PROJECT MANUAL

FOR

WINTON WOODS CITY SCHOOLS

2016 ELEMENTARY SCHOOL AND HIGH SCHOOL CONCRETE REPAIRS

Bid Documents

May 19, 2016

Prepared for

Winton Woods City Schools

By

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100 E. Eighth Street
Cincinnati, OH 45202
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THP #16055.00

Winton Woods City Schools
2016 E.S. and H.S. Concrete Repairs
May 19, 2016
THP#: 16055.00

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DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 002113

INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.1 The Instructions to Bidders, AIA Document A701, 1997, Articles 1 through 8 inclusive, is a part of the Bidding Documents, is incorporated herein as if here set forth, and is referred to as "Instructions to Bidders".

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 002213

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1. The following supplements, modify, change, delete from or add to AIA Document A701-1997 Instructions to Bidders. Where an Article of the Instructions to Bidders is modified or a paragraph, subparagraph, or clause is modified or deleted by these Supplements, the unaltered provisions of that Article, paragraph, subparagraph or clause shall remain in effect.

ARTICLE 1 DEFINITIONS

1.1 Add two new paragraphs:

Contract for which Bids will be received is identified in Section 004100 – Bid Form and Section 011000 - Summary of Work. The phrases "Bid Form," "Bid" and "Form of Proposal" are used interchangeably throughout the Bidding and Contract Documents.

Delete the word "Architect" wherever it appears in AIA Document A701 and replace with "Engineer."

ARTICLE 2 BIDDER'S REPRESENTATIONS

2.1.3.1 Add new paragraph:

The Contractor shall include all costs for labor, material, rental equipment, etc., with their Bid as required to clean bird or other animal excrement in accordance with governing authorities in order to perform the Work.

2.1.5 Add new paragraph:

All work shall be performed by qualified labor. Bidder shall not discriminate against any employee or applicant for employment because of race, color, religion, origin, ancestry or sex.

ARTICLE 3 BIDDING DOCUMENTS

3.1 COPIES

3.1.5 Add new paragraph:

The Bidding Documents consist of:

1. The Proposal (per 4.1.8).

2. The Conditions of the Contract, including Supplementary Conditions Specification Division 1, applicable Specifications Divisions as indexed in the Table of Contents, dated May 19, 2016.

3. Drawings: 001 through 201 (4 drawings total) dated May 19, 2016.

4. Addenda.

3.2 INTERPRETATION OR CORRECTION OF BIDDING DOCUMENTS

3.2.2 Modify paragraph to read as follows:

Bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Engineer at least four (4) days prior to the date for receipt of Bids.

3.3 SUBSTITUTIONS

3.3.2 Delete entire paragraph and insert new paragraph:

Should any Bidder wish to substitute or recommend any items other than those specified, they may do so by listing them on the Substitution Request Form – Section 004325. The Base Bid as well as any requested Alternate Bids must conform to Drawings and Specifications, but the submission of substitutions will be given full consideration. Any such substitutions which may be accepted will be incorporated in the Contract with proper amounts added to or deducted from the Bid amounts. All proposed substitutions and the corresponding credit or added cost shall be clearly listed on the Substitution Request Form. Bidder shall furnish, with their Proposal, all information necessary for the Owner to evaluate the proposed substitution, including manufacturer's literature, application and installation literature, testing data, etc.

3.3.5 Add new paragraph:

No Bidder may establish their Base Bid or any Alternate Bid on the use of a proposed substitution.

3.3.6 Add new paragraph:

The Owner's approval of any proposed substitution will be with the understanding that the substitution will conform to dimensions, details and provisions of the Contract Documents. Should any such substitution not conform to the Drawings and Specifications as to dimensions, erection, support, construction procedure or any other conditions, thereby requiring revisions to the Drawings and/or Specifications, such variations must be enumerated in the submission of the proposed substitution. Should the Bidder not enumerate such variations in the subsequently accepted Bid, and revisions to the Drawings and/or Specifications become necessary in the

Owner's and Owner's Representative's judgment to accommodate the substitution, then the Owner's Representative hourly cost at standard billing rate for executing such revisions shall be deducted from the Contractor's Contract amount.

3.3.7 Add new paragraph:

The acceptance of any substitution by the Owner shall in no way void or alter the intent of the Contract Documents. All conditions, requirements and responsibilities of Contractor established in the original Contract Documents shall remain in effect unless specifically altered by the agreement accepting the substitution.

3.4 ADDENDA

3.4.3 Change the words “four days” to “two days”.

ARTICLE 4 BIDDING PROCEDURES

4.1 PREPARATION OF BIDS

4.1.8 Add new paragraph:

Proposals:

1. The Proposal shall contain the following documents:
    a. Bid Form, which includes lump sum Base and if appropriate Alternate Bids, Base and if appropriate Alternate Bid Itemization and Unit Prices for Add/Deduct variations in quantities.
    b. Subcontractor and Material Supplier List.
    c. Substitution Request Form.
    d. Non-Collusion Affidavit Form.
2. Proposals shall be submitted in triplicate in the aforementioned “Form of Proposal” format. The wording of the “Form of Proposal” shall be used without change or alteration. Any other change in the wording will cause a Proposal to be rejected as not complying with the law.
3. Duplicate copies of Bid shall be endorsed with the name of the Bidder and filed in the same sealed envelope.
4. The Bidder shall take the following precautions in preparing Proposals:
    a. Sign all Proposals (two originals).
    b. Make certain that all originals of the Bid are properly executed and signed by the Bidder, with names of the parties signing typed

immediately below signatures. If a corporation, also include written authorization for the person executing the contract, evidencing his/her ability to sign on behalf of and bind the corporation thereto. Affix Corporate Seal(s).

4.2 BID SECURITY

4.2.1 Add to paragraph:

Bid Security in the amount of 100 percent of the Base Bid will be required for this project.

4.3 SUBMISSION OF BIDS

4.3.4 Delete entire paragraph and insert new paragraph:

Unless otherwise indicated by the Bidding Documents, oral; telephonic; telegraphic; facsimile; or other electronically transmitted bids will not be considered.

4.4 MODIFICATION OR WITHDRAWAL OF BID

4.4.1 Add to paragraph:

The Stipulated Time Period is 60 days.

ARTICLE 5 CONSIDERATION OF BIDS

5.3 ACCEPTANCE OF BID (AWARD)

5.3.1 Add to paragraph:

The Owner will consider the Contractor's lump sum bids, unit price quotes, qualifications and other voluntary submitted information, past records and references for competency and responsibility in determining the best qualified Bidder.

Article 6 POST BID INFORMATION

6.1 CONTRACTOR'S QUALIFICATION STATEMENT

6.1 Delete entire paragraph.

6.2 OWNER'S FINANCIAL CAPABILITY

6.2 Delete entire paragraph.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 002513

PRE-BID CONFERENCE

PART 1 GENERAL

1.1 PRE-BID MEETING

A. Bidders are strongly encouraged to attend the Pre-Bid Meeting to be held on May 26, 2016 at 10 am___ local time.

B. All Bidders attending the meeting will assemble on site at the main entrance of the elementary school, 1501 Kingsbury Dr, Cincinnati, OH 45240.

C. Bids will not be accepted from contractors who do not attend this meeting.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 004100

BID FORM

Bid for Winton Woods Schools – 2016 Elementary School and High School Concrete Repairs (Divisions 1 through 9).

Bid submitted by _____ Date _____ 2016.

The Form of Proposal must be fully completed and sealed in an envelope clearly marked on the outside with the Contract designation. Refer to Section 002113 - Instructions to Bidders, and Section 002213 - Supplementary Instructions to Bidders for further instructions regarding Proposal Submittal.

In submitting this Proposal, the undersigned agrees that the Bid will not be withdrawn for a period of 60 consecutive calendar days following the date of Bid Opening. Further, that if a notice to proceed or if a prepared agreement provided by the Issuing Office is received at the successful business address identified below within the above named 60 day period, the undersigned will, within seven days of such receipt, acknowledge acceptance of the Contract Award and will deliver Certificates of Insurance and will proceed in accordance with the requirements of the Contract Documents for the project.

Submit Bids in duplicate not later than 12 noon local time) on June 9, 2016 to:

Mr. Steve Denny
1215 West Kemper Road
Cincinnati OH, 4540
Ph.(513) 619-2401
Fx.(513) 619-2309

We, the undersigned, having familiarized ourselves with the local conditions affecting the cost of the Work, and with all Contract Documents for this Work, and also having visited the site and the structure incorporated in the Work, and having received and become familiar with and incorporated into the make-up of the Specifications, the following addenda: _____ for the construction of 2016 Elementary School and High School Concrete Repairs in conformance with the DRAWINGS AND SPECIFICATIONS prepared for the same by:

THP Limited, Inc.
100 East Eighth Street
Cincinnati, Ohio 45202

Hereby proposes to furnish all labor, equipment, utilities and transportation to furnish and

deliver all materials and to perform and supervise all Work as required by the said DRAWINGS AND SPECIFICATIONS, ADDENDA AND CONDITIONS OF THE CONTRACT, for completing the DIVISIONS OF WORK hereinafter designated, for the sums of money enumerated for the said divisions, the sums representing, respectively:

A. **Base Bid**: (*Total Cost for all work included in the Contract Documents, inclusive of all lump sum and unit price work efforts. Also included with the Base Bid is the Cash Allowance as stated in Section 012100 and Part A.1 below.)*

For the sum of ..... ($_____)

_____Dollars

1. **Base Bid Itemization:** (*Total must be equal to Base Bid amount listed above.)*

(a)	General conditions, permit fees, mobilization, demobilization, barricades, sidewalk protection, etc., plus any other efforts not itemized elsewhere.	($_____)
(b)	Premium for Payment and Performance Bond.	($_____)
(c)	Shoring efforts.	($_____)
(d)	Remove and replace loose parge coat at Elementary School.	($_____)
(e)	Total costs for unit price work (per quoted Unit Prices listed in Part **C** multiplied by Allowance Quantities listed in specification Section 012100)	($_____)
(f)	Cash Allowance per Specification Section 012100.	($ **5,000**)

B. **Alternate Bids**: *(Total cost for Alternate work as identified on the Drawings as an addition to the Base Bid).*

No. 1 – *Install Acrylic High Performance coating over Elementary School concrete repair areas and parge coat repair areas only.*

For the sum of ..... ($_____)

_____Dollars

No. 2 – *Clean all existing Elementary School concrete columns and beams and apply Elastomeric High Performance coating in lieu of installing Acrylic High Performance coating over concrete repair areas and parge coat repair areas.*

For the sum of ..... ($_____)

_____Dollars

No. 3 – *Clean existing High School entrance concrete columns and beams and apply silane water repellant.*

For the sum of ..... ($_____)

_____Dollars

C. **Unit Prices for Base Bid Work:** *(For additions to or deductions from the allowance quantities listed in Section 012100.)*

No. 1 – *Horizontal Concrete Repair at Elementary School* ..... ($_____)

_____ Dollars per *(sq.ft)*

No. 2 – *Overhead Concrete Repair at Elementary School* ..... ($_____)

_____ Dollars per *(sq.ft)*

No. 3 – *Concrete Column Corner Repair at Elementary School*.... ($_____)

_____Dollars per *(lin.ft)*

No. 4 – *Vertical Surface Concrete Repair at Elementary School*... ($_____)

_____ Dollars per *(sq.ft)*

No. 5 – *Cementitious Parge Coat Repairs at Elementary School*.. ($_____)

_____ Dollars per *(sq.ft)*

No. 6 – *Horizontal Concrete Repair at High School* ..... ($_____)

_____ Dollars per *(sq.ft)*

No. 7 – *Overhead Concrete Repair at High School*..... ($_____)

_____ Dollars per *(sq.ft)*

No. 8 – *Concrete Column Corner Repair at High School* ..... ($_____)

_____Dollars per *(lin.ft)*

No. 9 – *Vertical Surface Concrete Repair at High School* ..... ($_____)

_____ Dollars per *(sq.ft)*

D. **Labor Rates**: *(inclusive of all overhead, profit, benefits, and all other costs associated with the performance of any work efforts)*

1. Laborer hourly pay rate for work performed during normal work hours ..... ($_____)

   _____ Dollars per man hour

2. Laborer hourly pay rate for work performed outside normal work hours (standard overtime rate) ..... ($_____)

   _____ Dollars per man hour

3. Mason (Mechanic or bricklayer) hourly pay rate for work performed during normal work hours..... ($_____)

   _____ Dollars per man hour

4. Mason (Mechanic or bricklayer) hourly pay rate for work performed outside normal work hours (standard overtime rate) ..... ($_____)

   _____ Dollars per man hour

The undersigned states that this Proposal is made in the character or capacity checked in this paragraph, that he is the agent of, and is duly authorized to sign for

_____
(Legal Name of Firm)

_____
(Address - No P.O. Box allowed)

_____
City State Zip Code

that the Proposal is signed with the full understanding of the plans, provisions, specifications, and the foregoing terms of the Proposal.

