January 23, 2018
Bids

Project Manual

Ferndale Public Schools
Ferndale High School,
Early Childhood Center
Ferndale Upper Elementary School
Flooring and Ceilings
Ferndale, Michigan

INTEGRATED design SOLUTIONS
architecture  engineering  interiors & technology
1441 w long lake road, suite 200
troy, michigan 48098

5211 cascade road se, suite 300
grand rapids, michigan 49546

248.823.2100, fax 248.823.2200
www.ids-troy.com

IDS Project No. 17226-2000
## SECTION 00 0110 - TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>TITLE</th>
<th>PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>INTRODUCTORY INFORMATION</strong></td>
<td></td>
</tr>
<tr>
<td>00 0101</td>
<td>Project Title Page</td>
<td>1 only</td>
</tr>
<tr>
<td>00 0110</td>
<td>Table of Contents</td>
<td>1 thru 2</td>
</tr>
<tr>
<td></td>
<td><strong>PROCUREMENT REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td>00 1113</td>
<td>Advertisement for Bids</td>
<td>1 thru 2</td>
</tr>
<tr>
<td>00 2100</td>
<td>Instructions to Bidders</td>
<td>1 thru 6</td>
</tr>
<tr>
<td>00 4100</td>
<td>Bid Form</td>
<td>1 thru 4</td>
</tr>
<tr>
<td>00 4500</td>
<td>Supplement to Bid Form – Familial Disclosure Statement</td>
<td>1 only</td>
</tr>
<tr>
<td>00 4500</td>
<td>Supplement to Bid Form – Affidavit of Compliance – Iran Economic Sanctions Act</td>
<td>1 only</td>
</tr>
<tr>
<td>00 0000</td>
<td>Standard Form of Agreement Between Owner and Contractor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For Project of Limited Scope; AIA Document A107- 2007</td>
<td>1 thru 19</td>
</tr>
<tr>
<td>00 7300</td>
<td>Supplementary Conditions and Additional Conditions</td>
<td>1 thru 5</td>
</tr>
<tr>
<td></td>
<td><strong>SPECIFICATIONS GROUP</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>GENERAL REQUIREMENTS SUBGROUP</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 01 - GENERAL REQUIREMENTS</strong></td>
<td></td>
</tr>
<tr>
<td>01 0000</td>
<td>General Requirements, Substitution Request Form, Submittal Form</td>
<td>1 thru 25</td>
</tr>
<tr>
<td>01 2300</td>
<td>Alternates</td>
<td>1 only</td>
</tr>
<tr>
<td>01 2700</td>
<td>Unit Prices</td>
<td>1 thru 2</td>
</tr>
<tr>
<td></td>
<td><strong>FACILITY CONSTRUCTION SUBGROUP</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 02 – EXISTING CONDITIONS</strong></td>
<td></td>
</tr>
<tr>
<td>02 4119</td>
<td>Selective Demolition</td>
<td>1 thru 5</td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 03 - CONCRETE</strong></td>
<td></td>
</tr>
<tr>
<td>03 0130</td>
<td>Maintenance of Cast-In-Place Concrete</td>
<td>1 thru 2</td>
</tr>
<tr>
<td>03 5416</td>
<td>Hydraulic-Cement Underlayment</td>
<td>1 thru 4</td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 04 THRU DIVISION 08</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 09 - FINISHES</strong></td>
<td></td>
</tr>
<tr>
<td>09 5113</td>
<td>Acoustical Panel Ceilings</td>
<td>1 thru 3</td>
</tr>
<tr>
<td>09 6513</td>
<td>Resilient Wall Base and Accessories</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>09 6519</td>
<td>Resilient Tile Flooring</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>09 6813</td>
<td>Tile Carpeting</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>09 6816</td>
<td>Sheet Carpeting</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>09 8436</td>
<td>Sound-Absorbing Ceiling Units</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>09 9100</td>
<td>Painting</td>
<td>1 thru 10</td>
</tr>
<tr>
<td></td>
<td><strong>DIVISION 10 THRU DIVISION 14</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>
FACILITIES SERVICES SUBGROUP
DIVISION 21 THRU DIVISION 25
Not Applicable

DIVISION 26 THRU DIVISION 28
Not Applicable

SITE AND INFRASTRUCTURE SUBGROUP
DIVISION 31 THRU DIVISION 33
Not Applicable

PROCESS EQUIPMENT SUBGROUP
DIVISION 40 – PROCESS INTEGRATION
Not Applicable

END OF TABLE OF CONTENTS
SECTION 00 1113 - ADVERTISEMENT FOR BIDS

DATE: January 23, 2018

PROJECT: Ferndale Public Schools
Ferndale High School,
Early Childhood Center,
Ferndale Upper Elementary School
Flooring and Ceilings
Ferndale, Michigan

OWNER: Ferndale Public Schools
Central Offices
Ferndale High School, 3rd Floor, Room 326
871 Pinecrest
Ferndale, Michigan 48220

ARCHITECT: Integrated Design Solutions, LLC
Architecture, Engineering, Interiors & Technology
1441 W. Long Lake Road, Suite 200
Troy, MI 48098
5211 Cascade Road, SE, Suite 300
Grand Rapids, Michigan 49546
(248) 823-2100
(248) 823-2200 fax
www.ids-troy.com

BIDS RECEIVED: Until 1:00pm local time on February 9, 2018 the Owner will receive sealed Bids for the work as set forth in the Bidding Documents at:

Ferndale Public Schools Central Offices
Ferndale High School, 3rd Floor
871 Pinecrest
Ferndale, Michigan 48220

Attention: Nancy Hoover, Assistant Superintendent of Business Services

At 1:15 pm on said date, all Bids will be publicly opened and read aloud. The location of the public opening will be the Front Office Conference Room in the High School. A bid tabulation summary will be available.

Project Web Site: Project Web sites will be used for purposes of managing communication and documents during the bidding and construction stage.

The Bidding documents, are available at the following web site

Michigan Statewide Integrated Governmental Management Applications system (SIGMA):
https://milogintp.michigan.gov/eai/tplogin

The Bidding documents are also available at the following web site
http://cloud.ids-troy.com/bids/bids/ferndale/flooring-ceilings/

A pre-bid conference is scheduled for February 2, 2018 at 3:00 pm local time. All Bidders are encouraged to attend. Bidders shall meet at Ferndale Upper Elementary School, 24220 Rosewood, Oak Park, Michigan 48237. There will also be site visits to Ferndale Early Childhood Center and Ferndale High School after the 3:00 pm pre-bid meeting.
Each Bid shall be accompanied by a Bid Security in the form of a certified check, cashier’s check, money order or bid bond made payable to Ferndale Public Schools in an amount not less than five percent (5%) of the base bid as a Bid guarantee.

Each bid shall be accompanied by the Familial Disclosure Statement in compliance with MCL.380.1267. The bid proposal must be accompanied by a sworn and notarized statement disclosing Familial Relationship that exists between the bidder or any employee of the bidder and any member of the Board of Education of the School district, or the Superintendent of the School district. The School district will not consider a Bid Proposal that does not include this sworn and notarized Disclosure Statement.

Each bid shall be accompanied by the Affidavit of Compliance – Iran Economic Sanctions Act in compliance with Michigan Public Act No. 517 of 2012. The School district will not consider a Bid Proposal that does not include this sworn and notarized Statement.

For Bids less than $50,000 each bidder shall include in the Base Bid the cost of a Performance Bond and a Labor and Material Payment Bond, covering the faithful performance of the Contract and payment of all obligations arising there under, each in the amount of one hundred percent (100%) of the contract amount. Bonds shall be provided by a company licensed to do business in the State of Michigan.

For Bids over $50,000, each Bidder shall indicate, in the space provided in the Bid Form, the cost of a Performance Bond and a Labor and Material Payment Bond covering the faithful performance of the Contract and payment of all obligations arising there under, each in the amount of one hundred percent (100%) of the contract amount. Should the Owner elect to require bonds, the cost shall be reimbursed by change order to the Contractor by the Owner.

The bid security of Bidders under consideration will be returned immediately after execution of the Contract by the Owner. The amount of the bid security shall be forfeited to the Owner if the successful Bidder fails to enter into a contract and furnish required bonds and insurance certificates within ten (10) days after award of Contract.

Withdrawal of any Bid is prohibited for a period of sixty (60) days after the actual date of the opening thereof.

Each Bidder agrees to waive any claim it has or may have with the Owner, the Architect and their respective employees, arising out of or in connection with the administration, evaluation, or recommendation of any bid.

The Owner reserves the right to reject any or all Bids, either in whole or in part, to reject a Bid not accompanied by the required bid security or by other data required by the Bidding Documents or to reject a Bid which is in any way incomplete or irregular and to waive informality and irregularity in the bids and in the bidding.

The Owner reserves the right to accept Alternates in any order or combination and to determine the low Bidder on the basis of the sum of the base bid and the Alternates accepted.

The Owner reserves the right to negotiate with any Bidder without rebidding the project in whole or in part.

The Owner reserves the right to award the Contract to whomever it may elect.

END OF ADVERTISEMENT FOR BIDS
SECTION 00 2100 - INSTRUCTIONS TO BIDDERS

1. DEFINITIONS

A. Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement for Bids, Instruction to Bidders, the Bid Form and other bidding and contract forms. The proposed Contract Documents consist of the form of Agreement between Owner and Contractor, General Conditions of the Contract for Construction, Supplementary and other Conditions, Specifications, Drawings and Addenda issued prior to execution of the Contract.

B. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract, which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.

C. A Bidder is a person or entity who submits a Bid.

D. A Bid is a complete and properly signed proposal to do the work for the sums stipulated there in submitted in accordance with the Bidding Documents.

E. The Base Bid is the amount stated in the Bid for which the Bidder offers to perform the work as described in the Bidding Documents as the base, to which work may be added to or deleted from, for the amounts stated in the Alternates.

F. An Alternate is an amount stated in the Bid Form to be added to or deducted from the amount of the Base Bid if the described Alternate is accepted.

G. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials, equipment or services or a portion of the work as described in the Bidding Documents.

2. SECURING BIDDING DOCUMENTS

A. Copies of the Bidding Documents may be obtained from the Michigan Statewide Integrated Governmental Management Applications system (SIGMA) web site or from Integrated Design Solutions, web site, upon conditions set forth in the Advertisement for Bids.

3. PREPARATION AND SUBMISSION OF BIDS

A. Bids shall be submitted on forms bound in the Project Manual of the Bidding Documents.

B. All blanks on the Bid Form must be filled in by typewriter or by hand in ink.

C. Amounts shall be expressed in both words and figures. In case of a discrepancy the amount stated in words shall govern.

D. Alterations by erasure or interlineations must be initialed by the Bidder.

E. All Alternates must be bid. If no change in the Base Bid is required, enter “No Change”.

F. Submit the Bid, along with the bid security and any other documents required to be submitted with the Bid, to the Owner, and deliver to the address given in the Advertisement for Bids on or before the day and hour set for receipt of the Bids.

1. Enclose each Bid in a sealed opaque envelope bearing the title of the Work Ferndale Public Schools, Ferndale High School, Early Childhood Center, Ferndale Upper Elementary School, Flooring and Ceilings, Ferndale, Michigan the name of the Bidder, and the date and hour of the Bid opening, with the notation “SEALED BID ENCLOSED”.
2. Do not change the wording of the Bid Form, and do not add words to, or delete words from the Bid Form.
3. Unauthorized conditions, limitations, or provisions attached to the Bid will be cause for rejection of the Bid.
4. Submit only duplicate signed copies of the Bid.
5. It is the sole responsibility of the Bidder to see that his bid is received on time.
6. Telephonic, telegraphic, facsimile (fax), or e-mail Bids or telephonic, telegraphic, facsimile (fax) or e-mail modification of a Bid will not be considered.
7. Bids received after the time fixed for receiving them will not be considered and will be returned to the Bidder unopened.
8. Properly identified Bids received on time will be privately opened. The Owner reserves the right to keep all information concerning such bids confidential.
9. Properly identified Bids received on time will be publicly opened and read aloud. A bid tabulation summary will be available.

G. The Bidder in submitting a Bid represents that:

1. The Bidder has read and understands the Bidding Documents, including the Drawings, Specifications and other proposed Contract Documents.
2. The Bid is made in compliance with the Bidding Documents.
3. The Bidder has visited the site of the Work and become informed as to existing conditions and limitations under which the Work is to be performed and included in their Bid a sum to cover the cost necessary to perform the Work as set forth in the Bidding Documents. No allowance will be made to a Bidder because of a lack of such examination or knowledge.
4. The Bid is based upon materials, equipment and systems required by the Bidding Documents without exception and without substitutions.

4. FAMILIAL DISCLOSURE STATEMENT

A. Each Bid shall be accompanied by the Familial Disclosure Statement in compliance with MCL.380.1267. The Bid proposal must be accompanied by a sworn and notarized statement disclosing Familial Relationship that exists between the bidder or any employee of the bidder and any member of the Board of Education of the School district, or the Superintendent of the School district. The School district will not consider a Bid Proposal that does not include this sworn and notarized Disclosure Statement.

5. IRAN ECONOMIC SANCTIONS ACT AFFIDAVIT OF COMPLIANCE

A. Each Bid shall be accompanied by the Iran Economic Sanctions Act Affidavit of Compliance in compliance with Michigan Public Act No. 517 of 2012. The Bid proposal must be accompanied by a sworn and notarized statement hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an “Iran Linked Business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Bidder is awarded a Contract as a result of the aforementioned Advertisement for Bids, the Bidder will not become an “Iran Linked Business” at any time during the course of performing under the Contract.
6. **BID SECURITY AND BONDS**

   **A.** Each bid shall be accompanied by a certified check, cashier's check, money order or bid bond made payable to **Ferndale Public Schools** in an amount not less than five percent (5%) of the Base Bid as a proposal guarantee. Bid Bond shall be provided by a company licensed to do business in the State of Michigan.

   **B.** For Bids less than $50,000 each bidder shall include in the Base Bid the cost of a Performance Bond and a Labor and Material Payment Bond, covering the faithful performance of the Contract and payment of all obligations arising there under, each in the amount of one hundred percent (100%) of the contract amount. Bonds shall be provided by a company licensed to do business in the State of Michigan.

   **C.** For Bids over $50,000, each Bidder shall indicate, in the space provided in the Bid Form, the cost of a Performance Bond and a Labor and Material Payment Bond covering the faithful performance of the Contract and payment of all obligations arising there under, each in the amount of one hundred percent (100%) of the contract amount. Should the Owner elect to require bonds, the cost shall be reimbursed by change order to the Contractor by the Owner.

   **D.** The Bidder shall deliver the required bonds to the Owner not later than three days following the date of execution of the Contract. If the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished and delivered in accordance with this paragraph.

   **E.** Should the Bidder refuse to enter into a Contract or fail to furnish such bonds, the amount of the bid security shall be forfeited to the Owner as liquidated damages, not as a penalty.

   **F.** The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either the Contract has been executed and bonds have been furnished or the specified time has elapsed so that the Bid may be withdrawn or all Bids have been rejected.

7. **MODIFICATIONS AND WITHDRAWAL OF BIDS**

   **A.** A Bidder may not modify, withdraw or cancel a Bid, for a period of sixty (60) days following the time and date designated for receipt of Bids, and by submitting a Bid each Bidder shall so agree.

   **B.** A Bidder may withdraw their Bid, either personally or by written request, at any time prior to the scheduled time for receipt of bids. A withdrawn Bid may be resubmitted up to the date and time designated for receipt of Bids.

   **C.** Prior to the time and date for receipt of Bids, a Bidder may modify a Bid by notice to the party receiving Bids, at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder. Written confirmation over the signature of the Bidder shall be received, and date and time stamped by the receiving party on or before the date and time set for receipt of Bids. A change shall be worded as not to reveal the amount of the original Bid.

8. **CONSIDERATION OF BIDS**

   **A.** The Owner reserves the right to reject any or all Bids submitted either in whole or part, to reject a bid not accompanied by the required Bid security or by other data required by the Bidding Documents or to reject a Bid which is any way incomplete or irregular and to waive informality and irregularity in the Bids and in the Bidding.

   **B.** The Owner reserves the right to accept alternates in any order or combination and to determine the low Bidder on the basis of the sum of the Base Bid and the alternates accepted.
C. The Owner reserves the right to negotiate with any Bidder without rebidding the project in whole or in part.

D. The Owner reserves the right to award the Contract to whom ever it may elect.

9. EXECUTION OF AGREEMENT

A. The successful Bidder will be required to execute AIA Standard Form of Agreement between Owner and Contractor for Construction Projects of Limited Scope, AIA Document A107-2007.

B. The Bidder to whom the Contract is awarded shall, within five (5) calendar days after notice of award and receipt of Agreement forms from the Owner, sign and deliver required copies to the Owner.

C. At or prior to delivery of the signed Agreement, the Bidder to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Owner.

D. The Owner shall approve Bonds and Certificates of Insurance before the successful Bidder may proceed with the Work. Failure or refusal to provide Bonds or Certificates of Insurance in a form satisfactory to the Owner shall subject the successful Bidder to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

10. INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING

A. Bidders shall study and compare the Bidding Documents with each other, shall examine the site and local conditions and if in doubt as to the true meaning of any part of the Bidding Documents, or finds discrepancies, inconsistencies, ambiguities or errors in or omissions from any part of the Bidding Documents, the Bidder may submit to the Architect a written request for interpretation thereof not later than seven days before bids will be opened. The person submitting the request shall be responsible for its prompt delivery.

B. Interpretation, connection or changes to the proposed Contract Documents will be made only by Addendum. Explanations, interpretations, corrections or changes of the Bidding Documents by any other method will not be binding.

11. ADDENDA

A. Addenda will be transmitted to all who are known by the Architect to have received a complete set of Bidding Documents.

B. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file.

C. Addenda will be issued no later than four (4) days prior to the date for receipt of Bids, except an Addendum withdrawing the request for Bids or one which postpones the date for receipt of Bids.

D. Each Bidder shall ascertain prior to submitting his bid that he has received all Addenda issued and shall acknowledge their receipt on the Bid Form.
12. **SUBSTITUTIONS**

A. No substitutions will be considered prior to receipt of Bids, unless a written request for approval has been received by the Architect at least ten (10) days prior to the date for receipt of Bids. Such request for substitutions shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, samples and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect’s decision of approval or disapproval of a proposed substitution shall be final.

B. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum.

C. No substitutions will be considered after Contract award unless specifically provided for in the Contract Documents.

13. **TAXES**

A. All Bids shall include all applicable taxes, including social security unemployment, and sales or use taxes, and any other taxes specifically levied on the work or on wages by local, city, state, or federal government, except real property taxes on the site. Bids shall also include all premiums, assessments, and other like payments, charges, and costs incidental to the work covered by the Bidding Documents.

14. **PERMITS AND FEES**

A. No building permits (local or State) are required.

15. **TIME OF COMPLETION**

A. The Bidder, if awarded the Contract, agrees to complete the Work on or before the Contract Completion Date stated in the Bid Form.

16. **EQUAL OPPORTUNITY**

A. The Contractor and the Contractor’s Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.

B. The Contractor and the Contractor’s Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin.
17. POST BID INFORMATION

A. Bidders to whom Contract award is under consideration shall submit to the Architect, upon request a properly executed AIA Document A305, Contractor's Qualification Statement unless such a Statement has been submitted as a prerequisite to the issuance of Bidding Documents.

A. The Bidder to whom award of Contract is under consideration shall, with 48 hours of notification, submit to the Architect, the following:

1. A designation of the Work to be performed with the Bidder's own forces.
2. Names of the proposed major subcontractors.
3. Names of manufacturers and products for principal systems, equipment and items of work.

