

**BRIGHTON AREA SCHOOLS
CONTRACTOR SERVICES**

**REQUEST FOR PROPOSALS (“RFP”)
Brighton High School
Rooftop Mechanical
Replacements & Renovation**

July 2, 2026

Brighton Area Schools
REQUEST FOR PROPOSALS FOR
CONTRACTOR SERVICES
PART 1 – GENERAL INSTRUCTIONS

A. Instructions

Qualified firms are invited to submit proposals to Brighton Area Schools (the “District”) for the BAS Brighton High School-Rooftop Mechanical Unit replacements and renovation (the “Project”).

The Project will take place at the location(s) below:

7878 Brighton Rd., Brighton, MI 48116

This project involves removing and replacing 14 rooftop units, two energy recovery ventilators (ERVs), and one cooling tower, as well as installing a new rooftop chiller to replace a broken ERV. The new chiller’s weight requires structural steel reinforcement. The contractor must work from the classroom below, removing and replacing its acoustic ceiling tiles to perform the reinforcement scope.

Due to equipment lead times, BAS has assumed 2 phases are necessary. Phase 1 focuses entirely on this interior structural work and must be completed by September 3rd, ahead of the school year opening on September 8th. Phase 2 will begin after the new mechanical units—which have already been purchased by BAS—are delivered in January. The winning general contractor is responsible for managing or self-performing the full scope, providing all necessary connection accessories to make the system fully operational, and submitting a final adjusted schedule upon being awarded the project.

For the purpose of this RFP, the terms “proposal” and “bid” shall be treated as one and the same.

The District reserves the right to reject any or all proposals and to make any award that it considers to be in the best interest of the District.

B. Proposal Submission

To be considered by the District, four (4) copies of the complete proposal must be received no later than noon on July 30th, 2026. Proposals should be addressed to:

Brighton Area Schools
c/o David Jones
125 S. Church Street
Brighton, Michigan 48116
Telephone: (810) 299-4031

The lower left corner of the submittal envelope should be marked: PROPOSAL FOR CONTRACTOR SERVICES.

Pursuant to Michigan law, MCL 380.1267, proposals must include security (cashier’s check or bond) in an amount not less than 1/20 (5%) of the amount of the bid conditioned to secure the District from loss or damage by reason of the withdrawal of the bid or by the failure of the bidder to enter a contract for performance, if the bid is accepted by the District’s Board of Education. Any firm(s) not awarded will be refunded this security if submitted in the form of a cashier’s check.

Submitted proposals become the property of the District and will not be returned.

C. Late Proposals

Any proposal received by the District after the time specified above will not be considered. The party submitting a proposal shall bear full and total responsibility for ensuring timely receipt of that proposal.

D. Withdrawal of Proposals

Proposals may be withdrawn by written notice received at any time prior to the submission deadline. Proposals may be withdrawn in person, provided that the firm's representative signs a receipt for the proposal prior to the submission deadline.

E. Questions Concerning this RFP

Inquiries may be made to David Jones, Assistant Superintendent for Finance, at the address and telephone number above. Information about the District is available during business hours (8:00 a.m. to 4:30 p.m.).

F. Economy of Preparation

Proposals should be prepared simply, providing a concise description of the firm's ability to meet the requirements of this RFP. Please limit your proposal to the information requested in Part 3 - Proposal Details and Part 4 - Proposal Summary. Part 4 - Proposal Summary, must be signed by the person responsible for the decision as to services and costs being offered.

G. Site Visit

Bidders are required to attend a project review walkthrough July 16th at 1:30pm at the BAS's Brighton Hish School (7878 Brighton Rd., Brighton, MI 48116) to personally inspect the site before bid submission to become familiar with the space. Bidders should arrive at the main entry for formal check-in. The District will not accept proposals from bidders who fail to inspect the facility.

H. Prime Responsibilities

The firm selected will be required to assume responsibility for all services offered in the proposal, regardless of who actually provides such services and whether the selected firm utilizes separate consultants. The selected firm shall be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the contract.

A general scope of services is described below in this Part 1 under Section M.

I. Proposal Preparation Costs

All costs incurred for proposal preparation presentation, or contract negotiation are the responsibility of the firm. The District will not be responsible for, and will not pay, the cost for any information solicited or received.

J. Acceptance of Proposal Contents

The contents of the proposal of the selected firm will become contractual obligations when a contract is issued, except with regard to particular contents that are rejected by the District. Failure of the successful firm to abide by such obligations will result in cancellation of the award.

K. Proposed Project Schedule

The bid is expected to be awarded after the August 10, 2026 Brighton Area School Board meeting. The selected bidder is expected to begin work mid-August and/or after State reviews are complete. At the time of signing the selected bidder shall furnish a construction schedule. The District and all bidders recognize that this schedule is subject to change. Refer to specifications section 01B-Special Conditions for additional scheduling and sequencing information.

L. Collusive Bidding and Relationship Disclosure

The Proposer certifies that their Proposal is made without any previous understanding, agreement or connection with any person, firm, or company making a Proposal for the same project and is in all respects fair and without outside control, collusion, fraud, or other illegal action.

The Proposer shall submit a Familial Relationship Disclosure in substantially the form attached hereto as Attachment "B".

The Proposer shall submit an Iran Economic Sanctions Act Certification in substantially the form attached hereto as Attachment "C".

M. Scope of Services

It is assumed that any proposal submitted will include, but shall not necessarily be limited to, the performance of all of the activities listed below. The District will consider alternate proposals; however, the proposal must clearly indicate any activities that have been deleted and/or added from the requested scope of services.

1. Construction Phase Services:

- a. Prepare for and commence construction, construction draw, and occupancy schedules. Apply, pay for and/or pull all necessary permits.
- b. Propose change order requests, subject to District approvals.
- c. Review shop drawings and expedite the review process.
- d. Review payment and cost control procedures, including the following:
 - i. Subcontractors' Schedule of Values, if applicable
 - ii. Subcontractors' Payment Application and Certification, if applicable
 - iii. Subcontractors' Sworn Statements and Waivers of Lien, if applicable
 - iv. Purchase Order and disbursement Summaries
 - v. Change Order Listings
 - vi. Budget Cost Summary Reports

- e. Participate in progress meetings and provide progress reports of same.
 - i. As needed, meet with the District's Project Representative to discuss any activities which may affect operations.
 - ii. Weekly meeting with District representative and trade contractors.
 - iii. Monthly meetings for planning, coordination, and payments with District administrators which will include status reports on the Project, budget, change orders, and allowances for reimbursable expenses.
 - f. Prepare as-built drawings and record and review operating and maintenance manuals, warranties, guarantees, and Project directories.
 - g. Ensure that all construction is completed as specified by the construction documents and meets all codes and regulations of agencies having jurisdiction.
 - h. Provide review and coordinate Project commissioning.
 - i. Prepare and complete punch lists, coordinate final inspections, and recommend District acceptance and occupancy.
2. Post-construction Phase Services:
- a. Assist in conducting training sessions for appropriate employees regarding the operation and maintenance of technical equipment.
 - b. Provide staff readily available during three-month adjustment period as staff and students become accustomed to new surroundings.
 - c. Provide follow-up for the duration of the longest warranty period covered by the Project.

N. Insurance Coverage

Before beginning work, the selected firm will be required to provide a copy of insurance certificates to The District for the required insurance types and amounts as listed in the project's specifications, Division 01A "General Requirements", Article 16 "Insurance". Refer to performance bond, payment bond, and other miscellaneous requirements provided in Article 16 as well.

O. Payment of Fees

The District will make payments to the Contractor in accordance with the awarded bid. Payments will be subject to 10% retainage. Professional fees and reimbursable expenses shall be itemized on the same invoice so that the District may issue one monthly check to the Contractor. The specific day of the month on which invoices are to be received and checks released will be determined during contract negotiations with the selected firm.

P. Indemnification

If the acts or omissions of the Contractor or its employees, agents or officers cause injury to District person or property, the Contractor shall defend, indemnify and save harmless the District, its agents, officials, and employees against all claims, judgments, losses, damages, demands, and payments of any kind to persons or property to the extent occasioned from any claim or demand arising therefrom, to the extent allowed by law.

Q. Bidding Documents

1. The drawings and specifications are the exclusive property of the Architect and must not be altered in any fashion. The drawings and specifications shall be destroyed at the completion of the project. Bidding Documents will be distributed electronically upon request via email at: djm@lindhout.com.
2. The instruments upon which proposals and contract for the work to based are:
 - a. General conditions of the Contract, Standard Form as issued by the American Institute of Architects, Articles 1 through 14, together with additions and modifications as stated in Division 1 of the Specifications and specifically stricken in copy of General Conditions included herein.
 - b. Specifications for Work Divisions 1 through 16, except as specifically deleted.
 - c. Architectural, Mechanical and Electrical Drawings covering the work.
 - d. Addenda as may be issued in the course of bidding.
 - e. The form of Agreement which the successful Bidder will be required to execute is AIA Document A101.

R. BASE BID SPECIFICATIONS

1. Whenever the specifications call for one specific product, material application, etc. the Contractor or sub-contractor shall bid solely on that which is named. All Base Bids shall then be consistent in such a manner as to permit the best possible evaluation of all proposals.
 - b. Should any real and definite hardship result in the foregoing "Base Bid" the Contractor shall communicate the facts to the Architect, and if warranted, and addendum will be issued to all bidders rectifying the condition.