Dated at _____ this _____ day of _____2016.

SIGNATURES

Name and Address of all Partners

_____ _____
Name of Organization

_____ _____
By

Attest:_____ _____
(Seal) Title of Person Signing

END OF SECTION

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 004300

SUPPLEMENTS TO BID FORM

PART 1 GENERAL

1.1 The following information (refer to attached forms as appropriate) must be submitted with the Bid Form. Failure to submit any of the listed information, or the submittal incomplete information, may be cause for rejection of Bid by the Owner.

Form Name	Section
A. Substitution Request Form	004325
B. Non-Collusion Affidavit	004519
C. Subcontractor and Material Supplier List.	004550

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 004325

SUBSTITUTION REQUEST FORM

Bidder is to list here any "Substitutions" for which consideration is desired, showing the addition or reduction in price to be made, for each, if the substitution is accepted, or stating "No Change in Price", if none is proposed. The Bidder should also use this form to list “Approved Substitutions” for materials listed in the waterproofing technical sections.

WORK SPECIFIED	PROPOSED SUBSTITUTION	ADD	DEDUCT

It is understood and agreed that the proposal submitted is based on furnishing "Standards" as specified and entitles the Owner to require that such named materials and methods be incorporated in the Work, except as substitutions for same, based on the supplementary quotations entered above are accepted and subsequently made a part of the written Contract.

Signed:

_____
Principal/Officer

Winton Woods
2016 E.S. and H.S. Concrete Repairs
May 13, 2016
THP#: 16055.00

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 004519

NON-COLLUSION AFFIDAVIT

STATE OF _____)

COUNTY OF _____)

_____

_____being first

duly sworn, deposes and says that he is _____
(Title of Person Signing)

of_____

_____
Name of Bidder

that all statements made and facts set out in the Proposal for the above project are true and correct, and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affidavit further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By _____

By _____

By _____

Sworn to before me this _____ day of _____ 2016.

_____
Notary public

My commission expires _____

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 004550

SUBCONTRACTOR AND MATERIAL SUPPLIER LIST

Bidders must list below all subcontractors and material suppliers used in the compilation of this proposal, whose bids are in excess of 2% of the total Base Bid.

BRANCH	MATERIAL SUPPLIER OR SUBCONTRACTOR	AMOUNT OF BID

NOTE: Total of bids listed need not amount to sum of proposal. This listing is not meant to commit the Bidder to the material suppliers or subcontractors above. If the Bidder can show just cause at the time of awarding the Contract that a specific material supplier or subcontractor has withdrawn his bid, or raises his bid, the Bidder may substitute a material supplier or subcontractor upon approval of the Owner and at no additional cost to the Owner.

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 005200

AGREEMENT FORMS, BONDS, CERTIFICATES AND AFFIDAVITS

PART 1 GENERAL

1.1 AGREEMENT

A. Owner Agreement per AIA Document, A101-2007 Standard Form of Agreement between Owner and Contractor.

1.2 CERTIFICATE OF INSURANCE

A. Certificate of insurance for the bidder setting forth the specified insurance requirements from the bidder's insurance provider.

1.3 BONDS

A. Performance and Labor and Material Payment Bond: AIA Document A312, Performance and Payment Bond, 1984 Edition.

1.4 CERTIFICATE FOR PAYMENT

A. AIA Document G702, Application and Certificate for Payment, 1992 Edition.

B. AIA Document G703, Continuation Sheet, 1992 Edition.

1.5 AFFIDAVITS

A. Contractor's Affidavit of Payment of Debts and Claims: AIA Document G706, 1994 Edition.

B. Contractor's Affidavit of Release of Liens: AIA Document G706A, 1994 Edition.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 007200

GENERAL CONDITIONS

PART 1 GENERAL

1.1 GENERAL CONDITIONS

A. The General Conditions of the Contract for Construction, AIA Document A201-2007, Articles 1 through 15 inclusive, is a part of the Contract Documents, is incorporated herein as fully as if here set forth, and is referred to as "The General Conditions."

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

SECTION 007300

SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

The following supplements modify, "The General Conditions of the Contract for Construction", AIA Document A201 - 2007. 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.

ARTICLE 1 - GENERAL PROVISIONS

1.1 BASIC DEFINITIONS

1.1.1 Add to paragraph:

Section 004100 is herein incorporated as a part of the Contract Documents.

1.1.9 Add new paragraph:

THE ARCHITECT

Where the term "Architect" is found it shall mean "Engineer" throughout AIA Document A201.

1.1.10 Add new paragraph:

"Provide" shall mean furnishing of all labor, products, transportation and services for the Work.

1.1.11 Add new paragraph:

"Product" shall mean material, systems and equipment.

1.2 CORRELATION AND INTENT OF THE CONTRACT DOCUMENTS

1.2.1 Add to paragraph:

The Work shall conform to the requirements of all the Contract Documents. Should conflicts be found between Drawings, between Specifications, or between Drawings and Specifications, the most costly material, method or detail shall be included in the Contract. Large scale Drawings take precedence over smaller scale Drawings which they are intended to amplify.

1.2.4 Add new paragraph:

The Sections of Division 01 - General Requirements, govern the execution of the work of all sections of the specifications and shall apply with equal force to Contractor, subcontractor's work, extra work and similar work which may

be specified herein or performed in or about the building or site under this Contract.

1.4 INTERPRETATION

Add to paragraph:

The Contract Documents may be written in condensed form and without the use of a grammatical sentence structure.

ARTICLE 2 - OWNER

2.4 OWNER'S RIGHT TO CARRY OUT THE WORK

Delete the second from last sentence.

ARTICLE 3 - CONTRACTOR

3.2 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR.

3.2.5 Add new paragraph:

Discrepancies between existing conditions and those represented by the Contract Drawings shall be immediately reported to the Engineer. Work affected by the discrepancy shall not proceed, except at the Contractor's risk, until directed, in writing by the Engineer.

3.3 SUPERVISION AND CONSTRUCTION PROCEDURES

3.3.4 Add new paragraph:

Where laws, codes, or standards require supervision or inspection of portions of the Work by an architect, engineer, or other competent or qualified person, it is the Contractor's responsibility to furnish such supervision and/or inspection to the satisfaction of the governing authority. Such requirements shall in no way be the responsibility of the Owner, Engineer or their field representatives.

3.4 LABOR AND MATERIALS

3.4.2 Add to paragraph:

Should the Contractor desire consideration for use of materials, equipment, etc., not named in the Specifications or shown on the Contract Drawings he may, at the time of bidding only, submit proposals for substitutions as provided in the Form of Proposal – Section 004100.

3.4.4 Add new paragraph:

Provide products in accordance with current specifications, requirements and

recommendations of their manufacturers or fabricators. Should the Contract Documents show or specify the applications of a product not conforming to such specifications, requirements or recommendations, notify Owner in writing.

3.4.5 Add new paragraph:

Prior to purchasing or fabrication of products for his Work, the Contractor shall examine the Contract Documents for all adjacent and related Work. He shall notify the Owner in writing of all conditions of such Work as shown or specified that are unsatisfactory for the proper installation and subsequent performance of his Work or that are not in accordance with the product manufacturer's or fabricator's specifications, requirements or recommendations.

3.4.6 Add new paragraph:

Failure to make the required checks and reports in Paragraphs 3.4.4 and 3.4.5 above shall be taken as acceptance by the Contractor of specified materials. No subsequent claims for extra compensation arising from failure of materials to perform intended function will be considered.

3.4.7 Add new paragraph:

Standards for products and workmanship shall, as a minimum, comply with industrial standards, recognized standards of good quality and published standards of recognized National Trade Associations. Products shall be new, sound and of quality suitable for their application. They shall be orderly positioned, aligned with the building structure with vertical components plumb, horizontal components level and surface true to line and dimension. Joinery and connections shall be accurate, close fitting and well made.

3.4.8 Add new paragraph:

All manufactured materials, equipment, devices or apparatus shall bear the identification mark of the manufacturer.

3.4.9 Add new paragraph:

If material, equipment devices or apparatus is of questionable acceptability for incorporation into the Project, the Owner (at his option) may require certification by an approved testing laboratory.

3.4.10 Add new paragraph:

If changes required to the structure, finish, detail or space requirements are not enumerated in the Bid by the Contractor for a proposed substitution, and the substitution is accepted by the Owner, then the Contractor shall bear the cost of redesign and revision by the Owner and Engineer, and the cost of changes in the construction caused by the substitution. The redesign and

revision changes will be billed directly to the Contractor involved. The construction changes will be made through change order.

3.4.11 Add new paragraph:

All materials entering into this project, together with name of dealer furnishing same, shall be subject to Owner's approval.

3.4.12 Add new paragraph:

All workmen employed on the Project shall work together in harmony and all workmen newly assigned to the Project shall cooperate and work harmoniously with workmen on the site, including work forces of the Owner.

3.4.13 Add new paragraph:

Any workmen not complying with the provisions of the Contract Documents shall be immediately removed by the Contractor from the Owner's premises upon notice of the Owner or his representative.

3.7 PERMITS, FEES AND NOTICES

3.7.6 Add new paragraph:

Certificates showing that required inspections have been made shall be submitted to the Owner at completion of the Project by the General Contractor. Final payment will be contingent upon Owner's receipt of the above submittals.

3.7.7 Add new paragraph:

A copy of all permit certificates shall be delivered to the Owner prior to the starting of work.

3.14 CUTTING AND PATCHING

3.14.3 Add new paragraph:

The Contractor shall be responsible for all cutting, fitting and patching, including attendant excavation and backfill required to complete the Work or to:

1. Make its several pieces fit together properly.
2. Uncover portions of the Work to provide for installation of ill-timed Work.
3. Remove and replace defective Work.
4. Remove and replace Work not conforming to requirements of the Contract Documents.

5. Remove samples of installed Work as specified for testing.

3.14.4 Add new paragraph:

Provide protection from the elements for that portion of the Project which may be exposed by cutting and patching Work and maintain excavations free from water.

3.14.5 Add new paragraph:

Execute Work in such a manner as to interfere as little as possible with functioning and normal operations of the existing building and with the safety and conveniences of those employed in and about the premises or those using the facility.

3.14.6 Add new paragraph:

Execute cutting and demolition by methods which will prevent damage to other Work and will provide proper surfaces to receive installation of repairs.