END OF SECTION 00 2100
SECTION 00 4100 - BID FORM

OWNER: Ferndale Public Schools
Central Offices
Ferndale High School 3rd Floor, Room 326
871 Pinecrest Drive
Ferndale, Michigan

PROJECT: Ferndale Public Schools
Ferndale High School,
Early Childhood Center,
Ferndale Upper Elementary School,
Flooring and Ceilings
Ferndale, Michigan

ARCHITECT: Integrated Design Solutions, LLC
Architecture, Engineering, Interiors & Technology
1441 W. Long Lake Road, Suite 200
Troy, Michigan 48098
5211 Cascade Road, SE Suite 300
Grand Rapids, Michigan 49546
(248) 823-2100
(248) 823-2200 fax

NAME OF BIDDER: __________________________________________________________

ADDRESS: ________________________________________________________________

TELEPHONE: ________________________

FAX NO: ________________________

EMAIL: ________________________

BID

Pursuant to and in compliance with your Advertisement for Bids, Instructions to Bidders and other documents relating thereto, the undersigned proposes and agrees to furnish equipment, materials, and labor and perform all work necessary to complete the Contract for the Ferndale Public Schools, Ferndale High School, Early Childhood Center, Ferndale Upper Elementary School, Flooring and Ceilings Project in accordance with the Drawings and Specifications prepared by Integrated Design Solutions, LLC and agrees to accept payment as herein provided.

BASE BID

Lump sum bid for all work specified and shown on the Drawings as indicated for base bid

__________________________________________________________________________

Dollars ($_____________________________).

NOTE: The amount shall be shown in both words and figures. In case of a discrepancy, the amount shown in words shall govern.
ALTERNATES

The foregoing Base Bid may be increased or decreased by the amounts herein quoted for Alternates specified in Section 01 2300. The following alternate prices shall include all charges for labor, material, and equipment, bonds, overhead and profit, general conditions, supervision, insurance, taxes, and incidental expenses.

Alternate No. 1: _____________________________________________

Add _______________________________________________________ Dollars ($__________________).

UNIT PRICES

The Bidder proposes unit prices in accordance with the following schedule. Said unit prices shall include all charges for labor, materials and equipment, overhead and profit, general conditions, supervision, insurance, taxes and incidental expenses.

Said unit prices shall be applicable to the pricing of additions to, or deletions from, the work indicated in the Contract Documents.

Unit Price No. 1: Repair of concrete floor slabs with epoxy bonding agent and concrete patching material:

$_________________/cu. ft

Unit Price No. 2: Luxury Vinyl Tile including floor preparation and installation:

$_________________/sq. yd.

Unit Price No. 3: Carpet Tile including floor preparation and installation:

$_________________/sq. yd.

Unit Price No. 2: Sheet Carpet including floor preparation and installation:

$_________________/sq. yd.

TAXES

The Bidder shall include in his Bid and shall pay all applicable Federal, State and local taxes of whatever character and description.

BID SECURITY

Accompanying this Bid is a certified check, cashier's check, money order or bid bond (cross out those not applicable) made payable to Ferndale Public Schools in the amount of five percent (5%), of Base Bid, which shall be retained by the Owner as liquidated damages, if the undersigned fails to execute the contract within ten (10) days of award of the Contract.
PERFORMANCE BONDS AND LABOR AND MATERIAL PAYMENT BONDS

For Bids less than $50,000 include in the Base Bid the cost of a Performance Bond and a Labor and Material Payment Bond, covering the faithful performance of the Contract and payment of all obligations arising there under, each in the amount of one hundred percent (100%) of the contract amount.

For Bids over $50,000, indicate, in the space provided below, the cost of a Performance Bond and a Labor and Material Payment Bond covering the faithful performance of the Contract and payment of all obligations arising there under, each in the amount of one hundred percent (100%) of the contract amount. Should the Owner elect to require bonds, the cost shall be reimbursed by change order to the Contractor by the Owner.

Cost of Performance bond and Labor and Material Payment Bond (For Bids over $50,000): ___________________________ Dollars ($___________________).

ADDENDA

The undersigned acknowledges the receipt of the following addenda:

Addendum No. _____ Dated ________________ Addendum No. _____ Dated ________________

Addendum No. _____ Dated ________________ Addendum No. _____ Dated ________________

Addendum No. _____ Dated ________________ Addendum No. _____ Dated ________________

TIME OF COMPLETION

The undersigned agrees to substantially complete the Project by Friday, August 10, 2018. Bidders may start work on site June 18, 2018.

WITHDRAWAL OF BIDS

The undersigned agrees that his Bid shall not be withdrawn for a period of sixty (60) days after the date set for receipt of Bids.
SIGNATURE AND LEGAL STATUS OF BIDDER

Signed and sealed this ______________ day of __________________, 20___.

(Individual, Partnership, Corporation)

State of Incorporation

Affix Corporate Seal

By:

(Authorized Signature of Bidder)

(Print or Type Name of Bidder)

Title

Business Address

NOTE: Please submit one original and one copy of this form and retain one copy for your file

END OF BID FORM
SECTION 00 4500
FAMILIAL DISCLOSURE STATEMENT

1. The undersigned, the Owner or Authorized Officer of __________________________ (“the Bidder”), pursuant to the familial disclosure requirement provided in the Advertisement for Bids and Instructions to Bidders, hereby represent and warrant, except as provided below, that no familial relationships exist between the Bidder or any employee of the Ferndale Public Schools and any member of the Board of Education of the School District or the Superintendent of the School District.

2. List any Familial Relationships:

BIDDER

_______________________________
(Individual, Partnership or Corp.)

By_____________________________
(Authorized Signature of Bidder)

Its_____________________________
(Title)

State of Michigan )
County of ____________________________ )

This instrument was acknowledged before me on the ________ day of __________________________, 20___ by

_____________________________
Notary Public, ________________
County, Michigan

My commission expires ____________________

THIS FORM MUST ACCOMPANY THE BID.
FAILURE TO SUBMIT THIS FORM WITH THE BID WILL RESULT IN THE BID BEING DISQUALIFIED.
SECTION 00 4510 – SUPPLEMENT TO BID FORM
AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT

MICHIGAN PUBLIC ACT NO. 517 OF 2012

The undersigned, the owner or authorized officer of ________________________ (the “Bidder”), pursuant to the compliance certification requirement provided in the Ferndale Public Schools (the “School District”) Advertisement for Bids, hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an “Iran Linked Business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Bidder is awarded a Contract as a result of the aforementioned Advertisement for Bids, the Bidder will not become an “Iran Linked Business” at any time during the course of performing under the Contract.

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than $250,000.00 or 2 times the amount of the Contract or proposed Contract for which the false certification was made, whichever is greater, the cost of the School District’s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on an Advertisement for Bids for three (3) years from the date that it is determined that the person has submitted the false certification.

BIDDER:

________________________________________
Name of Bidder

By: ______________________________________

Its: ______________________________________

STATE OF MICHIGAN )
COUNTY OF ______________ ) ss.

This instrument was acknowledged before me on the _____ day of ____________, 20____, by _____________________________.

________________________________________
, Notary Public

___________ County, Michigan
My Commission Expires: _____________
Acting in the County of: _____________

END OF SUPPLEMENT TO BID FORM 00 4510
AGREEMENT made as of the ______ day of ______ in the year ______
(In words, indicate day, month and year)

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

and the Contractor:
(Name, address and other information)

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

The Architect:
(Name, address and other information)

The Owner and Contractor agree as follows.
TABLE OF ARTICLES

1  THE WORK OF THIS CONTRACT
2  DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
3  CONTRACT SUM
4  PAYMENT
5  DISPUTE RESOLUTION
6  ENUMERATION OF CONTRACT DOCUMENTS
7  GENERAL PROVISIONS
8  OWNER
9  CONTRACTOR
10 ARCHITECT
11 SUBCONTRACTORS
12 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
13 CHANGES IN THE WORK
14 TIME
15 PAYMENTS AND COMPLETION
16 PROTECTION OF PERSONS AND PROPERTY
17 INSURANCE & BONDS
18 CORRECTION OF WORK
19 MISCELLANEOUS PROVISIONS
20 TERMINATION OF THE CONTRACT
21 CLAIMS AND DISPUTES

ARTICLE 1   THE WORK OF THIS CONTRACT
The Contractor shall execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others.

ARTICLE 2   DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
§ 2.1 The date of commencement of the Work shall be the date of this Agreement unless a different date is stated below or provision is made for the date to be fixed in a notice to proceed issued by the Owner.
(Insert the date of commencement, if it differs from the date of this Agreement or, if applicable, state that the date will be fixed in a notice to proceed.)

§ 2.2 The Contract Time shall be measured from the date of commencement.
§ 2.3 The Contractor shall achieve Substantial Completion of the entire Work not later than [ ] ( [ ] ) days from the date of commencement, or as follows:
(Insert number of calendar days. Alternatively, a calendar date may be used when coordinated with the date of commencement. If appropriate, insert requirements for earlier Substantial Completion of certain portions of the Work.)

, subject to adjustments of this Contract Time as provided in the Contract Documents.
(Insert provisions, if any, for liquidated damages relating to failure to achieve Substantial Completion on time or for bonus payments for early completion of the Work.)

ARTICLE 3   CONTRACT SUM
§ 3.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor’s performance of the Contract. The Contract Sum shall be one of the following:
(Check the appropriate box.)

[ ] Stipulated Sum, in accordance with Section 3.2 below

[ ] Cost of the Work plus the Contractor’s Fee, in accordance with Section 3.3 below

[ ] Cost of the Work plus the Contractor’s Fee with a Guaranteed Maximum Price, in accordance with Section 3.4 below

(Based on the selection above, complete Section 3.2, 3.3 or 3.4 below.)

§ 3.2 The Stipulated Sum shall be [ ] ($ [ ] ), subject to additions and deletions as provided in the Contract Documents.

§ 3.2.1 The Stipulated Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:
(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

§ 3.2.2 Unit prices, if any:
(Identify and state the unit price, and state the quantity limitations, if any, to which the unit price will be applicable.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Units and Limitations</th>
<th>Price Per Unit</th>
</tr>
</thead>
</table>

§ 3.2.3 Allowances included in the stipulated sum, if any:
(Identify allowance and state exclusions, if any, from the allowance price.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Allowance</th>
</tr>
</thead>
</table>

§ 3.3 COST OF THE WORK PLUS CONTRACTOR’S FEE
§ 3.3.1 The Cost of the Work is as defined in Exhibit A, Determination of the Cost of the Work.

§ 3.3.2 The Contractor’s Fee:

3
§ 3.4 COST OF THE WORK PLUS CONTRACTOR’S FEE WITH A GUARANTEED MAXIMUM PRICE
§ 3.4.1 The Cost of the Work is as defined in Exhibit A, Determination of the Cost of the Work.

§ 3.4.2 The Contractor’s Fee:
(State a lump sum, percentage of Cost of the Work or other provision for determining the Contractor’s Fee and the method of adjustment to the Fee for changes in the Work.)

§ 3.4.3 GUARANTEED MAXIMUM PRICE
§ 3.4.3.1 The sum of the Cost of the Work and the Contractor’s Fee is guaranteed by the Contractor not to exceed ($ ), subject to additions and deductions by changes in the Work as provided in the Contract Documents. Such maximum sum is referred to in the Contract Documents as the Guaranteed Maximum Price. Costs which would cause the Guaranteed Maximum Price to be exceeded shall be paid by the Contractor without reimbursement by the Owner.
(Insert specific provisions if the Contractor is to participate in any savings.)

§ 3.4.3.2 The Guaranteed Maximum Price is based on the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

§ 3.4.3.3 Unit Prices, if any:
(Identify and state the unit price, and state the quantity limitations, if any, to which the unit price will be applicable.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Units and Limitations</th>
<th>Price Per Unit</th>
</tr>
</thead>
</table>

§ 3.4.3.4 Allowances included in the Guaranteed Maximum Price, if any:
(Identify and state the amounts of any allowances, and state whether they include labor, materials, or both.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Allowance</th>
</tr>
</thead>
</table>

§ 3.4.3.5 Assumptions, if any, on which the Guaranteed Maximum Price is based:

ARTICLE 4 PAYMENTS
§ 4.1 PROGRESS PAYMENTS
§ 4.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

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

§ 4.1.3 Provided that an Application for Payment is received by the Architect not later than the day of a month, the Owner shall make payment of the certified amount to the Contractor not later than the day of the same
§ 4.1.4 Retainage, if any, shall be withheld as follows:

§ 4.1.5 Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate stated below, or in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

(Insert rate of interest agreed upon, if any.)

per annum

§ 4.2 FINAL PAYMENT

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

.1 the Contractor has fully performed the Contract except for the Contractor’s responsibility to correct Work as provided in Section 18.2, and to satisfy other requirements, if any, which extend beyond final payment;

.2 the Contractor has submitted a final accounting for the Cost of the Work, where payment is on the basis of the Cost of the Work with or without a guaranteed maximum price; and

.3 a final Certificate for Payment has been issued by the Architect.

§ 4.2.2 The Owner’s final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect’s final Certificate for Payment, or as follows:

ARTICLE 5 DISPUTE RESOLUTION

§ 5.1 BINDING DISPUTE RESOLUTION

For any claim subject to, but not resolved by, mediation pursuant to Section 21.3, the method of binding dispute resolution shall be as follows:

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

[ ] Arbitration pursuant to Section 21.4 of this Agreement

[ ] Litigation in a court of competent jurisdiction

[ ] Other (Specify)

ARTICLE 6 ENUMERATION OF CONTRACT DOCUMENTS

§ 6.1 The Contract Documents are defined in Article 7 and, except for Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 6.1.1 The Agreement is this executed AIA Document A107–2007, Standard Form of Agreement Between Owner and Contractor for a Project of Limited Scope.

§ 6.1.2 The Supplementary and other Conditions of the Contract:
§ 6.1.3 The Specifications:
(Either list the Specifications here or refer to an exhibit attached to this Agreement.)

Title of Specifications exhibit:

§ 6.1.4 The Drawings:
(Either list the Drawings here or refer to an exhibit attached to this Agreement.)

Title of Drawings exhibit:

§ 6.1.5 The Addenda, if any:

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Pages</th>
</tr>
</thead>
</table>

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are enumerated in this Article 6.

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

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

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

ARTICLE 7 GENERAL PROVISIONS

§ 7.1 THE CONTRACT DOCUMENTS

The Contract Documents are enumerated in Article 6 and consist of this Agreement (including, if applicable, Supplementary and other Conditions of the Contract), Drawings, Specifications, Addenda issued prior to the execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 7.2 THE CONTRACT

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

§ 7.3 THE WORK

The term “Work” means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor’s obligations. The Work may constitute the whole or a part of the Project.

§ 7.4 INSTRUMENTS OF SERVICE

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect’s consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.
§ 7.5 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER INSTRUMENTS OF SERVICE

§ 7.5.1 The Architect and the Architect’s consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Architect’s or Architect’s consultants’ reserved rights.

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

§ 7.6 TRANSMISSION OF DATA IN DIGITAL FORM

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmission, unless otherwise provided in the Agreement or in the Contract Documents.

ARTICLE 8   OWNER

§ 8.1 INFORMATION AND SERVICES REQUIRED OF THE OWNER

§ 8.1.1 The Owner shall furnish all necessary surveys and a legal description of the site.

§ 8.1.2 The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 8.1.3 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 9.6.1, the Owner shall secure and pay for other necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 8.2 OWNER’S RIGHT TO STOP THE WORK

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

§ 8.3 OWNER’S RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, and fails within a ten-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner, without prejudice to any other remedy the Owner may have, may correct such deficiencies and may deduct the reasonable cost thereof, including Owner’s expenses and compensation for the Architect’s services made necessary thereby, from the payment then or thereafter due the Contractor.

ARTICLE 9   CONTRACTOR

§ 9.1 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

§ 9.1.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed and correlated personal observations with requirements of the Contract Documents.

§ 9.1.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 8.1.1, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the
purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Architect any errors, inconsistencies, or omissions discovered by or made known to the Contractor as a request for information in such form as the Architect may require. It is recognized that the Contractor’s review is made in the Contractor’s capacity as a contractor and not as a licensed design professional unless otherwise specifically provided in the Contract Documents.

§ 9.1.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Architect any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Architect may require.

§ 9.2 SUPERVISION AND CONSTRUCTION PROCEDURES
§ 9.2.1 The Contractor shall supervise and direct the Work, using the Contractor’s best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters.

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

§ 9.3 LABOR AND MATERIALS
§ 9.3.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 9.3.2 The Contractor shall enforce strict discipline and good order among the Contractor’s employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.

§ 9.3.3 The Contractor may make a substitution only with the consent of the Owner, after evaluation by the Architect and in accordance with a Modification.

§ 9.4 WARRANTY
The Contractor warrants to the Owner and Architect that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor’s warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation or normal wear and tear under normal usage.

§ 9.5 TAXES
The Contractor shall pay sales, consumer, use and other similar taxes that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

§ 9.6 PERMITS, FEES, NOTICES, AND COMPLIANCE WITH LAWS
§ 9.6.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit as well as other permits, fees, licenses and inspections by government agencies necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

§ 9.6.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work. If the Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction.
§ 9.7 ALLOWANCES
The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. The Owner shall select materials and equipment under allowances with reasonable promptness. Allowance amounts shall include the costs to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts. Allowance amounts shall not include the Contractor’s costs for unloading and handling at the site, labor, installation, overhead, and profit.

§ 9.8 CONTRACTOR’S CONSTRUCTION SCHEDULES
§ 9.8.1 The Contractor, promptly after being awarded the Contract, shall prepare and submit for the Owner’s and Architect’s information a Contractor’s construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work.

§ 9.8.2 The Contractor shall perform the Work in general accordance with the most recent schedule submitted to the Owner and Architect.

§ 9.9 SUBMITTALS
§ 9.9.1 The Contractor shall review for compliance with the Contract Documents and submit to the Architect Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in coordination with the Contractor’s construction schedule and in such sequence as to allow the Architect reasonable time for review. By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has (1) reviewed and approved them; (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so; and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. The Work shall be in accordance with approved submittals.

§ 9.9.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents.

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

§ 9.11 CUTTING AND PATCHING
The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.

§ 9.12 CLEANING UP
The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor’s tools, construction equipment, machinery and surplus material from and about the Project.

§ 9.13 ROYALTIES, PATENTS AND COPYRIGHTS
The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner and Architect harmless from loss on account thereof, but shall not be responsible for such defense or loss when a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents or where the copyright violations are contained in Drawings, Specifications or other documents prepared by the Owner or Architect. However, if the Contractor has reason to believe that the required design, process or product is an infringement of a copyright or a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Architect.

§ 9.14 ACCESS TO WORK
The Contractor shall provide the Owner and Architect access to the Work in preparation and progress wherever located.
§ 9.15 INDEMNIFICATION
§ 9.15.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect’s consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys’ fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 9.15.1.

§ 9.15.2 In claims against any person or entity indemnified under this Section 9.15 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 9.15.1 shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or Subcontractor under workers’ compensation acts, disability benefit acts or other employee benefit acts.

ARTICLE 10 ARCHITECT
§ 10.1 The Architect will provide administration of the Contract and will be an Owner’s representative during construction, until the date the Architect issues the final Certificate for Payment. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified in writing in accordance with other provisions of the Contract.

§ 10.2 The Architect will visit the site at intervals appropriate to the stage of the construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor’s rights and responsibilities under the Contract Documents.

§ 10.3 On the basis of the site visits, the Architect will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. The Architect will not be responsible for the Contractor’s failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 10.4 Based on the Architect’s evaluations of the Work and of the Contractor’s Applications for Payment, the Architect will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 10.5 The Architect has authority to reject Work that does not conform to the Contract Documents and to require inspection or testing of the Work.

§ 10.6 The Architect will review and approve or take other appropriate action upon the Contractor’s submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 10.7 The Architect will interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the Owner or Contractor. The Architect will make initial decisions on all claims, disputes and other matters in question between the Owner and Contractor but will not be liable for results of any interpretations or decisions rendered in good faith.
§ 10.8 The Architect’s decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

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

ARTICLE 11 SUBCONTRACTORS
§ 11.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site.

§ 11.2 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Architect the names of the Subcontractors or suppliers for each of the principal portions of the Work. The Contractor shall not contract with any Subcontractor or supplier to whom the Owner or Architect has made reasonable written objection within ten days after receipt of the Contractor’s list of Subcontractors and suppliers. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor’s Work. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.

