

# **PROJECT MANUAL**

**BROWNFIELDS CLEANUP  
ASBESTOS ABATEMENT  
SACRED HEART CHURCH – 509 CAPITAL ST  
SACRED HEART SCHOOL LINK AUDITORIUM – 504 CAPITAL ST  
YANKTON, SD**

**Prepared By**

**GEOTEK ENGINEERING & TESTING SERVICES, INC  
909 East 50<sup>th</sup> Street North  
Sioux Falls, South Dakota 57104  
605-335-5512**

**January 18, 2024**

This Project Manual provides for liquidated delay damages in the amount of **\$250 per calendar day** for the Contractor's delay in completion of the work.  
See the Bid Form and Article 10 of the General Conditions for details.

**INDEX**  
**FOR**  
**SPECIFICATION**  
**HEAD SECTIONS, GENERAL CONDITIONS,**  
**SPECIAL CONDITIONS, TECHNICAL SPECIFICATIONS**  
**AND PLANS**

- 1 INDEX
- 2 INVITATION TO BID
- 3 BIDDER'S CHECKLIST
- 4 ASBESTOS CONTAINING MATERIALS STATEMENT
- 5 INSTRUCTIONS TO BIDDERS
  - A..... BID FORM AND/OR EXPLANATION OF ALTERNATES
  - A-1..... MODIFICATION TO BID FORM
  - B..... FORMAT FOR SEALED ENVELOPE
  - C..... BID BOND
  - D..... PERFORMANCE & PAYMENT BOND WITH ACKNOWLEDGMENT OF SURETY
  - E..... NON-RESIDENT BIDDER AFFIDAVIT
  - F..... CONTRACTOR'S STATEMENT OF SKILLS & CAPABILITIES
  - G..... RESIDENT SUBCONTRACTOR CERTIFICATION
- 6 AGREEMENT FOR CONSTRUCTION
- 7 GENERAL INDEX AND GENERAL CONDITIONS
- 8 ARPA SUPPLEMENTAL CONDITIONS
- 9 SPECIAL INDEX AND SPECIAL CONDITIONS
- 10 TECHNICAL INDEX AND TECHNICAL SPECIFICATIONS
- 11 PLAN INDEX AND PLANS

## **INVITATION TO BID**

## BIDDER'S CHECKLIST

The following items need to be submitted along with your bid. All bids and any modifications to bids must be in the hands of the Owner or the Owner's representative on or before the time set for opening bids in the Invitation for Bids.

- ☐ All blanks on the Bid Form are filled in.
- ☐ Receipt of all addenda is noted on the Bid Form.
- ☐ Bid Form is signed by an officer of the corporation or, if not a corporation, a proprietor or partner.
- ☐ For bids of \$100,000.00 or higher, a bid bond or security is submitted with the bid.
- ☐ If a foreign contractor, a fully executed "Non-Resident Bidder Affidavit" is submitted with the bid.
- ☐ The bid, bid bond or security, and "Non-Resident Bidder Affidavit" are placed in a sealed envelope labeled in accordance with Paragraph 2 of the "Instructions to Bidders."



## **ASBESTOS STATEMENT**

#### ASBESTOS CONTAINING MATERIALS CAUTION:

It is brought to the contractor's attention that asbestos containing materials (greater than 1%) may be present outside the project requirements yet within the building or area. The contractor shall take the necessary precautions so as not to disturb this material. If asbestos containing materials are disturbed, the contractor shall follow and comply with the state rules promulgated under SDCL 34-44 pertaining to asbestos, and 29 CFR 1926.58, 40 CFR Part 61, 40 CFR Part 763 as in effect and the United States Environmental Protection Agency publication entitled "Guidance for Controlling Asbestos Containing Materials in Buildings" (EPA 560/5-85-024, June 1985).

#### ASBESTOS CONTAINING MATERIALS STATEMENT:

In accordance with the provisions of SDCL 34-44-8, all bidders and contractors are hereby notified that this project **does** involve asbestos containing materials (greater than 1%). Proper procedures shall be followed in handling asbestos containing materials. This statement constitutes the warning and specifications required by SDCL 34-44-8. The owner or those representing the owner shall not be held responsible or liable for any injury to any individual resulting from his or her handling of or proximity to such materials. Further, the owner shall not be responsible for any extra cost to the bidder or contractor beyond that specified and included in the bid resulting directly or indirectly from handling of or proximity to these materials. Bidders are further instructed that no asbestos containing materials are to be installed in this project.

The contractor is cautioned that hidden materials unknown to the owner and inaccessible for testing may be found during the demolition work of this project which may be asbestos containing materials. Proper procedures shall be followed upon discovery of these materials. The owner or those representing the owner in any capacity shall not be held responsible or liable for any injury or cost to any person resulting from handling of or proximity to such materials.

#### ASBESTOS LIABILITY STATEMENT

In accordance with amended SDCL34-44, neither the owner, employees or agents of the owner, nor any other person may have any claim, right or action against the prime contractor for any asbestos related injury or damage arising from the activities of a certified asbestos abatement subcontractor. Unless exempt under applicable state and federal law, no asbestos abatement work may be performed except by a certified asbestos contractor. A certified asbestos abatement subcontractor shall hold the owner and general contractor harmless from any liability arising from such subcontractor's activities on the project. A certified asbestos abatement contractor shall cause the owner and, if acting as a subcontractor, the general contractor to be named as additional insureds and provide sufficient proof of insurance for purposes of this section.

## **INSTRUCTIONS TO BIDDERS**

## **Instructions to Bidders**

### **1. Examination of Plans, Specifications and Site.**

Bidders should carefully examine the site of the proposed work, subsurface conditions, the Plans and Specifications, and the bid and contract documents governing the project. The submission of bids is conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered; the character, quality, and scope of the proposed work; the quality and quantity of the materials to be furnished; and the requirements of the bid, the Plans and Specifications, and the other Contract Documents.

The Plans and Specifications are to be used only with respect to this project and are not to be used for any other project or purposes other than preparing a bid for this project; the Plans and Specifications will not be disseminated to any person or entity for purposes other than obtaining pricing information without the express written approval of the Owner; all information contained in the Plans and Specifications is confidential; and should the bidder disseminate the Plans and Specifications to an individual or entity for purposes of obtaining pricing information, the bidder will require that individual or entity to adhere to the terms set forth herein. The bidder, however, assumes no liability for the misuse of the Plans and Specifications by such third party or such third party's failure to comply with the provisions contained herein.

Any copies of the Plans and Specifications obtained directly from the Architect/Engineer will be returned to the office of the Architect/Engineer immediately after the Owner provides notice that bidder will not be awarded a contract, or thirty (30) days after the bid opening for the project, whichever occurs first. Any copies of the Plans and Specifications made by the bidder will be destroyed immediately after the Owner provides notice that bidder will not be awarded a contract, or thirty (30) days after the bid opening for the project, whichever occurs first. If bidder does not submit a bid, bidder will fulfill the requirements previously outlined on or before the date of the bid opening. Should bidder be awarded a contract for construction of the project, bidder does not need to return or destroy Plans and Specifications until after completion of the project.

### **2. Submission of Bids.**

Each bid must:

- a. Be submitted on the prescribed form (Exhibit "A"); all blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures;
- b. Include any addenda issued during the time of advertising for bids the same as though it had been included in the original Plans and Specifications; and
- c. Be submitted in a sealed opaque envelope bearing on the outside the name of the bidder, his/her address, and the name of the project for which the bid is submitted. See Exhibit "B" attached hereto for Sample Format for envelope. If forwarded by mail, Federal Express, or another commercial courier, the sealed envelope containing the bid must be enclosed in another envelope addressed as specified on the bid form.

All bids and any modifications to bids must be in the hands of the Owner or the Owner's representative on or before the time set for opening bids in the Invitation for Bids. Bids that are not properly marked may be disregarded. Bids will not be received after the time for bid opening.

### **3. Modification of Bids.**

- a. Bids may be modified by mail or email received at the place designated in the Invitation to Bid, not later than the time set for the opening of bids. A modification shall not reveal the bid price, but shall provide the addition or subtraction or the modification so that the final prices or terms will not be known to the public corporation until the sealed bid is opened (see Exhibit "A-1", Modification To Bid Form). A modification may not be withdrawn after the time set for the opening of bids. No bid made shall be changed or altered by telephone. No oral changes, alterations or conditions will be accepted under any circumstance.
- b. An email modification must be submitted on Exhibit "A-1", Modification To Bid Form to the email address [bbies@cityofyankton.org](mailto:bbies@cityofyankton.org). Pursuant to the requirements of SDCL §5-18A-5(6), Owner will not accept any email modification received in its offices after the time set for the opening of bids.

### **4. Contractor's Qualification Statement.**

For bids of \$100,000.00 or more, the low bidder, upon request, must submit to the Owner and A/E, within 48 hours of said request, Contractor's Statement of Skills and Capabilities (Exhibit "F") with their bids. The Contractor's Qualification Statement (AIA Document A305) or the AGC's Contractor Qualification Statement may be used provided it includes all the information required by the Owners document, minus the financial statement.

### **5. Bid Security.**

Each bid over \$100,000.00 must be accompanied by a bid security as follows:

- a. Certified Check, Cashier's Check or Draft. A certified check, cashier's check or draft for five percent (5%) of the amount of the bid, including all add alternates, such check to be certified or issued by either a State or National Bank and payable to said public corporation or officer.
- b. Bid Bond. In lieu of a certified check as a bid guarantee, a bid bond of ten percent (10%) of the total amount of the bid, including all add alternates, may be furnished by the Contractor. See Exhibit "C" for Bid Bond form. Such bond to be issued by a surety authorized to do business in the State of South Dakota. Such bond shall be payable to said public corporation or officer as guaranty that such bidder will enter into a contract with said public corporation, its Board or officers thereof, in accordance with the terms of such letting and bid in case such bidder be awarded the contract.

No bidder shall be required to leave his/her certified check or other guaranty or bid bond posted for a longer period than thirty (30) days if the bid is not accepted. The certified check or other guaranty of the successful bidder shall be returned to him forthwith upon the execution of the contract and surety herein provided for.

### **6. Withdrawal of Bids.**

Any bid may be withdrawn by letter, email, or in person before the time specified in the advertisement therefor. Withdrawal of a bid does not prejudice a bidder's right to submit a new bid within the time designated for the submission of bids. No bids may be withdrawn after the time designated in the Invitation to Bid for the opening of bids. The email address for withdrawing a bid is [bbies@cityofyankton.org](mailto:bbies@cityofyankton.org).

## **7. Request for Interpretation.**

Any person who plans to bid on the project may submit to the Owner a written request for an interpretation of any part of the Plans and Specifications or Contract Documents. Requests for interpretations shall be made not less than ten (10) days prior to the opening of bids. Any interpretation will be in writing and furnished to each person receiving Plans and Specifications for bidding. The Owner will not be responsible for any other explanation or interpretation.

## **8. Or Equal Clause.**

Whenever a material, article, or piece of equipment is identified on the Plans or in the Specifications by reference to manufacturers' or vendors' names, trade names, catalogue numbers, etc., it is intended merely to establish a standard; and any materials, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design will be considered equally acceptable provided the requirements of Article 6.3.4 of the General Conditions are met and the material, article, or equipment so proposed is, in the opinion of the A/E, of equal substance and functions.

## **9. Preference for South Dakota Products, Labor and Materials.**

By virtue of statutory authority in SDCL § 5-18A-6(10) et seq. preference will be given to South Dakota products, labor and materials as provided by law.

## **10. Opening of Bids.**

Bids will be received until the time for opening designated in the Invitation to Bid. All bids received within the designated time will be opened and read aloud at the time and place designated in the Invitation to Bid. Bidders and their authorized agents are invited to attend.

## **11. Relief from Mistake in Bid.**

A bidder claiming a mistake in a bid must give the Owner written notice of the alleged mistake within five calendar days after the bids are opened, specifying in detail how the mistake occurred. Relief will only be granted for clerical or mathematical mistakes which can be documented to the satisfaction of the Owner.

## **12. Rejection of Bids.**

Bids may be rejected if they show any alteration of form, additions not called for, conditional bids, incomplete bids, unexplained erasures, or irregularities of any kind. The Owner may waive any informality in the bids received. When bids are signed by an agent other than an authorized corporate officer or member of a partnership, a power of attorney must be filed with the bid. Otherwise, the bid will be rejected as irregular and unauthorized. If there is reason to believe that collusion among the bidders exists, any or all bids may be rejected. The Owner reserves the right to reject all bids if in the judgment of the Owner it is in the best interest of the Owner.

## **13. Award of Contract.**

If the contract is awarded, it will be awarded to the responsible bidder submitting the lowest bid, subject to paragraph 17 below, which complies with the Invitation to Bid and with these instructions. The successful bidder will be notified within thirty (30) calendar days of the date bids are opened. Subsequent to notice of award, the successful bidder will be presented with a contract agreement. The contract will require the completion of work according to the Plans and Specifications and the Contract Documents. Conditional bids will not be accepted.

#### **14. Responsibility.**

The Owner may make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein.

#### **15. Nonresident Bids.**

SDCL § 5-18A-26, provides that the Contract shall be let to the lowest responsible bidder; provided, however, a resident bidder may be allowed a preference on any such contract as against the bid of any bidder from any other State or foreign province which enforces or has a preference for resident bidders. The amount of the preference given to the resident bidder shall be equal to the preference in the other state.

#### **16. Subcontractor Certification.**

SDCL§ 5-18B-6, provides that prior to execution of a public improvement project a successful bidder shall certify on the prescribed form (Exhibit "G"):

- (1) That no more than twenty-percent of the cost of labor included in the contract is being provided by nonresident subcontractors; or
- (2) That more than twenty percent of the cost of labor included in the contract is being provided by nonresident subcontractors because resident contractors are not available and at competitive prices.

#### **17. Method of Award.**

- a. Bidding procedure involving only a base bid: If the base bid is within the amount of funds available to finance the demolition contract, then contract award will be made to that responsible bidder submitting the low base bid. If the low bid exceeds the funds available to finance the construction, the Owner may negotiate with the low bidder to produce a bid amount within the availability of funds.
- b. Bidding procedure involving a base bid and alternate bids: If the base bid is within the amount of funds available to finance the demolition contract and the Owner wishes to accept alternate bids, then contract award will be made to that responsible bidder submitting the low combined bid, consisting of the base bid and any combination of add or deduct alternative bids found to be most advantageous to the Owner. Under this procedure, if the Owner wishes to make award on low base bid only, then contract award will be made to that responsible bidder submitting the low base bid. If the low bid exceeds the funds available to finance the construction, the Owner may negotiate with the low bidder to produce a bid amount within the availability of funds.

#### **18. Execution of Agreement.**

Within ten (10) calendar days after the proposed contract agreement is presented to the successful bidder for execution, the successful bidder must execute the contract documents and, *if the Contract is for more than \$100,000.00*, provide a performance and labor and material payment bond.

**19. Performance & Labor and Material Payment Bond.**

If the Contract is for more than \$100,000.00, provide a performance and labor and material payment bond produced by a South Dakota licensed insurance producer (agent) and issued by a South Dakota licensed surety in an amount not less than the amount of the awarded contract. The performance and labor and material payment bond Surety or Sureties shall meet all requirements of South Dakota Law.

This bond is to secure the faithful performance of the contract and the payment of those to whom the bidder may become legally indebted for labor, materials, tools, equipment, or services of any kind used or employed by the bidder in performing the work. The surety bond shall be on the form attached hereto as Exhibit "D". *(Failure on the part of the bidder to furnish such bond in the time stated shall be cause for consideration by the Owner of awarding the Contract to the second low bidder and the retention of the bid deposit.)*

**20. Power of Attorney.**

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

**21. Default.**

The failure to execute the contract documents or to furnish bonds required by these instructions within ten (10) calendar days after the proposed contract agreement is presented for execution constitutes a default. In the event of a default, the State may award the contract to the next lowest bidder or may re-advertise for bids. The State may charge against the defaulting bidder the difference between the amount of the bid and the amount for which a contract for the work is subsequently executed plus the State's additional administrative cost necessitated by the bidder's failure to execute the Contract Documents, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the State for a refund.

**22. Commencement of Work/Time of Completion.**

The contractor for the general construction shall commence work under the contract within ten (10) consecutive calendar days after issuance of written Notice to Proceed and shall substantially complete all work under the contract within the timeframe specified in the Bid Form.

**23. Liquidated Damages.**

See Article 10.3.4 of the General Conditions.

**24. Applicable Laws and Regulations.**

The bidder's attention is directed to the fact that all applicable South Dakota laws, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout and they will be deemed to be included in the contract the same as though herein written out in full.

**25. South Dakota Tax Information for Public Contracts.**

Contractors performing public contracts in South Dakota may become responsible for two types of taxes: the excise tax upon realty improvement contracts and the sales/use tax upon materials.



All contractors must secure a license from the Department of Revenue before engaging in the construction activities in this State. Detailed information on tax requirements may be obtained from the Department of Revenue, Anderson Building, Pierre, South Dakota 57501. Telephone 605.773.3311.

**26. Applicable Standards.**

In addition to codes, Standards and Regulations referenced for compliance in the various sections of the Specifications, the work shall be in compliance with the following:

ANSI Z53.1 - 1971, and as revised  
Safety color code for marking physical hazards.

ANSI A13.1 - 1975, and as revised  
Scheme for the identification of piping systems.

ANSI C2, and as revised  
National Electrical Safety Code.

**27. Affirmative Action Plan.**

All contractors, vendors, and suppliers, employing fifty or more persons, shall maintain (and provide if requested) on file a statement of Affirmative Action that said contractor, vendor, or supplier does not discriminate in its employment practices with regard to race, color, religion, sex or national origin.

**28. Procurement Law.**

This project is subject to the provisions of SDCL § 5-18A and 5-18B et seq.

**29. Federal Registration.**

All bidders shall be registered with SAM.gov.

## **EXHIBIT “A”**

### **BID FORM**

**BID FORM**

**BROWNFIELDS CLEANUP  
ASBESTOS ABATEMENT**

**SACRED HEART CHURCH – 509 CAPITAL ST  
SACRED HEART SCHOOL LINK AUDITORIUM – 504 CAPITAL ST  
YANKTON, SD  
GeoTek Project No.: 22-199**

Date \_\_\_\_\_

**To: City of Yankton  
416 Walnut St  
Yankton, South Dakota 57078**

**Phone: 605-668-5224**

The undersigned, being familiar with the local conditions affecting the work, and with the Contract Documents, including the Invitation to Bid, Instructions to Bidders, Bid Form, Explanation of Alternates, Modification to Bid Form, Bid Bond Form, Performance and Payment Bond, Acknowledgment of Surety, Sample Certification of Surety, Non-Resident Bidder Affidavit, Form of Agreement for Construction, General Conditions, Special Conditions, Technical Specifications, Plans and Addenda which govern the purchase of material and labor and the awarding of contracts hereby proposes to do all the work and provide all the material and equipment which pertains to:

**The Brownfields Cleanup, Asbestos Abatement, Sacred Heart Church-509 Capital St, Sacred Heart School Link Auditorium-504 Capital St, Yankton, South Dakota** in accordance with the plans and specifications dated January 18, 2024.

**CHURCH BASE BID – Includes the following:**

Removal of all the ceiling spray and substrate from the church area and adjoining service rooms  
Removal of pipe fitting insulation from the steam lines – include thirty (30) fittings on steam lines scattered in the ceiling cavity and basement/crawlspace sections

**CHURCH BASE BID:**

\_\_\_\_\_ **DOLLARS**

(\$ \_\_\_\_\_ )

**SCHOOL LINK/AUDITORIUM BASE BID – Includes the following:**

Removal of floor tile and base cove and adhesive from the projection room and main stairs to balcony  
Removal of light fixtures with asbestos insulation – include 2 fixtures  
Removal of transite panels – East Edge of the Gymnasium  
Removal of approximately 5 lineal feet of caulk at the exterior – NW entry

**SCHOOL LINK/AUDITORIUM BASE BID:**

\_\_\_\_\_ **DOLLARS**

(\$ \_\_\_\_\_ )

**CHURCH ALTERNATE BID – Includes the following:**  
Base Bid Items omitting the ceiling substrate removal.

**CHURCH ALTERNATE BID:**

\_\_\_\_\_ **DOLLARS**

(\$ \_\_\_\_\_ )

**UNIT PRICE BIDS:**

In the event additional materials are required to be removed beyond what is identified in the base bid or alternate bid.

Mobilization to perform additional work beyond \$ \_\_\_\_\_ each  
what is identified in the base or alternate Bids

Pipe Fittings (assume same size as those included in the \$ \_\_\_\_\_ each  
Base Bid

Light fixtures with ACM insulation \$ \_\_\_\_\_ each

The above unit prices shall include all labor, materials, bailing, shoring removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. Changes shall be processed in accordance with Article 14 of the General Conditions.

The Owner also reserves the unrestricted privilege to reject any unit prices for additions to or deductions from the scheduled amount of work as given in the Bid, if the same are considered excessive or unreasonable, or to accept by including the same in the contract as unit prices applicable in the event of addition to or deduction from the work to be performed under the contract, any or all such unit prices which may be considered fair or reasonable.

The above bid includes all applicable State and Municipal Sales and Use Taxes on materials, and State and Municipal Excise Taxes and all other State and Federal Taxes that would affect the amount of the bid. (See Instructions to Bidders-SD Sales and Use Tax Information for Public Contracts.)

In addition, any material furnished by the Owner for use in this project is subject to Use Tax and Excise Tax. The total taxable value of materials furnished by the City for this project is **\$ 0.00** \_\_\_\_\_.

*A Performance and Payment Bond as required by General Conditions will not be required on contracts which do not exceed One Hundred Thousand Dollars (\$100,000). (See SDCL 5-21-1.1 as amended).*

*If discrepancies remain at the time of substantial completion, a value will be assigned to each of the discrepancies and two (2) times their estimated value will be retained from payment to the Contractor until completed and accepted. (See SDCL 5-18-13 as amended).*

**Within ten (10) days after Contractor's receipt of the Agreement for Construction, the Contractor shall submit to the Owner, the executed Agreement for Construction, Performance and Payment Bond, Certificates of Insurance and Affirmative Action Plan (if applicable).**

**Work shall be commenced within ten (10) consecutive calendar days after written Notice to Proceed by the Owner and shall be substantially completed by six weeks after notice to proceed.**

The undersigned acknowledges receipt of the following addenda to the drawings and/or specifications (give number and date of each):

Addenda Nos. \_\_\_\_\_ dated \_\_\_\_\_ respectively.

The undersigned acknowledges that they have read and understand the Asbestos-Containing Materials Statement contained in the project manual.

Accompanying this proposal is a certified check, cashier's check or draft in the amount of 5% of the base bid and all add alternates, and drawn on a State or National Bank in the amount of \$ \_\_\_\_\_ or a 10% bid bond issued by a surety authorized to do business in the State of South Dakota, in the amount of \$ \_\_\_\_\_. *(Not applicable if Bid is under \$100,000.)*

In submitting this bid, it is understood that the right is reserved by the Owner to reject any and all bids and to waive any irregularities. It is further understood by the Bidder that he may not withdraw his Bid within 30 days after the actual opening thereof.

In submitting this bid, bidder asserts it has reviewed all provisions of the General Conditions including the provision for assessment of liquidated delay damages found in Article 10 of the General Conditions. Bidder agrees that the damages anticipated by the Owner in the event of delay in completion of the project are uncertain in amount and difficult to prove; the amount stipulated in Article III of the Agreement for Construction is a reasonable amount in light of the anticipated loss and injury; and the Owner's actual damages in the event of delay would be impracticable or extremely difficult to fix. Bidder agrees to be bound by the liquidated damages set forth in Article III of the Agreement for Construction. Bidder further agrees that the liquidated amount stipulated in Article III of the Agreement for Construction is not a penalty.

For contractors, vendors, suppliers, or subcontractors with five (5) or more employees who enter into a contract with the State of South Dakota that involves the expenditure of one hundred thousand dollars (\$100,000) or more, by submitting a response to this solicitation or agreeing to contract with the Owner, the bidder or offeror certifies and agrees that the following information is correct:

The bidder or offeror, in preparing its response or offer or in considering proposals submitted from qualified, potential vendors, suppliers, and subcontractors, or in the solicitation, selection, or commercial treatment of any vendor, supplier, or subcontractor, has not refused to transact business activities, has not terminated business activities, and has not taken other similar actions intended to limit its commercial relations, related to the subject matter of the bid or offer, with a person or entity on the basis of Israeli national origin, or residence or incorporation in Israel or its territories, with the specific intent to accomplish a boycott or divestment of Israel in a discriminatory manner. It is understood and agreed that, if this certification is false, such false certification will constitute grounds for the State to reject the bid or response submitted by the bidder or offeror on this project and terminate any contract awarded based on the bid or response. The successful bidder or offeror further agrees to provide immediate written notice to the contracting executive branch agency if during the term of the contract it no longer complies with this certification and agrees such noncompliance may be grounds for contract termination.

Compliance with Executive Order 2023-02, Contractor certifies and agrees that the following information is correct:

In preparing its response or offer or in considering proposals submitted from qualified, potential subconsultants, vendors, suppliers, and subcontractors, or in the solicitation, selection, or commercial treatment of any subconsultant, vendor, supplier, or subcontractor, Contractor is not an entity, regardless of its principal place of business, that is ultimately owned or controlled, directly or indirectly, by a foreign national, a foreign parent entity, or foreign government from China, Iran, North Korea, Russia, Cuba, or Venezuela, as defined by South Dakota Executive Order 2023-02.

Contractor further agrees that, if this certification is false, such false certification will constitute grounds for the State to terminate this Agreement. Contractor further agrees to provide immediate written notice to the State if during the term of this Agreement it no longer complies with this certification and agrees such noncompliance may be grounds for termination of this Agreement.

The undersigned further acknowledges that they have read, understand, and agree to the information stated in the Instructions to Bidders.

BIDDER: _____ (Type Name of Firm)
BY: _____ (Signature of Firm's Representative)
_____ (Type Name and Title of Firm's Representative)
TELEPHONE NO. _____
E-MAIL ADDRESS _____
BUSINESS ADDRESS _____ _____
STATE OF INCORPORATION _____

**EXHIBIT “A-1”**

**MODIFICATION TO BID FORM**

**MODIFICATION  
to Bid Form**

**BROWNFIELDS CLEANUP  
ASBESTOS ABATEMENT  
SACRED HEART CHURCH – 509 CAPITAL ST  
SACRED HEART SCHOOL LINK AUDITORIUM – 504 CAPITAL ST  
YANKTON, SD  
GeoTek Project No.: 22-199**

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

**To:** City of Yankton  
416 Walnut St  
Yankton, South Dakota 57078

Phone: 605-668-5224  
Email: [bbies@cityofyankton.org](mailto:bbies@cityofyankton.org)

Please make the following modifications to our bid on the referenced project. This modification is per the Instructions to Bidders Item #3 included in the original bid documents and modifies our sealed bid.

*Note To Bidder: Please circle the appropriate ADD/DEDUCT and "X" out the undesired action.*

**Modification to Base Bid - ADD / DEDUCT to our Bids the Sums of**

**CHURCH BASE BID:**

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

**SCHOOL LINK/AUDITORIUM BASE BID:**

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

**CHURCH ALTERNATE BID:**

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)



**UNIT PRICE BIDS:**

Mobilization to perform additional work beyond what is identified in the base or alternate Bids \$\_\_\_\_\_ each

Pipe Fittings (assume same size as those included in the Base Bid) \$\_\_\_\_\_ each

Light fixtures with ACM insulation \$\_\_\_\_\_ each

The undersigned acknowledges receipt of the following addenda to the drawings and/or specifications (give number and date of each):

Addenda Nos. \_\_\_\_\_ dated \_\_\_\_\_ respectively.

In submitting this modification to bid, it is understood that the right is reserved by the Owner to reject any and all bids and to waive any irregularities. It is further understood by the Bidder that he may not withdraw his Bid within 30 days after the actual opening thereof.

BIDDER: \_\_\_\_\_  
(Type Name of Firm)

BY: \_\_\_\_\_  
(Signature of Firm's Representative)

\_\_\_\_\_  
(Type Name and Title of Firm's Representative)

TELEPHONE NO. \_\_\_\_\_

E-MAIL ADDRESS \_\_\_\_\_

BUSINESS ADDRESS \_\_\_\_\_

STATE OF INCORPORATION \_\_\_\_\_

## EXHIBIT “B”

### SAMPLE OF SEALED ENVELOPE

Return Address  
John Smith, Contractor  
Box 1  
Anytown, USA

TO: City of Yankton  
416 Walnut St  
Yankton, South Dakota 57078

Bid For: Asbestos Abatement  
Sacred Heart Church—509 Capital St  
Sacred Heart School Link Auditorium—504 Capital St  
Yankton, SD

To Be Opened:  
Addenda Received: Nos. \_\_\_\_\_

## **EXHIBIT “C”**

### **BID BOND**

## BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, \_\_\_\_\_

as Principal, and \_\_\_\_\_

as Surety, are hereby held and firmly bound unto \_\_\_\_\_

as owner for the penal sum of \_\_\_\_\_ of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The condition of the above obligation is such that whereas the Principal has submitted to

\_\_\_\_\_ a certain Bid, attached hereto and hereby made

a part hereof to enter into a contract in writing for the \_\_\_\_\_

NOW, THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract, attached hereto (properly completed in accordance with said bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid.

Then this obligation shall be void, otherwise the same shall remain in force and effect: it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extensions of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

\_\_\_\_\_(L.S.)  
Principal

\_\_\_\_\_  
Surety

SEAL

By: \_\_\_\_\_

**EXHIBIT “D”**

**PERFORMANCE AND PAYMENT BOND**

**PERFORMANCE AND PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS, THAT WE \_\_\_\_\_

\_\_\_\_\_  
(Contractor – Name and address)

hereinafter called "Principal", and \_\_\_\_\_

\_\_\_\_\_  
(Surety – Name and address)

a corporation, organized and existing under the laws of the State of \_\_\_\_\_, and duly authorized to transact business in the State of South Dakota, hereinafter called "Surety", are held and firmly bound unto the State of South Dakota, hereinafter called "Obligee", in the just and full sum of \_\_\_\_\_ Dollars(\$ \_\_\_\_\_)

lawful money of the United States of America to be paid to the State of South Dakota, which payment to be made, we bind ourselves, our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

The condition of this obligation is such that:

WHEREAS, Principal has been awarded a contract with Obligee for the construction of:

PROJECT NAME: \_\_\_\_\_

\_\_\_\_\_

PROJECT LOCATION: \_\_\_\_\_

\_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_

\_\_\_\_\_

which Contract is herein referred to and made a part hereof as fully and to the same extent as if the same were entirely written herein; and

WHEREAS, it was one of the conditions of the award by Obligee of the Contract that these presents should be executed.

PROVIDED, FURTHER, that the Surety, for consideration received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, to work to be performed thereunder or to the specifications accompanying the Contract shall in any manner affect its obligation on this Bond. The Surety hereby does waive notice of any such change, extension of time, alteration or addition to the terms of the Contract, to the work or to the specifications. The Surety further stipulates and agrees that this Bond shall be valid and enforceable regardless of the time period

between the date of execution of the Bond by the Surety and the date of execution of the Bond by the Principal.

PROVIDED, FURTHER, that no final settlement between the Obligee and the Principal shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

NOW, THEREFORE, if the Principal in all respects complies with the terms and conditions of the Contract and his (their or its) obligations thereunder, including specifications therein referred to and made a part thereof and any alteration made in such specifications as herein or therein provided, then this obligation is void, but otherwise remains in full force and effect.

A further condition of this bond is that in the event the Principal fails to pay all just claims and demands on the part of any employee, person, firm or corporation for labor and materials furnished for or used in connection with the prosecution of the work under the Contract, or fails to pay any tax which may accrue to the State of South Dakota under the provisions of the "Use Tax Act of 1939 and The Excise Tax on Realty Improvements under SDCL 10-46A," and Sections 5-21-3 and 5-21-4 of the South Dakota Codified Laws, this bond and the sureties thereon shall be responsible to such person, firm or corporation and to the State of South Dakota for the full payment of the value of such labor and materials so furnished, including payment of South Dakota use taxes and excise taxes on realty improvements.

SIGNED AND SEALED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

**INDIVIDUAL PRINCIPAL**

By \_\_\_\_\_ Typed Name \_\_\_\_\_  
(Affix Seal if available)

**PARTNERSHIP, CORPORATE, OR LLC PRINCIPAL**

By \_\_\_\_\_ Typed Name \_\_\_\_\_

Title \_\_\_\_\_ Business Name \_\_\_\_\_  
(Affix Corporate Seal if available)

Address \_\_\_\_\_



**INDIVIDUAL, PARTNERSHIP OR CORPORATE SURETY**

By \_\_\_\_\_ Typed Name \_\_\_\_\_

Title \_\_\_\_\_ Business Name \_\_\_\_\_  
(Affix Corporate Seal if available)

Address \_\_\_\_\_

Surety's South Dakota License Number: \_\_\_\_\_

Insurance Producer's Name: \_\_\_\_\_

Insurance Producer's South Dakota License Number: \_\_\_\_\_

**ACKNOWLEDGMENT OF PRINCIPAL  
(Individual)**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally  
appeared \_\_\_\_\_, known to me to be the individual described in  
and who executed the foregoing instrument and acknowledged to me that he/she executed the same.

\_\_\_\_\_  
Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**ACKNOWLEDGMENT OF PRINCIPAL  
(Partnership)**

State of \_\_\_\_\_ )  
 ) ss  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally  
appeared \_\_\_\_\_, who acknowledged himself/herself to be one  
of the partners of \_\_\_\_\_, a partnership, and that  
he/she, as such partner, being authorized so to do, executed the foregoing instrument for the purposes  
therein contained, by signing the name of the partnership by himself/herself as a partner.

\_\_\_\_\_  
Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**ACKNOWLEDGMENT OF PRINCIPAL  
(Corporation)**

State of \_\_\_\_\_ )  
 ) ss  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally  
appeared \_\_\_\_\_, who acknowledged himself/herself to  
be the \_\_\_\_\_ of \_\_\_\_\_, a corporation,  
and that he/she, as such \_\_\_\_\_ being authorized so to do, executed the  
foregoing instrument for the purposes therein contained, by signing the name of the corporation by  
himself/herself as \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ before me personally appeared \_\_\_\_\_, who acknowledged himself/herself to be the \_\_\_\_\_ of \_\_\_\_\_, a limited liability company, and that he/she in such capacity, being authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the limited liability company by himself/herself as \_\_\_\_\_.

Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

## ACKNOWLEDGMENT OF SURETY (Corporate Officer)

State of) \_\_\_\_\_ )ss  
County of \_\_\_\_\_ )

On this \_ day of \_\_\_\_\_, 20\_\_\_\_, before me, a Notary Public in and for said County, personally appeared \_\_\_\_\_ personally known to me, who being by me duly sworn, did say that he/she aforesaid officer of the \_\_\_\_\_ of \_\_\_\_\_, a corporation duly organized and existing under the laws of the State of \_\_\_\_\_, that the seal affixed to the foregoing instrument is the corporate seal of said corporation, that the said instrument was signed, sealed and executed in behalf of said corporation by authority of its Board of Directors, and further acknowledges that the said instrument and the execution thereof to be the voluntary act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto subscribed by name and affixed by official seal at \_\_\_\_\_, the day and year last above written.

Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**ACKNOWLEDGMENT OF SURETY  
(Attorney-In-Fact)**

State of \_\_\_\_\_)

County of \_\_\_\_\_)ss

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_ known to me or satisfactorily proven to the person whose name is subscribed as attorney in fact for \_\_\_\_\_ and acknowledged that he/she executed the same as the act of his/her principal for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto subscribed my name and affixed my official seal at \_\_\_\_\_, the day and year last above written.

\_\_\_\_\_  
Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**APPROVAL AS TO FORM**

Approved as to form this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Assistant Attorney General

**EXHIBIT “E”**

**NON-RESIDENT BIDDER AFFIDAVIT**

**NON-RESIDENT BIDDER AFFIDAVIT**

Country of \_\_\_\_\_ )

)ss

State or Province of \_\_\_\_\_ )

Business Name: \_\_\_\_\_

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

\_\_\_\_\_

Affiant's Name and Title: \_\_\_\_\_

Project Name and Location: \_\_\_\_\_

A/E Project Number:

**AFFIDAVIT WHEN NO PREFERENCE IS GIVEN**

I do hereby affirm that \_\_\_\_\_ resides in the country of \_\_\_\_\_

\_\_\_\_\_ in the state or province of \_\_\_\_\_

and that said country and/or state or province does not grant a preference to resident bidders for work on behalf of said country, state or province.

Dated: \_\_\_\_\_

Signed \_\_\_\_\_

**AFFIDAVIT WHEN PREFERENCE IS GIVEN**

I do hereby affirm that \_\_\_\_\_ resides in the country of \_\_\_\_\_  
\_\_\_\_\_ in the state or province of \_\_\_\_\_  
and that said country and/or state or province does grant a preference to resident bidders for work on behalf of  
said country, state, or province, the nature and extent of such preference being \_\_\_\_\_  
\_\_\_\_\_.

Dated: \_\_\_\_\_

Signed \_\_\_\_\_

**ACKNOWLEDGEMENT OF AFFIANT**

Country of \_\_\_\_\_ )

)ss

State or Province of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20, before me personally appeared  
\_\_\_\_\_, known to me to be the affiant who, being duly  
sworn, declares all statements made in this affidavit to be true and correct to the best of his or her knowledge.

\_\_\_\_\_  
Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

## **EXHIBIT “F”**

### **CONTRACTOR’S STATEMENT OF SKILLS AND CAPABILITIES**



## **CONTRACTOR'S STATEMENT OF SKILLS AND CAPABILITIES**

Send Completed Form to: **City of Yankton**  
**416 Walnut St**  
**Yankton, South Dakota 57078**  
**Phone: 605-668-5224**

Project: **BROWNFIELDS CLEANUP**  
**ASBESTOS ABATEMENT**  
**SACRED HEART CHURCH – 509 CAPITAL ST**  
**SACRED HEART SCHOOL LINK AUDITORIUM – 504 CAPITAL ST**  
**YANKTON, SD**

### **CONTRACTOR INFORMATION**

#### **A. Business Structure**

##### **Submitted By:**

1. Current Business Name and Address.

Business Name:

Address:

Phone:

E-mail:

2. How many years has your company been in business under the name listed above?
3. Has your company been in business under any other business name(s)?  
If so, list previous business name(s) and the years your company operated under each name:
4. If a corporation, provide the:  
  
Date and State of incorporation:  
  
Type of corporation:

Names of Officers

President:

Vice-president(s):

Secretary:

Treasurer:

5. If a partnership, provide the:

State of Organization:

Partnership type:

Date of organization:

Names of partners:

6. If individual, provide:

Date of organization:

Name of owner:

7. Use this space to describe your company's business structure if it differs from those listed above:

8. List the states and trades in which you may legally do business where applicable. Provide registration or license number(s).

9. If your company is organized under the laws of another state, has it registered with the Secretary of State for the State of South Dakota and/or the Department of Revenue?

## **B. Background and History**

1. What types of Work does your company perform with its own forces?
2. Has your company ever failed to complete Work it had contracted to perform? Provide details if the answer is “yes.”
3. Within the last five years, has any officer or principal of your company been an officer or principal of another company that failed to complete Work that the latter company contracted to perform? Provide details if “yes.”
4. List any and all judgments, claims, suits at law, or arbitration proceedings pending or outstanding against your company or its officers regarding any construction contracts:
5. Within the last five years, has your company filed law suits or requested arbitration regarding any construction contracts?
6. On separate paper, provide a list of major construction projects your company is currently working on. For purposes of this document “major construction projects” shall be considered anything of average size or greater for your company. Provide name of owner, location, architect, contract amount, and scheduled completion.
7. On separate paper, list the major construction projects your company has completed in the last five years. For purposes of this document “major construction projects” shall be considered anything of average size or greater for your company. Provide name of owner, project, location, architect, contract amount, and scheduled completion.
8. On separate paper, list the construction background/experience of the key personnel in your company.
9. What is the average annual value of all construction work your company performed within the last five years?

### C. References

1. List your company's Business/Industry References:
2. List your company's Financial References:
3. Provide the name and address of your company's Surety, as well as the name and address of the Agent:

### SIGNATURE AND NOTARIZATION

Date \_\_\_\_\_

Typed Name: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Signature

Business Name: \_\_\_\_\_

(Affix Seal)

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

\_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20, before me personally appeared \_\_\_\_\_, known to me to be the affiant who, being duly sworn, declares all statements made in this affidavit to be true and correct to the best of his or her knowledge.

\_\_\_\_\_  
Notary Public

My commission expires the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

## **EXHIBIT “G”**

### **RESIDENT AND NON-RESIDENT SUBCONTRACTOR BREAKOUT**

### Resident and Non-resident Subcontractor Breakout

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

Contract Amount: \_\_\_\_\_

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

Re: **ASBESTOS ABATEMENT  
SACRED HEART CHURCH – 509 CAPITAL ST  
SACRED HEART SCHOOL LINK AUDITORIUM – 504 CAPITAL ST  
YANKTON, SD**

## Resident Contractors

Company	Location	Labor Cost	% Value of Contract
Total:			

## Non- Resident Contractors

Company	Location	Labor Cost	% Value of Contract
Total:			

As defined in 5-18A:

(26) "Resident," any person, partnership, association, limited liability company, foreign limited liability company, corporation, or foreign corporation licensed to do business within this state that has maintained a substantial and bona fide place of business and has conducted business from within this state for at least one year prior to the date on which a contract was awarded. The members of the partnership or association shall have been bona fide residents of the state for one year or more immediately prior to bidding upon the contract. A foreign corporation licensed pursuant to §§ 47-1A-1501 to 47-1A-1532, inclusive, is not a resident as defined by this section if the state or country in which it is organized enforces or has a preference for resident bidders;

If more than 20% of the labor cost included in the contract is being provided by nonresident subcontractors, please explain: \_\_\_\_\_

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## **AGREEMENT FOR CONSTRUCTION**



PLANS AND SPECIFICATIONS PREPARED  
BY: **GeoTek Engineering & Testing Services, Inc.**  
**909 E. 50<sup>TH</sup> Street North**  
**Sioux Falls, SD 57104**

PROJECT **Brownfields Cleanup**  
**Asbestos Abatement**  
**Sacred Heart Church-509 Capital St**  
**Sacred Heart School Link Auditorium-**  
**504 Capital St**  
**Yankton, SD**

## **AGREEMENT FOR CONSTRUCTION**

### **PRIME CONTRACT**

THIS Agreement is made the \_\_\_\_\_ day of \_\_\_\_\_, 2024 by and between **contractor** (the "Contractor") and the **City of Yankton, South Dakota** represented by its legal officers (the "Owner").

WITNESSETH, that the Contractor and the Owner for the consideration stated herein agree as follows:

#### **ARTICLE I, CONTRACT DOCUMENTS:**

The following documents and any other documents incorporated in them by reference constitute the contract documents:

1. This Agreement
2. The Project Manual dated **January 18, 2024**
3. The Project Drawings dated **Included in Project Manual**
4. Addenda issued prior to execution of this Agreement
5. Contractor's Performance and Labor and Material Payment Bond

These documents constitute the entire and integrated agreement between the parties hereto and supersede prior negotiations, representations, or agreements, either written or oral. The Index for items 2 and 3 is attached hereto as Exhibit "A."

#### **ARTICLE II, STATEMENT OF WORK:**

To the extent not otherwise provided in the contract documents, contractor shall furnish and pay for all labor, tools, equipment, supplies, materials, appurtenances, utilities, charges, fees, permits, and all other construction accessories and services required to complete the work specified in the contract documents in strict compliance with the contract documents.

#### **ARTICLE III, DATE OF COMMENCEMENT AND COMPLETION:**

The work shall be commenced within ten (10) consecutive calendar days after the date of issuance of the Notice to Proceed by the Owner and shall be substantially completed not later than

**six weeks after to notice to proceed**, and completed and ready for final inspection/acceptance no later than **seven weeks after notice to proceed**, subject to adjustments of the contract time as provided in the contract documents. Should the Contractor fail to substantially complete the work within the time set forth herein, or within such extra time as may have been allowed by increases in the contract, or by formally approved extensions granted by the Owner, the Contractor and the Contractor's surety shall be liable for and shall pay the Owner **\$250** per calendar day as liquidated damages for each calendar day of delay until the work is substantially complete. After Substantial Completion, if the Contractor shall neglect, refuse, or fail to complete the remaining Work as outlined in the approved punch list, subject to adjustments of the contract time as provided in the contract documents, the Contractor shall be liable for and shall pay the Owner **\$250** as liquidated damages for each calendar day of delay until the Work is completed and ready for final inspection/acceptance.

#### ARTICLE IV, CONTRACT SUM:

- A. For the performance of the work specified in the Contract Documents, Owner will pay Contractor and Contractor will accept as full compensation the sum of

CHURCH BASE BID:

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

LINK/AUDITORIUM BASE BID:

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

subject to additions or deductions as provided in the contract documents;

- B. Contract sum includes the following alternates, if any, which are described in the Contract Documents and are hereby, accepted by the Owner.