3.14.7 Employ the original installer or fabricator to perform cutting and patching.

3.14.8 Add new paragraph:

Restore Work which has been cut or removed; install new products to completed Work in accordance with the requirements of the Contract Documents.

3.17 ROYALTIES, PATENTS AND COPYRIGHTS

3.17.1 Add to paragraph:

If any Contractor has information that any process or article specified by the Owner or Engineer as part of the Work is a copyrighted or patented article or process, he shall promptly give such information to the Owner. The Owner reserves the right to eliminate, if possible, such copyrighted or patented article or process and substitute others.

3.18 INDEMNIFICATION

3.18.3 Add new paragraph:

The Contractor is fully responsible under this paragraph 3.18 for conforming to all safety codes and regulations applying to the performance of his Contract, and the Engineer, Owner and/or Owner's representative shall in no way be liable for observing, checking, instructing and giving directions thereto or for any responsibilities thereof.

3.18.4 Add new paragraph:

The Contractor agrees to indemnify and save harmless the Owner, Engineer

and other Owner's representatives from any and all claims arising out of work performed on the Contract or from the presence of the Contractor, his officer, agents, or employees, or subcontractors or their officers, agents, or employees.

ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

4.1 ARCHITECT

4.1.1 Add to paragraph

Refer to paragraph 1.1.8.

4.2 ADMINISTRATION OF THE CONTRACT

4.2.1.1 Add new paragraph:

The Engineer will provide administrative and field services during the Contract period of the Project only to the extent provided under separate agreement between Engineer and Owner. Additional inspection may also be provided by other consultants serving as Owner's representatives. All references to Engineer's or Owner's representatives duties, functions and responsibilities throughout the Contract Documents shall be interpreted accordingly, and where services described are not within the scope of the Engineer's or Owner's representative's agreement with the Owner, the Owner will perform said services.

4.2.3 Add to paragraph:

Oral assistance, advice or interpretations rendered by the Engineer or Owner's representative relative to construction means, methods, techniques, sequences, procedures, safety precaution or programs shall be considered a gratuitous service and shall not be binding upon the Contractor nor make the Engineer or Owner's representative responsible for any of these items. The Engineer or Owner's representative will endeavor to observe the Work, but omissions or failures to provide proper material and failure to perform work correctly are totally the responsibility of the Contractor. The Contractor, not the Engineer or Owner's representative, is responsible for determination that all work under his Contract as it proceeds or as completed is performed and installed in accordance with the Drawings and Specifications and governing regulations.

4.2.3.1 Add new paragraph:

Where laws, codes or standards require supervision or inspection of portions of the Contractor's work by an architect, engineer, or other competent or qualified person, it is the Contractor's responsibility to furnish such supervision and/or inspection to the satisfaction of the governing authority

and without cost to the Owner. Such requirements shall in no way be the responsibility of the Engineer or the Owner's representative.

4.2.7.1 Add new paragraph:

The Engineer shall act as the Owner's agent in the reception of all submittals required by the Contract Documents.

4.2.8 Add to paragraph:

The Owner's representative does not have the authority to order or approve modifications in the Work. Such authorization must be in writing signed by the Project Manager for those items for which the Engineer has authority under the Contract, or by Change Order.

ARTICLE 8 - TIME

8.2 PROGRESS AND COMPLETION

8.2.4 Add new paragraph:

The Contractor, by accepting a Contract, agrees that he will expedite his Work to achieve the earliest possible completion, that he will maintain on the Work the maximum practicable labor and supervision force at all times, that he will cooperate with all other Contractors and coordinate his Work with theirs so as to achieve the maximum prosecution of the entire Project, and that he will complete his Contract within the minimum time possible.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.3 APPLICATIONS FOR PAYMENT

9.3.1 Delete entire paragraph.

Add new paragraph:

The Contractor shall submit to the Engineer an itemized Application and Certificate for Payment, notarized, supported by such data substantiating the Contractor's right to payment as the Owner or the Engineer may require, and reflecting ten (10) percent retainage. Also, Affidavits for Payment of Debts and Claims, and Release of Liens must be completed and submitted by the Contractor and all subcontractors and material suppliers with the final application of payment.

9.3.1.1 Revise sentence to read as follows:

"As provided in Subparagraph 7.3.9, such applications may not include requests ...."

9.4 CERTIFICATES FOR PAYMENT

9.4.1 Delete entire paragraph.

Add new paragraph:

The Engineer will within seven days after receipt of the Contractor's Application for Payment, will either certify and forward on for payment the application or notify the Contractor in writing his reasons for withholding an application or payment in part.

9.4.2 Delete entire paragraph.

9.5 DECISIONS TO WITHHOLD CERTIFICATION

9.5.1 Delete and revise the first four sentences to read:

"The Engineer may decline to certify payment and may withhold the Certificate in whole or in part to the extent necessary to reasonably protect the Owner. If the Engineer is unable to certify payment in the amount of the Application, he will notify the Contractor as provided in paragraph 9.4.1. If the Contractor and the Owner cannot agree on a revised amount, the Engineer will promptly certify the Application and Certificate for Payment for the amount for which the Owner is able to make such representations. The Owner may also decline to certify payment because of subsequently discovered evidence or subsequent observations; the Owner may nullify the whole or any part of any Application and Certificate for Payment previously issued to such extent as may be necessary in the Owner's opinion to protect himself from loss because of:"

9.6 PROGRESS PAYMENTS

9.6.1 Delete entire paragraph.

Add new paragraph:

After the Contractor has submitted an Application and Certificate for Payment, the Owner shall make payment within 15 days after the approvals as stated in Paragraph 9.4.1. Final payment request may be made when work is 100% complete, including completion of all punch list items and other requirements are met per Section 017700 of the Specifications.

9.6.3 Delete entire paragraph.

Add new paragraph:

The Owner may, on request, furnish to a subcontractor if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner on account of portions of the Work done by such subcontractor.

9.6.8 Add new paragraph:

No lien of any kind shall attach to any premises of Owner or any part hereof or improvement thereon with respect to any work done or materials furnished by Contractor; Contractor hereby expressly waives and relinquishes any right to a lien for any labor or materials furnished by it pursuant to the terms or conditions of the Contract Documents.

9.7 FAILURE OF PAYMENT

9.7.1 Delete and revise the first sentence to read:

"If the Owner does not pay the Contractor within seven days after the date established in the Contract Documents any amount certified by the Engineer then the Contractor may, upon seven additional day's written notice to the Owner, stop the Work until payment of the amount owing has been received."

9.8 SUBSTANTIAL COMPLETION

9.8.2 Delete and revise the paragraph to read:

"When the Engineer on the basis of his or the Owner's representative's inspection determines that the Work or designated portion thereof is substantially complete, the Engineer will then prepare a Certificate of Substantial Completion of the Work, shall state the responsibilities, if any, of the Owner and the Contractor for security, maintenance, heat, utilities, damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. The Certificate of Substantial Completion of the Work shall be submitted to the Contractor for his written acceptance of the responsibilities assigned to him in such Certificate."

9.9 PARTIAL OCCUPANCY FOR USE

9.9.1 Revise third sentence to read as follows:

"When the Engineer in consultation with the Owner's representative considers a portion substantially complete, the Engineer or Owner's representative shall prepare a list as provided under subparagraph 9.8.2."

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAM

10.1.1 Add to paragraph:

The requirements apply continuously and are not limited to normal working hours. The Contractor accepts full responsibility for all safety requirements and precautions related to his Contract and relieve the Engineer of any responsibility thereto. The presence of Engineer or Owner's representative is not intended to include review of the adequacy of the Contractor's safety

measures in, on or near construction site.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.8 Add new paragraph:

In addition, the Work shall be conducted in strict accordance with the Williams-Steiger Occupational Safety and Health Act of 1970 (OSHA) to provide safety and health protection for workers.

10.2.9 Add new paragraph:

Each Contractor shall be in charge of ascertaining that all other Contractors connected with the project conform to the (OSHA) Safety and Health Regulations as noted above.

10.2.10 Add new paragraph:

Weather Protection:

1. Contractor shall at all times provide protection against weather, rains, wind storms, frost or heat in order to maintain all work, materials, apparatus, fixtures, etc., free from damage.

10.2.11 Add new paragraph:

Fire Protection:

1) Bonfires or other open fires shall not be built on premises.

2. Unless otherwise required under OSHA 1970, the Contractor shall provide fire extinguishers in sufficient quantity to locate three (3) fire extinguishers in each area of the project during the construction period. Extinguishers shall be standard UL labeled 2-1/2 gallon pressurized water type except under electrical installation where they shall be a minimum five- (5) pound carbon dioxide type. Fire extinguishers shall also be provided in all temporary offices and tool sheds. Should OSHA require fewer, the above quoted quantities shall be required as a minimum under this Contract.

10.2.12 Add new paragraph:

Where welding or flame cutting is done on premises, the Contractor doing the welding or flame cutting shall remove all combustibles from the vicinity of the welding or cutting and shall protect all "in place" work or materials with fireproof coverings. Contractor doing the work shall keep a 2-1/2 gallon fire extinguisher at the site of the work at all times while welding or flame cutting is in progress. The Contractor is responsible for obtaining all necessary burn permits or other permits as required by the local authorities.

10.2.13 Add new paragraph:

The Contractor shall not wait for or expect direction from the Owner, Engineer or Owner's representative for compliance with all Federal, State and local statutes, rules, regulations and orders. The Contractor shall be responsible for the payments of all fines levied against the Owner, Engineer or Owner's representative for deficiencies relating to said Contractor's conduct of his work. The Contractor shall indemnify and hold harmless the Owner, Engineer and Owner's representative for any damages or liability resulting from any claim made by or on the behalf of any employee of the Contractor relating to the conduct of the work by said Contractor.

10.5 Add new paragraph:

COMPLIANCE

10.5.1 Responsibility for compliance with the requirements of Article 10 lies solely with the Contractor. The Engineer or Owner's representative will neither inspect nor be responsible for compliance with the requirements of Article 10.

ARTICLE 11 - INSURANCE AND BONDS

11.1 CONTRACTOR'S LIABILITY INSURANCE

11.1.2 Delete the first sentence and replace with the following:

The insurance required by subparagraph 11.1.1 shall be written for not less than the following, or greater, if required by law:

1. Worker’s Compensation and Employee Liability

a)	State:	Statutory	
b)	Applicable Federal:	Statutory	
c)	Employer's Liability:	$1,000,000	Each Accident
d)	Disease-Policy Limit	$1,000,000	Policy Limit
e)	Disease	$1,000,000	Each Employee
f)	Benefits required by Union Labor Contracts	As applicable.	

2. Comprehensive General Liability (Including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage):

a)	General Liability	$1 Million	Each Occurrence.

b)	Fire Damage	$1 Million	Any One Fire.
c)	Medical Expense	$10,000	Any One Person
d)	Personal Adv Injury	$1 Million	
e)	General Aggregate	$2 million	
f)	Products Comp/OP Agg	$2 Million	

3. Comprehensive Automobile Liability (owned, non-owned, hired):

a)	Bodily Injury	$1 Million	Each Person
		$1 Million	Each Accident
b)	Property Damage	$1 Million	Each Accident
	OR		
	Combined Single Limit	$1 Million	Aggregate

4. Excess Liability

a)	Excess Liability	$1 Million	Each Occurrence
b)	Umbrella Form	$1 Million	Aggregate

5. Additional Insureds should be listed as follows:

   WINTON WOODS CITY SCHOOL DISTRICT

6. Certificate Holder:

   WINTON WOODS CITY SCHOOL DISTRICT

11.1.3 Add to paragraph:

Certificates of Insurance shall be submitted to the Owner no later than ten (10) days after Notice of Award by the Owner. No Contractor/Subcontractor shall be allowed to continue to work on-site after the expiration of full insurance coverage. Partial payment shall be withheld until current Certificates of Insurance are submitted to the Owner.