§ 11.3 Contracts between the Contractor and Subcontractors shall (1) require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor’s Work, which the Contractor, by the Contract Documents, assumes toward the Owner and Architect, and (2) allow the Subcontractor the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Contract Documents, has against the Owner.

ARTICLE 12 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS
§ 12.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner’s own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site under conditions of the contract identical or substantially similar to these, including those portions related to insurance and waiver of subrogation. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, the Contractor shall make such claim as provided in Article 21.

§ 12.2 The Contractor shall afford the Owner and separate contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor’s activities with theirs as required by the Contract Documents.

§ 12.3 The Owner shall be reimbursed by the Contractor for costs incurred by the Owner which are payable to a separate contractor because of delays, improperly timed activities or defective construction of the Contractor. The Owner shall be responsible to the Contractor for costs incurred by the Contractor because of delays, improperly timed activities, damage to the Work or defective construction of a separate contractor.

ARTICLE 13 CHANGES IN THE WORK
§ 13.1 By appropriate Modification, changes in the Work may be accomplished after execution of the Contract. The Owner, without invalidating the Contract, may order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, with the Contract Sum and Contract Time being adjusted accordingly. Such changes in the Work shall be authorized by written Change Order signed by the Owner, Contractor and Architect, or by written Construction Change Directive signed by the Owner and Architect.

§ 13.2 Adjustments in the Contract Sum and Contract Time resulting from a change in the Work shall be determined by mutual agreement of the parties or, in the case of a Construction Change Directive signed only by the Owner and Architect, by the Contractor’s cost of labor, material, equipment, and reasonable overhead and profit, unless the parties agree on another method for determining the cost or credit. Pending final determination of the total cost of a Construction Change Directive, the Contractor may request payment for Work completed pursuant to the Construction Change Directive. The Architect will make an interim determination of the amount of payment due for purposes of certifying the Contractor’s monthly Application for Payment. When the Owner and Contractor agree on
adjustments to the Contract Sum and Contract Time arising from a Construction Change Directive, the Architect will prepare a Change Order.

§ 13.3 The Architect will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

§ 13.4 If concealed or unknown physical conditions are encountered at the site that differ materially from those indicated in the Contract Documents or from those conditions ordinarily found to exist, the Contract Sum and Contract Time shall be equitably adjusted as mutually agreed between the Owner and Contractor, provided that the Contractor provides notice to the Owner and Architect promptly and before conditions are disturbed.

ARTICLE 14 TIME
§ 14.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

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

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

§ 14.4 The date of Substantial Completion is the date certified by the Architect in accordance with Section 15.4.3.

§ 14.5 If the Contractor is delayed at any time in the commencement or progress of the Work by changes ordered in the Work, by labor disputes, fire, unusual delay in deliveries, abnormal adverse weather conditions not reasonably anticipatable, unavoidable casualties or any causes beyond the Contractor’s control, or by other causes which the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine, subject to the provisions of Article 21.

ARTICLE 15 PAYMENTS AND COMPLETION
§ 15.1 APPLICATIONS FOR PAYMENT
§ 15.1.1 Where the Contract is based on a Stipulated Sum or the Cost of the Work with a Guaranteed Maximum Price, the Contractor shall submit to the Architect, before the first Application for Payment, a schedule of values, allocating the entire Contract Sum to the various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used in reviewing the Contractor’s Applications for Payment.

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

§ 15.1.3 Payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored, and protected from damage, off the site at a location agreed upon in writing.

§ 15.1.4 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor’s knowledge, information and belief, be free and clear of liens, claims, security interests or other encumbrances adverse to the Owner’s interests.
§ 15.2 CERTIFICATES FOR PAYMENT

§ 15.2.1 The Architect will, within seven days after receipt of the Contractor’s Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Architect determines is properly due, or notify the Contractor and Owner in writing of the Architect’s reasons for withholding certification in whole or in part as provided in Section 15.2.3.

§ 15.2.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on the Architect’s evaluations of the Work and the data comprising the Application for Payment, that, to the best of the Architect’s knowledge, information and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion and to specific qualifications expressed by the Architect. The issuance of a Certificate for Payment will further constitute a representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Owner to substantiate the Contractor’s right to payment, or (4) made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 15.2.3 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect’s opinion the representations to the Owner required by Section 15.2.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 15.2.1. If the Contractor and the Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect’s opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 9.2.2, because of

1. defective Work not remedied;
2. third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to the Owner is provided by the Contractor;
3. failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
4. reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
5. damage to the Owner or a separate contractor;
6. reasonable evidence that the Work will not be completed within the Contract Time and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
7. repeated failure to carry out the Work in accordance with the Contract Documents.

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

§ 15.3 PROGRESS PAYMENTS

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

§ 15.3.2 Neither the Owner nor Architect shall have an obligation to pay or see to the payment of money to a Subcontractor except as may otherwise be required by law.

§ 15.3.3 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
§ 15.4 SUBSTANTIAL COMPLETION

§ 15.4.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

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

§ 15.4.3 Upon receipt of the Contractor’s list, the Architect will make an inspection to determine whether the Work or designated portion thereof is substantially complete. When the Architect determines that the Work or designated portion thereof is substantially complete, the Architect will issue a Certificate of Substantial Completion which shall establish the date of Substantial Completion, establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 15.4.4 The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate. Upon such acceptance and consent of surety, if any, the Owner shall make payment of retainerage applying to such Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 15.5 FINAL COMPLETION AND FINAL PAYMENT

§ 15.5.1 Upon receipt of the Contractor’s written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect will promptly issue a final Certificate for Payment stating that to the best of the Architect’s knowledge, information and belief, and on the basis of the Architect’s on-site visits and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Certificate is due and payable. The Architect’s final Certificate for Payment will constitute a further representation that conditions stated in Section 15.5.2 as precedent to the Contractor’s being entitled to final payment have been fulfilled.

§ 15.5.2 Final payment shall not become due until the Contractor has delivered to the Owner a complete release of all liens arising out of this Contract or receipts in full covering all labor, materials and equipment for which a lien could be filed, or a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including costs and reasonable attorneys’ fees.

§ 15.5.3 The making of final payment shall constitute a waiver of claims by the Owner except those arising from

.1 liens, claims, security interests or encumbrances arising out of the Contract and unsettled;
.2 failure of the Work to comply with the requirements of the Contract Documents; or
.3 terms of special warranties required by the Contract Documents.

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

ARTICLE 16 PROTECTION OF PERSONS AND PROPERTY

§ 16.1 SAFETY PRECAUTIONS AND PROGRAMS

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract. The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to

.1 employees on the Work and other persons who may be affected thereby;
.2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor’s Subcontractors or Sub-subcontractors; and

.3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons and property and their protection from damage, injury or loss. The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, a Subcontractor, a sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 16.1.2 and 16.1.3, except for damage or loss attributable to acts or omissions of the Owner or Architect or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor’s obligations under Section 9.15.

§ 16.2 HAZARDOUS MATERIALS

§ 16.2.1 The Contractor is responsible for compliance with the requirements of the Contract Documents regarding hazardous materials. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents, and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and report the condition to the Owner and Architect in writing. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased in the amount of the Contractor’s reasonable additional costs of shutdown, delay and start-up.

§ 16.2.2 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect’s consultants and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys’ fees, arising out of or resulting from performance of the Work in the affected area, if in fact, the material or substance presents the risk of bodily injury or death as described in Section 16.2.1 and has not been rendered harmless, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss or expense is due to the fault or negligence of the party seeking indemnity.

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

ARTICLE 17  INSURANCE AND BONDS

§ 17.1 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, insurance for protection from claims under workers’ compensation acts and other employee benefit acts which are applicable, claims for damages because of bodily injury, including death, and claims for damages, other than to the Work itself, to property which may arise out of or result from the Contractor’s operations and completed operations under the Contract, whether such operations be by the Contractor or by a Subcontractor or anyone directly or indirectly employed by any of them. This insurance shall be written for not less than limits of liability specified in the Contract Documents or required by law, whichever coverage is greater, and shall include contractual liability insurance applicable to the Contractor’s obligations under Section 9.15. Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. Each policy shall contain a provision that the policy will not be canceled or allowed to expire until at least 30 days’ prior written notice has been given to the Owner. The Contractor shall cause the commercial liability coverage required by the Contract Documents to include: (1) the Owner, the Architect and the Architect’s Consultants as additional insureds for claims caused in whole or in part by the Contractor’s negligent acts or omissions during the Contractor’s operations; and (2) the Owner as an additional insured for claims caused in whole or in part by the Contractor’s negligent acts or omissions during the Contractor’s completed operations.
§ 17.2 OWNER’S LIABILITY INSURANCE
The Owner shall be responsible for purchasing and maintaining the Owner’s usual liability insurance.

§ 17.3 PROPERTY INSURANCE
§ 17.3.1 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 on an “all-risk” or equivalent policy form, including builder’s risk, in the amount of the initial Contract Sum, plus the value of subsequent modifications and cost of materials supplied and installed by others, comprising total value for the entire Project at the site on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in Section 15.5 or until no person or entity other than the Owner has an insurable interest in the property required by this Section 17.3.1 to be covered, whichever is later. This insurance shall include interests of the Owner, the Contractor, Subcontractors and sub-subcontractors in the Project.

§ 17.3.2 The Owner shall file a copy of each policy with the Contractor before an exposure to loss may occur. Each policy shall contain a provision that the policy will not be canceled or allowed to expire, and that its limits will not be reduced, until at least 30 days’ prior written notice has been given to the Contractor.

§ 17.3.3 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 12, if any, and any of their subcontractors, sub-subcontractors, agents and employees for damages caused by fire or other causes of loss to the extent covered by property insurance obtained pursuant to Section 17.3 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 12, if any, and the subcontractors, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

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

§ 17.4 PERFORMANCE BOND AND PAYMENT BOND
§ 17.4.1 The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

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

ARTICLE 18 CORRECTION OF WORK
§ 18.1 The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether discovered before or after Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Architect’s services and expenses made necessary thereby, shall be at the Contractor’s expense, unless compensable under Section A.2.7.3 in Exhibit A, Determination of the Cost of the Work.

§ 18.2 In addition to the Contractor’s obligations under Section 9.4, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established
under Section 15.4.3, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor and to make a claim for breach of warranty.

§ 18.3 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Section 8.3.

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

§ 18.5 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Article 18.

ARTICLE 19 MISCELLANEOUS PROVISIONS

§ 19.1 ASSIGNMENT OF CONTRACT

Neither party to the Contract shall assign the Contract without written consent of the other, except that the Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project if the lender assumes the Owner’s rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate such assignment.

§ 19.2 GOVERNING LAW

The Contract shall be governed by the law of the place where the Project is located, except that if the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 21.4.

§ 19.3 TESTS AND INSPECTIONS

Tests, inspections and approvals of portions of the Work required by the Contract Documents or by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The Contractor shall give the Architect timely notice of when and where tests and inspections are to be made so that the Architect may be present for such procedures. The Owner shall bear costs of (1) tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded, and (2) tests, inspections or approvals where building codes or applicable laws or regulations prohibit the Owner from delegating the costs to the Contractor.

§ 19.4 COMMENCEMENT OF STATUTORY LIMITATION PERIOD

The Owner and Contractor shall commence all claims and causes of action, whether in contract, tort, breach of warranty or otherwise, against the other arising out of or related to the Contract in accordance with the requirements of the final dispute resolution method selected in the Agreement within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all claims and causes of action not commenced in accordance with this Section 19.4.

ARTICLE 20 TERMINATION OF THE CONTRACT

§ 20.1 TERMINATION BY THE CONTRACTOR

If the Architect fails to certify payment as provided in Section 15.2.1 for a period of 30 days through no fault of the Contractor, or if the Owner fails to make payment as provided in Section 4.1.3 for a period of 30 days, the Contractor may, upon seven additional days’ written notice to the Owner and the Architect, terminate the Contract and recover from the Owner payment for Work executed, including reasonable overhead and profit, costs incurred by reason of such termination, and damages.

§ 20.2 TERMINATION BY THE OWNER FOR CAUSE

§ 20.2.1 The Owner may terminate the Contract if the Contractor
.1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
.2 fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
.3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of a public authority; or
.4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 20.2.2 When any of the above reasons exists, the Owner, upon certification by the Architect that sufficient cause exists to justify such action, may, without prejudice to any other remedy the Owner may have and after giving the Contractor seven days’ written notice, terminate the Contract and take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever reasonable method the Owner may deem expedient. Upon request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 20.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 20.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 20.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect’s services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, shall be certified by the Architect, upon application, and this obligation for payment shall survive termination of the Contract.

§ 20.3 TERMINATION BY THE OWNER FOR CONVENIENCE
The Owner may, at any time, terminate the Contract for the Owner’s convenience and without cause. The Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination, along with reasonable overhead and profit on the Work not executed.

ARTICLE 21   CLAIMS AND DISPUTES
§ 21.1 Claims, disputes and other matters in question arising out of or relating to this Contract, including those alleging an error or omission by the Architect but excluding those arising under Section 16.2, shall be referred initially to the Architect for decision. Such matters, except those waived as provided for in Section 21.8 and Sections 15.5.3 and 15.5.4, shall, after initial decision by the Architect or 30 days after submission of the matter to the Architect, be subject to mediation as a condition precedent to binding dispute resolution.

§ 21.2 If a claim, dispute or other matter in question relates to or is the subject of a mechanic’s lien, the party asserting such matter may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 21.3 The parties shall endeavor to resolve their disputes by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with their Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the mediation. The request may be made concurrently with the binding dispute resolution but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 21.4 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any claim, subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association, in accordance with the Construction Industry Arbitration Rules in effect on the date of this Agreement. Demand for arbitration shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.
§ 21.5 Either party, at its sole discretion, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 21.6 Any party to an arbitration may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of a Claim not described in the written Consent.

§ 21.7 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 21.8 CLAIMS FOR CONSEQUENTIAL DAMAGES
The Contractor and Owner waive claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

.1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

.2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party’s termination in accordance with Article 20. Nothing contained in this Section 21.8 shall be deemed to preclude an award of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

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

OWNER (Signature)                          CONTRACTOR (Signature)

(Printed name and title)                         (Printed name and title)
SECTION 00 7300 - SUPPLEMENTARY CONDITIONS AND ADDITIONAL CONDITIONS

PROJECT: Ferndale Public Schools
Ferndale High School, Early Childhood Center,
Ferndale Upper Elementary School
Flooring and Ceilings
Ferndale, Michigan

OWNER: Ferndale Public Schools
Central Offices
Ferndale High School, 3rd Floor
871 Pinecrest
Ferndale, Michigan 48220

ARCHITECT: Integrated Design Solutions, LLC
1441 W. Long Lake Road, Suite 200
Troy, MI 48098
5211 Cascade Road, SE, Suite 300
Grand Rapids, Michigan 49546
(248) 823-2100
(248) 823-2200 (Fax)

THE FOLLOWING SUPPLEMENTS MODIFY AIA DOCUMENT A107-2007, "STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION PROJECTS OF LIMITED SCOPE". WHERE A PORTION OF THE GENERAL CONDITIONS IS MODIFIED OR DELETED BY THESE SUPPLEMENTARY CONDITIONS, THE UNALTERED PORTIONS OF THE GENERAL CONDITIONS SHALL REMAIN IN EFFECT.

EXPLANATION OF NUMBERING: Article 22 shall constitute revisions and additions to and follow the same format of the General Conditions.

ARTICLE 22

OTHER CONDITIONS OR PROVISIONS

22.1 Add new subparagraph 7.1.1 as follows:

7.1.1 In the case of conflicts or discrepancies between Drawings and the Specifications or within or among the Contract Documents and not clarified by Addendum, the Architect will determine which takes precedence in accordance with Sections 10.7, 10.7.1 and 10.8.

22.2 Add new subparagraph 7.5.3 as follows:

7.5.3 The Contractor will be responsible for printing and distributing copies of Drawings and Project Manuals for execution of the Work.

22.3 Delete subparagraph 8.1.1 in its entirety.

22.4 Delete subparagraph 9.9.1 and add the following in its place:

9.9.1 The Contractor shall review for compliance with the Contract Documents, approve in writing and submit to the Architect all Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents in coordination with the Contractor’s construction schedule and in such sequence as to allow the Architect reasonable time for review. By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents to the Owner and Architect that the Contractor has 1)
reviewed and approved them; 2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so; and 3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. At the time of submission, the Contractor shall inform the Architect in writing of any deviation in the Shop Drawings, Product Data and Samples from the requirements of the Contract Documents. Submittals which are not marked as reviewed for compliance with the Contract Documents and approved by the Contractor may be returned by the Architect without action. The Work shall be in accordance with approved submittals.

22.5 Add new subparagraph 10.7.1 as follows:

10.7.1 Interpretations and decisions of the Architect will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of Drawings. When making such interpretations and decisions, the Architect will endeavor to secure faithful performance by both the Owner and Contractor, will not show partiality to either and will not be liable for results of interpretations or decisions rendered in good faith.

22.6 Delete subparagraph 13.2 and add the following in its place:

13.2 The cost or credit to the Owner resulting from a change in the work shall be determined by mutual agreement, by an acceptable estimate and lump sum proposal by the Contractor, by actual cost of all labor and materials and a percentage or fixed fee for all other changes, such as overhead, profit, insurance, taxes and bonds or in the case of a Construction Change Directive signed only by the Owner and Architect, by the Contractor’s cost of labor, material, equipment and reasonable overhead and profit. On any change which involves a net credit to the Owner, no allowance for overhead and profit shall be figured.

13.2.1 If none of the foregoing methods is agreed upon, the Contractor, upon receipt of an order as hereinbefore stated, shall proceed with the work. In such case the Contractor shall keep and present in such form as the Owner may direct, a correct account of the cost, together with vouchers. In any case, the Owner shall certify to the amount including the specified allowance for overhead and profit, due the Contractor.

13.2.2 The combined overhead and profit included in the total cost to the Owner for a change in the Work shall be based on the following schedule.

.1 For the Contractor, for Work performed by the Contractor’s own forces 15 percent of the cost.
.2 For the contractor, for Work performed by the Contractor’s Subcontractors 7-1/2 percent the amount due the Subcontractors.
.3 For each Subcontractor involved, for Work performed by that Subcontractor’s own forced, 15 percent of the cost.
.4 For each Subcontractor involved, for work performed by the Subcontractor’s, Sub-subcontractor’s 7-1/2 percent of the amount due the Sub-subcontractor.
.5 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials, and Subcontracts. In no case will a change be approved without such itemization.

22.7 Add the following to the end of subparagraph 15.1.1

"The form of Application for Payment shall be a notarized AIA Document G702, Application and Certification for Payment, supported by AIA Document G703, Continuation Sheet."

.1 Until final completion, the Owner will pay ninety (90) percent of the amount due the Contractor on account of progress payments. Upon final completion, the Architect will certify payment in full.

22.8 Delete subparagraph 15.1.2 in its entirety.
22.9 Modifications to subparagraph 17.1.
To the end of this subparagraph add the following:

"17.1.1 The insurance required by Subparagraph 17.1 shall be written for not less than the following limits, or greater if required by law:

1. Worker's Compensation:
   a. State: Statutory
   b. Applicable Federal (e.g. Longshoremen's): Statutory
   c. Employer's Liability:
      1. Worker's Compensation:
         a. State: Statutory
         b. Applicable Federal (e.g. Longshoremen's): Statutory
         c. Employer's Liability: $1,000,000.00 per Accident
            $1,000,000.00 Disease, Policy Limit
            $1,000,000.00 Disease, Each Employee
   2. Comprehensive or Commercial General Liability (including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage):
      a. Bodily Injury:
         $1,000,000.00 Each Occurrence
         $1,000,000.00 Aggregate
      b. Property Damage:
         $1,000,000.00 Each Occurrence
         $1,000,000.00 Aggregate
      c. Products and Completed Operations to be maintained for one (1) year after final payment:
         $1,000,000.00 Aggregate
      d. Broad Form Property Damage Coverage shall include Completed Operations.
   3. Contractual Liability:
      a. Bodily Injury:
         $1,000,000.00 Each Occurrence
         $1,000,000.00 Aggregate
      b. Property Damage:
         $1,000,000.00 Each Occurrence
         $1,000,000.00 Aggregate
   4. Personal Injury, with Employment Exclusion deleted:
      $1,000,000.00 Aggregate
   5. Business Auto Liability (including owned, non-owned and hired vehicles):
      a. Bodily Injury:
         $1,000,000.00 Each Person
         $1,000,000.00 Each Occurrence
      b. Property Damage:
         $1,000,000.00 Each Occurrence

SUPPLEMENTARY CONDITIONS AND ADDITIONAL CONDITIONS
00 7300 - 3
6. Umbrella Excess Liability
   (Bodily Injury and Property Damage Combined) $1,000,000.00

"17.1.2" Liability Insurance shall include all major divisions of coverage and be on a comprehensive basis including:

1. Premises Operations (including X, C, and U coverages as applicable).
2. Independent Contractor's Protective.
5. Owned, non-owned and hired motor vehicles.
6. Broad Form Property Damage including Completed Operations.