S. BID BOND

- 01 Every person, firm or corporation submitting a proposal shall be required to furnish with such bid, a certified check or bid bond which shall be forfeited to the Brighton Area Schools in case of failure of the bidder to sign a contract within fifteen days after the award of contract to him. The certified check or bond shall be in the amount of 5% of the bid amount.

T. SURETY BONDS

- 01 Accepted bidders will be required to furnish two surety bonds, each made out in the form consistent with that supplied by the AIA, document A312, as follows:
 - a. A payment bond for the full amount of the contract running to the people of the State of Michigan Guaranteeing the payment of all subcontractors and all indebtedness incurred for labor, materials, or any cause whatsoever on account of this contractor in accordance with the laws of the State of Michigan relating to such bonds.

- b. A material and labor bond for the full amount of the contract to guarantee and insure the completion of the work according to the contract.

Brighton Area Schools

**REQUEST FOR PROPOSAL FOR
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PART 2 – PROPOSAL REVIEW AND SELECTION PROCESS**

A. Time Frame for Project and Contractor Selection

It is the intent of the District to select a Contractor according to the following schedule:

Week of June 29 th , 2026	RFP is released.
July 16, 1:30-2:30pm	Mandatory walkthrough review meeting with Owner & Architect at Brighton High School
July 21, noon	Last day for RFI's & clarifications.
July 22, end of day	Final addendum to be issued.
July 30, at Noon	Proposals are due.
July 30, at 12:15pm	Proposal opening (at BAS Board Room)
August 3, time t.b.d.	Select bidder interviews w/ the BAS District staff and Architect.
August 10, 2026	Board of Education selects a Contractor and authorizes the Superintendent to finalize a contract.
Mid-August	Earliest date for Contractor to begin work (phase #1).
January	Earliest date for mechanical units to be delivered to site (phase #2).
September 3, 2026	Required phase #1/interior of building completion date, based on BAS's start of school schedule.

The District may modify or eliminate any of the above schedule in its sole discretion.

B. Review and Selection Process

The District reserves the right to reject any or all proposals that are determined not to be in the best interests of the District. The District will not necessarily select the lowest cost proposal.

C. Contractor Interviews

It is possible that the District will invite firms to participate in interviews with the Board of Education (and/or, if applicable, any Selection Committee) and to answer any questions that may exist about their proposal.

D. Evaluation Criteria

The District will evaluate proposals considering all of the information provided in response to this RFP, including but not necessarily limited to the following:

Adherence to RFP: To merit evaluation, submittals must conform, in both content and presentation, to the parameters established in this request.

Relevant Experience: Relevant experience of the firm with construction and renovation of K-12 public school facilities, particularly those of comparable size and complexity.

Qualifications: Qualifications and experience of the key staff to be assigned to these projects.

Timeliness: Ability of the firm to complete work tasks specified in this RFP in a timely fashion.

Responsiveness: The ability to meet quickly with District officials, contractors, etc. when necessary.

Team Compatibility: The ability of the firm to work with students, District employees, parents, community members, and governmental officials based on references and interviews.

Fee Proposal: The total fees for Contractor services, including Alternates.

E. Awarding of the Contract

All proposals received shall be subject to evaluation by Administration for the purpose of recommending a firm or firms with whom a contract will be signed. Authorization for execution of a contract will be approved by the District's Board of Education after it has had an opportunity to review the recommendations of the Administration.

The form of Contract shall be based on the modified version of AIA Document A101-2017 Edition, Edition, as modified. The bidder shall be deemed to agree with the attached document in its entirety, except and to the extent the bidder specifically objects in writing to any provision therein and attaches the objection(s) as a separate document to its response to this RFP, along with a proposed alternative.

Notwithstanding anything herein to the contrary, the District shall have the ability, in its sole discretion, to negotiate any term of the Contract. The award of a Contract shall be contingent upon the successful negotiation of same.

Brighton Area Schools
REQUEST FOR PROPOSAL FOR
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PART 3 – PROPOSAL DETAILS

NAME OF FIRM: _____ YEAR ESTABLISHED: _____

ADDRESS: _____
(Street) (City/State) (Zip Code)

TELEPHONE NUMBER: _____ FAX NUMBER: _____
(Area Code) (Area Code)

A. BUSINESS ORGANIZATION

1. Individual _____ Partnership _____ Corporation _____ Other _____
2. Years firm has provided Fuel Dispensing facility Contractor Services: _____
3. List Principals and officers of the firm:
4. List subcontractors or consultants outside your firm you propose using to provide services not available in your firm.

<u>Firm Name</u>	<u>Location</u> <u>City/State</u>	<u>Specialty</u>	<u>Number of Times</u> <u>Affiliated With You</u>
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- 1.
- 2.
- 3.
- 4.

5. What is your firm's present workload? Can your firm meet or exceed the construction schedule stated herein?
6. What is your General Liability Insurance coverage:
 - a. Total amount of protection provided.
 - b. Amount of deductible, if any.
 - c. Name, address, phone #, and contact person of Insurance Company.
 - d. Are the costs of this coverage included in your Fee Proposal? If not, what is that additional cost?
7. Have you had mediation, litigation, arbitration or a claim filed against or settled with your firm by an educational client or have you filed or settled the same against an educational client? If yes, explain each in detail.

8. Has your firm ever been terminated, for cause or for convenience, prior to completion of a project or has your firm ever terminated a contractor contract, for cause or for convenience, prior to completion of a project? If yes, explain each in detail.

B. Anticipated Project Schedule

A Construction schedule is required by the successful bidder soon after award and/or State approvals are complete. **Interior work (phase #1) shall be completed by September 3, 2026 for the affected classroom to be open for the start of the school year.** Please identify any concerns or reservations your firm may have with these general parameters and describe any negative impacts on the Project foreseen as a result of such parameters.

C. Cost Proposal

The cost proposal shall be stated as a lump sum as set forth below. If you believe any other information or clarification may be helpful to the District in determining your cost for services, please include that information in your proposal.

Brighton Area Schools

**REQUEST FOR PROPOSAL FOR
CONTRACTOR SERVICES
PART 4 – PROPOSAL SUMMARY**

All materials necessary to complete the Project shall be the responsibility of the Contractor.

Single Prime (All Trades) Contract: The undersigned Bidder, having carefully examined the Bidding and Contract Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as issued by the Owner, hereby agrees to furnish all material, labor, equipment, and services as described in the above documents, without exception, including all scheduled allowances and permits, if any, necessary to complete the Project, to the sum of:

\$ _____

This proposal has been prepared to provide the District with all the information requested in Part 3 - Proposal Details of the RFP regarding Contractor services. The undersigned certifies that the proposal contained herein meets or exceeds the scope of services as outlined in this RFP, and that any items that have been deleted from and/or added to the requested scope of services (including, but not limited to, the proposed contract language) are clearly noted as follows or separately attached:

Signed this ____ day of _____, 2026.

Firm Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

By: _____
Signature and Title

ATTACHMENT "A"

AIA Document A101-2017 Standard Form of Agreement Between Owner and Contractor.

ATTACHMENT "B"
FAMILIAL DISCLOSURE STATEMENT

AFFIDAVIT OF _____
(insert name of affiant)

STATE OF MICHIGAN)
)ss
COUNTY OF _____)

_____ makes this Affidavit under oath and states as follows:
(insert name of affiant)

1. I am a/the:

- ☐ President
- ☐ Vice-President
- ☐ Chief Executive Officer
- ☐ Member
- ☐ Partner
- ☐ Owner
- ☐ Other (please specify) _____

of _____ [insert name of contractor], a bidder for contractor services for Brighton Area Schools.

2. I have personal knowledge and/or I have personally verified that the following are all of the familial relationships existing between the owner(s) and the employee(s) of the aforementioned contractor and the school district's superintendent and/or board members:

3. I have authority to bind the aforementioned contractor with the representations contained herein, and I am fully aware that the school district will rely on my representations in evaluating bids for contractor services.

4. I declare the above information to be true to the best of my knowledge, information and belief. I could completely and accurately testify regarding the information contained in this affidavit if requested to do so.

(signature of affiant)

Dated: _____

Subscribed and sworn before me in _____ County,
Michigan, on the ____ day of _____, 202__

(signature)

(printed)

Notary public, State of Michigan, County of _____

My Commission expires on _____

Acting in the County of _____

ATTACHMENT "C"

IRAN ECONOMIC SANCTIONS ACT CERTIFICATION

I am the _____ (title) _____ of _____ (bidder) _____, or I am bidding in my individual capacity ("Bidder"), with authority to submit a binding bid for the provision of contractor services to Brighton Area Schools. I have personal knowledge of the matters described in this Certification, and I am familiar with the Iran Economic Sanctions Act, MCL 129.311, et seq. ("Act"). I am fully aware that the school district will rely on my representations in evaluating bids.

I certify that Bidder is not an Iran-linked business, as that term is defined in the Act. I understand that submission of a false certification may result in contract termination, ineligibility to bid for three (3) years, and a civil penalty of \$250,000 or twice the bid amount, whichever is greater, plus related investigation and legal costs.

(signature)

(printed)

(date)

DIVISION 01A**GENERAL REQUIREMENTS****SECTION 01A****SUPPLEMENTARY GENERAL CONDITIONS**

- 01 The General Conditions of the Contract for the Construction of Buildings Standard Form of the American Institute of Architects, latest Edition: Article 1 through 14 inclusive are hereby, except as the same way be inconsistent with, made a part of this specification.