11.1.5 Add new paragraph:

The Owner requires the following specific conditions regarding health and safety on this project.

The contractor shall keep himself fully informed of and shall carefully observe and comply with all Federal, State, County, City, and local laws, ordinances, rules, permits, licenses, or inspections; the legal rights of all workers

employed under this Contract; and any other items which in any manner affect the conduct of the work and all such orders or decrees that exist at present, or those which may be enacted later, or tribunal having any jurisdiction or authority over the work; and he will be required to indemnify and save harmless the Owner and all its officers and agents against any claim or liability rising from the acts or omissions of the contractor or Contractor's agents or employees based upon any violation of any such law, ordinance, regulation, order or degree whether by himself or his employees or subcontractor.

This obligation to indemnify shall include indemnity for civil actions for personal injury or property damage in tort as well as enforcement actions for regulatory violations. The Contractors obligation to indemnify includes the costs of litigation, including attorney's fees and expert witness fees, as well as the cost of any judgment or settlement for damages or fines. Should the contractor at any time find that any requirement of this contract is at variance with applicable laws, ordinances, or building code requirements, he shall promptly notify the Owner and any necessary adjustment of the contract will be made as specified under the section herein entitled "Changes in the Work".

The Contractor will be required to give all notices, and pay all fees for any and/or all permits, licenses, or inspections necessary for the prosecution of the contract.

If the Owner receives any violation, pursuant to Chapter 4167 of the Ohio Revised Code, for violation of the employment risk reduction standards, in connections with the work performed under the contract, the contractor shall perform all work required to abate the violation. Such work shall be performed at no cost to the Owner. If the contractor should fail or refuse to abate the violation, the Owner may, at its option, abate the violation either through its own employees or by contracting out the work. The Contractor shall pay the Owner all expenses incurred in abating the violation, including but not limited to the expense of using the Owners' employees and supplies. The obligations herein survive the completion or termination of this contract.

11.1.6 Add new paragraph:

Each Subcontractor shall procure and maintain during the life of his Subcontract, insurance of the type and in the same amount as listed in the General Conditions.

11.1.7 Add new paragraph:

The Contractor shall indemnify and save harmless the Owner, Engineer or Owner's representative from and against any and all liability, loss, damage or expense (including Attorney's fees) due to injuries (including death) or property damage to members of the public, the Owner and its employees, the Engineer or Owner's representative and his employees, or anyone else

arising out of the operations of the Contractor or anyone directly or indirectly employed by him, his agents, invitees or licensees.

11.3 PROPERTY INSURANCE

11.3.1 Delete paragraph and replace with the following:

Until the work is completed and accepted by the Owner, the Owner shall purchase and maintain Property Insurance upon the entire Work at the site to the full insurable values thereof, exclusive of contractor's property. This insurance shall include the interest in the Work of the Owner, Contractor and Subcontractors and shall insure against the perils of Fire and Extended Coverage and shall include "All Risk" insurance for physical loss or damage including without duplication, theft, vandalism, malicious mischief, collapse and water damage. Any deductible included in the Owner purchased Property Insurance shall be the responsibility of the Owner and shall not prejudice the Contractor's right to complete recovery of an insured loss to property.

11.4 PERFORMANCE BOND AND PAYMENT BOND

Delete Subparagraph 11.4.1 and substitute the following:

11.4.1 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through the Contractor's usual source 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.

11.4.1.1 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 Notice of Award or letter of intent, the Contractor shall, prior to the commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished.

11.4.1.2 The Contractor shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney, and certificates showing the legal right of the Bonding Company and attorney to do business in the State of OHIO.

ARTICLE 12 - UNCOVERING AND CORRECTION OF WORK

12.1 UNCOVERING OF WORK

12.1.1 Revise as follows:

"....covered contrary to the Owner's request or ....if required in writing by the Owner, be uncovered for the Owner's observation..."

12.1.2 Revise the first sentence as follows:

"...has been covered which the Owner has not specifically requested to examine prior to its being covered, the Owner may request..."

12.2 CORRECTION OF WORK

12.2.1.1 Revise the first sentence as follows:

"...correct Work rejected by the Owner or failing..."

Revise the last sentence as follows:

"...compensation for the Owner's services..."

12.2.4 Delete entire paragraph.

Add new paragraph:

If the Contractor does not remove such condemned work within ten (10) days after notice of condemnation by the Owner, the Owner move it and store material at the expense of the Contractor. If the Contractor does not pay for the expense of such removal within ten (10) days written notice, the Owner may sell such material at auction or private sale and shall account to the Contractor for the net proceeds thereof after deducting costs and expenses that should have been borne by the Contractor. If the proceeds of any sale be less than the cost of removal, storage and other expenses incurred by the Owner in connection with such removal, the Owner may withhold an amount equaling the balance of this expense from payment which may be or may become due the Contractor.

Add new paragraph:

12.4 SPECIFIC WARRANTIES

12.4.1 Warranty period on work shall be the manufacturer's standard, unless specified otherwise in the Contract Documents.

12.4.2 Defects in the Work within the specified periods due to faulty materials or workmanship shall be corrected as required to satisfy Contract Documents. Execute such repairs, corrective work, including cost of making good other work damaged or otherwise affected by making of repairs, without extra charge to Owner, within 5 calendar days after written note to Contractor by Owner. On parts of the Work corrected under the Warranty, the Warranty period for those parts shall be extended for a period of one year from the date of correction, or to the end of the warranty period, whichever is longer.

ARTICLE 13 MISCELLANEOUS PROVISIONS

13.5 TESTS AND INSPECTIONS

13.5.7 Add new paragraph:

Field tests shall be made in the presence of the Owner's representative.

13.6 INTEREST

13.6.1 Delete entire paragraph.

13.8.1 Add new paragraph:

In connection with the performance of work under this Contract, the Contractor agrees to comply with all statutes, Federal, State, or Local, prohibiting discrimination against any employee or applicant for employment and agrees further that he will not discriminate against such employee or applicant for employment because of age, race, religion, color, nation of origin or sex. The following agreement shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer, recruitment or recruitment advertising, lay-off or termination rates of pay or other forms of compensation, and selection for training, including apprenticeship.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 011000

SUMMARY OF WORK

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Summary of Base Bid Work Efforts:

1. Perform unit price concrete repairs to the concrete beams and columns on the Elementary School.

2. Remove loose and install new cementitious parge coat on the Elementary School concrete beams and columns. Work to be performed on a unit price basis.

3. Perform unit price concrete repairs to the concrete beams and columns at the High School. High School concrete repairs shall match the appearance of the existing exposed aggregate concrete.

4. Provide shoring for concrete repairs.

B. Summary of Alternate Bid Work Efforts:

1. Install Acrylic High Performance coating over Elementary School concrete repair areas and parge coat repair areas only.

2. Clean all existing Elementary School concrete columns and beams and apply Elastomeric High Performance coating in lieu of installing Acrylic High Performance coating over concrete repair areas and parge coat repair areas.

3. Clean existing High School entrance concrete columns and beams and apply silane water repellant.

1.2 CONTRACTS

A. Base and alternate bids for all the work will be received from the Contractor.

B. The Work will be performed under one General Contractor.

1.3 CONTRACTOR'S DUTIES

A. Assume all Contractor responsibilities and provide for the Work required by the Contract Documents.

B. Give required notices where and when requested.

C. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities which bear on the performance of the Work.

D. Pay all legally required taxes. Refer to Bidding Requirements, General Conditions for information relative to sales tax for which the Owner is exempt.

E. Apply, secure and pay for all required local permits, fees, licenses and approvals per the General Conditions of the Contract.

1.4 NOTES TO CONTRACTOR

A. The division of the body of the Specifications into various Parts has been arranged for clarity in the delineation of the various parts of the whole Work. It is not the intent of such division to develop any secondary responsibilities for the satisfactory completion of the Work and all of its parts as required of the Contractor by the Contract Documents, nor is the assignment of any parts of the Work to any trade or craft to be inferred from the Contract Documents.

B. Division 01 Specifications typically address items in a general nature and the Contractor must take notice that more specific requirements may be included in the Technical Sections.

1.5 PROJECT COORDINATION

A. The Contractor has full responsibility and authority regarding the scheduling and coordination of the Work within the Contract time and within the requirements of Article 1.7.

B. The Contractor also has full responsibility for the completeness and quality of the Work as outlined in the Contract Documents, and must staff the project with qualified, competent personnel to the extent required for the Work.

C. The Contractor's Project Manager and Lead Project Superintendent are subject to the review and approval of the Owner. Upon request at any portion of the project (i.e. pre-award, post-award and prior to project start, or during the project), the Contractor shall produce a detailed resume, with references, documenting the experience of the Project Manager and Lead Project Superintendent for the Owner's review and approval.

D. All subcontractors shall abide by the Project Schedule and coordination requests made by the Contractor.

E. If a subcontractor is substantially responsible for specific components of the Work (i.e. concrete repairs or new concrete placements, waterproofing efforts, electrical work, painting, etc.), the Contractor must have a regular, periodic site presence during those efforts, not less than two separate days per week, nor less than 20 percent of the total work week time, to provide a level of coordination and quality control consistent with that expected of a wholly self-performing Contractor labor force.

F. Unless otherwise directed or allowed, the Owner (or the Owner's representative) communicates directly with the Contractor. All dealings and decisions regarding execution of the Work shall be from the Owner, (or Owner's representative,) to the Contractor; and the reverse flow.

G. The Contractor communicates directly with the subcontractors, vendors and suppliers. At the Engineer's option, direct communications between the Engineer and subcontractor may occur, for clarification of material delivery, installation procedures, technical support, logistics and other matters. Contractor will be kept advised of any such Engineer/subcontractor communications.

H. The subcontractor shall coordinate with the Contractor who has the overall responsibility for the Work.

I. Where Work of any one Section of the Specifications affects the Work of other Sections, successive Work shall not be installed until conditions have been inspected by the Contractor and are satisfactory for successive Work. Installation of successive Work shall serve as the Contractor's acceptance and confidence with the conditions being covered by subsequent work. The performance of successive Work shall be the responsibility of the Contractor to coordinate.

J. Contractor is required to be on site to conduct regular, job progress meetings with the Owner every 14 days (bi-weekly). Contractor shall include Engineer via telephone for said progress meetings and shall distribute written meeting minutes as directed by Owner.

K. The Owner reserves the right to hold additional job progress and coordination meetings on an as-needed basis as determined by the Owner. The Contractor shall be given 48 hours notice (when possible) to said meeting.

L. A preconstruction project meeting shall be held by the Owner prior to the start of work.

1.6 APPLICABLE CODES

A. The Contractor shall comply with all Federal, State and Municipal laws, codes, ordinances and regulations applicable to the Work in this Contract and also with all requirements of the National Fire Protection Association and the National Electric Code.

B. If the above laws, codes or ordinances conflict with this Specification, then the laws, codes or ordinances shall govern, except in such cases where the Specification exceeds them in quality of materials or labor, then the Specifications shall be followed.

1.7 PROJECT SCHEDULE AND SEQUENCING

A. The Contractor shall submit to the Owner a complete itemized time schedule and detail program for construction, purchasing of critical materials, and for submission of shop drawings and samples. This schedule is required within

seven calendar days after Notice of Award. The schedule shall indicate the duration of time required for the performance of all work. All construction activities and each phase of work must be clearly indicated on the schedule. The schedule must be signed by an official of the firm. It must be realistic as its faithful execution will be considered a commitment, not an estimate.

