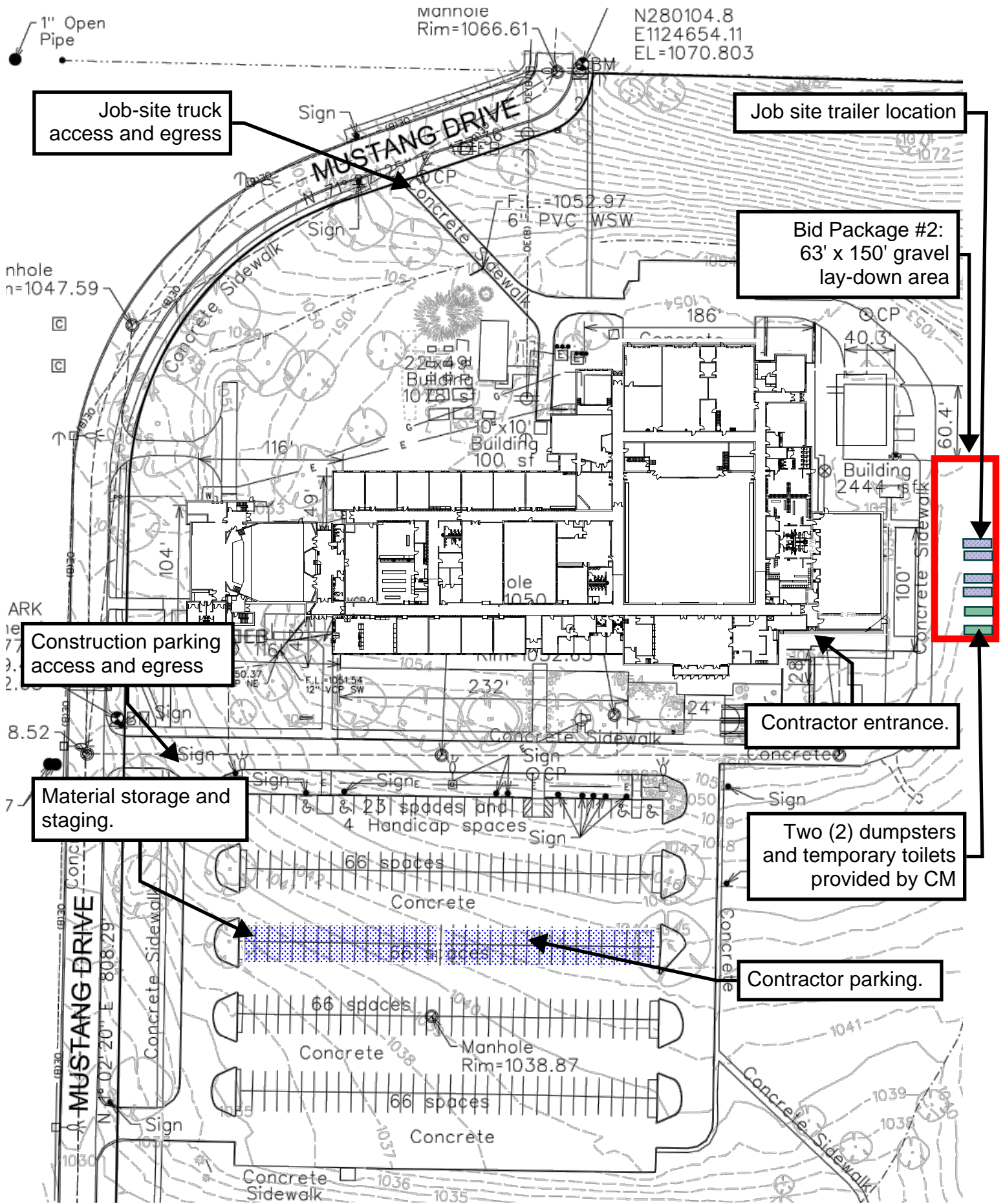
**1.13 WORKING HOURS**

- A. Normal working hours begin at 7:00 AM Monday through Friday.
- B. Normal working hours end at 5:00 PM Monday through Friday.
- C. Working hours that fall outside the normal project working hours shall be approved by the CM.
- D. Very loud exterior demolition shall not occur before 8:00 AM without prior approval of the CM.
- E. Work that occurs during the school year, including but not limited to punch list items, shall occur during nights and weekends.