- a. Where any article of the "A.I.A. General Conditions" is herein supplemented, the A.I.A. provisions shall remain in effect. All the supplemental provisions shall be considered as added thereto. Where any such article is amended, voided or superseded, the provisions of such article not so specifically amended, voided or superseded, shall remain in effect.

02 **ARTICLE 15****DRAWINGS AND SPECIFICATIONS**

- a. The drawings and specifications are complementary, and what is called for by one is binding as if called for by the other.

03 **ARTICLE 16****INSURANCE**

This article shall void Article II of the General Conditions as cited in Paragraph A under the heading of this Division.

16.1 **CONTRACTORS LIABILITY INSURANCE**

- 16.1.1 The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, such insurance as will protect the contractor from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts and of them may be liable:

- .1 claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- .2 claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- .3 claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- .4 claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person;
- .5 claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- .6 claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of any motor vehicle; and
- .7 claims involving contractual liability insurance applicable to the Contractors obligations, under Paragraph 3.18.

- 16.1.2 The insurance required by Subparagraph 16.1.1 shall be written for not less than the limits of liability specified in the Contract Documents, or required by law, whichever coverage is greater.

Coverage, whether written on an occurrence or claims-made basis, shall be maintained without interruption from date of commencement of the Work until date of final payment and termination of any coverage required to be maintained after final payment. Notwithstanding the above, the insurance required by paragraph 16.1 shall be on an occurrence basis.

16.1.2.1 Such insurance shall be written to include the following coverage and for not less than the following minimum limits or greater if required by law;

.1 Worker's Compensation, Occupational Disease and Employer's Liability Insurance:

- A. State of Michigan - Statutory Limits
- B. Applicable Federal (if any) - Statutory limits.
- C. Employer's Liability -
 - Bodily Injury by Accident - \$1,000,000 each accident
 - Bodily Injury by Disease - \$1,000,000 each employee
 - Bodily Injury by Disease - \$1,000,000 each policy limit

.2 Commercial General Liability Insurance including as minimum coverage:

- Premises - Operations Liability
- Independent Contractor's Protective Liability
- Broad Form Property Damage Endorsement
- Blank Contractual
- Personal Injury, with Employment Exclusion deleted
- A. Special Requirements:
 - 1. Property Damage Liability Insurance will provide "X, C, and U" (Explosion, collapse and underground hazard) coverage as applicable.
 - 2. Products and Completed Operation to be maintained for 1 year after final payment.
 - 3. The owner, architect, their consultants, agents and employees, shall be named as: additional insured's on the commercial general liability policy of the general contractor and/or subcontractor of any tier.
- B. Limits of Liability:
 - \$1,000,000 Each Occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
 - \$1,000,000 General Aggregate
 - \$1,000,000 Products/Completed Operations Aggregate
 - \$1,000,000 Personal and Advertising Injury

.3 Automobile Liability Insurance":

- A. Special Requirements:
 - 1. All owned, hired, and non-owned vehicles including the loading or unloading thereof.

2. The owner, architect, their consultants, agents and employees, shall be name as "additional insured's" on the commercial automobile liability policy of the general contractor and/or subcontractor of any tier.

B. Limits of Liability

\$1,000,000 Each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

.4 Owner's and Architect's Protective Liability Incurrence:

The Contractor will furnish and maintain during the entire period of construction an Owner's Protective Liability Policy written in the name of the owner, architect, and architect's consultants, with the following limits of liability:

Limits of Liability:

\$1,000,000 Each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.

\$1,000,000 General Aggregate

.5 Umbrella/Excess Liability Insurance:

Limits of Liability

\$1,000,000 Each occurrence

\$1,000,000 Aggregate

- 16.1.3 Certificates of Insurance for the above coverage and the Owner's Protective Policy shall be submitted to the Architect for transmittal to the Owner for his approval prior to the start of construction. The Contractor shall certify to the Owner that he has obtained or will obtain similar certificates of insurance from each of his Subcontractors before their work commences. Each Subcontractor must be covered by insurance of the same character and in the same amounts as the Contractor unless the Contractor and the Owner agree that a reduced coverage is adequate. Each subcontractor's insurance shall cover the Owner, Architect, their agents and employees. The Contractor shall submit a statement with each monthly affidavit stating that he has obtained certificates of insurance, or other satisfactory evidence, that all required insurance is in force for each of the Subcontractors listed on his affidavit. If the "additional insured" have other insurance which is applicable to the loss, it shall be on an excess or contingent basis. The amount of the company's liability under this policy shall not be reduced by the existence of such other insurance Contractor certificates shall be in duplicate on standard Acord forms.

- 16.1.3.1 Certificate of insurance shall contain a statement therein or a rider attached thereto incorporating the indemnity clause stated in Paragraph 3.18 (Indemnification) and Subparagraphs 3.18.1, 3.18.1.1, 3.18.2 and 3.18.3 of the General Conditions, and including the changes and addition made in those subparagraphs within these Supplemental General Conditions.

- 16.1.3.2 These Certificates and the insurance policies required by this Paragraph 16.1 shall contain a provision that coverage afforded under the policies will not be canceled or allowed to expire until at least thirty (30) days prior written notice has been given to the Owner and Architect. If any of the foregoing insurance coverage is required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage

shall be submitted with the final Application for Payment as required by Subparagraph 9.10.2. Information concerning reduction of coverage shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.

- 16.1.3.3 The obligations of the Contractor under the provisions of this article shall not extend to the liability of the Architect, his agents or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs, or specifications, or (2) the giving of or the failure to give directions or instructions by the Architect, his agents or employees to the extent that such giving or failure to give is the cause of the injury or damage.

16.2 OWNER'S LIABILITY INSURANCE

- 16.2.1 The Owner shall be responsible for purchasing and maintaining the Owner's usual liability insurance. Optionally, the Owner may purchase and maintain other insurance for self-protection against claims, which may arise from operations under the Contract. The Contractor shall not be responsible for purchasing and maintaining this optional Owner's liability insurance unless specifically required by the Contract Documents.

16.3 PROPERTY INSURANCE

- 16.3.1 Unless otherwise provided, the Owner shall purchase and maintain, in a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located, property insurance in the amount of the initial Contract Sum as well as subsequent modifications thereto for the entire Work at the site on a replacement cost basis without voluntary deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made and provided in Paragraph 9.10 or until no person or entity other than the Owner has an insurable interest in the property required by this Paragraph 16.3 to be covered, whichever is earlier. This insurance shall include interests of the Owner, Architect, the Contractor, Subcontractors and the Sub-subcontractors in the Work.

Property Insurance provided by Owners shall not cover any tools, apparatus, machinery, scaffolding, hoists, forms, staging, shoring and other similar items commonly referred to as construction equipment, which may be on the site and the capital value of which is not included in the Work. The Contractor shall make his own arrangements for any insurance he may require on such construction equipment.

- 16.3.1.2 If the Owner does not intend to purchase such property insurance required by the Contract and with all of the coverage in the amount described above, the Owner shall so inform the Contractor in writing prior to commencement of the Work. The Contractor may then affect insurance, which will protect the interests of the Contractor, Subcontractors and Sub-subcontractors in the Work, and by appropriate Change Order, the cost thereof shall be charged to the Owner. If the contractor is damaged by the failure or neglect of the Owner to purchase or maintain insurance as described above, without so notifying the Contractor then the Owner shall bear all reasonable cost properly attributable thereto.
- 16.3.1.3 If the property insurance required minimum deductibles and such deductibles are identified in the Contract Documents, the Contractor shall pay costs not covered because of such deductibles. If the Owner or insurer increases the required minimum deductibles above the amounts so identified or if the Owner elects to purchase this insurance with voluntary deductible amounts, the Owner shall be responsible for payment of the additional costs not covered because of such increased or voluntary deductibles. If deductibles are not identified to the Contract Documents, the Owner shall pay costs not covered because of deductibles. The property insurance for the Work requires a minimum deductible of: \$5,000 per claim.

- 16.3.2 **Boiler and Machinery Insurance.** The Owner shall purchase and maintain boiler and machinery insurance required by the Contract Documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Owner; this insurance shall include interests of the Owner, Contractor, Subcontractors and Sub-subcontractors in the Work, and the Owner and Contractor shall be named insured's.
- 16.3.3 **Loss of Use Insurance.** The Owner, at the Owner's option, may purchase and maintain such insurance as will insure the Owner against loss of use of the Owner's property due to fire or other hazards, however caused. The Owner waives the rights of action against the Contractor for loss of use of the Owner's property, including consequential losses due to fire or other hazards however caused.
- 16.3.4 If the Contractor requests in writing that insurance for risks other than those described herein or for other special hazards be included in the property insurance policy, the Owner shall, if possible, include such insurance, and the cost thereof shall be charged to the contractor by appropriate Change order.
- 16.3.5 If during the Project construction period the Owner insures properties, real or personal or both, adjoining or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, the Owner shall waive all rights in accordance with the terms of Subparagraph 16.3.7 for damages caused by fire or other perils covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.
- 16.3.6 Before an exposure to loss may occur, the Owner shall file with the Contractor a copy of each policy that includes insurance coverage required by the Paragraph 16.3. Each policy shall contain all generally applicable conditions, definitions, exclusions and endorsements related to this Project. Each policy shall contain a provision that the policy will not be cancelled or allowed to expire until at least 30 days prior written notice has been given to the Contractor.
- 16.3.7 **Waivers of Subrogation.** If permitted by the Owner's and Contractor's insurance companies, without penalties, the Owner and Contractor waive all rights against (1) each other and any of their Subcontractors, Sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors described in Article 6, if any, and any of their Subcontractors, Sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this Paragraph 16.3 or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner as fiduciary. The Owner or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors described in Article 6, if any, and the Subcontractors, Sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.
- 16.3.8 A loss insured under Owner's property insurance shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insured, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Subparagraph 16.3.10. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriated agreements, written where legally required for validity, shall require Subcontractors in similar manner.