CHURCH ALTERNATE BID:

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

- C. Unit Prices, if any, are as follows:

Mobilization to perform additional work  
beyond what is identified in the base or  
alternate Bids:

\$ \_\_\_\_\_ each

Pipe Fittings (assume same size as those included in the Base Bid): \$\_\_\_\_\_ each

Light fixtures with ACM insulation \$\_\_\_\_\_ each

Where the quantities originally contemplated are so changed that application of the agreed unit price to the quantity of work performed is shown to create a hardship to the Owner or the Contractor, there shall be an equitable adjustment of the contract to prevent such hardship.

#### **ARTICLE V, PROGRESS PAYMENTS:**

The Owner shall make progress payments on a monthly basis for work accomplished in accordance with General Conditions, Article 11.

#### **ARTICLE VI, ACCEPTANCE AND FINAL PAYMENT:**

Final payment less amounts withheld to cover the cost of nonconforming work, shall be made by the Owner in accordance with General Conditions Sub-Article 11.8.

~~Prior to issuing final payment, the Contractor shall provide Operation and Maintenance Manuals for all material and equipment that requires operation and maintenance work. Operation and Maintenance Manuals shall be as follows:~~

- ~~A. \_\_\_\_\_ Hard Copies: 2 3-ring bound copy~~
- ~~B. \_\_\_\_\_ Electronic Copies: 1 single PDF file~~

#### **ARTICLE VII, NOTICE:**

All notices, demands and other communications required by the Contract Documents shall be in writing and shall be deemed to have been duly given if personally delivered, mailed first class (postage prepaid), or e-mailed:

- 1) **If to Contractor:**

- 2) **If to Owner:**  
Brad Bies  
City of Yankton  
416 Walnut St  
Yankton, South Dakota 57078  
Phone: 605-668-5224  
[bbies@cityofyankton.org](mailto:bbies@cityofyankton.org)
- 3) **If to the Engineer:**  
Jerry Zutz, P.E.  
GeoTek Engineering & Testing Services, Inc.  
909 E. 50<sup>th</sup> Street North  
Sioux Falls, South Dakota 57104  
Phone: 605.335.5512  
[jzutz@geotekeng.com](mailto:jzutz@geotekeng.com)

Either party may change the addresses set forth for notice herein upon written notice thereof to the other.

#### **ARTICLE VIII, CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION:**

Contractor certifies, by signing this Agreement, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation, by any Federal department or agency, from transactions involving the use of Federal funds.

Pursuant Executive Order 2020-01, for contractors, vendors, suppliers, or subcontractors with five (5) or more employees who enter into a contract with the Owner that involves the expenditure of one hundred thousand dollars (\$100,000) or more, by signing this contract **CONTRACTOR FIRM NAME** certifies and agrees that it has not refused to transact business activities, have not terminated business activities, and have not taken other similar actions intended to limit its commercial relations, related to the subject matter of the contract, with a person or entity that is either the State of Israel, or a company doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel to do business, or doing business in the State of Israel, with the specific intent to accomplish a boycott or divestment of Israel in a discriminatory manner. It is understood and agreed that, if this certification is false, such false certification will constitute grounds for the Owner to terminate this contract. **CONTRACTOR FIRM NAME** further agrees to provide immediate written notice to the Owner if during the term of the contract it no longer complies with this certification, and agrees such noncompliance may be grounds for contract termination.”

Compliance with Executive Order 2023-02, Contractor certifies and agrees that the following information is correct:

In preparing its response or offer or in considering proposals submitted from qualified, potential subconsultants, vendors, suppliers, and subcontractors, or in the solicitation, selection, or commercial treatment of any subconsultant, vendor, supplier, or subcontractor, Contractor is not an entity, regardless of its principal place of business, that is ultimately owned or controlled, directly or indirectly, by a foreign national, a foreign parent entity, or foreign government from China, Iran, North Korea, Russia, Cuba, or Venezuela, as defined by South Dakota Executive Order 2023-02.

Contractor further agrees that, if this certification is false, such false certification will constitute grounds for the State to terminate this Agreement. Contractor further agrees to provide immediate written notice to the State if during the term of this Agreement it no longer complies with this certification and agrees such noncompliance may be grounds for termination of this Agreement.

IN WITNESS WHEREOF, THE parties hereto have caused this instrument to be executed in one original counterpart the day and year above first written:

SAMPLE

CONTRACTOR:

By: \_\_\_\_\_  
(Date)

(Affix Corporate Seal if Available)

\_\_\_\_\_  
Print Name and Title

Fed. Emp. Tax ID#: \_\_\_\_\_

OWNER: CITY OF YANKTON, SOUTH DAKOTA

By: \_\_\_\_\_  
(Date)

\_\_\_\_\_  
Print Name and Title

Exhibit "A"  
AGREEMENT FOR CONSTRUCTION  
Enumeration of Contract Documents

1. This agreement
2. The General and Special Conditions contained in the Project Manual dated
3. The Invitation for Bids and Instruction to Bidders contained in the Project Manual dated
4. The Specifications are those contained in the Project Manual dated \_\_\_\_\_ and are as follows:

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

5. The drawings are as follows:

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

6. The addenda, if any, are as follows:

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

7. The Performance and Labor and Material Payment Bond dated \_\_\_\_\_

\_\_\_\_\_  
Issued by \_\_\_\_\_ . Bond # \_\_\_\_\_  
\_\_\_\_\_.

8. Other documents forming a part of the Contract Documents are:

Definitions .....	1
Execution, Correlation & Intent.....	2
Ownership, Use of Documents, Confidentiality of Documents .....	3
Ownership of Work Product .....	3.1
Confidentiality of Documents .....	3.2
Return of Documents .....	3.3
Terms to Be Included in Subcontracts.....	3.4
A/E's Responsibilities.....	4
Owner's Rights & Responsibilities .....	5
Information & Services Required of the Owner .....	5.1
Owner's Right to Stop the Work.....	5.2
Owner's Right to Carry Out the Work .....	5.3
Owner's Right to Access for Observation or Other Work .....	5.4
Contractor's Responsibilities .....	6
Review of Contract Documents.....	6.1
Supervision & Construction Procedures.....	6.2
Labor & Materials .....	6.3
Substitutions.....	6.3.4
Guarantees/Warranty .....	6.4
Taxes.....	6.5
Permits, Fees & Notices.....	6.6
Superintendent.....	6.7
Construction Progress Schedule.....	6.8
Documents & Samples at the Site .....	6.9
Shop Drawings, Product Data & Samples.....	6.10
Shop Drawing & Product Data Procedures .....	6.10.9
Samples Procedures .....	6.10.10
Use of Site.....	6.11
Cutting & Patching of Work.....	6.12
Cleaning Up .....	6.13
Communications.....	6.14
Royalties & Patents .....	6.15
Indemnification .....	6.16
Default .....	6.17
Subcontractors .....	7
Definitions .....	7.1
Award of Subcontracts & Other Contracts.....	7.2
Subcontractual Relations.....	7.3
Work by Owner or by Separate Contractors .....	8
Owner's Right to Perform Work & Award Separate Contracts .....	8.1
Mutual Responsibility .....	8.2
Owner's Right to Clean Up .....	8.3



Miscellaneous Provisions .....	9
Governing Law .....	9.1
Successors & Assigns .....	9.2
Written Notice .....	9.3
Claims for Damages .....	9.4
Performance & Labor and Material Payment Bond .....	9.5
Rights & Remedies .....	9.6
Tests .....	9.7
Litigation .....	9.8
 Time .....	 10
Definitions .....	10.1
Progress & Completion .....	10.2
Delays & Extensions of Time .....	10.3
Beneficial Occupancy .....	10.4
 Payments & Completion .....	 11
Contract Sum .....	11.1
Schedule of Values .....	11.2
Monthly Application for Payment .....	11.3
Recommendation for Payment .....	11.4
Progress Payments .....	11.5
Payments Withheld .....	11.6
Substantial Completion .....	11.7
Final Completion & Final Payment .....	11.8
 Protection of Persons & Property .....	 12
Safety Precautions & Programs .....	12.1
Safety of Persons & Property .....	12.2
Emergencies .....	12.3
 Insurance .....	 13
Commercial General Liability Insurance .....	13.1.1
Business Automobile Liability Insurance .....	13.1.2
Worker's Compensation Insurance .....	13.1.3
Builder's Risk Insurance .....	13.1.4
Installation Floater Insurance .....	13.1.5
 Changes in the Work .....	 14
Change Orders .....	14.1
Site Conditions .....	14.4
Claims for Additional Cost .....	14.5
Minor Changes in the Work .....	14.6
 Uncovering & Correction of Work .....	 15
Uncovering of Work .....	15.1
Correction of Work .....	15.2
Acceptance of Defective or Non-Conforming Work .....	15.3
 Termination of the Contract .....	 16
Termination by the Contractor .....	16.1
Termination by the Owner .....	16.2
Termination for Convenience .....	16.3

## **Article 1**

### **Definitions**

- 1.1 Owner: The term "owner" (hereinafter owner) means the City of Yankton, South Dakota.
- 1.2 Architect/Engineer: The term "architect/engineer" (hereinafter A/E) means the person or entity identified as such on the cover sheet to the drawings or plans and his/her authorized representative including his/her consulting engineer(s).
- 1.3 Contractor: The term "contractor" means the person or entity identified as such in the Agreement for Construction and his authorized representatives.
- 1.4 Subcontractor: Any individual, firm or corporation to whom the Contractor sublets any part of the contract for supplying materials and labor, or only labor, at the site of the project.
- 1.5 The Contract Documents: The documents identified as the Contract Documents in the Agreement for Construction.
- 1.6 The Contract: The Contract Documents form the contract. The contract may be amended or modified only in writing in the manner set forth in Article 14. Nothing contained in the Contract Documents shall create any contractual relationship between the owner and any subcontractor, sub-subcontractor or supplier.
- 1.7 The Work: The completed construction required by the Contract Documents, and every part thereof, and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated into such construction.
- 1.8 The Project: The total construction of which the work performed under the Contract Documents may be the whole or a part.
- 1.9 The Drawings or Plans: The graphic and pictorial portions of the Contract Documents showing the design, dimensions and layout of the work including, but not limited to, plan views, elevation views, details, sections, schedules, and diagrams.
- 1.10 The Specifications: The written requirements in the Contract Documents for materials, equipment, construction systems, standards and workmanship.
- 1.11 The Project Manual: The manual compiled for the work containing the Invitation for Bid, Instructions to Bidders, blank form of Bid Bond, blank form of Agreement for Construction, blank form of Performance and Labor and Material Payment Bond, sample forms, General Conditions, and Special Conditions.

## **Article 2**

### **Execution, Correlation and Intent**

2.1 By executing the contract, the contractor represents he has examined the plans, specifications, site of the proposed Work and Contract Documents in accordance with the requirements of the Instructions to Bidders.

2.2 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonably inferable therefrom as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings. All work mentioned or indicated in the Contract Documents shall be performed by the Contractor as part of this Contract unless it is specifically indicated in the Contract Documents that such work is to be done by others. Should the Drawings or the Specifications disagree in themselves or with each other, the Contractor shall provide the better quality or greater quantity of work and/or materials unless otherwise directed by written change.

2.3 The organization of the Specifications into Divisions, Sections and Articles, and the 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.

2.4 Neither the Owner nor the A/E assumes any liability arising out of jurisdictional issues raised or claims advanced by trade organizations or other interested parties based on the arrangement or manner of subdivision of the content of the Specifications and Drawings.

2.5 The Contractor and all Subcontractors shall refer to all of the Drawings, including those showing primarily the work of the mechanical, electrical, and other specialized trades, and to all of the Sections of the Specifications, and shall perform all work reasonably inferable therefrom as being necessary to produce the indicated results. The Contractor shall promptly report any discrepancy or omission which it observes in the Construction Documents and any need for clarification or interpretation to the Owner and the A/E. The Contractor's failure to do so will cause any additional cost incurred by the Contractor to be its sole responsibility. The Contractor shall number Requests for Information in consecutive order. The Contractor shall maintain a log of each Request for Information indicating the date it was issued, the date or dates of any correspondence and/or discussions on the Request for Information, and the date a final answer is received.

2.6 The General Conditions and the Special Conditions are a part of each Section of the Specifications. The Special Conditions for Mechanical and Electrical Trades, if any, are part of each Section of the Specifications referenced therein, and apply to the work of the trades affected thereby.

2.7 A typical or representative detail indicated on the Drawings shall constitute the standard for workmanship and material throughout corresponding parts of the Work. Where necessary, and where reasonably inferable from the Construction Documents, the Contractor shall adapt such representative detail for application to such corresponding parts of the Work. The details of such adaptation shall be subject to prior approval by the A/E. Repetitive features shown in outline on the drawings shall be in exact accordance with corresponding features completely shown.

2.8 The layout of mechanical and electrical systems, equipment, fixtures, piping, ductwork, conduit, specialty items, and accessories indicated on the Drawings is diagrammatic, and all variations in alignment, elevation, and detail required to avoid interferences and satisfy architectural and structural limitations are not necessarily shown. Actual layout of the Work shall be carried out without affecting the architectural, engineering and structural integrity and limitations of the Work and shall be performed in such sequence and manner as to avoid conflicts, provide clear access to all control points, including valves, strainers, control devices, and specialty items of every nature related to such systems and equipment, obtain maximum headroom, and provide adequate clearances as required for operation and maintenance.

2.9 The Drawings shall not be scaled for dimensions. If figured dimensions are not given on the Drawings, the Contractor shall request same from the A/E giving reasonable advance notice.

2.10 All indications or notations which apply to one of a number of similar situations, materials or processes shall be deemed to apply to all such situations, materials or processes wherever they appear in the Work, except where a contrary result is clearly indicated by the Contract Documents.

2.11 Where codes, standards, requirements and publications or public and private trade associations or other bodies are referred to in the Specifications, references shall be understood to be in the latest revision prior to the date of receiving bids, except where otherwise indicated.

2.12 Where no explicit quality or standards for materials or workmanship are established for work, such work is to be of good quality for the intended use and consistent with the quality of the surrounding work, of the construction of the Project generally, and industry standards.

2.13 All manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions unless otherwise indicated in the Contract Documents. A copy of the manufacturer's written or printed directions shall be provided to the Owner upon completion of the project.

**Article 3**  
**Ownership, Use of Documents, Confidentiality of Documents.**

**3.1 Ownership of Work Product**

Any plans, specifications, engineering calculations, technical data, reports, miscellaneous drawings, and all information contained therein provided by the Owner, its consultants, employees, contractors and agents to the contractor for the contractor's performance of its obligations under this agreement are the property of the Owner. They are to be used only with respect to this Project and are not to be used for any other project. The contractor may not disseminate these materials to any person or entity nor may the contractor use these materials for purposes other than work for the owner, without the express written approval of the owner. The owner shall not unreasonably withhold such approval for dissemination of these materials as necessary to subcontractors and suppliers.

**3.2 Confidentiality of Documents**

All reports, plans, specifications, engineering calculations, technical data, miscellaneous drawings, and information contained therein provided to or prepared by the contractor, its owners, officers, employees, agents, consultants, suppliers, and subcontractors in connection with the contractor's performance under this Agreement are confidential and the contractor, its owners, officers, employees, agents, consultants, suppliers, and subcontractors shall not disclose this information to any person, individual, or entity without the express written permission of the owner.

**3.3 Return of Documents**

All documents covered by Article 3 shall be delivered to the A/E at the completion of the work. The contractor may not retain any such documents for its own use without the express written permission of the owner and any documents that are retained, with or without owner permission, shall be subject to all of the requirements of Article 3.

**3.4 Terms to be Included in Subcontracts**

The contractor shall include the requirements of Article 3 in any contract it enters into with any consultants, subcontractors, suppliers, persons, individuals, or entities for the performance of any of the contractor's obligations under this agreement.

## **Article 4**

### **A/E'S RESPONSIBILITIES**

4.1 The A/E, under the direction of the Owner, will provide administration of the Contract as hereinafter described. The A/E will represent the Owner during construction. The A/E will advise and consult with the Owner. The Owner's instructions to the Contractor may be forwarded through the A/E. The A/E will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with Sub-Article 4.15.

4.2 The Contractor shall accept instructions only from the A/E or Owner, and not the A/E's consulting engineers, except as the A/E and Owner shall authorize in writing.

4.3 The A/E will visit the construction site at intervals appropriate to the stage of construction to keep generally familiar with the progress and quality of the work completed and to determine in general if the Project is being constructed in a manner such that when completed it would be in conformance with the plans and specifications and other Contract Documents. The A/E will not, however, be required to make exhaustive or continuous on-site inspections to check the quality or quantity of work. On the basis of such observations or inspections, the A/E shall keep the Owner informed of the progress and quality of the work on the Project and endeavor to guard the Owner against defects and deficiencies in the work of the Contractor. The A/E will maintain written reports of all site visits.

4.4 The A/E shall not have control over or charge of and shall not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Project, since these are solely the Contractor's responsibilities under the Agreement for Construction. The A/E shall not be responsible for the Contractor's schedules or failure to carry out the Project in accordance with the Contract Documents. The A/E shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Project, except to the extent that the A/E may formally notify the Contractor of the unacceptability of various portions of the Project or failure to carry out the Work on the Project in accordance with the Contract Documents.

4.5 The A/E will inform the Contractor on behalf of and in consultation with the Owner to cease work on the Project or portions thereof affected by those items that are unacceptable and remain uncorrected until such time as corrections are made.

4.6 The A/E shall at all times have access to the Work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the A/E may perform his functions under the Contract Documents.

4.7 Except as may otherwise be provided in the Contract Documents or when direct communications have been approved by the A/E, the Owner and its representatives and the Contractor shall communicate through the A/E. Communications by and with the A/E's consultants shall be through the A/E.

4.8 The A/E will determine the amounts owing to the Contractor based on inspections and observations at the site, and on evaluations of the Contractor's Monthly Applications for Payment, and shall issue Certificates of Payment for amounts due on forms provided by the A/E. A Certificate of Payment constitutes a representation by the A/E to the Owner, based upon the inspections and the information provided by the Contractor in the Application, that the Project has progressed to the point indicated; that to the best of the A/E's knowledge, information and belief, the quality of the work on the Project is in accordance with the Contract Documents; and that the Contractor is entitled to payment in the amount certified.

4.9 The A/E shall have authority to reject work on the Project which does not conform to the Contract Documents. Whenever the A/E considers it necessary or advisable for implementation of the intent of the Contract Documents, the A/E will have authority to recommend to the Owner additional inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not such work is fabricated, installed or completed. However, neither this authority of the A/E nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the A/E to any Construction Contractor, Subcontractors, material and equipment suppliers, their agents or employees or other persons performing portions of the work on the Project.

4.10 The A/E shall review and approve or take other appropriate action on Shop Drawings, Product Data and Samples submitted by Construction Contractors to determine if they conform with the design concept for the Project and with the information provided in the Contract Documents, and submit these documents or information to the Owner indicating the A/E's approval or comments with reasonable promptness so as to cause no delay to the prosecution of the Project.

Approval or acceptance of a specific item shall not necessarily indicate the A/E's approval of an assembly of which the item is a component. When professional certification of equipment is required by the Contract Documents, the A/E will be entitled to rely upon that certification to determine that the materials, systems, or equipment will meet the performance criteria required in the Contract Documents.

4.11 The A/E will conduct, at the time and place approved by the Owner, with representatives of the State agencies involved in the Project and the Contractor, inspections to establish dates of Project acceptance and completion. The A/E shall have other A/Es, Structural, Mechanical, or Electrical Engineers, or other consultants in their employ in attendance at this and at various progress inspections as may be necessary to evaluate whether the work completed on the Project is in conformance with the Contract Documents. The A/E will receive and forward to the Owner, with comments on completeness or acceptability, those warranties, operation manuals, and other documents required by the Contract Documents and assembled by the Contractor.

4.12 The A/E will review the final estimate for final payment to the Contractor and provide a Certificate of Final Payment to the Owner.

4.13 The A/E will provide to the Owner or the Contractor, upon written request in the form of a Request for Information, interpretations and decisions in writing, or in the form of drawings, on matters concerning performance under the Contract Documents, and execution or performance of the Work on the Project. Response to such requests shall be made with reasonable promptness and within any time limits agreed upon. The final decision on all such questions shall be made by the Owner.

4.14 The A/E will prepare Change Orders in accordance with Article 14, and will have authority to order minor changes in the Work as provided in Sub-Article 14.6.

4.15 The duties, responsibilities and limitations of authority of the A/E as the Owner's representative during construction as set forth in the Contract Documents will not be modified or extended without written consent of the Owner, the Contractor and the A/E.

4.16 In case of the termination of the employment of the A/E, the Owner shall appoint a replacement A/E whose status under the Contract Documents shall be that of the former A/E.

5.3 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 in any material respect and fails within three working days after receipt of written notice from the Owner or in such time as may be established in written notice from Owner to commence and continue correction of such default or neglect with diligence and promptness, or if the Work is not being performed properly or in accordance with the scheduling provisions of the Contract Documents in any material respect, whether or not the Contractor is in default, the Owner may, after the expiration of such notice period and without prejudice to any other remedy he may have, make good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the A/E's additional services made necessary by such default, neglect or failure. If the payments then or thereafter due the contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner upon demand. If, in the sole judgment of the Owner, an emergency exists as a result of the Contractor's default, neglect or failure to correct defective work, which in the Owner's opinion, requires more immediate corrective action than the Contractor is able to provide, then the Owner may, without notice to the Contractor, perform such corrective work or cause it to be performed by others. The Owner shall also have the right to carry out the Work, or any part thereof, during the period of any work stoppage without terminating the Contract. If the Owner wishes to exercise this right it will give the Contractor three days notice of its intent to do so. In any such case, an appropriate deductive Change Order shall be issued in accordance with Article 14, the amount of which shall not exceed an amount which equals the estimated direct cost, including the A/E's fees, of performing the work which the Owner elects to perform and the proportionate amount of the Contractor's fee associated therewith.

5.4 Owner's Right to Access for Observation or Other Work: The Owner reserves the right of access to any part of the Work, at any time, for the purpose of observation, or testing, or to install other work, either with its own forces or with separate contractors. Such access is not to be construed to mean partial occupancy by Owner, and no claim for additional compensation by the Contractor because of such access or installation of work will be considered. Contractor shall cooperate with Owner during Owner's access or performance of work.



## **ARTICLE 6**

### **CONTRACTOR'S RESPONSIBILITIES**

6.1 Review of Contract Documents: The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Owner and the A/E any error, inconsistency or omission he may discover. The Contractor shall not be liable to the Owner or the A/E for any damage resulting from any such errors, inconsistency or omission he may discover and report, nor for any damage resulting from any such errors, inconsistencies or omissions which he could not reasonably have discovered. The Contractor shall perform no portion of the work at any time without Construction Documents or, where required, Shop Drawings, Product Data or Samples for such portions of the Work bearing the A/E's appropriate action stamp.

6.2 Supervision and Construction Procedures.

6.2.1 The Contractor shall supervise and direct the Work, using the skill and attention necessary to complete the Work in a workmanlike manner. The Contractor shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the contract. Neither the Owner nor the A/E shall have control over, or responsibility for, any such matters.

6.2.2 Nothing contained in the Contract Documents shall be interpreted by implication or otherwise as a direction by the A/E or the Owner to the Contractor as to construction means, methods, techniques, sequences and procedures. If there is express reference to such means, methods, techniques, sequences and procedures, it is solely for the purpose of insuring that the Work will be produced in accordance with the desired objectives as set forth in the Construction Documents but such express reference shall in no way relieve the Contractor of his responsibilities in connection therewith. If the Contractor does not wish to accept the responsibility for any means, techniques, sequences or procedures which are expressly set forth in the Construction Documents, then the contractor shall notify the A/E in writing of the actual means, methods, techniques, sequences and procedures which he will employ on the Work if these differ from those expressly referred to in the Construction Documents. All loss, damage or liability or cost of correcting defective Work arising from the employment of any construction means, methods, techniques, sequences or procedures shall be borne by the Contractor notwithstanding that any of the same shall have been referred to expressly in the Construction Documents.

6.2.3 The Contractor shall be responsible to the Owner for the acts and omissions of his employees, Subcontractors, Sub-subcontractors, materialmen and suppliers and their agents and employees, and other persons performing any of the Work.

6.2.4 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the A/E in his administration of the Contract, by the use or occupancy of part of the Work by the Owner as provided in Sub-Article 5.4, by the performance of work related to the Project by others as provided in Sub-Article 8.1, or by inspections, tests or approvals required or performed under Sub-Article 9.7 by persons other than the Contractor.

6.2.5 The Contractor shall retain a competent Registered Professional Engineer or Registered Land Surveyor, acceptable to the Owner and A/E, who shall establish the exterior lines and required elevations of all buildings and structures to be erected on the site and shall establish sufficient lines and grades for the construction of associated work such as, but not limited to, roads, utilities and site grading. The Engineer or Land Surveyor shall certify as to the actual location of the constructed facilities in relation to property lines, building lines, easements, and other restrictive boundaries.

6.2.6 The Contractor shall establish the building grades, lines, levels, column, wall and partition lines required by the various Subcontractors in laying out their work.

6.2.7 The Contractor shall coordinate and supervise the work performed by Subcontractors to the end that the work is carried out without conflict between trades or jurisdictional disputes and so that no Subcontractor, at any time, causes delay to the general progress of the Work. The Contractor and all Subcontractors shall at all times afford each other Subcontractor, any separate contractor, and the Owner, every reasonable opportunity for the installation of work and the storage of materials, and shall provide access to and the use of necessary loading dock and hoist facilities, adequate storage room and necessary utilities and other services.

6.2.8 Wherever the work of a Subcontractor is dependent upon the work of other Subcontractors, or the Contractor, the Contractor shall require the Subcontractor to:

6.2.8.1 Coordinate his work with the dependent work;

6.2.8.2 Provide necessary dependent data and requirements;

6.2.8.3 Supply and/or install items to be built into dependent work of others;

6.2.8.4 Make provisions for dependent work of others;

6.2.8.5 Examine dependent drawings and specifications;

6.2.8.6 Examine previously placed dependent work;

6.2.8.7 Check and verify dependent dimensions of previously placed work;

6.2.8.8 Notify Contractor of previously placed dependent work or dependent dimensions which are unsatisfactory or will prevent a satisfactory installation of his work; and

6.2.8.9 Not proceed with his work until the unsatisfactory dependent conditions have been corrected.

Installation of Work by a Subcontractor in any given area shall constitute acceptance by the Subcontractor and Contractor of the previously placed dependent work.

### 6.3 Labor and Materials.

6.3.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. The word "provide" shall mean furnish and install complete, including connections, unless otherwise specified. All connection charges, assessments or inspection fees which may be imposed by any public agency or utility company are included in the Contract Sum and shall be the Contractor's responsibility, except the final water and sewer connection charges which shall be paid by the Owner.

6.3.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him. The Contractor shall be responsible to maintain and observe, and to require his Subcontractors to maintain and observe, sound labor practices, and shall require each Subcontractor to take all steps reasonably necessary to avoid labor disputes or stoppages.

6.3.3 Except in the event of emergency, no substantial field operations shall be performed outside of regular working hours without the prior notification of the A/E and the Owner. The Contractor will not be entitled to additional compensation for work performed outside of regular working hours except as otherwise expressly agreed in writing by the Owner prior to the performance of such overtime work. Additional compensation for such authorized overtime shall be limited to the direct cost of the premium portion only of such authorized overtime. No additional indirect cost or fee shall be included.

#### 6.3.4 Substitutions

6.3.4.1 The products, materials and equipment of manufacturers referred to in the Specifications and on the Drawings are intended to establish the standard of quality and design required by the A/E; however, products, materials and equipment manufacturers, other than those specified, may be used, if equivalent and approved in writing by the A/E.

6.3.4.2 It is deemed that the term 'or approved equal' is included after all products, materials and equipment referred to in the Specifications or on the Drawings.

6.3.4.3 The Owner in consultation with the A/E will be the sole judge of equivalency of proposed substitute products, materials, and equipment. The A/E will make written recommendation of acceptance or rejection to the Owner. The Owner will then authorize the A/E to issue to the Contractor written approval or rejection of the substitution.

6.3.4.4 If the Contractor desires to use a substitute item, he shall make application to the A/E in writing in sufficient time (having regard to the progress of the Work, the period of delivery of the goods concerned and adequate time for the Owner's and A/E's review) stating and fully identifying the proposed substitute, cost changes (if any), and submitting substantiating data, sample, brochures, etc. of item proposed. It is the Contractor's responsibility to provide sufficient evidence by tests or other means to support any request for approval of substitution.

6.3.4.5 Prior to proposing any substitute item, the Contractor shall satisfy himself that the item he proposes is, in fact, equal to that specified, that it will fit into the space allocated, that it affords comparable ease of operation, maintenance and service, that its appearance, longevity and suitability for the climate and use are comparable to that specified, and that the substitution is in the Owner's best interest.

6.3.4.6 The burden of proof that a proposed substitution is equal to a specified item shall be upon the Contractor, who shall support his request with sufficient test data and other means to permit the owner and A/E to make a fair and equitable decision on the merits of the proposal. Any item by a manufacturer other than those cited in the Contract Documents, or of brand name or model number or of generic species other than those cited in the Contract Documents will be considered a substitution.

6.3.4.7 Materials and methods proposed as substitutions for specified items shall be supported by certification of their acceptance for use by an authority, person or persons having jurisdiction over the use of the specified material or method.

6.3.4.8 Acceptance of substitutions shall not relieve the Contractor from responsibility for compliance with all the requirements of the Construction Documents. The Contractor shall be responsible at his own expense for any changes in other parts of the work of his Contract or the work of other contractors caused by his substitutions, including cost of all design and redesign services related thereto incurred by the A/E and his consultants.

6.3.4.9 The Contract completion time shall not be extended by any circumstances resulting from a proposed substitution, nor shall the Contractor be entitled to any compensation for any delay caused thereby or related thereto.

6.3.4.10 All costs for the evaluation of proposed substitutions, whether approved or not, shall be borne by the Contractor.

6.3.5 All materials and equipment shall be delivered, handled, stored, installed and protected to prevent damage in accordance with best current practice in the industry, in accordance with manufacturers' specifications and recommendations, and in accordance with Contract Document requirements. The Contractor will store packaged materials and equipment in their original and sealed containers, marked with the brand and manufacturer's name, until ready for use, and deliver materials and equipment in ample time to facilitate inspections and tests prior to installation. The term 'delivery' in reference to any item specified or indicated, means the unloading and storing with proper protection at the project site. Damaged materials or equipment will be rejected and removed from the site by the Contractor.

6.3.6 Before ordering materials, equipment, or performing Work, the Contractor shall verify indicated dimensions. If a discrepancy exists, the Contractor shall notify the A/E of same immediately. The A/E will then clarify the intended design. The Contractor shall take field measurements required for the proper fabrication and installation of the Work. Upon commencement of any item of Work, the Contractor shall be responsible for dimensions related to such item of Work.

#### 6.4 Guarantees/Warranty.

6.4.1 The Contractor guarantees and warrants to the Owner that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the A/E or Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This guarantee/warranty is not limited by the provisions of Sub-Article 15.2.

6.4.2 The Contractor will indemnify the Owner against loss, including loss of use and lost revenues resulting from a breach of the Contractor's guaranty and warranty under Sub-Article 6.4.1, whether the loss arises before or after the Owner's acceptance of the Project.

6.4.3 Where the contract documents provide for equipment and material warranties in addition to the Contractor's guarantees' and warranty contained in Sub-Article 6.4.1, such warranties shall at a minimum:

6.4.3.1 Provide that the term of the warranty shall start on the date of substantial completion of the project or the date the Owner takes beneficial occupancy of any portion of the project that requires the use or start-up of the warranted equipment or material, whichever date occurs first.

6.4.3.2 Provide for complete repair or replacement of defective equipment or material;

6.4.3.3 Provide all materials, shipping, and labor necessary to repair or replace defective equipment or material at no expense to the Owner;

6.4.3.4 Provide that any replacement parts used in repairing or replacing defective equipment or material shall be new or in a like-new condition.

6.4.3.5 Provide for the complete repair or replacement of defective equipment or material within two weeks after receiving written notice of the defect, provided however, that the Owner can, at its sole discretion, grant an extension of time for good cause shown; and

6.4.3.6 Provide for no limitation of liability should the Contractor and/or manufacturer fail to repair or replace defective equipment or material within the time specified in Sub-Article 6.4.3.4 or should the remedy of repair or replacement otherwise fail.

6.4.3.7 Be construed under South Dakota law.

6.4.3.8 Provide that any legal action brought on the warranty shall be brought only in a South Dakota court.

6.5 Taxes: The Contractor shall pay all sales, consumer, use, excise, and other similar taxes for the Work or portions thereof which are to be provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.

6.6 Permits, Fees and Notices.

6.6.1 The Contractor shall secure and pay for all permits and governmental fees, licenses and inspections necessary for the proper execution and completion of the Work which are customarily secured after execution of the Contract and which are legally required at the time the bids are received.

6.6.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work and shall indemnify the Owner and the A/E against all costs, fines and damages, and all actions, claims and proceedings, due to its failure to do so.

6.6.3 The Contractor and its Subcontractors shall acquaint themselves with all codes governing their work and shall complete the work in conformance with all codes governing their work.

6.6.4 It is not the responsibility of the Contractor to make certain that the Contract Documents are in accordance with applicable laws, statutes, building codes and regulations. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Owner and the A/E in writing, and any necessary changes shall be accomplished by appropriate modification.

6.6.5 If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Owner and the A/E, he shall assume full responsibility therefor and shall bear all costs attributable thereto.

6.7 Superintendent: The Contractor shall employ a competent superintendent and necessary assistants all of whom are acceptable to the Owner and who shall be in attendance at the Project site during the progress of the Work. The Superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. Other communications shall be so confirmed on written request in each case. The Superintendent shall not be changed without the Owner's consent.

6.8 Construction Progress Schedule.

6.8.1 The Contractor shall, within 5 days, or within such time as determined by the A/E, after date of Notice to Proceed, prepare and submit to the A/E for approval a reasonable schedule showing the critical path, order in which the Contractor proposes to carry on the work and, the date on which he will start the several salient features (including procurement of materials, plant and equipment). The progress schedule shall indicate appropriately the percentage of work scheduled for completion at any time. If at any time the sequence of work is modified, the Construction Progress Schedule shall be updated.

6.8.2 The Construction Progress Schedule shall reflect the time required for the preparation and processing of shop drawings and submittals and the lead time required in connection with the procurement of manufactured or processed materials and equipment.

6.8.3 The Contractor shall furnish sufficient forces, construction plant, and equipment, and shall work such hours, including night shifts, overtime operations, and Sunday and holiday work, as may be necessary to insure the prosecution of the work in accordance with the approved progress schedule.

6.8.4 Whenever major portions of the Work fall behind the planned schedule, the Owner and A/E shall be notified and advised of action being taken to return the project to its original schedule and such action shall be indicated on the Construction Progress Schedule which shall then be reissued. If, in the opinion of the A/E and Owner, the Contractor is not taking adequate steps to improve or maintain the progress of the work, the A/E and Owner may require him to increase the number of shifts, and/or overtime operations, days of work, and/or the amount of construction plant, all without additional cost to the Owner.

6.9 Documents and Samples at the Site: The Contractor shall maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be available to the A/E and Owner and shall be delivered to A/E for the Owner upon completion of the Work.

6.10 Shop Drawings, Product Data and Samples.

6.10.1 Shop Drawings are drawings, diagrams, schedules or other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

6.10.2 Product Data are illustrations, standard schedules, performance charts, instructions brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

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

6.10.4 The Contractor shall submit a schedule for submittal of Shop Drawings, Product Data and Samples to the A/E for review. The Contractor shall review, approve and submit to the A/E, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the A/E or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents, in accordance with the schedule reviewed by the A/E.

6.10.4.1 The A/E reserves the right to review Shop Drawings, Product Data, Samples and submittals in a sequence consistent with the sequence of erection, installation and assembly of the various elements of the Work.

6.10.4.2 The Contractor's identification of Shop Drawings, Product Data and Samples shall include verification of information required in Sub-Articles 6.10.9.2 and 6.10.10.2.

6.10.4.3 No extension of time will be granted, nor will any consideration be given to claims arising out of the Contractor's failure to submit any Shop Drawing, Product Data, Samples or related submittals according to the schedule or otherwise in a manner which does not allow adequate lead time for A/E's review, or does not allow ample time for revision, resubmission and subsequent review by the A/E as required.

6.10.4.4 Composite Drawing: In the interest of coordination and expediting the work in critical areas, i.e. exterior wall components, mechanical/electrical systems, and other areas so requested by the A/E, the Contractor shall prepare and submit, to the A/E for review, Composite Drawings embodying the Work of the various trades and/or Subcontractors involved. After review, the Contractor shall distribute prints or reviewed Composite Drawings to affected trades and/or Subcontractors. The Contractor shall require that the involved trades and/or Subcontractors cooperate in preparation of the Composite Drawings to assure proper coordination between trades and/or Subcontractors. The participating trades and/or Subcontractors shall indicate their approval on these drawings.

6.10.5 By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he has determined and verified all materials, field measurement, and field construction criteria related thereto, checked the Shop Drawings, Product Data, and Samples for complete dimensional accuracy; that he has checked to insure that work contiguous with and having bearing on the work shown on the Shop Drawings is accurately and clearly shown, that he has checked the Shop Drawings against the Composite Drawings prepared by the Contractor, that the Work has been coordinated and that the equipment will fit into the assigned spaces, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Construction Documents.

6.10.5.1 Any Shop Drawing, Product Data or Sample submitted without Contractor's approval will not be processed for review by the A/E, but will be returned to the Contractor for his compliance with the above procedures, in which event it will be deemed that the Contractor has not complied with the provisions herein specified and the Contractor shall bear the risk of all delays as if no Shop Drawing, Product Data and Sample had been submitted.

6.10.5.2 Shop Drawings shall bear a coordination and approval stamp signed by the Contractor and each contiguous Subcontractor, which shall confirm the representations set forth in Sub-Article 6.10.5. Shop Drawings shall bear the seal of a registered professional engineer or A/E when required by the Specifications or State Law.

6.10.6 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Construction Documents by the A/E's approval of Shop Drawings, Product Data or Samples under Sub-Articles 4.10 and 6.10.9 unless the Contractor has specifically informed the A/E in writing of such deviation at the time of submission and the A/E has given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples by the A/E's approval thereof. Any deviation shall also be indicated on such Shop Drawing, Product Data, Sample, or related submittal by circling or other approved means.

6.10.7 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the A/E on previous submittals. Unless such written notice has been given, the A/E's Action on a resubmitted Shop Drawing, Product Data, or Sample shall not constitute Review and Action of any changes not requested on the prior submittal.

6.10.8 No portion of the Work requiring submission of a Shop Drawing, Product Data or Sample shall be commenced until the submittal has been approved by the A/E as provided in Sub-Article 6.10.9. All such portions of the Work shall be in accordance with approved submittals.

6.10.8.1 No Shop Drawing, Product Data or Sample shall be issued to the field without the A/E's Action Stamp affixed thereto.

#### 6.10.9 Shop Drawing & Product Data Procedures

6.10.9.1 Shop Drawing Requirements: Shop Drawings shall show design, materials (kind, thickness and finish), dimensions, connections, rough openings, routing details, and other details necessary to insure that they accurately interpret Contract Drawings and Specifications and also show adjoining work in such detail as required to provide proper connection with same. Shop Drawings shall be numbered consecutively and insofar as possible shall be uniform in size.

6.10.9.2 Identification: All Shop Drawings and Product Data shall be identified with the name of the Project, Project Number, building or buildings for which the Shop Drawings and Product Data are being submitted, and shall contain the A/E's name, Contractor's name, Subcontractor's name, date of submittal, drawing number, revision, if any, as well as the Specification Section under which the Work is to be performed and the Drawing and detail numbers that relate to the Shop Drawings and Product Data.

6.10.9.3 Transmittals: All Shop Drawings and Product Data shall be accompanied by a letter of transmittal from the Contractor setting forth the same identification information as required above under Sub-Article 6.10.9.2. Contractor shall number transmittals consecutively in sequence with the sample transmittals and shall indicate the Submittal Procedure number being followed. Transmittal shall also indicate if Shop Drawing is resubmittal and note A/E's file number for original submittal.

6.10.9.4 Submittal Procedures: The Contractor shall submit copies of Shop Drawings and Product Data to the A/E in accordance with the Submittal Procedures listed below.

6.10.9.4.1 Shop Drawings and Product Data shall be sent by the Contractor to the Architect/Engineering team.

6.10.9.4.2 Shop Drawings and Product Data can be sent via an electronic method (email or other electronic platform) or via original paper copy. Contract, Architect/Engineer, and Owner shall agree on submittal method (email, other electronic platform, original paper copy, etc.).



6.10.9.4.3 Shop Drawings and Product Data shall be clearly legible and physical product samples shall be provided whenever necessary.

6.10.9.5 A/E's Distribution & Stamp: Following the A/E's review of each Shop Drawing and Product Data submission, the A/E will retain a copy of the submittal for their records as well as return a copy to the Contractor and Owner with the A/E's stamp and signature affixed thereto, annotated as follows:

6.10.9.5.1 "A Action": "A Action" means the submission is in general conformance with the design concept. Construction, fabrication and/or manufacture can proceed subject to the provision that the Work shall be in accordance with the requirements of the Construction Documents. Final acceptance of the Work shall be contingent upon such compliance.

6.10.9.5.2 "B Action": "B Action" means the submission is in general conformance with the design concept subject to notations by the A/E on the returned Shop Drawings. Construction, fabrication and/or manufacture can proceed subject to the provision that the Work shall be carried out in compliance with all annotations and/or corrections indicated on the returned Shop Drawings and Product Data and in accordance with the requirements of the Construction Documents. Final acceptance of the Work shall be contingent upon such compliance.

6.10.9.5.3 "C Action": "C Action" means that the Contractor shall revise and resubmit the Shop Drawings and Product Data in accordance with all annotations and/or corrections indicated therein. Construction, fabrication and/or manufacture cannot proceed. Shop Drawings and Product Data bearing "C Action" stamp shall not be permitted on the Project Site.

6.10.9.5.4 "D Action": "D Action" means that the submission is rejected for nonconformance with the design concept and the Contractor shall make a new submittal which shall comply with the requirements of the Construction Documents. Construction, fabrication and/or manufacture cannot proceed. Shop Drawings and Product Data bearing "D Action" stamp shall not be permitted on the Project Site.

6.10.9.6 Contractor's Distribution: When transparencies are returned "A Action" or "B Action", the Contractor shall obtain and provide such number of prints to the Subcontractor as may be required by the Subcontractor for his distribution. The Contractor shall have copies of all "A Action" or "B Action" Shop Drawings and Product Data at the Project Site at all times and shall make them available to the A/E's representatives.

6.10.9.7 Cost of Submittal and Distribution: All charges in connection with the delivery of Shop Drawings and Product Data to the A/E shall be paid by the Contractor. All charges in connection with the distribution of Shop Drawings and Product Data to the Contractor shall be paid by the Contractor.

## 6.10.10 Samples Procedures

6.10.10.1 Sample Requirements: Where possible, all samples required for a particular Specification Section shall be submitted together.

6.10.10.1.1 Samples shall be submitted from the same source which will supply the actual job. Samples shall be of adequate size to show quality, type, color, range, finish, texture and other specified characteristics.

6.10.10.1.2 Samples of materials or products which are normally furnished in containers or packages, which bear descriptive labels and/or application or installation instructions, shall be submitted with such labels and/or instructions.

6.10.10.2 Identification: All Samples shall be labeled, tagged, or otherwise clearly identified. Labels or tags shall set forth the name of the Project, the project number, buildings for which the Sample is being submitted, A/E, Contractor, Subcontractor, and/or supplier, the name of the manufacturer, fabricator, or processor, the trade designation, grade and quality of the material or product, the date of submittal, and specific identification of each sample and a precise reference to the Specification Article and Sub Article wherein the material, product, or element of the Work is specified. Each label or tag shall have sufficient clear space to permit the application of the approval stamp of the Contractor, and the action stamp of the A/E.

6.10.10.3 Transmittals: All samples shall be accompanied by a letter of transmittal from the Contractor setting forth the same identification information as required above under Sub-Article 6.10.4.2. Contractor shall number transmittals consecutively in sequence with the Shop Drawings and Product Data transmittals. Where appropriate, test data and/or manufacturers' certificates shall be referenced in and forwarded with the letter of transmittal. Samples without accompanying certificates or test data will be returned without action.

6.10.10.4 Submittal Procedure: The Contractor shall submit the number of samples as indicated below:

6.10.10.4.1 In the event that a range of variations in texture, graining, color or other characteristics may be anticipated in furnished materials, assemblies, or elements of the Work, a sufficient number of samples of such materials or products shall be submitted to indicate the full range of characteristics which will be present in the materials or products proposed for the Work. Any such materials or products delivered or erected prior to approval of full range samples shall be subject to rejection.

6.10.10.4.2 All Samples shall be submitted in triplicate to the A/E's home office, or where directed by the A/E, except as otherwise set forth in other Sections of the Contract Documents.

6.10.10.5 A/E's Distribution & Stamp: Following the A/E's review of each Sample submission, the A/E will return one set of each submission to the Contractor with the A/E's stamp and signature affixed thereto and annotated in a manner conforming to the convention established in Sub-Article 6.10.9.5.