17.1.3 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Subparagraph 9.10.2.

22.10 Delete subparagraph 17.4.1 and add the following in its place.

"17.4.1 The Owner shall have the right, prior to the signing of the Contract, to require the Contractor to furnish good and satisfactory bonds covering the faithful performance of the Contract, and the payment of all obligations arising thereunder, in such form as the Owner may prescribe and with such sureties as the Owner may approve. If such bonds are required by instructions given previous to the submission of bids, the premium shall be paid by the Contractor; if subsequent thereto, it shall be paid by the Owner.

"17.4.1 The Contractor shall furnish a Performance Bond and a Labor and Material Payment Bond covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds shall be obtained from a company licensed to do business in the State of Michigan and the cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to 100 percent of the Contract Sum.

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

22.11 Add the following after subparagraph 20.3.

"20.3.1 Upon receipt of written note from the Owner of such termination for the Owner's convenience, the Contractor shall:

1. Cease operations as directed by the Owner in the notice;
2. Take actions necessary, or that the Owner may direct, for the protection and preservation of the work; and
3. Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing Subcontracts and purchase orders and enter into no further Subcontracts and purchase orders.
22.12 EQUAL OPPORTUNITY

22.12.1. The Contractor shall maintain policies of employment as follows:

22.12.2. The Contractor and the Contractor's Subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The Contractor shall take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination.

22.12.3. The Contractor and the Contractor's Subcontractors shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin.

END OF SECTION 00 7300
SECTION 01 1000 – GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Project Identification.
2. Summary of Work.
3. Work Restrictions.
5. Payment Procedures.
6. Project Management and Coordination.
7. Submittal Procedures.
8. References.
9. Temporary Facilities and Controls, including temporary protections of existing flooring.
11. Execution Requirements.
12. Cutting and Patching.
13. Progress Cleaning.
15. Final Cleaning.

1.3 PROJECT IDENTIFICATION

A. Project Title: Ferndale High School, Early Childhood Center, Ferndale Upper Elementary School, Flooring and Ceilings.

1. Owner: Ferndale Public Schools.
2. Project Location: Ferndale, Michigan

B. Architect and MEP Engineer:

1. Integrated Design Solutions, 1441 W. Long Lake Road, Suite 200, Troy, Michigan 48098.

C. Project Web Site: A project Web site administered by Architect will be used for purposes of managing communication and documents during the bidding and construction stage.

1. Project Web Site: Project Web sites will be used for purposes of managing communication and documents during the bidding and construction stage.

a. The Bidding documents, are available at the following web site


b. The Bidding documents are also available at the following web site

1) http://cloud.ids-troy.com/bids/bids/ferndale/flooring-ceilings/
SUMMARY OF THE WORK

A. Summary of the Work: The Work of Project is defined by the Contract Documents and consists of the following:

1. All work required to provide new lay-in acoustical ceiling panels in existing grid system, painting of existing grid, sound absorbing ceiling units, flooring and includes, but is not limited to:
   a. Selective demolition.
   b. Lay-in acoustical panels in existing grid system.
   c. Painting existing acoustical ceiling grid.
   d. Painting existing walls.
   e. Fabric wrapped suspended sound absorbing ceiling units.
   f. Luxury vinyl plank tile
   g. Carpet tile.
   h. Sheet carpeting.
   i. Resilient wall base, resilient stair tread/risers and resilient accessories.
   j. Moving of existing furniture in work areas and reinstalling it after completion of construction.
   k. Cleaning of all spaces so as to be ready for occupancy.

B. Type of Contract:

1. Project will be constructed under a single lump sum general contract.

C. Ordinances and Fees:

2. No permits (local or State) are required.

D. Supervision and Construction Procedures: The Contractor shall supervise and direct the Work, using the Contractor’s best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures, and for coordinating all portions of the Work under the Contract. The Contractor shall be fully and solely responsible for the jobsite safety of such means, methods, techniques sequences or procedures. There will be an Owner’s Representative assigned to the project.

E. Packing, Removing, Storage and Reinstallation of Existing Furniture, Furnishings, Equipment and Belongings: Prior to start of construction in each room or area, Contractor pack and move all furniture, furnishings, equipment and supplies from each area to allow access for work activities. Furniture, furnishings and equipment may be temporarily stored in the Gymnasium. Provide temporary floor protection prior to storing anything on Gymnasium floor.

1. Upon completion of construction in each room or area, including cleaning, Contractor shall move all furniture, furnishings, equipment and belongings back to original location. Furniture shall be set in original locations except as directed by Owner.

1.5 WORK RESTRICTIONS

A. On-Site Work Hours: Limit work in the existing building to normal business working hours of 6:30 a.m. to 6:00 p.m., Monday through Friday, unless otherwise indicated.
1. Work done after hours may be allowed subject to prior approval from the Owner.
2. Work done during school hours may be allowed subject to prior approval from the Owner and provided work area is cleaned and ready for use the next day.

B. Use of Premises: Limit the use of the premises to work in areas indicated. Do not disturb portions of the site beyond areas in which the Work is indicated. Allow for Owner occupancy. Contractor to be responsible to maintain fire alarm system during construction or assume responsibility if the system is put in the test mode.
   1. Confine operations to areas within Contract limits indicated. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.

C. Use of Existing Building: Maintain the existing building in a weather-tight and secure condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.
   1. The Contractor and each Subcontractor will be expected to have visited the site and appraise the existing situation and circumstances of operation.
   2. Consult with the Owner as to the availability of space for storage of materials and places of access to the work, etc. Materials and equipment must be placed to avoid interferences with the Owner's operations and shall be moved when so required.
   3. Comply with the Owner's requirements with regard to entrance, movement within and exit of all trucks, equipment, and personnel.
   4. The Owner reserves the right to perform construction work similar in nature to the work included under this Contract, in the same area concurrently with the Contractor, with his own forces, or with other Contractors, without conflict of any nature.

D. Maintaining Service and Functions:
   1. The school will not be occupied during summer months but all work must be complete, operational and all areas clean by Friday, August 10, 2018.
   2. The nature of this project is such that close coordination will be required of the Contractor with the Owner, other Contractors, and others having an interest in the project to assure that work on the site, access to and from the site, and the general conduct of operations is maintained in a safe and efficient manner, and that disruption and inconvenience is minimized.

E. Fire Alarm System and Security Alarm System: During construction the Contractor is responsible to maintain the fire alarm system and security system in good working order.
   1. At end of each day's shift the Contractor shall be required to ensure the building is locked and both fire alarm system and security system are operational.

F. Owner's Right to Place Equipment: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building, prior to Substantial Completion, provided that such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

G. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
   1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.

H. Damage to Other Work: The Contractor shall repair, replace, or touch-up all finished surfaces in the existing building which may be damaged as a result of his work or operations.
I. Utilities or other services encountered or otherwise found shall be protected from any damage, unless or until they are abandoned. If the utilities or services are not abandoned, immediately repair any damage from work and operations of this Contract. Immediately repair any damage from the Work or operations and restore the utilities and services to an equal or better condition than that which existing prior to the damage or disruption.

J. Enforce strict discipline and good order among the Contractor's employees and subcontractor's.
   1. Foul or abusive language or demeanor will not be tolerated.
   2. Contractor's employees and subcontractor's shall dress in a neat workmanlike manner.
   3. Tobacco is prohibited anywhere on school property.
   4. Possession, sale or consumption of alcoholic beverages on Owner's property is strictly prohibited.
   5. The manufacturing, distribution, dispensing, possession or use of unlawful drugs on Owner's property is strictly prohibited and may result in criminal prosecution.

1.6 CONTRACT MODIFICATION PROCEDURES

A. Architect's Supplemental Instructions: After award of Contract, the Architect has the authority to order minor changes in the Work, not involving adjustments in the contract sum or extension of the contract time and not inconsistent with the intent of the contract Documents.

B. Bulletin: A written notice by the Architect to the Contractor requesting an itemized cost quotation for an addition, deletion, or revision in the Work, issued after award of contract. Bulletins are not an order or authorization to proceed with any changes in the Work. After award of Contract, the Contractor as required shall quote changes in the work described in Bulletins or otherwise.

C. Construction Change Directive (CCD): A written order prepared by the Architect and signed by the Owner and Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract sum or contract time or both.
   1. The Owner may, by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the construct Sum and Contract Time being adjusted accordingly.

D. Except as otherwise specifically mentioned, the general character of the work covered by Bulletins or Construction Change Directives shall be the same as originally specified for the project and all incidental items required in connection with the work hereinafter described shall be included even though not specifically mentioned. Where an item is mentioned with no additional specifications given, reference is to be made to the original specifications. All applicable parts of the original specifications shall apply.

E. Submit detailed itemized quotations for each item of work described, stating fully the amounts for additions and deductions.

F. Following are sample guidelines for use in preparing detailed cost breakdown for each item in the Bulletin being quoted:
   1. Material Cost:  
      List material giving unit cost  
      \( \times \) number of units = cost \( \text{__________} \)  
      Add sales tax \( \text{__________} \)  
      Add applicable shipping costs \( \text{__________} \)  
      Subtotal Material Cost $\text{__________} $
2. Labor Cost - List for each trade the:
   Hourly rate x number of hours =
   Labor cost __________

   Add Labor Fringes as applicable:
   F.I.C.A. __________
   M.E.S.C. __________
   Pension Contribution __________
   Vacation Contribution __________
   H.E.W. Insurance __________

   Subtotal Labor Cost $__________

3. Equipment (heavy, i.e. cranes, earth moving, hoists, etc.):
   Rental Charge or equivalent per day or week (including operating costs except labor) __________

   Subtotal Equipment Cost $__________

4. Overhead & Profit
   a. Work performed by prime contractor
      10% overhead and profit.
   b. On work performed by subcontractor,
      The prime contractor is allowed 7-1/2% handling charge unless otherwise stated in Contract Documents.
   c. Work performed by subcontractor
      10% overhead and profit

   Subtotal Overhead & Profit $__________

   TOTAL COST ITEM $__________

G. Quotations should be received by the Architect within two (2) weeks of issuance of the Bulletin.

H. If the Owner feels extra costs are not reasonable and the work is outside the Contract, the Owner reserves the right to get a second estimate, and if in the Owner's best interest, the Owner may engage that firm to do the Work.

1.7 PAYMENT PROCEDURES

A. Schedule of Values: Submit the Schedule of Values as a preliminary Application for Payment to the Architect at least 7 days before submittal of the initial Application for Payment.

   1. Format and Content: Use AIA Documents G702 and G703. Use the Project Manual Table of Contents as a guide to establish the format for the Schedule of Values.

   a. Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into several line items.
   b. Round amounts off to the nearest whole dollar; the total shall equal the Contract Sum.
c. Where an Application for Payment may include materials or equipment, purchased or fabricated and stored, but not yet installed, provide separate line items on the Schedule of Values for initial cost of the materials, for each subsequent stage of completion, and for total installed value of that part of the Work.

d. Margins of Cost: Show line items for indirect costs, and margins on actual costs, only to the extent that such items will be listed individually in Applications for Payment. Each item in the Schedule of Values and Applications for Payment shall be complete including its total cost and proportionate share of general overhead and profit margin.

1) At the Contractor's option, temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown as separate line items in the Schedule of Values or distributed as general overhead expense.

B. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and paid for by the Owner.

1. The Application for Payment at time of Substantial Completion and the final Application for Payment involve additional requirements.

C. Payment Application Forms: Use AIA Document G 702 and Continuation Sheets G 703 as the form for Application for Payment.

D. Application Preparation: Complete every entry on the form, including notarization and execution by person authorized to sign legal documents on behalf of the Contractor. Incomplete applications will be returned without action.

1. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.

E. Transmittal: Submit 3 executed copies of each Application for Payment to the Architect. One copy shall be complete, including waivers of lien and similar attachments, when required.

1. Transmit each copy with a transmittal form listing attachments, and recording appropriate information related to the application in a manner acceptable to the Architect.

F. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
5. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.
6. The General Contractor shall not hold payment to any subcontractor more than ten (10) days after payment has been received from the Owner unless there are documented issues with the subcontractor’s work.

G. Application for Payment at Substantial Completion: Actions and submittals that shall proceed or coincide with this application include:

1. Warranties (guarantees) and maintenance agreements.
3. Final cleaning.
4. Application for reduction of retainage, and consent of surety.
5. Punch list of incomplete Work, recognized as exceptions to Architect’s Certificate of Substantial Completion. Please note, the Contractor shall include in their price one (1) week extra time for one (1) repair technician and one (1) programmer, whose sole function will be to finish all outstanding items after Substantial Completion.

H. Final Payment Application: Actions and submittals that shall precede or coincide with this application include:

1. Completion of Project closeout requirements.
2. Completion of items specified for completion after Substantial Completion.
3. Transmittal of required Project construction records to Owner.
4. Proof that taxes, fees and similar obligations have been paid.
5. Removal of temporary facilities and services.
6. Removal of surplus materials, rubbish and similar elements.

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

1.8 PROJECT MANAGEMENT AND COORDINATION

A. Coordination: Coordinate construction operations included in various Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.
4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Pre-Construction Conference:

1. Owner will schedule a pre-construction conference at the Project site after execution of the Agreement and prior to commencement of construction to review responsibilities and personnel assignments.
2. Attendees: The Owner or their Representative, Architect, the Contractor and its superintendent, major subcontractors, manufacturers, suppliers and other concerned parties shall each be represented at the conference.
3. Agenda: Discuss items of significance that could affect progress including such topics as:
   a. Tentative construction schedule.
   b. Critical Work sequencing.
   c. Designation of responsible personnel.
   d. Procedures for processing field decisions and Change Orders.
   e. Procedures for processing Applications for Payment.
   f. Distribution of Contract Documents.
   g. Submittal of Shop Drawings, Product Data and Samples.
   h. Preparation of record documents.
   i. Use of the premises.
   j. Office, Work and storage areas.
   k. Equipment deliveries and priorities.
   l. Safety procedures.
   m. First aid.
   n. Security.
   o. Housekeeping.
   p. Working hours.

D. Progress Meeting:

1. Progress meetings, with the representatives of the various trades and the Contractor in attendance, will be held by the Architect and Owner at regular intervals as directed. The Minutes of these meetings will be recorded by the Contractor and copies sent to all interested parties. The dates of progress will be coordinated with preparation of payment request.

2. Agenda: Review and correct or approve minutes of the previous progress meeting. Include topics for discussion as appropriate to the current status of the Project.
   a. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
   b. Review including such items as:
      1) Interface requirements.
      2) Time.
      3) Sequences.
      4) Deliveries.
      5) Off-site fabrication problems.
      6) Access.
      7) Site utilization.
      8) Temporary facilities and services.
      9) Hours of Work.
      10) Hazards and risks.
      11) Housekeeping.
      12) Quality and Work standards.
      13) Change Orders.
      14) Documentation of information for payment requests.
1.9 CONSTRUCTION PROGRESS DOCUMENTATION

A. Construction Schedule: Submit a comprehensive, fully developed, horizontal bar chart, construction schedule.

1. Submit schedule within two (2) weeks after award of Contract. Base schedule on the Times of Completion specified for the Project.
2. Update construction schedule monthly after construction progress meetings, to reflect actual construction progress and activities.
3. Indicate each significant construction activity separately.
4. Time Frame: Extend schedule from date established for commencement of the Work to date of final completion.
5. Activities: Treat each story or separate area as a separate activity for each principal element of the Work. Comply with the following:
   a. Procurement Activities: Include procurement activities for long lead items. Procurement activities include, but are not limited to, submittals, approvals, purchasing, fabrication and delivery.
   b. Start-Up and Testing Time: Include time for start-up, testing and commissioning.
   c. Substantial Completion: Indicate completion in advance of date of substantial completion, allow time for Architect’s inspection and punch list.

   a. Phasing: Arrange list of activities on schedule by phase.
   b. Work Restrictions: Show effect on the schedule of limitations of continued occupancies, uninterruptible services, use of premises restrictions, and provisions for future construction.
   c. Work Stages: Indicate important stages of construction for each major portion of the Work.

7. Milestones: Include milestones such as Notice to Proceed, Substantial Completion and Final Completion.

B. Daily Construction Reports: Prepare a daily construction report, recording the following information concerning events at the site; and submit duplicate copies to the Architect at weekly intervals:

1. List of subcontractors at the site.
2. Approximate count of personnel at the site.
3. High and low temperatures, general weather conditions.
4. Accidents and unusual events.
5. Meetings and significant decisions.
7. Emergency procedures.
8. Orders and requests of governing authorities.
9. Change Orders received, implemented.
11. Substantial Completions authorized.

C. Field Condition Reports: Immediately on discovery of a difference between field conditions and the Contract Documents, prepare and submit a detailed report. Submit with a request for information (RFI). Include a detailed description of the differing conditions, together with recommendations for changing the Contract Documents.
D. Special Reports: Submit special reports directly to Owner within one day(s) of an occurrence. Distribute copies of report to parties affected by the occurrence.

1. Reporting Unusual Events: When an event of an unusual and significant nature occurs at Project site, whether or not related directly to the Work, prepare and submit a special report. List chain of events, persons participating, response by Contractor's personnel, evaluation of results or effects, and similar pertinent information. Advise Owner in advance when these events are known or predictable.

1.10 SUBMITTAL PROCEDURES

A. Definitions:

1. Action Submittals: Written and graphic information that requires Architect's responsive action. Submittals may be rejected for not complying with requirements.
2. Informational Submittals: Written information that does not require Architect's approval.
3. File Transfer Protocol (FTP): Communications protocol that enables transfer of files to and from another computer over a network and that serves as the basis for standard Internet protocols. An FTP site is a portion of a network located outside of network firewalls within which internal and external users are able to access files.

B. Shop Drawings, Product Data and Samples: Submit Shop Drawings, Product Data and Samples to the Architect for review.

1. Architect will provide to the Contractor the submittal forms that must be filled out and accompany each submittal. Refer to Sample at the end of this Section.
2. Coordinate the preparation and processing of submittals with the performance of the work. Coordinate each separate submittal with other submittals and related activities such as testing, purchasing, fabrication, delivery and similar activities and require sequential activity.
   a. Coordinate the submittal of different units of interrelated work so that one submittal will not be delayed by the Architect's need to review a related submittal. The Architect reserves the right to withhold action on any submittal requiring coordination with other submittals until related submittals are forthcoming.
3. Allow sufficient time so that the installation will not be delayed as a result of the time required to properly process submittals, including time for resubmittal, if necessary.
   a. Allow ten (10) working days for the Architect's review of each submittal. Allow a longer time period where processing must be delayed for coordination with subsequent submittals. The Architect will advise the Contractor promptly when it is determined that a submittal being processed must be delayed for coordination.
   b. No extension of time will be authorized because of the Contractor's failure to transmit submittals to the Architect/Engineer sufficiently in advance of the work.
4. The Contractor shall review Shop Drawings, product Data and Samples prior to submission. Notify the Architect in writing of any deviations in the submittals from requirements of the Contract Documents.
   a. Information required on shop drawings includes, dimensions, identification of specific products and materials which are included in the work, compliance with specified standards and notations of coordination requirements with other work.
1) Provide special notation of dimensions that have been established by field measurement.
2) Highlight, encircle or otherwise indicate deviations from the contract documents on the shop drawings.

b. Submit samples for the Architect's visual review of general generic kind, color, pattern, and texture, and for a final check of the coordination of these characteristics with other related elements of the work. Samples are also submitted for quality control comparison of these characteristics between the final sample submittal and the actual work as it is delivered and installed.