- 16.3.9 If required in writing by a party in interest, the Owner as fiduciary shall, upon occurrence of an insured loss, give bond for proper performance of the Owner's duties. The cost of required bonds shall be charged against proceeds received as fiduciary. The Owner shall deposit in a separate account proceeds he received, which the Owner shall distribute in accordance with such agreement as the parties in interest may reach or in accordance with an arbitration award in which case the procedure shall be as provided in Paragraph 4.5. If after such loss no other special agreement is made, replacement of damaged property shall be covered by appropriate Change Order.
- 16.3.10 The Owner as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five days after occurrence of loss to the Owner's exercise of this power; if such objection be made, arbitrators shall be chosen as provided in Paragraph 4.5. The Owner as fiduciary shall, in that case, make settlement with insurers in accordance with directions of such arbitrators. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.
- 16.3.11 Partial occupancy or use in accordance with Paragraph 9.9 shall not commence until the insurance company or companies providing property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Owner and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse or reduction of insurance.

16.4 PERFORMANCE BOND AND PAYMENT BOND

- 16.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising there under as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.
- 16.4.2 Upon the request of any person or entity appearing to be a potential beneficiary of bonds, covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall permit a copy to be made.
- 16.4.3 When required by the Owner the Contractor, before commencing the Work, shall furnish a Performance Bond and a Labor and Material Payment Bond. The Performance Bond shall be in an amount equal to one hundred percent (100%) of the full amount of the Contract Sum as security for the faithful performance of the obligations of the Contract Documents, and the Labor and Material Payment Bond shall be in an amount to equal to one hundred percent (100%) percent of the full amount of the Contract Sum as Security for the payment of all persons performing labor and furnishing materials in connection with the Contract Documents. Such bond shall be on A.I.A. Document A-312, issued by the American Institute of Architects, shall be issued by a surety satisfactory to the Owner and shall name the Owner as primary co-obligee.

16.5 MISCELLANEOUS REQUIREMENTS

- 16.5.1 All insurance coverage shall be provided by insurance companies having policy holder ratings no lower than "A" and financial ratings not lower than "XII" in the Best's Insurance Guide, latest edition in effect as of the date of the Contract.
- 16.5.2 The Contractor is responsible for determining that Subcontractors are adequately insured against claims arising out of relating to the work. The premium cost and charges for such insurance, shall be paid by each Subcontractor.

SECTION 01B**SPECIAL CONDITIONS****ARTICLE 1S****TIME OF COMPLETION**

01 The project involves the removal of existing rooftop units, reinforcement of existing roof structure, installation of new steel on the roof for the new mechanical units, and installation of new rooftop mechanical units with their associated mechanical & electrical connections and/or extensions. BAS assumes two phases of the project.

- a. Phase #1: Removal of the existing rooftop units, the structural reinforcement of the existing roof (from the interior) and exterior steel work for the chiller and/or cooling tower. Interior work within the affected classroom for this phase must be completed by September 3rd, 2026, prior to the start of school.
- b. Phase #2: Installation of new mechanical units. Units have been purchased by BAS. Expected delivery is in January. Coordination of installation, on site delivery, etc. will be expected.

ARTICLE 2S**EXAMINATION OF SITE**

01 The General Contractor and those sub-contractors specifically involved shall be held to have examined the site and have informed themselves of the conditions under which they must work. Their proposal shall make due allowance for the conditions that are reasonably apparent on site.

ARTICLE 3S**LAYING OUT WORK**

01 Each Sub-Contractor shall lay out the work, establish all levels and heights and provide the assistance of a competent surveyor for the work required by the sub-contractor.

02 The General Contractor shall establish a permanent benchmark where directed to which all measurements and levels shall be referred during the progress of the work.

ARTICLE 4S**TEMPORARY FIELD OFFICE**

01 The General Contractor shall establish a field office as needed on site in location as directed by the Owner.

02 The contractor's trailers, material storage, etc., shall be located so as to not interfere with Owner's use of existing building and parking areas on site when so occurring.

ARTICLE 5S**TEMPORARY UTILITIES**

01 Water: The General Contractor shall arrange for all water used during construction. Water shall be available through Owners existing building on site. Mechanical Contractor shall furnish and maintain all temporary connections.

02 Electrical: The Electrical Contractor shall furnish all temporary power and lighting service throughout the construction period. Sub-contractors requiring special service beyond that outlined in Division 16, shall reimburse the electrical contractor for service connections needed. Owner shall bear cost of metered power.

03 Telephone: The General Contractor shall maintain a working telephone instrument on site.

ARTICLE 6S**TEMPORARY TOILETS**

01 Toilet facilities shall be provided through the Owner's existing building.

ARTICLE 7S**COLD WEATHER PROTECTION**

01 All heating required by Contractors during construction prior to temporary operation of the permanent heating system shall be classified as "Cold Weather Protection". Such heat shall be furnished by each contractor requiring same. Heating units must be of approved types, and equipment and surroundings shall be kept in a clean and safe condition.

- 02 The building shall be considered as enclosed when, in the opinion of the Architect, the exterior walls are completely erected, roof deck is complete and watertight and building has such protection at doorways, windows and other openings as will provide a reasonable heat retention.
- 03 After the building is enclosed, and prior to operation of the permanent heating system, the General Construction Contractor shall provide portable space heaters sufficient to maintain the temperature inside the building between 50°F and 65°F at all other times. The General Construction Contractor shall provide all fuel. All direct fired space heaters shall be vented directly to the outside.

ARTICLE 8S**TEMPORARY HEAT**

- 01 All heating requiring temporary use of the permanent heating system shall be classified as "Temporary Heat".
- 02 The Heating Contractor shall have the permanent heating system ready to furnish temporary heat within 30 days after the building is enclosed. This shall include the setting of new boilers, unit ventilators and heating units with all necessary ductwork and piping to the boilers. Temporary heating units may be used where it is impossible to set permanent heating units.
- 03 The General Construction Contractor shall pay for all fuel for the operation of the system from the time that the system is first turned on until the Owner accepts the building. This shall include the cost of fuel; cleaning of boilers, ventilating units, filters, etc.; draining, cleaning and re-filling of system.
- 04 If the permanent heating system is used, the Heating Contractor shall be responsible for the system and its maintenance until acceptance by the Owner. A minimum temperature of 60°F and a maximum temperature of 70°F shall be maintained during working hours and not less than 55°F at all other times.

ARTICLE 9S**SHOP DRAWINGS**

- 01 All shop drawing submissions shall be examined by the General Contractor for coordination with other trades and general conformity to contract documents before submission to the Architect for the Architects review and shall bear the signature of the party so doing. The preferred submission of shop drawings is by electronic PDF drawings to the Lindhout Associates project architect, or his designee, at the appropriate e-mail address. Reviewed submissions will be returned electronically. Paper submissions, when necessary, shall furnish four (4) copies.
- 02 Corrections or comments made on the shop drawings during their review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of the general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for:
- Confirming and correlating all quantities and dimensions.
 - Selecting fabrication processes and techniques of construction.
 - Coordinating his or her work with that of all other trades and performing all work in a safe and satisfactory manner.
- 03 Architects review of Shop Drawings shall not be construed to relieve supplier of any obligations set forth in the original contract documents. Specific reference shall be made on the Shop Drawings of any changes in or contradictions of the original documents and specific acceptance of that contradiction must be made on the drawings by the Architect.
- 04 The preceding conditions are in addition to those covered under Article 3.12 of the General Conditions of the Contract.

ARTICLE 10S**CLOSE OUT AND GUARANTEES**

- 01 At the completion of the Contract and prior to final payment:
- a. The General Contractor and sub-contractors shall give to the Owner a written guarantee that they will make good at their own expense any defects in material or workmanship, not due to ordinary wear or improper use, which may develop within one (1) year from the date of acceptance of the work unless otherwise stated in the specifications.
 - b. The Owner shall be furnished with the following as it may apply to the project and as called for in the specifications:
 1. Owner's manuals for operation and maintenance of equipment furnished under the Architectural trades.
 2. Owner's manuals for operation and maintenance for equipment furnished under the Mechanical contract; test reports of system balancing..
 3. Owner's manuals for operation and maintenance for equipment furnished under the Electrical contract; a complete brochure of lighting fixtures and lamps furnished; an as-built drawing of the electrical installation as described in the specifications.
 4. List of sub-contractors employed on the project, including addresses, phone and fax numbers.
 5. Final Certificate of Occupancy and approvals from State inspections.

ARTICLE 11S**PROGRESS SCHEDULES**

- 01 At the time of signing of the contract, the General Contractor, in co-operation with his sub-contractors, shall furnish a schedule giving the time of starting and finishing of each trade involved.
- 02 The Schedule shall be maintained throughout the job to give an up-to-date statement of progress and completion time.
- 03 Satisfactory rate of progress and completion on time shall be essential conditions of the contract.