6.10.10.6 Contractor's Distribution: When Samples are returned 'Action A' or 'Action B', the Contractor shall retain such Samples in a suitable place at the Project Site for use by the Contractor, his Subcontractors, the A/E and his authorized representatives to insure that all work is being installed in accordance with these Samples. The remaining Samples will be retained by the A/E.

6.10.10.7 Cost of Submittal and Distribution: All charges in connection with the delivery of Samples to the A/E's home office or where directed by A/E (and all charges in connection with the subsequent distribution thereof by the A/E) shall be paid by the Contractor.

#### 6.11 Use of Site.

6.11.1 The Contractor shall confine operations at the Site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the Site with any unnecessary or surplus materials or equipment or debris.

6.11.2 Notwithstanding the designation of construction limits or the indication of temporary fences or barricades, the provisions of the Contract Documents governing certain portions or phases of the Work may require that certain operations be carried out beyond such designated limits. Trenching, utility work, site development, landscaping and all other work, if required beyond such designated limits, shall be scheduled in such a manner as to cause or occasion a minimum of inconvenience or disturbance or interference with the normal operation of the Owner, abutters, and the public. The Contractor shall obtain the Owner's prior approval for such operations, prosecute such operations expeditiously and restore the affected area and other areas needed for access to their original condition immediately upon completion of such operations, unless otherwise specified herein.

6.11.3 All operations, including pumping, draining and control of surface and ground water shall be carried out so as to avoid endangering the Work of any adjacent facility or property, or interrupting, restricting or otherwise infringing or interfering with the use thereof.

6.11.4 The Contractor shall confine operations at the site to work related activities. The Contractor shall not use the site for lodging or as a personal residence.

#### 6.12 Cutting and Patching of Work.

6.12.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.

6.12.2 The Contractor shall not damage or endanger any portion of the Work or the work of the Owner or any separate contractors or adjacent facilities by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Contractor shall not unreasonably withhold from the Owner or any separate contractor his consent to cutting or otherwise altering the Work.

6.12.3 Structural elements of the Work shall not be cut, patched or otherwise altered or repaired without prior written authorization by the A/E.

6.12.4 Authorization to proceed with remedial operations for any damaged or defective element or portion of the Work shall not constitute a limitation or a waiver of the A/E's right to require the removal and replacement of any work which fails to fulfill the requirements of the Contract Documents.

#### 6.13 Cleaning Up.

6.13.1 The Contractor at all times shall keep the Site and related streets free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as his tools, construction equipment, machinery and surplus materials. All waste and rubbish shall be removed from the Site at least weekly and more often if necessary.

6.13.2 If the Contractor fails to maintain a clean and safe Project and/or fails to clean up at the completion of the Work, the Owner may do so as provided in Sub-Article 5.3 and the cost thereof shall be charged to the Contractor.

6.14 Communications: Except where otherwise directed by the A/E or otherwise provided in the Contract Documents, the Contractor shall forward all communications to the Owner through the A/E.

6.15 Royalties and Patents: The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the A/E and Owner in writing.

6.16 Indemnification.

6.16.1 To the fullest extent permitted by law, the Contractor shall indemnify, defend and hold harmless the Owner, the A/E and its consulting engineers, and their respective successors, agents and employees from and against all claims, damages, liabilities, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (including the Work itself) including the loss of use resulting therefrom, and (2) is caused in whole or in part by any tortious act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder. Such obligations shall not be construed to negate, abridge or otherwise reduce any other right or obligation or indemnity which would otherwise exist as to any party or person described in this Sub-Article 6.16.

6.16.2 In any and all claims against the Owner, the A/E or any of its consultants, and their respective successors, agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Article 6.16 shall not be limited in any way by any limitation on the amount or type of damages, compensations or benefits payable by or for the Contractor or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

6.16.3 The obligations of the Contractor under this Sub-Article 6.16 shall not extend to indemnification of the A/E or other design consultants employed by him, his consultant, agents or employees for damages, claims, losses or expenses arising out of: (a) the preparation or approval by the A/E or his design consultants of maps, drawings, opinions, reports, Change Orders, designs or specifications, or (b) the giving of or the failure to give directions or instructions by the A/E or his design consultants provided such giving or failure to give is the primary cause of the damage, claim, loss or expense.

6.16.4 The Contractor agrees to defend, indemnify and save the Owner, and A/E, or any of its consulting engineers, and their respective successors, agents or employees harmless from all costs, liabilities, damages or expenses, including reasonable attorneys' fees, incurred by them, by virtue of any claim or claims whatsoever filed by any Subcontractor, Sub-subcontractor, mechanic, laborer or materialman making claims arising from the Work by, through, or under the Contractor. The Contractor also hereby agrees to defend, indemnify and hold harmless, protect, and defend the Owner, the A/E and its consulting engineers, and their respective successors, agents or employees from and against any liability, claim, judgment, loss, damage, including but not limited to direct, indirect and incidental and consequential damages, attorneys fees, court costs and expense of collection, occasioned in whole or in part by the failure of the Contractor, its Subcontractor, or Sub-subcontractors to comply with any of the terms or provisions of the Contract Documents.

6.16.5 This article does not require the Contractor to indemnify the Owner, its officers, agents, or employees from claims or liability arising solely from the acts or omissions of the Owner, its officers, agents, or employees.

## 6.17 Default.

6.17.1 The Contractor shall be in default of the Contract if:

6.17.1.1 Contractor refuses or fails to prosecute the Work in accordance with the Contract Documents in any material respect;

6.17.1.2 Contractor fails to make proper payment to Subcontractors or for materials or labor (provided Owner shall have paid to Contractor any payments due from Owner in connection with such materials or labor);

6.17.1.3 Contractor disregards laws, ordinances, rules, building codes and regulations or orders of any public authority having jurisdiction;

6.17.1.4 Contractor fails to coordinate its work with other contractors and Subcontractors as required under Article 8 of these General Conditions;

6.17.1.5 Contractor fails to comply with the scheduling requirements of the Contract;

6.17.1.6 Contractor fails to promptly replace rejected material or correct rejected workmanship;  
or

6.17.1.7 Contractor fails in any material respect to observe any other terms, provisions, conditions, covenants and agreements in the Contract to be observed and performed on the part of the Contractor.

6.17.2 In the event of any default by Contractor under the Contract, Owner shall have the right to take such measures as it deems necessary to correct the default, at the Contractor's sole cost and expense and to deduct such costs, including but not limited to the A/E's fees, as it may incur from amount otherwise owing to the Contractor, or to terminate the Contract in accordance with Sub-Article 16.2 of the General Conditions in addition to any and all other remedies that Owner may now or hereafter have. If the amounts owing to the Contractor are insufficient to cover the Owner's cost of corrections, the Contractor shall pay such amount promptly upon demand.

**Article 7**  
**SUBCONTRACTORS**

**7.1 Definitions.**

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

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

7.2 Award of Subcontracts and Other Contracts for Portions of the Work. The Contractor shall conduct an investigation of each of its proposed Subcontractor's capabilities to assure each is responsible and has the requisite experience, skill, physical plant, and financial strength necessary to perform each Subcontractor's respective Work. The Contractor shall not contract with any Subcontractor that is not responsible or does not have the requisite experience, skill, physical plant, and financial strength necessary to perform its part of the Work.

**7.3 Subcontractual Relations.**

7.3.1 The Contractor shall not include any provisions in its Contracts with its Subcontractors which will in any way prejudice the rights of the Owner and the Architect/Engineer under the Contract between the Owner and the Contractor.

7.3.2 The Subcontract agreement shall require the Subcontractor to consent to any assignment of the Subcontract to the Owner in the event of a default by the Contractor hereunder.

7.3.3 Nothing in Article 7 shall be construed to create a privity of Contract between the Owner and any Subcontractor.

**Article 8**  
**WORK BY OWNER OR BY SEPARATE CONTRACTORS**

**8.1 Owner's Right to Perform Work and to Award Separate Contracts.**

8.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with such work. Such work may include Work assigned to the Contractor under the Contract Documents which Work is not being performed properly or in accordance with the scheduling provisions of the Contract Documents, whether or not the Contractor is in default under Sub-Article 6.17 and whether or not the Owner has terminated the Contract under Sub-Article 16.2. If the Owner elects to exercise this right it will do so upon reasonable notice to the Contractor. There shall be an appropriate adjustment in amounts payable to the Contractor to reflect the Work undertaken by the Owner, which the parties shall confirm by Change Order in accordance with Article 14. If the Contractor claims that delay is involved because of such action by the Owner, he shall make such claim as provided elsewhere in the Contract Documents.

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

8.1.3 The Owner will provide for the coordination of the work, of his own forces and of each separate contractor with the Work of the Contractor, who shall cooperate therewith as provided in Sub-Article 8.2.

**8.2 Mutual Responsibility.**

8.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity and all required facilities for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate his Work with theirs as required by the Contract Documents.

8.2.2 If any part of the Contractor's Work depends for proper execution or results upon the work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the A/E any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to report shall constitute an acceptance of the Owner's or separate contractor's work as fit and proper to receive his Work, except as to defects which may subsequently become apparent in such work by others.

8.2.3 Any costs caused by defective or ill-timed work shall be borne by the party responsible therefor.

8.2.4 Should the Contractor wrongfully cause damage to the work or property of the Owner or of a separate Contractor, or to other work on the site, the Contractor shall promptly remedy such damage as provided in Sub-Article 12.2.5.

8.2.5 Should the Contractor wrongfully cause damage to the work or property of any separate contractor, the Contractor shall upon due notice promptly attempt to settle with such other contractor by agreement, or otherwise to resolve the dispute. If such separate contractor sues or initiates a litigation proceeding against the Owner on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall participate in the defense of such proceedings at the Contractor's expense, and if any judgment or award against the Owner arises therefrom the Contractor shall pay or satisfy it and shall reimburse the Owner for all attorneys' fees and court costs which the Owner has incurred.

8.3 Owner's Right to Clean Up: If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up the Project, the Site and related streets and walks on a routine basis as required by Sub-Article 6.13, the Owner may clean up and charge the cost thereof to the contractors responsible therefore as the Owner shall determine to be just.



**Article 9**  
**MISCELLANEOUS PROVISIONS**

9.1 Governing Law: The Contract shall be governed by South Dakota Law.

9.2 Successors and Assigns: The Owner and the Contractor each binds himself, his successors, assigns and legal representatives to the other party hereto and to the successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract or sublet it as a whole without the written consent of the Owner, nor shall the Contractor assign any money due or to become due to him hereunder, without the previous written consent of the Owner.

9.3 Written Notice: All notices, demands and other communications hereunder shall be in writing and shall be deemed to have been given if sent pursuant to Article VII of the Agreement for Construction.

9.4 Claims for Damages: Should either party to the Contract suffer injury or damage because of any act or omission of the other party or of any of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to such other party within 14 days after the first observance of such injury or damage.

9.5 Performance and Labor and Material Payment Bond: Before commencing the Work, the Contractor shall provide a Performance and Labor and Material Payment Bond in accordance with the requirements of the Instructions to Bidders.

9.6 Rights and Remedies.

9.6.1 The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. This provision relates particularly to the Contractor's obligations under Sub-Article 15.2.2.

9.6.2 No action or failure to act by the Owner, A/E or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

9.7 Tests.

9.7.1 If the Construction Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested or approved, the Contractor shall give the A/E and Owner timely notice of its readiness so the A/E and Owner may observe such inspection, testing or approval. The Contractor shall perform and bear all costs of such inspections, tests and approvals, unless otherwise provided.

9.7.1.1 Where certain testing and inspection requirements are set forth in the various Sections of the Construction Documents to be performed at the expense of the Owner, the Owner will retain the services of testing laboratories, agencies, or consultants, to perform such tests or inspections and render such services as may be required to verify that the work fulfills the requirements and intent of the Construction Documents. Such services will be performed in a manner consistent with the requirements of the Owner and the various agencies having jurisdiction over the Work and in accordance with reasonable standards of architectural and engineering practice.

9.7.1.2 The Owner reserves the right to modify the scope of or to re-allocate any of the testing and inspection services specified in the various Sections of the Construction Documents to be performed by a testing laboratory, agency or consultant retained by the Owner in connection with the Work when it can be satisfactorily established that such adjustment in scope is consistent with the intent of the Construction Documents. In the event that the Contractor shall not concur with such modification of scope or re-allocation of such services, he shall immediately notify the A/E and Owner in writing.

9.7.2 If the A/E determines that any Work requires special inspection, testing, or approval which Sub-Article 9.7.1 does not include, he will upon written authorization from the Owner, order the performance of such services by qualified independent testing laboratories, agencies or consultants as may reasonably be required or instruct the Contractor to order such special inspection, testing or approval, and the Contractor shall give notice as provided in Sub-Article 9.7.1. If such special inspection or testing reveals a failure of the Work to comply with the requirements of the Construction Documents, the Contractor shall bear all costs thereof, including the cost of the tests, correction of the Work, the cost of retesting, and compensation for the A/E's additional services made necessary by such failure; otherwise the Owner shall bear such costs, and an appropriate Change Order shall be issued.

9.7.2.1 If A/E's observation or any inspection or testing undertaken pursuant to Sub-Article 9.7 reveals a failure in any one of a number of identical or similar items or elements incorporated in the Work to comply with (1) the requirements of the Construction Documents or, (2) with respect to the Performance of the Work, with laws, ordinances, rules, regulations, building codes or orders of any public authority having jurisdiction, the A/E will have the authority to order inspection and/or testing of all such items or elements of the Work, or of a representative number of such items or elements of the Work, as he may in his reasonable opinion consider necessary or advisable, and the Contractor shall bear all costs thereof, including the cost of the tests, correction of the Work, the cost of retesting, and the A/E's additional services, if any are required, made necessary thereby. However, neither the A/E's authority to act under Sub-Article 9.7 nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the A/E to the Contractor, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.

9.7.3 Required certificates of inspection, testing or approval shall be secured by the Contractor and promptly delivered by him to the A/E and the Owner.

9.7.3.1 The Contractor shall obtain and deliver promptly to the Owner any certificates of final inspection of any part of his Work or operating permits for any mechanical or electrical apparatus, such as elevators, escalators, boilers, air compressors, fire alarms, etc., which may be required by law to permit full use and occupancy of the premises by the Owner. Except as is otherwise provided in Sub-Article 10.1.3, receipt of such permits or certificates by the Owner shall be a condition precedent to Completion of the Work.

9.7.3.2 Copies of reports issued as a result of services performed at the expense of the Owner pursuant to the provisions of this Article will be distributed to all parties to the Contract.

9.7.4 If the A/E or owner is to observe the inspections, tests or approvals required by the Contract Documents, they will do so promptly and, where practicable, at the source of supply.

9.7.5 In connection with testing and inspection services performed at the expense of the Owner, the Contractor shall provide Samples of materials and/or elements of the Work required as test specimens and shall provide incidental labor and facilities at the site reasonably required in support of such services.

9.7.6 The cost of testing services required solely for the convenience of the Contractor in his scheduling and performance of the Work shall be borne by the Contractor.

9.7.7 The cost of testing services related to remedial operations performed to correct deficiencies in the Work shall be borne by the Contractor.

9.7.8 If, during the course of the performance of any testing, inspection, control, balancing, adjusting, or similar work by the Contractor or an agent of the Contractor, it is the opinion of the A/E that the Contractor or said agent has failed to perform such work in a satisfactory manner, the Contractor shall, at his own expense, retain the services of a service organization which is satisfactory to the A/E for the performance of such work.

## 9.8 Litigation.

9.8.1 Unless otherwise specifically provided in this Agreement, all claims, counter-claims, disputes or other matters in question between the Owner and the Contractor arising out of, or relating to this Agreement, or the breach thereof, will be decided by direct negotiations, by non-binding mediation if the parties mutually agree, or in a circuit court of competent jurisdiction within the State of South Dakota. Notice of a request for mediation shall be sent in writing to the other party to this Agreement within a reasonable time after the claim, dispute, or other matter in question has arisen. If the party receiving notice of request does not agree to mediation in writing within 10 calendar days, it will be deemed that the parties do not mutually agree to mediate the matter. If the parties agree to mediate, a mediator to hear the dispute will be agreed upon by the parties. If agreement on a mediator cannot be reached, the owner shall select the mediator.

9.8.2 The Contractor shall carry on the Work and maintain its progress during any dispute or litigation proceedings, and the Owner shall continue to make payments to the Contractor to the extent required by the Contract Documents and South Dakota Law.

## **Article 10**

### **TIME**

#### **10.1 Definitions.**

10.1.1 The Contract Time is the period of time allotted in the Construction Contract for Substantial Completion of the Work as defined in Sub-Article 10.1.3, including authorized adjustments thereto.

10.1.2 The date of commencement of the Work is the date established in the Notice to Proceed.

10.1.3 The date of Substantial Completion of the Work is the date certified by the A/E when construction is sufficiently completed in accordance with the Contract Documents so that the Owner can occupy and utilize the Project for the use for which it is intended, and such Work is fully completed in accordance with the Contract Documents except for minor items, adjustments or corrections which have no material effect upon the utilization, function or intrinsic values of the entire Project, including all of its mechanical, electrical and other systems and facilities.

10.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically designated.

#### **10.2 Progress and Completion.**

10.2.1 All time limits stated in the Contract Documents, including the Construction Completion Schedule, are of the essence of the Contract.

10.2.2 The Contractor shall begin the Work on the date of commencement as defined in Sub-Article 10.1.2. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

#### **10.3 Delays and Extensions of Time.**

10.3.1 If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the Owner or the A/E, or by any employee of either, or by changes in the Construction Completion Schedule required by the Owner, or by any separate contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes not caused by the labor practices of the Contractor or any Subcontractor in contravention of applicable labor practices, fire, unusual delay in transportation, severe and unusual weather conditions not reasonably anticipatable, unavoidable casualties, or any other causes beyond the Contractor's control and not occurring due to the fault or neglect of the Contractor, any Subcontractor or any other person for whose acts the Contractor is responsible, then the Contract Time shall be extended by Change Order for such reasonable time as the Owner shall determine, or the Owner may elect to require the Contractor to accelerate the Work, in which case the Contract Sum shall be increased by a Change Order in the amount of the direct cost to the Contractor (exclusive of overhead and profit of necessary over-time labor).

10.3.2 Any claim for extension of time shall be made in writing to the Owner with a copy to A/E not more than 10 days after the commencement of the delay; otherwise it shall be waived. In the case of continuing delay only one claim is necessary. The Contractor shall provide an estimate of the probable effect on such delay on the progress of the Work.

10.3.2.1 Such claims shall set forth in detail the nature of the circumstances which form the basis for each such claim, the date upon which each such alleged cause of delay began, or began to affect the timely prosecution of the Work, and ended, or ceased to have an adverse effect upon the timely prosecution of the Work, and the number of days extension of time requested as a consequence of each such alleged cause of delay. The Contractor shall provide such supporting documentation as the Owner may require, including, where appropriate, a revised Construction Completion Schedule indicating all of the activities affected by the circumstances which form the basis for the claim.

10.3.2.2 The Contractor shall not be entitled to a separate extension of time as a consequence of each one of a number of causes of delay which may have a concurrent or interrelated effect on the progress of the Work.

10.3.2.3 The Owner shall have the right to defer his decision or decisions with reference to any claim or claims for an extension of time made pursuant to the provisions of this Article until the facts or circumstances which form the basis for such claim or claims may be fully assessed to the Owner's reasonable satisfaction.

10.3.2.4 Notwithstanding the provisions of Sub-Article 10.3.2, claims for an extension of time arising out of authorized changes in the Work shall be made in writing prior to or concurrent with the submission of the Contractor's proposal pursuant to such change. No extension of time arising out of changes in the Work will be granted subsequent to the date upon which the Contractor is authorized to proceed with such change or changes in the Work unless specific provisions governing a subsequent determination of an extension of time have been incorporated in such authorization to proceed with such change or changes in the Work. No claim for damages or separate compensation for delay arising from such change in the Work shall be recognized or be deemed valid, it being understood that any additional cost to the Contractor arising from such change shall be included in the amended Contract Sum set forth in such Change Order.

10.3.2.5 Time extensions will not be granted for rain, wind, snow, or other natural phenomena of normal intensity for the locality where work is performed. Determinations of the extent of delay attributable to unusual weather phenomena shall be made by comparing the weather for the contract period involved with the average of the preceding five (5) year climactic range during the same period on the calendar. National Oceanic and Atmospheric Administration National Weather Service statistics for the locality or area where the work is performed shall be used to determine the five (5) year average weather conditions. Time extensions for weather delays do not entitle the Contractor to "extended overhead" recovery.

10.3.3 If no agreement is made stating the dates upon which interpretations as provided in Sub-Article 4.13 shall be furnished, then no claim for delay shall be allowed on account of failure to furnish such interpretations until 15 days after written request is made for them, and not then unless such claim is reasonable.

10.3.4 Should the contractor fail to substantially complete the work within the time agreed upon in the contract documents, or within such extra time as may have been allowed by increases in the contract or by formally approved extensions granted by the owner, the contractor and the contractor's surety shall be liable for and shall pay the owner the sums stipulated in the agreement for construction as liquidated damages for each calendar day of delay until the work is substantially complete. This sum is not a penalty but is liquidated damages due the owner from the contractor by reason of inconvenience to the public, added cost of engineering and supervision, and other items which have caused an expenditure of public funds resulting from the contractor's failure to complete the work within the time specified in the contract. In addition to liquidated damages, if any delay on the part of the contractor, any subcontractor or sub-subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable results in any claim by third parties against the owner or the A/E arising out of such delay, the contractor shall pay, satisfy, and discharge all losses, damages and expenses arising out of such claims, including attorneys' fees, and shall indemnify and hold harmless the owner and the A/E and their agents and employees from and against all costs, fees, losses, damages, and expenses arising out of such claims enforced against the owner or the A/E.

10.3.5 No extension of time will be granted to the Contractor for any delay other than those described in Sub-Article 10.3.1.

10.3.5.1 Should the Contractor fail, refuse or neglect to supply a sufficiency of workmen or to deliver the materials with such promptness as to prevent delay in the progress of the Work, or fail in any material respect diligently to commence and prosecute the Work and to proceed in accordance with the approved construction schedule, or if the different parts thereof are not commenced, prosecuted, finished, delivered or installed in such manner as will insure substantial completion in accordance with the approved Construction Completion Schedule, or if the Contractor shall fail in the performance of any of his obligations under this Contract in any material respect, the Owner shall have the right to direct the Contractor, upon 3 days notice at the Contractor's cost and expense, to furnish such additional labor and to expedite deliveries of materials (or the Owner may furnish such labor and expedite such deliveries at the cost of the Contractor), which labor or expediting shall, in the Owner's opinion, be sufficient to speed up and complete the Work in accordance with the Construction Completion Schedule.

10.3.5.2 If such additional labor shall not be available, the Owner shall have the right to direct the Contractor at the latter's own cost and expense, to work overtime to such an extent as will be sufficient, in the Owner's opinion, to speed up and complete the Work as herein provided.

10.3.6 The Contractor's right to make a claim or claims for an extension of time, as provided in Sub-Article 10.3.1, shall not preclude the Contractor's right to make a claim for delay damages arising out of the Owner's significant interference, by action or inaction, with the Contractor's Work.

#### 10.4 Beneficial Occupancy.

10.4.1 The Owner shall have the privilege of Beneficial Occupancy and the use and benefit of designated areas, subdivisions or portions of the Project prior to completion and acceptance of the entire Project, provided that such Beneficial Occupancy shall not unduly interfere with the Contractor's operations nor unduly delay him in completing the entire Work. Such occupancy and use shall be further subject to the provisions set forth herein and the provisions of SDCL § 5-18B-13.

10.4.2 In the event that the Owner desires to exercise the privilege of Beneficial Occupancy, he shall give reasonable notice to the A/E and the Contractor. If the A/E determines that such proposed occupancy is reasonable and proper, the Contractor shall cooperate with the Owner in providing services and facilities reasonably required for the health, safety and comfort of the occupants and other parties lawfully present and/or entering or leaving the premises. Mutually acceptable arrangements shall be made between the Owner and the Contractor with regard to procedures, terms and conditions governing the operation and maintenance of such services and facilities as may be utilized for the benefit of the Owner. The Owner will assume proportionate and reasonable responsibility for operation of systems, equipment and/or utilities required to provide such services, in part or in total, including proportionate and reasonable expenses of operation incidental thereto. No such Beneficial Occupancy shall accelerate the commencement of any warranty period on any system but only on the particular components being utilized.

10.4.3 The Owner's Beneficial Occupancy or use of such designated areas, subdivisions, or portion of the Work shall not constitute acceptance of systems, materials, or elements of the Work which are not in accordance with the requirements of the Contract Documents; nor relieve the Contractor from his obligations to complete the Work; nor for responsibility for loss or damage due to or arising out of defects in, or malfunctioning of, systems, materials, equipment, or elements of the Work; nor from other unfulfilled obligations or responsibilities of the Contractor under the Contract. If, however, damage results solely from any act of the Owner, the Owner will assume its proportionate responsibility for such damage.

**Article 11**  
**PAYMENTS AND COMPLETION**

11.1 Contract Sum: The Contract Sum is stated in the Agreement for Construction.

11.2 Schedule of Values: Before the first Application for Payment, the Contractor shall submit to the Owner and A/E a schedule of values allocated to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Owner and A/E may require. The format and number of copies of such Applications for Payment shall be as directed by the Owner and the A/E. This schedule, unless objected to by the Owner, shall be used as a basis for the Contractor's Applications for Payment.

11.3 Monthly Application for Payment.

11.3.1 No later than the 25th day of each month the Contractor shall submit to the A/E his monthly itemized application for Payment. The Contractor shall not submit more than one pay application per month. The monthly Application for Payment shall be on AIA Document G702 or form provided by the A/E and supported by such data substantiating the Contractors right to partial payment as the Owner or A/E may require; including but not limited to receipts, releases, and waivers of liens.

11.3.1.1 In applying for payment, the Contractor shall submit his monthly payment estimate based upon the approved schedule of work for the project, itemized in such form and supported by such evidence as will show his right to the payment claimed. Claims made on account of materials delivered and suitably stored at the site, but not incorporated in the work, shall be conditioned upon submission by the Contractor of Bills of Sale or such other procedure as will establish the Owner's title to such material or otherwise adequately protect the Owner's interest.

11.3.1.2 If the Contractor chooses to apply for payment for materials which cannot be incorporated into the Work, and cannot be stored on the site, he may do so provided the following conditions are met:

Unless otherwise agreed to by the Owner, the material shall be stored in a bonded or insured commercial warehouse within a geographic radius of 15 miles of the construction site, with the Owner being listed on the bond or insurance certificate as the sole beneficiary in the case of loss or damage to the stored materials. The Contractor shall be responsible for all storage, insurance or transportation costs associated with the materials. Conditions of insurance will apply to applicable portions of Sub-Article 11.3.1.2. Contractor shall provide the Owner with bills of sale or such other documents as will establish the ownership of the materials.

11.3.2 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

11.3.3 Monthly applications received after the 25th day of the month will be treated as if submitted on the 25th day of the following month.

11.4 Recommendation for Payment.



11.4.1 By the 5th of each month, the A/E will review the Contractors Monthly Application for Payment and make his certification to the Owner with a copy to the Contractor, for such amount as the A/E believes is properly due, or notify the Contractor in writing his reasons for withholding a Certificate as provided in Sub-Article 11.6.1.

11.4.2 The issuance of a Certification for Payment will constitute a representation by the A/E to the Owner, based on his observations at the site as provided in Sub-Article 4.3 and the data comprising the Monthly Application for Payment, that the Work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the result of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in his Certificate); and that the A/E believes that the Contractor is entitled to payment in the amount recommended. However, by issuing a Certification for Payment, the A/E shall not thereby be deemed to represent that he has made exhaustive or continuous on-site inspections to check the quality or quantity of the Work or that he has reviewed the construction means, methods, techniques, sequences or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the moneys previously paid on account of the Contract Sum. The Owner will not be bound by the amount stated in the A/E's Certification for Payment in making determinations of amounts properly payable to the Contractor.

## 11.5 Progress Payments.

11.5.1 Based upon his review of the Monthly Application for Payment, and the A/E's Certification, the Owner shall make progress payments to the Contractor in such amounts as the Owner reasonably determines are properly due less the aggregate of previous payments in each case. Payment of amounts determined to be due by the Owner under each Monthly Application for Payment shall be due to the Contractor 45 days after the 5th of each month unless the A/E's certification was delayed by following the procedures of Article 11.6.1. In such case, payment shall be 60 days after the 15th of each month. If the Owner retains any portion of a certified progress payment that is properly due and undisputed beyond the time for payment specified herein and for reasons other than those required by statute, the Owner shall owe and pay the Contractor four percent (4%) interest compounded annually on the retained amount starting from the date payment first becomes due under this article.

11.5.2 The Contractor shall promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's Work, the amount to which said Subcontractor is entitled reflecting any amounts actually withheld, if any, from payments to the Contractor on account of such Subcontractor's Work. The Contractor shall not withhold retainage from its Subcontractors unless retainage is withheld from the Contractor by the Owner. The Contractor shall, by an appropriate agreement with each Subcontractor, require each Subcontractor to make payments to his Sub-subcontractors in similar manner.

11.5.3 The Owner shall, on request, furnish to any Subcontractor, if practicable, information regarding the percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Owner on account of Work done by such Subcontractor.

11.5.4 Neither the Owner nor the A/E shall have any obligation to pay or to see to the payment of any moneys to any Subcontractor except as may otherwise be required by law.

11.5.5 No Certification for Payment, nor any progress payment, nor any partial or entire use or occupancy of the Project by the Owner, shall constitute acceptance or approval of any Work not in accordance with the Contract Documents.

#### 11.6 Payments Withheld.

11.6.1 The A/E may decline to certify the full payment of the amount requested by the Contractor in his monthly application to the extent necessary to reasonably protect the Owner. If the A/E is unable to certify payment in the amount of the Application, he will, within 10 days after receipt of the monthly application, notify the Contractor in writing the reasons he cannot make such a certification. If the Contractor and the A/E cannot agree on a revised amount within five days of A/E sending written notice, the A/E will promptly issue a Certification for Payment for the amount for which he is able to certify to the Owner pursuant to Sub-Article 11.4.2. The A/E may also decline to certify payment because of subsequently discovered evidence or subsequent observations, he may nullify the whole or any part of any Certification for Payment previously issued, and the Owner may withhold payment of all or any part of an Application for Payment, to such extent as may be necessary to protect the Owner from loss because of:

11.6.1.1 Defective work not remedied;

11.6.1.2 Third party claims filed or reasonable evidence indicating probable filing of such claims;

11.6.1.3 Failure of the Contractor to make payments properly to subcontractors or for labor, materials or equipment;

11.6.1.4 Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;

11.6.1.5 Damage to the Owner or another contractor;

11.6.1.6 Reasonable evidence that the Work will not be completed within the Contract Time;

11.6.1.7 Failure to carry out the Work in accordance with the Contract Documents;

11.6.1.8 A lien or attachment is filed and such lien is not discharged within 5 days of demand from the Owner;

11.6.1.9 Failure of the Contractor and/or of the Mechanical or Electrical Subcontractors to comply with the mandatory requirements for maintaining "up-to-date" Record Drawings;

11.6.1.10 Incomplete or otherwise inadequate Application for Payment; or

11.6.1.11 Reasonable evidence that the Contractor is in material breach of his obligations under the Contract.

11.6.2 When the above grounds in Sub Article 11.6.1 are removed, payment shall be made for amounts withheld because of them.

#### 11.7 Substantial Completion.

11.7.1 When the Contractor considers that the Work, or a designated portion thereof which is acceptable to the Owner, is Substantially Complete as defined in Sub Article 10.1.3 the Contractor shall prepare for submission to the A/E and Owner a list of items to be completed or corrected. The failure to include any item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the A/E and Owner on the basis of an inspection determines that the Work or designated portion thereof is Substantially Complete, the A/E will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities and damage to the Work, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties and Guarantees 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. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

11.7.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the A/E, the Owner shall make payment, reflecting adjustment for defective or incomplete work, if any, for such Work or portion thereof, as provided in the Contract Documents. Double the amount necessary to complete the Work shall be retained by the Owner pursuant to SDCL § 5-18B-13.

## 11.8 Final Completion and Final Payment.

11.8.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the A/E and Owner will promptly make such inspection and, when they find the Work acceptable under the Contract Documents and the Contract fully performed, the A/E will promptly issue a final Certificate for payment stating that to the best of his observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in said final Certificate, is due and payable. The A/E's Final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Sub-Article 11.8.2 have been fulfilled.

11.8.2 The final payment shall not become due until the Contractor submits to the A/E and Owner (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety to final payment, (3) if required by the Owner, other data establishing payment or satisfaction of all such obligation, such as receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Owner, (4) an Unemployment Compensation Contribution Certificate from the South Dakota Department of Labor, and (5) a full and complete release of the Owner from all liability under the Contract and otherwise, except to the extent provided in Sub-Article 11.8.4. If the Contractor fails to furnish such releases or waivers of liens as the Owner reasonably requires to determine that there are no outstanding liens, the Owner may require that Contractor, as a condition of final payment to furnish a bond satisfactory to the Owner to indemnify the Owner against any such liens. Cost of such bond shall be borne by the Contractor. If any such lien remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

11.8.3 Owner shall make final payment of all sums due to the Contractor 45 days after the completion and acceptance of the project by the Owner and Contractor's compliance with Article 11.8.2 above. If the Owner fails to make final payment to the Contractor within the time specified herein, the Owner shall pay the Contractor interest at the rate of four percent (4%) compounded annually on the amount retained starting from the date final payment first becomes due.

11.8.4 The acceptance of final payment by the Contractor shall constitute a complete and unconditional waiver and release of any and all claims by the Contractor of whatever nature, and regardless whether they are then known or unknown, and a complete and unconditional release of the Owner and every person for whom the Owner is responsible for any and all matters related to the Contract or otherwise, except those claims which have been made in writing and identified by the Contractor as not having been settled at that time.

**Article 12**  
**PROTECTION OF PERSONS AND PROPERTY**

12.1 Safety Precautions and Programs: The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work, and for safeguarding all adjacent properties and facilities.

12.2 Safety of Persons and Property.

12.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

12.2.1.1 All employees on the Work and all other persons who may be affected thereby;

12.2.1.2 All the Work and all materials and equipment to be incorporated therein, whether in storage or off the site, under the care, custody or control of the Contractor and any of his Subcontractors or Sub-subcontractors; and

12.2.1.3 Other property at the site or adjacent thereto, including but not limited to, work of the Owner or of separate contractors, trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

12.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss, and shall indemnify the Owner and the A/E and save them harmless against all claims, penalties, actions and proceedings relating thereto or the Contractor's failure so to comply.

12.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all 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 utilities.

12.2.4 When the use or storage of any hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

12.2.5 The Contractor shall promptly remedy all damage or loss to any property referred to in Sub-Articles 12.2.1.2 and 12.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Sub-Articles 12.2.1.2 and 12.2.1.3, except damage or loss attributable to the acts or omissions of the Owner or A/E or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to his obligations under Sub-Article 6.16.

12.2.6 The Contractor shall designate a responsible member of his organization at the Site whose duty shall be the prevention of accidents. This person shall be qualified as a safety supervisor by experience, training, or education and shall have the responsibility to insure and enforce safety requirements on behalf of the Contractor and shall be designated by the Contractor in writing to the Owner and the A/E.

12.2.7 The Contractor shall issue weekly safety reports to the Owner and the A/E attesting to conditions on the Site relating to safety and to actions taken.

12.2.8 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.

12.2.9 The structure of the Project is designed to support the loads of the finished building. No provision is included for stresses or loads imposed by construction operations. If the Contractor desires to place such loads in excess of the design load shown on drawings, he shall submit drawings and calculations prepared by, and bearing the seal of a professional structural engineer of the proposed method for supporting such loads for the A/E's review and approval. No loading of any kind in excess of design loads shall be placed on any part of the building structure prior to the A/E's approval of submitted drawings and calculations. The costs of the A/E's review shall be borne by the Contractor.

12.2.10 The Contractor shall prepare a written report setting forth the circumstances and details related to any accident or occurrences involving death, bodily injury, sickness, disease, personal injury, and/or loss or injury to or destruction of tangible property. Such reports shall be forwarded promptly to the insurance carriers, the A/E and the Owner.

12.3 Emergencies: In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss and shall as promptly as conditions permit notify the insurance carriers, Owner, and A/E of the nature of the emergency and circumstances related thereto. Immediately thereafter, the Contractor shall prepare a written report setting forth in detail the action taken and describing in detail all circumstance and conditions which are related to such action.

## Article 13 INSURANCE

13.1. At all times during the term of this Agreement, Contractor shall obtain and maintain in force insurance coverage of the types and with the limits as follows:

13.1.1. Commercial General Liability Insurance:

equivalent form of coverage **with a limit of not less than one million dollars (\$1,000,000) for each occurrence.** If such insurance contains a general aggregate limit it shall apply separately to this Agreement or be no less than two (2) times the occurrence limit. The insurance policy shall name the owner, its officers and employees, as additional insureds, but liability coverage is limited to claims not barred by sovereign immunity. The owner, its officers and employees do not hereby waive sovereign immunity for discretionary conduct as provided by law.

13.1.2. Business Automobile Liability Insurance:

Contractor shall maintain business automobile liability insurance or equivalent form **with a limit of not less than one million dollars (\$1,000,000) for each accident.** This insurance shall include coverage for owned, hired and non-owned vehicles.

13.1.3. Worker's Compensation Insurance:

Contractor shall procure and maintain workers' compensation and employers' liability insurance **as required by South Dakota or Federal law.**

~~13.1.4. Builder's Risk Insurance:~~

~~Contractor shall maintain builder's risk insurance with a limit of not less than the full value of this Agreement upon any building, structure, equipment and appliance in the process of construction or installation under state contract and upon all materials on site, until such time as the building, structure, equipment and appliances have been finally accepted by the Owner and the contract completed. This insurance shall include the interest of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Work and shall insure against loss by physical damage including, without duplication of coverage, fire, flood, extended coverage, theft, vandalism, malicious mischief, and collapse.~~

~~13.1.5. Installation Floater Insurance:~~

~~Contractor shall maintain installation floater insurance with a limit of not less than the full value of Specialized Equipment and Material upon specialized equipment and material not covered under the Builder's Risk Insurance in the process of construction or installation under state contract and upon all materials on site, until such time as the building, structure, equipment and appliances have been finally accepted by the Owner and the contract completed. This insurance shall include the interest of the Owner, Contractor, Subcontractors, and Sub-subcontractors in the Work and shall insure against loss by physical damage including, without duplication of coverage, fire, flood, extended coverage, theft, vandalism, malicious mischief, and collapse.~~

Before beginning work under this Agreement, Contractor shall submit insurance policies to the A/E for review and approval, and shall furnish the owner with properly executed Certificates of Insurance which shall clearly evidence all insurance required in this Agreement including naming the owner, its officers and employees, as additional insureds, as set forth above. In the event of a substantial change in insurance, issuance of a new policy, cancellation or nonrenewal of the policy, Contractor agrees to provide immediate notice to the owner and provide a new certificate of insurance showing continuous coverage in the amounts required. Contractor shall furnish copies of any changed or new insurance policies if requested by the owner.

**Article 14**  
**CHANGES IN THE WORK**

14.1 Change Orders: A Change Order is a written order to the Contractor signed by the Owner, issued after execution of the Contract, authorizing a change in the Work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time.

14.2 The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. No later than the 5th day of each month, the A/E will process a written change order to include all outstanding RFPs.

14.3 The cost or credit to the Owner resulting from a change in the Work shall be determined in one or more of the following ways:

14.3.1 By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. Such lump sum proposals shall be supported by a completely detailed analysis of the proposed change subdivided into the Work of the Contractor and/or the Work of each Subcontractor and/or Sub-subcontractors involved in the proposed change, as applicable, with each such subdivision further broken down into the following elements:

14.3.1.1 Number of man-hours of labor to be performed by each trade, craft or classification of employee involved in the proposed change.

14.3.1.2 The hourly rate for each such trade, craft or classification of employee, including the appropriate wage supplement for social security, old age and unemployment contributions, and such other employee benefits as may be established by statute or by written agreement negotiated by and between organizations representing such crafts or trades and representatives of their employers.

14.3.1.3 The estimated quantity of each item or element of material and/or equipment entering into the proposed change.

14.3.1.4 The unit cost of each such item or element of material and/or equipment.

14.3.1.5 Rental of items or units of construction plant and equipment with a schedule of the period or periods of use of such item or unit in connection with the proposed change.

14.3.1.6 Rental terms and rates for each such item or unit of construction plant and equipment. Rental for equipment shall be based on the following:

14.3.1.6.1 Hourly rental rates shall be based on 80% of the applicable rates for equipment listed in the 'Green Book', latest edition, (published by the Associated Equipment Distributors, 615 West 22nd Street, Oakbrook, Illinois, 60523).

14.3.1.6.2 Hourly rental rates for equipment not listed in the 'Green Book' shall be based on 100% of the applicable rates for equipment listed in the 'Blue Book', latest edition (published by Dataquest, 1290 Ridder Park Drive, San Jose, California, 95131).



14.3.1.6.3 Hourly rental rates determined from the 'Green Book' or 'Blue Book' includes all items of cost and expense to the Contractor, including gas, oil, maintenance, repairs, insurance, and transportation to and from construction site.

14.3.1.7 Power and/or other utilities entering into the proposed change.

14.3.1.8 Rates and terms applicable to such power and/or other utilities.

14.3.1.9 Additional premiums, if applicable, for the extension of insurance and bond coverages as required herein to the proposed change.

14.3.1.10 Applicable federal, state and local taxes.

14.3.1.11 Indirect Cost and Fee computed as a percentage override applied to net cost in accordance with the provisions of this Article.

14.3.2 By unit prices stated in the Contract Documents or subsequently agreed upon;

14.3.3 By cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee;

14.3.4 By the method provided in Sub-Article 14.3.12.

14.3.5 The Contractor shall require that the itemized analysis of each portion of the proposed change to be performed by a Subcontractor and/or Sub-subcontractor be prepared by each such Subcontractor and/or Sub-subcontractor in accordance with the format established herein. Copies of all such itemized analysis shall be appended to the Contractor's itemized analysis of the proposed change in the Work.

14.3.6 For purposes of calculating Indirect Cost and Fee in relation to Change Orders, the net cost of a proposed change in the Work shall include, and unless otherwise agreed in writing prior to the performance of the proposed change, shall be limited to the fair and reasonable estimated cost of the total of all of the individual items, elements, or components involved in proposed change in the Work (including adds and deducts) as set forth in Sub-Articles 14.3.1.1 through 14.3.1.8.

14.3.7 For each portion of a proposed net additive change in the Work to be performed directly by the Contractor, the cost to Owner shall include an increment for the Indirect Cost and Fee of the Contractor associated with such portion of proposed change of 8% of the net cost of the Work.

14.3.8 For each portion of a proposed net additive change in the Work to be performed directly by a Subcontractor, in addition to an increment or increments for Subcontractor's Indirect Cost and profit associated therewith of 8%, the cost to the Owner shall include a supplementary increment or increments for Contractor's Indirect Cost and Fee associated therewith of 6% of the net cost of the Work.

14.3.9 In computing Indirect Cost and Fee, the percentage for Indirect Cost and Fee shall be taken on basic wage only. No percentage override shall be taken on Social Security, Old Age and Unemployment contributions, contributions to Industry funds, education, and Training Funds and/or similar wage supplements, contributions or benefits.

14.3.10 Items, elements or components of changes in the Work or proposed changes which shall be classified as Indirect Cost and excluded from net cost shall include, but shall not necessarily be limited to:

14.3.10.1 All classifications of administrative, supervisory, and clerical personnel not engaged manually in the performance of the Work, including timekeepers, clerks, watchmen, and security personnel.

14.3.10.2 Miscellaneous expense, job burden, and/or other generalized categories of cost or expense.

14.3.10.3 Use of small tools and miscellaneous materials.

14.3.10.4 Insurance other than insurance coverage required herein.

14.3.11 In changes in the Work involving both additions to and deductions in the Work, or any portion or element thereof, or the relocation or rearrangement of items, portions or elements thereof, or the substitution of any items, portions or elements thereof, such additions and deductions shall be balanced, and the Contractor's Fee computed on the same basis for deductions as well as additions. If at the request of the A/E and/or the Owner a number of unrelated changes in the Work are set forth individually, summarized and totaled in a single Change Order for reasons of administrative convenience, the amount or amounts of individual deductive changes in the Work set forth therein shall, in any event, be balanced against the amount or amounts of individual additive changes in computing the Contractor's Fee for the purpose of adding and deducting.