B. Normal working hours are 7:00 AM to 3:30 PM, Monday through Friday. Work is also permitted and encouraged for some efforts after closure of adjacent buildings and businesses, from 10:30 PM to 8:00 AM, Sunday/Monday through Thursday/Friday.

C. Work requested by the Contractor to be performed outside of normal working hours must be approved and coordinated through the Owner. Provide the Owner a minimum of 4 working days notice prior to the requested time to perform work outside normal working hours. Such request shall include type of work to be performed and expected duration.

D. Odor or fume producing work performed in the vicinity of fresh air intakes (or similar occupied building access points) must be performed at night after the shutdown of fresh air intakes. At the Contractor's option, and if approved in advance by the Owner, work may begin prior to air intake shutdown. If work is elected to begin prior to intake shutdown, the Contractor shall at their expense, employ measures to draw fresh air from areas beyond the work activities that produce odors/fumes. All methods or procedures must be approved by, and meet the satisfaction of the Owner.

E. Work performed outside of normal business/working hours shall be performed at no additional cost to the Owner. Additional cost incurred for testing and inspection, including services of the Engineer or Owner's representative shall be solely borne in full by the Contractor.

F. Work Phasing:

1. All work to be completed at the High School Entrance and Southeast Elevation of the Elementary School prior to beginning work on the Northwest Elevation of the Elementary School.

G. Site Restrictions

1. When work is performed which may create a hazard to persons or property above, below or in the proximity of the work, those areas shall be blocked or otherwise protected to eliminate the hazard.

2. All work at entry/exits is to be performed in such a manner to allow traffic flow in and out without significantly constricting the accessibility.

H. Change order work that is to be performed on a time and materials basis shall be billed as if performed during normal work hours. In the event that work is required to be performed outside normal work hours due to schedule or site restrictions,

the Contractor shall be compensated at their standard overtime rate.

I. Should the Contractor fall behind the approved or adjusted schedule in the performance of his Work and, in the judgment of the Owner, it appears that the Contractor cannot complete his Work within the time established by the Contract, then the Contractor shall work overtime, additional shifts or adopt such other procedures with the Owner's approval, as may be necessary to restore adherence to the schedule while maintaining the required level of quality control, testing and inspection. The full cost of such work or procedures shall be borne by the Contractor, including the cost of additional services of the Owner or Owner's representative.

J. Work rejected by the Owner as not meeting the intent or requirements of the Contract Documents shall be replaced by the Contractor and shall not result in additional costs to the Owner. Rejected work will not be cause for an extension to the Contract Time.

K. The Contractor is responsible for securing work area for performance of the Work.

L. Project Schedule and Sequence:

1. The Contractor shall deliver submittals to the Engineer at least 7 days prior to mobilizing.

2. The Contractor shall mobilize and begin work not later than one week from receiving a formal Notice to Proceed or executed Contract. Work shall follow the sequence and phasing as outlined in Contract Documents or Pre-Construction Meeting.

3. The anticipated Substantial Completion Date for all Work, including Change Order and/or Add Alternate work associated with the following is July 29th, 2016:

   a. High School Entrance

   b. Southeast Elevation of the Elementary School

4. The anticipated Substantial Completion Date for all Work, including Change Order and/or Add Alternate work associated with the following is August 11th, 2016:

   a. Northwest Elevation of the Elementary School

5. Final completion of all Work shall be 28 days beyond specified Substantial Completion date. Refer to paragraph 1.9.3 for additional information.

M. Within 7 days after Notice of Award, submit a detailed plan for the project schedule implementation following the outline sequence shown above.

1.8 PROJECT CONDITIONS

A. No equipment exceeding 4000 lbs. per axle, including transportation and removal equipment shall be allowed on a supported structural level.

B. Existing emergency access routes must be maintained at all times where work is being performed.

1.9 SAFETY

A. The Contractor is responsible for all safety issues regarding performance of the Work.

B. The Contractor must submit to the Owner a copy of the contractor's safety program prior to the start of work.

C. The Contractor shall have weekly Tool Box Safety Meetings which must be attended by all Contractor and subcontractor personnel on-site.

D. Fire extinguishers shall be provided at all contractor furnished gasoline operated equipment, contractor storage area, at membrane application areas and membrane mixing areas, and at each area of other work efforts with flammable components. Extinguishers to be 10 lb. A, B, C Class.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 012100

ALLOWANCES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Base Bid Quantity Allowances.

1.2 RELATED SECTIONS

A. Section 012900 - Payment Procedures.

B. Section 030100 - Concrete Repairs.

1.3 QUANTITY ALLOWANCE

A. General:

1. Allowances include all labor, material, tools, equipment, supervision transportation, handling, storage, overhead and profit, and all other costs associated with performance of work.

2. Additions to a quantity allowance as listed in this Section will be paid by the Owner at the unit price established in Section 012900 – Payment Procedures.

3. Deletions from a quantity allowance as listed in this Section will be credited to the Owner at the unit price established in Section 012900 – Payment Procedures.

B. Base Bid Quantity Allowance Items:

1. Horizontal Concrete Repair at Elementary School.....10 square feet

2. Overhead Concrete Repair at Elementary School .....10 square feet

3. Concrete Column Corner Repair at Elementary School..... 100 linear feet

4. Vertical Surface Concrete Repair at Elementary School.....50 square feet

5. Cementitious Parge Coat Repairs at Elementary School.....500 square feet

6. Horizontal Concrete Repair at High School.....10 square feet

7. Overhead Concrete Repair at High School.....10 square feet

8. Concrete Column Corner Repair at High School.....10 linear feet

9. Vertical Surface Concrete Repair at High School .....50 square feet

C. The Contractor shall include the total cost for all Base Bid Quantity Allowance items listed above in the Base Bid Lump Sum Total as reflected on the Bid Form – Section 004100.

1.4 CASH ALLOWANCE

A. General:

1. Cash allowances will be performed on a time and material basis. The Contractor shall furnish and certify daily detail records of all labor and materials provided.

2. If the cost to complete the work is less than the cash allowance, a deduct Change Order will be prepared by the Owner for the cost difference.

B. Cash Allowance Items:

1. A cash allowance of $5,000 shall be included in the Base Bid to address work items identified on the drawings to be paid on a time-and-material basis.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 012300

ALTERNATES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Install Acrylic High Performance coating over Elementary School concrete repair areas and parge coat repair areas only.

B. Clean all existing Elementary School concrete columns and beams and apply Elastomeric High Performance coating in lieu of installing Acrylic High Performance coating over concrete repair areas and parge coat repair areas.

C. Clean existing High School entrance concrete columns and beams and apply silane water repellant.

1.2 RELATED SECTIONS

A. Section 01100 - Summary of Work.

B. Section 012100 – Allowances.

C. Section 012900 - Payment Procedures.

D. Section 015600 – Barriers.

E. Section 030100 - Concrete Repairs.

F. Section 071900 - Penetrating Concrete Water Repellent.

1.3 ALTERNATES

A. General:

1. Cost for Alternates shall be complete, including all labor materials, tools, equipment, supervision, transportation, handling storage, overhead and profit and performance and material bonds.

2. The Owner may choose any or all Alternates in any order unless otherwise indicated.

3. The Owner reserves the right to reject any or all Alternates.

4. Failure to provide a cost for each requested Alternate on the Bid Form may be cause for rejection of bid by the Owner.

5. Alternates that are submitted by the Contractor at zero cost change must be indicated on the Bid Form by writing "No change in cost".

B. Provide a cost in the spaces provided on the Bid Form – Section 004100 for the following Alternates. Refer to Drawings for additional information.

Alternate No. 1: Install Acrylic High Performance coating over Elementary School concrete repair areas and parge coat repair areas only.

Alternate No. 2: Clean all existing Elementary School concrete columns and beams and apply Elastomeric High Performance coating in lieu of installing Acrylic High Performance coating over concrete repair areas and parge coat repair areas.

Alternate No. 3: Clean existing High School entrance concrete columns and beams and apply silane water repellant.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 012600

CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Change of Work Procedures.

1.2 CONTRACT MODIFICATIONS

A. Minor Changes in the Work:

1. Interpretation of Contract Documents or minor changes in the Work not involving changes in Contract Price or Time shall be issued by the Owner in writing and shall be executed promptly by the Contractor.

B. Contract Modifications:

1. Changes to the Contract that affect the cost/time shall be processed as follows:

   a. Contractor shall submit a written proposal, with a complete itemized breakdown, showing quantities and unit costs of the major items of materials, labor hours, labor costs per hour, overhead and profit, and time modifications to the Owner for review and acceptance.

   b. The Owner will review the proposal and respond with one of the following:

      - Reject the proposal in writing.
      - Issue a Construction Change Directive.
      - Issue a Change Order.

C. Change Orders

1. Cost for change orders shall be calculated as the sum of hourly wages, materials, overhead and profit.

2. The percentage to be used for General Contractor overhead and profit shall be 15 percent for self-performed labor, 10 percent for subcontractors and 10 percent for materials and equipment.

3. The percentages to be used for Sub-Contractor overhead and profit shall not exceed 10 percent for labor and 10 percent for materials and equipment.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 012900

PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Unit Prices.

B. Measurement Procedures for Allowances.

1.2 RELATED SECTIONS

A. Section 012100 – Allowances.

B. Section 030100 - Concrete Repairs.

1.3 UNIT PRICES

A. General:

1. Unit prices shall apply for both additions to and deletions from the Work.

2. Unit prices shall be complete including all labor, materials, tools, equipment, supervision, transportation, handling, storage, overhead and profit, and all other costs associated with the work.

3. No monetary variance of unit prices for additive and deductive quantities will be accepted and will be cause for rejection of Bid.

4. The Owner reserves the right to accept or reject any or all unit prices.

5. All unit price items on the Bid Form must be completed. If unit price is zero, then it must be indicated as such in the space provided.

6. Failure to provide unit prices as required on the Form of Proposal may be cause for rejection of Bid.

1.4 MEASUREMENTS

A. Prior to the start of work in each work area or phase, the Contractor and the Owner will inspect the area and document locations and quantities of all allowance items. The Contractor shall notify the Owner at least 3 days in advance of required inspection. Refer to Section 012100.

B. Quantity allowance items will be recorded and the date of the inspection and the persons performing the inspections will be recorded on each item sheet.

C. The Owner's representative will measure and count the allowance items. The Contractor will record the results.

D. At the completion of each item inspection, both the Owner and Contractor will sign the record sheets.

E. The Owner will copy the sheets and provide a copy of all sheets to the Contractor within 3 working days from the date of inspection.

F. These inspection sheets will be the only basis for determining final quantities of all quantity allowance items.

G. Measurements will be recorded to the nearest inch.

1.5 PAYMENTS

A. For each application of payment submitted by the Contractor, a summation of all quantity allowance items shall be sent for verification.

B. Differences in sum totals between the Owner and Contractor will be resolved by comparing quantity sheets to determine exact final quantities. Quantities NOT measured AND confirmed per Article 1.4 shall not be approved for payment.

C. The difference between an actual quantity and a specified quantity will be multiplied by the unit cost for that item to establish a dollar value. The dollar value for quantities above the allowance quantity will be added to the contract amount. The dollar value for quantities below the allowance quantity will be subtracted from the contract amount.

D. Adjustments to the contract amount will be made by approved change order.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 013300

SUBMITTALS PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Procedural requirements for non-administrative submittals, including shop drawings, product data, samples and other miscellaneous work-related submittals. Shop drawings, product data, samples and other work-related submittals are required to amplify, expand and coordinate the information contained in the Contract Documents.