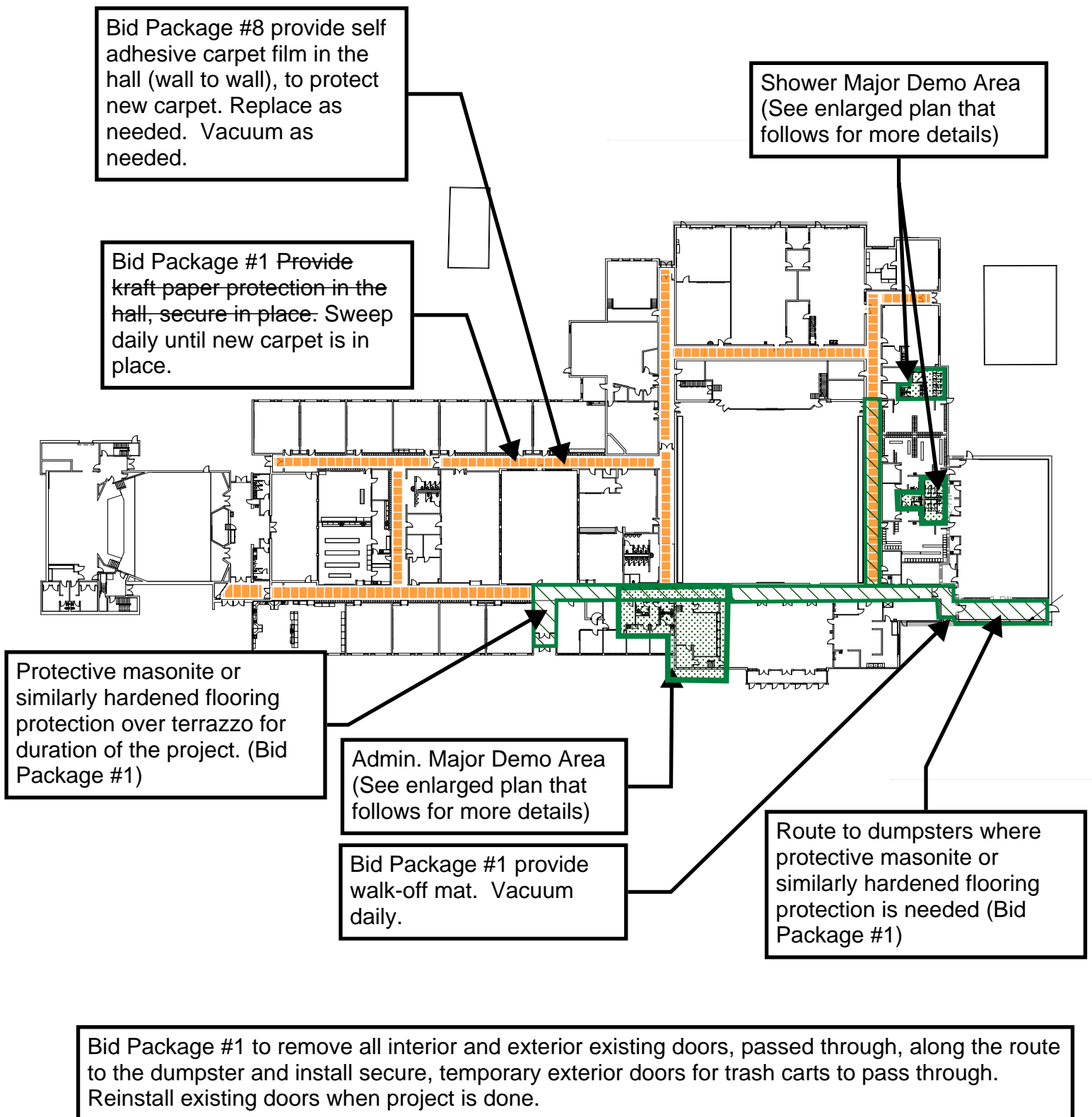
**END OF SECTION 01 51 00**



# SITE PLAN



# OVERALL FLOOR PLAN



## SECTION 01 66 00

### PRODUCT STORAGE AND HANDLING REQUIREMENTS

#### PART I - GENERAL

##### 1.1 GENERAL STORAGE

- A. Store and handle products immediately on delivery in accordance with the manufacturer's printed instructions, with seals and labels intact and legible, and protect until installed in the work.
- B. Arrange storage in a manner to provide easy access for inspection.

##### 1.2 ENCLOSED STORAGE

- A. Store products subject to damage by the elements in substantial weathertight enclosures.
- B. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
- C. Store unpacked products on shelves, in bins or in neat piles, accessible for inspection.

##### 1.3 EXTERIOR STORAGE

- A. Provide substantial platforms, blocking or skids to support fabricated products above the ground to prevent soiling or staining.
- B. Cover products which are subject to discoloration or deterioration from exposure to the elements with impervious sheet coverings. Provide adequate ventilation to avoid condensation.

Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

Provide surface drainage to prevent flow or ponding of rainwater.

Prevent mixing of refuse or chemically injurious materials or liquids.

##### 1.4 MAINTENANCE OF STORAGE

- A. Maintain a periodic system of inspections of stored products on a scheduled basis to assure that:
  - 1. Condition of storage facilities is adequate to provide required conditions.
  - 2. Required environmental conditions are maintained on a continuing basis.
  - 3. Surfaces of products exposed to elements are not adversely affected.
  - 4. Note: Any weathering of products, coatings and finishes is NOT acceptable under requirements of the Contract Documents.
- B. Have complete manufacturer's instructions for servicing accompanying each item, with notice of enclosed instructions shown on the exterior of the package, for mechanical and electrical equipment which requires servicing during long term storage.
  - 1. Comply with the manufacturer's instructions on a scheduled basis.
  - 2. Connect space heaters which are part of the electrical equipment and operate continuously until equipment is placed in service.

## **1.5 STORAGE OFF-SITE**

- A. Materials stored off-site must be segregated from other project's materials, clearly marked as property of the Owner, and have proof of insurance specifically listing the material and its value, if payment is to be requested.
- B. Storage conditions shall follow this specification.
- C. Refer to 01 20 00 Price and Payment Procedures.

## **1.6 PROTECTION AFTER INSTALLATION**

- A. Provide substantial coverings to protect installed products from damage from subsequent operations. Remove when no longer needed, prior to completion of work.
- B. Control traffic to prevent damage to equipment and surfaces.
- C. Provide coverings to protect finished surfaces from damage.
- D. Cover projections, wall corners, jambs, sills and soffits of openings, in areas used for traffic and passage of products in subsequent work.
- E. Protect finished floors and stairs from dirt and damage.
- F. In other areas subject to foot traffic, secure heavy paper, sheet goods on the materials in place.
- G. For movement of heavy products, lay planking or similar materials in place.
- H. Waterproofed and roofing surfaces:
  - 1. Prohibit use of surfaces for traffic of any kind, and for storage of any products.
  - 2. When some activity must take place in order to carry out the Contract, obtain recommendations of the installer for protection of surface.
  - 3. Install recommended protection and remove on completion of that activity.
  - 4. Restrict the use of adjacent unprotected areas.
- I. Prohibit traffic of any kind across planted lawn and landscaped areas.

## **1.7 PRODUCT HANDLING**

- A. Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.
- B. Provide additional protection during handling as necessary to prevent scraping, marring, or otherwise damaging products or surrounding spaces.
- C. Handle products by using methods that will prevent bending or over stressing.
- D. Lift heavy components only at designated lifting points.

## **PART 2 - PRODUCTS**

Not Used

## **PART 3 - EXECUTION**

Not Used

## **END OF SECTION 01 66 00**

## SECTION 01 73 00

### EXECUTION

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and other Division 01 Specification Sections, apply to this Section.