14.3.12 If none of the methods set forth in Sub-Articles 14.3.1, .3.2 or .3.3 is agreed upon, the Contractor, provided he receives a written order signed by the Owner, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Owner on the basis of the reasonable expenditures and savings of those performing the Work attributable to the change, including, in the case of an increase in the Contract Sum, a reasonable allowance for the Contractor's Fee. In such case, and also under Sub-Articles 14.3.3 and .3.4 above, the Contractor shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a Change Order, at the end of each day, and will submit to the Owner or his designated representative: (a) daily time slips showing the name of each workman employed on such work, the number of hours which he is employed thereon, the character of his duties, and the wages and benefits to be paid to him and on his behalf, and (b) a memorandum of the equipment used in the performance of such Work, together with the rental claimed therefor. Unless otherwise provided in the Contract Documents, cost shall be limited to the following: cost of materials, including sales tax and cost of delivery; cost of labor, including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; worker's or workmen's compensation insurance; bond premiums; rental value of equipment and machinery; and the additional costs of supervision and field office personnel directly attributable to the change. Pending final determination of cost to the Owner, payments on account shall be made on the basis of amounts reasonably estimated by the Owner. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results in a net decrease in the Contract sum will be the amount of the actual net cost as confirmed by the A/E and agreed to by the Owner. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance or credit for the Contractor's Fee shall be figured on the basis of the net increase, or decrease, if any, with respect to that change.

#### 14.4 Differing Site Conditions

14.4.1 The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the A/E of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

14.4.2 The A/E shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, the Contract Sum shall be adjusted as provided in this Article, provided that the work has been ordered in writing by Owner and A/E as provided in Sub-Article 14.1 above. There shall be included in the adjustment to the Contract Sum under the preceding sentence a reasonable allowance for any extraordinary increase in Indirect Cost borne by the Contractor because of such additional work.

#### 14.5 Claims for Additional Cost.

14.5.1 If the Contractor wishes to make a claim for an increase in the Contract Sum, he shall give the A/E and Owner a written notice thereof within 10 days after the occurrence of the event giving rise to such claim except where claim is made in connection with deviations in Shop Drawing or Sample submittals, in which case claim shall be made in writing to the A/E concurrently with such submittals. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Sub-Article 12.3. No such claim shall be valid unless so made. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

14.5.2 If the Contractor claims that additional cost is involved because of, but not limited to, (1) any written interpretation pursuant to Sub-Article 4.13, (2) any order by the Owner to stop the Work pursuant to Sub-Article 5.2 where the Contractor was not at fault, (3) any written order for a minor change in the Work issued pursuant to Sub-Article 14.6, or (4) any deviation in Shop Drawing or Sample submittals from the requirements of the Contract Documents, the Contractor shall make such claim as provided in Sub-Article 14.5.1.

14.6 Minor Changes in the Work: The A/E will have authority to order minor changes in the Work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order, and shall be binding on the Owner and the Contractor. The Contractor shall carry out such written orders promptly.

**Article 15**  
**UNCOVERING AND CORRECTION OF WORK**

**15.1 Uncovering of Work.**

15.1.1 If any portion of the Work should be covered contrary to the request of the A/E or the Owner, or the requirements specifically expressed in the Contract Documents, it must, if required in writing by the A/E or the Owner, be uncovered for his observation and shall be replaced at the Contractor's expense.

15.1.2 If any other portion of the Work has been covered which the A/E or the Owner has not specifically required to observe prior to being covered, the A/E or the Owner may request to see such Work and it shall be uncovered by the Contractor. If such work be found in accordance with the Construction Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such work be found not in accordance with the Construction Documents, the Contractor shall pay such costs unless it be found that this condition was caused by the Owner or a separate contractor as provided in Article 8, in which event the Owner shall be responsible for the payment of such costs.

**15.2 Correction of Work.**

15.2.1 The Contractor shall promptly correct all Work rejected by the A/E as defective or as failing to conform to the Construction Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for the A/E's additional services made necessary thereby.

15.2.2 If, at any time after the Owner's acceptance of the fully completed Project any of the Work is found not to have been provided in conformance with the Construction Documents, or, if within one year after such acceptance any of the Work is otherwise found to be faulty or defective, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so. The Contractor shall also repair or replace any part of the Work which is damaged by the defective condition or the remedial Work. This obligation shall survive termination of the Contract, subject to the terms of any applicable statute of limitations. The Owner shall give such notice promptly after discovery of the condition.

15.2.3 The Contractor shall remove from the Site all portions of the Work which are defective or non-conforming and which have not been corrected under Sub-Articles 6.4.1, 15.2.1 and 15.2.2, unless removal is waived by the Owner.

15.2.4 If the Contractor fails to correct defective or non-conforming Work as provided in Sub-Articles 6.4.1, 15.2.1 and 15.2.2, the Owner may correct it in accordance with Sub-Article 5.3.

15.2.5 If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the A/E, the Owner may remove it and may store the materials or equipment at the expense of the Contractor. If the Contractor does not pay the cost of such removal and storage within 10 days thereafter, the Owner may upon 10 additional days written notice sell such Work at auction or a private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the A/E's additional services made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor should have borne, the difference shall be charged to the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due to the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner upon demand.

15.2.6 The Contractor shall bear the cost of making good all work of the Owner or separate contractors destroyed or damaged by such correction removal.

15.2.7 Nothing contained in this Article shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Sub-Article 6.4 hereof. The establishment of any time period prescribed by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, nor the time within which proceedings may be commenced to establish the Contractor liability with respect to his obligations other than specifically to correct the Work.

15.3 Acceptance of Defective or Non-Conforming Work: If the Owner prefers to accept defective or non-conforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

**Article 16**  
**TERMINATION OF THE CONTRACT**

16.1 Termination by the Contractor: If the Work is stopped for a period of 90 days under an order of any court or any public authority having jurisdiction, or as a result of an act of government, such as a declaration of a national emergency making materials unavailable, through no act or fault of the Contractor or Subcontractor or their agents or employees or any other persons performing any of the Work under a contract with the Contractor, then the Contractor may, upon 7 additional days written notice to the Owner and the A/E, terminate the Contract and recover from the Owner payment for all Work executed to the termination date, together with reasonable demobilization costs. The Contractor shall have no other right to terminate the Contract for any reason.

16.2 Termination by the Owner.

16.2.1 If the Contractor is in default under the Contract Documents, the Owner may, without prejudice to any other right or remedy and upon written notice to the Contractor, terminate the contract.

Prior to termination of the Contract, the Owner shall give the Contractor and his surety 10 calendar days written notice, during which the Contractor and/or his surety may rectify the cause of the termination. If rectified to the satisfaction of the Owner within said 10 days, the Owner may rescind its notice of termination. If not rectified, the termination for cause shall become effective at the end of the 10 day notice period. In the alternative, the Owner may postpone the effective date of the termination notice, at its sole discretion, if it should receive reassurances from the Contractor and its surety that the causes of termination will be remedied in a time and manner which the Owner finds acceptable. If at any time more than 10 days after the notice of termination, the Owner determines that the Contractor or its surety has not or is not likely to rectify the causes of termination in an acceptable manner or within the time allowed, then the Owner may immediately terminate the Contract for cause by giving written notice to the Contractor and its surety. In no event shall termination for cause terminate the obligations of the Contractor's surety on its payment and performance bonds.

Notice of termination, whether initial or given after a period of postponement, may be served upon the Contractor and the surety by mail or any other means at their last known places of business in South Dakota or elsewhere, by delivery to any officer or management/supervisory employee of either wherever they may be found, or, if no such officer, employee or place of business is known or can be found by reasonable inquiry within 3 days, by posting the notice at the job site. Failure to accept or pick up registered or certified mail addressed to the last known address shall be deemed to be delivery.

Upon termination of the Contract, the Owner shall take possession of the premises and of all materials, tools, appliances, equipment, and other facilities on the Project, wherever stored, and may finish the Work by whatever method he may deem expedient. The Contractor shall assign Subcontracts to the Owner or to a designated substitute contractor promptly upon request. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished and the Owner has determined its damages owing to the Contractor's default.

16.2.2 If the costs of finishing the Work, including compensation for the A/E's additional services made necessary by the Contractor's default, and all other damages suffered by the Owner on account of the Contractor's default, exceed the unpaid balance of the Contract Sum, the Contractor shall pay the difference to the Owner, and this obligation for payment shall survive the termination of the Contract. If the costs of finishing the Work are less than the unpaid portion of the contract Sum, the Owner shall pay the unpaid balance of any amount properly owing to the Contractor for all Work executed to the date of termination, less actual damages. The Owner will not be obligated to pay any further amount on account of Direct Cost, Indirect Cost or Fee.

16.2.3 If it should be judicially determined that the Owner improperly terminated this Contract for cause, then the termination shall be deemed to be a termination for the convenience of the Owner.

### 16.3 Termination for Convenience.

16.3.1 The Owner may terminate this Contract at any time without cause, in whole or in part, upon giving the Contractor notice of such termination. Upon such termination, the Contractor shall immediately cease Work and remove from the project site all of its labor forces and such of its materials as Owner elects not to purchase or to assume in the manner hereinafter provided. Upon such termination, the Contractor shall take such steps as Owner may require to assign to the Owner the Contractor's interest in all Subcontracts and purchase orders designated by Owner. After all such steps have been taken to Owner's satisfaction, the Contractor shall receive as full compensation for termination and assignment the following:

- (1) All amounts then otherwise due under the terms of this Contract,
- (2) Amounts due for work performed subsequent to the latest Request for Payment through the date of termination,
- (3) Reasonable compensation for the actual cost of demobilization incurred by the Contractor as a direct result of such termination. The Contractor shall not be entitled to any compensation for lost profits or for any other type of contractual compensation or damage other than those provided by the preceding sentence. Upon payment of the foregoing, Owner shall have no further obligations to Contractor of any nature.

16.3.2 In no event shall termination for the convenience of the Owner terminate the obligations of the Contractor's surety on its payment and performance bonds.

# **FUNDING AGENCY GENERAL CONDITIONS**



## **Table of Contents**

Guidance for Utilization of Disadvantaged Business Enterprises	DBE – 1
DBE Subcontractor Solicitation Information Form	DBE – 6
DBE Subcontractor Participation Form (EPA Form 6100-2)	DBE – 7
DBE Subcontractor Performance Form (EPA Form 6100-3)	DBE – 9
DBE Subcontractor Utilization Form (EPA Form 6100-4)	DBE – 11
Equal Employment Opportunity and Affirmative Action Requirements	EEO – 1
DOL Notification Form	EEO – 7
Certification Regarding Debarment, Suspension and Other Responsibility Matters	Debar – 1
Prohibition Against Listed Violated Facilities	PALVF – 1
Williams-Steiger Occupational Safety and Health Act of 1970	OSHA – 1
Discovery of Archaeological and Other Historical Items	Archaeol – 1

## **GUIDANCE FOR UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES REQUIREMENTS OF 40 CFR §33.**

### **A. REQUIREMENTS**

1. The recipient and prime contractor will exercise good faith efforts to attract and utilize small, minority, and women's business enterprises primarily through outreach, recruitment, and race/gender neutral activities; at a minimum, fulfillment of the six affirmative steps set forth below:
  - a. Including disadvantaged businesses on solicitation lists;
  - b. Assuring that disadvantaged businesses are solicited whenever they are potential sources;
  - c. Dividing total requirements, when economically feasible, into small tasks or quantities to permit maximum participation by disadvantaged businesses;
  - d. Establishing delivery schedules, when the requirements of the work permit, which will encourage participation by disadvantaged businesses;
  - e. Using the services of the Small Business Administration and the Office of Minority Business Enterprise of the U.S. Department of Commerce, as appropriate; and
  - f. Require a. through e. to be taken if subcontracts are awarded.

### **B. FAIR SHARE OBJECTIVE**

1. The fair share objective for this project is   1   % MBE's and   4   % WBE's.

### **C. DEFINITIONS**

1. Disadvantaged Business Enterprise (DBE) is a business concern which meets the qualifications of a Minority Business Enterprise (MBE), Women's Business Enterprise (WBE), Small Business (SBE), or Small Business in a Rural Area (SBRA).
2. Minority Business Enterprise (MBE) is a business concern which is:
  - a. Certified as socially and economically disadvantaged by the Small Business Administration;
    - (1) Socially disadvantaged individuals are those who have been subjected to racial or ethnic prejudice or cultural bias because of their identity as a member of a group without regard to their individual qualities.
    - (2) Economically disadvantaged individuals are those socially disadvantaged individuals whose ability to compete in the free enterprise system is impaired due to diminished capital and credit opportunities, as compared to others in the same business area who are not socially disadvantaged. In determining the degree of diminished credit and capital opportunities, the Small Business Administration shall consider, but not be limited to, the assets and net worth of such socially disadvantaged individuals. Individuals who certify that they are members of named groups (Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Asian-Indian Americans), are to be considered socially and economically disadvantaged. Economically and socially disadvantaged individuals are deemed to include women.
  - b. Certified as a minority business enterprise by a State or Federal agency; and

- c. An independent business concern which is at least 51 percent owned and controlled by minority group member(s).

(1) A minority group member is an individual who is a citizen of the United States and one of the following:

- (a) Black American;
- (b) Hispanic American (with origins from Puerto Rico, Mexico, Cuba, South or Central America)
- (c) Native American (American Indian, Eskimo, Aleut, native Hawaiian); or
- (d) Asian-Pacific American (with origins from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, Taiwan or the Indian subcontinent).

(2) In order to satisfy this third criteria of the MBE definition, the minority ownership's interest must be real, substantial and continuing. Such interest is characterized by:

- (a) Risk of loss/share of profit commensurate with the proportional ownership; and
- (b) Receipt of the customary incidents of ownership, such as compensation (i.e., salary and other personnel compensation).

(3) A minority owner must have and exercise control of the business decisions. Characteristics of control include, but are not limited to:

- (a) Authority to sign bids and contracts;
- (b) Decisions in price negotiations;
- (c) Incurring liabilities for the firm;
- (d) Final staffing decisions;
- (e) Policy-making; and
- (f) General company management decisions.

(4) Only those firms performing a useful business function according to custom and practice in the industry, are qualified as MBEs. Acting merely as a passive conduit of funds to some other firm where such activity is unnecessary to accomplish the project does not constitute a "useful business function according to custom and practice in the industry." The purpose of this approach is to discourage the use of MBE "fronts" and limit the creation of an artificial supplier and broker marketplace.

3. Women's Business Enterprise (WBE) is a business which is certified as such by a State or Federal agency, or which meets the following definition:

"A women's business enterprise is an independent business concern which is at least 51 percent owned by a woman or women, who also control and operate it. Determination of whether a business is at least 51 percent owned by a woman or otherwise qualified WBE which is 51 percent owned by a married woman in a community property State will not be disqualified because her husband has a 50 percent interest in her share. Similarly, a business which is 51 percent owned by a married man and 49 percent owned by an

unmarried woman will not become a qualified WBE by virtue of his wife's 50 percent interest in his share of the business."

As in the case of a MBE, only United States citizens will be deemed to be WBEs. Similar to the MBE criteria, WBE should meet the criteria cited in subparagraphs B.1.c.(2), (3), and (4).

4. Fair Share or Fair Share Objective A fair share or a fair share objective is an amount of funds reasonably commensurate with the total project funding and the availability of qualified MBEs and WBEs, taking into account experience on EPA-funded projects and other comparable projects in the area. A fair share objective does not constitute an absolute requirement, but a commitment on the part of the bidder to exercise good faith efforts as defined in this section to use MBEs and WBEs to achieve the fair share objective.
5. Small Business (SBE) Any business entity, including its affiliates, that is independently owned and operated, and not dominant in its field of operations in which it is bidding on Government contracts, and qualified as a small business under the criteria and size standards set forth in 13 CFR Part 121.
6. Small Business in a Rural Area A small business in a rural area (SBRA) is a business entity meeting the definition of a small business, and is located and conducts its principal operations in a geographical area (county) listed in the Small Business Administration's Listing of Non-Metropolitan Counties by State.
7. Recipient A party receiving ~~SRF~~ <sup>EPA</sup> financial assistance.
8. Project The scope of work for which an ~~SRF loan~~ <sup>EPA Grant</sup> is awarded.
9. Bidder A party seeking to obtain a contract with a recipient through a competitive, advertised, sealed bid process.
10. Offeror A party seeking to obtain a contract with a recipient through a negotiative procurement process.
11. Prime Contractor A party that has obtained a contract with a recipient through a competitive, advertised, sealed bid process.
12. Good Faith Efforts Good faith efforts by a recipient, prime contractor, and/or bidder/offeror means efforts to attract and utilize DBEs primarily through outreach, recruitment, and race/gender neutral activities. The following are examples of activities to assist recipients, prime contractors and/or bidders/offerors to comply with good faith efforts.

a. Include qualified DBEs on solicitation lists.

- (1) Maintain and update a listing of qualified DBEs that can be solicited for supplies, construction and/or services.
- (2) Provide listings to all interested parties who requested copies of the bidding or proposing documents.
- (3) Contact appropriate sources within your geographic area and State to identify qualified DBEs for placement on your minority and women's business listings.
- (4) Utilize other DBE listings such as those of the State's Minority Business Office, the Small Business Administration, Minority Business Development Agency, US EPA- Office of Small Business Programs and the Department of Transportation.
- (5) Have the State environmental agency personnel review this solicitation list.

b. Assure that DBEs are solicited.

- (1) Conduct meetings, conferences, and follow-ups with DBEs, small, minority and/or women's business associations, minority media, etc., to inform these groups of opportunities to provide supplies, services, and construction.
- (2) MBE Utilization is facilitated if the recipient or prime contractor advertises through the minority media. Such advertisements may include, but are not limited to, contracting and subcontracting opportunities, hiring and employment, or any other matter related to the project.
- (3) Conduct pre-bid, pre-solicitation, and post-award conferences to ensure that consultants, suppliers, and builders solicit DBEs.
- (4) Provide bidders and offerors with listings of qualified DBEs and establish that a fair share of contracts/procurements should be awarded to these groups.
- (5) Advertise in general circulation, trade publications, State agency publications of identified source, disadvantaged business focused media, etc., concerning contracting opportunities on your projects. Maintain a list of disadvantaged business-focused publications that may be utilized to solicit MBEs or WBEs.
- (6) Provide interested DBEs with adequate information about plans, specifications, timing and other requirements of the proposed projects.
- (7) Provide DBE trade organizations with succinct summaries of solicitations.
- (8) Notify DBEs of future procurement opportunities so that they may establish bidding solicitations and procurement plans.

c. Divide total requirements when economically feasible, into small tasks or quantities to permit maximum participation of DBEs.

- (1) Perform an analysis to identify portions of work that can be divided and performed by qualified DBEs.
- (2) Scrutinize the elements of the total project to develop economically feasible units of work that are within the bonding range of DBEs.
- (3) Analyze bid packages for compliance with the good faith efforts to afford DBEs maximum participation.

d. Establish delivery schedules, where requirements of the work permit, which will encourage participation by DBEs.

- (1) Consider lead times and scheduling requirements often needed by DBE participation.
- (2) Develop realistic delivery schedules which may provide for greater DBE participation.

e. Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the US Department of Commerce, as appropriate.

- (1) Use the services of outreach programs sponsored by the Minority Business Development Agency and/or the Small Business Administration to recruit bona fide firms for placement on DBEs' bidders lists to assist these firms in the development of bid packaging.

- (2) Seek out Minority Business Development Centers (MBDCs) to assist recipients and prime contractors in identifying MBEs for potential work opportunities on this project.

**D. ADDITIONAL CONTRACT PROVISIONS (New Requirements)**

1. The prime contractor must pay its subcontractors for satisfactory performance no more than 30 days from the prime contractor's receipt of payment from the owner.
2. The prime contractor must notify the owner in writing prior to any termination of a DBE subcontractor for convenience.
3. If a DBE subcontractor fails to complete work under the subcontract for any reason, the prime contractor must employ the good faith efforts if soliciting a replacement subcontractor, even if the fair share objectives have already been achieved.
4. Each procurement contract signed by an EPA financial recipient, including those for an identified loan under an EPA financial assistance agreement capitalizing a revolving loan fund, must include the following term and condition:

The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

**E. REPORTING**

1. Bidders/offerors shall demonstrate compliance with good faith efforts in order to be deemed responsible. To demonstrate compliance, the "DBE Subcontractor Solicitation Sheet" (pg. DBE - 6) shall be submitted as part of its bid or proposal package. Information shall be included for each DBE subcontractor contacted by the bidder/offeror, not just those used to meet the fair share objective.
2. The prime contractor must distribute DBE Program Subcontractor Participation Form (EPA Form 6100-2) to all of its DBE subcontractors. The subcontractors can submit completed forms to the Owner.
3. The prime contractor must have its DBE subcontractors complete DBE Program Subcontractor Performance Form (EPA Form 6100-3) and should include completed forms in its bid or proposal package.
4. The prime contractor must complete DBE Program Subcontractor Utilization Form (EPA Form 6100-4) which should be submitted as part of its bid or proposal package.
5. Form 6100-3 and Form 6100-4 must be submitted by the apparent low-bidder within ten calendar days of the bid opening. Failure to submit this information will be viewed as a non-responsive bid.

Additional DBE forms can be downloaded at <http://www.epa.gov/osbp/grant.htm>

## DBE SUBCONTRACTOR SOLICITATION INFORMATION

**PROJECT NAME:**

<b>Subcontractor Name and Telephone Number</b>	<b>MBE or WBE</b>	<b>Description of Work Offered</b>	<b>Date of Phone Follow-up &amp; Person Contacted</b>	<b>Amount of Bid or Reason for not Quoting</b>	<b>Bid Accepted or Rejected? Include Reason for Rejection</b>

This information is true and correct to the best of my knowledge

\_\_\_\_\_  
Contractor Name, Address and Telephone Number

**This form shall be submitted as part of the contractor's bid.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date



Environmental  
Protection Agency

OMB Control No: 2090-0030

Approved: 05/01/2008

Approval Expires: 01/31/2011

**Disadvantaged Business Enterprise Program  
DBE Subcontractor Participation Form**

NAME OF SUBCONTRACTOR	PROJECT NAME
ADDRESS	CONTRACT NO.
TELEPHONE NO.	EMAIL ADDRESS
PRIME CONTRACTOR NAME	

Please use the space below to report any concerns regarding the above EPA-funded project (e.g., reason for termination by prime contractor, late payment, etc.).

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CONTRACT ITEM NO.	ITEM OF WORK OR DESCRIPTION OF SERVICES RECEIVED FROM THE PRIME CONTRACTOR	AMOUNT SUBCONTRACTOR WAS PAID BY PRIME CONTRACTOR
<hr/> Subcontractor Signature <hr/> Title/Date		

'Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

**EPA FORM 6100-2 (DBE Subcontractor Participation Form)**





Environmental  
Protection Agency

OMB Control No: 2090-0030  
Approved: 05/01/2008  
Approval Expires: 01/31/2011

## **Disadvantaged Business Enterprise Program DBE Subcontractor Participation Form**

The public reporting and recordkeeping burden for this collection of information is estimated to average fifteen (15) minutes. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed EPA DBE Subcontractor Participation Form to this address.



Environmental  
Protection Agency

OMB Control No: \_\_\_\_\_  
Approved: \_\_\_\_\_  
Approval Expires: \_\_\_\_\_

**Disadvantaged Business Enterprise Program  
DBE Subcontractor Performance Form**

<b>NAME OF SUBCONTRACTOR<sup>1</sup></b>		<b>PROJECT NAME</b>
<b>ADDRESS</b>		<b>BID/PROPOSAL NO.</b>
<b>TELEPHONE NO.</b>		<b>E-MAIL ADDRESS</b>
<b>PRIME CONTRACTOR NAME</b>		
<b>CONTRACT ITEM NO.</b>	<b>ITEM OF WORK OR DESCRIPTION OF SERVICES BID TO PRIME</b>	<b>PRICE OF WORK SUBMITTED TO PRIME CONTRACTOR</b>
Currently certified as an MBE or WBE under EPA's DBE Program? ____ Yes ____ No		
Signature of Prime Contractor _____		Date _____
Print Name _____		Title _____
Signature of Subcontractor _____		Date _____
Print Name _____		Title _____

<sup>1</sup>Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.



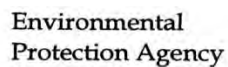
Environmental  
Protection Agency

OMB Control No: _____
Approved: _____
Approval Expires: _____

## Disadvantaged Business Enterprise Program DBE Subcontractor Performance Form

The public reporting and recordkeeping burden for this collection of information is estimated to average fifteen (15) minutes. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

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OMB Control No: 2090-0030  
Approved: 05/01/2008  
Approval Expires: 01/31/2011

## Disadvantaged Business Enterprise Program DBE Subcontractor Utilization Form

BID/PROPOSAL NO.	PROJECT NAME
NAME OF PRIME BIDDER/PROPOSER	E-MAIL ADDRESS
ADDRESS	
TELEPHONE NO.	FAX NO.

The following subcontractors will be used on this project:			
COMPANY NAME, ADDRESS, PHONE NUMBER, AND E-MAIL ADDRESS	TYPE OF WORK TO BE PERFORMED	ESTIMATED DOLLAR AMOUNT	CURRENTLY CERTIFIED AS AN MBE OR WBE?

I certify under penalty of perjury that the forgoing statements are true and correct. In the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302(c)

Signature of Prime Contractor \_\_\_\_\_ Date \_\_\_\_\_  
 Print Name \_\_\_\_\_ Title \_\_\_\_\_

<sup>1</sup>Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

EPA FORM 6100-4 (DBE Subcontractor Utilization Form)





Environmental  
Protection Agency

OMB Control No: 2090-0030  
Approved: 05/01/2008  
Approval Expires: 01/31/2011

**Disadvantaged Business Enterprise Program  
DBE Subcontractor Utilization Form**

The public reporting and recordkeeping burden for this collection of information is estimated to average fifteen (15) minutes. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed EPA DBE Subcontractor Utilization Form to this address.

EPA FORM 6100-4 (DBE Subcontractor Utilization Form)

**EQUAL EMPLOYMENT OPPORTUNITY and AFFIRMATIVE ACTION REQUIREMENTS on  
FEDERALLY ASSISTED CONSTRUCTION CONTRACTS**

**Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity  
(Executive Order 11246)**

1. The Offerer's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area as follows:

Goals for minority participation in each trade - \_\_\_\_\_

(See Appendix A for goals by county)

Goals for female participation in each trade - 6.9%

As used in this notice, and in the contract resulting from this solicitation, the "covered area" is  
\_\_\_\_\_ County.

These goals are applicable to all the contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

**3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation.** The notification shall list the name, address and telephone number for the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed. A form is provided on page EEO - 7 that the contractor may use for this purpose.

**This notice shall be included in, and shall be a part of, all solicitations for offers and bids on all federal and federally assisted construction contracts or subcontracts.**

## **EQUAL OPPORTUNITY CLAUSES**

The Equal Opportunity Clause published at 41 CFR Part 60-1.4(b) is required to be included in, and is part of, all nonexempt federally assisted construction contracts and subcontracts. The Equal Opportunity Clause shall be considered to be a part of every contract and subcontract required by the regulations in this part to include such a clause, whether or not it is physically incorporated in such contracts.

In addition to the clauses described above, all federal contracting officers, all applicants, and all non-construction contractors, as applicable, shall include the specifications set forth in this section in all federal and federally assisted construction contracts in excess of \$10,000 to be performed in geographical areas designated by the Director pursuant to §60-4.6 of this part and in construction subcontracts in excess of \$10,000 necessary in whole or in part to the performance of non-construction Federal contracts and subcontracts covered under the Executive Order.

### **STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

1. As used in these specifications:

- a. "Covered Area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal Social Security number used on the employer's quarterly Federal Tax Return, U.S. Treasury Department Form 941.
- d. "Minority" includes:
  - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
  - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);
  - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area, (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs (7)(a) through (p) of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the FEDERAL REGISTER in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the areas which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under (7)(b) above.



f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7)(a) through (p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be

asserted as fulfilling any one or more of its obligations under (7)(a) through (p) of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the Executive order if a specific minority group of women is under-utilized).

10. The contractor shall not use the goals and timetables of affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (7) of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

## APPENDIX A

### GOALS FOR MINORITY PARTICIPATION ON EACH TRADE

<b>Counties</b>	<b>Goal</b>
Aurora, Beadle, Brookings, Brule, Charles Mix, Davison, Douglas, Gregory, Hand, Hanson, Hutchinson, Jerauld, Kingsbury, Lake, Lincoln (excluding Sioux Falls), McCook, Miner, Moody, Sanborn, Turner	0.8
Bon Homme, Clay, Minnehaha (including all of Sioux Falls), Union, Yankton	1.2
Brown, Clark, Codington, Day, Deuel, Edmunds, Faulk, Grant, Hamlin, McPherson, Marshall, Roberts, Spink	1.3
Meade, Pennington	3.4
Bennett, Buffalo, Butte, Campbell, Corson, Custer, Dewey, Fall River, Haakon, Harding, Hughes, Hyde, Jackson, Jones, Lawrence, Lyman, Mellette, Perkins, Potter, Shannon, Stanley, Sully, Todd, Tripp, Walworth, Ziebach	7.9

CONTRACTOR'S NAME, ADDRESS & TELEPHONE NUMBER

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Contractor Employer ID Number: 

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**Return to:**

Joan Ford, Regional Director  
US Department of Labor  
Federal Building, Room 840  
525 South Griffin St.  
Dallas, TX 75202

**CONTRACT INFORMATION**

PROJECT AND LOCATION:				
Dollar Amount of Contract	Estimated Start Date	Estimated Completion Date	Contract No.	Geographical Area (County, State)
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

**NOTIFICATION OF SUBCONTRACTS AWARDED (>\$10,000)**

Subcontractor's Name Address, and Phone Number	Employer ID Number of Subcontractor	Estimated \$ Amount of Subcontract	Estimated Start Date	Estimated Completion Date
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
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## **CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

### **A. INSTRUCTIONS**

Under Executive Order 12549, an individual or organization debarred or excluded from participation in Federal assistance or benefit programs may not receive any assistance award under a Federal program, or a subagreement thereunder for \$25,000 or more. The status of prospective individuals or organizations can be checked at:

<http://epls.arnet.gov/>

Accordingly, each prospective recipient of an EPA grant, loan, or cooperative agreement and any contract or subagreement participant thereunder must complete the attached certification or provide an explanation why they cannot complete the certification. For further details, see 40 CFR 32.510, Participants Responsibilities.

### **B. WHERE TO SUBMIT**

A prospective prime contractor must submit a completed certification or explanation to the project owner for the project. Each prospective subcontractor must submit a completed certification or explanation to the prime contractor for the project.

### **C. HOW TO OBTAIN FORMS**

This form may reproduced as necessary.

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Project Name

United States Environmental Protection Agency  
Washington, DC 20460

**Certification Regarding  
Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

---

Typed Name & Title of Authorized Representative

---

Signature of Authorized Representative

Date

\_\_\_\_\_ I am unable to certify to the above statements. My explanation is attached.

## **PROHIBITION AGAINST LISTED VIOLATED FACILITIES**

### **A. REQUIREMENTS**

- (1) To comply with all the requirements of section 114 of the Clean Air Act, as amended (42 U.S.C. 1857, et seq., as amended by Pub. L. 92-604) and section 308 of the Clean Water Act (33 U.S.C. 1251, as amended), respectively, which relate to inspection, monitoring, entry, reports, and information, as well as other requirements specified in section 114 and section 308 of the Air Act and the Water Act, respectively, and all regulations and guidelines issued thereunder before the award of this contract.
- (2) That no portion of the work required by this prime contract will be performed in a facility listed on the Environmental Protection Agency list of violating facilities on the date when this contract was awarded unless and until the EPA eliminates the name of such facility or facilities from the listing.
- (3) That the best efforts to comply with clean air and clean water standards at the facilities in which the contract is being performed.
- (4) To insert the substance of the provisions of this clause, including this paragraph (4), in any nonexempt subcontract.

### **B. DEFINITIONS**

- (1) Air Act means the Clean Air Act, as amended (42 U.S.C. 1857 et seq.).
- (2) Water Act means the Clean Water Act, as amended (33 U.S.C. 1251 et seq.).
- (3) Clean Air Standards means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted under the Air Act or Executive Order 11738, an applicable implementation plan as described in section 110 (d) of the Air Act (42 U.S.C. 1857c-5(d)), an approved implementation procedure or plan under section 111 (c) or section 111(d), or an approved implementation procedure under section 112(d) of the Air Act (42 U.S.C. 1857c-7(d)).
- (4) Clean Water Standards means any enforceable limitation, control, condition, prohibition, standard, or other requirement which is promulgated under the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. 1342), or by a local government to ensure compliance with pretreatment regulations as required by section 307 of Water Act (33 U.S.C. 1317).
- (5) Compliance means compliance with clean air or water standards. Compliance shall also mean compliance with a schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency in accordance with the requirements of the Air Act or Water Act and regulations.
- (6) Facility means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by a contractor or subcontractor, to be used in the performance of a contract or subcontract. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location or site shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are located in one geographical area.

## **WILLIAMS-STEIGER OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970**

### **A. AUTHORITY**

- (1) The contractor is subject to the provisions of the Williams-Steiger Occupational Safety and Health Act of 1970.
- (2) These construction documents and the joint and several phases of construction hereby contemplated are to be governed, at all times, by applicable provisions of the Federal law(s) , including but not limited to the latest amendment of the following:
  - a. Williams-Steiger Occupational Safety and Health Act of 1970, Public Law 94-596;
  - b. Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations;
  - c. Part 1926 - Safety and Health Regulations for Construction, Chapter XVII of Title 29, Code of Federal Regulations.

### **B. SAFETY AND HEALTH PROGRAM REQUIREMENTS**

- (1) This project, its prime contractor and its subcontractors, shall at all times be governed by Chapter XVII of Title 29, Code of Federal Regulations, Part 1926 - Safety and Health Regulations for Construction (29 CFR 22801), as amended to date.
- (2) To implement the program and to provide safe and healthful working conditions for all persons, general project safety meetings will be conducted at the site at least once each month during the course of construction, by the construction superintendent or his/her designated safety officer. Notice of such meeting shall be issued not less than three (3) days prior, stating the exact time, location, and agenda to be included. Attendance by the owner, architect, general foreman, shop steward(s), and trades, or their designated representatives, witnessed in writing as such, shall be mandatory.
- (3) To further implement the program, each trade shall conduct a short gang meeting, not less than once a week, to review project safety requirements mandatory for all persons during the coming week. The gang foreman shall report the agenda and specific items covered to the project superintendent, who shall incorporate these items in his/her daily log or report.
- (4) The prime contractor and all subcontractors shall immediately report all accidents, injuries, or health hazards to the owner and architect, or their designated representatives, in writing. This shall not obviate any mandatory reporting under the provisions of the Occupational Safety and Health Act of 1970.
- (5) This program shall become a part of the contract documents and the contract between the owner and prime contractor, prime contractor and all subcontractors, as though fully written therein.



## **DISCOVERY OF ARCHAEOLOGICAL AND OTHER HISTORICAL ITEMS**

In the event of an archaeological find during any phase of construction, the following procedure will be followed:

- (1) Construction shall be halted, with as little disruption to the archaeological site as possible.
- (2) The Contractor shall notify the Owner who shall contact the State Historical Preservation Officer.
- (3) The State Historical Preservation Officer may decide to have an archaeologist inspect the site and make recommendations about the steps needed to protect the site, before construction is resumed.
- (4) The entire event should be handled as expediently as possible in order to hold the loss in construction time to a minimum while still protecting archaeological finds.

A similar procedure should be followed with regard to more recent historical resources. Should any artifacts, housing sites, etc., be uncovered, the same procedure should be followed as for an archaeological find.

In the event archaeological/historical data are evaluated to meet National Register criteria, the Advisory Council on Historic Preservation may be notified and asked to comment by the Owner.

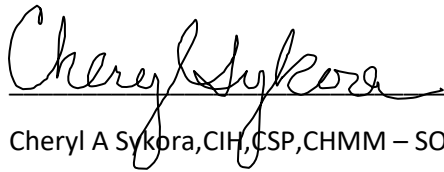
## REMEDATION SECTION TABLE OF CONTENTS

<b><u>SECTION NUMBER</u></b>	<b><u>DESCRIPTION</u></b>
NA	Signature Page
000115	Drawings
003126	Available Hazmat Information
010091	Definitions
010092	Codes
011100	Summary of Work
013300	Submittals
014100	Remediation Quality Control
015003	Temporary Facilities
015130	Pressure Differential Systems
015260	Temporary Enclosures
015423	Scaffolding
015600	Worker Protection
015620	Respiratory Protection
015630	Decontamination Units
017419	Construction & Waste Management
020810	Removal and Disposal of Asbestos-Containing Material
020840	Asbestos Waste Disposal
020850	Project Decontamination and Work Area Clearance

**BROWNFIELDS REMOVAL  
SACRED HEART CHURCH  
YANKTON, SOUTH DAKOTA**

**CERTIFICATION PAGE**

ASBESTOS ABATEMENT DESIGNER –      LEGEND TECHNICAL SERVICES, INC.  
88 EMPIRE DRIVE  
ST PAUL, MINNESOTA 55103  
651-221-4085  
CSYKORA@LEGEND-GROUP.COM

A handwritten signature in black ink, reading "Cheryl A. Sykora". The signature is written in a cursive, flowing style. Below the signature is a horizontal line.

Cheryl A Sykora, CIH, CSP, CHMM – SOUTH DAKOTA ASBESTOS DESIGNER #9566

**SECTION 00 0115  
LIST OF DRAWING SHEETS**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

This Section includes a list of drawings included in this document.

**1.02 DRAWINGS**

Drawing Listing:

ASB-01 – SACRED HEART CHURCH CEILING SPRAY LOCATIONS  
ASB-02 - SACRED HEART CHURCH LIGHT FIXTURE LOCATIONS  
ASB-03a – SACRED HEART CHURCH PHOTOGRAPHS  
ASB-03b – SACRED HEART CHURCH PHOTOGRAPH LOCATIONS

Leo A Daly (LAD) Reference Drawings:

S-1  
M-2

**PART 2 - PRODUCTS (NOT APPLICABLE)**

**PART 3 – EXECUTION (NOT APPLICABLE)**

END OF SECTION

**SECTION 00 3126**  
**AVAILABLE HAZARDOUS MATERIALS INFORMATION**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

This Section includes a list of attached reports identifying hazardous/regulated materials at the site.

**1.02 REPORTS**

Geotek Engineering & Testing Services, Inc. Asbestos Survey Targeted Brownfield Assessment, Sacred Heart Church, 509 Capital St, Sacred Heart School Link Auditorium, 504 Capitol St, Yankton, SD dated October 31, 2022 addressed to the SD Department of Agriculture and Natural Resources. (Available for review but not attached)

Legend Technical Services, Inc. Asbestos bulk sample report dated January 4, 2024 (attached).

**PART 2 - PRODUCTS (NOT APPLICABLE)**

**PART 3 – EXECUTION (NOT APPLICABLE)**

END OF SECTION

## SECTION 01 1091 REMEDIATION DEFINITIONS

### PART 1 - GENERAL

#### RELATED DOCUMENTS

The General Conditions, Funding Agency General Conditions, Supplementary Conditions, Special Conditions, and all sections of Division O and Division I apply to all sections of these specifications and are a part of the contract.

#### 1.01 SUMMARY

- A. General Explanation: A substantial amount of specification language constitutes definitions for terms found in other contract documents, including the Drawings. (Drawings must be recognized as diagrammatic in nature and not completely descriptive of the requirements indicated thereon). Certain terms used in contract documents are defined in this article.
- B. General Requirements: The provisions or requirements of Division I sections apply to the entire work of contract and where so indicated, to other elements which are included in project.

#### 1.02 DEFINITIONS TO ASBESTOS ABATEMENT

**GENERAL** - Definitions contained in this article are not necessarily complete, but are general to the extent that they are not defined more explicitly elsewhere in the contract documents.

**INDICATED** - This term refers to graphic representations, notes or schedules on the Drawings, or other paragraphs or schedules in specifications, and similar requirements in contract documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used, it is to help locate the reference; not limitation on location is intended except as specifically noted.

**DIRECTED** - Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean "directed by the owner's representative", "requested by the owner's representative", and similar phrases. However, no implied meaning shall be interpreted to extend the owner's representative's responsibility into the contractor's area of construction supervision.

**APPROVE** - The term "approved", when used in conjunction with the owner's representative's action on the contractor's submittals, applications, and requests is limited to the responsibilities and duties of the owner or owner's representative. Such approval shall not release the contractor from responsibility to fulfill contract document requirements, unless otherwise provided in the contract documents.

**REGULATION** - The term "regulation" includes laws, statutes, ordinances, 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 whether they are lawfully imposed by authorities having jurisdiction or not.

**FURNISH** - The term "furnish" is used to mean "supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations."

**INSTALL** - The terms "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing,

REMEDICATION DEFINITIONS

curing, protecting, cleaning, and similar operations."

**PROVIDE** - The terms "provide" means "to furnish and install, complete and ready for the intended use."

**INSTALLER** - An "installer" is an entity engaged by the contractor, either as an employee, subcontractor or subcontractor for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experience in the operations they are engaged to perform.

The term "experienced" when used with the term "installer" means having a minimum of five (5) previous projects similar in size and scope of this project, and familiar with the precautions required, and has complied with the requirements of the authority having jurisdiction.

**PROJECT SITE** - The space available to the contractor for performance of the work, exclusively or in conjunction with others performing other construction as part of the project. The extent of the project site is shown on the drawings and may or may not be identical with the description of the land upon which the project is to be built.

**TESTING LABORATORIES** - A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report on, and if required, to interpret results of those inspections or tests.

**OWNER'S REPRESENTATIVE** - This designated person or persons with delegated responsibilities to represent the owner during the work.

**INDUSTRIAL HYGIENIST** - The industrial hygienist is a representative of the owner at the job site with authority to stop the work upon verbal order if requirements of the contract document are not met, or if in the sole judgment of the industrial hygienist, owner's representative, owner, the interests of the owner, safety of any person or the owner's property are jeopardized by the work.

**GENERAL SUPERINTENDENT** - This is the contractor's representative at the work site. This person will generally be the competent person required by OSHA in 29 CFR 1926.

### 1.03 DEFINITIONS RELATIVE TO ASBESTOS ABATEMENT

**ABATEMENT** - Procedures to control fiber release from asbestos containing materials. Includes removal, encapsulation, enclosure, repair, demolition, and renovation activities.

**AIRLESS SPRAYER** - An airless sprayer, suitable for application of encapsulating material.

**AIRLOCK** - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorways separated by a distance of at least three (3) feet so that one passes through one doorway into the airlock, allowing the doorway sheeting to overlap and close off the opening before proceeding through the second doorway, thereby preventing flow through contamination.

**AIR MONITORING** - The process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure normally utilized for asbestos follows OSHA NIOSH P & CAM 239 or 7400A.

**AMENDED WATER** - Water to which a surfactant has been added.

**ANSI** - American National Standards Institute  
1430 Broadway  
New York, New York 10018

**ASBESTOS** - The asbestiform varieties of serpentinite (chrysotile) riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthrophyllite, actinolite, and tremolite.

**ASBESTOS BOARD** - Rigid board found between suspended ceiling and decking of buildings containing asbestos.

**ASBESTOS CONTAINING MATERIAL (ACM)** - Material composed of any type of asbestos in an amount one (1) percent or greater by weight.

**ASBESTOS CONTAINING WASTE MATERIAL** - Any material which is, or is suspected of being contaminated with an asbestos containing material which is to be removed from a work area for disposal.

**ASBESTOS DEBRIS** - Pieces of ACM that can be identified by color, texture, or composition, or means dust, if the dust is determined by an accredited inspector to be ACM.

**AUTHORIZED VISITOR** - The building owner, the owner's designated representatives or any representative of a regulatory agency having jurisdiction over the project.

**BAKER'S SCAFFOLDING** - OSHA approved scaffolding with partial or complete poly enclosure with HEPA filtration unit capable of exhausting 300 to 600 cubic feet of air per minute.

**BARRIER** - Any surface that seals off the work area to inhibit the movement of fibers.

**BREATHING ZONE** - A hemisphere forward of the shoulders with a radius of approximately six (6) to nine (9) inches.

**BUILDING OWNER** - Refers to the corporation, agency, or person who legally owns the building.

**CEILING CONCENTRATION** - The concentration of an airborne substance that shall not be exceeded.

**CERTIFIED INDUSTRIAL HYGIENIST (CIH)** - An industrial hygienist certified in comprehensive practice or chemical aspects by the American Board of Industrial Hygiene.

**CLEAN ROOM** - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective equipment.

**CLASS I ASBESTOS WORK** – Activities involving the removal of TSI and surfacing ACM and PACM

**CLASS II ASBESTOS WORK** – Activities involving the removal of ACM which is not TSI or surfacing material including, but not limited to, the removal of ACM wallboard, floor tile, sheeting, roofing and siding shingles, and construction mastics.

**CLASS III ASBESTOS WORK** – Repair and maintenance operations, where ACM, including TSI and surfacing material, is likely to be disturbed.

REMEDATION DEFINITIONS



**CLASS IV ASBESTOS WORK** – Maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM. Class IV asbestos work shall not be interpreted to include clean up within regulated areas for this asbestos abatement project.

**COMPETENT PERSON** – As defined in 29 CFR 1926.32(f) as well as a person who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, corrective measures to eliminate them as specified in 29 CF 1926.32(f): in addition, for Class I and Class II work, a person specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CF 763) for project designer or supervisor, or its equivalent and, for Class III and Class IV work, a person who is trained in an operations and maintenance (O&M) course developed by EPA 40CFR 763.92(a)(2).

**CONTRACTOR** - The individual and/or business with which the building owner arranges to perform the asbestos abatement. The contractor is responsible for the proper completion of project activities in accordance with the contract specifications even where a subcontractor has been retained to perform the actual work.