5. Architect's acceptance shall not relieve the Contractor from responsibility for errors in submittals.
6. Do not use Shop Drawings, Product Data or Samples without an appropriate stamp indicating Architect/Engineer's action taken.
7. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
   a. No Exceptions Taken: Work covered by the submittal may proceed provided it complies with requirements of the Contract Documents. Final payment depends on that compliance.
   b. Exceptions As Noted: Work covered by the submittal may proceed provided it complies with notations or corrections on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
   c. Rejected: Do not proceed with Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise or prepare a new submittal according to the notations; resubmit without delay. Repeat if necessary to obtain different action mark.

1) Do not use, or allow others to use, submittals marked "Rejected" at the Project Site or elsewhere where Work is in progress.

8. Informational Submittals: Architect will review each submittal and will not return it, or will reject and return it if it does not comply with requirements. Construction Manager will forward each submittal to appropriate party.
9. Action Not Required: Submittals not required by the Contract Documents will not be reviewed and will be returned with notation "Action Not Required."

C. Electronic Submittal Procedure: Shop Drawings and Product Data shall be submitted electronically to the Architect for review. All submittals (except samples) must be electronic. The following instructions must be followed to minimize the risk of submittals being lost and to help expedite the review.

1. At Construction kick-off meeting the Architect will transmit to the contractor in both Word and PDF format the submittal form that must be used.
2. Contractor prior to e-mailing to the Architect must fill out the following information on the submittal form.
   a. Item (1) – From/Return to:
   b. Item (2) – Project Title/Location:
   c. Item (3) - IDS Project No.:
   d. Item (4) – Submittal Date:
   e. Item (8) – Project Manual Section No.:
   f. Item (9) – Product Manufacturer:
   g. Item (10) - Item Description (specific information, not just “drawings”, i.e. Curtainwall Shop Drawings.
   h. Item (11) – Print/Sepia/Catalog/Sample/Other (Quantity)
   i. Item (12) – Contractor's/Construction Manager’s Remarks & Deviations (if any).
   j. Item (13) – Addendum or Bulletin (if any).
   k. Item (14) – Substitution (if any).
3. Contractor shall e-mail the submittal to shopdrawings@ids-troy.com and the IDS Construction Administration individual. (Note: Not all submittals will be able to be received in the Construction Administration individuals e-mail due to e-mail limiting). The e-mail submittals should be formatted as follows:

   a. Subject of e-mail should indicate the project name and specification section number and IDS project number.
   b. Only one (1) specification section should be included in each e-mail. This aids in processing and future retrieval.
   c. IDS submittal form must be completed and included at the beginning of and in the same PDF as the submittal (if the contractor chooses to use the Word format document to aid in filling in the information then they will need to convert it to a PDF and bind it into the actual submittal).

1.11 REFERENCES

A. Specifications & Drawings To be Cooperative:

1. These Specifications and accompanying Drawings are intended to describe and provide for finished work. They are intended to be cooperative and what is called for by either shall be as binding as if called for by both. The Drawings accompanying the Specifications are intended to show the general design and arrangement of the installation and in some cases are more or less diagrammatic. They are not intended to serve as shop drawings nor are they to be scaled for dimensions or exact locations of equipment.

2. It is the intent of the Drawings and Specifications to provide for a complete and satisfactory installation. The Contractor shall furnish Labor and/or materials neither shown nor specified but obviously necessary for the completion of the proper functioning of the systems.

B. Specification Format and Content Explanation:

1. Specification Format: These Specifications are organized into Divisions and Sections based on the Construction Specifications Institute's 49 Division format and MASTER FORMAT 2012 numbering system.

2. Words, which have well known technical or construction industry meanings are used in the Contract Documents in accordance with such, recognized meanings.

3. Abbreviated Language: In the interest of brevity, the Contract Documents frequently omit modifying words such as “all” and “any” and articles such as “the” and “an” but the fact that a modifier or an article is absent from a statement and appears in another is not intended to affect the interpretation of either statement.

4. Trades: Use of titles such as "carpentry" is not intended to imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespersons of the corresponding generic name.
C. Definitions:

1. Contract Documents: Contract documents consist of the Agreement between Owner and Contractor, Conditions of the Contract, Drawings, Specifications, Addenda issued prior to execution of the Contract, and modifications issued after execution of the Contract. A modification is (1) a written amendment to the contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive or (4) a written order for a minor change in the Work issued by the Architect (Architect's Supplemental Instructions). Contract Documents also includes bidding requirements or portions of Addenda relating to bidding requirements.

   a. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

2. Indicated: Refers to graphic representations, notes or schedules on the Drawings, or other Paragraphs or Schedules in Specifications, and similar requirements in Contract Documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used, it is to help locate the reference; no limitation on location is intended except as specifically noted.

3. Directed: Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean "directed by the Architect", "requested by the Architect", and similar phrases. However, no implied meaning shall be interpreted to extend the Architect's responsibility into the Contractor's area of construction supervision.

4. Approve: The term "approved", where used in conjunction with the Architect's action on the contractor's applications and requests, is limited to the duties and responsibilities of the Architect as stated in General and Supplementary Conditions. Such approval shall not release the Contractor from responsibility to fulfill Contract requirements unless otherwise provided in the Contract Documents.

5. Regulation: The term "Regulations" includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, as well as rules, conventions, and agreements within the construction industry that control performance of the Work, whether lawfully imposed by authorities having jurisdiction or not.

6. Furnish: The term "furnish" is used to mean "supply and deliver to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."

7. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations."

8. Provide: The term "provide" means "to furnish and install, complete and ready for the intended use."

9. Installer: An "Installer" is the Contractor engaged by the Contractor, either as an employee, subcontractor, or sub-subcontractor for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

10. Project Site: Is the space available to the Contractor for performance of construction activities, either exclusively or in conjunction with others performing other construction activities as part of the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land upon which the Project is to be built.

11. Testing Laboratories: A "testing laboratory" is an independent entity engaged to perform specific inspections or tests, either at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.
D. Standards of Industry: Reference to standards, codes, and recommendations shall be the latest edition of such publications adopted and published at date of bids. Work shall be installed according to the following industry standards when applicable:

1. UL - Underwriter's Laboratories, Inc.
2. ASA - American Standard Association
3. ASHRAE - American Society of Heating, Refrigeration and Air Conditioning Engineers
4. ASME - American Society of Mechanical Engineers
5. ASTM - American Society for Testing and Materials
6. Any local state or national plumbing and building codes having jurisdiction.

1.12 TEMPORARY FACILITIES AND CONTROLS

A. Temporary Water, Power and Lighting:

1. The Owner will furnish at no cost to the Contractor water and electricity for construction purposes. All such water and electricity shall be obtained from existing outlets designated by the Owner's Representative. If the Contractor's requirements exceed the characteristics at the designated outlets, the Contractor shall provide and pay for additional facilities as he may require.

   a. Water shall not be taken from Fire Protection System.

2. Provide temporary distribution systems, transformers, pumps, outlets, lighting fixtures and other accessories as may require for construction operations. At completion, or when so directed by the Owner's Representative, remove all temporary facilities.

3. All connections and distribution systems shall be furnished and installed by the Contractor at his own expense.

B. Compressed Air: Each trade shall provide compressed air as required for the successful performance of their work.

C. Temporary Toilets:

1. The Owner's will allow the use of designated toilet facilities for use by all workers employed on the project. Keep the facilities clean and in sanitary condition at all times.

   a. Disposable Supplies: Provide toilet tissue, paper towels, paper cups, and similar disposable materials for each facility. Maintain adequate supply.

D. Temporary Field Office:

1. The Owner will make space available for the Contractor's temporary field office in the Pool. Provide all furniture and supplies as required for the temporary field office.

E. Temporary Parking: Park in designated spaces only.

1. Do not park vehicles on sidewalks or lawn areas surrounding the building unless written approval is received from the Owner.

F. Temporary Telephones: Provide cellular phone service for project superintendent.

G. Janitorial Services: Provide janitorial services on a daily basis for temporary offices, toilets and similar areas.
H. Temporary Storage: Construction trades may use areas designated by Owner.

I. Temporary Protection of Existing Floors:

1. Provide temporary protection of existing finished floors (Carpet, Vinyl Composition Tile and Wood Gymnasium Floors) prior to construction and prior to moving furniture, furnishings and equipment.
   
a. The following are minimum requirements, provide additional protections as required by types of construction operations.

2. For Carpet and Vinyl Composition Tile Floors: Use undyed, untreated building paper with joints taped.
   
a. Do not use plastic film or self adhering plastic film which could create a humidity chamber.

3. For Wood Gymnasium Floors: Install temporary protection on Gymnasium Wood Floors, use smooth hardboard or plywood panels covered with undyed, untreated building paper, with joints taped.

4. Any damage to existing floors caused by Contractor's operations and failure to maintain temporary protection will be repaired at no cost to Owner.

J. Project Identification and Temporary Signs:

1. No advertising, contractor's sign or project sign will be permitted on the site.

1.13 PRODUCT REQUIREMENTS

A. Definitions:

1. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
   
a. Named Products: Items identified by manufacturer's product name, including make or model number or other designation, shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.

b. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.

c. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

2. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

3. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.
B. Product Selection Procedures:

1. Proprietary Specification Requirements: Where a single product or manufacturer is named, provide only the product indicated.
2. Semi-proprietary Specification Requirements: Where two or more products or manufacturers are named, provide one of the products indicated.
3. Available Manufacturers: Where Specifications include a list of “available” manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements.
4. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named.
   a. Contractor will be completely responsible for any and all modifications required as a result of using a product that is not “Basis of Design”.
5. Descriptive Specification Requirements: Where Specifications describe a product or assembly, listing exact characteristics required, with or without use of a brand or trade name, provide only a product or assembly possessing the specified characteristics and that otherwise complies with Contract requirements.
6. Performance Specification Requirements: Where Specifications require compliance with performance requirements, provide products that comply with indicated requirements, and are recommended by the manufacturer for the application indicated.
7. Compliance with Standards, Codes and Regulations: Where Specifications only require compliance with a code, standard or regulation, select a product that complies with the indicated standards, codes and regulations.
8. Visual Matching Specification: Where Specifications require matching an established Sample, select a product (and manufacturer) that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches satisfactorily.
   a. If no product available within specified category matches satisfactorily and complies with other specified requirements, comply with provisions of the Contract Documents on "substitutions" for selection of a matching product.
9. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product (and manufacturer) that complies with other specified requirements.
   a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that does not include premium items.
   b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, or texture from manufacturer's product line that includes both standard and premium items.

C. Product Substitutions: Contractor's request for substitution will be received and considered when extensive revisions to the Contract Documents are not required, when the proposed changes are in keeping with the general intent of the contract documents, when the request are timely, fully documented and properly submitted, and when one or more of the following conditions is satisfied, all as judged by the Architect; otherwise the request will be returned without action except to record non-compliance with these requirements.
D. The Architect will consider a request for substitution for the following reasons only:

1. Where the request is directly related to an "or equal" clause in the contract documents.
2. Where the specified product cannot be provided within the Contract Time. However, the request will not be considered if the product cannot be provided as a result of the Contractor's failure to pursue the work promptly or to coordinate the various activities properly.
3. Where the specified product cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
4. Where a substantial advantage is offered the Owner, in terms of cost, time, energy conservation or other considerations of merit, after deducting offsetting responsibilities the Owner may be required to bear. These additional responsibilities may include such considerations as additional compensation to the Architect for redesign and evaluation services, the increased cost of other work by the Owner or separate contractors, and similar considerations.
5. When the specified product cannot be provided in a manner which is compatible with other materials of the work, and where the Contractor certifies that the substitution will overcome the incompatibility.
6. When the specified product cannot be properly coordinated with other materials in the work, and where the Contractor certifies that the proposed substitution can be properly coordinated.
7. When the specified product cannot receive a warranty as required by the contract documents and where the contractor certifies that the proposed substitution receive the required warranty.

E. Substitution Requests:

1. Requests for Substitutions: Do not submit substitution request as a shop drawing submittal. Submit a separate request for each request for substitution. In each request identify the product to be replaced by the substitution, include related specification section and drawing numbers, and complete documentation showing compliance with the requirements for substitutions. Include the following information, as appropriate, with each request:
   a. Provide complete product data, drawings and descriptions of products, and fabrication and installation procedures.
   b. Provide samples if requested.
   c. Provide a detailed comparison of the significant qualities of the proposed substitution with those of the work originally specified. Significant qualities include elements such as size, weight, durability, performance and visual effect.
   d. Provide complete coordination information. Include all changes required in other elements of the work to accommodate the substitution.
   e. Provide a statement indicating the effect the substitution will have on the work schedule in comparison to the schedule without approval of the proposed substitution. Include information regarding the effect of the proposed substitution on the Contract Time.
   f. Provide complete cost information, including a proposal of the net change in the Contract Sum.
   g. Include in this certification, the Contractor's waiver of rights to additional payment or time, which may subsequently be necessary because of the failure of the substitution to perform adequately.

F. Sample Substitution Request Form: Use CSI Form 13.1A provided at end of Section
1.14 EXECUTION REQUIREMENT

A. **Existing Conditions:** The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.

B. Establish benchmarks and markers to set lines and levels as needed to properly locate each element of the Work. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.

C. Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
   1. Make vertical work plumb and make horizontal work level.
   2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
   3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.

D. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

E. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

F. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

G. **Attachment:** Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
   1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
   2. Allow for building movement, including thermal expansion and contraction.
   3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

H. **Joints:** Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

I. **Hazardous Materials:** Use products, cleaners, and installation materials that are not considered hazardous.

J. **Starting and Adjusting:**
   1. Coordinate schedule with Commissioning Agent prior to starting and adjusting equipment.
   2. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
   3. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
   4. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
5. **Manufacturer's Field Service:** If a factory-authorized service representative is required to inspect field-assembled components and equipment installation.

### 1.15 PROGRESS CLEANING

A. **Waste Material Removal and Cleaning:** Remove and properly dispose of, on a daily basis all waste materials and debris resulting from the Work. The Project and adjacent grounds shall be kept free of accumulations of rubbish.

   1. Construction debris shall not be stored overnight, nor shall it be left in common corridors. Keep debris confined to work areas only until such time as it is being removed.
   2. No burning of waste materials will be permitted on the premises.

B. **Site:** Maintain Project site free of waste materials and debris.

C. **Work Areas:** Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

   1. Remove liquid spills promptly.
   2. Do not wash waste materials down sewers or into waterways.
   3. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. **Installed Work:** Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. **Concealed Spaces:** Remove debris from concealed spaces before enclosing the space.

F. **Exposed Surfaces in Finished Areas:** Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. **During handling and installation,** clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

H. **Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period.** Adjust and lubricate operable components to ensure operability without damaging effects.

I. **Limiting Exposures:** Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

### 1.16 CLOSEOUT PROCEDURES

A. **Substantial Completion:**

   1. **Preliminary Procedures:** Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.

      a. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
      b. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
c. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction damage or settlement surveys, and similar final record information.
d. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
e. Terminate and remove temporary facilities from Project site, along with construction tools, and similar elements.
f. Complete final cleaning requirements, including touchup painting.
g. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

2. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

a. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
b. Results of completed inspection will form the basis of requirements for Final Completion.

B. Final Completion:

1. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

a. Submit a final Application for Payment according to Section 01290 "Applications for Payment."
b. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
c. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
d. Instruct Owner's personnel in maintenance of products.

2. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will review a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

a. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

C. At time of substantial completion, submit record drawings, maintenance manuals and warranties.

D. Record Shop Drawings and Product Data: Maintain one copy of shop drawings and product data. Mark these documents to show significant variations in actual Work performed.

E. Requirements For Maintenance Manuals:

1. Organization: Organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:

a. Title page.
b. Table of contents.
2. Title Page: Include the following information:
   a. Subject matter included in manual.
   b. Name and address of Project.
   c. Name and address of Owner.
   d. Date of submittal.
   e. Name and contact information for Contractor.
   f. Name and contact information for Architect.
   g. Name and contact information for Commissioning Authority.
   h. Cross-reference to related systems in other operation and maintenance manuals.

3. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

4. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder. Include the following types of information:
   a. Maintenance instructions
   b. Copies of warranties.
   c. Shop drawings and product data.

5. Manuals, Paper Copy: Submit manuals in the form of hard copy, bound and labeled volumes.
   a. Binders: Heavy-duty, three-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
      1) Identify each binder on front and spine, with printed title "MAINTENANCE MANUAL," Project title or name, Indicate volume number for multiple-volume sets.
   b. Dividers: Heavy-paper dividers with plastic-covered tabs for each section of the manual. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
   c. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software storage media for computerized electronic equipment.

6. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
   a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
   b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

F. Guarantee: Furnish the Owner with a written guarantee to remedy any defects due to faulty materials or workmanship which appear in the work within two (2) years from date of final acceptance by the Owner.

1. The Contractor's warranty to the Owner that materials furnished under the Contract will be of good quality and new, and that the work will be free from defects and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by the Contractor, improper or insufficient maintenance or improper operation.
1.17 FINAL CLEANING

A. General: Perform final cleaning prior to substantial completion. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a designated portion of Project:

   a. Remove tools, construction equipment, machinery, and surplus material from Project site.
   b. Clean exposed interior hard-surfacd finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Restore reflective surfaces to their original condition. Including the following:

      1) Carpet areas are to be vacuumed.
      2) Hard surface floors are free from dry, loose soil, dust, grit/gravel and liter.
      3) Hard surface floors are free from black marks, scuffs and scratches.
      4) Hard surface floors are free from watermarks, spots, spills and any detergent residues.
      5) Walk-off mats are vacuumed and free from liter, dirt, loose soil and gum.
      6) Corners, edges and hard to reach areas are free from all the above.
      7) Soil that remains after dust mopping of floor and surfaces is removed by wet cleaning.
      8) Interior glass doors, sidelites, borrowed lites and transoms are to be free from dust, dirt and hand marks.
      9) Exterior glass in windows, doors, sidelites are to be cleaned inside.
     10) Light fixtures are cleaned.
     11) Exposed pipes and conduit are free from dust and clean.
     12) Vents, fire extinguishers, window sills, window ledges and handrails are free from dust, dirt and debris.
     13) Casework and countertops are cleaned.
     14) Lockers faces are cleaned.

   c. Remove debris and surface dust from limited access spaces, including plenums, and similar spaces.
   d. Sweep concrete floors broom clean in unoccupied spaces.
   e. Leave Project clean and ready for occupancy.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 1000
### SUBMITTAL FORM

<table>
<thead>
<tr>
<th>From/Return To:</th>
<th>Project Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IDS Project No.:</td>
</tr>
<tr>
<td></td>
<td>Submittal Date:</td>
</tr>
<tr>
<td>Submittal No.:</td>
<td>Partial (6) Resubmittal (7)</td>
</tr>
<tr>
<td></td>
<td>IDS Submittal No.:</td>
</tr>
<tr>
<td>Project Manual Section No.:</td>
<td>Manufacturer(s):</td>
</tr>
<tr>
<td>Item Description</td>
<td>Print (11) Product Data Sample Other</td>
</tr>
<tr>
<td></td>
<td>A M E EN S C DN FS IN TE</td>
</tr>
</tbody>
</table>

**Contractor’s/Construction Manager’s Remarks and Deviations:**

Addendum or Bulletin:

Substitution:

The undersigned certifies that the above submitted items have been reviewed in detail, including materials, quantities, dimensions, specified performance criteria, installation requirements, catalog numbers and field conditions and are correct and in strict compliance with the Contract Documents, except as the undersigned has noted otherwise. Approval of items does not relieve the Contractor/Construction Manager from complying with all requirements of the Contract Documents. IDS review does not relieve the contractor from responsibility for errors or omissions in this submittal.