##### 1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
  - 1. Construction layout.
  - 2. Field engineering.
  - 3. Installation of the Work.
  - 4. Cutting and patching.
  - 5. Progress cleaning.
  - 6. Protection of installed construction.
- B. Related Requirements:
  - 1. Section 01 33 00 "Submittal Procedures"
  - 2. Section 01 77 00 "Closeout Procedures"
  - 3. Section 02 41 19 "Selective Demolition" for demolition and removal of selected portions of the building and site.
  - 4. Section 01 73 29 Cutting and Patching

##### 1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

##### 1.4 QUALITY ASSURANCE

- A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.
- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
  - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, fire lines and other utilities.
  - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
  - 1. Description of the Work.
  - 2. List of detrimental conditions, including substrates.
  - 3. List of unacceptable installation tolerances.
  - 4. Recommended corrections.
- D. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

### 3.2 PREPARATION

- A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of Work are indicated to fit to

other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying Work.

- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 01 31 00 "Project Management and Coordination."

### 3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
- B. Site Improvements: Locate and lay out site improvements, including pavements, ramps, stairs, grading, fill and topsoil placement.
- C. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

### 3.4 FIELD ENGINEERING

- A. Identification: Existing benchmarks is identified on C3.2. .
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
  - 1. Do not change or relocate existing benchmarks or control points without prior written approval of Architect. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to Architect before proceeding.
  - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.
- C. Benchmarks: Establish and maintain a minimum of one permanent benchmark on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
  - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
  - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
  - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

### 3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated. Make vertical work plumb and make horizontal work level.

- B. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- D. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- G. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

### 3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
  - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
  - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
  - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations. Use containers intended for holding waste materials of type to be stored.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
- D. Installed Work: Keep installed work clean
- E. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways.
- G. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### 3.7 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

END OF SECTION 01 73 00



## SECTION 01 73 29

### CUTTING AND PATCHING

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. See Divisions 2 through 49 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work.
- C. See Division 07, 21, 22, 23, 26, 27, and 28 "Through-Penetration Firestopping" Sections for patching fire-rated construction.

##### 1.2 SUBMITTALS

- A. Cutting and Patching Proposal: Submit a proposal describing procedures at least 7 days before the time cutting and patching will be performed, requesting approval to proceed. Include the following information:
  - 1. Extent: Describe cutting and patching, show how they will be performed, and indicate why they cannot be avoided.
  - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building's appearance and other significant visual elements.
  - 3. Products: List products to be used and firms or entities that will perform the Work.
  - 4. Dates: Indicate when cutting and patching will be performed.
  - 5. Utility Services and Mechanical/Electrical Systems: List services/systems that cutting and patching procedures will disturb or affect. List services/systems that will be relocated and those that will be temporarily out of service. Indicate how long services/systems will be disrupted.
  - 6. Structural Elements: Where cutting and patching involve adding reinforcement to structural elements, submit details and engineering calculations showing integration of reinforcement with original structure.
  - 7. Architect's Approval: Obtain approval of cutting and patching proposal before cutting and patching. Approval does not waive right to later require removal and replacement of unsatisfactory work.

##### 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 without written approval from Structural Engineer.
- 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.
- 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.

- 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.

#### **1.4 WARRANTY**

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

### **PART 2 - PRODUCTS**

#### **2.1 MATERIALS**

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
  - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

### **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.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be removed, relocated, or abandoned, bypass such services/systems before cutting to prevent interruption to occupied areas.

### 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. 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.
  - 5. 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.
  - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
  - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
  - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
  - 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
  - 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
  
- D. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.

END OF SECTION 01 73 29

## SECTION 01 77 00

### CLOSEOUT PROCEDURES

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Closeout procedures.
  - 2. Systems and equipment testing.
  - 3. Instructions to Owner.
  - 4. Clean-up.
  
- B. Related Sections:
  - 1. Section 011000 - Summary
  - 2. Section 013100 – Project Management and Coordination.
  - 3. Section 013200 – Construction Progress Documentation.
  - 4. Section 015100 – Temporary Facilities and Controls.
  - 5. Section 017800 – Closeout Submittals.

##### 1.2 SUBSTANTIAL COMPLETION AND OWNER OCCUPANCY

- A. Owner has urgent need to occupy Project to commence its intended use.
  
- B. Plan an efficient, orderly and coordinated completion process including organizing, scheduling and coordinating the following:
  - 1. Work of contractor's own forces.
  - 2. Work of subcontractors.
  - 3. Coordination with other trades.
  - 4. Establish firm commitments for on-time completion.
  - 5. Owner's needs for accommodations and time to occupy project during closeout per schedule of Substantial Completion and final completion.
  
- C. After Substantial Completion expedite completion of remaining work in an organized, efficient manner that maintains quality standards. Perform such work according to following requirements:
  - 1. Scheduled work in advance with CM.
  - 2. Perform Work in occupied spaces when space is not in use, such as after hours in administrative areas, classrooms or public spaces when public use hours are over for the day, unless otherwise approved by the CM.
  - 3. When necessary, use overtime to accomplish work not able to be completed during normal work hours at no extra cost to the Owner.
  - 4. Perform Work in occupied areas in a manner and at such time as will not significantly interfere with, hamper or inconvenience Owner's program or functions.

##### 1.3 PROJECT CLOSEOUT

- A. Insurance: Refer to General Conditions.
  - 1. Upon completion of work and written acceptance by Owner, provide a Certificate of Insurance indicating specified Completed Operations insurance will be provided a minimum of one year after Owner's acceptance of entire Project.
  - 2. Specified Property Insurance shall be maintained until final acceptance by Owner of entire Project.

- B. Supplemental Agreements: Resolve supplemental agreements prior to final payment, including adjustment of allowances.
- C. Consent of Surety: Refer to General Conditions – obtain consent of surety prior to reduction in retained percentage and prior to final payment.
- D. Broken Glass: Repair.
- E. Guarantees - Warranties: Refer to General Conditions for general guarantee requirements.
  - 1. In addition to general guarantee, provide written guarantees specified in technical sections of Specifications per Section 017800.
- F. Test Reports and Certificates: Refer to Section 017800.
- G. Retention of Records: Retain records required by law and good business practice.
- H. Record Set of Drawings:
  - 1. Refer to General Conditions and Section 017800.
  - 2. Deliver record set to CM upon Final Completion of Project.
  - 3. Review set with Architect to clarify or explain changes that may be necessary.
- I. Temporary Utilities:
  - 1. Refer to Section 015100.
  - 2. Remove temporary facilities and utilities as job progress permits.
- J. Temporary Facilities:
  - 1. Remove as work progresses and facilities are no longer needed at time acceptable to Architect.
  - 2. Prior to final payment, remove temporary sheds, offices, fences (including perimeter fence), barricades, surplus materials, debris and other material or items not part of Project.
- K. Extra Materials: Refer to Section 017800
- L. Identification of Equipment:
  - 1. Prior to Substantial Completion, provide identification tags or plates, or other identification means, as specified under Technical Sections of Specifications, such as at valves, panelboards and similar items.
  - 2. Apply directions on plates for circuit data and similar information.