**CRITICAL BARRIER** - It is to be understood that critical barriers are only those barriers which separate the work area from the adjacent zone or space within the building. Such barriers are over door openings, window openings, corridors, hallways, or portions of rooms and these barriers serve as the final barrier between the work area and a non-work area space. Temporary barriers placed over mechanical and electrical items and other such equipment are not critical barriers and must be removed before running the aggressive air final air clearance test.

**DAILY REPORT** - Includes summary of work activities and air monitoring data.

**DECONTAMINATION ENCLOSURE SYSTEM** - A series of connected rooms, separated from the work area and from each other by airlocks, for the decontamination of workers and equipment.

**DISPOSAL BAG** - A properly labeled 6-mil thick, leak-tight plastic bag used for transporting asbestos waste from work and to disposal site. Bag is labeled as follows:

DANGER

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST

CANCER AND LUNG DISEASE HAZARD

and

CAUTION

Contains Asbestos Fibers  
Avoid Opening or Breaking  
Container Breathing Asbestos  
Is Hazardous to Your Health

REMEDATION DEFINITIONS

**ENCAPSULANT** - A material that surrounds or embeds asbestos fibers in an adhesive matrix, to prevent release of fibers.

**REMOVAL ENCAPSULANT:** A penetrating encapsulant specifically designed to minimize fiber release during removal of asbestos containing materials rather than for encapsulation.

**ENCAPSULATION** - Treatment of asbestos containing materials with an encapsulant.

**ENCLOSURE** - The construction of an airtight, impermeable, permanent barrier around asbestos containing material to control the release of asbestos fibers into the air.

**EPA** - U.S. Environmental Protection Agency  
401 M Street Southwest  
Washington, D.C. 20460

**EQUIPMENT DECONTAMINATION ENCLOSURE SYSTEM** - That portion of a decontamination enclosure system designed for controlled transfer of materials and equipment into or out of the work area, typically consisting of a washroom and holding area.

**EQUIPMENT ROOM** - A contaminated area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.

**FINAL CLEAN** - Final cleaning consisting of a combination of wet wiping/vacuuming. It may occur only after: 1) air monitoring criteria has been achieved, 2) satisfactory visual examination by owner's representative(s), and 3) establishment of a 24-hour settling period.

**FRIABLE ASBESTOS MATERIAL** - Material that contains more than 1.0% asbestos by weight and that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

**GLOVEBAG TECHNIQUE (Profo Bag)** - A method with limited applications for removing small amounts of friable asbestos containing material from HVAC ducts, short piping runs, valves, joints elbows, and other nonplanar surfaces in an uncontained work area. The glovebag assembly is a manufactured or fabricated device consisting of a glovebag (typically constructed of 6-mil transparent polyethylene or polyvinyl chloride plastic), two inward projecting long sleeves, an internal tool pouch, and an attached labeled receptacle for asbestos waste.

The glovebag is constructed and installed in such a manner that it surrounds the object or material to be removed and contains all asbestos fibers released during the process. All workers who are permitted to use the glovebag technique shall be highly trained, experienced, and skilled in this method.

**HVAC** - Heating, ventilating, and air conditioning system.

**HEPA FILTER** - A high efficiency particulate air filter capable of removing particulates greater than 0.3 microns in diameter with 99.97% efficiency.

**HEPA VACUUM** - A vacuum system equipped with HEPA filtration.

**HEPA FILTER VACUUM COLLECTION EQUIPMENT (OR VACUUM CLEANER)** - High efficiency particulate air (absolute) filtered vacuum collection equipment with a filter system capable of collecting

REMEDICATION DEFINITIONS

and retaining asbestos fibers. Filters should be 99.97% efficiency for retaining fibers of 0.3 microns or larger.

**HIGH EFFICIENCY FILTER** - A filter which removes from air 99.97% or more of monodisperse dioctyl phthalate (DOP) particles having a mean particle diameter of 0.3 micrometer.

**HOMOGENEOUS WORK AREA** - A site within the abatement work area which contains one type of asbestos containing material and where one type of abatement is used.

**HUDSON SPRAYER** - Manual hand-held pressure sprayer with water holding capacity of two (2) to three (3) gallons.

**I.H.** - Industrial hygienist/technician. Person responsible for conducting air sampling and monitoring procedures during the abatement project.

**INITIAL CLEAN** - Removal of all visible bulk debris prior to next cleaning stage.

**MOVEABLE OBJECT** - A piece of equipment or furniture in the work area which can be removed from the work area.

**NEGATIVE PRESSURE SENSOR** - Monitor used for the detection of pressure differentials within the enclosure and outside ambient air. Normally interfaced with a recording device for continuous readout.

**NEGATIVE PRESSURE VENTILATION SYSTEM** - A portable exhaust system equipped with HEPA filtration and capable of maintaining a constant low velocity air flow into contaminated areas from adjacent uncontaminated areas.

**NESHAPS** - The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

**NIOSH** - National Institute for Occupational Safety and Health  
CDC-NIOSH  
Building J. NE Room 3007  
Atlanta, GA 30333

**OSHA** - Occupational Safety and Health Administration  
200 Constitution Avenue  
Washington, D.C. 20210

**OTHER TOOLS AND EQUIPMENT** - The contractor shall provide other suitable tools for the stripping and removal, encapsulation and disposal activities including but not limited to: hand-held scrapers, wire brushes, sponges, rounded end shovels, brooms, carts, and scrubbing pads.

**PHASE CONTRAST** - OSHA/NIOSH approved method of optical microscopy used to count asbestiform fibers for determination of airborne fiber concentrations.

**PRESSURE DIFFERENTIAL AND VENTILATION SYSTEM** - A local exhaust system, utilizing HEPA filtration capable of maintaining a pressure differential within the inside of the work area at a lower pressure than any adjacent area, and which cleans recirculated air or generates a constant air flow from adjacent areas into the work area.

**PRIOR EXPERIENCE** - Experience required of the contractor on asbestos projects of similar nature and scope to ensure capability of performing the asbestos abatement in a satisfactory manner. Similarities shall be in areas related to material composition, project size, abatement methods required, number of employees and the engineering, work practice, and personal protection controls required.

**PROTECTION FACTOR** - The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respirator at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

**POWERED AIR PURIFYING RESPIRATOR** - A device designed to protect the wearer from the inhalation of harmful atmospheres.

**REMOVAL** - The stripping of any asbestos containing materials from surfaces or components of a facility or taking out structure components in accordance with 40 CFR 61 Subpart A and M.

**SECURED DUMPSTER** - Direct transferrable container moved to truck bed without container unloading, comprised of plate steel top, bottom, and sides with locking hinged doors.

**SHOWER ROOM** - A room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination.

**SPRAYED ACOUSTIC INSULATION** - Insulation containing greater than one (1) percent asbestos.

**STAGING AREA** - Either the holding area or some area near the waste transfer airlock where contained asbestos waste has been placed prior to removal from the work area.

**SURFACTANT** - A chemical wetting agent, typically one (1) part polyethylene ether to one (1) part polyoxyethylene ester, added to water to improve water penetration.

**TIME-WEIGHTED AVERAGE (TWA)** - The average concentration of a contaminant in air during the specific time period.

**TRANSMISSION ELECTRON MICROSCOPE (TEM)** - Air sample analysis that conclusively identifies fibers as asbestos or non-asbestos. TEM sampling and analysis to be performed according to USEPA recommended procedures described in 40 CFR Part 763 and published in the Federal Register on October 30, 1987.

**TRANSPORTATION EQUIPMENT** - Shall be suitable for loading, temporary storage, transmitting and unloading of contaminated waste without exposure to persons or property.

**VACUUM EQUIPMENT** - All vacuum equipment utilized in the work area shall utilize HEPA filtration systems. All necessary replacement filters shall be on the job site.

**VISIBLE EMISSIONS** - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

**WASTE TRANSFER AIRLOCK** - A decontamination system utilized for transferring contained waste from inside to outside the work area separate from personnel decontamination chamber.

**WET CLEANING** - The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning utensils which have been dampened with water and afterwards thoroughly decontaminated or disposed of as asbestos contaminated waste.

**WORK AREA** - Designated rooms, spaces, or areas of the project in which asbestos abatement actions are to be undertaken or which may become contaminated as a result of such abatement actions. A contained work area is a work area which has been sealed, plasticized, put under negative pressure, and equipped with a decontamination enclosure system. A noncontained work area is an isolated or controlled access work areas which has not been plasticized nor equipped with a decontamination enclosure system and a negative pressure systems.

**WORKER DECONTAMINATION ENCLOSURE** - A decontamination system consisting of clean room, a shower room, and an equipment room separated from each other and from the work area by airlocks and curtained doorways. This system is used for all worker entries and exits from the work area and for equipment and waste passed out for small jobs.

### 1.03 INDUSTRY STANDARDS

- A. General Applicability of Standards - Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, applicable standards of the construction industry have the same force and effect (and are made a part of contract documents by reference) as if copied directly into contract documents, or as if published copies were bound herewith. Refer to the other contract documents for resolution of overlapping and conflicting requirements which result from the application of several different industry standards to the same unit of work. Refer to individual unit of work sections for indications of which specialized codes and standards the contractor must keep at the project site available for reference.
- B. References standards (referenced directly in contract documents or by governing regulation) have precedence over non-referenced standards which are recognized in industry for applicability to work.
- C. Non-referenced standards are hereby defined to have no particular applicability to the work, except as general requirements of whether the work complies with standards recognized in the construction industry.
- D. Publication Dates - Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of date of contract documents.
- E. Where copies of standards are needed for proper performance of the work, the contractor is required to obtain such copies directly from the publication source. Although certain copies of standards needed for enforcement of the requirements may be required submittals, the owner reserves the right to require the contractor to submit additional copies of these standards as necessary for enforcement of the requirements.
- F. Abbreviations and Names - Where acronyms or abbreviations are used but not identified in specifications or other contract documents they are defined to mean the industry recognized name of trade association, standards generating organizations, governing authority, or other entity applicable to context of text provision.
- G. Abbreviations and Names - The following acronyms or abbreviations as referenced in contract

### REMEDATION DEFINITIONS

documents are defined to mean the associated names.

AIA -	American Institute of Architects
ANSI -	American National Standards Institute
ASHRAE -	American Society for Heating, Refrigerating, and Air Conditioning Engineers
ASTM -	American Society for Testing and Materials
CFR -	Code of Federal Regulations
CGA -	Compressed Gas Association
EPA -	Environmental Protection Agency
NBS -	National Bureau of Standards
NEC -	National Electrical Code (by NFPA)
NFPA -	National Fire Protection Association
OSHA -	Occupational Safety & Health Administration

END OF SECTION 01091

**SECTION 01 1092  
REGULATIONS, CODES, STANDARDS  
HAZARDOUS MATERIALS REMEDIATION**

**PART 1 - GENERAL**

**1.01 GENERAL STANDARDS**

This section sets forth governmental regulations and industry standards which are included and incorporated herein by reference and made a part of the specifications. This section also sets forth those notices and permits known to the Owner that either must be applied for and received or must be given to governmental agencies before beginning work.

Requirements include adherence to work practices and procedures set forth in applicable codes, regulations, and standards.

Requirements also include obtaining permits, licenses, inspections, releases, and similar documentation, as well as payments, statements and similar requirements associated with codes, regulations, and standards.

**1.02 CODES AND REGULATIONS**

- A. General applicability of codes, regulations and standards: Except to the extent that more explicit or more stringent requirements are written directly into the contract documents, all applicable codes, regulations, and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies are bound herewith.
- B. Contractor Responsibility: The contractor shall assume full responsibility and liability for the compliance with all applicable federal, state, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site. The contractor is responsible for providing medical examinations and maintaining medical records of personnel as required by the applicable federal, state, and local regulations. The contractor shall hold the Owner and Owner's representative harmless for failure to comply with any applicable work, hauling, disposal, safety, health, or other regulation.
- C. Federal Requirements: Which govern asbestos abatement work or hauling and disposal of asbestos waste materials include, but are not limited to, the following regulations from the Code of Federal Regulations (CFR):
  - 1. U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), including but not limited to:
  - 2. Occupational Exposure to Asbestos, Tremolite;
  - 3. Anthophyllite and Actinolite; Final Rules Title 29, Part 1910, Section 1001, and Part 1926, Section 58 of the Code of Federal Regulations;
  - 4. Respiratory Protection; Title 29, Part 1910, Section 134 of the Code of Federal

Regulations;

5. Construction Industry Standards; Title 29, Part 1926, of the Code of Federal Regulations
6. Access to Employee Exposure and Medical Records; Title 29, Part 1910, Section 2 of the Code of Federal Regulations;
7. Hazard Communication; Title 29, Part 1910, Section 1200 of the Code of Federal Regulations;
8. Specifications for Accident Prevention Signs and Tags, Title 29, Part 1910, Section 145 of the Code of Federal Regulations.

D. USA EPA Rules as follows:

1. Asbestos Abatement Projects Rule, 40 CFR, Part 762, CPTS 62044, FRL 2843-9, Federal Register, Vol. 50 No. 134, July 12, 1985, P28530-28540;
2. Regulation for Asbestos, Title 40, Part 61, Sub-part A of the Code of Federal Regulations;
3. National Emission Standard for Asbestos, Title 40, Part 61, Sub-part M (Revised Sub-part B) of the Code of Federal Regulations;
4. Asbestos Containing Materials in Schools; Final Rule and Notice October 30, 1987 40 CFR, Part 763.

E. State requirements which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

1. Waste manifest form for transport of ACM and proposed landfill for disposal of ACM waste and non-ACM waste.
2. South Dakota certification of asbestos workers and abatement project supervisors.
3. Other requirements (verify)

F. Local Requirements - Abide by all local government requirements which regulate asbestos abatement work or hauling and disposal of asbestos waste materials.

### 1.03 STANDARDS

A. Standards which govern asbestos abatement work or hauling and disposal of asbestos waste materials include but are not limited to the following:

1. ANSI Z9.2 - 79, Fundamentals Governing the Design and Operation of Local Exhaust Systems Publication.
2. ANSI Z288.2 - 80., Practices for Respiratory Protection Publication.
3. ASTM P-189, Specification for Encapsulants for Friable Asbestos Containing Building



Materials.

4. ASTM E849-82, Safety and Health Requirements Relating to Occupational Exposure to Asbestos.

#### 1.04 NOTICES

Send written notification as required by USEPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations ( 40 CFR 61, Sub-part M) to the regional asbestos NESHAPS contact at least ten days prior to beginning any work on asbestos containing materials.

Region 8  
EPA Region VIII Office  
999 18<sup>th</sup> Street  
Denver Place, Suite 500  
Denver, CO 802202-2405  
Attn: Regional Asbestos Coordinator  
303-293-1730

Send completed original notification as required by the State of South Dakota on NOTIFICATION OF DEMOLITION AND RENOVATION FORM:

ASBESTOS COORDINATOR  
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES  
WASTE MANAGEMENT PROGRAM  
523 EAST CAPITOL AVENUE  
PIERRE, SOUTH DAKOTA 57501-3182

Revisions to the original notification and courtesy notification can be sent by email:

Attention: Asbestos Coordinator, Waste Management Program

Email: [Anthony.Wagner@state.sd.us](mailto:Anthony.Wagner@state.sd.us)

The ten weekdays required for processing of the notification begin when a completed notification form is received. Incomplete or inaccurate notifications will be returned to sender and a new 10 weekday period will begin when a completed notification is received.

B. Include the following information in the notification sent to the NESHAP's contact:

- Name and address of Owner or operator.
- Description of the facility being demolished or renovated, including the size, age, and prior use of the facility.
- Estimate of the approximate amount of friable asbestos material present in the facility in terms of linear feet of pipe, and surface area on other facility components. For facilities in which the amount of friable asbestos materials is less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, explain techniques of estimation.
- Location of the facility being demolished or renovated.

- Scheduled starting and completion dates of demolition or renovation.
  - Nature of planned demolition or renovation and method(s) to be used.
  - Procedures to be used to comply with the requirements of USEPA National Emission Standards for Hazardous Air Pollutants (NESHAPS) Asbestos Regulations (40 CFR, 61 Subpart M).
  - Name and location of the waste disposal site where the friable asbestos waste material will be deposited.
- C. Licenses - Maintain current licenses as required by the State of South Dakota and other applicable state or local jurisdictions for the removal, transportation, disposal, or other regulated activity relative to the work of this contract.
- D. Posting and Filing of Regulations - Maintain two copies of applicable federal, state, and local regulations above. Post one copy of each at the job site. Keep on file in contractor's office one copy of each.

#### **1.05 SUBMITTALS**

- A. Notices - Submit notices required by federal, state, and local regulations together with proof of timely transmittal to agency requiring the notice.
- B. Permits - Submit copies of current valid permits required by state and local regulations.
- C. Licenses - Submit copies of all state and local licenses and permits necessary to carry out the work of this contract.
- D. Worker Certifications - Submit copies of the worker certificates issued by the State of South Dakota for all asbestos workers who are on the job site.
- E. Asbestos Bag Generator Identification Labels - Submit copies of the proposed labels to be placed on asbestos disposal bags, which will comply with NESHAPS regulations regarding the identification of the generator on the disposal bag.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION 01092

## SECTION 01 1100 SUMMARY OF WORK

### PART 1 - GENERAL

#### 1.01 DESCRIPTION OF WORK

A. Project Identification:

1. Project Location: Sacred Heart Church  
509 Capital St  
Sacred Heart School Link Auditorium  
504 Capital St  
Yankton, South Dakota 57078

2. Contract Administrator: City of Yankton  
416 Walnut St  
Yankton, South Dakota 57078

3. Asbestos Removal Designer:

Legend Technical Services, Inc., 88 Empire Drive, St Paul, MN 55103 – 651-221-4085 or  
612-619-6547 (cell phone) – Sub-Consultant under Geotek Engineering & Testing Services,  
Inc., 909 East 50th Street North, Sioux Falls, South Dakota 57104 – 605-335-5512

C. Work Scope –

Includes the removal of the following:

#### CHURCH

- Ceiling spray on non-asbestos concrete metal mesh substrate in main area of the church. Substrate and mesh removed post asbestos removal as demolition debris.
- Ceiling spray on non-asbestos gypsum metal mesh substrate in perimeter offices/specialty areas. NOTE: this is at a height of about 8 feet and could be removed in entirety as asbestos or the ceiling spray removed and the substrate removed after as non-asbestos. The concrete substrate likely extends over this area as it does where there are lay in ceiling panels and conditions can be observed.
- Cementitious pipe fittings with no canvas jacketing on steam lines – SE Attic, basement below sacristy, above ceiling in first floor Sacristy, ceiling cavity above suspended ceiling – estimated total is 30 and they are on variable sized larger diameter steam line piping.

#### SCHOOL LINK/AUDITORIUM

- Floor tile 9x9 beige (approximately 50 sf) Projection room and main stairs to the balcony. This can be coordinated with building vacancy to complete. Tile has asbestos and adhesive

does not. The base cove mastic has asbestos (approximately 20 lf) and needs to be removed with the floor tile. This can be done all at once.

- Light fixture insulation (2 fixtures) projection room/main stairs to balcony. Remove and dispose of entire fixture.
- Transite Panel east edge of gym. Approximately 200 square feet.
- Exterior NW Entry – approximately 5 lineal feet of gray caulk

D. Drawings –

Have been provided to show the locations of the ceiling and substrate removal work which is the majority of this project. Leo A Daly (LAD) original drawings M-2 shows details above the ceiling and also the perimeter mechanical areas below grade. LAD S-1 shows some structure. These are included for reference only and may not exactly show current conditions. ASB-01, and 02 drawings show the extent of the asbestos ceiling and substrate, the general layout of the building for use to locate decon, HEPA's, etc. for planning and submittals. Photographs are included showing existing conditions keyed to the floor plan on drawings ASB-03a and b.

## 1.02 WORK SEQUENCING

The main work of this project is slated to be completed within a 6-week time frame. It is up to the contractor to provide a workforce and coordinate the work in a manner to get the work accomplished in this time frame.

The sequence of the two different types of ceiling spray applications and heights is at the discretion of the asbestos abatement contractor. An abatement contractor may opt to remove the lower ceilings in the perimeter rooms first and remove the ceiling and substrate as asbestos if they believe there is cost/time savings in this approach. Given the 3 to 4 percent slope to the altar and the extensive amount of work required at the ceiling height, install a scaffold system in accordance with the specifications that will remain in place through general construction work and be disassembled by others.

The pipe fittings have no outer canvas jacketing and are on large pipes isolated from each other above the finished ceiling in the cavity and in the below grade concrete mechanical area around the octagonal perimeter of the church area. Either mini-enclosures or glovebags can be used to remove this insulation material. The plan is to maintain the piping system so removal of the pipe is not an option. The smaller diameter pipes were observed to be insulated with fiberglass on the straight run with no insulation on the fittings. No suspect ACM was identified on any of these pipes.

The floor tile and base cove adhesive removal; light fixtures, and hardboard is in the auditorium building utilized by the students. The caulk is on the outside of the building and would require not using the NW entrance during the time this is removed which is not expected to take much time. This work is small and should be scheduled with a scheduled break at the school or possibly on weekends if there are no planned breaks during the abatement work time schedule.

## 1.03 CONDITIONS OF THE SITE

- A. The contractor shall accept the site in the condition that he/she finds it. The church has already removed the majority of the furnishings from the church area. There is some carpeting remaining in the perimeter rooms. These rooms are slated for renovation and wall re-configuration so interior walls can be demolished to increase the size of the enclosure and access the material for removal.

The altar is stone and the platform is terrazzo. Those surfaces need to be protected from damage during the work. The perimeter windows are stained glass. The ceiling spray extends to the edge of the window. Protect window in a manner acceptable to the Owner to avoid window damage during the removal work. Any costs related to window damage during the removal work will be the responsibility of the removal contractor to restore at the direction of the Owner.

The ceiling contains recessed light fixtures that will not be re-used. Terminate electrical power to these using a licensed electrician. No lighting in any of the ceiling abatement areas is being saved. Light fixture locations are shown on ASB-02 for reference. The abatement contractor is to verify quantities.

#### **1.04 SCHEDULING**

- A. The contractor shall schedule and sequence his/her work so as to minimize the interruption of services and interference with the Owner's use of the building and the site. There is a common entry on the NE side of the building that needs to remain open for use by the church. There are two separate entries here. The one nearest the temporary church needs to remain useable.

#### **1.05 INTERRUPTIONS OF UTILITIES**

- A. The contractor shall receive permission from the Owner before interrupting any utility service that will affect the community, school, or church. Such interruptions shall generally be kept to a practical minimum and in no case shall exceed 1 hour without prior approval by the Owner.
- B. Verify water and power to the buildings at the time of the work under this contract. Contractor is required to provide power and water if they are not otherwise available.

#### **1.06 STORAGE OF MATERIALS**

- A. The Owner will allow the temporary storage of materials and contractors equipment in designated areas.

#### **1.07 BARRIERS**

- A. Provide a barrier and/or locked dumpster for any waste ACM being stored on the site.

#### **1.08 LIFE SAFETY**

- A. Where necessary and/or required by the governing authority, this contractor shall provide any necessary temporary detectors, alarm systems, or perform fire watches in accordance with the requirements of the local governing authority. If required, these services shall be provided at no additional cost to the Owner.

#### **1.09 VENTILATION**

It will be the contractor's responsibility to provide any necessary local or general ventilation and any associated heating or cooling to protect workers from any harmful fumes or dust generated by his/her work.

#### **1.10 EXAMINATION OF SITE OF WORK**

- A. It shall be expected that each contractor, before submitting a proposal for work required under this specification, has visited the site, made a thorough examination of conditions, and familiarized himself/herself with all existing conditions and all the limitations pertaining to the work herein contemplated.
- B. No additional compensation or time will be allowed because of the contractor's misunderstanding as to the amount of work involved, the quantities of asbestos materials, or his/her lack of knowledge of any of the conditions pertaining to the work based on his/her neglect or failure to visit or make an examination of the site.
- C. It is also expected that in the event that any of this specification or the drawings relative to asbestos-containing materials removal and demolition work are not clear or in the event there are any discrepancies, these will be brought to the attention of the Design Professional during bidding so that a decision in writing can be rendered by the Design Professional before the bids are opened. Failure to clarify a discrepancy shall make the contractor responsible for bidding the largest quantity, best quality, or most stringent requirement stated or implied by any of the contract documents.

#### **1.11 CONTRACTOR'S RESPONSIBILITY**

- A. The whole of the work and everything pertaining thereto which is specified or reasonably implied in the contract documents shall be the sole cost and risk of the contractor from its commencement until its final acceptance by the Owner. The contractor shall personally, or, through an authorized representative, constantly supervise the work and be at the site of the work during working hours or be represented by them, and who shall have authority to act for the contractor. The contractor shall employ only competent mechanics and workers on the project. Asbestos workers must be licensed in the State of South Dakota.
- B. The contractor shall cause the least possible inconvenience to the public, to the neighboring residences, and others in the vicinity of this work. He/she shall not permit any materials, tools, equipment, waste excavation or rubbish to be stored, deposited or thrown upon any private or adjoining grounds, nor cause or permit to exist any unnecessary or unreasonable obstructions anywhere.

#### **1.12 PROCEDURES AND PROTECTION**

- A. Suitable precautions shall be taken to prevent injury to persons and property. The contractor shall protect the grounds, fences, walks, curbs, pavements, building, and all else from injury on account of this work.

#### **1.13 CONTRACTOR USE OF PREMISES**

- A. The contractor shall limit his/her use of the premises to the work areas indicated. Confine operations at the site to the areas permitted under the contract. Portions of the site beyond areas on which work is indicated are not to be disturbed.

Conform to site rules and regulations affecting the work while engaged in project construction. The contractor's employees are to park their vehicles in areas designated and follow existing parking rules and regulations.

- B. Keep existing driveways and entrances serving the premises clear and available to the Owner and his/her employees at all times. Do not use these areas for parking or storage of materials.
- C. Do not encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, the contractor shall obtain such storage on-site with no additional payment by Owner.

#### **1.14 WORK PLAN**

- A. Submit a project plan of the procedures, materials, and methods proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination areas, the sequencing of asbestos removal work, the interface of trades involved in the performance of work, methods to be used to assure the safety of occupants and visitors to the site, disposal plan including name and location of EPA approved disposal site, and a detailed description of the methods to be employed to control pollution. Identify the extent and location of each containment area. List specific removal methods proposed for each operation in every area of this building. The plan must be approved by the Owner or Owner's designated representative prior to commencement of work.

#### **1.16 POTENTIAL ASBESTOS HAZARD**

- A. If asbestos materials are disturbed outside of a containment enclosure, close off the area, stop work, and notify the Owner and Owner's representative.

#### **1.17 STOP WORK**

- A. If the Owner or Owner's designated representative presents a written stop work order, immediately and automatically stop all work. Do not commence work until authorized in writing by the Owner.

#### **1.18 CODE COMPLIANCE**

- A. The work to be performed and materials used shall conform in every respect to all requirements of Federal, State, and local codes, ordinances, laws, rules, and regulations pertaining to such work. It is the contractor's responsibility to check all requirements before bidding or performing the work.
- B. Where these specifications may deviate from the most current edition and recent interpretation of applicable codes or regulations, the contractor shall perform in accordance with the requirements of the governing authority.

#### **1.19 COORDINATION AND MEETINGS**

- A. Following receipt of the work plan and prior to the start of construction, the contractor or their representatives shall attend a pre-construction conference chaired by Owner's representatives. The conference will serve to acquaint the participants with the general plan of contract administration and requirements under which the construction operation is to proceed and also to inform the contractor in detail of the obligations imposed on him/her. The date, time, and place of the conference will be furnished to the Contractor by the Owner.

## **1.20 ADMINISTRATION AND SUPERVISOR PERSONNEL – Asbestos**

- A. Asbestos Work - Provide a full-time general superintendent who is experienced in administration and supervision of asbestos abatement projects including work practices, protective measures for building and personnel, disposal procedures, etc. This person is to be the competent person as required by OSHA, in 29 CFR 1926, for the Contractor and is the Contractor's representative responsible for compliance with all applicable federal, state and local regulations, particularly those relating to asbestos containing materials. This person must have completed a 40 hour course at an EPA training center or have an equivalent certified course in asbestos abatement procedures which complies with AHERA. He/she is also required to have a minimum of two (2) years on-the-job training and must meet any additional requirements set forth in 29 CFR for a competent person.
- B. Provide one foreperson for abatement crew. The foreperson must have completed a supervisory health and safety training course offered by an EPA or OSHA endorsed educational institute. The foreperson must also have a minimum of 12 months of on-the-job experience on asbestos abatement projects.

## **1.21 SPECIAL REPORTS**

- A. Except as otherwise indicated, submit reports directly to Owner and or designated representative electronically one day of occurrence as required, with a copy to others affected by the occurrence.

## **1.22 CONTINGENCY PLAN**

- A. Prepare a contingency plan for emergencies including fire, accident, power failure, differential pressure system failure, supplied air system failure or any other event that may require modification or abridgement of decontamination or work area isolation procedures. Include in the plan specific procedures for decontamination or work area isolation. Note that nothing in this specification should impede safe exiting or provision of adequate medical attention in the event of an emergency.
- B. Post on site, telephone numbers and locations of emergency services including, but not limited to, fire, ambulance, doctor, hospital, police, electrical power company, telephone company.

## **1.23 CONSTRUCTION SCHEDULE**

- A. Construction schedule will be determined at the time of contract award.

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION (NOT APPLICABLE)

END OF SECTION



## **SECTION 01 3300 SUBMITTALS**

### **PART 1 - GENERAL**

#### **GENERAL SUBMITTALS**

This section specifies administrative and procedural requirements for submittals required for performance of the removal of asbestos-containing materials and procedures for submittals identified in other sections as required by these specifications. Approval must be obtained from the Owner or Owner's representative prior to initiating any work which requires submittal approval.

#### **1.01 OVERVIEW OF SUBMITTALS**

The Owner/Owner's designated representative will assume that every submittal complies totally with drawings and specification requirements unless otherwise noted as a deviation by the contractor. Deviation from requirements shall be listed and labeled on the submittal (or attached thereto) for the consideration of the Owner/Owner's designated representative. Subsequent Owner/Owner's designated representative approval of the submittal shall not relieve the Contractor from the liability for furnishing specified materials nor shall approval be used for a basis for furnishing less than was specified. The Contractor shall remain responsible for coordination, dimensions, quantity and integrity of materials, equipment and installation.

#### **1.02 SUBMITTAL PROCEDURE**

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.

The Owner/Owner's designated representative reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- B. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from contractor to owner's representative.
1. On a separate sheet, include relevant information, requests for data, and record deviations from contract document requirements, including minor variations and limitations. Include contractor's certification that information complies with contract document requirements. Submittals without evidence of Owner/Owner's designated representative. Approval will be returned for resubmission.
- C. Complete Submittal: All submittals/shop drawings for each complete specification section shall be submitted to the Owner/Owner's designated representative at one time whenever possible. Where that is impractical, submittals shall be in complete groupings for each specification section. All submittals shall be identified by the Specification section. Submit via email to the designated reviewer.

### 1.03 REVIEW OF SUBMITTALS

- A. Time Required:
1. Submittal review will require 5 days for review for submittal or resubmittal, unless otherwise specified.
  2. Time required for review of each submittal or resubmittal begins when complete sets of materials required for a particular submittal are received and extends through final approval of submittal packet. It should be noted that submitting clear, complete submittals is important to the schedule. Don't submit partial information as that will be deemed insufficient.
- B. Time in excess of Specified:
1. The Owner/Owner's designated representative may extend the contract completion date to allow additional time for completing work affected by excess review time. The time extension will be to the extent that excess review time caused delay to the contract completion date. The time will not exceed the time used in excess of the specified number of days for review of submittals or resubmittals
  2. Concurrent days of excess review time resulting from review of two or more separate submittals or resubmittals will be counted only once in extending the contract completion date.
  3. No time extension will be allowed if the contractor fails to make complete approval submittals in sequence and within time periods specified.
  4. Adjustment for delay will be made only to the extent that:
    - a. Approval was required under the contract, and
    - b. Requests for approval were properly and timely submitted and were approved.
  5. Adjustment will be subject to terms of paragraphs (b) and (c) of the clause "Suspension of Work," however, no such delay shall be deemed to be a "suspension order" as the term is used in that clause.
- C. Return of Submittals
1. One set of submittals required for approval will be returned either approved as submitted, approved with modifications noted, approved except as noted; revise and resubmit or disapproved.
  2. Submittals that are approved except as noted; revise and resubmit:
    - a. Show changes and revisions with revision date.
    - b. Describe reasons for significant changes in transmittal letter.
    - c. Resubmit returned submittals within 14 days after receiving the comments, unless otherwise specified.
    - d. Requirements for initial submittals apply to resubmittals.
  3. Do not change designs without approval of the Remediation Designer after approval of drawings, documentation, and technical data have been approved. The Designer recognizes the value of Contractor input in both schedule and cost. Suggested Changes are welcome for review but are unwelcome if no discussion happens before they are implemented.

### 1.04 CONSTRUCTION SCHEDULE

- A. Progress Schedule: contractor shall, within five (5) working days after award of contract prepare and submit to the owner for approval an estimated progress schedule (days and

times) for the work. This progress schedule shall cover the entire project and all work planned. The schedule shall indicate the dates for starting and finishing the various stages of construction.

- B. Secure time commitments for performing critical elements of the work from parties involved. Coordinate each element on the schedule with other construction activities; include minor elements involved in the sequence of the work. Show each activity in proper sequence. Indicate graphically sequences necessary for completion of related portions of the work.
- C. Indicate clearance of each work area in advance of the dates established for clearance. Allow time for testing and other owner's representative's procedures necessary for certification of clearance.
- D. Indicate completion in advance of the date established for substantial completion. Indicate substantial completion on the schedule to allow time for the owner's representative's procedures necessary for certification of substantial completion.
- E. Provide notations on the schedule to show how the sequence of the work is affected by requirements for phased completion to permit work by substantial completion.
- F. Indicate important stages of construction for each major portion of the work, including testing and installation. Include indication of start and finish times for the following:
  - Non-asbestos demolitions.
  - Preparation of the work area.
  - Asbestos removal.
  - Clearance testing.
  - Substantial completion.

#### **1.05 SUBMITTAL SCHEDULE**

- A. At the end of this section is a listing of the principal submittals required for the work. This listing is not necessarily complete, nor does the listing reflect the significance of each submittal requirement. The listing is included only for the convenience of users of the contract documents.
- B. After review and action on the contractor's construction schedule, prepare a complete schedule of submittals. Submit the schedule of submittals within ten days of the date required for establishment of the contractor's construction schedule.

#### **1.06 LIST OF SUBCONTRACTORS AND LIST OF MATERIALS**

Provide a list of all subcontractors, name, address, phone number, contact person, and a list of all materials and equipment proposed for the project. These lists shall be submitted to the Owner/Owner's Designated Representative within five (5) days after contract award.

#### **1.07 SUBMITTALS PRIOR TO PRE-CONSTRUCTION DATE**

The contractor shall submit to the owner/owner's representative for approval via email pre-construction submittal within five (5) working days after award of contract.

- A. Administrative:

1. Pre-construction Inspection: Pre-abatement determination lists of existing conditions.
  2. Submit a detailed plan of the work procedures to be used in the removal and demolition of materials containing asbestos. The plan shall include location of asbestos control area, change rooms, layout of change rooms, sequencing of asbestos related work, and disposal plan. NOTE: existing drawings can be utilized for this.
  3. Provide a list of proposed subcontractor(s) who are established, reputable firms of recognized standing with a record of successful past performances with the type of work proposed. Use only subcontractors that are acceptable to the owner.
  4. Provide a copy of secured permission for deposit of asbestos waste material from the owner of approved landfill. Include name, address, and telephone number of landfill.
- B. Permits, licenses, proof of training certificates
1. Provide if required, permits, clearances, licenses, and notifications including, but not limited to, the required notification in accordance with 40 CFR 61.146 to state and federal authority by having jurisdiction over the project.
  2. Contractor's license to conduct asbestos removal in South Dakota.
  3. Superintendents:
    - a. Contractor/supervisor asbestos certification
    - b. Resume
    - c. Medical records
  4. Administrative project manager (if different than the superintendent)
    - a. Name
    - b. Address, State, and Zip Code
    - c. Telephone
  5. Laboratory conducting analysis for OSHA required sampling.
  6. Contractor's standard operating procedures for any set-up, removal, or decontamination procedures that either varies from the owner's described procedures or has not been included in the specification procedures.
- C. Temporary Facilities: Refer to Section 01503. Provide information concerning the following items:
1. Hot water heater for decontamination unit (if needed).
  2. Decontamination unit for electrical sub-panel and ground fault circuit interrupters (GFCI).

3. Electrical panel and GFCI for anticipated enclosure electricity.
  4. Lamps and fixtures.
  5. First aid supplies.
  6. Fire extinguishers - type.
- D. Negative Air Systems: Refer to Section 01513.
- E. Respiratory Protection Data: Refer to Section 01562.
1. Copy of respiratory protection program supplied to each employee describing dangers of asbestos dust and associated diseases and cancers. Program requires instruction of respiratory protection requirements in the event that solvent based chemicals or disinfectants are utilized.
  2. Documentation that each employee has received the following personal protection training as regulated in the Code of Federal Regulations, 29 CFR 1910, Subpart I:
    - a. 1910.132 General Requirements
    - b. 1910.133 Eye and Face Protection
    - c. 1910.134 Respiratory Protection
    - d. 1910.1001 Asbestos
    - e. 1926.55 Gases, vapors, fumes, dust, and mists
    - f. 1926.58 Asbestos, tremolite, anthophyllite, and actinolite
  3. Qualitative or quantitative fit test including description of specific test and name of person conducting test.
  4. Written respiratory protection program that has been reviewed by all persons requiring respiratory protection.
  5. Powered air purifying respirators
    - a. Copy of system literature
    - b. Copy of instruction given to personnel concerning use, maintenance, and repair
  6. If half-face respirators are used (limited to transport of contained waste material outside enclosure), include:
    - a. Copy of systems literature
    - b. Copy of instructions given to personnel concerning use, maintenance, and repair
- F. Worker Protection: Refer to Section 01560. Provide readable duplicates with legible writings and signatures for each individual worker.
1. South Dakota worker certification.
  2. Certificates of course completion.

3. Worker's signed acknowledgement of training.
    - a. Respiratory training for each of the respiratory protection systems as specified. Spray adhesives require additional training and different respiratory protection.
  4. Medical records of personnel involved with asbestos removal shall include, but not limited to:
    - a. Written interpretation of chest roentgenogram (posterior-anterior 14 x 17).
    - b. Written interpretation of pulmonary function tests including forced vital capacity and forced expiratory volume at 1 second.
    - c. Licensed medical doctor's signed opinion that individual is able to wear appropriate respirator.
    - d. General physical examination with emphasis on respiratory and cardiovascular systems.
  5. Safety training, including construction of scaffolding, work requiring ladders, and safety harnesses.
- G. Full Temporary Enclosures - Refer to Section 01526
1. Polyethylene Sheeting - Provide fire rating, mil rating, and manufacturer's literature in accordance to NFPA 701.
  2. Spray Adhesives - Provide manufacturer's literature, MSDS, and air monitoring data from previous work using the indicated product.
  3. Duct Tape - Provide brand name and manufacturer's literature.
  4. Provide manufacturer's literature and MSDS for each encapsulant used. Also provide manufacturer's literature and MSDS for each surfactant used.
  5. Spray Poly - Provide manufacturer's literature including installation instructions, required equipment, nozzle orifice size, and application press. Test areas required if used.
- H. Security
1. Provide written description on security procedures to be used for:
    - a. Building when contractor is not on premise. Include proposed security check, fire watch, and equipment operation check.
    - b. Coordinate with owner's security for required security of work area.
    - c. Asbestos waste staging area outside building.
    - d. Storage trailer.
  2. Fire and emergency evacuation plans from enclosure.
- I. Manufacturer's literature (and Material Safety Data Sheets when applicable) required for:
1. HEPA vacuums/filtration systems

2. Each proposed surfactant and encapsulant
3. Equipment to mechanically remove floor tile/adhesive
- J. Emergency Egress - Give detailed description of emergency egress procedures for:
  1. Fire
  2. Power failure during daylight and night work
- K. Provide shop drawings for:
  1. Configuration of temporary electrical serving including the power needed for:
    - a. HEPA vacuums/filtration system
    - b. Owner's industrial hygiene monitoring equipment
- L. Periodically:
  1. Provide copies of accident, event, and discovery of condition reports.
  2. Whenever asbestos debris is removed from work area, record actual quantity of packages, bags, bundles, or barrels on waste transfer certificate accompanied by receipt of deposit by landfill.

#### **1.08 SUBMITTALS REQUIRED FOR PROJECT CLOSEOUT**

- A. Waste shipment record with sign-off of contractor, waste handler, and landfill operator.
- B. Evidence of compliance with requirements of federal, state, and local regulations.
- C. Waste shipment record for nonasbestos hazardous materials disposal.
- D. Testing results.
- E. Closeout Submittals
  - A. GENERAL. At the inspection for Substantial Completion, the Contractor shall turn over to the Owner/Owner's Representative one copy of all submittal information electronically via email.
  - B. SUBMITTALS REQUIRED.
    1. SUBMITTALS, SHOP DRAWINGS, AND BROCHURES – One complete set electronically via email.

#### **PART 2 – PRODUCTS**

#### **PART 3 - EXECUTION**

Brownfields Cleanup  
Asbestos Abatement  
Sacred Heart Church  
Yankton, SD

Legend Technical Services,

END OF SECTION 01300



**SECTION 01 1400  
REMEDATION QUALITY CONTROL**

**PART 1 – GENERAL**

**1.01 DESCRIPTION**

- A. Work under this section includes the Owner supplied industrial hygiene services during regulated materials remediation activities and for determination of final clearance after asbestos removal work is completed.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Section 02 2081 – Removal of Asbestos Containing Materials
- B. Section 02 2085 – Project Decontamination and Work Area Clearance

**1.03 GENERAL CONTROL – ASBESTOS REMOVAL**

- A. The owner may elect to provide a full-time, on-site industrial hygienist (IH) or IH technician to document the contractor's work practices and to conduct general air monitoring both inside and outside the containment work area during remediation activities. The IH/technician will report to the owner or designated representative. This will be determined at the time of Project. In the event periodic industrial hygiene services are chosen, the Owner will provide third party final clearance services including the final visual prior to the air monitoring to verify Contract completion and the final clearance air monitoring.
- B. This section sets forth airborne fiber levels both inside and outside the work area and general clean-up parameters for each phase of asbestos removal.
- C. The owner's representative will also monitor work practices, methods, and procedures to assure compliance with these specifications, approved work plans, or other applicable standards. The owner's representative and/or IH will have the authority to require changes in work practices where he/she deems current practices are not appropriate.
- D. If full time on-site services are provided, the Contractor is not allowed to conduct abatement activity without either the IH or owner's representative on-site. The owner plans to have QA services available for one shift per day, five days per week if this option is chosen. The owner will be flexible and provide QA services for longer or different hours so long as the contractor can demonstrate to the owner's satisfaction that it is in the owner's best interest to do so. The minimum crew size for which the owner is willing to provide for on-site QA services is five, unless agreed to by industrial hygiene firm.

**1.04 AIR MONITORING – ASBESTOS REMOVAL**

- A. The purpose of the owner's air monitoring will be to detect faults in the work area isolation such as the following:
  - 1. Contamination of the building outside of the work area with airborne fibers.
  - 2. Failure of filtration or rupture in the negative pressure system.
  - 3. Contamination of the exterior of the building with airborne fibers.
- B. Should any of the above occur, the contractor shall immediately cease asbestos abatement activities until the fault is corrected. Work shall not commence until authorized by owner's representative.

- C. The owner will monitor airborne fiber counts in the work area. The purpose of this air monitoring will be to

detect airborne fiber counts which may significantly challenge the ability of the work area isolation procedures to protect the balance of the building or outside of the building from contamination by airborne fibers.

The owner will be conducting air monitoring throughout the course of the project. Approval of the completion of initial and final cleaning stages will include acceptable airborne fiber levels.

#### **1.05 AIRBORNE FIBER COUNT LEVELS INSIDE WORK AREA – ASBESTOS REMOVAL**

- A. Maintain an airborne count in the work area of less than levels specified in Item 1.10 of this section. If the fiber counts rise above these levels for any sample taken, revise work procedures to lower fiber counts. If two consecutive fiber counts for any two work shifts or 16 hour period exceed the specified levels, stop asbestos removal, use dust control measures to reduce airborne fiber levels, and check individual negative air systems for operating conditions. Do not recommence removal of asbestos until authorized in writing by owner's representative.