ARTICLE 12S

DELETED

JOB SIGN**ARTICLE 13S****TEMPORARY PROTECTION**

- 01 The General Contractor shall assume responsibility for the building, site and immediately adjacent areas, providing protection to meet the governing laws.
- 02 He shall provide suitable temporary walks, fences, enclosures, to maintain unobstructed areas for pedestrians, vehicles, fire protection equipment, etc., including temporary exit enclosures.
- 03 The General Contractor is referred to Article 10 of the General Conditions - Protection of Persons and Property.

ARTICLE 14S**ACCESS TO SITE**

- 01 Contractors shall consult with Architect on maintaining access route to the site for construction vehicles. All damage to existing walks, drives and landscaped areas traversed by construction vehicles shall be made good by the General Contractor.

ARTICLE 15S**OWNER'S USE OF SITE**

- 01 The Owner will maintain normal operation on the existing school building on site during the construction period. The various contractors shall take all possible precautions to minimize interference with the operations. Specific considerations shall be as follows.
- a. Access to existing building shall be maintained at all times.
 - b. Maintain uninterrupted, protected egress from all required exit doors of the building to the satisfaction of the Local Fire Marshal or Building Authority.

- c. On site storage of materials shall be arranged in such a manner to not interfere with the normal use of the parking areas. Contractor shall coordinate locations with Owner.
- d. Coordination of where units are to be delivered and temporarily stored on site shall be reviewed with BAS.

ARTICLE 16S**CONSTRUCTION SEQUENCE**

01 The following sequence of construction is anticipated by BAS:

- a. renovation activity of the affected classroom as soon as possible so the room is operational prior to the start of school.
- b. rooftop steel work is performed and prepped for new units' installation scope/phase.
- c. prep & install mechanical and electrical connections and/or extensions for new units' installation scope/phase.
- d. Test existing glycol levels, concentration, etc. & then install new mechanical units.
- e. Site cleanup (grade and seed) as necessary after craning and/or temporary storage of units is completed.

02 Final scheduling and phasing to be performed by Contractor and coordinated with BAS.

ARTICLE 17S**OTHER CONTRACTORS**

01 The contractor or contractors for this work shall at all times allow the Owner and any other contractors and their employees to be in the building or about the premises undisturbed as may be required in the execution of other portions of the building work, and installation of equipment, etc. Each contractor shall so arrange his work that it will interfere as little as possible with that of other trades or contracts; and in the event of disputes of such nature, the Architect's ruling in the matter shall be final and binding on all parties.

ARTICLE 18S**AWARD OF SUBCONTRACTS**

01 The award of subcontracts shall be subject to the right of rejection by the Owner and the Architect of any individual sub-contractor. All contracts made by the General Contractor with sub-contractors shall be covered by the terms and conditions of the prime contract.

ARTICLE 19S

DELETED

OCCUPATION OF BUILDING**ARTICLE 20S****PERMITS**

- 01 The General Contractor shall apply and pay, where necessary, for all required building and land use permits; all required plan review fees; in addition to any other required permits.
- 02 The mechanical and electrical contractors shall apply and pay for their respective permits and any required plan review fees. They shall call for all inspections and comply with all requirements.
- 03 If an inspection fee is charged due to the failure of sub-contractor to meet code or make his work accessible for the inspection, he is responsible for the re-inspection fee charged, if any.
- 04 The General Contractor, sub-contractors and their suppliers shall comply with Michigan Building Code Section 1704 Special Inspections, as it may be applied to the project by the local Building Authority for inspections and certifications.
- 05 See Article 29S for connection charges.

ARTICLE 21S**OWNER'S CONTINGENCY FUND**

- 01 The General Contractor shall include in his proposal a sum of 10% of the total bid for an Owner's Contingency Fund.
- 02 The Contingency Fund shall be charged for unexpected field conditions and items of errors and omissions in the drawings and specifications.
- 03 The General Contractor shall be responsible for his own contingency allowance for default of, and errors of, sub trades as necessary to complete the intended scope of the work.
- 04 Overhead and profit on this sum shall be considered included in Base Proposal.
- 05 Unused portion of the Owner's Contingency Fund will be credited to Owner on Final Payment.
- 06 Significant changes in the work required by the Owner will be covered by Change Orders.

ARTICLE 22S**NON DISCRIMINATION IN
EMPLOYMENT**

- 01 In connection with performance of work under this contract, the contractor agrees as follows:
- a. The contractor will not discriminate against any employee or applicant for employment because of sex, race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment of other forms of compensation, and selection for training, including apprenticeship.
 - b. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor state that all applicants will receive consideration for employment without regard to sex, race, creed, color or national origin.
 - c. The contractor will take such action with respect to any sub-contractor purchase order as the contracting agency may direct as means of enforcing such provisions, including sanctions for non-compliance.

ARTICLE 23S

DELETED

LOCAL BONDING REQUIREMENTS**ARTICLE 24S****TRADE AGREEMENTS**

- 01 The drawings and specifications make no attempt to define jurisdictional boundaries of the various trade unions. Systems and materials are specified under headings most suited to the project and construction locale from the Architect's and Owners viewpoint.

ARTICLE 25S**GAS SERVICE**

- 01 The General Contractor shall arrange and pay for the revised gas service to the building.

ARTICLE 26S

DELETED

SOIL EROSION PERMIT**ARTICLE 27S****CONSTRUCTION FENCE**

- 01 The General Contractor shall fence in the construction and storage areas with a 4 foot high snow fence.

ARTICLE 28S**SAFETY RULES**

- 01 All contractors and their employees shall comply with applicable requirements of "General Safety Rules and Regulations for the Construction Industry", as promulgated by the Construction Safety Commission of the State of Michigan including all amendments.

- 02 General Contractor and all sub-contractors shall become familiar with and comply with the "Safety and Health Regulation for Construction" as promulgated by the Occupational Safety and Health Administrator of the U.S. Department of Labor.

ARTICLE 29S**CONNECTION CHARGES**

- 01 All charges for water and sewer connections shall be paid by the Owner at time of obtaining building permit.

ARTICLE 30S**BASE BID SPECIFICATION**

- 01 Whenever the specifications call for one specific product, material application, etc. the Contractor or sub-contractor shall bid solely on that which is named. All Base Bids shall then be consistent in such a manner as to permit the best possible evaluation of all proposals.
- a. The Owner and architect in no way wish to overlook any possible alternate material that may be satisfactory as a direct substitute. *A list of proposed alternates of materials, products, methods, etc., may be proposed to, or by, the General Contractor or Construction Manager for inclusion in the proposal to the Owner. The proposal to the Owner shall state the proposed substitute and the cost savings, if any, of the substitution.* The Base Bid, however, shall be based on all items as specified.
 - b. Should any real and definite hardship result in the foregoing "Base Bid" the Contractor shall communicate the facts to the Architect, and if warranted, an addendum will be issued to all bidders rectifying the condition.

ARTICLE 31S**TESTING**

- 01 All testing as called for in the specifications shall be performed by a licensed testing laboratory approved by the Architect.
- 02 The General Contractor shall be responsible for obtaining and paying for the services of the approved laboratory for testing as outlined in the following Sections of the specifications as they may apply to the project:
- a. Section 02C – Excavating, Grading and Backfill.
 1. Compacted backfill.
 2. Confirming bearing capacity of foundation work.
 - b. Section 02D – Storm Drains and Sanitary Sewers
 1. As the local authority may require.
 - c. Section 03A – Concrete Work
 1. Test cylinders of each load of concrete for footings and site concrete.
 2. Pre stress anchor test of 10% of anchor bolts.
 3. All cast in place concrete.
 - d. Section 04 – Masonry
 1. Test cylinders of each load of structural grout.
 - e. Section 05 – Steel Framing
 1. Bolt test and visual weld inspection of 10% of steel connections.

SECTION 02L**REMOVAL AND DEMOLITION****SCOPE OF WORK**

- 01 All work under this heading shall meet requirements of Division 1 and Instructions to Bidders and include everything necessary and incidental to completion of removal and demolition work.
- 02 Work Included:
- a. Removal and demolition of existing rooftop units and related components as details on the Drawing Sheets.
 - b. This Contractor shall obtain and pay for all required permits and all bonding covering his work.
- 03 Certificates of insurance policies shall be filed with the Owner and the Architect prior to commencing work.

INSPECTIONS

- 01 Contractor and Owners representatives shall meet prior to beginning of work to inspect the site and establish limits of the work.
- 02 Contractor to perform testing services to confirm existing glycol levels, concentration, etc. prior to the beginning of the work.
- 02 This contractor shall call for any inspections of the demolition work required by the local authority.

EXISTING SERVICES

- 01 Protect and maintain all active conduit, sewers, pipes, overhead and underground wires existing on the site.
- 02 This contractor shall be responsible to arrange with local service providers the removal of their respective meters and equipment when their services are scheduled or shown to be abandoned.

TEMPORARY PROTECTION

- 01 Provide, erect and maintain all necessary fences, planking, bracing, shoring, sheath piling, warning signs to protect the existing site and all persons using same or public sidewalks adjacent to the site.
- 02 Remove all protections when work is completed and hazardous conditions are no longer present.
- 03 Provide temporary weather protection and building security of existing space during the removal of existing enclosures and coordinate with other trades the timing of the removal and their ability to continue temporary protection.

REMOVAL AND DEMOLITION

- 01 Perform all removal and demolition work as outlined on the drawings.
- 02 Materials that may become hazardous during demolition shall be removed and disposed of properly prior to the commencement of any demolition.