#### **1.4 INSTRUCTIONS TO OWNER**

- A. Provide instructions before final payment is made. Submit evidence that instruction/maintenance manuals were delivered to and were acceptable to Owner/CM.
- B. Requirements herein supplement specific requirements provided under individual specification sections.
- C. Collect information and data so complete manuals are provided in sufficient time to permit review prior to time for final payment. Refer also to Section 017800.
- D. Provide qualified representatives of Contractor or subcontractors to give explanations and instructions.
- E. Provide instruction manuals per Section 017800 to be used and reviewed during instructions.
- F. Thoroughly and properly instruct the Owner in use, operation, care and maintenance of Project, especially various systems and equipment installed under Contract. Give

instructions methodically and carefully. Cover various phases of work and in sufficient detail so Owner fully understands entire Project.

- G. Orient and familiarize designated Owner Representatives with locations, methods, materials, uses and operation of systems and equipment, as well as specialized materials installed under Contract.
- H. Instruct and demonstrate to the Owner regarding full use, sequence or function and similar information to fully acquaint Owner in proper use, care and control of equipment, systems and devices installed under Contract.
- I. Precautionary Measures and Dangers of Misuse.
  - 1. Specifically explain precautions and dangers of misuse.
  - 2. Establish specific and agreed upon periods of time with the Owner, adequate to thoroughly present pertinent information.
  - 3. Owner will record length of time and number of days spent on these instructions.
- J. Refer to Section 013100 for additional information and data for maintenance manual such as coordination drawings.
- K. Information Not Required:
  - 1. Normal and routine cleaning of normal floor and wall finishes.
  - 3. Hardware maintenance.
  - 4. Other similar housekeeping matters.

## **1.6 CLEAN-UP**

- A. Refer to General Conditions for cleaning requirements during construction. All contractors shall participate in the final cleaning of the facility.
- B. Clean materials and equipment. Remove (haul away) debris, cartons, crates, surplus materials.
- C. Maintain work neat and orderly.
- D. Definitions
  - 1. Thorough Cleaning:
    - a. Thorough cleaning required unless otherwise specified.
    - b. Remove dust, dirt, debris, laitance, grease, oil, stains, discolorations, droppings, markings, and other soil or foreign matter or substance.
    - c. Remove labels except labels specifically designated to remain as part of listed, rated or labeled item.
    - d. Use appropriate methods such as sweeping, scrubbing, mopping, washing, dusting, vacuuming so surface is completely clean and streak free.
  - 2. Broom Clean: Remove visible dirt or dust from surface with a new, high quality, clean broom by thoroughly and properly sweeping or brooming so no dust or dirt is visible on surface.
- E. Each Contractor shall perform general "final" cleaning prior to inspection for Substantial Completion and occupancy. The intent is for this to be a composite effort of all trades that worked on the site (not only the contractors working at the time of final cleaning). Each contractor shall participate, participation will be based on the number of workers at the site during the finishing stages of the project. Plan, organize and coordinate cleaning to avoid working in spaces once cleaned. Coordinate timely cleaning with CM especially for cleaning of glass.

- F. Clean entire Project. Each Contractor is responsible for final clean up of the work.
  - 1. Cleaning required under each Section.
  - 2. Remove accumulated dust, dirt and debris. Wipe down all surfaces.
  - 3. Materials, equipment or other items.
  - 4. Glass - both sides, interior and exterior, and mirrors.
  
- G. "Broom Clean" is allowed in following areas:
  - 1. Tunnels, shafts, air shafts and air plenums not constructed of ductwork.
  - 2. Similar areas.
  - 3. Floors in equipment rooms (including rooms such as electrical equipment rooms).
    - a. Except also wash floors and apply final coat of sealer if specified.
  
- H. Floors (including concrete) must be free of stains and discoloration
  
- I. Hardware: Adjust and polish as needed
  
- J. Perform other cleaning as required to turn over to Owner Project in new, well maintained condition, ready for full use and occupancy.
  
- K. Clean areas made dirty by work done after Substantial Completion so building is clean as specified prior to Final Completion. This final cleaning shall be a composite participation by all trades working at the site during the finishing stages of the project.

**1.7 FINAL ACCEPTANCE AND FINAL PAYMENT**

- A. Final payment will not be made until final acceptance inspection, completion of punch list items, consent of surety and final sign-off by Owner, CM, and Architect.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

**END OF SECTION 01 77 00**

## SECTION 01 78 00

### CLOSEOUT SUBMITTALS

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Closeout submittals.
  - 2. Warranties and guarantees.
  - 3. Test reports and certificates.
  - 4. Extra materials.
  - 5. Maintenance manuals.
  - 6. Record drawings and specifications.
- B. Related Sections:
  - 1. Section 013300 - Submittal Procedures.
  - 2. Section 017700 - Closeout Procedures.

##### 1.2 WARRANTIES AND GUARANTEES

- A. Provide written guarantees specified in technical sections of Specifications.
- B. Where guarantee terms are included in Specifications or a specific guarantee is referenced, submit guarantee in specified form.
- C. Submit guarantees prior to final payment.
- D. Submit a checklist of required guarantees, by section numbers.

##### 1.3 TEST REPORTS AND CERTIFICATES

- A. Provide test reports and certificates required in technical sections prior to final payment.
- B. Provide a written record of systems testing and results.
- C. Provide a check list of required reports and certificates, by Specifications sections.