#### **1.06 AIRBORNE FIBER COUNT LEVELS OUTSIDE THE WORK AREA INSIDE THE BUILDING OR OUTSIDE THE BUILDING AT HEPA EXHAUST**

- A. The contractor shall cease asbestos removal in the event that any two air samples, collected either simultaneously or consecutively inside the building outside the enclosure or at HEPA exhaust exceed: fiber levels of 0.01 f/cc, or average fiber levels determined by preliminary baseline sampling.
- B. Elevated fiber levels in the vicinity of HEPA exhaust requires the contractor to individually shutdown and inspect the negative pressure filtration systems. The inspection includes verifying that all controls and alarms are functional and that the primary HEPA filter is in place. Written verification is required by the beginning of the proceeding work shift.
- C. Appropriate respiratory protection shall be worn in affected area until area is cleared for re-occupancy.
- D. Leave critical barriers in place until completion of work and ensure that the operation of the differential pressure system in the work area results in a flow of air from the balance of the building into the affected area.
- E. If the exit from the clean room of the personnel decontamination unit enters the affected area, establish a temporary decontamination facility consisting of a shower room and changing room. After cleaning and decontamination of the affected area, remove the shower room and leave the changing room in place as an air lock.
- F. After certification of visual inspection in the work area, remove critical barriers separating the work area from the affected area. Final air samples will be taken within the entire area for final work area clearance.

#### **1.07 ANALYTICAL METHODS - ASBESTOS**

- A. ASBESTOS (PCM) - Preliminary (baseline), general, and some final clearance samples will be collected and analyzed in accordance with OSHA/NIOSH Method 7400 A using PCM. The final clearance air samples inside the ceiling removal area will be analyzed by transmission electron microscopy (TEM) to comply with EPA AHERA regulations for school buildings as this area is utilized by the attached school.
- B. ASBESTOS (TEM) – Final clearance will be analyzed by transmission electron microscopy (TEM) by NIOSH 7402.

#### 1.08 SAMPLES - ASBESTOS

- A. From start of work through completion, the owner may take as many samples as he/she deems necessary to assure compliance with these specifications. Generally, five to nine samples will be collected on a daily basis. Samples will be taken inside the work area outside the work area but inside the building and outside the building.

#### 1.09 PERSONAL MONITORING - ASBESTOS

- A. Perform air monitoring as required to meet OSHA requirements for maintenance of time-weighted average (TWA) fiber counts for types of respiratory protection provided. The owner will not be performing air monitoring to meet these OSHA requirements. Results of OSHA monitoring will be made available to the owner within 24 hours of receipt of the results.

#### 1.10 CRITERIA - ASBESTOS

<u>ACTIVITY</u>	<u>MAXIMUM ALLOWABLE LEVEL</u>
Preliminary	Background
Inside removal area during preparation	0.05 f/cc
Inside full containment area during gross removal	0.5 f/cc
During glovebag removal without mini-enclosure	0.01 f/cc
During wrap and cut procedures for pipe fittings	0.01 f/cc
Inside removal area during final clean	0.02 f/cc
FINAL CLEARANCE (PCM)	0.01 f/cc
FINAL CLEARANCE (TEM)	Average less than 70 structures per Square millimeter and no one sample greater than 200 structures/mm <sup>2</sup>

#### 1.11 LABORATORY QUALIFICATIONS

- A. Asbestos

NIST NVLAP accredited laboratory for any bulk asbestos analysis.

AIHA IHLAP accredited laboratory for PCM asbestos air analysis or AIHA registered PCM analyst in good standing.

NIST NVLAP accredited laboratory for TEM

#### PART 2 - PRODUCTS (NOT APPLICABLE)

#### PART 3 - EXECUTION

##### 3.01 ADDITIONAL TESTING

- A. The contractor may conduct his/her own air monitoring and laboratory testing. If he/she elected to do this, the cost of such air monitoring and laboratory testing shall be included in the contract sum. Results of such testing shall be made available to the owner.

##### 3.02 PERSONAL MONITORING

- A. Perform air monitoring as required to meet OSHA requirements for maintenance of Time Weighted Average (TWA) fiber counts for types of respiratory protection provided.

## **SECTION 01 5003 TEMPORARY FACILITIES**

### **PART 1 - GENERAL**

#### **1.10 GENERAL FACILITIES**

- A. Related Documents: Drawings and general provision of the contract applicable. Refer to Section 013300 for all required submittals.
- B. General: Provide temporary connection to existing building utilities or provide temporary facilities as required herein or as necessary to carry out the work. Temporary facilities include, but are not limited to:
  - 1. Temporary water service
  - 2. Fire extinguishing equipment and supplies
  - 3. First aid
  - 4. Temporary electrical
  - 5. Temporary lighting
  - 6. Sanitation facilities
  - 7. Scaffolding/ladders
  - 8. Office and storage trailers
  - 9. Signs
  - 10. Parking and traffic control

#### **1.02 WATER SERVICE**

- A. Temporary Water Service Connection: All connections to the owner's water system shall include backflow protection. Valves shall be temperature and pressure rated for operation of the temperatures and pressures encountered. After completion of use, connections and fittings shall be removed without damage or alteration to existing water piping and equipment. Leaking or dripping valves shall be piped to the nearest drain or located over an existing sink or grade where water will not damage existing finishes or equipment.
- B. Water Hoses: Employ heavy duty, abrasion-resistant hoses with a pressure rating greater than the maximum pressure of the water distribution system to provide water into each work area and to each decontamination unit. Provide fittings as required to allow for connection to existing wall hydrants or spouts, as well as temporary heating equipment, branch piping, showers, shut-off nozzles, and equipment.
- C. Hot Water Heater: Contractor to provide a UL rated 20 gallon minimum electric hot water heater per six workers to supply hot water for the decontamination unit shower. Activate from 30 amp circuit breaker located within the decontamination unit subpanel. Provide with relief valve compatible with water heater operation: fittings and hook-up locations to be approved by owner. Wiring of the hot water shall be in compliance with NEMA, NECA, and UL standards. GFCI required. Owner will provide hot water, if available, to project area.

#### **1.03 FIRE EXTINGUISHERS**

- A. Comply with governing regulations and recognized recommendations within the construction industry.

#### **1.04 FIRST AID**

- A. Comply with governing regulations and recognized recommendations within the construction industry.

A minimum of two first aid kits will be readily available (one within the clean room or dressing area, and one within enclosure).

#### **1.05 ELECTRICAL SERVICE**

- A. Comply with applicable NEMA, NECA, and UL standards and governing regulations for materials and layout of temporary electric service. Provide service to decontamination unit subpanel with minimum 60 amp, 2 pole circuit breaker or fused disconnect connected to the building's main distribution panel. Subpanel and disconnect shall be sized and equipped to accommodate all electrical equipment required for completion of the work.
- B. Provide a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of work during the construction period. Install temporary lighting adequate to provide sufficient illumination for safe work and traffic conditions in every area of work.
- C. Provide circuits of adequate size and proper characteristics for each use. In general, run wiring overhead, and rise vertically where wiring will be least exposed to damage from construction operations.
- D. Temporary wiring in the work area shall be type UF non-metallic sheathed cable located overhead and exposed for surveillance. Do not wire temporary lighting with plain, exposed (insulated) electrical conductors. Provide liquid tight enclosures or boxes for wiring devices. Provide overload protected disconnect switch for each temporary circuit located at the power distribution center.
- E. For power hand tools and task lighting, provide a temporary 4-gang outlet with GFI protection at each decontamination unit, located in equipment room. Provide a separate 110-120 volt, 20 amp circuit for each 4-gang outlet (4 outlets per circuit).
- F. The building has no electrical power. Contractor is responsible for providing a temporary service and all electricity costs.

#### **1.06 TEMPORARY LIGHTING**

- A. Provide the following only where natural lighting or existing building lighting does not meet the required light level:

Four 200-watt incandescent lamp per 1,000 square feet of floor area, uniformly distributed, for general construction lighting, or equivalent illumination of a similar nature. Provide sufficient temporary lighting to ensure proper workmanship everywhere; by combined use of daylight, general lighting, and portable plug-in task lighting.

- B. Provide lighting in the decontamination unit to supply 50 foot candle minimum light level.

#### **1.07 SANITARY FACILITIES**

- A. Contractor will provide sufficient sanitation facilities to accommodate his/her work force. The Owner will not be responsible for providing sanitation facilities. Properly and regularly clean, supply and maintain the portable toilets.
- B. Shower Facilities – Contractor will provide a centrally located shower unit meeting the requirements for asbestos abatement for use by personnel during all aspects of hazardous materials removal. A trailer decon facility would be acceptable.

#### **1.08 SCAFFOLDING/LADDERS**

- A. Provide all scaffolding, ladders and/or staging, etc. as necessary to accomplish the work of this contract. Scaffolding may be of suspension type or standing such as metal tube and coupler, tubular welded frame, pole type, outrigger type, or cantilever type. The type, erection, and use of all scaffolding shall comply with all applicable OSHA provisions. Refer to Section 015423 Scaffolding.
  - 1. Equipment rungs of all metal ladders, etc. with an abrasive non-slip surface.
  - 2. Provide a non-skid surface on all scaffold surfaces to foot traffic.
  - 3. Cap and seal all open ends of scaffold.
  - 4. In the event that scaffolding is rented, present required submittal. Refer to Section 01300.

#### **1.09 STORAGE OF MATERIALS**

- A. Contractor shall provide and maintain all necessary on-site facilities and structures required to protect materials. Temporary structures for material storage shall be weather tight, neatly constructed, well maintained, and subject to approval of the owner. Materials shall be stored and secured in the area so designated on the plans and as directed by the owner. The contractor is responsible for the security of all his/her materials, tools, and equipment and the owner will not be liable for any loss or damage to same.

#### **1.10 SIGNS**

- A. No advertising signs shall appear on the site except for the sign that the contractor may have on his/her field office stating his/her name and address. Small signs for the purpose of direction traffic or deliveries may be erected as approved. No other signs will be permitted on the site.

#### **1.11 PARKING AND TRAFFIC CONTROL**

- A. Comply with all posted regulations, signs, and directions regarding traffic, parking, loading, or unloading.
- B. Arrange for loading/unloading operations in designated areas as shown on the drawings or as approved by the owner.
- C. Provisions will be made for parking contractor's vehicles on the site. Personal vehicles of construction workers may be parked at the locations designated by the owner.

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Asbestos Abatement  
Sacred Heart Church  
Yankton, SD

Legend Technical Services, Inc.

PART 2 - PRODUCTS (NOT APPLICABLE)  
PART 3 - EXECUTION (NOT APPLICABLE)  
END OF SECTION 01503

**SECTION 01 5130  
PRESSURE DIFFERENTIAL SYSTEMS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. General provisions apply to work of this section. Refer to Section 013300 for submittals.
- B. Work under this section includes the provision of a complete system of HEPA filter units, make-up air openings, electrical power supply, alarm, and monitoring as specified and as necessary to maintain the work areas under a constant differential pressure from beginning to end of asbestos abatement activities.
- C. Differential pressure systems are required for all work areas of this project.
- D. Supply required number of HEPA filtration units to provide a minimum of four air exchanges per hour in each enclosure. Continuously monitor and record the pressure differential between the work area and the building outside of the work area with a monitoring device incorporating a continuous recorder (e.g., strip chart) or electronic memory accessible for viewing during the project.

**1.02 SUBMITTALS - REFER TO SECTION 013300**

- A. Submit design of pressure differential system to the owner for review. Do not begin work until submittal is returned approved by the owner indicating that the submittal is returned for unrestricted use.

Prepare shop drawing to include the following:

- 1. Method of supplying adequate power to filtration systems.
  - 2. Number of filtration systems and calculation necessary to determine quantity of machines.
  - 3. Location of filtration systems in work area and exhaust ports to building's exterior.
- B. Provide manufacturer's literature for each model of equipment including:
  - 1. HEPA filtration systems.
  - 2. Negative pressure monitoring sensor.

**PART 2 - PRODUCTS**

**2.01 HEPA FILTRATION SYSTEMS**

- A. General: Supply the required number of HEPA filtered fan units to the site in accordance with these specifications. Use units that meet the following requirements.
  - 1. Cabinet: Constructed of durable materials able to withstand damage from rough handling and transportation. Provide units whose cabinets are:
    - a. Factory sealed to prevent asbestos containing dust from being released during use, transport, or maintenance.



- b. Arranged to provide access to and replacement of all air filters from intake end.
  - c. Mounted on casters or wheels.
- 2. Fans: Rate capacity of fan according to usable air-moving capacity under actual operating conditions.

## 2.02 INSTRUMENTATION

Instrumentation and safety devices must include:

- A. Magnehelic gauge or manometer to measure the pressure drop across filters and indicate when filters have become loaded and need to be changed.
- B. Electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter, filter rupture, or filter blockage.
- C. Audible alarm if unit shuts down due to operation of safety systems if pressure differential drops below 0.02 inches of water.
- D. Warning lights to indicate normal operation (green), too high a pressure drop across the filters (i.e., filter overloading), (yellow), and too low of a pressure drop (i.e., rupture in HEPA filter or obstructed discharge), (red).
- E. Elapsed time meter to show the total accumulated hours of operation.

## 2.03 FILTERS

- A. HEPA
  - 1. Provide units whose final filter is the HEPA type with the filter media (folded into closely pleated panels) completely sealed on all edges with a structurally rigid frame.
  - 2. Provide units with a continuous rubber gasket located between the filter and the filter housing to form a tight seal.
  - 3. Provide HEPA filters that are individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent then challenged with 0.3 um dioctylphthalate (DOP) particles when tested in accordance with Military Standard Number 282 and Army Instruction Manual 136-300-175A. Provide filters that bear a UL 586 label to indicate ability to perform under specified conditions.
  - 4. Subject to compliance with requirements, provide products of one of the following manufacturers. Contractor may provide a unit of his/her own design or construction so long as he/she can demonstrate that it is equal to those listed.
  - 5.
    - a. Aerospace America, Inc. "Aero-Clean 2000"  
900 Truman Parkway  
Bay City, Michigan 48707
    - b. Asbestos Control Technology, Inc. "Micro-Trap"  
P.O. Box 183  
Maple Shade, NJ 08052

- c. Control Resource Systems, Inc. "Hog 2000"  
670 Mariner Drive  
Michigan City, Indiana 46360
  - d. Global Consumer Services, Inc. "Red Baron"  
1721 N. Highland Avenue  
Los Angeles, California 90028
  - e. Tri-Dim Filter Corporation "ACCU-2M"  
1431 West Lake Street  
Chicago, Illinois 60607
- 5. Supply the required number of asbestos air filtration units to the site in accordance with these specifications. Each unit shall include the following.
  - 6. Cabinet - Constructed of steel or other durable materials able to withstand damage from rough handling and transportation. Cabinet shall be factory sealed to prevent asbestos containing dust from being released during use, transport, or maintenance. Access to and replacement of all air filters shall be from intake end. Unit shall be mounted on casters or wheels.
  - 7. Fans - Rate capacity of fan according to useable air moving capacity under actual operating conditions. Use centrifugal-type fan.
  - 8. HEPA Filters - The final filter shall be the HEPA type with the filter media (folded into closely pleated panels) completely sealed on all edges with a structurally rigid frame.
  - 9. A continuous rubber gasket shall be located between the filter and the filter housing to form a tight seal.
  - 10. Each HEPA filter shall be individually tested and certified by the manufacturer to have an efficiency of not less than 99.97 percent when challenged with a 0.3 cm dioctylphthalate (DOP) particles. Testing shall be in accordance with Military Standard Number 282 and shall bear UL 586 label.
  - 11. Provide filters that are marked with the name of manufacturer and serial number.
- B. Prefilters: Which protect the final filter by removing the larger particles, are required to prolong the operating life of the HEPA filter. Two stages of prefiltration are required. Provide units with the following prefilters:
- 1. First Stage Prefilter: Low efficiency type (e.g., for particles 100 um and larger).
  - 2. Second Stage (or Intermediate) Filter: Medium efficiency (e.g., effective for particles down to 5 um).
- Provide units with prefilters and intermediate filters installed either on or in the intake grid of the unit and held in place with special housings or clamps.
- C. Safety and Warning Devices - The unit shall have an electrical (or mechanical) lockout to prevent fan from operating without a HEPA filter. Units shall be equipped with automatic shutdown

system to stop fan in the event of a major rupture in the HEPA filter or blocked air discharge. Warning lights are required to indicate normal operation, too high of a pressure drop across the filters (i.e., filter overloading), and too low of a pressure drop (i.e., major rupture in HEPA filter or obstructed discharge).

- D. Electrical components shall be approved by the National Electrical Manufacturers Association (NEMA) and Underwriter's Laboratories (UL). Each unit shall be equipped with overload protection sized for the equipment. The motor, fan, fan housing, and cabinet shall be grounded.

## **2.04 CONTINUOUS MONITORING EQUIPMENT**

- A. Provide all required submittals including:

1. Manufacturer's literature.
2. Manufacturer's recommended calibration method for calibration against standard.
3. Original daily chart strip from pressure differential monitoring equipment. Mark printout with date and start of time for each day. Use printout paper that indicates elapsed time in intervals no greater than hours. Indicate on each day's record times of starting and stopping work by including the following information three times during each work shift (prior to starting shift, mid-shift, end of shift):
  - a. Name of person check calibration.
  - b. Date and time.
  - c. Pressure sensor instrument reading.
  - d. Mark chart strip with arrow indicating precise time read.

- B. Negative pressure of 0.02 inches pressure differential or greater is required for this project.

## **2.05 DUCTWORK FOR HEPA EXHAUST**

- A. Vent HEPA filtered fan units to outside of building unless authorized in writing by owner. Ventilation exhaust locations and construction subject to owner's approval.

- B. Ducts

1. Use only new ductwork except for sheet metal connections and elbows.
2. Use ductwork and fittings of same diameter or larger than discharge connection on fan unit.
3. Use inflatable, disposable plastic ductwork in lengths not greater than 100 feet.
4. Use spiral wire reinforced flex duct in lengths not greater than 50 feet.
5. Arrange exhaust as required to inflate duct to a rigidity sufficient to prevent flapping.
6. If direction of discharge from fan unit is not aligned with duct, use sheet metal elbow to change direction. Use six feet of spiral wire reinforced flex duct after direction change.

## 2.06 BUILDING EXTERIOR HEPA EXHAUST PORTS

- A. Fabricate 1/2" plywood sheathing to fit required opening. Opening may require added framing support to secure sheathing. Plywood is to be secured by appropriate fasteners. Temporarily caulk cracks between sheathing and frame. Secure exhaust tube to sheathing.

## PART 3 - EXECUTION

### 3.01 AIR CIRCULATION IN THE WORK AREA

- A. Minimum number of air exchanges for work, provided continuous negative pressure monitor is operational, is four.
- B. Determine number of units needed to achieve required air circulation according to the following procedure:
1. Determine the volume in cubic feet of the work area by multiplying floor area by ceiling height. Determine total air circulation requirements in cubic feet per minute (CFM) for the work area by dividing this volume by the air change rate and multiplying by 60.

Air Circulation Required in CFM =

$$\frac{\text{Volume of work area (cu. ft.)} \times \text{Number of air changes per hour}}{60 \text{ (minutes per hour)}}$$

2. Divide the air circulation requirement (CFM) above by capacity of HEPA filtered fan unit(s) used. Capacity of a unit for purposes of this section is the capacity in cubic feet per minute with fully loaded filters (pressure differential which causes loaded filter warning light to come on) in the machine's labeled operating characteristics. The maximum CFM handling capacity for any single filtration system will be calculated at 75 percent of the manufacturer's optimum rating capacity or manufacturer's stated capacity for fully loaded filters, whichever is less.

Number of Units Needed =

$$\frac{\text{Air Circulation Requirement (CFM)}}{\text{Capacity of unit with loaded filters (CFM) or 75 percent of manufacturer's optimum rating capacity}}$$

- C. Add one (1) additional unit as a backup in case of equipment failure or machine shutdown for filter changing.

### 3.02 MAKE-UP AIR

- A. Decontamination Units: Arrange work area and decontamination units so that the majority of make-up air comes through the decontamination units. Use either personnel or equipment decontamination unit at any one time and seal the other so that make-up air passes through unit in use.

### 3.03 RECIRCULATING AIR

- A. Contractor may need additional HEPA filtration systems inside containment, in addition to those

required to maintain a minimum of four air exchanges per hour, located in the work area to reduce airborne fiber concentrations.

### **3.04 USE OF SYSTEM DURING ABATEMENT OPERATIONS**

- A. Start exhaust units before beginning work (before any asbestos containing material is disturbed). After abatement work has begun, run units continuously to maintain a constant differential pressure and air circulation until decontamination of the work area is complete. Do not turn off units at the end of the work shift or when abatement operations temporarily stop.
- B. Do not shut down differential air system during encapsulating procedures.
- C. Start abatement work at a location farthest from the fan units and proceed toward them. If an electric power failure occurs, immediately stop all abatement work, seal all inlets to containment and do not resume until power is restored and fan units are operating again.
- D. At completion of abatement work allow fan units to run as specified for project decontamination, to remove airborne fibers that may have been generated during abatement work and clean-up; and, to purge the work area with clean make-up air. The units may be required to run for a longer time after decontamination, if dry or only partially wetted asbestos material was encountered during any abatement work.

### **3.05 DISMANTLING THE SYSTEM**

- A. When a final visual inspection and the results of final air test indicate that the area has been decontaminated, fan units may be removed from the work area. Before removal from the work area, remove and properly dispose of filters, and seal intake to the machine with a 6-mil polyethylene to prevent environmental contamination from the filters.

END OF SECTION 01513

**SECTION 01 15260  
TEMPORARY ENCLOSURES**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. Work under this section shall include all labor, materials, and equipment necessary for the construction and maintenance of temporary enclosures and barriers to contain the asbestos materials abatement work area.
- B. Refer to specific sections addressing the various regulated/hazardous materials being remediated as part of the work scope under this contract.
- C. Applicable to:
  - 1. Decontamination unit construction
  - 2. Waste transfer airlock construction
  - 3. Enclosure, critical barriers, floor and wall coverings
  - 4. Special protection of existing equipment
  - 5. Mini enclosure

**1.02 SUBMITTALS - Refer to Section 013300**

Submittals required for work includes, but is not limited to:

- A. Materials
  - 1. Polyethylene sheeting
  - 2. Spray poly. Use at contractor's option
  - 3. Duct tape
  - 4. Spray adhesives
  - 5. Signage
  - 6. Shop drawings indicating methods proposed to secure wall covering
  - 7. Owner's approval of any pre-cleaning operation requiring cover up
- B. Shop Drawing showing mechanical fastener procedures for hanging wall poly and critical barriers.
- C. Drawing showing proposed enclosure for remote vacuum system for soil removal if applicable to the project.
- D. Contingency plans for safety evacuation of work area in case of fire or injury.
- E. Contact local fire marshall to review egress procedures and receive approval prior to start of work. Review plan with all subcontractors and project workers.

**1.03 PRE-ABATEMENT CONDITION OF THE WORK AREA**

- A.

**PART 2 - PRODUCTS**

## **2.01 PROTECTION MATERIALS**

- A. Polyethylene Sheet - A single polyethylene film in the largest sheet size possible to minimize seams, 4.0 or 6.0-mils thick as indicated, clear, frosted, or black as indicated.
- B. Reinforced Polyethylene Sheet - Where plastic sheet is the only separation between the work area and building exterior, provide translucent, nylon reinforced, laminated, flame resistant, polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-resistant Textiles and Films. Provide largest size possible to minimize seams, 4.0 or 6.0-mils thick as indicated, frosted, or black as indicated.
- C. Duct Tape- Provide duct tape in 2" or 3" widths as indicated, with an adhesive which is formulated to aggressively stick to sheet polyethylene.
- D. Spray Cement - Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.
- E. Spray polyethylene may be used in lieu of sheet poly in some areas subject to the Owner's approval.

## **PART 3 - EXECUTION**

### **3.01 GENERAL**

- A. Work area is the location where asbestos abatement work occurs. It is a variable of the extent of work of the contract. It may be a portion of a room, a single room, or a complex of rooms. A "work area" is considered contaminated during the work and must be isolated from the balance of the building and decontaminated at the completion of the asbestos control work.
- B. Completely isolate the work area from other parts of the building so as to prevent asbestos containing dust or debris from passing beyond the isolated area. Should the area beyond the work area(s) become contaminated with asbestos containing dust or debris as a consequence of the work, clean those areas in accordance with the same procedures indicated for project decontamination. Perform all such required cleaning or decontamination at no additional cost to owner.

Place all tools, scaffolding, staging, etc. necessary for the work in the area to be isolated prior to erection of plastic sheeting temporary enclosure.

- C. Emergency Exits
  - 1. At each existing exit door or hatch from the work area provide the following means for emergency exiting: Arrange exit door or hatch so that it is secure from outside the work area but permits exiting from the work area. Mark outline of door on primary and critical barriers with luminescent paint at least 3" wide. Hang a razor knife on a string beside outline. Arrange critical and primary barriers so that they can easily cut with one pass of razor knife. Paint words "**EMERGENCY EXIT**" inside outline with luminescent paint in letters at least one foot high and 2" thick. Directions to the exits will be clearly marked by painting arrows 2 feet off the floor pointing to the nearest emergency exit. Arrows will be a minimum of 3 feet long and spaced no more than 10 feet apart. Use luminescent orange or red paint for all markings.

2. Building to be secured using existing doors during non-work hours.

D. Work Area Security - Control Access

1. Permit access to the work area only through the decontamination unit. All other means of access shall be closed off and sealed and warning signs displayed on the clean side of the sealed access. Verify with local fire marshall that occupant life safety requirements are met.
2. Where the work area is immediately adjacent to or within view of occupied areas, provide a visual barrier of opaque polyethylene sheeting at least 4-mil in thickness so that the work procedures are not visible to building occupants. Where this visual barrier would block natural light, substitute frosted sheet plastic.
3. Where the area adjacent to the work area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct barrier with nominal 2" x 4" wood or metal studs 16" on center, securely anchored to prevent movement, covered with 1/2" plywood or sheetrock.
4. Warning signs at each visual or physical barrier that could be breached as follows:

LEGEND

NOTATION

KEEP OUT

3" Sans Serif Gothic or Block

BEYOND THIS POINT

1" Sans Serif Gothic or Block

ASBESTOS ABATEMENT WORK

IN PROGRESS

1" Sans Serif Gothic or Block

BREATHING ASBESTOS DUST MAY BE  
HAZARDOUS TO YOUR HEALTH

14 Point Gothic

5. The occupied side of non-breachable barriers are to be labeled "Construction Zone - Keep Out". Immediately inside such barriers, but outside critical barriers post an asbestos hazard warning sign per 29 CFR 1926.
  6. Temporary construction door locks shall be provided by the contractor. Locksets should be key lockable for the outside and always unlocked and operable from the inside. Do not use deadbolts or padlocks.
- I. Respiratory and worker protection: Before proceeding beyond this point in providing temporary enclosures, provide worker protection per Section 01560 and provide respiratory protection per Section 01562.
- J. Ventilation: During pre-cleaning and enclosure construction, all required HEPA filtration systems will be operating.



### **3.02 CRITICAL BARRIERS, WALL AND FLOOR COVERINGS**

#### **A. Critical Barriers**

1. Completely separate the work area from other portions of the building and the outside by sheet plastic barriers at least 6-mil in thickness or by sealing with duct tape.
2. Mechanically support sheet plastic independently of duct tape or spray poly seals so that seals do not support the weight of the plastic. Prepare shop drawings showing methods of supporting sheet plastic barriers. Support methods shall be approved in writing by the owner.
3. Window's critical barrier will consist of a minimum of one layer of 6-mil poly sheeting.
4. Electric motors and electrical service boxes require framing, plywood sheathing and a minimum of 3 layers of poly. Each layer of poly must be secured in such a manner as to allow the top layer to be removed without disrupting the seals of remaining layers.
5. Seal all ventilation openings (supply and exhaust), electrical conduit connectors, telephone wire, existing lighting fixtures, clocks, doorways, windows, connectors and speakers, and other openings into the work area with duct tape alone or with polyethylene sheeting at least 6-mil in thickness, taped securely in place with duct tape. Maintain seal until all work, including project decontamination, is completed. If during the removal of thermal insulation it is observed the thermal insulation penetrated the wall or deck, the contractor will attempt to seal hole with fiberglass insulation or other appropriate material from outside the enclosure and will perform any necessary clean up activity required to prevent asbestos exposure.
6. Provide sheet plastic barriers at least 6-mil in thickness as required to seal openings completely form the work area into adjacent areas. Seal the perimeter of all sheet plastic barriers with duct tape or spray adhesives.
7. Where applicable, remove and HEPA vacuum suspended ceiling tile to access the deck for enclosure construction.

B. Wall covering layer of poly sheeting is to be constructed in such a manner as to allow no seam joints extending horizontally. Use widths of sheeting minimizing the required number of vertical seams. Vertical seams require a minimum of a 12 inch overlap sealed with spray adhesives and duct tape.

C. In addition to the critical barrier, a primary barrier as described herein shall be installed and maintained throughout the work areas as required by Section 020810. Prior to installing the

primary barrier, pre-clean by HEPA vacuuming and wet wiping all surfaces in contact with the barriers.

D. Cover floor of work area with two individual layers of clear polyethylene sheeting, each at least 6-mil in thickness, turned up walls at least 12 inches, or provide an equivalent continuous film of spray poly. Form a sharp right angle bend at junction of floor and wall so that there is no radius which could be stepped on causing the wall attachment to be pulled loose. Both spray glue and

- duct tape all seams in floor covering. Locate seams in top layer six feet (6') from, or at right angles to, seams in bottom layer. Install sheeting so that top layer can be removed independently of bottom layer.
- E. Where applicable, cover carpeting to be saved with three layers of polyethylene sheeting at least 6-mil in thickness. Place corrugated cardboard sheets between the top and middle layers of polyethylene.
  - F. Remove all electrical and mechanical items such as lighting fixtures, clocks, diffusers, registers, escutcheon plates, etc., which cover or interfere with any part of the surface to be worked on.
  - G. Remove all general construction items such as cabinets, doors, casework, door and window trim, moldings, ceilings, trim, etc., which cover the surface of the work as required to prevent interference with the work.
  - H. Cover all walls in work area including "Critical Barrier" sheet plastic barriers with one layer of polyethylene sheeting, at least 6-mil in thickness, mechanically supported, and sealed with duct tape or spray glue in the same manner as "Critical Barrier" sheet plastic barriers. Tape all joints including the joining with the floor covering with duct tape. An equivalent film of spray poly is acceptable for block walls.
  - I. Whenever required, mechanically support sheet plastic independently of duct tape or spray cement seals so that seals do not support the weight of the plastic. The following are acceptable methods of supporting sheet plastic barriers. Alternative support methods may be used if approved in writing by the Contracting Officer. Use methods that minimize damage to existing finishes, which must be repaired by this contractor.
    - 1. Plywood squares 6" x 6" x 3/8" held in place with one 6d smooth masonry nail or electro-galvanized common nail driven through center of the plywood and duct tape on plastic so that plywood clamps to the wall. Locate plywood squares at each end, corner, and at maximum, 4' on corners.
    - 2. Nylon or polypropylene rope minimum 1/4" in diameter suspended between supports securely fastened on either side of opening at maximum 1' below ceiling. Tighten rope so that it has 2" maximum dip. Drape plastic over rope from outside work area so that a 2' flap of plastic extends over rope into work area. Staple or wire plastic to itself 1" below rope at maximum 6" on centers to form a sheath over rope. Lift flap and seal to ceiling with duct tape or spray cement. Seal loop at bottom of flap with duct tape. Erect entire assembly so that it hangs vertically without a "shelf" upon which debris could collect.
  - J. Do not cover stairs or ramps with unsecured sheet plastic. Where stairs or ramps are covered with plastic, provide 3/4" exterior grade plywood treads securely held in place over plastic. Do not cover rungs or rails with any type of protective materials.
  - K. Immediately remove and replace plastic sheeting which has been damaged by removal operations or where seal has failed allowing water to seep between layers. Remove affected sheeting and wipe down entire area. Install new sheet plastic only when area is completely dry.

### **3.03 CONTAINMENT**

- A. Full containment enclosures shall consist of critical barriers and primary barriers as described in this section and consisting of 2 layers of 6-mil polyethylene plastic on floors and wood framed walls and ceiling. Full containment shall include an attached decontamination unit for personnel and material.
- B. Mini enclosures shall consist of a temporary rigid wood or metal frame with two layers of 6-mil polyethylene on the walls, floor, and ceiling. The enclosure shall include a decontamination airlock where workers can HEPA vacuum their suits and/or don clean suits prior to proceeding to a remote shower unit. Air clearance in mini enclosures shall be aggressive after removal of the inner layer of poly.
- C. Glovebag enclosures shall consist of commercially available glovebags made of 6-mil polyethylene plastic.

### **3.04 MINI-CONTAINMENTS FOR GWB REMOVAL**

- A. Containment for GWB removal shall be mini-enclosures. Provide a central shower for worker decontamination.

### **3.05 DECONTAMINATION UNIT - Refer to Section 01563.**

### **3.06 EXTENSION OF WORK AREA**

- A. If the enclosure barrier is breached in any manner that could allow the passage of asbestos debris or airborne fibers, then add affected area to the work area, enclose it as required by this section of the specification and decontaminate in accordance with the project decontamination procedures specified elsewhere.

### **3.07 REPAIR OF DAMAGED POLYETHYLENE SHEETING**

- A. Remove and replace plastic sheeting which has been damaged by removal operations or where seal has failed allowing water to seep between layers. Remove affected sheeting and wipe down entire area. Install new sheet plastic only when area is completely dry.

### **3.08 ISOLATION AREAS**

- A. Establish and maintain isolation area between the work area and adjacent building areas as shown on the plans.
- B. Form isolation area by controlling access to the space in the same manner as a work area. Physically isolate the space from the work area and adjacent areas. Accomplish physical isolation by installing critical barriers in unoccupied space or erecting a second critical barrier a minimum of 3' 0" away from the work area as appropriate. Plywood barrier to be installed where identified on the plans.

### **3.09 STOP WORK**

- A. If the critical or primary barrier falls or is breached in any manner, stop work immediately.

### **3.10 SECONDARY BARRIERS**

- A. The secondary layer of plastic is a drop cloth to protect the primary layer from debris generated by the asbestos abatement work and is specified in the appropriate work sections.

END OF SECTION 01526

## **SECTION 01 54 23 SCAFFOLDING AND PLATFORMS**

### **PART 1 - GENERAL**

#### **1.01 DESCRIPTION**

- A. Related Documents: Drawings and general provision of the contract applicable. Refer to Section 013300 for all required submittals.
- B. This specification identifies the minimum requirements and standards for all scaffolding and edge protection designed, erected, altered, inspected, used and/or dismantled.

#### **1.02 SCOPE OF WORK**

- A. Installation of scaffolding to reach the roughly 25 foot main church ceiling for removal of the ceiling texture spray, achieve a clean on the substrate and an airborne clearance level of 70 structures per square millimeter via transmission electron microscopy (TEM), subsequent removal of the entire substrate including mesh and paper backing to expose the upper level mechanical systems for work by others. Removal of the scaffolding system will be done by others after completion of renovation work.

#### **1.03 REGULATIONS, CODES OF PRACTICE, AND BEST PRACTICE REQUIREMENTS**

- A. OSHA 1926.451 Scaffolds
- B. Scaffold & Access Industry Association, SAIA Documents
- C. A Guide to Scaffold Use in the Construction Industry, OSHA 3150, 2002 (revised)
- D. 1926.502 Fall Protection
- E. 1926.1050 Stairways and Ladders
- F. ANSI/ASSP A10.8-2019 Scaffolding Safety Requirements

#### **1.04 COMPETENT PERSON REQUIREMENTS**

- A. OSHA requires a competent person under the conditions of identified in this Project to:
  - 1. In General to select and direct employees who erect, dismantle, move or alter scaffolds (1926.451(f)(7))
  - 2. To train employees involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting scaffolds to recognize associated work hazards (1926.454(b)).
  - 3. To inspect scaffolds and scaffold components for visible defects before each work shift and after any occurrence which could affect the structural integrity and to authorize prompt corrective actions. (1926.451(f)(3))
  - 4. to determine the feasibility and safety of providing fall protection and access. (1926.451(e)(9) and 1926.451 (g)(2)
  - 5. To determine if a scaffold will be structurally sound when intermixed components from different manufacturers (if using pre-fabricated components). 1926.451(b)(10)

## 1.05 SUBMITTALS

- A. Name and qualifications of the designated competent person under this Section.
- B. Brief description of the design of the scaffolding system including how this will be accessed. If using the drawing is a better way to illustrate the plan, use the drawing to illustrate.

## PART 2 - PRODUCTS

### 2.01 SCAFFOLDING

- A. Capacity
  - 1. Each scaffold and scaffold component must support without failure its own weight and at least four times the maximum intended load applied or transmitted.
  - 2. Scaffolds and scaffold components must not be loaded in excess of their maximum intended loads or rated capacities, whichever is less.
  - 3. Load carrying timber members should be a minimum of 1,500 lb-f/in<sup>2</sup> construction grade lumber.
- B. Platform Construction
  - 1. Each platform must be planked and decked as fully as possible with the space between the platform and uprights not more than 1 inch wide. The space must not exceed 9 inches when side brackets or odd-shaped structures result in a wider opening between the platform and the uprights.
  - 2. Scaffold planking must be able to support, without failure, its own weight and at least four times the intended load. Solid sawn wood, fabricated planks, and fabricated platforms may be used as scaffold planks following the recommendations by the manufacturer or lumber grading association or inspection agency. Appendix A of 1926.451 tables show maximum permissible spans, rated load capacity, and nominal thickness.
  - 3. The platform must not deflect more than 1/60 of the span when loaded.
  - 4. Install guard rails along all open sides and ends before releasing the scaffold for use by workers other than the erection crew. Guard rails are not required if the end is less than 14 inches from the face of the work/wall but are required for scaffolds more than 10 feet above the ground or lower level. Steel or plastic banding must be used as a top rail or a mid-rail.
  - 5. The structural members must be plumbed and braced to prevent swaying and displacement. Supported scaffolds' poles, legs, posts, frames, and uprights must bear on base plates or other adequate firm foundation.

## PART 3 - EXECUTION

### 3.01 ASSEMBLY

A. Assemble in accordance with the approved submittal to create a stable, safe platform that can be used for remediation, demolition, and re-construction.

END OF SECTION 015423

## **SECTION 01 5600 WORKER PROTECTION**

### **PART 1 - GENERAL**

#### **1.01 GENERAL - DESCRIPTION OF WORK**

- A. This section describes the equipment and procedures required for protecting workers against asbestos contamination and other workplace hazards except for respiratory protection.

#### **1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Respiratory Protection is specified in Section 015620.

#### **1.03 WORKER TRAINING**

- A. All workers are to be trained and licensed as required by the State of South Dakota.
- B. Train in accordance with 29 CFR 1926, all workers in the dangers inherent in handling asbestos and breathing asbestos dust and in proper work procedures and personal and area protective measures.
- C. OSHA Regulations:
- 29 CFR 1910.1001            General Asbestos Standard
  - 29 CFR 1926.58            Construction Standard
  - 29 CFR 1910.20            Walking Working Surfaces
  - 29 CFR 1910.132-137      Personal Protection Equipment
  - 29 CFR 1910.141           Sanitation
  - 29 CFR 1926.417           Lockout and Tagging of Circuits

#### **1.04 MEDICAL EXAMINATIONS**

- A. Provide medical examinations for all workers who will enter the work area for any reason. Examination shall at a minimum meet OSHA requirements as set forth in 29 CFR 1926. In addition, provide an evaluation of the individual's ability to work in environments capable of producing heat stress in the worker.

#### **1.05 SUBMITTALS**

- A. Submit the following to the Owner for review. Do not start work until the submittals are approved by Owner.
1. Submit a copy of the worker certifications as issued by the state of South Dakota.
  2. Submit the report from medical examination conducted within last 12 months as part of compliance with OSHA medical surveillance requirements for each worker who is to enter the work area. Submit, at a minimum, for each worker the following:
    - a. Name



- b. Physician's written opinion from examining physician including at a minimum the person is able to wear respiratory protection during their work.

## PART 2 - PRODUCTS

### 2.01 EQUIPMENT

#### A. Protective Clothing – Asbestos Abatement

1. Coveralls: Provide disposable full-body coveralls and disposable head covers and require that they be worn by all workers in the work area. Provide a sufficient number for all required changes for all workers in the work area for asbestos abatement.
2. Boots: Provide work boots with non-skid soles, and where required, OSHA foot protectives for all workers. Provide boots at no cost to the workers. Paint uppers of all boots red with waterproof enamel. **Do not allow boots to be removed from the work area for any reason after being contaminated with asbestos-containing material.** Dispose of boots as asbestos-contaminated waste at the end of work.
3. Hard Hats: Provide head protectives (hard hats) as required by OSHA for all workers, and provide 4 spares for use by Government's representative, and Government. Label hats with same warning labels as used on disposable bags. Require hard hats to be worn at all times that work is in progress that may potentially cause head injury. Provide hard hats of type with plastic strap type suspension. Require hats to remain in the work area throughout the work. Thoroughly clean, decontaminate and bag hats before removing them from the work area at the end of the project.
4. Goggles: Provide eye protectives (goggles) as required by OSHA for all workers in any activity which may potentially cause eye injury if not all ready wearing full-face respiratory protection. Thoroughly clean, decontaminate and bag goggles before removing them from the work area at the end of the work.
5. Gloves: Provide work gloves to all workers and require that they be worn at all times in the work area. Do not remove gloves from work area and dispose of as asbestos contaminated waste at the end of the work when working inside asbestos abatement enclosures.
6. Additional Protective Equipment: Provide suits to any enclosure visitor. Visitor is expected to provide his/her own respirator.

## PART 3 - EXECUTION

### 3.01 GENERAL

- A. Provide worker protection as required by the most stringent OSHA and/or EPA standards applicable to the work. The following procedures are minimums to be adhered to regardless of fiber count in the work area.
- B. Each time work area is entered remove all street clothes in the changing room of the personnel decontamination unit and put on new disposable coveralls, new head cover, and a clean

respirator. Proceed through shower room to equipment room and put on work boots.

### **3.02 DECONTAMINATION PROCEDURES**

A. When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. The following procedure is required as minimum:

1. When exiting area, remove disposable coveralls, disposable head covers, and disposable footwear covers or boots in the equipment room.
2. Still wearing respirators, proceed to showers. Showering is mandatory. Care must be taken to follow reasonable procedures in removing the respiratory to avoid asbestos fibers while showering. The following procedure is required as a minimum:

Thoroughly wet body including hair and face. If using a powered air-purifying respirator

(PAPR) hold blower unit above head to keep canisters dry. With respirator still in place, thoroughly wash body, hair, respirator face piece and all parts of the respiratory except the blower unit and battery pack on PAPR. Pay particular attention to seal between face and respirator and under straps. Take a deep breath, hold it and/or exhale slowly, completely wet hair, face, and respirator. While still holding breath, remove respirator and hold it away from face before starting to breath. Carefully wash facepiece of respirator inside and out.

3. If using PAPR, shut down in the following sequence. First cap inlets to filter cartridges, then turn off blower unit (this sequence will help keep debris which as collected on the inlet side of filter from dislodging and contaminating the outside of the unit). Thoroughly wash blower unit and hoses. Carefully wash battery pack with wet rag. Be extremely cautious of getting water in battery pack as this will short out and destroy battery.
4. Shower completely with soap and water. Rinse thoroughly. Rinse shower room walls and floor prior to exit. Proceed from shower to changing room and change into street clothes or into new disposable work items.

### **3.03 PERSONAL HYGIENE**

A. Workers shall NOT eat, drink, smoke, chew gum, tobacco in the work area. To eat, chew, drink, or smoke, workers shall follow the procedure described above, then dress in street clothes before entering the non-work areas of the building. Contractor shall provide a break and lunch room in a clean area of the building or outside the building in an area visually enclosed.

END OF SECTION 015600

## **SECTION 01 5620 RESPIRATORY PROTECTION**

### **PART 1 - GENERAL**

#### **1.01 GENERAL DESCRIPTION OF WORK**

##### **ASBESTOS**

- A. Instruct and train each worker involved in asbestos abatement or maintenance and repair of friable asbestos-containing materials in proper respiratory use and require that each worker always wear a respirator, properly fitted on the face in the work area from the start of any operation which may cause airborne asbestos fibers until the work area is completely decontaminated. Use respiratory protection appropriate for the fiber level encountered in the work place or as required for other toxic or oxygen-deficient situations encountered.

#### **1.02 STANDARDS**

- A. Except to the extent that more stringent requirements are written directly into the contract documents, the following regulations and standards have the same force and effect (and are made a part of the contract documents by reference) as if copied directly into the contract documents, or as if published copies were bound herewith. Where there is a conflict in requirements set forth in these regulations and standards, meet the more stringent requirement.

OSHA - U.S. Department of Labor Occupation Safety and Health Administration, Safety and Health Standards 29 CFR 1910, Section 1001 and Section 1910.134. 29 CFR 1926.58.

CGA - Compressed Gas Association, Inc., New York, Pamphlet G-7, "Compressed Air for Human Respiration", and Specification G-7.1 "Commodity Specification for Air".

CSA - Canadian Standard Association, Rexdal, Ontario, Standard Z180.1-1978, "Compressed Breathing Air".

ANSI - American National Standard Practices for Respiratory Protection, ANSI Z88.2-1980.

NIOSH - National Institute for Occupational Safety and Health

MSHA - Mine Safety and Health Administration

#### **1.03 SUBMITTALS - Refer to Section 013300**

- A. Copy of contractor's respiratory training program.
- B. Worker signed acknowledgement that respiratory training was received. Note: Worker acknowledgement must include acknowledgement of respiratory training for all types of respirators and exposures including:
  - 1. Asbestos fiber and organic vapors (if and depending on type of encapsulants and spray adhesives used).