**IDS Remarks:**

IDS Construction Administration Approval:

**ACTION CODES:**

1. NO EXCEPTIONS TAKEN
2. EXCEPTIONS AS NOTED
3. REJECTED
4. ACTION NOT REQUIRED

Contractor/Construction Manager: ____________________________
Signature: _____________________________________________
## SUBSTITUTION REQUEST

(After the Bidding Phase)

### Project:

<table>
<thead>
<tr>
<th>Substitution Request Number:</th>
<th>From:</th>
</tr>
</thead>
</table>

### To:

<table>
<thead>
<tr>
<th>Date:</th>
<th>A/E Project Number:</th>
</tr>
</thead>
</table>

### Re:

<table>
<thead>
<tr>
<th>Contract For:</th>
</tr>
</thead>
</table>

### Specification Title:

<table>
<thead>
<tr>
<th>Description:</th>
</tr>
</thead>
</table>

### Section:

<table>
<thead>
<tr>
<th>Page:</th>
<th>Article/Paragraph:</th>
</tr>
</thead>
</table>

### Proposed Substitution:

<table>
<thead>
<tr>
<th>Manufacturer:</th>
<th>Address:</th>
<th>Phone:</th>
</tr>
</thead>
</table>

### Trade Name:

<table>
<thead>
<tr>
<th>Model No.:</th>
</tr>
</thead>
</table>

### Installer:

<table>
<thead>
<tr>
<th>Address:</th>
<th>Phone:</th>
</tr>
</thead>
</table>

### History:

- [ ] New product
- [ ] 2-5 years old
- [ ] 5-10 yrs old
- [ ] More than 10 years old

### Differences between proposed substitution and specified product:

________________________________________________________________________

### Point-by-point comparative data attached - REQUIRED BY A/E

### Reason for not providing specified item:

________________________________________________________________________

### Similar Installation:

<table>
<thead>
<tr>
<th>Project:</th>
<th>Architect:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Address:</th>
<th>Owner:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date Installed:</th>
</tr>
</thead>
</table>

### Proposed substitution affects other parts of Work:

- [ ] No
- [ ] Yes; explain ____________________________________________

### Savings to Owner for accepting substitution:

\($ \text{______________} \)\n
### Proposed substitution changes Contract Time:

- [ ] No
- [ ] Yes [Add] [Deduct] \(\text{______________}\) days.

### Supporting Data Attached:

- [ ] Drawings
- [ ] Product Data
- [ ] Samples
- [ ] Tests
- [ ] Reports
- [ ] __________
The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: __________________________

Signed by: __________________________

Firm: __________________________

Address: __________________________

Telephone: __________________________

Attachments: __________________________


A/E's REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Section 01330.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01330.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: __________________________

Date: __________________________

Additional Comments: __________________________

☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E ☐ ____________

__________________________

__________________________

__________________________

__________________________

__________________________
SECTION 01 2300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes requirements for alternates.

1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.

1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.

1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

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

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

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

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1 Provide and install fabric wrapped sound-absorbing ceiling units below ceiling work in existing grid and coordinate with owner's lighting contractor for new fixtures and installation of rope lighting on top of these panels prior to suspending panels from ceiling in Lobby of Ferndale Upper Elementary School as indicated on Drawings. Refer to Section 09 8436 Sound-Absorbing Ceiling Units.

END OF SECTION 01 2300
SECTION 01 2700 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes requirements for unit prices.

B. Related Sections include the following:

1. Section 03 0130 "Maintenance of Cast-In-Place Concrete."
2. Section 09 6519 "Resilient Tile Flooring."
3. Section 09 6813 "Tile Carpeting."
4. Section 09 9816 "Sheet Carpeting."

1.3 DEFINITIONS

A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

A. Unit prices include all necessary material, plus cost for delivery, handling, installation, insurance, applicable taxes, overhead, and profit.

B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent testing and inspection agency.

C. List of Unit Prices: A list of unit prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

A. Unit Price No. 1:

1. Description: Repair of concrete floor slabs with epoxy bonding agent and concrete patching material as specified in Section 03 0130 "Maintenance of Cast-In-Place Concrete".
2. Unit of Measurement: Cubic Foot.
B. Unit Price No. 2:
   1. Description: Luxury Vinyl Tile including floor preparation and installation as specified in Section 09 6519 "Resilient Tile Flooring".
   2. Unit of Measurement: Square Yard.

C. Unit Price No. 3:
   1. Description: Carpet Tile including floor preparation and installation as specified in Section 09 6813 "Tile Carpeting".
   2. Unit of Measurement: Square Yard.

D. Unit Price No. 4:
   1. Description: Sheet Carpet including floor preparation and installation as specified in Section 09 6816 "Sheet Carpeting".
   2. Unit of Measurement: Square Yard.

END OF SECTION 01 2700
SECTION 02 4119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Demolition and removal of selected portions of building or structure.
2. Salvage of existing items to be reused or recycled.

1.3 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.

B. Remove and Salvage: Detach items from existing construction and deliver them to Owner ready for reuse.

C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.

D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 SUBMITTALS

A. Predemolition Photographs or Videos: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by selective demolition operations. Submit before Work begins.

B. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept wastes.

1.5 QUALITY ASSURANCE

A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.

B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

C. Standards: Comply with ANSI A10.6 and NFPA 241.

D. Predemolition Conference: Conduct conference at Project site. Review methods and procedures related to selective demolition including, but not limited to, the following:

1. Inspect and discuss condition of construction to be selectively demolished.
2. Review structural load limitations of existing structure.
3. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
5. Review areas where existing construction is to remain and requires protection.

1.6 PROJECT CONDITIONS

A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

1. Before selective demolition, Owner will remove the following items:
   a. Furniture and equipment.

C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.

1. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Owner will remove hazardous materials under a separate contract.

E. Storage or sale of removed items or materials on-site is not permitted.

F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

B. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.

C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

D. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or videos.

1. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
E. Perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. Existing Services/Systems: Maintain services/systems indicated to remain and protect them against damage during selective demolition operations.

B. Service/System Requirements: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

   1. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.

   a. Where entire wall is to be removed, existing services/systems may be removed with removal of the wall.

3.3 PREPARATION

A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

   1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner.

   2. Protect existing site improvements, appurtenances, and landscaping to remain.

B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

   1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.

   2. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.

   3. Cover and protect furniture, furnishings, and equipment that have not been removed.

3.4 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

B. Removed and Reinstalled Items:

   1. Clean and repair items to functional condition adequate for intended reuse.

   2. Pack or crate items after cleaning and repairing. Identify contents of containers.

   3. Protect items from damage during construction and storage.

   4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.
3.5 POLLUTION CONTROLS

A. Dust Control: Use temporary enclosures, and other suitable methods to limit spread of dust and dirt.
   1. Wet mop floors to eliminate trackable dirt and wipe down walls and doors of demolition enclosure. Vacuum carpeted areas.

B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
   1. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.

3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

A. Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI-WP and its Addendum.
   1. Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RFCI.

B. Carpet: Remove carpet and adhesive.
   1. Remove residual carpet backing and adhesive and prepare substrate for new floor coverings by scraping or by using a terrazzo or concrete grinder, a drum sander, or a polishing machine equipped with a wire brush.

3.7 PATCHING AND REPAIRS

A. General: Promptly repair damage to adjacent construction caused by demolition operations.

B. Repairs: Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
   1. Completely fill holes and depressions in existing masonry walls that are to remain with an approved masonry patching material applied according to manufacturer's written recommendations.

C. Finishes: Restore exposed finishes of patched areas and extend restoration into adjoining construction in a manner that eliminates evidence of patching and refinishing.

D. Ceilings: Patch, repair, or rehang existing ceilings as necessary to provide an even-plane surface of uniform appearance.

3.8 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.
   1. Do not allow demolished materials to accumulate on-site.
   2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn demolished materials.
3.9 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 4119
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:
   1. Patching existing concrete.

1.3 SUBMITTALS

A. Product Data: Include material descriptions, chemical composition, physical properties, test data, and mixing and application instructions.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in manufacturer's original and unopened containers, labeled with type and name of products and manufacturers.

B. Comply with manufacturer's written instructions for minimum and maximum temperature requirements and other conditions for storage.

C. Store cementitious materials off the ground, under cover, and in a dry location.

PART 2 - PRODUCTS

2.1 BONDING AGENTS

A. Epoxy Bonding Agent: ASTM C 881, Type I and III.

   1. Products: Subject to compliance with requirements, provide one of the following:

      a. Dayton Superior Corporation; Resi-Bond (J-58).
      b. Euclid Chemical Company; EUCO #352 EPOXY SYSTEM.
      c. Sika Corporation; Sikadur 31 Hi-Mod Gel.

2.2 PATCHING MORTAR

A. Cementitious Patching Mortar: Rapid-setting, rapid hardening, packaged, dry mix cementitious material complying with ASTM C 928.

   1. Products: Subject to compliance with requirements, provide one of the following:

      b. Euclid Chemical Company; EUCO-SPEED.
      c. Sika Corporation; Sikaset Roadway Patch.
2.3 MIXES

A. Mix products in clean containers according to manufacturer's written instructions.

1. Add aggregates to products only as recommended by manufacturer.
2. Do not add water, thinners, or additives unless recommended by manufacturer.
3. When practical, use manufacturer's premixed or premeasured packages to ensure that materials are mixed in proper proportions. When premixed or premeasured packages are not used, measure ingredients using graduated measuring containers; do not estimate quantities or use shovel or trowel as a unit of measure.
4. Do not mix more materials than can be used within recommended open time. Discard materials that have begun to set.

PART 3 - EXECUTION

3.1 APPLICATION

A. Epoxy Bonding Agent: Apply to concrete by brush according to manufacturer's written instructions, leaving no pinholes or other uncoated areas. Apply patching mortar or concrete while epoxy is still tacky. If bonding agent dries, recoat before placing patching mortar or concrete.

B. Patching Mortar: Unless otherwise recommended by manufacturer, apply as follows:

1. Apply epoxy bonding agent to existing concrete substrate.
2. Place patching mortar by troweling toward edges of patch to force intimate contact with edge surfaces. For large patches, fill edges first and then work toward center, always troweling toward edges of patch.
3. After each lift is placed, consolidate material and screed surface.
4. Where multiple lifts are used, score surface of lifts to provide a rough surface for application of subsequent lifts. Allow each lift to reach final set before placing subsequent lifts.
5. Allow surfaces of lifts that are to remain exposed to become firm and then finish to a smooth surface with a wood or sponge float.
6. At slab surfaces, screed patching material to produce a surface that when finished will match required profile and surrounding concrete.
7. Cure patching material for not less than seven days by covering with moisture retaining polyethylene sheet.

END OF SECTION 03 0130
SECTION 03 5416 - HYDRAULIC-CEMENT-BASED UNDERLAYMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes hydraulic-cement-based underlayment.

B. Related Sections include the following:

1. Division 09 Sections for patching and leveling compounds applied with floor coverings.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Installer who is approved by manufacturer for application of underlayment products required for this Project.

B. Product Compatibility: Manufacturers of both underlayment and floor covering system certify in writing that products are compatible.

C. Mockups: Apply hydraulic-cement-based underlayment mockups to demonstrate surface finish, bonding, texture, tolerances, and standard of workmanship.

1. Apply mockups approximately 100 sq. ft. in area in location as directed by Architect.
2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store materials to comply with manufacturer’s written instructions to prevent deterioration from moisture or other detrimental effects.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Comply with manufacturer’s written instructions for substrate temperature, ambient temperature and humidity, ventilation, and other conditions affecting underlayment performance.

1. Place hydraulic-cement-based underlayments only when ambient temperature and temperature of substrates are between 50 and 80 deg F.

1.7 COORDINATION

A. Coordinate application of underlayment with requirements of floor covering products, including adhesives, specified in Division 9 Sections, to ensure compatibility of products.
PART 2 - PRODUCTS

2.1 HYDRAULIC-CEMENT-BASED UNDERLAYMENTS

A. Underlayment: Hydraulic-cement-based, polymer-modified, self-leveling product that can be applied in minimum uniform thicknesses of 1/8 inch and that can be feathered at edges to match adjacent floor elevations.

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Ardex; K-15 Self-Leveling Underlayment Concrete.
   b. Dayton Superior Corporation; Conflow Supreme.
   c. Euclid Chemical Company; Flo-Top.
   d. L&M Construction Chemicals, Inc.; Levelex.
   e. Maxxon Corporation; Level-Right.

2. Cement Binder: ASTM C 150, portland cement, or hydraulic or blended hydraulic cement as defined by ASTM C 219.

3. Compressive Strength: Not less than 4100 psi at 28 days when tested according to ASTM C 109/C 109M.

4. Underlayment Additive: Resilient-emulsion product of underlayment manufacturer formulated for use with underlayment when applied to substrate and conditions indicated.

B. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch; or coarse sand as recommended by underlayment manufacturer.

1. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required.

C. Water: Potable and at a temperature of not more than 70 deg F.

D. Primer: Product of underlayment manufacturer recommended in writing for substrate, conditions, and application indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for conditions affecting performance.

1. Proceed with application only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. General: Prepare and clean substrate according to manufacturer's written instructions.

1. Treat nonmoving substrate cracks according to manufacturer's written instructions to prevent cracks from telegraphing (reflecting) through underlayment.

2. Fill substrate voids to prevent underlayment from leaking.

B. Concrete Substrates: Mechanically remove, according to manufacturer's written instructions, laitance, glaze, efflorescence, curing compounds, form-release agents, dust, dirt, grease, oil, floor adhesive and other contaminants that might impair underlayment bond.
1. Moisture Testing: Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with installation only after substrates do not exceed a maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.

C. Adhesion Tests: After substrate preparation, test substrate for adhesion with underlayment according to manufacturer's written instructions.

3.3 APPLICATION

A. General: Mix and apply underlayment components according to manufacturer's written instructions.

1. Close areas to traffic during underlayment application and for time period after application recommended in writing by manufacturer.
2. Coordinate application of components to provide optimum underlayment-to-substrate and intercoat adhesion.
3. At substrate expansion, isolation, and other moving joints, allow joint of same width to continue through underlayment.

B. Apply primer over prepared substrate at manufacturer's recommended spreading rate.

C. Apply underlayment to produce uniform, level surface.

1. Apply a final layer without aggregate to produce surface.
2. Feather edges to match adjacent floor elevations.

D. Cure underlayment according to manufacturer's written instructions. Prevent contamination during application and curing processes.

E. Do not install floor coverings over underlayment until after time period recommended in writing by underlayment manufacturer.

F. Remove and replace underlayment areas that evidence lack of bond with substrate, including areas that emit a "hollow" sound when tapped.

3.4 PROTECTION

A. Protect underlayment from concentrated and rolling loads for remainder of construction period.

3.5 WASHOUT WASTE MANAGEMENT AND DISPOSAL

A. Washout Waste Management and Disposal: Hydraulic-Cement-Based Underlayment washout cannot be discharged into storm drains, catch basins or to the sanitary sewer system. Washout typically has a high pH and can be harmful to the environment. Proper disposal and washout practices should be taken. Perform washing of concrete trucks in designated areas or offsite.

1. Designated areas should:
   a. Be labeled.
   b. Be a pit to prevent runoff.
   c. Be approximately 50 feet away from storm drains, bodies of water and ditches.
   d. Have some type of liner to prevent seepage.
   e. Have some type of barrier.
2. Once concrete is washed out into designated area and is allowed to harden, it should be broken up and disposed of properly. Dispose of hardened concrete on a regular basis.
3. Washout facilities must be cleaned, or new facilities must be constructed and ready for use once washout is 75 percent full.

END OF SECTION 03 5416
PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes acoustical panels and exposed suspension systems for ceilings.

1. Acoustical panels in existing exposed suspension systems.

B. Related Sections include the following:

1. Room Finish Schedule on Drawings.

1.3 DEFINITIONS

A. CAC: Ceiling Attenuation Class.

B. LR: Light Reflectance coefficient.

C. NRC: Noise Reduction Coefficient.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of size indicated below.

1. Acoustical Panel: Set of 6-inch- square Samples of each type, color, pattern, and texture.

C. Maintenance Data: For finishes to include in maintenance manuals.

1.5 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of acoustical ceiling panel and supporting suspension system through one source from a single manufacturer.

B. Fire-Test Characteristics: Provide acoustical panel ceilings that comply with the following requirements:

1. Surface-Burning Characteristics: Provide acoustical panels with the following surface-burning characteristics complying with ASTM E 1264 for Class A materials as determined by testing identical products per ASTM E 84:

   a. Smoke-Developed Index: 450 or less.
1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver acoustical panels, suspension system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Do not store porous materials near other materials that may off-gas or emit harmful fumes, such as kerosene heaters, fresh paint, adhesives, etc.

C. Do not allow materials to become damp. Maintain temperatures at 60 deg F or higher and humidity between 20 percent and 60 percent, prior to, during and after installation.

D. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.

E. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

1.7 PROJECT CONDITIONS

A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

1.8 COORDINATION

A. Coordinate layout and installation of acoustical panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

1.9 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Acoustical Ceiling Panels: 5 packages of full-size acoustical panels of each type, color and size installed.

PART 2 - PRODUCTS

2.1 ACOUSTICAL PANELS, GENERAL

A. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, acoustical ratings, and light reflectances.

B. Acoustical Panel Colors and Patterns: Match appearance characteristics indicated for each product type.
2.2 MINERAL-BASE ACOUSTICAL PANELS C1

A. Mineral-Base Acoustical Panels: Provide acoustical panels complying with the following:

1. Products:
   a. Millennia Illusion Two/24 ClimaPlus No. 78780; USG Interiors, Inc.

2. Color: White
3. LR: Not less than 0.85.
4. NRC: Not less than 0.70 minimum.
5. CAC: Not less than 35.
6. Humidity Resistance: No visible sag at 90 percent relative humidity, 104 deg F. temperature.
7. Recycled Content: 79 percent minimum.
8. Edge Detail: Square.
10. Size: 24 by 48 inches with face score to simulate 24 by 24 inch panels.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. General: Install acoustical panel ceilings to comply with ASTM C 636 and seismic requirements indicated, per manufacturer’s written instructions and CISCA’s “Ceiling Systems Handbook.”

B. Install acoustical panels with undamaged edges and fit accurately into existing suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

1. For reveal-edged panels on suspension system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
   a. Panels requiring field cut reveal edges shall be cut using a table mounted router or “Falcon Cutter”. Hand cut reveal edges are not allowed.

2. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.

3.2 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 09 5113
SECTION 09 6513 - RESILIENT WALL BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Wall base.
2. Molding accessories.
3. Resilient stair treads and risers.

B. Related Sections include the following:

1. Section 09 6519 “Resilient Tile Flooring.”
2. Section 09 6813 “Tile Carpeting.”
3. Room Finish Schedule on Drawings.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples: For each type of product indicated, in manufacturer's standard-size.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F.

1.5 PROJECT CONDITIONS

A. Maintain temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive floor tile during the following time periods:

1. 48 hours before installation.
2. During installation.
3. 48 hours after installation.

B. After postinstallation period, maintain temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.

C. Install resilient products after other finishing operations, including painting, have been completed.
1.6 EXTRA MATERIALS
   A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
      1. Furnish 1 roll for each color of resilient base installed.

PART 2 - PRODUCTS

2.1 COLORS AND PATTERNS
   A. Colors: As indicated in Room Finish Schedule on Drawings.

2.2 RESILIENT WALL BASE
   A. Wall Base: ASTM F 1861.
      1. Manufacturer: Johnsonite/Tarkett.
      2. Type (Material Requirement): TS (rubber, vulcanized thermoset) or TP (rubber, thermoplastic).
      4. Style: Cove (with top-set toe) and Straight where indicated in Room Finish Schedule on Drawings.
      5. Minimum Thickness: 0.125 inch.
      6. Height: 4 inches.
      7. Lengths: Coils in manufacturer's standard length.
      8. Outside Corners: Job formed.
      10. Surface: Smooth.