##### 1.4 EXTRA MATERIALS

- A. Prior to final completion, deliver extra materials specified in various technical sections.
- B. Do not allow materials to "collect" in various parts of Project. Deliver to CM/Owner together.
- C. Obtain receipt for specified extra materials. Without such evidence of delivery, no credit will be given for fulfilling specified requirements.
- D. Provide a checklist of specified extra materials.

##### 1.5 OPERATING INSTRUCTIONS AND MAINTENANCE MANUALS

- A. Coordinate submittals from Section 013300 that will be needed to fulfill following requirements.
- B. Provide operating instruction data and maintenance manuals in accordance with Section 017700 Closeout Procedures.



- C. Organize information by classes or types of equipment and systems as follows:
  - 1. Manual shall consist of neatly edited and typed instruction manuals (in hard cover, indexed, loose-leaf notebook) to explain use, function and control of equipment, materials and systems. Printed information shall include:
    - a. Warranties and guarantees.
    - b. Common errors made, which will "abuse" equipment or system
    - c. Use, function and control of equipment and systems
    - d. Clean installation data and pamphlets (not to be left at equipment but included in manuals)
    - e. Instructions and explanations.
    - f. Cleaning instructions.
    - g. Wiring and piping diagrams.
    - h. Various types of maintenance procedures.
    - i. Lubrication data and schedules.
    - j. Maintenance instructions with frequency.
    - k. Other maintenance information.
    - l. Adjustment and repair data.
    - m. Parts list with numbers and recommended parts for Owner's stock.
    - n. Names, addresses, and telephone numbers parts distributor.
    - o. Names, addresses, and telephone numbers of appropriate service organizations for various items and equipment.
- D. Digital O&M manuals should include digital bookmarks for all systems and equipment.

## 1.6 RECORD SET OF DRAWINGS AND SPECIFICATIONS

- A. Provide record set of Drawings and Specifications to CM at completion of Contract.
  - 1. Refer to General Conditions for general requirements.
  - 2. Refer to Section 013300 - Submittal Procedures for posted (updated) job site contract documents.
- B. During construction, maintain clean set of Drawings and Specifications for sole purpose of recording changes to Contract.
- C. Mark record set methodically as work progresses, clearly and neatly, in color.
- D. Include information cut and pasted into appropriate location of documents to reference change, adjustment, or clarification. Type of information to be recorded on record set includes but is not limited to:
  - 1. Addendum items sent during bidding
  - 2. Changes, deviations or revisions made, except minor or non-critical dimensions, including those made by Change Order or Supplementary Instructions.
  - 3. Accepted submittals including shop drawings, product data and samples.
  - 4. Omissions, including work omitted by accepted alternates.
  - 5. Additions to the work.
  - 6. Changes in significant details.
  - 7. Coordination drawings.
  - 8. Changes in locations of panelboards, outlets, drains, piping, openings, dampers and similar features.
  - 9. Other similar data.

**PART 2 PRODUCTS -Not Used**

**PART 3 EXECUTION - Not Used**

**END OF SECTION 01 78 00**

**SECTION 02 41 19**  
**SELECTIVE DEMOLITION**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS.**

- A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.

**1.2 SUMMARY**

A. Section Includes:

- 1. Demolition and removal of selected portions of building and site.
- 2. Salvage of existing materials to be reclaimed.

B. Related Requirements:

- 1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and field conditions.
- 2. Section 013200.01 "Preliminary Schedule" for phasing requirements.
- 3. Section 017300 "Execution" for cutting and patching procedures.
- 4. Section 015100 "Construction Facilities and Temporary Controls" for proposed protection measures

**1.3 DEFINITIONS**

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.
- C. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

**1.4 MATERIALS OWNERSHIP**

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
  - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

## 1.5 PRE-DEMOLITION CONFERENCE/ PRE-CONSTRUCTION CONFERENCE

- A. Pre-demolition / Pre-construction Conference: A conference will be conducted at Project site by the Construction Manager. The Contractor is required to attend and to comply with the following:
1. Inspect and discuss condition of construction to be selectively demolished.
  2. Review structural load limitations of existing structure.
  3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  4. Review areas where existing construction is to remain and requires protection.
  5. Review and finalize protection requirements.
  6. Review procedures for noise control and dust control.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Proposed Protection Measures: Submit report that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control, and, for noise control. Indicate proposed locations and construction of barriers. Refer to spec 015100 Construction Facilities and Temporary Controls for additional guidance.
- B. Schedule of Selective Demolition Activities: Indicate the following:
1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure other on-site operations are uninterrupted.
  2. Interruption of utility services. Indicate how long water and sewer utility services will be interrupted (until such time that specified temporary measures are implemented and such temporary services are usable).
  3. Coordination for shutoff, capping, and continuation of utility services as well as provisions for the specified temporary use of water and sewer utilities.

## 1.9 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted. Refer to Summary 011000 for schedule of occupancy during construction.
1. Before selective demolition, Owner will remove the following items:
    - a. Asbestos abatement
    - b. Kitchen equipment in FCS B119
    - c. Refer to Summary 011000 for list of Owner items that will be relocated prior to start of project.
- B. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- C. Hazardous Materials: Hazardous materials are present in the building. A report on the presence of hazardous materials is in the Project Manual for review and use. Same is entitled "NESHAP Pre-Renovation Asbestos Survey." Examine report to become aware of locations where hazardous materials are present. Asbestos will be abated by the Asbestos Abatement

Contractor prior to the selective demolition. However, lead-based paint may be present in the building at the Contractor's commencement of work, and the Contractor shall be responsible for safely removing and disposing of such lead-based paint.

- D. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

#### 1.10 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties. Notify warrantor before proceeding. Existing warranties include the following:
  - 1. Select storefront windows and entries.
  - 2. Safe room roof.
- B. Notify warrantor on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

#### PART 2 - PRODUCTS

##### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

#### PART 3 - EXECUTION

##### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped (or otherwise modified for the specified temporary use, as is the case for water and sewer utilities) before starting selective demolition operations.
- B. Review Drawings and information in the Project Manual of existing conditions. Owner does not guarantee that existing conditions are same as those indicated in record documents.
- C. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS – BY OTHERS

- A. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished
  - 1. Arrange to shut off indicated utilities with utility companies.
  - 2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of temporary water and sewer services/systems to the specified areas of the site.