WORKMANSHIP

- 01 All work shall be executed in an orderly and careful manner, with due consideration for adjacent property holders.
- a. Driveways and parking areas shall be kept clear and swept daily.
 - b. Rubbish and debris shall be removed promptly and not allowed to accumulate.
 - c. Sprinkle rubbish and debris with water as required to control dust.

PROHIBITED ACTIVITIES

- 01 Prohibited activities are as follows:
- a. Creation of "Attractive Nuisances".
 - b. Storing, unprotected or overnight, of hazardous or dangerous materials.

POTENTIALLY HAZARDOUS MATERIALS

- 01 Materials may be discovered as hazardous during demolition, removal, and testing. Notify the Owner and Architect immediately upon discovery and verification. These materials will require removal and shall follow State guidelines for proposer removal and disposal. General Contractor is responsible for the testing via a subcontracted testing firm. General contractor is NOT responsible for removal or abatement of materials deemed hazardous.

DIVISION 03**CONCRETE****GENERAL**

- 01 All concrete work shall be detailed and constructed in accordance with the latest specifications of the American Concrete Institute and Concrete Reinforcing Steel Institute and all materials shall conform to current standard specifications of the ASTM as may apply to the work and respective materials.

SECTION 03A**CONCRETE****SCOPE OF WORK**

- 01 All work under this heading shall meet requirements of Division 1 and Instructions to Bidders and include everything necessary and incidental to completion of items outlined.
- 02 Work Included:
- a. Equipment pads.

MATERIALS

- 01 Cement: Shall be Portland Cement (ASTM C-150 Type 1) of American Manufacturer.
- 02 Aggregate: All aggregate shall conform to ASTM C-33 Specifications for Concrete Aggregate. Maximum aggregate size shall not exceed 3/4 of clear space between reinforcing bars or 1/5 minimum thickness of formed slabs.
- a. Pea Gravel shall be clean washed river-run gravel, 3/8" size and conform to ASTM C33.
- 03 Combined Aggregate: Shall be of such composition as to permit between 30% and 50% to pass through a No. 4 sieve.
- 04 Water: Shall be suitable for drinking purposes.
- 05 Sand: Shall meet MDOT specification for Grade 2 porous fill containing less than 5% of particles passing a No. 200 screen
- 06 Reinforcing Steel: Shall be ASTM A-615 specifications for deformed billet steel for concrete reinforcement (Fy=60,000 psi).
- 07 Reinforcing Mesh: Shall be ASTM A-185 specification for wire mesh having a rigid connection of intersecting wires. Gage of wires and spacing is shown on drawings.
- 08 Concrete: Limits for proportions of concrete made with average materials are indicated in the following table. Trial mixtures shall establish exact proportions for all materials to be used within the limits of the table.

CLASS OF CONCRETE	MINIMUM 28 DAY STRENGTH (PSI)	MAX. W/C RATIO LBS. HOH/LB. CEMENT	NOM. AGGR. SIZE	MINIMUM CEMENT CONTENT PER CUBIC YARDS* WEIGHT	SLUMP	AIR CONT .%
STRUCTURAL CLASS 5	4500	0.49	3/4" 1 -1/2"	Determined by trial mix	4"	2 1

STRUCTURAL CLASS 4	4500	0.54	3/4" 1 -1/2"	6-1/4 5-3/4	588 541	4"	2 1
STANDARD EXPOSED CONCRETE	4500	0.45	3/4" 1-1/2"	6-1/4 5-3/4	611 541	3" 4"	6 5-1/2

* Cement content may be reduced by 1/2 bag per cu. yd. for un-reinforced mass concrete.

** Omit air entraining agent in hardened slabs.

Additional design mixes by the supplier that meet the above performance requirements are permitted pending proper documentation and submission for Architect's approval prior to bid due date.

- 09 Admixtures: For air entraining and water-reducing shall be as manufactured by W.R. Grace Co. or Master Builders, and employed in strict accordance with the manufacturers recommendations (ASTM C260 & ASTM C494, Type A). Air content in air entrained concrete delivered shall be +/- 1-1/2 percent. Non-corrosive, non-chloride accelerator shall be "Accelguard" by The Euclid Chemical Co. (ASTM C494, Type C or E). No admixtures containing chloride ions are permitted. No fly ash shall be permitted in exterior concrete.
- 10 Expansion Joint Material: W. R. Meadows or equivalent conforming to ASTM D-1752 for interior work and ASTM D1751 for exterior work.
- 11 Curing Compound: ChemRex "Masterkure N-Seal VOC" or Sonneborn "Kure-N-Seal, Euclid Chemical "Diamond Clear VOX" or Dayton Superior "Safe Cure & Seal" (J-18).
- 12 Combination Curing Compound / Hardner: Sonneborn " Kure-N-Harden.
- 13 Hardner: ChemRex "Lapidolith".

MATERIAL LOCATIONS

- 01 Sand: At grading course below slabs on grade.
- 02 Reinforcing Mesh: Exterior equipment pad.
- 03 Standard Exposed Concrete: Exterior equipment pad
- 04 Expansion Joint Material: At all slabs abutting concrete or masonry walls.
- 05 Curing Compound: Floor slabs and walks.
- 06 Combination Curing Compound / Hardner: Employ when fast curing is required.

FORM WORK

- 01 Form work shall follow ACI-347 "Recommended Practice for Concrete Form Work." Forms shall be constructed of wood planking or plywood (use plywood where concrete is exposed above grade,) or be of a re-usable metal type. Chamfer all external corners of exposed work.
- a. Permitted abrupt or gradual irregularities in formed surfaces shall be Class C.
- 02 All forms shall be mortar tight, rigid, strong and so constructed to prevent distortion during the placing of concrete. Due allowances shall be made for impact. Forms shall be built to given

dimensions and maintained until concrete is of sufficient strength for removal. Concrete members shall have obtained sufficient strength to sustain dead and live loads without damage before removing any form work.

- 04 Provide necessary metal accessories to hold forms in correct alignment. Accessories shall be so constructed as to permit removal to a depth of at least 1 inch from the surface of the concrete. Tie rods shall be held in place by devices attached to walls. Use cone type, not wire ties or pipe.

REINFORCING STEEL AND MESH

- 01 Provide shop drawings for all reinforcing steel.
- 02 On site storage of reinforcing steel shall provide isolation from the ground and protection from the weather.
- 03 All reinforcement bar and mesh shall be free of paint, dirt, oil and excessive rust.
- 04 Place reinforcement as shown on the Drawings in a secure manner to prohibit displacing during the pouring of concrete. Bars shall be securely wired together at their intersections.
- 05 Mesh reinforcement shall be carefully and frequently hooked during the placement of floor slabs on grade to assure its placement at a distance approximately 1-1/2" from the top of the slab.
- 06 Provide OSHA approved caps for all exposed ends of reinforcing steel extending beyond completed pours and awaiting future embedment.

CONCRETE

- 01 Concrete shall be transit-mixed from a plant approved by the Architect, and shall conform to ASTM Designation C-94/94M.
- 02 The transit-mix plant shall have in operation satisfactory measuring devices to assure accurate and uniform proportions of the materials as specified. Verification of this information shall accompany each individual delivery to the job site. Information shall include material quantities of the mix: moisture contents; admixes, (if any); size of the load and time of day and date when truck was loaded.
- 03 Mixing trucks shall be of an approved design to provide separate container for holding water. Mixing water shall be added **ONLY** at the proper time required to provide necessary consistency and not to exceed maximum slump as specified.

DEPOSITING CONCRETE

- 01 No concrete shall be placed without prior notice to Architect.
- 02 All formwork shall be cleaned, wetted down or oiled (in freezing weather) before depositing concrete. When placing concrete on grade, fill shall be smooth and firmly tamped to proper elevations. See Division 02 for compaction requirements.
- 03 Concrete shall be conveyed from mixer to the place of deposit in buggies, carts or conveyers as soon as possible after mixing. Do not use troughs. Handling of concrete shall be done in such a manner as to prevent free fall of more than three (3) feet. Always place concrete into face of previously placed material. When placing into deep forms, discharge concrete through hose or hopper directly to the level of the material being placed so as to prevent free fall.

- 04 All pours shall be continuous, keeping concrete plastic until final levels are attained. Take all necessary precautions to prevent voids and surface defects. Tamp or vibrate as conditions warrant. Penetrate previously placed layers at regular intervals when vibrating. Consult with Architect on location of all construction joints required.

CONCRETE TESTING

- 01 General Contractor shall arrange and pay for an approved independent testing laboratory to make test cylinders of all poured-in-place concrete. Test cylinders and laboratory tests shall be made in accord with ACI Standards and ASTM Specifications. Provide a minimum of one test (consisting of three cylinders per each test) for each 50 cubic yards placed, but not less than one test per day. One cylinder shall be broken at 7 days; tow at 28 days. Cylinders shall be properly cured by the laboratory making the tests.