2. Half-face air purifying respirator.
  3. Powered Air Purifying Respirator (PAPR).
  4. Acknowledgement that either a qualitative or quantitative fit test was performed to individual satisfaction for air purifying respiration.
- C. Medical doctor's sign-off that individual is fit to wear various respirators.
- D. Manufacturer's literature for various respirator equipment types.
- E. Manufacturer's literature and training manual for air purification system to be used in conjunction with type "C" supply air respirators.

#### **1.05 DELIVERY**

- A. Deliver replacement parts, etc, not otherwise labeled by NIOSH or MSHA to job site in manufacturer's containers.
- B. Operating Instruction - Submit complete operating and maintenance instructions for all components and systems as a whole. Submittal is to be in bound manual form, suitable for field use.
- C. Provide air used for breathing in Type "C" supplied air respiratory systems that meets or exceeds standards set for C.G.A. Type 1 (Gaseous Air) Grade D or CSA Z180.1, whichever presents the more stringent quality standard.

### **PART 2 - EQUIPMENT**

#### **2.01 AIR PURIFYING RESPIRATORS**

1. Respirator Bodies: Provide half-face or full-face type respirators.
2. Filter Cartridges: Provide at a minimum, HEPA type filters labeled with NIOSH and MSHA certification for "Radionuclides, Radon Daughters, Dust, Fumes, Mists, including "Asbestos-Containing Dusts and Mists", and color coded in accordance with ANSI Z228.2 (1980). In addition, a chemical cartridge section may be added if required, for solvents, etc., in use. In this case, provide cartridges that have each section of the combination canister labeled with the appropriate color code and NIOSH/MSHA Certification.
3. Non-permitted Respirators: Do not use single use, disposable or quarter-face respirators.

### **PART 3 - EXECUTION**

#### **3.01 GENERAL**

- A. Respiratory Protection Program: Must comply with ANSI Z88.2-1980 "Practices for Respiratory Protection" and OSHA 29 CFR 1910 and 1926.

- B. Contractor shall require that respiratory protection be used at all times that there is any possibility of disturbance of asbestos containing materials whether intentional or accidental.
- C. Regardless of airborne fiber levels the minimum level of respiratory protection used will be half-face air purifying respirators with high efficiency filters.
- D. Single use, disposable, or quarter-face respirators shall not be used for any purpose.
- E. Any worker caught not wearing proper respiratory protection will not be allowed to continue work on this project.
- F. Fit Testing:
  - a. Provide initial fitting of respiratory protection during a respiratory protection course of training set up and administered by an Industrial Hygienist or other person with qualification in respiratory training. Allow the individual to use only those respirators for which training and fit testing has been provided.
  - b. In the case of air purifying respirators, check the fit of each worker's respirator by having irritant smoke blown onto the respirator from a smoke tube. This project requires that a minimum of one irritant smoke test be performed for each type of air purifying respirator worn by an individual. In addition to the smoke test, the contractor's employees are to be instructed that each time an air purifying respirator is put on it be checked for fit with a positive and negative pressure fit test in accordance with the manufacturer's instructions or ANSI Z88.2 (1980).
- G. Respirators
  - 1. Negative Pressure - Half-face or Full-face Mask:
    - a. Supply a sufficient quantity of respirator filters approved for asbestos, so that workers can change filters during the work day.
    - b. Respirators to be wet-rinsed and filters discarded each time a worker leaves the work area.
    - c. New filters be installed each time a worker re-enters the work area. Store respirators and filters at the job site in the changing room and protect totally from exposure to asbestos prior to their use.
  - 2. Powered Air Purifying Full-Face Mask:
    - a. Supply a sufficient quantity of high efficiency respirator filters approved for asbestos so that workers can change filters at any time that flow through the face piece decreases to the level at which the manufacturer recommends filter replacement.
    - b. Regardless of flow, filter cartridges be replaced after 40 hours of use.
    - c. HEPA elements in filter cartridges be protected from wetting during showering. Entire exterior housing of respirator, including blower unit, filter cartridges, hoses, battery pack, face mask, belt, and cords, be washed each time a worker leaves the

work area. Caution should be used to avoid shorting battery pack during washing.

- d. Provide an extra battery pack for each respirator so that one can be charging while one is in use.

#### H. Conditions of Use for Respirator Types

- 1. Half-face air purifying respirators can be used in work situations where fiber levels have been documented or are not expected to exceed 0.1 f/cc. Work areas or individual exposures exceeding 0.1 f/cc requires increased respiratory protection.
  - a. Holding and clean rooms of waste transfer airlocks.
  - b. Pre-cleaning and enclosure set-up.
  - c. Loading waste debris in dumpster or vehicle.
  - d. Enclosure and decontamination unit tear down of final clean determination.

### 3.02 PERMISSIBLE EXPOSURE LIMIT (PEL)

- A. Eight-hour time weighted average (TWA) of asbestos fibers to which any worker may be exposed shall not exceed current OSHA regulations.
- B. For purposes of this section fibers are defined as all fibers regardless of composition as counted in the NIOSH 7400 procedure.
- C. PAPR can be used in work situations where fiber levels have been determined to be equal to or less than 2.0 f/cc. Work areas or individual exposures exceeding 1.0 f/cc may require increased respiratory protection. APR can be used in full containment when fiber levels are demonstrated below 0.5 f/cc and materials being removed have a low asbestos content.

END OF SECTION 015620

## **SECTION 01 5630 DECONTAMINATION UNITS**

### **PART 1 - GENERAL**

#### **1.01 DESCRIPTION OF WORK**

- A. Work under this section includes all labor, material and equipment for separate personnel and equipment decontamination facilities. The personnel decontamination unit shall be the only allowed means of ingress and egress for all workers who enter the work area. All material shall exit the work area through an alternative bag out area for larger enclosures that are expected to be sustained for more than a few days.

#### **1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Refer to Section 015003, Temporary Facilities - Asbestos abatement for electrical requirements and requirements relative to connection of decontamination facilities to building systems such as water, sewer, and electrical.

### **PART 2 - PRODUCTS**

#### **2.01 MATERIALS**

- A. Polyethylene Sheet: A single polyethylene film in the largest sheet size possible to minimize seams, 4.0 or 6.0 mil thick as indicated, clear, frosted, or black as indicated.
- B. Reinforced Polyethylene Sheet: Where plastic sheet is the only separation between the work area and building exterior, provide translucent, nylon reinforced, laminated, flame resistant, polyethylene film that conforms to requirements set forth by the National Fire Protection Association Standard 701, Small Scale Fire Test for Flame-Resistant Textile and Films. Provide largest size possible to minimize seams, 4.0 or 6.0 mil thick as indicated, frosted, or black as indicated.
- C. Duct Tape: Provide duct tape in 2" or 3" widths as indicated, with an adhesive which is formulated to stick aggressively to sheet polyethylene.
- D. Spray Adhesive: Provide spray adhesive cans which is specifically formulated to stick tenaciously to sheet polyethylene.
- E. Shower Pan: Provide one piece waterproof shower pan 4' x 8' x 6' deep. Fabricate from seamless fiberglass minimum 1/16" thick reinforced with wood, 18 ga. stainless or galvanized steel with welded seams, copper, or lead with soldered seams, or a seamless liner of minimum 60 mil thick elastomeric membrane.
- F. Shower Walls: Provide 8' long by approximately 7' high walls fabricated from rigid, impervious, waterproof material, either corrugated fiberglass roofing or equivalent. Structurally support, as necessary, for stability.
- G. Shower Head and Controls: Provide a factory-made shower head producing a spray of water which can be adjusted for spray size and intensity. Feed shower with water mixed from hot and cold supply lines. Arrange so that control of water temperature, flow rate, and shut off is from

inside shower without outside aid.

- H. Filters: Provide cascaded filter units on drain lines from showers or any other water source carrying asbestos contaminated water from the work area. Provide units with disposable filter elements as indicated below. Connect so that discharged water passes primary filter and output of primary filter passes through secondary filter.
- Pump wastewater to drain or to storage for use in amended water. If pumped to drain, provide 20 micron and 5 micron wastewater filters in line to drain or wastewater storage. Change filters daily or more often, if necessary. Locate filters inside shower unit so that water lost during filter changes is caught by shower pan.
- I. Hose Bibb. Provide heavy bronze angle type with wheel handle, vacuum breaker and 3/4" National Standard male house outlet.
- J. Shower Stall: For wash down station provide leak tight shower enclosure with integrated drain pan fabricated from fiberglass or other durable waterproof material, approximately 3' x 3' square with minimum 6' high sides and back. Structurally support as necessary for stability. Equip with hose bib, as specified in this section, mounted at approximately 4' - 0" above drain pan. Connect drain to a reservoir. Pump water from reservoir through filters to a drain or store and use for amended water. Mount filters inside shower stall on back wall beneath hose bibb.
- K. Rubber Roofing: Provide uniform flat sheets of flexible sheet roofing material fabricated for EPDM or Neoprene, in a nominal thickness or 45 mils.
- L. Lumber: Provide kiln dried lumber, construction grade.
- M. Sump Pump: Provide totally submersible waterproof sump pump with integral float switch. Provide unit sized to pump 2 times the flow capacity of all showers or hoses supplying water to the sump, through the filters specified herein when they are loaded to the extent that replacement is required. Provide unit capable of pumping debris, sand, plaster or other materials washed off during decontamination procedures without damage to mechanism of pump. Adjust float switch so that a minimum of 3" remains between top of liquid and top of sump pan.
- N. Airlock: Provide an airlock between shower room and equipment room. This is a transit area for workers. Separate this room from equipment room by a sheet plastic flap doorway.
- Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
  - Separate this room from the equipment room and shower room with airtight walls fabricated of 6-mil polyethylene.
  - Separate from equipment room by a sheet plastic flapped doorway.
- O. Equipment Room (Contaminated Area): Require work equipment, footwear and additional contaminated work clothing to be left here. This is a change and transit area for workers.
- Separate this room from the work area by a 6-mil polyethylene flapped doorway.
  - Separate this room from the rest of the building with airtight walls fabricated of 6-mil



polyethylene.

- Separate this room from the shower room and work area with airtight walls fabricated of 6-mil polyethylene.
- P. Airlock: Provide an airlock between equipment room and work room. This is a transit area for workers.
- Separate this room from the equipment room by a sheet plastic flap doorway.
  - Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
  - Separate this room from the equipment room and work area with airtight walls fabricated of 6-mil polyethylene.
- Q. Work Area: Separate work area from the equipment room by polyethylene barriers. If the airborne asbestos level in the work area is expected to be high, as in dry removal, add an intermediate cleaning space between the equipment room and the work area. Damp wipe clean all surfaces after each shift change. Provide one additional floor layer of 6-mil polyethylene per shift change and remove contaminated layer after each shift.
- R. Decontamination Sequence: Require that all workers adhere to the following sequence when entering or leaving the work area.
- S. Entering Work Area:
- Worker enters changing room and removes street clothing, puts on clean disposable overalls and respirator and passes through the shower room into the equipment room.
  - Any additional clothing and equipment left in equipment room needed by the worker are put on in the equipment room.
  - Worker proceeds to work area.
- T. Exiting Work Area:
- Before leaving the work area, require the worker to remove all gross contamination and debris from overalls and feet.
  - The worker then proceeds to the equipment room and removes all clothing except respiratory protection equipment.
  - Extra work clothing such as boots, hard hats, goggles, gloves are to be stored in the contaminated end the equipment room.
  - Disposable coveralls are placed in a bag for disposal with other material.
  - Require that decontamination procedures found in Section 01560 be followed by all individuals leaving the work area.

- After showering, the worker moves to the changing room and dresses in either new coveralls for another entry or street clothes if leaving.

U. Decontamination Sequence: Take all equipment or material from the work area through the designated equipment decontamination unit according to the following procedure.

- Prior to passing contaminated equipment or sealed polyethylene bags into the equipment room, thoroughly wet clean all equipment bags. Conduct this cleaning on a drop cloth layer of plastic for every load out operation.
- When passing equipment or containers into the washroom, close all doorways of the equipment decontamination unit, other than the doorway between the washdown station and the washroom. Keep all outside personnel clear of the equipment decontamination unit.
- Once inside the equipment room, remove any remaining material from the bags and/or equipment using wet methods.
- Pass items into the shower room for a final wet cleaning.
- A worker standing in the shower room passes the cleaned bags to a second worker standing in the drying room placing each cleaned bag into second properly labeled 6-mil polyethylene disposal bag.
- Twist neck of bag, bend over, and seal with a minimum of three (3) wraps of duct tape. See Section 020840 - Disposal of Asbestos Containing Waste Material for labeling requirements and container alternatives.
- When cleaning is complete, pass items into holding room. Close all doorways except the doorway between the holding room and the clean room.
- Workers from the building exterior enter drying area and remove decontaminated equipment and/or containers for disposal.
- Require these workers to wear full protective clothing and appropriate respiratory protection.
- Provide a continuously adequate supply of disposable bath towels.

V. Drying Room: Provide a drying room as an airlock and a place for workers to dry after showering.

- Construct room by providing a pan continuous with or draining to shower room pan. Install a freely draining wooden or non-skid metal floor in pan at elevation of top of pan.
- Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.
- Separate this room from the changing room and shower room with airtight walls fabricated of 6-mil polyethylene.
- Separate from changing room by a sheet plastic flapped doorway.

## SECTION 01563 DECONTAMINATION UNITS

- Provide a continuously adequate supply of disposable bath towels.

W. Shower Room: Provide a completely watertight operational shower to be used for transit by cleanly dressed workers heading for the work area from the changing room or for showering by workers headed out of the work area after undressing in the equipment room.

Construct room by providing a shower pan and two shower walls in a configuration that will cause water running down walls to drip into pan. Install a freely draining wooden floor in shower pan at elevation of top of pan.

- Separate this room from the rest of the building with airtight walls fabricated of 6-mil polyethylene.

Provide splash-proof entrances to drying room and airlock with doors arranged in the following configuration:

- At each entrance to the shower room construct a door frame out of nominal 2" x 4" lumber with 12" jambs (side) and 12" head (top) and sill (bottom). Attach to this door frame two overlapping flaps of elastomeric membrane material, fastened at the head (top) and jambs (sides) (by clamping between a 12" x 3/4" batten and frame). Overlap the flaps a minimum of 6" in a direction that presents a shingle-like configuration to the water stream from the shower. Overlap sill (bottom) by 12" minimum. Arrange so that any air movement out of the work area will cause the flaps to seal against the door frame.

Provide shower head and controls.

- Provide temporary extensions of existing hot and cold water and drainage, as necessary for a complete and operable shower.
- Provide a soap dish and a continuously adequate supply of soap and maintain in sanitary condition.
- Arrange so that water from showering does not splash into the changing rooms or equipment rooms.
- Arrange water shut off and rain pump operation controls so that a single individual can shower without assistance from either inside or outside of the work area.
- Provide flexible hose shower head.
- At no time is a worker from an uncontaminated area to enter the enclosure when a removal worker is inside.

### PART 3 - EXECUTION

#### 3.01 CONSTRUCTION OF THE DECONTAMINATION UNITS

A. Walls and Ceiling: Construct airtight walls and ceiling using polyethylene sheeting at least 6-mil in thickness. Attach to existing building components or a temporary framework.

B. Floors: Use two (2) layers (minimum) of 6-mil polyethylene sheeting to cover floors in all areas of

## SECTION 01563 DECONTAMINATION UNITS

the decontamination units. Use only clear plastic to cover floors.

- C. Flap Doors: Fabricated from three (3) overlapping sheets with openings a minimum of three feet (3') wide. Configure so that sheeting overlaps adjacent surfaces. Weigh sheets at bottoms as required so that they quickly close after being released. Put arrows on sheets to indicate direction of overlap and/or travel. Provide a minimum of six feet (6') between entrance and exit of any room. Provide a minimum of three feet (3') between doors to airlocks.

If the decontamination area is located within an area containing friable asbestos on overhead ceilings, ducts, piping, etc., provide the area with a minimum 1/4 inch hardboard or 1/2 inch plywood "ceiling" with polyethylene sheeting, at least 6-mil in thickness covering the top of the "ceiling".

- D. Visual Barrier: Where the decontamination area is immediately adjacent to and within view of occupied areas, provide a visual barrier of opaque polyethylene sheeting at least 6-mil in thickness so that worker privacy is maintained and work procedures are not visible to building occupants. Where the area adjacent to the decontamination area is accessible to the public, construct a solid barrier on the public side of the sheeting to protect the sheeting. Construct barrier with wood or metal studs covered with minimum 1/4 inch thick hardboard or 1/2 inch plywood. Where the solid barrier is provided, sheeting need not be opaque.

Alternate methods of providing decontamination facilities may be submitted to the owner's representative for approval. Do not proceed with any such method(s) without written authorization of the owner's representative.

- E. Electrical: Connect all electrical branch circuits in decontamination unit and particularly any pumps in shower room to a ground fault circuit protection device.

### 3.02 EQUIPMENT DECONTAMINATION UNITS

- A. Provide an equipment decontamination unit consisting of a serial arrangement of rooms, clean room, holding room, wash room for removal of equipment and material from work area. Do not allow personnel to enter or exit work area through equipment decontamination unit.
- B. Wash Down Station: Provide an enclosed shower unit location in work area just outside wash room as an equipment, bag and container cleaning station.
- C. Wash Room. Provide wash room for cleaning of bagged or contained asbestos-containing waste materials passed from the work area. Construct wash room of 2X wood framing and polyethylene sheeting, at least 6-mil in thickness and located so that packaged materials, after being wiped clean can be passed to the holding room. Separate this room from the work area by a single flap of 6-mil polyethylene sheeting.
- D. Holding Room. Provide holding room as a drop location for bagged asbestos-containing materials passed from the wash room. Construct holding room of 2X wood framing and polyethylene sheeting, at least 6-mil in thickness and located so that bagged materials cannot be passed from the wash room through the holding room to the clean room. Separate this room from the adjacent rooms by double flaps fabricated from 1/16" +/- thick single ply rubber roofing materials, either EPDM or Neoprene.
- E. Clean Room. Provide clean room to isolate the holding room from the building exterior. Construct clean room of 2X wood framing and polyethylene sheeting, at least 6-mil in thickness and located

## SECTION 01563 DECONTAMINATION UNITS

to provide access to the holding room from the building exterior. Separate this room from the exterior by a single flap of 6-mil polyethylene sheeting.

- F. Equipment or Material. Take all equipment or material from the work area through the equipment decontamination unit according to the following procedure:

At washdown station, thoroughly wet-clean contaminated equipment or sealed polyethylene bags and pass into wash room. When passing equipment or containers into wash room, close all doorways of the equipment decontamination unit, other than the doorway between the wash down station and the wash room. Keep all outside personnel clear of the equipment decontamination unit. Once inside the wash room, wet clean the bags and/or equipment. When cleaning is complete pass items into holding room. Close all doorways except the doorway between the holding room and the clean room.

Workers from the building exterior enter holding area and remove decontaminated equipment and/or containers for disposal. These workers are to wear full protective clothing and appropriate respiratory protection. At no time is a worker from an uncontaminated area to enter the enclosure when a removal worker is inside.

### 3.03 CLEANING OF DECONTAMINATION UNITS

- A. Clean debris and residue from inside of decontamination units on a daily basis or as otherwise indicated on contract drawings. Damp wipe or hose down all surfaces after each shift change. Clean debris from shower pans on a daily basis.

If the changing room of the personnel decontamination unit becomes contaminated with asbestos containing debris, abandon the entire decontamination unit and erect a new decontamination unit. Use the former changing room as an inner section of the new equipment room.

### 3.04 SIGNS

- A. Post an approximately 20 inch by 14 inch manufactured caution sign at each entrance to the work area displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

**DANGER  
ASBESTOS  
CANCER AND LUNG DISEASE HAZARD  
RESPIRATORS AND PROTECTIVE CLOTHING ARE  
REQUIRED IN THIS AREA**

Provide spacing between respective lines at least equal to the height of the respective upper line. Post an approximately 10 inch by 14 inch manufactured sign at each entrance to each work area displaying the following legend with letter sizes and styles of a visibility at least equal to the following:

#### SIGNAGE

No Food, Beverages or  
Tobacco Permitted

All Persons Shall

#### NOTATION

3/4" Block

**SECTION 01563  
DECONTAMINATION UNITS**

Don Protective Clothing  
(Coverings) Before Entering  
The Work Area

3/4" Block

All Persons Shall Shower  
Immediately After Leaving  
Work Area and Before Entering  
The Change Area

3/4" Block

Post an approximately 20 inch by 14 inch manufactured caution sign at each entrance to the work area displaying the following legend with letter sizes and styles of a visibility required by 29 CFR 1926:

**SIGNAGE**

**DANGER  
ASBESTOS**

**CANCER AND LUNG DISEASE HAZARD  
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA**

Provide spacing between respective lines at least equal to the height of the respective upper line.

END OF SECTION 01563

**SECTION 01 7419  
CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. Work under this section includes all labor, material and equipment for waste management of waste other than asbestos regulated waste. The substrate and mesh being removed following the ceiling spray removal and clearance achievement qualifies as demolition waste.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Refer to Section 02 08 40, ASBESTOS WASTE DISPOSAL for requirements specific to disposing of asbestos-related waste.

**1.03 SUBMITTALS**

- A. Waste Management Plan – Include handling of non-ACM waste in the waste plan. Identify the proposed landfill.

**1.04 COLLECTION**

- A. Separate, store, protect, and handle at the site identified recyclable and salvageable waste products in a manner that maximizes recyclability and salvageability of identified materials. Provide the necessary containers, bins, and storage areas to facilitate effective waste management and clearly and appropriately identify them. Provide materials for barriers and enclosures around recyclable material storage areas which are non-hazardous and recyclable material storage areas which are non-hazardous and recyclable or reusable. Locate out of the way of construction traffic.
- B. Regular construction waste that is not eligible for recycling should be containerized in some manner on the site to protect from vandalism. Label container as non-ACM waste to avoid confusing the two.
- C. Housekeeping should include maintaining the inside of the building and grounds area free from any extraneous debris. All waste is to be controlled.

**PART 2 - PRODUCTS**

Not Used.

**PART 3 - EXECUTION**

Not Used.

END OF SECTION 01 74 19

**SECTION 02 0810  
REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIALS**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. Work to be performed under this section includes the removal, handling, movement through the building, loading, transport, and disposal of asbestos containing materials and other wastes. Decontamination of building materials, equipment, electrical, and mechanical items and thorough cleaning of all building surfaces is also part of the work.

**1.02 SCOPE OF WORK**

- A. The work scope precedes a renovation of the church and includes:

CHURCH

- Ceiling spray on non-asbestos concrete metal mesh substrate in main area of the church. Substrate and mesh removed post asbestos removal as demolition debris.
- Ceiling spray on non-asbestos gypsum metal mesh substrate in perimeter offices/specialty areas. NOTE: this is at a height of about 8 feet and could be removed in entirety as asbestos or the ceiling spray removed and the substrate removed after as non-asbestos. The concrete substrate likely extends over this area as it does where there are lay in ceiling panels and conditions can be observed.
- Cementitious pipe fittings with no canvas jacketing on steam lines – SE Attic, basement below sacristy, above ceiling in first floor Sacristy, ceiling cavity above suspended ceiling – estimated total is 30 and they are on variable sized larger diameter steam line piping.

SCHOOL LINK/AUDITORIUM

- Floor tile 9x9 beige (approximately 50 sf) Projection room and main stairs to the balcony. This can be coordinated with building vacancy to complete. Tile has asbestos and adhesive does not. The base cove mastic has asbestos (approximately 20 lf) and needs to be removed with the floor tile. This can be done all at once.
  - Light fixture insulation (2 fixtures) projection room/main stairs to balcony. Remove and dispose of entire fixture.
  - Transite Panel east edge of gym. Approximately 200 square feet.
  - Exterior NW entry – approximately 5 lineal feet of gray caulk.
- B. The drawings show work areas in which work is to be performed. NOTE: there are no drawings for the auditorium work.

**1.03 SUMMARY OF WORK**

- A. Drawings showing asbestos locations requiring abatement have been included for reference. Abatement contractor is to verify quantities and locations prior to bidding.
- B. All asbestos waste materials must be cleaned up, bagged, and moved to an acceptable storage area or to a receiving dumpster each day. No loose asbestos material is to be left uncontained at the end of any work shift.



#### **1.04 RELATED WORK SPECIFIED ELSEWHERE**

- A. Installation of critical and primary barriers, and work area isolation procedures are set forth in Section 015260.
- B. Project decontamination and clean-up procedures after removal of barriers are specified in Section 020850.

#### **1.05 SUBMITTALS**

- A. Surfactant: Submit product data, use instructions and recommendations from manufacturer of surfactant intended for use. Include data substantiating that material complies with requirements.
- B. Floor Tile Mastic Remover: Submit product data, use instructions and recommendations from manufacturer of surfactant intended for use. Include data substantiating that material complies with requirements. Mastic removal is limited to the area under the base cove in the projection room. It is possible this can be adequately removed by scraping as the extent is limited to 20 lf.
- C. Encapsulants: Submit product data, use instructions and recommendations from manufacturers of encapsulants intended for use. Include data substantiating that material complies with requirements and is compatible with paints, fireproofing or adhesives specified in other sections of these specifications or intended to be used by remodeling contractors. Use encapsulants rated for the temperature of affected piping services.
- D. Certifications: Submit certification from manufacturer of surfactant or removal encapsulant that, to the extent required by this specification, the material, if used in accordance with manufacturer's instructions, will wet asbestos containing materials to which it is applied as required by the National Emission Standard for Hazardous Pollutants (NESHAPS) Asbestos Regulations (40 CFR 61, Subpart M).
- E. Material Safety Data Sheet: Submit the Material Safety Data Sheet, or equivalent, in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) for each surfactant and encapsulating material proposed for use on the work. Include a separate attachment for each sheet indicating the specific worker protective equipment proposed for use with the material indicated.
- F. Manifests and Disposal Certificates: Number sequentially each waste tracking form and keep copies at the job site. Submit tracking forms with attached landfill receipts as they are received (all receipts must be filed within 45 days of shipment).

#### **1.06 DISPOSAL**

- A. Friable asbestos containing waste material and debris which is packaged in accordance with the provisions of this specification may be disposed of at designated EPA approved sanitary landfills.
- B. Provide any required notices to the U.S. Environmental Protection Agency Region 8 office and South Dakota Department of Environmental Quality.

- C. Identify landfill and waste hauler (contact persons, and telephone numbers) and submit state and federal permit of identification numbers to the Owner 30 days prior to disposal.
- D. Dispose of all asbestos containing or contaminated material in accordance with all applicable regulations.
- E. Label asbestos waste containers and bags with the generator's name and site address in accordance with NESHAPS regulations.

## **PART 2 - PRODUCTS**

### **2.01 WETTING AGENTS**

- A. For wetting prior to disturbance of asbestos containing materials, use either amended water or a removal encapsulant.
- B. For amended water, provide water to which a surfactant has been added. Use a mixture of surfactant and water which results in wetting of the asbestos containing material and retardation of fiber release during disturbance of the material equal to or greater than that provided by the use of one ounce of a surfactant consisting of 50% polyoxyethylene ether mixed with five gallons of water.
- C. For removal encapsulant designed specifically for removal of asbestos containing material. Use a material which results in wetting of the asbestos containing material and retardation of fiber release during disturbance of the material equal to or greater than that provided by water amended with a surfactant consisting of 50% polyoxyethylene ester and 50%polyoxyethylene ether mixed with five gallons of water.

### **2.02 PROTECTION MATERIALS**

- A. Polyethylene sheet shall be a single polyethylene film in the largest sheet size possible to minimize seams, 4.0 or 6.0 mils thick as indicated, clear, frosted, or black as indicated.
- B. Duct tape shall be in 2" or 3" widths as indicated, with an adhesive which is formulated to aggressively stick to sheet polyethylene.
- C. Spray cement shall be spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene.
- D. Disposal bags shall be 6-mil thick leak tight polyethylene bags labeled with three labels with text as follows:

First Label:

CAUTION  
CONTAINS ASBESTOS FIBERS  
AVOID OPENING OR BREAKING CONTAINER  
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH

Second Label: Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication standard:

DANGER

CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD  
BREATHING AIRBORNE ASBESTOS, TREMOLITE,  
ANTHOPHYLLITE, OR ACTINOLITE FIBERS  
IS HAZARDOUS TO YOUR HEALTH

Third Label: Provide in accordance with U.S. Department of Transportation regulation on hazardous waste marking, 49 CFR Parts 171 and 172. Hazardous Substances: Final Rule. Published November 21, 1986 and revised February 17, 1987:

RQ HAZARDOUS  
SUBSTANCE,  
SOLID, NOS,  
ORM-E, NA 9188  
(ASBESTOS)

- E. Fiberboard drums shall be heavy duty leak tight fiberboard drums with tight sealing locking metal tops.
- F. Paper board boxes shall be heavy duty corrugated paper board boxes coated with plastic or wax to retard deterioration from moisture. All boxes must be lined with two layers of 6-mil poly and appropriately labeled for disposal.

### **PART 3 - EXECUTION**

#### **3.01 PROTECTION - GENERAL REQUIREMENTS**

- A. Where required by this Section, install secondary barriers consisting of drop cloths of clear 6-mil sheet plastic installed over the primary barriers. Secondary barriers are required for removal of acoustical plaster, fireproofing, pipe insulation, and under glove-bags unless noted otherwise on the contract drawings or in these specifications.
- B. Before beginning work with any material for which a Material Safety Data Sheet has been submitted, provide workers with the required protective equipment. Require that appropriate protective equipment be used at all times.
- C. Use work procedures that result in airborne fiber counts less than that indicated in this Section of the specification. If airborne fiber counts exceed this level, immediately mist the area with amended water to lower fiber counts, increase level of respiratory protection if necessary and revise work procedures to maintain airborne fiber levels within the required limits. Refer to Section 14100 for additional requirements.

#### **3.02 PRE-CLEANING**

- A. Containment for pre-cleaning shall be critical barriers and differential pressure. Respiratory protection shall be half-face APR.
- B. Prior to erecting any primary barriers, pre-clean all dust from all surfaces that will be in contact with poly sheeting.
- C. Pre-cleaning shall be by wet wiping or HEPA vacuuming.

- D. Cleaned and decontaminated items shall be inspected by the asbestos supervisor and then moved out of containment to a storage area in the building designated by the Owner or shall be covered with poly sheeting and left in place.

### **3.03 SECONDARY BARRIERS**

- A. Over the primary barrier, install as a drop cloth a clear 6-mil sheet plastic in all areas where asbestos removal work is to be carried out. Completely cover floor with sheet plastic. Where the work is within 10'0" of a wall, extend the secondary barrier up wall to ceiling. Support sheet plastic on wall with duct tape so that debris is unable to get behind it. Provide cross strips of duct tape at wall support as necessary to support sheet plastic prevent its falling during removal operations.
- B. Install Secondary Barrier at the beginning of each shift and install only sufficient plastic for work of that shift or maintain barrier on a daily basis.
- C. Remove secondary barrier at end of each work shift or as work in an area is completed. Fold plastic toward center of sheet and pack in disposal bags. Keep material on sheet continuously wet until bagged.

### **3.04 PROTECTION FOR GLOVEBAGGING**

- A. The pipe insulation shall be removed using glovebags made of transparent 6-mil polyethylene. Glovebags may be used only once. Sliding or moving a glovebag after asbestos removal work has begun is strictly prohibited.
- B. Install critical barriers over all openings in the area and drop cloth in location of glovebag removal.

### **3.05 GENERAL REMOVAL PROCEDURES**

- A. After the contractor has demonstrated that he/she has complied with all of the on-site specific pre-abatement conditions contained in Sections 01 5030, 01 5130, 01 5260, 01 5600, 01 5620 and 01 5630 of these specifications, then he/she shall begin actual asbestos removal work.
- B. Thoroughly wet asbestos containing materials to be removed prior to stripping and/or tooling to reduce fiber dispersal into the air. Accomplish wetting by a fine spray (mist) of amended water or removal encapsulant. Saturate material sufficiently to wet to the substrate without causing excess dripping. Allow time for water or removal encapsulant to penetrate material thoroughly.

If amended water is used, spray material repeatedly during the work process to maintain a continuously wet condition. If a removal encapsulant is used, apply in strict accordance with manufacturer's written instructions. Perforate outer covering or any installation which has been painted and/or jacketed in order to allow penetration of amended water or removal encapsulant, or where necessary, carefully strip away while simultaneously spraying amended water or removal encapsulant on the installation in order to minimize dispersal of asbestos fibers into the air.

- C. Mist work area continuously with amended water whenever necessary to reduce airborne fiber levels. Use wet vacuums to control water buildup. Do not allow standing water to puddle on floors.

- D. Remove saturated asbestos containing material in small sections from all areas. Do not allow material to dry out. As it is removed, simultaneously pack material while still wet into disposal bags. Twist neck of bags, bend over and seal with minimum three wraps of duct tape. Clean outside and move to wash down station adjacent to material decontamination unit.
- E. Large components shall be wrapped in 2 layers of 6-mil polyethylene sheeting sealed with duct tape. Sharp corners shall be taped before covering with poly.
- F. Small sharp-edged materials shall be placed in burlap bags prior to double bagging with 6-mil polyethylene or they shall be placed in drums.
- G. Saturated asbestos containing material shall be removed and containerized before moving to a new location for continuance of work. Surrounding areas shall be periodically sprayed and maintained in a wet condition until visible material is cleaned up. At the end of each workday, all visible asbestos containing materials shall be removed and containerized.
- H. Material removed from building structures or components shall not be dropped or thrown to the floor. Material shall be removed as intact sections or components whenever possible and carefully lowered to the floor. If this cannot be done for materials greater than 50 feet above the floor, a chute which does not allow dust to escape shall be constructed to transport the material to containers on the floor or the materials shall be containerized at elevated levels (e.g. on scaffolds) and carefully lowered to the ground by mechanical means. Materials between 15 and 20 feet above the ground may be containerized at elevated levels or dropped onto inclined chutes for subsequent collection and containerization.
- I. Containers (6-mil polyethylene bags or drums) shall be sealed when full. Asbestos containing material shall be double bagged when polyethylene bags are used for disposal. Bags shall not be overfilled. The bags shall be sealed to prevent accidental opening and leakage by tying the tops in an overhand knot or by taping in gooseneck fashion. Bags shall not be sealed with wire or cord. Bags may be placed in drums for staging and transportation to the landfill. Bags shall be decontaminated on exterior surfaces by wet cleaning before being removed from the enclosure.
- J. Metal or fiber drums with locking ring tops must be sealed for disposal of asbestos containing waste material that contains sharp edges, unless the sharp edges can be covered or blunted.
- K. After completion of all stripping work, surfaces from which asbestos containing materials have been removed shall be cleaned (e.g. wet brushed and sponged) to remove all visible residue.
- L. Clean-up shall proceed in accordance with Section 020850.
- M. For all surfaces stripped of asbestos containing materials, a coating of encapsulating agent must be applied after the area has passed the visual inspection, to securely seal any residual fibers. The encapsulating agent must be compatible with subsequent coverings.
- N. Encapsulation operations must meet the following requirements:
  - 1. Any loose or hanging asbestos containing material must be removed.
  - 2. Filler material applied to gaps in existing material must contain no asbestos, adhere well to the substrate, and provide an adequate base for the encapsulating agent.

3. Encapsulants must be applied using only airless spray equipment with air pressure and nozzle orifice as recommended by the encapsulant manufacturer.
  4. Encapsulant must not be solvent-based or use a vehicle consisting of hydrocarbons.
  5. Encapsulated asbestos containing materials must be specifically designated according to the Code of Federal Regulations, Title 29, Section 1926.58 (K) (2), to warn individuals who may disturb the material.
- O. After the work area has been rendered free of visible residues, a thin coat of an encapsulating agent shall be applied to all surfaces in the work area, including structural members, building components and plastic sheeting on walls and floors to seal in non-visible residue.

### **3.06 REMOVAL OF PIPE INSULATION - GENERAL**

- A. Containment for pipe insulation removal shall be full containment, mini enclosures, or glovebags as specified in Sections 015130, 015260, and as shown on the drawings. Respiratory protection will be minimum N100 half mask HEPA filtered respirators as specified in Section 015620 and airborne fiber count limit will be 0.5 f/cc as specified in Section 014100 for full enclosures, 0.05 f/cc for mini enclosures, and 0.01 f/cc for glovebagging.
- B. Establish specified level of containment. Spray insulation with a mist of amended water or removal encapsulant. Allow amended water or removal encapsulant to saturate material to substrate. If a removal encapsulant is used, use in strict accordance with manufacturer's instructions.
- C. Cut all pipe insulation into chunks and carefully remove from pipes. Place all insulation by hand into disposal bags. Do not let insulation drop to floor or let insulation lay on the floor. Where asbestos insulation contacts fiberglass or other non-asbestos insulation that is to remain, cut back 6' into non-asbestos insulation.
- D. Remove any residue on pipes or fittings with stiff bristle nylon hand brush and wet sponging.
- E. Remove all pipe insulation passing through walls, floors, etc. Perform minor demolition as necessary to access insulation through floors and walls.

### **3.07 REMOVAL OF CEILING SPRAYS**

- A. Containment for ceiling spray will be full containment as specified in Sections 015130, 015260, and as shown on the drawings. Respiratory protection will be minimum N100 half mask cartridge respirators.
- B. Completely remove all ceiling spray from the non-acm substrate as shown on the drawings. Ceiling spray is to be thoroughly wet prior to removal.
- B. Double bag or place in drums for landfill disposal.

### **3.08 REMOVAL OF CEILING TILE**

- A. Containment for ceiling tile will be critical barriers and negative air as specified in Sections 015130, 015260, and as shown on the drawings. If this is a renovation, protect carpeting from dust. Respiratory protection will be minimum Half mask cartridge respirator. Clean and protect fluorescent light fixtures, smoke detectors, and other building items that penetrate suspended ceiling system. Supply diffusers and return grilles are attached in the ceiling system with a small "L" channel fastened with rivets. Rivets and "L" channels require removal prior to removing ceiling tile. Clean and protect supply diffusers and return grilles if this is a demolition, finish protection can be limited to avoiding dispersing asbestos to other areas of the building.
- B. Remove one ceiling tile to access ceiling cavity. Vacuum backside of each tile prior to removing tile from grid system. Package tile for disposal in accordance with these specifications so as to minimize tile breakage.
- C. Clean ceiling grid and cavity to satisfaction of on-site IH.

### **3.09 REMOVAL OF FLOOR TILE AND ADHESIVE**

- A. Containment for floor tile and/or adhesive removal will be critical barriers as specified in Section 015130 and 015260. Respiratory protection will be minimum APR.
- B. Scrape tiles from substrate; misting as necessary for dust control. Avoid cutting, abrading, or breaking tiles to reduce potential for release of asbestos fibers. Double bag and place in boxes, drums, or burlap bags for landfill disposal.
- C. Where adhesive also contains asbestos, remove adhesive in a manner that complies with the State regulations but avoids use of large volumes of chemicals to perform the removal. Care must be taken to avoid liquids penetrating floor substrate cracks and contaminating the areas below the removal area.

### **3.10 REMOVAL OF WATERPROOFING MATERIAL FROM EXTERIOR FOUNDATION WALLS**

- A. Coordinate location and excavation with the General Contractor. Remove sufficient water proofing to allow for cutting of concrete using techniques to minimize dust. Concrete with ACM waterproofing material is to be disposed of as asbestos-containing waste.

### **3.11 REMOVAL OF CAULKS AND ROOFING MATERIALS**

- A. Caulks and roofing materials removed outside the building do not require constructing an enclosure. Remove materials nonfriable to avoid creating dust.

### **3.12 REMOVAL OF PIPE FITTINGS ABOVE A NONASBESTOS-CONTAINING PLASTER CEILING**

- A. Install critical barriers and negative air in rooms where plaster ceilings require cutting to access pipe fittings for removal. Cut the access for pipe insulation removal and clean all dust/debris from the area prior to accessing ceiling for pipe fitting insulation removal using glovebag. Remove any debris from the top side of the ceiling.

### **3.13 REMOVAL OF FIRE DOORS**

- A. Remove fire doors with ACM core maintaining the door outer shell intact. Wrap door in two layers of 6 mil poly. Provide the appropriate warning labels on the outer layer of poly.

### **3.14 REMOVAL OF ASBESTOS HARDBOARD FROM INSIDE A BUILDING**

- A. Hardboard is generally non-friable unless it is glued in place or the fasteners cannot be easily removed to allow removal of the material in original pieces. If it is anticipated the hardboard will become friable during the removal and/or the hardboard is glued in place or fastened in some manner that does not allow removal without breakage, install a mini-enclosure with negative air in the removal location.
- B. Remove the hardboard and containerize for disposal. Clean the area completely of dust prior to performing a final clearance sampling by PCM.

### **3.15 REMOVAL OF SMALL AREAS OF FRIABLE ACM WHERE GLOVEBAG CANNOT BE USED**

- A. Install critical barriers, decon and engineering controls.
- B. Wet the material to be removed and carefully remove the material. Bag the debris.
- C. Thoroughly clean the removal location of all visible asbestos debris. Encapsulate the location after the on-site IH has determined the removal is complete.
- C. Final air samples in the area must be at or below 0.01 fibers per cubic centimeter.

### **3.16 REMOVAL OF SMALL SECTIONS OF GYPSUM WALLBOARD WITH ASBESTOS CONTAINING TAPING COMPOUND**

- A. Install critical barrier, mini-enclosure, and engineering controls. If work requires GWB removal on both sides of the wall, remove one side then the other.
- B. Install remote shower.
- C. Carefully remove section of GWB misting the front surface to minimize dust. Bag the debris.
- D. Thoroughly clean the area of all visible dust including any cavities that were exposed during the work. If thermal system insulations are encountered, assume they are asbestos containing and encapsulate any openings in the outside jacket. Encapsulate the location avoiding any finishes that are to remain.
- E. Final air samples in the area must be at or below 0.01 fibers per cubic centimeter by PCM.

### **3.17 REMOVAL OF ASBESTOS CONTAINING WALL AND CEILING TEXTURE FROM A BUILDING TO BE DEMOLISHED**

- A. Install critical barriers over windows, doors, and openings. Install negative pressure to achieve - 0.02 inches of water pressure. Install decontamination unit.



- B. Wet texture and remove from substrate to achieve a clean surface. Bag debris. After texture is satisfactorily removed from substrate, seal substrate with encapsulant.
- C. Achieve 0.01 f/cc clearance in abatement area.

### **3.18 REMOVAL OF ASBESTOS CONTAMINATED VERMICULITE**

- A. Personnel performing the work should wear minimum half mask cartridge respirator.

Remove and containerize vermiculite for disposal as to minimize dust production. Removal area should be substantially free of vermiculite at completion. In the case of masonry block cores, it may be easier to remove the entire block wall as vermiculite contaminated material rather than attempt to remove vermiculite from the cores. Verify completion with on-site IH.

### **3.19 DISPOSAL**

- A. Asbestos containing materials shall be placed in two 6-mil poly bags with the appropriate labeling as specified elsewhere. Sharp objects shall be bagged and drummed rather than double bagged. Drums may be fiber or metal construction at the contractor's option. Do not use labeled bags for general, non-asbestos waste.
- B. Properly contained and labeled asbestos materials shall be moved through the building in carts or on dollies as appropriate. Drop chutes will not be allowed.
- C. Do not store disposal bagged or drummed material outside of the work area. Take bags from the work area directly to a sealed truck or sealed dumpster each day.
- D. Carefully load containerized waste in enclosed dumpsters or sealed trucks with poly lined beds for transport. Exercise care before and during transport. Exercise care before and during transport to ensure that no unauthorized persons have access to the material.
- E. Do not transport bagged or drummed materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated with asbestos containing waste and dispose of in accordance with this specification.
- F. Advise the sanitary landfill operator, at least 10 days in advance of transport, of the quantity of material to be delivered. Provide bag counts or volume data by material type to Owner on a weekly basis.
- G. At the disposal site, sealed plastic bags may be carefully unloaded from the truck. If bags are broken or damaged, return to work site for re-bagging and clean entire truck and contents using procedures set forth in Section 020850, Project Decontamination.
- H. Retain receipts from landfill for materials disposed and submit along with waste manifests and chain of custody forms to the Owner on a weekly basis.

### **3.20 INITIAL CLEAN**

The following applies to full containment enclosures.

- A. Initial cleaning begins after all asbestos debris and bulk removal of asbestos bearing material is complete.
- B. Remove secondary barrier (drop cloth plastic), roll up and pack for disposal in plastic bags or drums. Clean exposed surfaces and the primary barrier plastic by HEPA vacuuming and wet methods. This cleaning must remove any remaining bulk material and visible film or dust on all affected surfaces.
- C. Where appropriate, use cloth cleaning rags and soap and water to get surfaces clean without leaving films and towel residues.

### **3.21 ENCAPSULATION**

- A. After the work area has been rendered free of all visible residues, a thin coat of satisfactory encapsulating agent shall be applied to all surfaces in the containment enclosure including structural members, exposed building components and any remaining plastic sheeting on walls, floors and covering over non-removable items.
- B. Piping is to be encapsulated wherever asbestos bearing insulation has been removed.
- C. Where primary barrier plastic is used, it shall be encapsulated before removal.
- D. In exposed or public areas, remove encapsulant overspray thoroughly from building surfaces and refinish as necessary to restore to a blemish free condition.