### 3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- B. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  - 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  - 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  - 4. Cover and protect furniture, furnishings, and equipment (FFE) that have not been removed. See Section 011000 "Summary" for FFE removal status during work.
  - 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015100 "Temporary Facilities and Controls."
- C. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
- D. Temporary Shoring: Provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction, excavations, and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of selective demolition.

### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Proceed with selective demolition systematically as required to minimize disturbance.

2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use cutting torches until work area is cleared of flammable materials. Maintain adequate ventilation when using cutting torches.
  6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  7. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  8. Dispose of demolished items and materials promptly.
- B. Reuse of Elements: Do not demolish any elements beyond what is indicated on Drawings without Architect's approval. Reclaim, reuse, reinstall, and relocate items as specified on Drawings.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after selective demolition operations are complete. Refer to 011000 Summary.

### 3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete Slabs-on-Grade : Saw-cut perimeter of area to be demolished, then break up and remove.
- B. Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI's "Recommended Work Practices for the Removal of Resilient Floor Coverings." Do not use methods requiring solvent-based adhesive strippers.
- C. Removal of Asbestos Containing Resilient Floor Coverings and Mastic: By others.

### 3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be reclaimed, recycled, reused, salvaged, reinstalled, relocated, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
  1. Except for materials specified for reclamation, do not allow demolished materials to accumulate on-site.
  2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  3. Remove debris from elevated portions of building by using devices that will convey debris to grade level in a controlled descent.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them. Pay for all disposal costs.

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

**END OF SECTION 02 41 19**

<b>February 12, 2020</b>						
<b>Shenandoah High School Renovation</b>						
<b>Bidding Construction Budget Recap</b>						
<b>Phase I</b>	<b>25% SD Budget</b>	<b>DD Budget</b>	<b>90% CD Budget</b>	<b>Permit Set Budget</b>	<b>Apparent Low Bids</b>	<b>Over/ (under)</b>
BP 1 General Construction			\$501,098	\$564,023		
BP 2 Site Work			\$159,739	\$194,051		
BP 3 Mechanical			\$698,500	\$698,500	\$768,169	\$69,669
BP 4 HVAC Controls			\$290,000	\$290,000	\$197,264	(\$92,736)
BP 5 Electrical			\$882,973	\$882,973		
BP 6 Technology			\$299,925	\$299,925	\$249,940	(\$49,985)
BP 7 Asbestos Abatement			\$25,000	\$25,000		
Phase I CM General Conditions			\$353,129	\$353,129		
Subtotal	\$3,206,637	\$3,348,409	\$3,210,364	\$3,307,601		
Bid Contingency	\$497,139	\$346,079	\$321,036	\$330,760		
Phase I Bidding Construction Budget	\$3,703,776	\$3,694,488	\$3,531,400	\$3,638,361		(\$73,052)
Phase I Total Budget				\$4,759,070		
<b>Phase II</b>				<b>CD Budget</b>		
BP 8 General Construction				\$761,208		
CO to Mechanical				\$16,743		
CO to Electrical				\$14,102		
Additional BP 7 Asbestos Abatement				\$32,054		
Phase II CM General Conditions				\$113,184		
				\$937,291		
Alternate for sitework				\$488,440		
				\$1,425,731		
Bid Contingency				\$220,934		
Phase II Bidding Construction Budget				\$1,646,665		
Phase I & II Bidding Construction Budget				\$5,285,026		
Phase II Total Budget				\$1,985,527		
Phase I & II Total Budget				\$6,744,597		



**Phase II Renovation CD Budget Detail**

Budget Code	Item	Budget	Budget % of Const. Cost	Notes
<b>100</b>	<b>Development Costs</b>	<b>\$ 2,800</b>	<b>0.15%</b>	
101	Land	\$ -		N/A
102	Utility Hook-up Fees	\$ -		
103	State Building Permit	\$ 1,900		
104	Local Building Permit	\$ 900		
<b>200</b>	<b>Construction Cost</b>	<b>\$ 1,863,213</b>	<b>100.00%</b>	
201	Building Construction	\$ 824,107		
202	Alternate for site paving	\$ 488,440		
203	CM Phase II General Conditions	\$ 113,184		
204	General Insurance	\$ 7,744	0.59%	
205	Construction Manager Construction Fee	\$ 39,421	2.75%	CANCO
206	Design & Estimating Contingency	\$ 220,934	15.00%	of const. cost
207	Construction Contingency	\$ 169,383	10.00%	of const. cost
<b>300</b>	<b>Professional Fees &amp; Expenses</b>	<b>\$ 88,400</b>	<b>4.74%</b>	
301	A/E Prebond Services Fee	\$ -		DLR
302	CM Pre-bond Services Fee	\$ -		CANCO
303	A/E Design Services	\$ 71,550	3.84%	CANCO T&M
304	Prepare SWPPP & NPDES Permit	\$ -		DLR
305	Monitor & Document SWPPP	\$ -		see #200
306	Arch/Eng. Reimbursable Expenses	\$ -	0.00%	
307	Printing	\$ 2,500	0.30%	TBD
308	CM Pre-Construction Services Fee	\$ 4,600	0.25%	CANCO T&M
309	Furniture and Equipment Consultant	\$ -		District personnel
310	Site Survey	\$ -		Snyder & Assoc.
311	Geotechnical investigation & Report	\$ -		TBD
312	Building Laser Scan	\$ -		DLR
313	HVAC Retro-Commissioning Services	\$ -		CANCO
314	Asbestos Testing	\$ 9,750		TBD
<b>400</b>	<b>Administrative &amp; Legal</b>	<b>\$ 1,099</b>	<b>0.06%</b>	
401	Legal Expense	\$ -		
402	Administrative & Misc. Expense	\$ -		None
403	Moving Expense	\$ -		District personnel
404	Builder's Risk Insurance	\$ 1,099	0.06%	TBD
<b>500</b>	<b>Furniture, Fixtures, &amp; Equip. (FFE)</b>	<b>\$ 30,015</b>	<b>1.61%</b>	
501	Stools for FCS	\$ 6,000		
502	Five ranges in FCS	\$ 3,000		G. Disposal in #202
503	Three refrigerators in FCS	\$ 2,400		
504	Stacked washer dryer in FCS	\$ 1,200		
505	Five microwaves in FCS	\$ 2,000		
506	Reception furniture	\$ 6,500		
507	Conference room furniture	\$ 5,000		
508	FFE Contingency (15%)	\$ 3,915	15.00%	