CURING AND WEATHER PROTECTION

- 01 Protect concrete at all times, keeping surfaces damp for at least seven days in warm weather, and keep covered as long as required in freezing weather.
- 02 Cold weather concreting work shall be performed in accordance with ACI 308.1-11 at the following minimum temperatures:
- a. Air Temperature 30-45 degrees F: Concrete temperature 60 degrees F minimum.
 - b. Air Temperature 0-30 degrees F: Concrete temperature 65 degrees F minimum.
 - c. Air Temperature below 0 degrees F: Concrete temperature 70 degrees F minimum.
 - d. Maintain concrete temperature at not less than 50 degrees for at least 7 days.
- 03 Warm weather concreting shall be performed in accordance with ACI 302.1-11 with the maximum allowable temperatures of 90 degrees.
- 04 The method of maintaining the proper temperature during hardening shall be subject to prior approval. Obtain Architects approval of any admixtures employed to facilitate cold and hot weather concreting.

POINTING AND CLEANING

- 01 Where walls, slab edges and concrete other than specified to be etched is exposed to view, fill all holes, smooth all irregularities and point smooth with mortar. Concrete shall be steel brushed clean and left in smooth even color.

GUARANTEE

- 01 This contractor shall provide a written guarantee all work under this contract shall be free of any defects in material or workmanship, not due to ordinary wear or improper use, which may develop within one (1) year from the date of acceptance of the work.

DIVISION 05**METALS: STRUCTURAL & MISC****SCOPE OF WORK**

- 01 All work under this Division shall meet requirements of Division I and Instructions to Bidders and include everything necessary and incidental to completion of items outlined.
- 02 Work Included:
- a. Structural steel including beams, columns, trusses, leveling plates, beam and joist bearing plates, anchor bolts, hanger rods.
 - b. Steel Joists and Metal Deck.
 - c. Miscellaneous and Ornamental metals.

SECTION 05A**STRUCTURAL STEEL****GENERAL**

- 01 All steel shall be detailed, fabricated and erected in accordance with the latest specifications for the Design, Fabrication and Erection of Structural Steel for Buildings, and the Code of Standard Practice as adopted by the American Institute of Steel Construction, Inc., for bolted and arc-welded construction.
- a. See Structural Drawings as they may apply to this Division.

MATERIALS

- 01 ASTM Designations and strengths for structural steel work shall be as follows:

Items	ASTM Designation	Min. Yield Strength f_y
Structural steel shapes, except angles, bars and plates	A992/A992M Grade 50 or A572/A572M Grade 50	50ksi 50ksi
Angles, bars and plates	A36/A36M	36ksi
Angles, bars and plates, noted 50ksi on drawings	A572/A572M Grade 50	50ksi
Steel pipe	A-501 or A53/A53M Grade B type E or S	36ksi 35ksi
Square and rectangular tubing HSS	A500/A500M Grade B	46ksi

MATERIAL LOCATIONS

- 01 Steel Beams and Columns: roof reinforcement at new chiller location, cooling tower platform as indicated.

MEASUREMENTS

- 01 This Contractor shall visit the site and shall verify and obtain all measurements from work previously constructed, which may affect the dimensions of units included under this heading. Report any discrepancy to the Architect.

FABRICATION

- 01 Straightening: Material shall be straightened or flattened only to the extent that it will not injure the materials. Sharp kinks or bends shall not be permitted.

- 02 Holes: Shall be punched or drilled, remove burrs. Diameter of holes shall be 1/16" greater than bolt size. All holes shall match, drifting to enlarge unfair holes not permitted.
- 03 Assembling: Pin or bolt to hold members tightly together while making connections to assure best possible fit.
- 04 Welded Connections: Shall be by Electric Arc Method in accordance with latest code of fusion welding of structural steel by the American Welding Society. Connections shall be standard unless otherwise noted or required.
- 05 Bolted Connections: Shall be as per ASTM A-325.
- 06 Welded Connections: Shall conform to the E-70 series of specification for mild steel arch welding electrodes ASTM A233, latest edition. Welding shall be done by certified welders and conform to American Welding Society requirements, latest edition.
- 07 Holes, Cutting, etc: Where indicated on the drawings, provide holes for the installation of materials by other trades. Provide Nelson studs where thru bolting of beams is impractical.
- 08 Shop Painting:
- a. Provide one coat of shop paint on all exposed structural members
 - b. Painting shall be in accordance with AISC Specifications, latest edition. Paint shall be Grey rust inhibiting primer as manufactured by DeGraco, Rustoleum or Tnemec. See paragraph 05 below for touch-up requirements.

ERECTION

- 01 Bracing: Provide temporary bracing to take care of all loads to which the structure may be subjected, including erection equipment and operation of same. Bracing shall remain in place until all component parts of the structure are installed and as long as required for safety. Remove no bracing without approval of Architect.
- 02 Alignment: Assemble frame as a unit, plumb, align and level all members before making final connections.
- 03 Connections: Field connections shall be electric arc welded as per AWS Code or high strength bolts (ASTM A-325).
- 04 Drifting: Light drifting shall be permitted for slightly unmatched holes. No unfair holes (1/2 diameter or more off center of another hole) permitted.
- 05 Paint Touch-up: Touch-up all blemishes in shop coat of paint due to weathering and erection conditions.

SHOP DRAWINGS

- 01 This contractor shall make complete shop drawings for the work. He shall follow standard detailing practice as to methods and submit drawings for the Architect's or Engineers review. The design of all structural steel connections shall be the responsibility of the structural steel fabricator. Approval of the shop drawings by the Architect or Engineer shall not constitute approval of the adequacy of any structural steel connections.
- 02 Shop Drawings must be reviewed before fabrication of steel.

SECTION 5D**MISCELLANEOUS AND ORNAMENTAL METALS****SCOPE OF WORK**

- 01 The work under this heading shall provide all materials, labor and apparatus necessary to furnish and install as indicated on the drawings any miscellaneous and ornamental metals necessary to complete the work.
- 02 Work Included, but not limited to:
- a. Steel ladders and railings (installation only)
 - b. Galvanized floor grates

MATERIALS

- 01 Steel: Shall meet standard specifications of the American Institute of Steel Construction.
- 02 Aluminum: Shall meet and conform to the specifications included in "Aluminum Standards and Data", latest edition, of "The Aluminum Association."

WORK TO BE FURNISHED/LOCATION

- 05 Miscellaneous Steel ladder and Guardrails: New cooling tower. Installation only. Ladder and railings shipped with the new unit.
- 06 Galvanized floor grates: New grates as needed at existing cooling tower work platform.

WORKMANSHIP

- 01 All workmanship and finish shall be first quality in accordance with the best practices of the industry.
- 02 As fast as possible fit and shop assemble all work.
- 03 Jointing and intersections of metals shall be accurately made, tightly fitted and in true planes throughout. Welds shall be made sound and ground smooth. Bolted work shall be screwed tight.
- 04 Provide shop coat of paint on all exposed members of steel work.

MEASUREMENTS

- 01 This Contractor shall visit the site and verify all measurements from work previously constructed which may affect the dimensions of units under this heading. Report discrepancies to Architect on Shop Drawings.

SHOP DRAWINGS

- 01 This Contractor shall make complete shop drawings of his work and submit them to the Architect for review. Do not fabricate before approved drawings are received.

OPEN GRATE STEEL PLATFORM

- 01 Provide and install open grate steel floor grating as needed where indicated under "Work Furnished/Location" paragraph above.
- 02 floor grating shall be designed to carry a Live Load of 100 pounds per square foot.

03 At existing exterior cooling tower work platform.

1. Floor grating shall be McNichols Co. heavy duty welded bar grating (galvanized), match existing and cut to size. Provide steel clip angles or alternate method of approved attachment to existing steel framed work platform.

DIVISION 07**MOISTURE PROTECTION****SCOPE OF WORK**

01 All work under this Division shall meet requirements of Division I and Instructions to Bidders and include everything necessary and incidental to completion of items outlined.

02 Work Included, but not limited to:

- a. Roofing and Sheet Metal Work
- b. Sealant Work
- c. Sound and Thermal Insulation

SECTION 07A**ROOFING AND SHEET METAL WORK****GENERAL**

01 All roofing work shall conform to the latest specifications and recommendations of the manufacturer of the materials employed in the work for the structural conditions indicated on the drawings. Sheet metal work shall generally follow the recommended practices of the SMACNA Architectural Manual. All work shall be installed by skilled mechanics of the trade and executed in a manner consistent with the best practices of the trade.

02 Work under this section shall include single ply roofing, metal siding, metal copings and flashing.

MATERIALS

01 Single Ply Membrane Roofing and Flashing: Shall be a single ply roofing system as manufactured by an established roofing manufacturer. Method of securing of membrane shall be fully adhered fastening. Membrane thickness shall match existing. Membranes shall be match existing color providing maximum reflectance against solar gain. Bonded membrane permitted if exposed surface is white. Installation shall bear a 15 year warranty.

- a. Acceptable Manufacturers: Carlisle, Firestone/Elevate, Johns Manville, Duro-Last, Sarnafil, Dow.

02 Sheet Metal: Shall be 24 gauge G-90 hot dipped galvanized steel with Kynar 500 fluorocarbon coating.

03 Fastenings: Nails, screws, etc., shall be best grade to meet compatibility requirements of material being secured, and be as furnished by the manufacturer of the roofing system where employed in same.

04 Elastic Cement: Federal Spec. SS-C-153.

05 Rigid Insulation: Shall be Closed-cell HCFC FREE "Green" Polyisocyanurate Foam board insulation laid in a minimum of two equal layers providing a minimum in service thermal resistance of the insulation only of R=23.6. Facers shall be glass reinforced felt. Insulation shall be as furnished by the manufacturer of the roofing system being employed.