B. Shop drawings are technical drawings and data that have been specifically prepared for this project, including but not limited to:

1. Fabrication and installation drawings.
2. Setting diagrams.
3. Shop work manufacturing instructions.
4. Coordination drawings (for use on-site).
5. Schedules.
6. Concrete Mix Designs.

C. Standard information prepared without specific reference to a project is not considered to be shop drawings.

D. Product data includes standard printed information on manufactured products that has not been specifically prepared for this project, including but not limited to the following items:

1. Manufacturer's product specifications and installation instructions.
2. Standard color charts.
3. Catalog cuts.
4. Printed performance curves, independent technical analysis of performance, or similar.
5. Operational range diagrams.
6. Standard product operating and maintenance manuals.
7. Mill reports.

8. Material safety data sheets on all material provided or used in execution of the Work.

E. Samples are physical examples of work, including, but not limited to the following items:

1. Partial sections of manufactured or fabricated work.

2. Small cuts or containers of materials.

3. Complete units of repetitively-used materials.

4. Swatches showing color, texture and pattern.

5. Color range sets.

6. Units of work to be used for independent inspection and testing.

1.2 SUBMITTAL PROCEDURES

A. General:

1. Promptly after the Contract has been signed, the Contractor shall submit complete and detailed shop drawings to the Owner or its representative for the work of the various trades, and the Owner or its representative shall approve or reject them with reasonable promptness.

2. The Contractor prior to submitting the shop drawings shall review all shop drawings, check all conditions, check and verify all field measurements, and mark all corrections, sign and date each set.

3. No shop drawings will be reviewed without the signature of Contractor, which will signify that he has checked drawings.

4. No faxed copies to the Engineer for approval will be accepted.

B. Coordination of Submittal Times:

1. Prepare and transmit each submittal sufficiently in advance of the scheduled performance of related work and other applicable activities.

2. Transmit different kinds of submittals for the same unit of work so that processing will not be delayed by the need to review submittals concurrently for coordination.

3. The Owner will endeavor to complete his review of submittals within 7 days of receipt. Submittals shall be returned noted: “No exceptions noted”, or “Exceptions noted”, or “Exceptions noted: revise and resubmit”. Fabrication of material before the receipt of shop drawings for that material noted “No exceptions noted” shall be at the Contractor’s risk.

C. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the work.

D. Submittal Preparation:

1. Mark each submittal with a permanent label for identification. Provide the following information on the label for proper processing and recording of action taken.

a. Project name.

b. Date.

c. Name and address of Owner.

d. Name and address of Contractor.

e. Name and address of subcontractor.

f. Name and address of supplier.

g. Name of manufacturer.

h. Number and title of appropriate Specification Section.

i. Drawing number and detail references, as appropriate.

j. Similar definitive information as necessary.

2. Provide a space on the label for the Contractor's review and approval markings, and a space for the Owner's "Action" marking.

1.3 SPECIFIC SUBMITTAL REQUIREMENTS

A. General:

1. Specific submittal requirements for individual units of Work are specified in the applicable Specification Section.

2. Except as otherwise indicated in the individual Specification Sections, comply with the requirements specified herein for each type of submittal.

B. Shop Drawings:

1. Information required on shop drawings shall include dimensions, identification of specific products and materials which are included in the Work, information showing compliance with specified standards, and notations of coordination requirements with other work.

2. Provide special notation of dimensions that have been established by field measurement.

3. Highlight, encircle or otherwise indicate deviations from the Contract Documents on the shop drawings.

4. Coordination Drawings:

   a. Provide coordination drawings where required for the integration of the Work, including Work first shown in detail on shop drawings or product data.

   b. Show sequencing and relationship of separate units of Work which must interface in a restricted manner to fit in the space provided or function as indicated.

   c. Coordination drawings are considered shop drawings and must be definitive in nature.

5. Do not permit shop drawings copies without an appropriate final "Action" marking to be used in connection with the Work.

6. Do not reproduce Contract Documents or copy standard printed information as the basis of shop drawings.

7. Initial Submittal:

   a. Provide four (4) prints and Electronic versions of each submittal; two prints will be returned. One of the returned prints shall be maintained by the Contractor and marked-up as a "Record Document."

8. Final Submittal:

   a. Provide four (4) prints of each revised submittal as directed by the Engineer based on Initial Submittal review. Two prints will be returned. One of the returned prints shall be maintained by the Contractor and marked-up as a "Record Document."

C. Product Data:

1. General information required specifically as product data includes manufacturer's standard printed recommendations for application and use, compliance with recognized standards of trade associations and testing agencies, and the application of their labels and seals (if any), special notation of dimensions which have been verified by way of field measurement, special coordination requirements for interfacing the material, product or system with other work, and material safety data sheets.

2. Preparation:

   a. Collect four sets of the required product data into a single submittal for each unit of Work or system.

b. Mark each copy to show which choices and options are applicable to the project.

c. Where product data has been printed to include information on several similar products, some of which are not required for use on the Project or are not included in this submittal, mark the copies to show clearly that such information is not applicable.

3. Submittals:

a. Product data submittal is required for information and record and to determine that the products, materials and systems comply with the provisions of the Contract Documents.

b. The initial submittal is also the final submittal, except where it is observed that there is non-compliance with the provisions of the Contract Documents and the submittal promptly returned to the Contractor marked with the appropriate "Action."

4. Final Distribution:

a. The Owner will retain two sets of the submittals.

b. Furnish copies of product data to subcontractors, suppliers, fabricators, manufacturers, installers, governing authorities and others as required for proper performance of the Work.

c. Show distribution on transmittal forms.

5. Installation Copy:

a. Do not proceed with installation of materials, products and systems until a copy of product data applicable to the installation is in the possession of the installer.

b. Do not permit the use of unmarked copies of product data in connection with the performance of the Work.

D. Samples:

1. Submit a minimum of two samples for visual review of general generic kind, color, pattern, and texture, and with other related elements of the Work.

2. 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.

3. Refer to individual Work Sections of these Specifications for additional sample requirements which may be intended for examination or testing of additional characteristics.

4. Compliance with other required characteristics is the exclusive responsibility of the Contractor; such compliance is not considered in the Owner's review and "Action" indication on sample submittals.

5. Documentation required specifically for sample submittals includes a generic description of the sample, the sample source or the product name or manufacturer, compliance with governing regulations and recognized standards. Indicate limitations in terms of availability, sizes, delivery time and similar limiting characteristics.

E. Miscellaneous Submittals:

1. Inspection and Test Reports:

a. Classify each inspection and test report as being either "shop drawings" or "product data," depending on whether the report is specially prepared for the project or a standard publication of workmanship control testing at the point of production.

b. Process inspection and tests reports accordingly.

c. Refer to Section 014000 - Quality Requirements for report distribution.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 014000

QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. General: Required inspection and testing services are intended to assist in the determination of probable compliance of the Work with requirements specified or indicated. These required services do not relieve the Contractor of responsibility for compliance with these requirements or for compliance with requirements of the Contract Documents.

B. Definitions: Quality control services include inspections, tests and related actions, including reports, performed by independent agencies and governing authorities, as well as directly by the Contractor. These services do not include Contract enforcement activities performed directly by the Owner.

C. Specific quality control requirements for individual units of Work are specified in the Sections of these Specifications that specify the individual element of the Work. These requirements, including inspections and tests, cover both production of standard products and fabrication of customized work. These requirements also cover quality control of the installation procedures.

D. Inspections, tests and related actions specified in this Section and elsewhere in the Contract Documents are not intended to limit the Contractor's own quality control procedures which facilitate overall compliance with requirements of the Contract Documents.

E. Requirements for the Contractor to provide quality control services as required by the Owner, governing authorities or other authorized entities are not limited by the provisions of this Section.

1.2 RESPONSIBILITIES

A. Contractor Responsibilities: Except where they are specifically indicated as being the Owner's responsibility, or where they are to be provided by another identified entity approved by the Owner, all inspections, tests and similar quality control services are the Contractor's responsibility - these services also include those specified to be performed by an independent agency and not directly by the Contractor. Costs for these services shall be included in the Contract Sum. The Contractor shall employ and pay an independent agency, testing laboratory or other qualified firm approved by the Owner to perform quality control services specified.

B. Owner Responsibilities: The Owner will employ and pay for the services of an independent agency, testing laboratory or other qualified firm to perform services which are the Owner's responsibility. Such services shall be coordinated by the Contractor as required.

C. Retest Responsibility: Where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance of related Work with the requirements of the Contract Documents, then retests are the responsibility of the Contractor, regardless of whether the original tests were the Contractor's responsibility. Retesting of Work revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original Work.

D. Responsibility for Associated Services: The Contractor is required to cooperate with the independent agencies performing required inspections, tests and similar services. Provide such auxiliary services as are reasonably requested. Notify the testing agency sufficiently in advance of operations to permit assignment of personnel. These auxiliary services include, but are not necessarily limited to the following:

1. Providing access to the Work.

2. Taking samples or assistance with taking samples.

3. Delivery of samples of test laboratories.

4. Security and protection of samples and test equipment at the Project site.

E. Limitations of Authority of Testing Service Agency: The agency is not authorized to release, revoke, alter or enlarge the Contract Documents. The agency shall not approve or accept any portion of the Work. The agency shall not perform any duties of the Contractor.

F. Coordination: The Contractor and each independent agency engaged to perform inspections, tests and similar services for the Project shall coordinate the sequence of their activities so as to accommodate required services with a minimum of delay in the progress of the Work. In addition, the Contractor and each independent testing agency shall coordinate their work so as to avoid the necessity of removing and replacing work to accommodate inspections and tests. The Contractor is responsible for scheduling times for inspections, tests, taking of samples and similar activities.

G. If the laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to be inspected, tested or approved, the Contractor shall give the Owner timely notice of its readiness and of the date arranged so the Owner may observe such inspection, testing or approval.

H. Special Tests: The Owner may on occasion request the Contractor to perform a special test on materials or equipment installed to verify conformance to the Specifications. The Owner will pay for all such tests if the materials or equipment meet or exceed specified requirements. However, if the items tested fail to meet these requirements, then the Contractor shall pay all costs of such tests and shall rectify at no cost to the Owner.

1.3 QUALITY ASSURANCE

A. Qualification for Service Agencies: Except as otherwise indicated, engage inspection and test service agencies, including independent testing laboratories, which are pre-qualified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which are recognized in the industry as specialized in the types of inspections and tests to be performed. Owner must approve Contractor's designated testing agency.

B. Codes and Standards: Testing, when required, shall be in accordance with all pertinent codes and regulations and with selected standards indicated in the various Sections of these Specifications under the Article entitled QUALITY ASSURANCE.

1.4 SUBMITTALS

A. General: Refer to Section 01 33 00 – Submittal Procedures, for submittal requirements.

B. Submit a certified written report of each inspection, test or similar service performed by the Testing Laboratory directly to the parties below.

- Contractor, 1 copy.
- Engineer, 1 copy.
- Owner's representative, 1 copy.
- Owner, 1 copy
- Submit additional copies of each written report directly to the governing authority when the authority so directs.

C. Report Data: Written reports of each inspection, test or similar service shall include, but not be limited to the following:

1. Name of testing agency or test laboratory.
2. Dates and locations of samples and tests or inspections.
3. Names of individuals making the inspection or test.

4. Designation of the Work and test method.

5. Complete inspection or test data.

6. Test results.

7. Interpretations of test results.

8. Notation of significant ambient conditions at the time of sample taking and testing.

9. Comments or professional opinion as to whether inspected or test work complies with requirements of the Contract Documents.