**Renovation Budget Detail**

Budget Code	Item	Budget	Budget % of Const. Cost	Notes
<b>600</b>	<b>Technology Systems</b>	<b>\$ -</b>	<b>0.00%</b>	
601	Network switches & fire wall	\$ -		
602	Structured Cabling System	\$ -		
603	Phone system	\$ -		
604	A/V Equipment	\$ -		
605	Access Control & Security Cameras	\$ -		
606	Public Address/Intercom System	\$ -		
607	Clocks	\$ -		
608	Technology Contingency (15%)	\$ -	15.00%	
<b>700</b>	<b>Financing Expenses</b>	<b>\$ -</b>	<b>N/A</b>	
701	Capitalized Interest During Construction	\$ -		funding will be net
702	Bond Fees	\$ -		funding will be net
	<b>Total</b>	<b>\$ 1,985,527</b>		

**Phase I Renovation Budget Detail**

Code	Item	90% CD Budget	% of Con. Cost	Permit Set Budget	% of Con. Cost	Notes
<b>100</b>	<b>Development Costs</b>	<b>\$ 2,500</b>	<b>0%</b>	<b>\$ 2,744</b>	<b>0%</b>	
101	Land	\$ -		\$ -		N/A
102	Utility Hook-up Fees	\$ -		\$ -		
103	State Building Permit	\$ 1,600		\$ 1,844		
104	Local Building Permit	\$ 900		\$ 900		
<b>200</b>	<b>Construction Cost</b>	<b>\$ 3,959,663</b>	<b>100%</b>	<b>\$ 4,079,595</b>	<b>100%</b>	
201	Site Grading, Utilities, Paving,	\$ -		\$ -		See 202
202	Building Construction	\$ 3,210,364		\$ 3,307,601		
203	General Insurance	\$ 18,941	0.59%	\$ 19,515	0.59%	
204	Construction Manager Const. Fee	\$ 88,285	2.75%	\$ 90,959	2.75%	CANCO
205	Design & Estimating Contingency	\$ 321,036	10%	\$ 330,760	10%	of con. cost
206	Construction Contingency	\$ 321,036	10%	\$ 330,760	10%	of con. cost
<b>300</b>	<b>Professional Fees &amp; Expenses</b>	<b>\$ 588,218</b>	<b>15%</b>	<b>\$ 596,474</b>	<b>15%</b>	
301	A/E Prebond Services Fee	\$ 42,224		\$ 42,224		DLR
302	CM Pre-bond Services Fee	\$ 15,000		\$ 15,000		CANCO
303	A/E Design incl CA Fee	\$ 248,803	7.75%	\$ 256,339	7.75%	DLR
304	Prepare SWPPP & NPDES Permit	\$ -		\$ -		DLR
305	Monitor & Document SWPPP	\$ -		\$ -		see #200
306	Arch/Eng. Reimbursable Expenses	\$ 11,879	0.30%	\$ 12,239	0.30%	DLR
307	Printing	\$ 11,879	0.30%	\$ 12,239	0.30%	TBD
308	CM Pre-Construction Services Fee	\$ 55,000		\$ 55,000		CANCO
309	Furniture and Equipment Consultant	\$ -		\$ -		District
310	Site Survey	\$ 11,950		\$ 11,950		Snyder
311	Geotechnical investigation & Report	\$ 10,000		\$ 10,000		TBD
312	Building Laser Scan	\$ 33,339		\$ 33,339		DLR
313	HVAC Retro-Commissioning Services	\$ 12,444		\$ 12,444		CANCO
314	Asbestos Survey & Testing	\$ 5,000		\$ 5,000		TBD
315	Mold Testing	\$ 3,000		\$ 3,000		TBD
316	3rd Party Special Inspections	\$ 5,000		\$ 5,000		TBD
317	Commissioning - IECC code minimum	\$ 47,700		\$ 47,700		IMEG
318	Commissioning - Enhanced MEP	\$ -		\$ -		See 317
320	HVAC Test and Balance	\$ 50,000		\$ 50,000		Moved from 202
321	Training and Demo - Videographer	\$ 5,000		\$ 5,000		TBD
322	Conformed Documents	\$ 20,000		\$ 20,000		TBD
<b>400</b>	<b>Administrative &amp; Legal</b>	<b>\$ 12,336</b>	<b>0%</b>	<b>\$ 12,407</b>	<b>0%</b>	
401	Legal Expense	\$ 10,000		\$ 10,000		
402	Administrative & Misc. Expense	\$ -		\$ -		None
403	Moving Expense	\$ -		\$ -		District
404	Builder's Risk Insurance	\$ 2,336	0.06%	\$ 2,407	0.06%	TBD
<b>500</b>	<b>Furniture, Fixtures, &amp; Equip. (FFE)</b>	<b>\$ 4,600</b>	<b>0%</b>	<b>\$ 4,600</b>	<b>0%</b>	
501	Furniture	\$ 4,000		\$ 4,000		Admin. Furn.
502	Lab Casework	\$ -		\$ -		
503	Lab Equipment	\$ -		\$ -		
504	Shop Equipment	\$ -		\$ -		
505	Gym & Fitness Equipment	\$ -		\$ -		
506	FFE Contingency (15%)	\$ 600	15%	\$ 600	15%	