06 Base Flashing: Cured or uncured EPDM. Compatible metal where required.

07 Membrane Base: High Density Fiberboard Roof Insulation as approved by manufacturer of roof system being employed.

- 08 Insulation Fasteners: Shall be as furnished and approved by the manufacturer of the insulation and the roof system being employed.

MATERIAL LOCATIONS

- 01 Single Ply Membrane Roofing System: As needed at patching of roof where new chiller steel supports are installed.
- 02 Sheet Metal: As needed at patching and flashing of removed exterior ductwork.
- 03 Rigid Insulation: As needed at patching of roof where new chiller steel supports are installed.
- 04 Membrane Base: At unheated areas.

INSPECTION

- 01 The roofing contractor shall inspect all surfaces which are to receive his materials and report any discrepancies to the Architect before commencing work. Proceeding with installation of insulation or roofing materials shall indicate acceptance of surfaces by this Contractor.

INSTALLATION

01 Single Ply Roofing:

- a. The roofing system, flashing and accessories must be applied in strict accordance with the approved manufacturer's latest printed manual for a roofing system for the type and slope of structure indicated.
- b. Examine substrates, areas, and conditions for compliance with requirements affecting performance of roofing system.
- c. Proceed with installation only after unsatisfactory conditions have been corrected
- d. Roofing shall be applied by a roofer approved by the manufacturer.

02 Insulation

- a. Insulation shall be kept dry at all times. Only as much as can be covered with roofing shall be applied in any one day.
- b. Insulation shall be laid in a minimum of two layers.
- c. Boards shall be laid in parallel courses, each course staggering joints with adjacent course and layer above. Bring boards into moderate contact; do not force.
- d. Installation of the insulation shall be as approved by the manufacturer of the roofing applied.
- e. Where mechanically secured insulation is used, provide metal clips of length suited to thickness of insulation being secured. Install in accordance with Factory Mutual Approved Rates by Wind Uplift Classification for type of insulation used.

03 Flashings (Single Ply Roofs):

- a. Pressure Bar Flashing, Base Flashing, and Termination Details shall be as required by the manufacturer whose materials are applied. Details on the drawings indicate design requirements. Provide manufacturers approved flashing termination at base of parapets and carry flashing vertically up parapet walls and across top of parapet at all copings. Where counter-flashing occurs provide termination as approved by manufacturer of roofing system.
- b. Provide manufacturers approved flashing and counter flashing details at all mechanical curbs, plumbing vents, roof sumps and other roof penetrations.

WORKMANSHIP CERTIFICATION

- 01 The roofing contractor shall submit written certification, in approved form, that all materials and workmanship in connection with the roofing system have been installed in complete conformance with the drawings and specifications, and with the manufacturer's specifications and requirements for the particular type of roof called for. This certification must also contain a statement by the manufacturer that the materials furnished by him are without defect.

GUARANTEE

- 01 This Contractor shall provide a written guarantee covering defects in material and workmanship under this contract for period of two (2) years after acceptance of work.
- 02 Completed single ply roof system shall be inspected by manufacturers representative to verify that system has been installed according to specifications and details. The manufacturer shall issue an inspection and service guarantee, without limiting penal sum, assuring that the system shall remain watertight for fifteen (15) years; the insulation shall retain at least 80% of its initial thermal resistance and the insulation system shall meet UL Class "A" requirements.

SECTION 07B**SEALANT WORK****SCOPE OF THE WORK**

- 01 This Section shall provide all materials and labor, services and equipment necessary and incidental to the completion of the installation of sealant material.

MATERIALS

- 01 Sealant: Shall be One-part, non-sag, acrylic latex compound for interior work; Epoxidized Polyurethane Terpolymer for exterior work; self-leveling epoxidized urethane for control and expansion joints in sidewalks and pavements, Tremco, Sonneborn, Polymeric Systems or Dow Corning Sealants. Color as selected by Architect.
- 02 Back Up Material: AET. Inc. HBR Backer Rod. Williams Products, Inc. Backer Rod or Expand-O-Foam Cord.
- 03 Standards: ASTM C920 - Use of Elastomeric Joint Sealants. ASTM D 1752-Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.

MATERIAL LOCATIONS

- 01 Sealant: Shall be provided at the following locations.
- At exterior insulated metal panel infill locations-interior and exterior, both sides.
 - At removed rooftop ducting curb caps as needed.
 - At joints between dissimilar materials.
 - Elsewhere as required for weather tight construction.
- 02 Back Up Materials: Shall be used to control depth of sealant per schedule herein. Use Foam-Cord where joints vary in width.

SUBMITTALS

- 01 Submit color samples of sealants to be used, together with sealant bond breaker, if applicable, and joint backing. Samples shall be accompanied by Manufacturers Literature and Certification.

DELIVERY, STORAGE, AND HANDLING

- 01 Deliver materials in manufacturer's original, unopened containers.
- 02 Store between 40 and 90 degrees F.

DEPTH OF SEALANT SCHEDULE

- 01 Schedule:

SEALANTS		Joint Width Condition			
		Min. 1/4"	1/4" to 1/2"	1/2" to 1"	1" to 2"
Depth	Concrete, Masonry & Stone	1/4"	Same as Width	One-Half Width	Max. 1/2"
	Metal, Glass and Non-Porous Materials	1/4"	1/4"	One-Half Width	Max. 1/2"

- 02 Install joint backing to control joint depth as indicated and to prevent 3-sided bond.

PROJECT CONDITIONS

- 01 Do not apply clear water repellent sealers, waterproofing compounds, or other architectural coatings to surfaces to which sealers will be applied without first verifying compatibility.
- 02 Verify that dimensions are correct and substrate is in proper condition for installation. Do not proceed with installation until unsatisfactory conditions have been corrected.

INSTALLATION

- 01 General: Install sealants in accordance with manufacturer's printed instructions and the requirements of ASTM C 962.
- 02 All surfaces receiving sealant material shall be clean and dry before sealing. See above schedule for allowable depths of sealant related to width of joint.
- 03 Installation of all work shall be when air temperature is above 40 degrees F and below 80 degrees F, unless manufacturer submits written instructions for use of his material beyond this range.
- 04 Mask adjacent finished surfaces and adjacent porous surfaces that would be damaged by primer, sealant, or cleaning agents.
- 05 Prime each joint with primer as recommended by sealant manufacturer for material employed. No bond should occur between backer rods and sealant.
- 06 The sealing compound shall be forced in the opening with a caulking gun having a nozzle not less than 3/8" in diameter so as to fill the opening completely, making a neat, smooth bead. Sealant work shall be done in a neat, professional manner without sags, overlaps or uneven distribution. Clean any overruns from adjacent materials.

SECTION 09D**ACOUSTICAL TREATMENT****SCOPE OF WORK**

- 01 The work under this heading shall provide all materials, labor, services, equipment, necessary for and incidental to the installation and furnishing of acoustical tile and related suspension systems as called for on the drawings and specified herein.
- 02 Construction conditions shall comply with Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings - ASTM C635/C635M and Recommended Practice for Installation of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings - ASTM C636/C636M.
- 03 Systems shall be rated for Noise Reduction Coefficient in accordance with ASTM C423 and Sound Transmission Coefficient in accordance with AMA 1-II as tested by an independent agency.

MATERIALS

- 01 Acoustical tile: Refer to drawing sheet A1.
- a. Approved Alternate Manufactures: None.
- 04 Suspension System: Refer to drawing sheet A1. All Suspension system parts shall be of sufficient strength and rigidity to carry acoustical units in a true and level plane without exceeding a deflection of 1/360th of its span.
- a. Acceptable Alternate Manufacturer: None.

MATERIAL LOCATIONS

- 01 See Sh. No. A1 of the drawings for location of ceiling tile types.

INSTALLATION

- 01 All acoustical tile and panels shall be installed in strict accordance with the manufacturers recommendations by experienced, skilled mechanics. Cutting and edging of all boarder tiles shall be done in a precise and accurate manner to match field tiles. Framing and installation of suspension systems shall be in accordance with ASTM C635 and C636 respectively as applied to Metal Ceiling Suspension Systems for Acoustic Tile and Lay-in Panels.
- 02 All lighting fixtures are installed by Division 16. Ceiling diffusers are installed by Division 15.
- 03 At exposed grid system provide Main Tees supported by No. 12 ga. wire at 4' - 0" o.c. for tees not bearing light fixtures. Provide additional hangers at each corner of light fixtures for support. Provide wall angles at all walls to match exposed grid and as detailed. Water or laser level for uniform ceiling height. All members shall be surely interlocked for good stability and shall be plumb and in true alignment throughout the combined lengths. Use maximum available lengths of material wherever possible. Miter all corners in wall angles. Acoustical panels shall lay flat and true in grid. All panels shall securely fit into the suspension system.
- 04 Entire installation shall be coordinated as necessary with Mechanical and Electrical Trades. This contractor's layout in accordance with Electrical Plan will establish dimensions for all affected trades. See Reflected Ceiling Plans Drawing Sh. A1 & A2 for location and details of all ceiling work.

- 05 Immediately remove any foreign substances from exposed grid members. Touch up any minor scratches or blemishes with paint type and application to match. Replace any grid members showing crimps or major blemishes and leave installation in acceptable condition.

REPLACEMENT MATERIAL

- 01 At completion of installation provide to Owner one (1) unopened box of each type of acoustic tile used on the project.

GUARANTEE

- 01 This Contractor shall guarantee that all work executed under this heading will be free from defects of material and workmanship for a period on one (1) year after date of acceptance.