2.3 RESILIENT MOLDING ACCESSORIES
   A. Description:
      1. Carpet to Concrete Resilient Edge Strip: Johnsonite No. EG-XX-H.
      2. Resilient Flooring to Concrete Resilient Edge Strip: Johnsonite No. RRS-XX-C.
      3. Carpet to Resilient Floor Edge Strip: Johnsonite No. CTA-XX-A.
      4. Step Nosings: Johnsonite No. SLN-XX-B.

   B. Material: Rubber.

2.4 RESILIENT STAIR ACCESSORIES
   A. Stair Treads: ASTM F 2169.
      1. Type: TS (rubber, vulcanized thermoset).
      2. Class: 2 (pattern; embossed, grooved, or ribbed).
      3. Nosing Style: Square, adjustable to cover angles between 60 and 90 degrees.
      4. Nosing Height: 2 inches.
      5. Thickness: .0210 inch and tapered to 0.153 inch at back edge.
      6. Size: Lengths and depths to fit each stair tread in one piece or, for treads exceeding maximum lengths manufactured, in equal-length units.
      7. Integral Risers: Smooth, flat; in height that fully covers substrate.
8. Fire-Test-Response Characteristics:
   a. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.
   b. Smoke Density: Less than 450 per ASTM E 662.

9. Products/Manufacturer: Subject to compliance with requirements, provide the following:
   a. Rubber Stair Treads Style Cubis (CUTR); Johnsonite, a Tarkett Company.

2.5 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic cement based formulation provided or approved by resilient product manufacturers for applications indicated.

B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.
   1. Use adhesives that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24) to meet LEED requirements:
      a. Cove Base Adhesives: 50 g/L.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
   1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
   2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of resilient products.

B. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation.
   1. Do not install resilient products until they are the same temperature as the space where they are to be installed.

C. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.
3.3 RESILIENT WALL BASE INSTALLATION

A. Apply wall base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.

B. Install wall base in lengths as long as practicable without gaps at seams and with tops of adjacent pieces aligned.

C. Tightly adhere wall base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.

D. Do not stretch wall base during installation.

E. Job-Formed Corners:

1. Outside Corners: Use straight pieces of maximum lengths possible. Form without producing discoloration (whitening) at bends. Shave back of base at points where bends occur and remove strips perpendicular to length of base that are only deep enough to produce a snug fit without removing more than half the wall base thickness.

2. Inside Corners: Use straight pieces of maximum lengths possible. Form by cutting an inverted V-shaped notch in toe of wall base at the point where corner is formed. Shave back of base where necessary to produce a snug fit to substrate.

3.4 RESILIENT ACCESSORY INSTALLATION

A. Resilient Molding Accessories: Butt to adjacent materials and tightly adhere to substrates throughout length of each piece. Install reducer strips at edges of floor coverings that would otherwise be exposed.

3.5 RESILIENT STAIR ACCESSORY INSTALLATION

A. Resilient Stair Accessories:

1. Tightly adhere to substrates throughout length of each piece.

2. For treads installed as separate, equal-length units, install to produce a flush joint between units.

3.6 CLEANING AND PROTECTION

A. Perform the following operations immediately after completing resilient product installation:

1. Remove adhesive and other blemishes from exposed surfaces.

   a. Do not wash surfaces until after time period recommended by manufacturer.

B. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
3.7 WASTE MANAGEMENT

A. Separate and recycle waste materials, packaging, and all other materials in accordance with the Waste Management Plan and to the maximum extent possible, send to reuse or recycle centers.

B. Close and tightly seal all partly used containers and store protected in well-ventilated, fire-safe area at moderate temperature. Deliver to reuse and/or recycle facilities if not removed from site for Contractor’s reuse.

C. Check with manufacturer for recycling options. Many manufacturers take back scrap and unused portions for resale or manufacturing into new product.

END OF SECTION 09 6513
SECTION 09 6519 - RESILIENT TILE FLOORING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Solid luxury vinyl plank tile.

B. Related Sections include the following:

1. Section 09 6513 "Resilient Wall Base and Accessories" for resilient wall base, reducer strips, and other accessories installed with resilient floor tile.
2. Section 09 6813 “Tile Carpeting.”
3. Section 09 6816 “Sheet Carpeting.”
4. Room Finish Schedule on Drawings.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.
B. Samples for Verification: Full-size units of each color and pattern of resilient floor tile required.
C. Fire Performance Affidavit: Signed by resilient tile manufacturer stating the flooring products comply with specified fire performance characteristics.
D. Maintenance Data: For resilient products to include in maintenance manuals.

1.4 QUALITY ASSURANCE

A. Fire-Test Characteristics: Provide products identical to those tested for fire-exposure behavior per test method indicated by a testing and inspecting agency acceptable to authorities having jurisdiction.
B. Installer Qualifications: Installers shall be certified INSTALL (International Standards & Training Alliance) professionals certified for the requirements of the project.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store resilient products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F or more than 90 deg F. Store tiles on flat surfaces.
1.6 PROJECT CONDITIONS

A. Maintain temperatures within range recommended by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive floor tile during the following time periods:
   1. 48 hours before installation.
   2. During installation.
   3. 48 hours after installation.

B. After postinstallation period, maintain temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F.

C. Close spaces to traffic during floor covering installation.

D. Close spaces to traffic for 48 hours after floor covering installation.

E. Install resilient floor tile under cabinets and fan coil units.

F. Install resilient products after other finishing operations, including painting, have been completed.

1.7 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

   1. Floor Tile: Furnish 1 box for every 50 boxes or fraction thereof, of each type, color, and pattern of floor tile installed.

1.8 WARRANTY

A. Special Warranty for Luxury Vinyl Tile: Manufacturer agrees to repair or replace components of luxury vinyl tile installation that fail in materials or workmanship within specified warranty period.

   1. Warranty does not include deterioration or failure of luxury vinyl tile due to unusual traffic, failure of substrate, vandalism, or abuse.
   2. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOLID VINYL PLANK FLOOR TILE LVT-01 and LVT-03

A. Solid Vinyl Plank Floor Tile: ASTM F 1700, Class III, Type -B.

   1. Products: Subject to compliance with requirements provide the following:

      a. Vertical Layers Collection – Unveil No. 0601V; Shaw

   2. Colors: As indicated in Room Finish Schedule on Drawings.

   3. Thickness:

      a. Overall: 3 mm (0.118 inch nominal)
      b. Wear Layer: 30 mil.
4. Plank Size: 22.86 cm by 91.44 cm, (9 by 36 inches nominal).
8. Residual Indentation: Passes when tested according to ASTM F1914.
11. Fire-Test-Response Characteristics:
   a. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.

2.2 SOLID VINYL PLANK FLOOR TILE LVT-02

A. Solid Vinyl Plank Floor Tile: ASTM F 1700, Class III, Type -A.

1. Products: Subject to compliance with requirements provide the following:
   a. Stratified+ No. 1322V; Patcraft

2. Colors: As indicated in Room Finish Schedule on Drawings.
3. Thickness:
   a. Overall: 2.5 mm (0.098 inch nominal)
   b. Wear Layer: 30 mil.

4. Plank Size: 12 by 24 inches.
7. Residual Indentation: Passes when tested according to ASTM F1914.
8. Slip Resistance: ASTM D2047, ADA Compliant
10. Fire-Test-Response Characteristics:
    a. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm per ASTM E 648.

2.3 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Cement-based, rapid-drying, trowelable skimcoat to patch and smooth interior floors prior to installation.

1. Product:
   a. Prep Star; CMP Specialty Products, (257) 522-8000

B. Adhesives: Water-resistant type recommended by manufacturer to suit resilient products and substrate conditions indicated.

1. Use adhesives that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
   a. Solid Vinyl Plank and Solid Vinyl Tile Floor Adhesives: 50 g/L.
   b. Rubber Floor Adhesives: 60 g/L.
PART 3 - EXECUTION

3.1  EXAMINATION

A. Examine substrates for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
   1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
   2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2  PREPARATION

A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of resilient products.

B. Concrete Substrates: Prepare according to ASTM F 710.
   1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
   2. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
   3. Moisture Testing:
      a. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
      b. Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.

C. Remove substrate coatings including old adhesive and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.

D. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates and skim coat entire surface to receive resilient tile flooring.

E. Move resilient products and installation materials into spaces where they will be installed at least 48 hours in advance of installation. Open boxes and allow tiles to acclimatize.
   1. Do not install resilient products until they are same temperature as space where they are to be installed.

F. Sweep and vacuum clean substrates to be covered by resilient products immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3  TILE INSTALLATION

A. Lay out tiles from center marks established with principal walls, discounting minor offsets, so tiles at opposite edges of room are of equal width. Adjust as necessary to avoid using cut widths that equal less than one-half tile at perimeter.
   1. Lay luxury vinyl tiles in brick pattern indicated on Drawings.
B. Discard broken, cracked, chipped, or deformed tiles.

C. Scribe, cut, and fit tiles to butt neatly and tightly to vertical surfaces and permanent fixtures including built-in furniture, cabinets, pipes, outlets, edgings, door frames, thresholds, and nosings.

D. Extend tiles into toe spaces, door reveals, closets, and similar openings.

E. Adhere tiles to flooring substrates using a full spread of adhesive applied to substrate to produce a completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after completing resilient product installation:

1. Remove adhesive and other blemishes from exposed surfaces.
2. Sweep and vacuum surfaces thoroughly.
3. Damp-mop surfaces to remove marks and soil.

   a. Do not wash surfaces until after time period recommended by manufacturer.

B. Protect resilient products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.

1. Do not apply floor polish to luxury vinyl plank tile flooring.
2. Cover products installed on horizontal surfaces with undyed, untreated building paper until Substantial Completion.
3. Do not move heavy and sharp objects directly over surfaces. Place hardboard or plywood panels over flooring and under objects while they are being moved. Slide or roll objects over panels without moving panels.

END OF SECTION 09 6519
SECTION 09 6813 – TILE CARPETING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes carpet tile and installation.

B. Related Sections include the following:

1. Section 09 6519 "Resilient Tile Flooring."
2. Section 09 6513 "Resilient Wall Base and Accessories" for resilient wall base and accessories installed with carpet tile.
3. Section 09 6816 "Sheet Carpeting."
4. Room Finish Schedule on Drawings

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation methods.

B. Shop Drawings: Show the following:

1. Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet tiles.
2. Carpet tile type, color, and dye lot.
3. Pattern type, location, and direction.
4. Pile direction.
5. Type, color, and location of edge, transition, and other accessory strips.
6. Transition details to other flooring materials.

C. Samples: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.


D. Fire Performance Affidavit: signed by carpet tile manufacturer indicating compliance with specified fire performance characteristics.

E. Product Schedule: Use same room and product designations indicated on Drawings and in schedules.

F. Qualification Data: For qualified Installers indicating they are certified INSTALL (International Standards & Training Alliance) professionals.
G. Maintenance Data: For carpet tile to include in maintenance manuals. Include the following:
   1. Methods for maintaining carpet tile, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
   2. Precautions for cleaning materials and methods that could be detrimental to carpet tile.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Installers shall be certified INSTALL (International Standards & Training Alliance) professionals certified for the requirements of the project.

B. Fire-Test-Response Characteristics: Provide products with the critical radiant flux classification indicated in Part 2, as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

C. Installer Qualifications: Installers shall be certified INSTALL (International Standards & Training Alliance) professionals certified for the requirements of the project.

1.5 DELIVERY, STORAGE, AND HANDLING

A. General: Comply with CRI 104, Section 5, "Storage and Handling."

1.6 PROJECT CONDITIONS

A. General: Comply with CRI 104, Section 6.1, "Site Conditions; Temperature and Humidity."

B. Environmental Limitations: Do not install carpet tile until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

C. Do not install carpet tile over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet tile manufacturer.

1.7 WARRANTY

A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Special Carpet Tile Warranty: Written warranty, signed by carpet tile manufacturer agreeing to replace carpet tile that does not comply with requirements or that fails within specified warranty period. Warranty does not include deterioration or failure of carpet tile due to unusual traffic, failure of substrate, vandalism, or abuse. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.

   1. Warranty Period: 10 years from date of Substantial Completion.

1.8 EXTRA MATERIALS

A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

   1. Carpet Tile: 4 sq. yd. full-size units for each color and type indicated.
PART 2 - PRODUCTS

2.1 CARPET TILE CPT-02

A. Products: Subject to compliance with requirements, provide the following:

1. Carpet Tile Collection, Pattern Name and Manufacturer: Clearview Collection, Transparent Tile No. 59563, Shaw Contract Group.
2. Color: Color as indicated in Room Finish Schedule on Drawings.
3. Construction: Multilevel Pattern Loop.
4. Fiber Content: Eco Solution q nylon.
5. Gauge: 1/12 inch.
6. Stitches per Inch: 8.0/inch.
7. Total Thickness: 0.254 inch.
8. Tufted Yarn Weight: 15.0 oz./sq. yd.
10. Primary Backing: Synthetic.
13. Performance Characteristics: As follows:
   d. Static Generation (AATCC 134): 3.0 kV.
   e. CRI Green Label Plus Certification: GLP9968.

2.2 CARPET WALK-OFF TILE CPT-04

A. Products: Subject to compliance with requirements, provide the following:

1. Carpet Tile Pattern Name and Manufacturer: Abrasive Action II No. 02578, Tandus Centiva
2. Color: Winter Gray 19103
5. Gauge: 1/12 inch.
6. Stitches per Inch: 8.0.
7. Pile Height Average: 0.187 inch.
8. Face Weight: 24.0 oz./sq. yd.
12. Performance Characteristics: As follows:
   a. Traffic Class: Severe (TARR).
   e. Static Generation (AATCC 134): 1.5 kV.

2.3 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by carpet tile manufacturer.
B. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet tile and is recommended by carpet tile manufacturer for releasable installation.

1. Adhesives shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24) to meet LEED Requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet tile performance. Verify that substrates and conditions are satisfactory for carpet tile installation and comply with requirements specified.

B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:

1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet tile manufacturer.

2. Subfloor finishes comply with requirements specified in Section 03300 "Cast-in-Place Concrete" for slabs receiving carpet tile.

3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and carpet tile manufacturer's written installation instructions for preparing substrates indicated to receive carpet tile installation.

B. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet tile manufacturer.

C. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.

D. Broom and vacuum clean substrates to be covered immediately before installing carpet tile. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

A. General: Comply with CRI 104, Section 13, "Carpet Modules (Tiles)."

B. Installation Method: Glue-down; install every tile with full spread of releasable adhesive.

1. Install carpet tile in patterns indicated on Drawings.

C. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet tile manufacturer.
D. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, alcoves, and similar openings.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet tile:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet tile manufacturer.
2. Remove yarns that protrude from carpet tile surface.

B. Protect installed carpet tile to comply with CRI 104, Section 15, "Protection of Indoor Installations."

1. Do not use plastic protection. Plastic can permanently discolor carpet and cause accelerated soiling. Kraft paper, corrugated box material or hardboard are recommended by carpet tile manufacturers.

C. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

END OF SECTION 09 6813
SECTION 09 6816 - SHEET CARPETING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Broadloom carpet.

B. Related Sections include the following:

1. Section 09 6513 "Resilient Base and Accessories."
2. Section 09 6813 "Tile Carpeting."
3. Room Finish Schedule on Drawings.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate required.

B. Shop Drawings: Show the following:

1. Columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet.
2. Carpet type, color, and dye lot.
3. Locations where dye lot changes occur.
4. Seam locations, types, and methods.
5. Pattern type, repeat size, location, direction, and starting point.
6. Pile direction.
7. Type, color, and location of edge, transition, and other accessory strips.
8. Transition details to other flooring materials.

C. Samples: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.

1. Carpet: 12-inch- square Sample.

D. Qualification Data: For qualified Installers indicating they are certified INSTALL (International Standards & Training Alliance) professionals.

E. Maintenance Data: For carpet to include in maintenance manuals.

1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
2. Precautions for cleaning materials and methods that could be detrimental to carpet.
1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Sheet Carpet: Full-size units equal to 10 percent of amount installed for each type indicated, but not less than 10 sq. yd.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: An experienced Installer who is certified by the International Certified Floorcovering Installers Association at the Commercial II certification level.

1. Installer shall be approved, authorized, or licensed by carpet manufacturer to install manufacturer’s product.

B. Fire-Test Characteristics: Provide products with the critical radiant flux classification indicated in Part 2, as determined by testing per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

1.6 DELIVERY, STORAGE, AND HANDLING

A. General: Comply with CRI 104, Section 5, "Storage and Handling."

1.7 PROJECT CONDITIONS

A. General: Comply with CRI 104, Section 6.1, "Site Conditions; Temperature and Humidity."

B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

C. Do not install carpet over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet manufacturer.

1.8 WARRANTY

A. Special Warranty for Carpet: Manufacturer agrees to repair or replace components of carpet installation that fail in materials or workmanship within specified warranty period.

1. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse.

2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, seam failures and delamination.

3. Warranty Period: Three (3) years from date of Substantial Completion.
PART 2 - PRODUCTS

2.1 CARPET-CPT-01

A. Products: Subject to compliance with requirements, provide the following:

1. Product Line/Manufacturer: Nova No. 044707; Tandus Centiva, A Tarkett Company.
   a. Color: Refer to Room Finish Schedule and Color Codes for each school on Drawings
2. Construction: Stratatec Patterned Loop.
4. Stitches: 10.0/inch.
5. Pile Height Average: 0.187 inch.
7. Dye Method: 100 percent solution dyed.
8. Primary Backing: Non-woven synthetic fiber.
11. Performance Characteristics: As follows:
   c. Static Generation (AATCC 134): Less than 1.1 kV.

2.2 CARPET CPT-03

A. Products: Subject to compliance with requirements, provide the following:

1. Product Line/Manufacturer: Aftermath II No. 03026; Tandus Centiva, A Tarkett Company.
   a. Color: Refer to Room Finish Schedule and Color Codes for each school on Drawings
2. Construction: Stratatec Patterned Loop.
3. Face Weight: 17 oz./sq.yd.
5. Stitches: 8.5/inch.
6. Pile Height Average: 0.187 inch.
7. Fiber Content: Dynex SD Nylon/Dynex Nylon.
8. Dye Method: 90 percent solution dyed/10 percent yarn dyed.
11. Performance Characteristics: As follows:
   c. Static Generation (AATCC 134): Less than 1.5 kV.

2.3 INSTALLATION ACCESSORIES

A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided by or recommended by the following:

1. Carpet manufacturer.
B. Subfloor Transition Strips:
   1. Product:

C. Adhesives: Water-resistant, mildew-resistant, nonstaining, pressure-sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet tile and is recommended by carpet tile manufacturer for releasable installation.

D. Seaming Cement: Seam sealant, or similar product recommended by carpet manufacturer for bonding seams and butting cut edges at backing to form secure seams and to prevent pile loss at seams.
   1. Hot-melt adhesive tape shall not be acceptable.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet performance. Verify that substrates and conditions are satisfactory for carpet installation and comply with requirements specified.

B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
   1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
   2. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet manufacturer.
   3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and carpet manufacturer's written installation instructions for preparing substrates indicated to receive carpet installation.

B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.

C. Subfloor Transition Strips: Install subfloor transition strips as required for a flush transition between carpet and adjacent finish floor. Comply with subfloor transition strip manufacturer's written installation instructions.
   1. Locations:
      a. As required or indicated on Drawings.
D. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by the following:

1. Carpet manufacturer.

E. Broom and vacuum clean substrates to be covered immediately before installing carpet. After cleaning, examine substrates for moisture, alkaline salts, carbonation, or dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 INSTALLATION

A. Comply with CRI 104 and carpet manufacturer's written installation instructions for the following:

1. Direct-Glue-Down Installation: Comply with CRI 104, Section 9, "Direct Glue-Down Installation."

B. Comply with carpet manufacturer's written recommendations for seam locations and direction of carpet; maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.

C. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

D. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

E. Carpet Patterns: Install pattern parallel to walls and borders to comply with CRI 104, Section 15, "Patterned Carpet Installations" and with carpet manufacturer's written recommendations.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
2. Remove yarns that protrude from carpet surface.