10. Recommendations on retesting, if applicable.

1.5 REPAIR AND PROTECTION

A. General: Upon completion of inspection, testing, sample taking and similar services performed on the Work, repair damaged Work and restore substrates and finishes to eliminate deficiencies, including deficiencies in the visual qualities of exposed finishes. Protect Work exposed by or for quality control service activities, and protect repaired Work. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 014216

DEFINITIONS AND STANDARDS

PART 1 GENERAL

1.1 DESCRIPTION OF REQUIREMENTS

A. General: This Section specifies procedural and administrative requirements for compliance with governing regulations and the codes and standards imposed upon the Work. These requirements include the obtaining of permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with regulations, codes and standards.

1. "Regulations" is defined to include laws, statutes, ordinances and lawful orders issued by governing authorities, as well as those rules, conventions and agreements within the construction industry which effectively control the performance of the Work regardless of whether they are lawfully imposed by governing authority or not.

1.2 DEFINITIONS

A. Owner: Winton Woods School District and their properly authorized agents including the Engineer and other consultants serving as Owner's Representatives reviewing work.

B. Engineer: THP Limited, Inc., Cincinnati, Ohio.

C. Owner's Representative: THP Limited, Inc., or other authorized agent as designated by the Owner.

D. General Explanation: A substantial amount of specification language consists of definitions for terms found in other Contract Documents, including the Drawings. (Drawings must be recognized as diagrammatic in nature and not completely descriptive of the requirements indicated thereon). Certain terms used in Contract Documents are defined in this Article. Definitions and explanations contained in this Section are not necessarily either complete or exclusive, but are general for the Work to the extent that they are not stated more explicitly in another element of the Contract Documents.

E. General Requirements: The provisions or requirements of Division 01 Sections apply to entire work of Contract and, where so indicated, to other elements which are included in the Project.

F. Indicated: The term "indicated" is a cross reference to graphic representations, notes or schedules on Drawings, to other paragraphs or schedules in the Specifications, and to similar means of recording requirements in Contract Documents. Where terms such as "shown", "noted", "scheduled", and "specified"

are used in lieu of "indicated", it is for the purpose of helping reader locate cross reference, and no limitation of location is intended except as specifically noted.

G. Directed, Requested, Etc.: Where not otherwise explained, terms such as "directed", "requested", authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by Owner or Engineer", "requested by Owner or Engineer", and similar phrases. However, no such implied meaning will be interpreted to extend the Owner's, Engineer's or Owner's representative's responsibility into the Contractor's area of construction supervision.

H. Project Site: The term "project site" is defined as the space available to the Contractor for performance of the Work, either exclusively or in conjunction with others performing other work as part of the project. The extent of the project site is shown on the Drawings.

I. Furnish: Except as otherwise defined in greater detail, term "furnish" is used to mean supply and deliver to project site, ready for unloading, unpacking, assembly, installation, etc., as applicable in each instance.

J. Install: Except as otherwise defined in greater detail, term "install" is used to describe operations at project site, including unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations, as applicable in each instance.

K. Provide: Except as otherwise defined in greater detail, term "provide" means furnish and install, complete and ready for intended use, as applicable in each instance.

L. Installer: The term "installer" is defined as the entity (person or firm) engaged by the Contractor, its subcontractor or sub-subcontractor for performance of a particular unit of work at the project site, including installation, erection, application and similar required operations. It is a general requirement that such entities (installers) be expert in the operations they are engaged to perform.

M. Final Completion: The term "Final Completion" refers to the degree of completion at which time the Project as a whole is turned over for full use to the Owner and all Work is completed in compliance with the Contract Documents.

N. Entrance: The term "entrance" is defined as a pedestrian doorway, stair, walkway, passageway, landing, elevator or other type of connector which connects or allows access from one structure to another structure.

1.3 INDUSTRY STANDARDS

A. General Applicability of Standards: Except to the extent that more explicit or more stringent requirements are written directly into the Contract Documents, applicable standards of the construction industry have the same force and effect (and are made a part of the Contract Documents by reference) as if copied directly into the Contract Documents, or as if public copies were bound herewith. Refer to other Contract Documents for resolution of overlapping and conflicting

requirements which result from the application of several different industry standards to the same unit of work.

Refer to individual unit of work Sections for indications of which specialized codes and standards the Contractor must keep at the project site, available for reference.

1. Referenced standards (referenced directly in Contract Documents or by governing regulations) have precedence over non-referenced standards which are recognized in industry for applicability to the Work.

2. Non-referenced standards recognized in the construction industry are hereby defined, except as otherwise limited in the Contract Documents as having direct applicability to the Work, and will be so enforced for the performance of the Work. The decision as to whether an industry code or standard is applicable to the Work, or as to which of several standards are applicable, is the sole responsibility of the Engineer.

B. Publication Dates: Except as otherwise indicated, where compliance with an industry standard is required, comply with standard in effect as of date of Contract Documents.

C. Copies of Standards: The Contract Documents require that each entity performing work be experienced in that part of the Work being performed. Each entity is also required to be familiar with recognized industry standards applicable to that part of the Work. Copies of applicable standards are not bound with the Contract Documents.

D. Where copies of standards are needed for proper performance of the Work, the Contractor is required to obtain such copies directly from the publication source.

E. In case of conflict between the published standard and Project Specifications, the more stringent shall govern.

F. References to known standard specifications shall mean the latest edition of such specifications adopted and published at date of execution of the Contract.

G. No claim by Contractor for additional compensation will be entertained on account of his failure to be fully informed as to requirements of any referenced standard.

1.4 REGULATORY REQUIREMENTS

A. Adherence to Codes and Regulations:

1. Before proceeding with the Work, the Contractor shall thoroughly review the Drawings and Specifications to assure the design to be in accordance with all laws, ordinances, rules and regulations, and he shall assume full responsibility therefore and shall bear all costs attributable thereto UNLESS notice is given to the Owner in writing of the discrepancy BEFORE proceeding with the Work.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 015000

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Administrative and procedural requirements for temporary services and facilities, including such items as temporary utility services, temporary construction and support facilities, and project security and protection.

1.2 OWNER OPERATION, MAINTENANCE OF OPERATION AND SAFETY

A. The structure is currently operated by the Owner for school operations. Areas of the facility outside the limits of a particular construction area shall remain functional throughout the construction period.

B. All construction operations shall be carefully coordinated with the Owner so as to minimize the overall inconvenience to the Owner, maintain the use of the entrances at all specified times and to expedite job progress.

C. All fumes and dust arising from construction operations shall be controlled so as to not adversely affect persons using the facilities

D. The Contractor shall protect his Work and equipment from damage by the public and other entities occupying facilities during the construction period.

E. The Contractor shall take all necessary precautions during all Work Areas to prevent debris from falling and causing damage outside the work area, including damage to existing mechanical/electrical fixtures. The Contractor shall be held liable for all damage caused by excavation, patching, drilling, coring, cutting, sandblasting, dust and debris. The Contractor shall be held liable for all damage to mechanical/electrical fixtures systems due to construction related activities. Contractor shall be responsible for all injury to people and property, including motor vehicles, caused by any construction related activity. The Owner will endeavor to field complaints and forward same to Contractor. Contractor is responsible for contacting people or property owner and resolving complaints.

F. When Work is performed which may create a hazard to persons or property above, below or in the proximity of Work, affected areas shall be blocked or otherwise protected to eliminate the hazard. Coordinate this activity with the Owner a minimum of 4 working days prior to the requested time for performance of such work.

G. Access to all emergency egress routes outside the limits of an individual construction area shall be continuously and safely maintained. Emergency egress routes shall not be impaired due to construction activities.

H. Coordinate Work Areas with the Owner to minimize interference with normal operations.

1.3 WORK AREAS

A. The Work is divided into sections termed Work Areas. Work outside the closed Work Area is not allowed, except work permitted by the Construction Documents or authorized by the Owner.

B. The Construction limit lines are defined as the extent of the Work Areas designated on the Drawings. Areas outside the construction limits may not be used by the Contractor for staging, storage of materials, or any other purpose, except as indicated in the Construction Documents.

1.4 MATERIAL AND EQUIPMENT STORAGE AND DELIVERY

A. An area of parking lot will be made available to the Contractor for material and equipment storage, staging and other facilities deemed necessary by the Contractor.

B. Deliveries shall not block entrance or exit to the facility by patrons or other services. Deliveries are to be scheduled between 7:00 am and 3:00 pm.

1.5 PROTECTION OF THE SURROUNDING AREA

A. All construction operations shall be conducted such as to protect the surrounding areas and adjacent buildings.

B. Fumes and dust shall also be controlled so as to prevent harmful or undesirable effects in the surrounding areas. All potential avenues for penetration of fumes or dust into occupied spaces adjacent to the work area must be located and sealed by the Contractor in a manner acceptable to the Owner prior to the start of the work in the affected area.

C. Areas below regions of construction activity may remain open for portions of that activity. However, the Contractor is totally responsible for damage as a result of the Work.

1.6 PROTECTION OF EXISTING CONDITIONS

A. All portions of the existing structure, all utilities and all other building contents not part of the work damaged, moved or altered in any way during construction shall be replaced or repaired to the Owner’s satisfaction at the Contractor's expense.

B. Contractor and Owner shall conduct a preconstruction inspection of all finish materials and equipment located within the Work area to record in writing existing damaged finish materials and/or equipment not directly involved with this Contract. The Contractor shall be deemed responsible for damaged finish material and/or equipment not recorded during the preconstruction inspection. Contractor shall replace or repair to the Owner's satisfaction damaged finish

material and/or equipment. It is the Contractor's responsibility to schedule and coordinate this preconstruction walk-through with the Owner. Provide a minimum of 5 calendar days notice prior to the requested walk-through time.

C. Accidental interruptions caused by the Contractor to school services outside of the work area shall be reported to the Owner at once, and immediate, emergency efforts to restore the service shall be made at the expense of the Contractor.

D. When performing work adjacent to building and structures, protect buildings and structures from dirt, dust and debris.

E. Protect drain openings during construction from construction debris entering drainage system. Provide filter cloth over openings to prevent debris from entering pipes, but still allowing water to enter. Clean debris from drains as necessary to maintain water removal. Remove drain protection during non-working hours and reinstall prior to commencing work.

1.7 TEMPORARY FACILITIES

A. Existing electric and water service shall remain at their present level of service within the facility and may be used by the Contractor. The Owner will pay for current and water used. Additional electricity and water and their service connections which may be required for construction shall be provided by the Contractor. Contractor shall verify existence and usability of listed services prior to submitting Bid. Non-listed services required by the Contractor shall be provided by the Contractor.

B. The Contractor shall provide his own job phone.

C. The Contractor shall provide temporary toilet facilities for use by its employees and subcontractors. Locate in an area approved by the Owner. Use of Owner facilities is not allowed.

D. Job signs are not allowed.

E. The Contractor shall furnish temporary lighting or heat required so that work may proceed to meet the Contract schedule.

F. The Contractor shall arrange and establish a location satisfactory to the Owner where workmen may eat; provide a rubbish container, and clean and remove all debris at the end of each work day.

G. At all times when work is being performed, the Contractor's foreman shall be on-site. Both the foreman and the superintendent shall have a mobile phone or beeper with him/her at all times while on the job site. Provide the Owner with the telephone number.

H. A job site office/trailer is not required.

1.8 PARKING

A. Parking for a maximum of four Contractor vehicles associated with the production of the work will be provided in the parking lot. Contractor employee parking will not be permitted within Work Areas.

1.9 USE OF FACILITY

A. Contractor employees are not permitted to use Owner and tenant facilities except as previously noted. Failure to comply with this restriction can result in the dismissal of the offending employee from the construction site.

B. Elevators may not be used by the Contractor.

C. Except for materials being used during a work shift, store all materials in approved storage area.

D. Materials being used for work shall be uniformly distributed throughout the work area so as to not overload or otherwise distress the supported structural system.