END OF SECTION 02081

**SECTION 02 0840  
ASBESTOS WASTE DISPOSAL**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK**

- A. This section describes the disposal of asbestos-containing materials. Disposal includes packaging of asbestos-containing waste materials in accordance with this Section and acceptable to the landfill accepting the waste materials.

**1.02 SUBMITTAL - Refer to Section 013300**

- A. Before start of work: Submit the following to the Owner/Owner's designated representative for review. Do not start work until these submittals are identified as complete and acceptable.
- Copy of state or local license for waste hauler.
  - Name and address of landfill where asbestos-containing materials are to be buried. Include contact person and telephone number.
  - On a weekly basis submit copies of all manifests and disposal site receipts to owner's representative. Verify these manifests are legible and have a unique number that can be traced through the disposal process.

**PART 2 - PRODUCTS**

**2.03 MATERIALS**

- A. Disposal Bags: Provide 6-mil thick, leak-tight polyethylene bags labeled with three labels with test as follows:
1. First label as required by NESHAPS

**CAUTION  
CONTAINS ASBESTOS FIBERS  
AVOID OPENING OR BREAKING CONTAINER  
BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH**

2. Second label: Provide in accordance with 29 CFR 1910.1200(f) of OSHA's Hazard Communication Standard.

**DANGER  
CONTAINS ASBESTOS FIBERS  
AVOID CREATING DUST  
CANCER AND LUNG DISEASE HAZARD  
BREATHING AIRBORNE ASBESTOS, TREMOLITE, ANTHOPHYLLITE OR  
ACTINOLITE FIBERS IS HAZARDOUS TO YOUR HEALTH**

3. Third Label: Provide in accordance with U.S. Department of Transportation regulation on hazardous waste marking, 49 CFR parts 171 and 172, Hazardous Substances: Final Rule. Published November 21, 1986 and revised February 17, 1987.

**RQ HAZARDOUS SUBSTANCE,  
SOLID, NOS, ORM-E, NA 9188  
(ASBESTOS)**

- B. Any asbestos-containing material or material contaminated by asbestos that is not suitable to be contained in doubled 6-mil polyethylene bags, shall be contained in a minimum of one 6-mil bag and placed into metal drums or fiber drum and sealed with appropriate lid.
  1. Impermeable Containers: Suitable to receive and retain any asbestos-containing or contaminated materials until disposal at an approved site. The containers shall be labeled in accordance with OSHA regulation 29 CFR 1910.1001. Containers shall be both air and water tight and shall be resistant to damage and rupture. The containers shall be of two parts: 1) 6-mil polyethylene bags of size to fit within the drum listed hereafter and capable of being sealed; 2) 55 gallon capacity metal drums with tight fitting lids, fiberglass containers with tight fitting lids, or heavy walled fiber drums with tight fitting lids, may be used as impermeable containers if shipped to the dump site in a fully closed, lockable vehicle.
  2. Transport barrels by two-wheeled carts or other suitable device. Enclosed card may be substituted.
  3. Barrels containing debris may be stored on-site in a secured dumpster or trailer.
  4. Place barrels in dumpster. Do not remove debris from barrels.
  5. A barrel is reusable providing it remains free of water and no visible debris after removal of bags.
  6. Barrels containing bags with tears, rips or excess water shall immediately be resealed and discarded into the dumpster.
  7. Barrels entering premises that are not visibly clean on both the interior and exterior, including visible dust or bulk material or unidentifiable liquid other than water, will be rejected. Rejection of any drum for any single load will require the contractor to remove from premises all drums for that shipment. The contractor will assume all additional costs for recleaning or purchasing additional drums.

## **2.02 TRANSPORT**

- A. All waste is to be hauled by a waste hauler with all required licenses from all state and local authority with jurisdiction.
- B. Load all asbestos-containing waste material in disposal bags or leak-tight drums. All materials are to be contained in one of the following: two 6-mil disposal bags or one 6-mil disposal bag and a fiberboard drum or steel drum. Protect interior of truck or dumpster with a single layer of 6-mil

poly sheeting.

- C. Carefully load containerized waste in fully enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport to insure that no unauthorized persons have access to the material. Vehicle or dumpster must be secured with either door lock or padlock when contractor is not working.
  - 1. Dumpster doors must be appropriately posted with asbestos warning signs.
- D. Do not store containerized materials outside of the work area. Take containers from the work area directly to a sealed truck or secured dumpster with steel roof and sides.
- E. Do not transport disposal bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated as asbestos-containing waste and dispose of in accordance with this specification.
- F. Disposal at Landfill
  - 1. Contractor to familiarize workers with specific landfill procedures if any procedures are available by landfill operator.
  - 2. Personal protection required including one-half face respirator and disposable garments over street clothes when unloading vehicle or dumpster by hand.
  - 3. Automated dumping by contractor's waste hauler does not require personal protection, but is recommended.
  - 4. In the event that bags, bundles or barrels are broken, the transporter shall be equipped to immediately place broken containers into new bag or barrel.
  - 5. In the event that all asbestos debris is not contained in lining of vehicle box or dumpster, the hauler will be equipped with manual spray and disposable wipes to contain debris prior to moving vehicle from unloading site.
  - 6. At completion of hauling and disposal of each load and within 24 hours, submit copy of Waste Transfer Chain of Custody form and landfill receipt to owner's representative.

### **PART 3 - EXECUTION**

Comply with the following sections during all phases of this work:

- 1. Section 015600 Worker Protection
- 2. Section 015620 Respiratory Protection

#### **3.01 GENERAL**

- A. All waste is to be hauled by a waste hauler with all required licenses from all state and local authority with jurisdiction.
- B. Load all asbestos-containing waste material in disposal bags or leak-tight drums. All materials are

to be contained in one of the following:

1. Two 6-mil disposal bags, or
  2. Two 6-mil disposal bags and sealed steel drum with no bag
- C. Protect interior of truck or dumpster with critical and primary barriers as described in Section 01526 Temporary Enclosures.
- D. Carefully load containerized waste in fully enclosed dumpsters, trucks or other appropriate vehicles for transport. Exercise care before and during transport, to insure that no unauthorized persons have access to the material.
- E. Do not store containerized materials outside of the work area. Take containers from the work area directly to a sealed truck or dumpster.
- F. Do not transport disposal bagged materials on open trucks. Label drums with same warning labels as bags. Uncontaminated drums may be reused. Treat drums that have been contaminated as asbestos-containing waste and dispose of in accordance with this specification.
- G. Advise the landfill operator or processor at least ten days in advance of transport, of the quantity of material to be delivered.
- H. At disposal site unload containerized waste:
1. At a disposal site, sealed plastic bags may be carefully unloaded from the truck. If bags are broken or damaged, return to work site for re-bagging. Clean entire truck and contents. At a processing site truck and loading dock are arranged as a controlled work area and containerized waste is transferred to storage area by site personnel. All bags including broken ones, will be transferred.
- I. Retain receipts from landfill or processor for materials disposed of.
- J. At completion of hauling and disposal of each load, submit copy of waste manifest, chain of custody form, and landfill receipt to Owner/Owner's designated representative.

END OF SECTION 02084

**SECTION 02 0850  
PROJECT DECONTAMINATION AND WORK AREA CLEARANCE**

**PART 1 - GENERAL**

**1.01 DESCRIPTION**

- A. The work under this section includes all labor, materials, and equipment as necessary to decontaminate all work areas to the cleanliness level required by the work area air sample fiber count clearance criteria specified herein.
- B. This section includes the decontamination of air in the work area which has been or may have been contaminated by the elevated airborne asbestos fiber levels generated during abatement activities, or which may previously have had elevated fiber levels due to friable asbestos containing materials in the space.
- C. Work of this section also includes the cleaning, decontamination, and removal of temporary facilities installed prior to abatement work, including primary and critical barriers, decontamination units and differential pressure systems.
- D. Work of this section also includes the cleaning and decontamination of all surfaces (ceiling, walls, floors) of the work area and all other unprotected surfaces in the containment area including pipes, ducts, conduits, fixtures, furniture, and equipment.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Removal of gross debris is integral with the performance of abatement work and as such is specified in the Section 020810 of these specifications.

**1.03 CONTRACTOR RELEASE CRITERIA**

- A. The ceiling spray should be completely removed from the substrate to the satisfaction of the industrial hygienist and a final visual examination certification signed off before the area receives final air quality testing in accordance with TEM protocols. Clearance limit is less than 70 structures per square millimeter and no single sample exceeding 200 structures per square millimeter.
- B. The floor tile area and any air monitoring conducted separately for the pipe fitting removal and/or the transite duct preparation may be done by phase contrast microscopy (PCM) depending on the scope of the work performed. The clearance limit is the indoor air quality standard of 0.01 fibers per cubic centimeter of air.

**PART 2 - PRODUCTS - NOT APPLICABLE**

**PART 3 - EXECUTION**

**3.01 START OF WORK**

- A. During completion of the asbestos abatement work specified in other sections, the secondary

barrier of polyethylene sheeting will have been removed and disposed of along with any gross debris generated by the asbestos abatement work. Exposed building surfaces, piping, and primary barriers will already be encapsulated.

- B. Work of this section begins with the removal of the primary barrier. At start of work the following will be in place:

Primary Barrier: Two or three layers of polyethylene sheeting on the floor and one layer polyethylene of sheeting on the walls.

Critical barrier which forms the sole barrier between the work area and other portions of the building or the outside.

Critical barrier sheeting over clocks, ventilation openings, doorways, connectors, speakers, and other openings, etc.

Decontamination units for personnel and equipment in operation condition.

Differential pressure system in operation.

### **3.02 PRIMARY BARRIER REMOVAL**

- A. After surfaces have been encapsulated, all primary barrier poly shall be rolled up and bagged or drummed for disposal as contaminated waste. Critical barriers will remain intact through achievement of final clean and final aggressive air clearance test. Other barriers, such as those placed over mechanical and electrical items may be removed, once the final cleaning has proceeded to the point that they would no longer be affected by the cleaning activity.
- B. Remove material decontamination unit, if there is one, leaving only the critical barriers, the decontamination unit and differential pressure system.

### **3.03 FINAL CLEANING**

- A. Carry out a cleaning of all existing wall, floor, and ceiling surfaces of the work area including items of remaining sheeting, tools, scaffolding and/or staging by use of damp cleaning and mopping, and or HEPA filtered vacuum. Clean all other unprotected or exposed surfaces including ducts, fixtures, pipes, conduits, equipment, and etc. Do not perform dry dusting or dry sweeping. Use each surface of a cleaning cloth one time only and then dispose of as contaminated waste. Continue this cleaning until there is no visible debris from removed materials or residue on any plastic sheeting or other surface.
- B. Remove pre-filters in HEPA units and dispose of as asbestos containing waste in accordance with requirements of Section 020810.

### **3.04 VISUAL INSPECTION**

- A. After the area is dry, perform a complete visual inspection of the entire work area including: decontamination unit, all plastic sheeting, seals over ventilation openings, doorways, windows, and other openings; look for debris from any sources, residue on surfaces, dust or other matter. If



any such debris, residue, dust, or other matter is found, inspection will be terminated and contractor shall repeat final cleaning and continue decontamination procedure from that point. When the area is visually clean, complete the certification at the end of this section.

### **3.05 COMPLETION OF ABATEMENT WORK**

- A. Seal differential pressure fan units with 6-mil polyethylene sheet and duct tape to form a tight seal at intake end before being moved from work area.
- B. Remove all equipment, materials, debris from the work area. Dispose of all asbestos containing waste material as specified in Section 020810.
- C. After removal of any remaining barriers or barricades, the Owner shall thoroughly inspect the space with the contractor to determine whether any damage has been done within the workspace. A punch list shall be prepared, detailing the list of items to be fixed by this contractor.
- D. Upon completion of asbestos abatement work and achievement of final air clearance in the last zone or work area, this contractor shall fulfill applicable project closeout requirements of Section 013300.

### **3.06 COMPLETION OF ABATEMENT WORK IN MINI-ENCLOSURE**

- A. Carry out a cleaning of all existing wall, floor, and ceiling surfaces of the work area including items of remaining sheeting, tools, scaffolding and/or staging by use of damp cleaning and mopping, and or HEPA filtered vacuum. Clean all other unprotected or exposed surfaces including ducts, fixtures, pipes, conduits, equipment, and etc. Do not perform dry dusting or dry sweeping. Use each surface of a cleaning cloth one time only and then dispose of as contaminated waste. Continue this cleaning until there is no visible debris from removed materials or residue on any plastic sheeting or other surface.
- B. Encapsulate as necessary.
- C. Allow encapsulant to come to dryness prior to requesting final air clearance.

### **3.07 GLOVEBAG REMOVAL**

Glovebag removal may be utilized to remove isolated asbestos pipe fittings from the steam lines. Air monitoring during the glovebag removal can serve to achieve clearance if airborne fiber levels do not exceed 0.01 fibers per cubic centimeter of air.

END OF SECTION 02085

**LEGEND TECHNICAL SERVICES, INC.**  
**CERTIFICATION OF VISUAL EXAMINATION**

Project No.: \_\_\_\_\_

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

Containment: \_\_\_\_\_

Sign-Off	Pre-Clean	Containment Construction	IHT Visual	QC Visual	Encapsulation and Under Poly	Final Air Clearance	Post Barrier Visual
<u>Contractor</u>							
Initials							
Date							
Time							
<u>IH Technician</u>							
Initials							
Date							
Time							
Pass/Fail							
<u>Contractor</u>							
Initials							
Date							
Time							
<u>IH Technician</u>							
Initials							
Date							
Time							
Pass/Fail							

**CERTIFICATION OF VISUAL INSPECTION**

In accordance with Section 02085, "Project Decontamination," the Contractor hereby certifies that he/she has visually inspected the work area (all surfaces including pipes, beams, ledges, walls, ceiling, floor, decontamination unit, sheet poly, etc.) and has found no dust, debris, or residue.

By: \_\_\_\_\_

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

Printed Name: \_\_\_\_\_

Signed Name: \_\_\_\_\_

**IH QUALITY ASSURANCE CERTIFICATION**

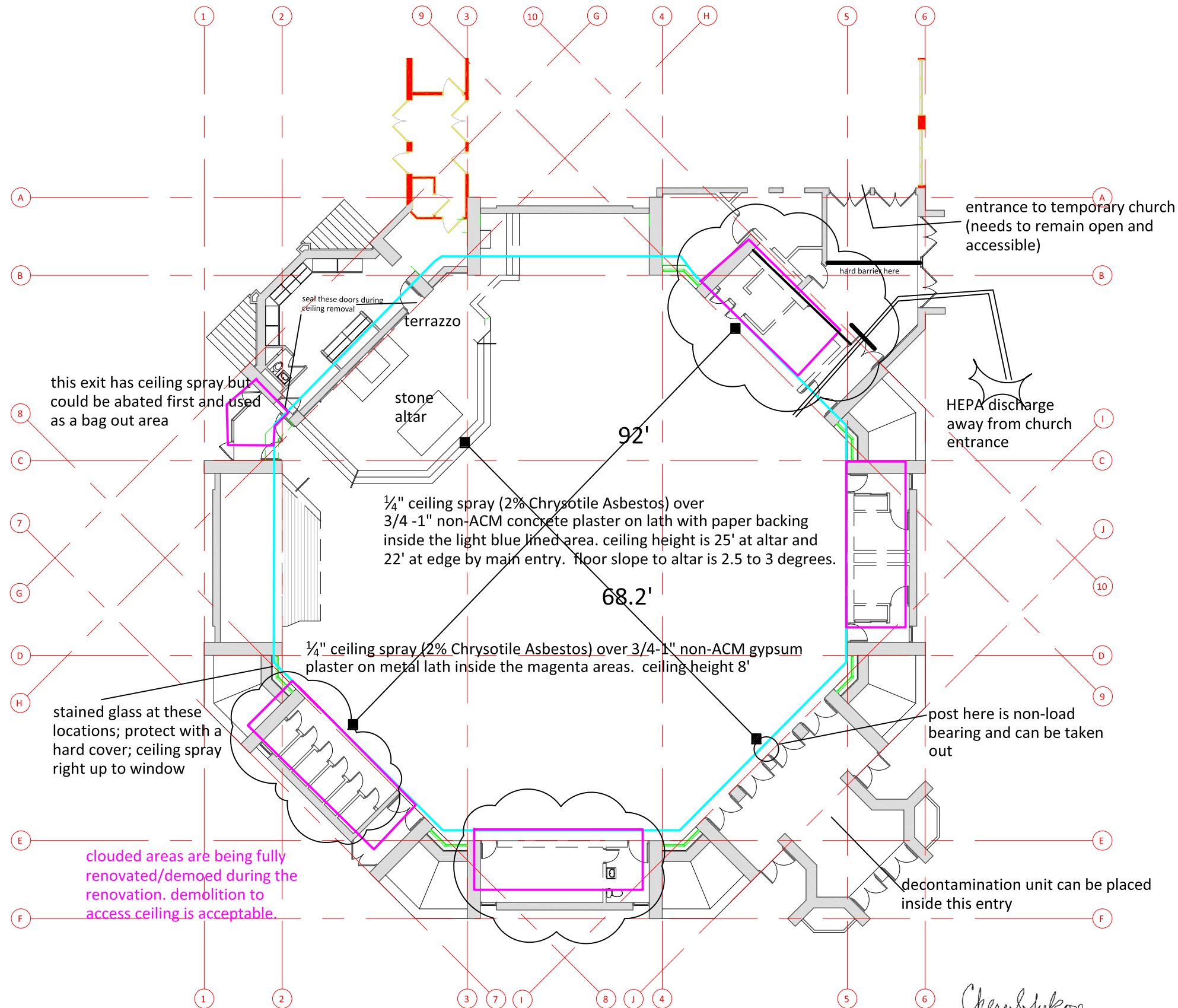
The IH hereby certifies that he/she has accompanied the Contractor on his/her visual inspection and verifies that this inspection has been thorough and to the best of his/her knowledge and belief, the Contractor's certification is a true and honest one.

By: \_\_\_\_\_

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

Printed Name: \_\_\_\_\_

Signed Name: \_\_\_\_\_



#### NOTES:

1. The removal of ACM in the church area precedes a major renovation of the area including ceiling and lighting replacement and reconfiguration of the perimeter side rooms.
2. The surface ceiling spray contains 2% Chrysotile Asbestos. There are two different types of substrates on metal mesh. The main area has a concrete substrate. The perimeter rooms have a gypsum substrate and lower ceilings. The substrates will be removed under the abatement contract. The main ceiling as a nonACM material after successful clearance of the asbestos removal. The ceiling spray/substrate/metal mesh can be removed together as ACM as an alternative to removing the ceiling spray first and then the gypsum/mesh substrate. The main concrete substrate is expected to slope down to the outside walls above the gypsum/mesh substrate as it does in the NW section of rooms with lay in ceiling tile and no ceiling spray. Assume this condition exists throughout the church area and remove all the substrate to the exterior walls.
3. The floor in the main church area slopes from the entries toward the altar. The project has been designed to use scaffolding to perform the work in the this area with the high ceiling. Scaffolding to remain up through the ACM removal and substrate removal. Construct scaffolding to be cleanable for a TEM air clearance in the area.
4. The perimeter windows are all stainglass and ceiling spray is applied to the window. Protect windows from any damage during the Work. Protect stone altar and terrazzo platform from damage.
5. Exits are limited and the NE entry needs to remain open during construction. Construct barrier to split the one exit identified for HEPA discharge from the public entry. Direct HEPA flow toward the south away from the entrance.
6. All work is to be performed by a SD certified asbestos abatement contracotr with certified people under the direction of a certified site supervisor.
7. All work to be performed in accordance with Text specifications unless request for changes have been submitted and approved.

General Notes

## BROWNFIELDS CLEANUP ASBESTOS ABATEMENT SACRED HEART CHURCH, YANKTON, SD

No.	Revision/Issue	Date

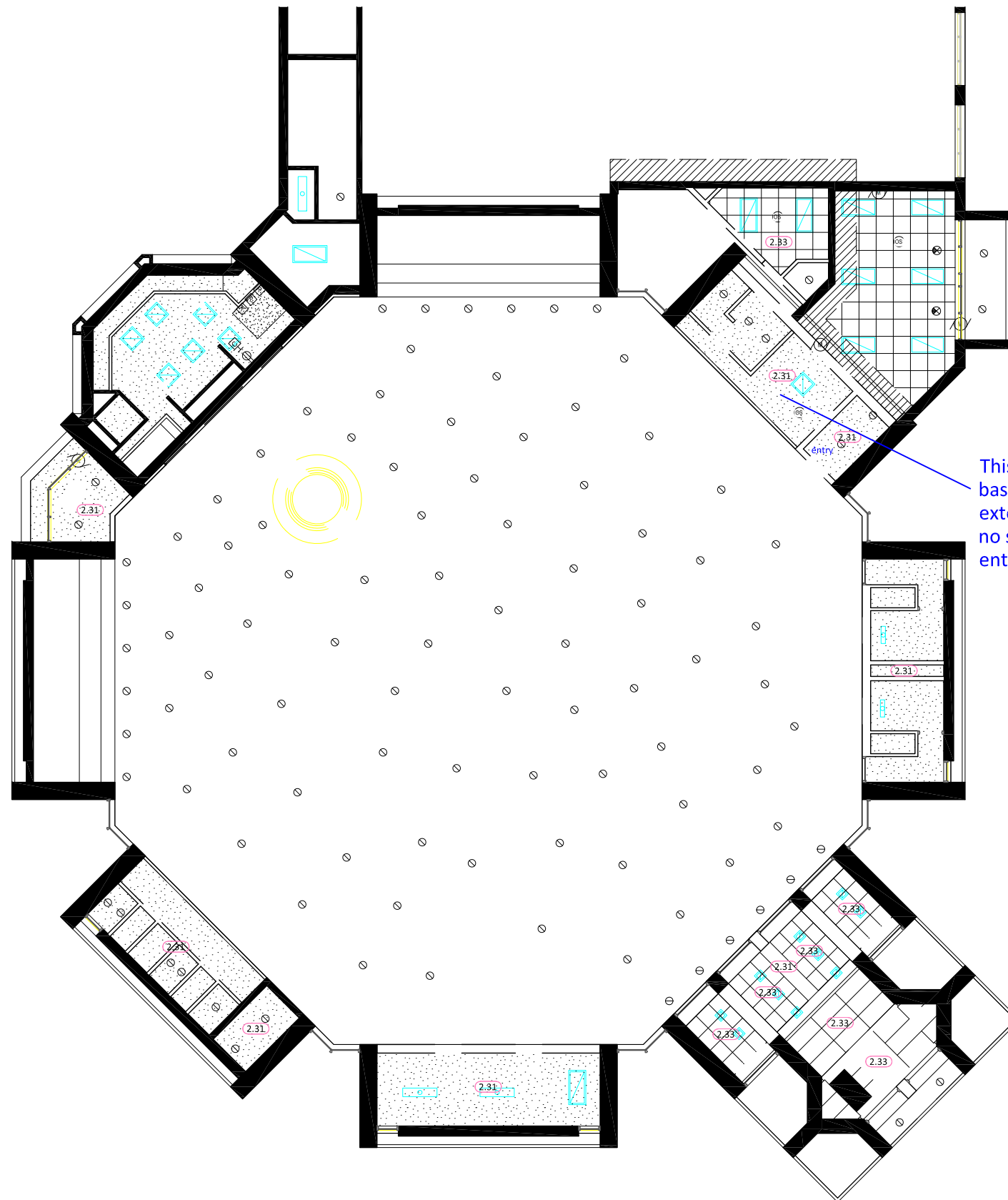
Firm Name and Address  
**LEGEND**  
Technical Services, Inc.

Project Name and Address  
SACRED HEART CHURCH  
509 CAPITOL ST  
YANKTON, SOUTH DAKOTA

Project	Sheet
Date 01/10/2024	ASB-01
Scale	

Cheryl Sykora

Cheryl A. Sykora, CIH, CSP, CHMM - SD Asbestos Designer #9566



NOTES:

1. The ceilings are identified differently by type - the ceiling spray in the main area on a concrete/metal mesh substrate is shown blank; the areas with ceiling spray on gypsum/metal mesh substrate is shown with a dotted pattern; areas with lay-in tile and no spray are shown with a square hatch.
2. This drawing shows the locations of the light fixtures that are being removed in the ceiling removal areas, and disposed of as part of the ceiling work. If light fixtures are not in an area of ceiling spray and/or substrate removal where there is no ceiling spray, they will be left in place they are not part of the abatement contractor's work.
3. There will be a general contractor for the renovation project. They should have an electrical subcontractor that can be contracted with directly to cut the electrical power to the fixtures. The abatement contractor has the option of using their own electrical subcontractor also.
4. Light fixtures embedded in the ceiling spray will be asbestos contaminated and should be disposed of as asbestos materials.

This area has the hard  
base plaster mesh  
extending to back wall but  
no spray. lay in tile except  
entry has a hard plaster

*Cheryl Sykora*

Cheryl A. Sykora, CIH, CSP, CHMM - SD ASBESTOS DESIGNER #9566

General Notes

BROWNFIELDS CLEANUP  
ASBESTOS ABATEMENT  
SACRED HEART CHURCH, YANKTON, SD

No.	Revision/Issue	Date

Firm Name and Address

**LEGEND**  
Technical Services, Inc.

Project Name and Address

SACRED HEART CHURCH  
509 CAPITOL ST  
YANKTON, SOUTH  
DAKOTA

Project	Sheet
Date 01/16/24	ASB-02
Scale	





Photo 1 - choir area



Photo 2 - altar

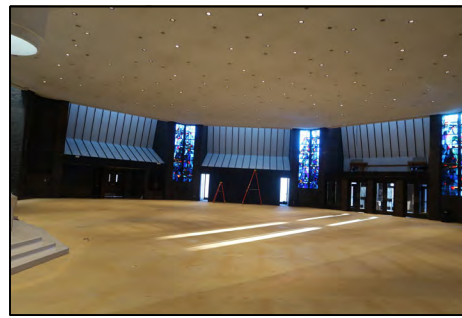


Photo 3 - View Outward from altar

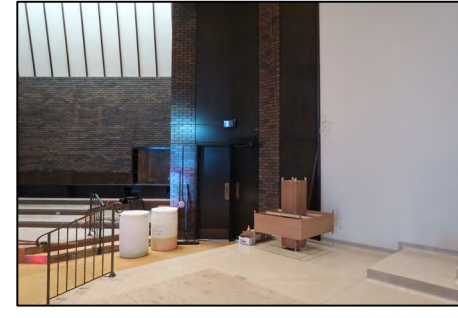


Photo 4 - On altar looking toward choir area

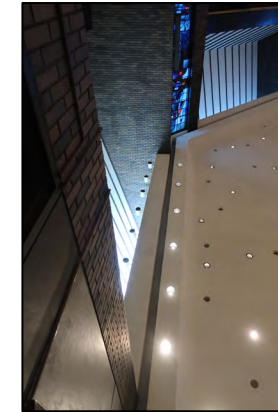


Photo 5 - Looking upward to the perimeter outside of the ceiling sprayed area

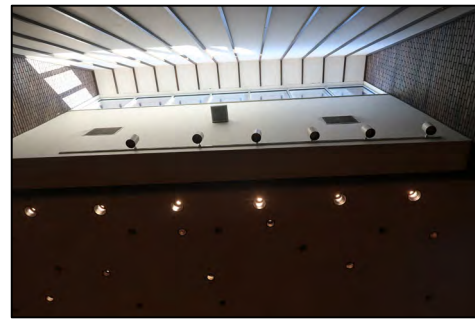


Photo 6 - Looking upward in the choir area



Photo 7 - Area behind altar; access to the sub mech

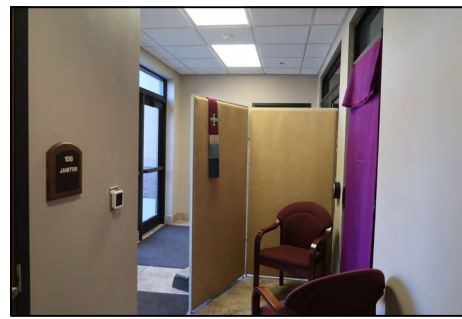


Photo 8 - Area used by church



Photo 9 - area above side area showing tie in of mesh to exterior

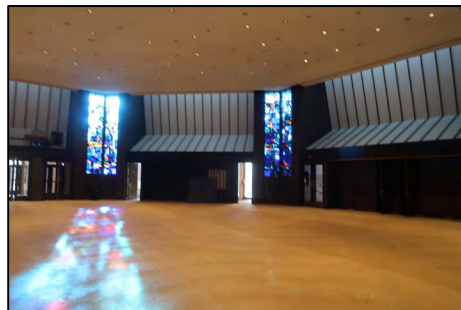


Photo 10 - looking at window placement



Photo 11 - mezzanine above south low section

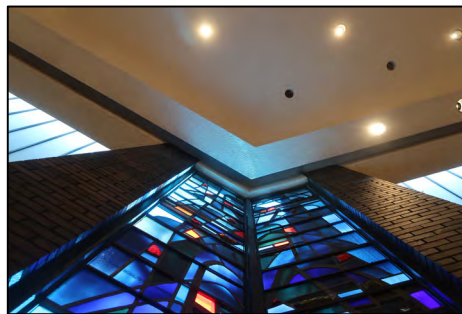


Photo 12 - stained glass/coating interface



Photo 13 - Closer view of 12

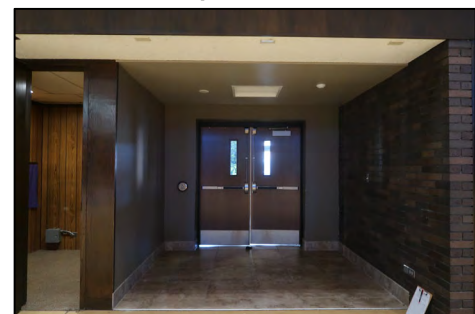


Photo 14 - NE exit shared with church

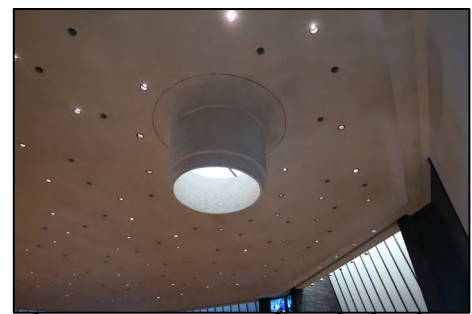


Photo 15 - retrofited sky lite above altar



Photo 16 - above suspended ceiling (skylite)



Photo 17 - Front main entrance south side

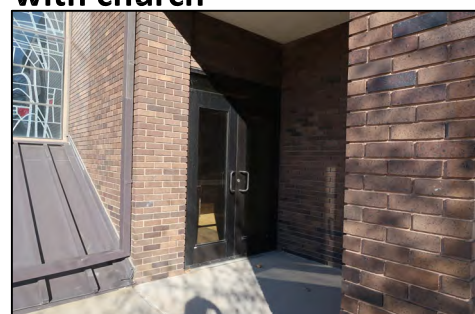


Photo 18 - NW exit



Photo 19 - View of area out NW door

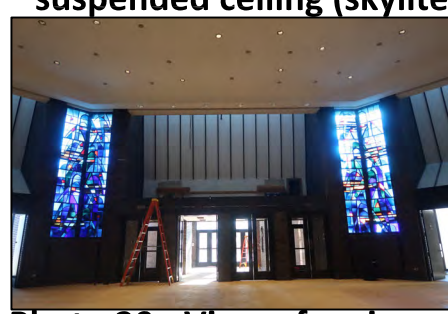


Photo 20 - View of main entrance from inside

Photo Locations Are Shown on ASB-03b

General Notes

**BROOKFIELD CLEANUP  
ASBESTOS ABATEMENT  
SACRED HEART CHURCH, YANKTON, SD**

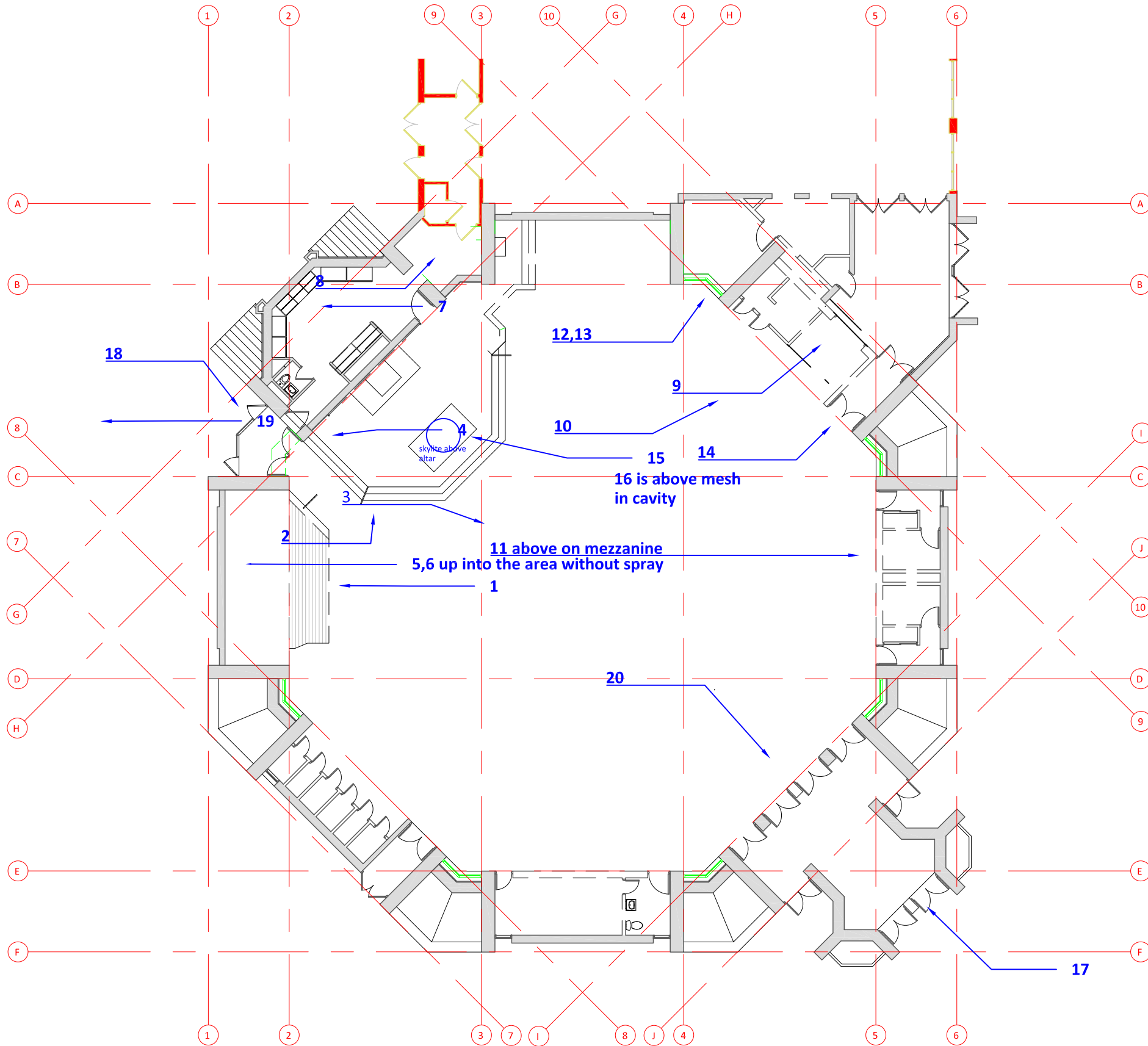
No.	Revision/Issue	Date



Project Name and Address  
**SACRED HEART CHURCH  
509 CAPITOL ST  
YANKTON, SOUTH DAKOTA**

Project	Sheet
Date 1/16/24	ASB-03a
Scale	





General Notes

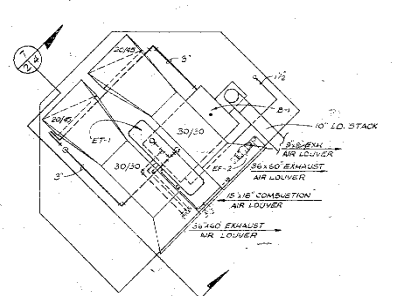
BROWNFIELDS CLEANUP  
ASBESTOS ABATEMENT  
SACRED HEART CHURCH, YANKTON, SD

No.	Revision/Issue	Date

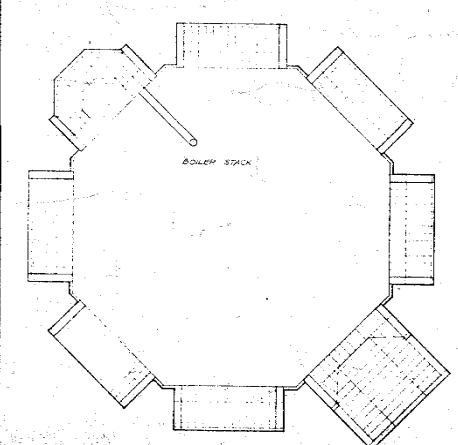
Firm Name and Address  
**LEGEND**  
Technical Services, Inc.

Project Name and Address  
SACRED HEART CHURCH  
509 CAPITOL ST  
YANKTON, SOUTH  
DAKOTA

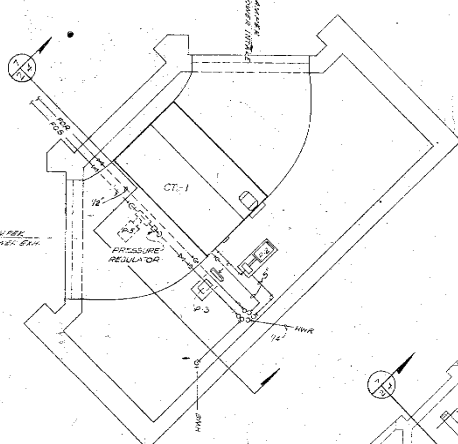
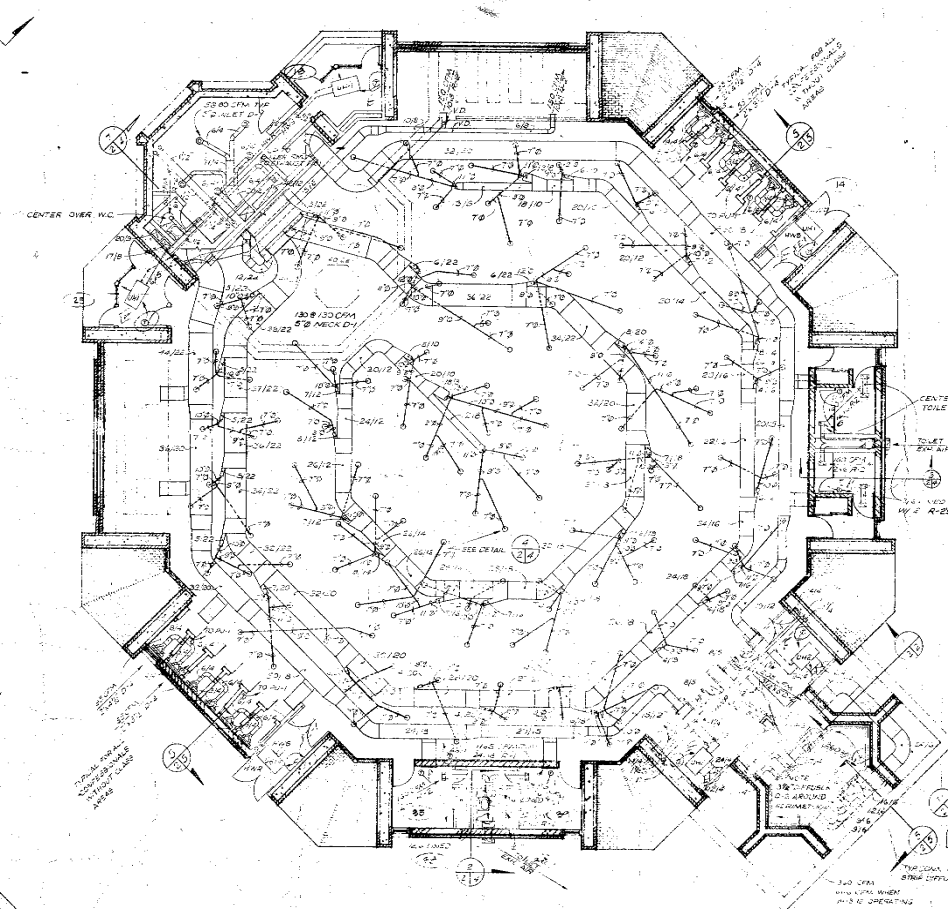
Project	Sheet
Date	ASB-03b
Scale	



**BOILER ROOM**  
SCALE: 1/4" = 1'-0"



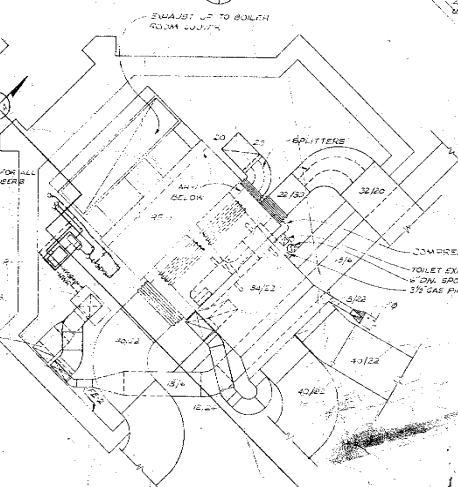
**FLOOR PLAN**  
SCALE: 1/8" = 1'-0"



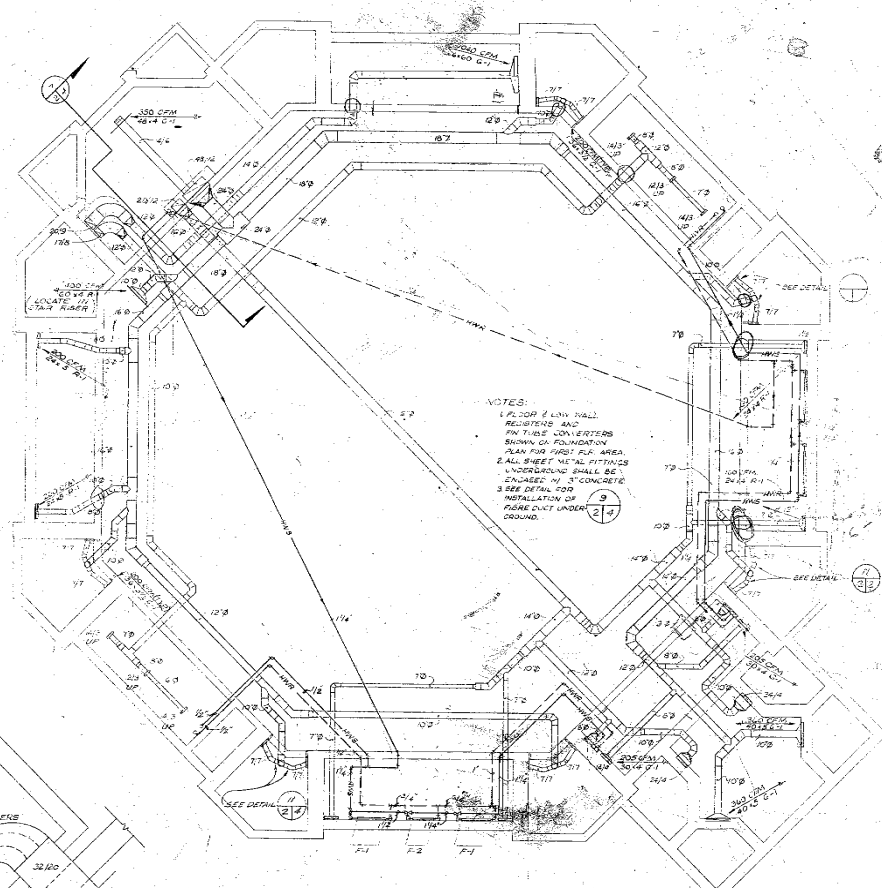
**BASEMENT MECH. ROOM**  
SCALE: 1/4" = 1'-0"

NOTE: CEILING DUCTWORK SHALL BE HUNG IN A PARALLEL MANNER TO THE LONGEST SIDE OF THE ROOM. ALL DUCTWORK SHALL BE HUNG IN A PARALLEL MANNER TO THE LONGEST SIDE OF THE ROOM. ALL DUCTWORK SHALL BE HUNG IN A PARALLEL MANNER TO THE LONGEST SIDE OF THE ROOM.

**DETAIL**  
SCALE: 1/2" = 1'-0"



**UPPER MECH. ROOM**  
SCALE: 1/4" = 1'-0"



NOTES:  
1. FLOOR & WALL  
FINISHES AND  
PAINTS TO BE  
AS SHOWN ON  
PLAN FOR FIRST FLOOR AREA.  
2. ALL SHEET METAL FITTINGS  
UNDERGROUND SHALL BE  
EXPOSED BY 2" CONCRETE  
3. SEE DETAIL FOR  
INSTALLATION OF  
PIPE DUCT UNDER  
GROUND.