B. Protect installed carpet to comply with CRI 104, Section 16, "Protecting Indoor Installations."

C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer.

END OF SECTION 09 6816
SECTION 09 8436 - SOUND-ABSORBING CEILING UNITS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes shop-fabricated, acoustical panel units tested for acoustical performance, including the following:

1. Custom shape sound-absorbing ceiling panels.

B. Related Requirements:

1. Room Finish Schedule on Drawings

1.3 DEFINITIONS

A. NRC: Noise Reduction Coefficient.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include fabric facing, panel edge, core material, and mounting indicated.

B. Shop Drawings: For unit assembly and installation.

1. Include reflected ceiling plans, elevations, sections, and mounting devices and details.
2. Include direction of fabric weave and pattern matching.

C. Samples for Verification: For the following products:

1. Fabric: Sample of size required to show complete pattern repeat, from dye lot to be used for the Work, and with specified treatments applied. Mark top and face of fabric.

1.5 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Reflected ceiling plans and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Suspended ceiling components above ceiling units.

B. Product Certificates: For each type of unit.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of unit to include in maintenance manuals. Include fabric manufacturer's written cleaning and stain-removal instructions.
1.7 DELIVERY, STORAGE, AND HANDLING

A. Comply with fabric and unit manufacturers’ written instructions for minimum and maximum temperature and humidity requirements for shipment, storage, and handling.

B. Deliver materials and units in unopened bundles and store in a temperature-controlled dry place with adequate air circulation.

1.8 FIELD CONDITIONS

A. Environmental Limitations: Do not install units until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, work at and above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Air-Quality Limitations: Protect units from exposure to airborne odors, such as tobacco smoke, and install units under conditions free from odor contamination of ambient air.

C. Field Measurements: Verify unit locations and actual dimensions of openings and penetrations by field measurements before fabrication, and indicate them on Shop Drawings.

1.9 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace units and components that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
   b. Fabric sagging, distorting, or releasing from panel edge.
   c. Warping of core.

2. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

2.2 PERFORMANCE REQUIREMENTS

A. Fire-Test-Response Characteristics: Units shall comply with "Surface-Burning Characteristics" or "Fire Growth Contribution" Subparagraph below, or both, as determined by testing identical products by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:

1. Surface-Burning Characteristics: Comply with ASTM E 84 or UL 723; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
   a. Flame-Spread Index: 25 or less.
   b. Smoke-Developed Index: 450 or less.

2.3 SOUND-ABSORBING CEILING UNITS

A. Sound-Absorbing Ceiling Panel: Manufacturer’s standard panel construction consisting of facing material laminated to front face, edges, and back edge border of core.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
a. Acoustical Panel Systems (APS, Inc.).
b. Armstrong World Industries, Inc.
c. Conwed Designscape; an Owens Corning company.
d. Golterman & Sabo.
e. Sound Concepts Canada, Inc.
f. Wall Technology, Inc.; an Owens Corning company.

2. Panel Shape: As indicated on Drawings.
3. Mounting: Back mounted with manufacturer's standard suspension system with stiffening, back-support angles, secured to existing acoustical ceiling grid with clips.
1. Core: Glass-fiber board.
   a. Core-Face Layer: Manufacturer's standard impact-resistant, perforated copolymer sheet.

2. Edge Construction: Manufacturer's standard chemically hardened core with no frame.
3. Edge Profile: Square.
4. Corner Detail in Elevation: As indicated on Drawings with continuous edge profile indicated.
5. Facing Material:.
6. Acoustical Performance: Sound absorption NRC 0.90 according to ASTM C 423 for Type J mounting according to ASTM E 795.
7. Nominal Core Thickness: 2 inches.

2.4 MATERIALS

A. Core Materials:
1. Glass-Fiber Board: ASTM C 612; of type standard with manufacturer; nominal density of 6 to 7 lb/cu. ft., unfaced, and dimensionally stable, molded rigid board; and with maximum flame-spread and smoke-developed indexes of 25 and 50, respectively.
2. Impact-Resistant, Copolymer Sheet for Face Layer: 1/16- to 1/8-inch- thick layer of perforated, noncombustible, copolymer sheet laminated to face of core.

B. Facing Material: Fabric from same dye lot; color and pattern:
1. Manufacturer: Carnegie Fabrics Inc..
3. Style Number: 6423.
4. Color: As indicated in Room Finish Schedule on Drawings.
5. Fiber Content: 100 percent woven polyethylene (85 percent plant based PE/15 percent PE).

C. Mounting Devices: Concealed on back or top edge of unit, recommended by manufacturer to support weight of unit.
1. Mounting: Back mounted with manufacturer's standard suspension system with stiffening, back-support angles, secured to existing acoustical ceiling grid with clips which engage gris..

D. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
1. Zinc-Coated Carbon-Steel Wire: ASTM A 641, Class 1 zinc coating, soft temper.
2. Size: Select wire diameter so its stress at three times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch diameter wire.
2.5 FABRICATION

A. Standard Construction: Use manufacturer's standard construction unless otherwise indicated, with facing material applied to face, edges, and back border of dimensionally stable core and with rigid edges to reinforce panel perimeter against warpage and damage.

B. Edge Hardening: For glass-fiber board cores, chemically harden core edges and areas of core where mounting devices are attached.

C. Facing Material: Apply fabric facing fully covering visible surfaces of unit; with material stretched straight, on the grain, tight, square, and free from puckers, ripples, wrinkes, sags, blisters, seams, adhesive, or other visible distortions or foreign matter.
   1. Square Corners: Tailor corners.
   2. Radius and Other Nonsquare Corners: Attach facing material so there are no seams or gathering of material.
   3. Fabrics with Directional or Repeating Patterns or Directional Weave: Mark fabric top and attach fabric in same direction so pattern or weave matches adjacent units.

D. Dimensional Tolerances of Finished Units: Plus or minus 1/16 inch for the following:
   1. Thickness.
   2. Edge straightness.
   3. Overall length and width.
   4. Squareness from corner to corner.
   5. Chords, radii, and diameters.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine fabric, fabricated units, substrates, areas, and conditions for compliance with requirements, installation tolerances, and other conditions affecting unit performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install units in locations indicated. Unless otherwise indicated, install units with edges in alignment with walls and other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.

B. Comply with manufacturer's written instructions for installation of units using type of mounting devices indicated. Mount units securely to supporting substrate.

3.3 INSTALLATION TOLERANCES

A. Variation from Level or Slope: Plus or minus 1/8 inch.
3.4 CLEANING

A. Clip loose threads; remove pills and extraneous materials.

B. Clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.

END OF SECTION 09 8436
SECTION 09 9100 - PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes surface preparation and field painting of the following:

1. Existing acoustical panel ceiling grid members and wall trim.
2. Interior wall surfaces.

B. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.

1. Prefinished items include the following factory-finished components:
   a. Finished mechanical and electrical equipment.
   b. Light fixtures.

2. Concealed surfaces include walls or ceilings in the following generally inaccessible spaces:
   a. Furred areas.
   b. Ceiling plenums.
   c. Pipe spaces.

3. Finished metal surfaces include the following:
   a. Anodized aluminum.
   b. Stainless steel.
   c. Chromium plate.
   d. Copper and copper alloys.
   e. Bronze and brass.

4. Operating parts include moving parts of operating equipment and the following:
   a. Valve and damper operators.
   b. Linkages.
   c. Sensing devices.
   d. Motor and fan shafts.

5. Labels: Do not paint over UL, FMG, or other code-required labels or equipment name, identification, performance rating, or nomenclature plates.

C. Related Sections include the following:

1. Room Finish Schedule on Drawings.
DEFINITIONS

A. Dry Film Thickness (DFT): The thickness of the dry film of a coating measured in mils.

B. Mils: One one-thousandth of an inch. Used to measure thickness of coating films.

C. Sheen/Gloss: Defined in ASTM D 523 apply to this Section.

1. Gloss Level 1 (Matte or Flat Finish): Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.
2. Gloss Level 2 (Velvet Finish): Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
3. Gloss Level 3 (Eggshell Finish): 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.
4. Gloss Level 4 (Satin Finish): 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.
5. Gloss Level 5 (Semi-Gloss Finish): 35 to 70 units at 60 degrees, according to ASTM D 523.
6. Gloss Level 6 (Gloss Finish): 70 to 85 units at 60 degrees, according to ASTM D 523.
7. Gloss Level 7 (High Gloss Finish): More than 85 units at 60 degrees, according to ASTM D 523.

1.4 SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions, include the following:

1. VOC content.

B. Samples for Verification: For each color and material to be applied, with texture to simulate actual conditions.

1. On draw down display cards submit three samples of each color and finish.

1.5 QUALITY ASSURANCE

A. Applicator Qualifications: A firm and individuals experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project.

1. Only qualified journeypersons, as defined by local jurisdiction, shall be engaged in painting work. Apprentices may be employed provided they work under the direct supervision of a qualified journeyperson in accordance with trade regulations.

B. Source Limitations: Obtain primers for each coating system from the same manufacturer as the finish coats.

C. Mockups: Apply mockups of each paint system indicated and each color and finish selected to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Prepare and paint designated surface, area, room or item to requirements specified herein, with specified paint showing selected colors, gloss/sheen, textures and workmanship for review and approval. When approved, surface, area, room and/or items shall become acceptable standard of finish quality and workmanship for similar on-site work

a. Acoustical Panel Ceiling Grid: Provide mockup samples of at least 100 sq. ft.
2. Final approval of color selections will be based on mockups.
   a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.

4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

   A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:

      1. Product name or title of material.
      2. Product description (generic classification or binder type).
      3. Manufacturer's stock number and date of manufacture.
      4. Contents by volume, for pigment and vehicle constituents.
      5. Thinning instructions.
      6. Application instructions.
      7. Color name and number.
      8. VOC content.

   B. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.

      1. Maintain containers in clean condition, free of foreign materials and residue.
      2. Protect from freezing. Keep storage area neat and orderly.
      3. Remove rags and waste from storage areas daily.

   C. Take all necessary precautionary and safety measures to prevent fire hazards and spontaneous combustion and to protect the environment from hazard spills. Materials that constitute a fire hazard (paints, solvents, drop clothes, etc.) shall be stored in suitable closed and rated containers and removed from the site on a daily basis.

1.7 FIELD CONDITIONS

   A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.

   B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.

   C. Apply paint only to dry, clean, and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.
1.8 EXTRA MATERIALS

A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.

1. Quantity: Furnish Owner with extra paint materials in quantities indicated below:
   a. Interior, Eggshell Acrylic Finish: 1 gal. of each color applied.
   b. Interior Semi-gloss Acrylic Finish: 1 gal. of each color applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

B. Manufacturers’ Names: Shortened versions (shown in parentheses) of the following manufacturers’ names are used in other Part 2 articles:
   1. Benjamin Moore & Co. (Benjamin Moore).
   2. PPG Industries, Inc. (Pittsburgh Paints).

2.2 PAINT MATERIALS, GENERAL

A. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. All paint shall be ready-mixed and pre-tinted. Re-mix all paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity.

C. Material Quality: Provide manufacturer's paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application indicated. Paint-material containers not displaying manufacturer's product identification will not be acceptable.

1. Proprietary Names: Use of manufacturer's proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other specified manufacturers.

D. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

1. Flat Paints and Coatings: 50 g/L.
2. Nonflat Paints and Coatings: 150 g/L.
3. Dry-Fog Coatings: 400 g/L.
4. Primers, Sealers, and Undercoaters: 200 g/L.
5. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
7. Pretreatment Wash Primers: 420 g/L.
8. Floor Coatings: 100 g/L.
9. Shellacs, Clear: 730 g/L.
10. Shellacs, Pigmented: 550 g/L.

E. Low-Emitting Materials: Interior paints and coatings shall comply with the testing and product requirements of the California Department of Health Services’ “Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers.”

F. Restricted Components: Paints and coatings shall not contain any of the following:

1. Acrolein.
2. Acrylonitrile.
3. Antimony.
4. Benzene.
5. Butyl benzyl phthalate.
7. Di (2-ethylhexyl) phthalate.
8. Di-n-butyl phthalate.
9. Di-n-octyl phthalate.
10. 1,2-dichlorobenzene.
11. Diethyl phthalate.
12. Dimethyl phthalate.
14. Formaldehyde.
15. Hexavalent chromium.
16. Isophorone.
17. Lead.
18. Mercury.
19. Methyl ethyl ketone.
20. Methyl isobutyl ketone.
22. Naphthalene.
23. Toluene (methylbenzene).
24. 1,1,1-trichloroethane.

G. Colors: As indicated in Room Finish Schedule on Drawings.

2.3 INTERIOR PRIMERS

A. Adhesion Promoting Primer: Factory-formulated alkali-resistant acrylic-latex interior adhesion promoting primer/stain blocker for topcoat adhesion to slick, hard to paint interior surfaces.

1. Benjamin Moore; Fresh Start Hi-Hiding All Purpose Primer 046 (0.44 g/L VOC).
2. Pittsburgh Paints; Seal-Grip Interior/Exterior 100% Acrylic Universal Primer/Sealer 17-921 (84 g/L VOC).
3. Sherwin-Williams; PrepRite ProBlock Interior/Exterior Latex Primer/Sealer B51, (96 g/L VOC).
INTERIOR FINISH COATS

   1. Benjamin Moore; Ultra Spec 500 Interior Eggshell Finish No. N538 (0 g/L VOC): Applied at a dry film thickness of not less than 1.8 mils.
   2. Pittsburgh Paints; 6-4300 Series Speedhide Zero Interior Zero VOC Latex Eggshell (0 g/L VOC): Applied at a dry film thickness of not less than 1.5 mils.
   3. Sherwin-Williams; S-W ProMar 200 Zero VOC Interior Latex Eg-Shel B20-2600 Series (0 g/L VOC): Applied at a dry film thickness of not less than 1.6 mils.

B. Interior Semigloss Acrylic Enamel: Factory-formulated semigloss acrylic-latex enamel for interior application.
   1. Benjamin Moore; Ultra Spec 500 Interior Semi-Gloss Finish No. N539 (0 g/L VOC): Applied at a dry film thickness of not less than 1.8 mils.
   2. Pittsburgh Paints; 6-4500 Series Speedhide zero Interior Zero VOC Latex Semi-Gloss (0 g/L VOC): Applied at a dry film thickness of not less than 1.7 mil.
   3. Sherwin-Williams; S-W ProMar 200 Zero VOC Interior Latex Semi-Gloss B31-2600 Series (0 g/L VOC): Applied at a dry film thickness of not less than 1.6 mils.

2.5 CLEANING MATERIALS

A. Cleaning Materials: Cleaners and degreasers which contain no solvents, phosphates, halogens or alkali hydroxides:
   1. Products: Provide the following:
      a. T. S. P. Substitute Heavy Duty Cleaner; DAP Inc.
      b. Custom T. S. P. Substitute; Custom Building Products, Inc.
      c. TSP-PF or Liquid TSP Substitute; Savogran.
      d. Devoe Devprep 88; ICI.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions for compliance with requirements for conditions affecting performance of the Work.

B. Verify suitability of substrates, including surface conditions and compatibility with finishes and primers.
   1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.

C. Proceed with coating application only after unsatisfactory conditions have been corrected.
   1. Application of coating indicates acceptance of surfaces and conditions.
3.2 PREPARATION

A. Comply with manufacturer’s written instructions and recommendations applicable to substrates and paint systems indicated.

B. Provide surface-applied protection on walls, floors, grilles and diffusers and lighting fixtures before surface preparation and painting.
   1. Protect all adjacent interior surfaces and areas from painting operations and damage by drop cloths, shields, masking, templates, or other suitable protective means and make good any damage caused by failure to provide such protection.

C. Substrate defects shall be made good and sanded ready for painting. Start of finish painting of defective surfaces (e.g. rust on ceiling grid) shall indicate acceptance of substrate and any costs of making good defects shall be borne by the painter including repainting of entire defective surface (no touchup painting).

D. Cleaning, General: Before applying paint, clean the substrates of substances that could impair the bond of the various coatings including dust, dirt, oil, grease, and incompatible paints.
   1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.

E. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer’s written instructions for each particular substrate condition and as specified.
   1. For coatings applied over previously painted surfaces, test application to check for lifting and other adhesion problems. Perform test in an isolated area where practicable.

F. Repair of Existing Drywall Surfaces: Spackle and sand smooth minor surface imperfections in existing drywall surfaces.

G. Existing Surfaces: Remove all surface contamination such as, oil, grease, dirt, foreign matter, rust, mold, and mildew to assure sound bonding to the tightly adhered existing paint.
   1. Clean surfaces to remove dirt, masking tape, labels, adhesives, and other materials that would either be deleterious to adhesion of, or show through, new paint.
   2. Thoroughly wash surfaces and dull by sanding.
   3. Spot prime all bare areas with appropriate primer before priming entire surface.

H. Material Preparation: Mix and prepare paint materials according to manufacturer’s written instructions.
   1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
   2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
   3. Use only thinners approved by paint manufacturer and only within recommended limits.
APPLICATION

A. General: Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

1. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
2. Provide finish coats that are compatible with primers used.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
2. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
3. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.

1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.

D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

E. Mechanical Work: Painting of mechanical work is not required.

F. Electrical Work: Painting of electrical work is not required.

G. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Reccoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

H. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
I. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

J. Painted surfaces shall be considered to lack uniformity and soundness if any of the following defects are apparent:

1. Brush/roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, and foreign materials in paint coatings.
2. Evidence of poor coverage at rivet heads, plate edges, lap joints, crevices, pockets, corners and re-entrant angles.
3. Damage due to touching before paint is sufficiently dry or any other contributory cause.
4. Damage due to application on moist surfaces or caused by inadequate protection from the weather.
5. Damage and/or contamination of paint due to blown contaminants (dust, spray paint, etc.).

K. Painted surfaces shall be considered unacceptable if any of the following are evident under natural lighting source for exterior surfaces and final lighting source (including daylight) for interior surfaces:

1. Visible defects are evident on vertical surfaces when viewed at normal viewing angles from a distance of not less than 39 inches.
2. Visible defects are evident on horizontal surfaces when viewed at normal viewing angles from a distance of not less than 39 inches.
3. Visible defects are evident on ceiling, soffit and other overhead surfaces when viewed at normal viewing angles.
4. When the final coat on any surface exhibits a lack of uniformity of color, sheen, texture, and hiding across full surface area.

L. Painted surfaces rejected by the Architect shall be made good at the expense of the Contractor. Small affected areas may be touched up; large affected areas or areas without sufficient dry film thickness of paint shall be repainted. Runs, sags of damaged paint shall be removed by scraper or by sanding prior to application of paint.

3.4 CLEANING

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

1. Dispose wash water from latex paint to the sanitary sewer. Excess latex paint shall be salvaged for reuse or solidified for disposal with other construction materials. Dry empty latex paint cans and dispose with other construction materials.

B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.
3.5  PROTECTION

A. Protect adjacent surfaces against damage from paint application. Correct damage to adjacent surfaces by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protection.

1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces.

3.6  INTERIOR PAINT SCHEDULE

A. Ferrous Metal: Provide the following finish systems over acoustical ceiling grid members and wall trim:

   1. Low-Luster Acrylic-Enamel Finish: One finish coats over a primer.
      a. Primer: Acrylic-latex interior adhesion promoting primer/stain blocker.

B. Concrete Unit Masonry: Provide the following finish systems over existing painted interior concrete masonry:

      a. Primer: Acrylic-latex interior adhesion promoting primer/stain blocker.

C. Gypsum Board: Provide the following finish systems over existing painted interior gypsum board surfaces:

      a. Primer: Acrylic-latex interior adhesion promoting primer/stain blocker on existing painted gypsum board.

3.7  WASTE MANAGEMENT

A. Close and tightly seal all partly used containers and store protected in well-ventilated, fire-safe area at moderate temperature. Deliver to reuse and/or recycle facilities if not removed from site for Contractor’s reuse.

B. Separate and recycle waste materials, packaging, and all other materials in accordance with the Waste Management Plan and to the maximum extent possible, send to reuse or recycle centers.

END OF SECTION 09 9100