Building Solutions Since 1913

**Phase I Renovation Budget Detail**

Code	Item					Notes
<b>600</b>	<b>Technology Systems</b>	<b>\$ 63,250</b>	<b>2%</b>	<b>\$ 63,250</b>	<b>2%</b>	
601	Network switches & fire wall	\$ 40,000		\$ 40,000		
602	Structured Cabling System	\$ -		\$ -		
603	Phone system	\$ -		\$ -		
604	Security Cameras	\$ 10,000		\$ 10,000		11 outdoor, 16 indoor
605	Door Access Control	\$ 5,000		\$ 5,000		
606	Public Address/Intercom System	\$ -		\$ -		See 202
607	Clocks	\$ -		\$ -		
608	Technology Contingency (15%)	\$ 8,250	15%	\$ 8,250	15%	
<b>700</b>	<b>Financing Expenses</b>	<b>\$ -</b>		<b>\$ -</b>		
701	Capitalized Interest During Const.	\$ -		\$ -		net funding
702	Bond Fees	\$ -		\$ -		net funding
	<b>Total</b>	<b>\$ 4,630,567</b>	<b>117%</b>	<b>\$ 4,759,070</b>	<b>117%</b>	

\$ (240,576)

\$ 128,502

**Phase I Renovation Budget Detail**

Code	Item	90% CD Budget	% of Con. Cost	Permit Set Budget	% of Con. Cost	Notes
<b>100</b>	<b>Development Costs</b>	<b>\$ 2,500</b>	<b>0%</b>	<b>\$ 2,744</b>	<b>0%</b>	
101	Land	\$ -		\$ -		N/A
102	Utility Hook-up Fees	\$ -		\$ -		
103	State Building Permit	\$ 1,600		\$ 1,844		
104	Local Building Permit	\$ 900		\$ 900		
<b>200</b>	<b>Construction Cost</b>	<b>\$ 3,959,663</b>	<b>100%</b>	<b>\$ 4,079,595</b>	<b>100%</b>	
201	Site Grading, Utilities, Paving,	\$ -		\$ -		See 202
202	Building Construction	\$ 3,210,364		\$ 3,307,601		
203	General Insurance	\$ 18,941	0.59%	\$ 19,515	0.59%	
204	Construction Manager Const. Fee	\$ 88,285	2.75%	\$ 90,959	2.75%	CANCO
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<b>300</b>	<b>Professional Fees &amp; Expenses</b>	<b>\$ 588,218</b>	<b>15%</b>	<b>\$ 596,474</b>	<b>15%</b>	
301	A/E Prebond Services Fee	\$ 42,224		\$ 42,224		DLR
302	CM Pre-bond Services Fee	\$ 15,000		\$ 15,000		CANCO
303	A/E Design incl CA Fee	\$ 248,803	7.75%	\$ 256,339	7.75%	DLR
304	Prepare SWPPP & NPDES Permit	\$ -		\$ -		DLR
305	Monitor & Document SWPPP	\$ -		\$ -		see #200
306	Arch/Eng. Reimbursable Expenses	\$ 11,879	0.30%	\$ 12,239	0.30%	DLR
307	Printing	\$ 11,879	0.30%	\$ 12,239	0.30%	TBD
308	CM Pre-Construction Services Fee	\$ 55,000		\$ 55,000		CANCO
309	Furniture and Equipment Consultant	\$ -		\$ -		District
310	Site Survey	\$ 11,950		\$ 11,950		Snyder
311	Geotechnical investigation & Report	\$ 10,000		\$ 10,000		TBD
312	Building Laser Scan	\$ 33,339		\$ 33,339		DLR
313	HVAC Retro-Commissioning Services	\$ 12,444		\$ 12,444		CANCO
314	Asbestos Survey & Testing	\$ 5,000		\$ 5,000		TBD
315	Mold Testing	\$ 3,000		\$ 3,000		TBD
316	3rd Party Special Inspections	\$ 5,000		\$ 5,000		TBD
317	Commissioning - IECC code minimum	\$ 47,700		\$ 47,700		IMEG
318	Commissioning - Enhanced MEP	\$ -		\$ -		See 317
320	HVAC Test and Balance	\$ 50,000		\$ 50,000		Moved from 202
321	Training and Demo - Videographer	\$ 5,000		\$ 5,000		TBD
322	Conformed Documents	\$ 20,000		\$ 20,000		TBD
<b>400</b>	<b>Administrative &amp; Legal</b>	<b>\$ 12,336</b>	<b>0%</b>	<b>\$ 12,407</b>	<b>0%</b>	
401	Legal Expense	\$ 10,000		\$ 10,000		
402	Administrative & Misc. Expense	\$ -		\$ -		None
403	Moving Expense	\$ -		\$ -		District
404	Builder's Risk Insurance	\$ 2,336	0.06%	\$ 2,407	0.06%	TBD
<b>500</b>	<b>Furniture, Fixtures, &amp; Equip. (FFE)</b>	<b>\$ 4,600</b>	<b>0%</b>	<b>\$ 4,600</b>	<b>0%</b>	
501	Furniture	\$ 4,000		\$ 4,000		Admin. Furn.
502	Lab Casework	\$ -		\$ -		
503	Lab Equipment	\$ -		\$ -		
504	Shop Equipment	\$ -		\$ -		
505	Gym & Fitness Equipment	\$ -		\$ -		
506	FFE Contingency (15%)	\$ 600	15%	\$ 600	15%	



Building Solutions Since 1913

**Phase I Renovation Budget Detail**

Code	Item					Notes
<b>600</b>	<b>Technology Systems</b>	<b>\$ 63,250</b>	<b>2%</b>	<b>\$ 63,250</b>	<b>2%</b>	
601	Network switches & fire wall	\$ 40,000		\$ 40,000		
602	Structured Cabling System	\$ -		\$ -		
603	Phone system	\$ -		\$ -		
604	Security Cameras	\$ 10,000		\$ 10,000		11 outdoor, 16 indoor
605	Door Access Control	\$ 5,000		\$ 5,000		
606	Public Address/Intercom System	\$ -		\$ -		See 202
607	Clocks	\$ -		\$ -		
608	Technology Contingency (15%)	\$ 8,250	15%	\$ 8,250	15%	
<b>700</b>	<b>Financing Expenses</b>	<b>\$ -</b>		<b>\$ -</b>		
701	Capitalized Interest During Const.	\$ -		\$ -		net funding
702	Bond Fees	\$ -		\$ -		net funding
	<b>Total</b>	<b>\$ 4,630,567</b>	<b>117%</b>	<b>\$ 4,759,070</b>	<b>117%</b>	

\$ (240,576)

\$ 128,502