1.10 TRAFFIC CONTROL

A. Provide lighting, signage, barricades, traffic cones, signals, and traffic direction personnel required to clearly and safely re-route traffic in non-work areas. Coordinate with the Owner a minimum of 7 days in advance of when an area is scheduled to be closed.

B. Erect barricades to prevent unauthorized entry of pedestrian or vehicular traffic into, on or under the Work Area. Post appropriate signs to warn against entry. Construct barricades to prevent unauthorized entry during non-work hours.

C. Perform temporary traffic marking and striping that may be required during construction.

D. Provide signage to safely route pedestrians to the nearest stairwell.

1.11 USE OF STREETS AND WALKS

A. All use of streets and walks must be in accordance with local authorities having jurisdiction. The Contractor must coordinate such use directly with the local authorities.

B. The Contractor shall provide and maintain control device necessary for the protection of his Work, and areas which the local authorities may consider hazardous, including necessary lighting. Further, should conditions arise which necessitate the use of flagman and/or the services of the local police, the Contractor shall supply this type of control at no expense to the Owner.

C. Maintain traffic in accordance with local authority's requirements.

D. The Contractor shall provide and maintain signage, barricades, warning devices,

etc. that may be necessary or required by local authorities or the Owner for the protection of pedestrians and vehicles while performing the work.

1.12 CLEANUP

A. Each Contractor or Subcontractor, upon completion of his division of the work, shall collect and remove all rubbish, surplus material, tools and scaffolding pertaining to his work, and shall keep the work area neat and orderly by periodic removal and cleanup. Crates and cartons in which materials or equipment are received shall be removed daily. Contractor shall leave each phase of the work broom-clean upon completion of that phase.

B. Each Contractor shall be responsible for daily collection and disposal of rubbish created by his materials, men and work. If this is not done, the Owner may direct that cleanup be done and the cost of same shall be deducted from the Contractor's contract.

C. Contractor shall clean surfaces of all lights, control panels, overhead piping, duct work, etc., after construction is complete, to the same level of cleanliness as surfaces were before construction.

D. Protect from damage during subsequent construction activities all new work and existing construction cleaned upon the completion of any one phase.

E. Contractor shall legally dispose of all debris (including concrete) off the site.

1.13 FIRE PROTECTION

A. It shall be the responsibility of the Contractor to take the proper precautions to prevent fires when welding or while other fire-hazardous work is being performed.

B. Gasoline and other flammable liquids shall be kept in approved safety cans at all times.

1.14 WATCHMEN

A. The services of a watchman will not be provided by the Owner.

B. The Contractor shall assume full responsibility for protection and safety of material and equipment stored at the job site both within and outside of the work areas or storage areas.

1.15 ADDITIONAL REQUIREMENTS

A. During the term of this Contract, the employees of the Contractor shall not consume or be under the influence of alcohol while on the premises of the Owner. The use of nonprescription, over the counter drugs and medications (i.e., Contact, Actifed, etc.) is discouraged, but if used, manufacturer's guidelines must be followed. Drugs considered illegal by federal, state, and local authorities are strictly prohibited.

B. Owner reserves the right with or without cause and at its sole discretion, provided that such right is lawful, to have the Contractor temporarily or permanently remove any of the Contractor's employees from the Project.

C. Shutting down of existing apparatus and service lines shall be done only at times prescribed and approved by the Owner. Apparatus and service lines shall not be left out of service overnight, during non-working periods or during scheduled events.

D. Notice of temporary service interruption (or potential interruption) shall be given to the Owner and his designated representative not less than (5) working days prior to required interruption to allow adequate preparation to be made.

E. Provide the Owner with emergency telephone numbers to be able to contact the Contractor's superintendent or project manager 24 hours a day.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 015600

BARRIERS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Partial height construction barriers.

B. Sawhorse barricades.

C. Temporary pedestrian walkways through partially completed work areas.

D. Miscellaneous barriers and efforts, including construction fencing, caution tape and signage.

1.2 RELATED SECTIONS

A. Section 024119 – Selective Structural Demolition.

B. Section 015000 - Temporary Facilities and Controls

C. Section 030100 - Concrete Repairs

D. Section 071916 – Silane Water Repellent.

E. Section 099101 – High Performance Coatings.

1.3 SUBMITTALS

A. Submittals are not required unless Owner or Engineer raise questions or concerns regarding the quality or construction of barriers or enclosures. Potential submittals, if requested, could include the following:

1. Fire-retardant treatment for dimensional lumber and plywood.

2. Fire-resistant visqueen sheeting.

3. Plastic Safety Fencing.

4. Caution Barrier Tape.

5. Enclosure construction details.

PART 2 PRODUCTS

2.1 MATERIALS

A. Lumber:

1. Dimensional lumber:
    a. Minimum 2 x 4 dimensional lumber.
    b. Fire-retardant treated (non-com) with treatment stamp visible.
2. Plywood:
    a. Minimum 1/2-inch thick.
    b. Fire-retardant treated (non-com) with treatment stamp visible.

B. Visqueen Sheeting:
1. Approved Products:
    c. Griffolin fire-retardant type 55-FR.
    d. Midco vinyl fire-resistant reinforced polyfilm.

C. High Visibility Safety Fencing:
1. High density polyethylene material.
2. Diamond mesh with 1-1/2" openings.
3. Minimum 4 feet high.
4. Bright orange color.
5. Minimum 2200 lbs. break load capacity.

D. Chain Link Fencing:
1. Minimum 8’-0” feet tall.
2. Minimum 9 gauge galvanized with 2”x2” pattern configuration
3. Fence to be panelized system, surface set with ballasted based.
4. Drilled posts are not permitted.

E. Caution Tape:
1. 3" wide.
2. Minimum 4 mil thick plastic.
3. Safety yellow tape with black "CAUTION" lettering, minimum 1-1/2" high.

PART 3 EXECUTIONS

3.1 GENERAL

A. Work shall not proceed until dust barriers, barricades, construction fencing or partial or full height barriers or enclosures are in place and secure.

B. Provide barricades to isolate areas directly under work areas for protection of persons or property.

C. Remove barricades at entrances during non-working hours which will obstruct or hinder the use of the entrance.

D. Installation and removal of barricades or barriers shall not damage existing surfaces.

E. The use of anchors which penetrate the existing surface are prohibited, unless approved in advance by Engineer.

F. Remove all evidence of barriers installation upon removal.

G. Contractor is responsible for erection, maintaining, moving and removal of barricades, fencing and barriers from the job site.

3.2 BARRICADES

A. Where barricades are required for vehicular traffic control, provide orange construction fencing to divert traffic around work area. Support orange fencing to prevent sagging along entire length of barricade. Maximum spacing of orange fencing support is ten feet. Construct and provide barricades that are permanent for the period when the barricade is required. Weight or otherwise secure the barricades to keep unauthorized personnel from moving them.

B. Provide partial height or full height dust barriers where noted on drawings or where work performed is adjacent to pedestrian walkways, drive lanes or other public access areas.

C. Use of sawhorses, barrels and yellow caution tape are permitted only with advance approval by Owner.

3.3 COVERED SIDEWALKS AND ENTRANCES/EXITS

A. When any portion of the Work is directly over or within fifteen feet of a sidewalk or entrance/exit, provide a covered walkway for pedestrians to safely pass through the area. Covered walkway shall extend ten feet beyond the end of the Work Area.

B. The covered walkway shall meet the following minimum requirements:

1. Walkway to be constructed with metal walk-through scaffolding with nominal 2 inch thick dimensional lumber on the upper surface covered with ¾ inch plywood.

2. Provide lighting within the enclosed walkway so that pedestrians may safely

use passage at all hours.

END OF SECTION

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 77 00

CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Requirements for Close-Out of Contract.

B. Specific requirements for individual units of work may be included in the appropriate Sections.

1.2 DEFINITIONS

A. Contract Closeout is the term used to describe certain collective project requirements, indicating completion of the Work that are to be fulfilled near the end of the Contract time in preparation for final acceptance and occupancy of the Work by the Owner, as well as final payment to the Contractor and the normal termination of the Contract.

1.3 PREREQUISITES TO SUBSTANTIAL COMPLETION

A. General: Complete the following before requesting the Owner's inspection for certification of substantial completion, either for the entire Work or for portions of the Work. List known exceptions in the request.

1. In the progress payment request that coincides with, or is the first request following, the date substantial completion is claimed, show either 100% completion for the portion of the Work claimed as "substantially complete," or list incomplete items, the value of incomplete Work, and reasons for the Work being incomplete. Include supporting documentation for completion as indicated in these Contract Documents.

2. Submit a statement showing an accounting of changes to the Contract Sum.

3. Advise Owner of pending insurance change over requirements.

4. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.

5. Obtain and submit releases enabling the Owner's full, unrestricted use of the Work and access to services and utilities. Where required, include occupancy permits, operating certificates and similar releases.

6. Submit record drawings, maintenance manuals, final project photographs, damage survey and similar final record information.

7. Discontinue or change over and remove temporary facilities and services from the project site, along with construction tools and facilities, mock-ups and similar elements.

8. Complete final cleaning-up requirements, including touch-up painting of marred surfaces. Touch up and otherwise repair and restore marred exposed finishes.

B. Inspection Procedures: Upon receipt of the Contractor's request for inspection, the Owner will either proceed with inspection or advise the Contractor of unfilled prerequisites.

1. Following the initial inspection the Owner will either prepare the certificate of substantial completion or will advise the Contractor of work which must be performed before the certificate will be issued. The Owner will repeat the inspection when requested and when assured that the Work has been substantially completed.

2. Results of the completed inspection will form the initial "punch list" for final acceptance.

1.4 PREREQUISITES TO FINAL ACCEPTANCE

A. General: Complete the following before requesting the Owner's final inspection for certificate of final acceptance and final payment as required by the General Conditions. List known exceptions, if any, in the request.

1. Submit the final payment request with final releases, affidavits and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

2. Submit an updated final statement accounting for final additional changes to the Contract Sum.

3. Submit a certified copy of the Owner's final punch list of itemized Work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.

4. Submit consent of Surety.

5. Submit evidence of final, continuing insurance coverage complying with insurance requirements per General and Supplementary Conditions in these Specifications.

6. Submit a certificate clearly indicating that all outstanding bills for materials, services and labor, and all subcontractors have been paid in full.

B. Re-inspection Procedure: The Owner will re-inspect the Work upon receipt of the Contractor's notice that the Work, including punch list items resulting from earlier inspections, has been completed except for these items whose completion has been delayed because of circumstances that are acceptable to the Owner.

1. Upon completion of re-inspection, the Owner will either approve the final payment request, or will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled, but are required for final release of final payment.

2. If necessary, the re-inspection procedure will be repeated.

C. Schedule with the Owner a close-out meeting. Coordinate this meeting with the Owner. Provide a minimum of 3 working days notice prior to the requested time for the meeting.

1.5 PROJECT RECORD DOCUMENTS

A. The Contractor shall be responsible to maintain at the job site one copy of:

1. Record contract drawings.

2. Record project manual.

3. Addenda.

4. Reviewed shop drawings.

5. Change orders.

6. Other modifications to Contract.

B. Maintain documents in clean, dry, legible condition.

C. Do not use project Record Documents for construction purposes.

D. Failure to maintain documents up-to-date will be cause for withholding payments to Contractor.

E. Obtain one complete set of Contract Documents, including:

1. Project Manual with all addenda.

2. One complete set of black-line or blue-line prints of all drawings not bound in project manual.

3. One complete set of sepia prints of all drawings not bound in project manual.

F. Keep Record Documents current.

G. Contract Drawings: Contractor may, at his option, enter required information on a "working set" and then at completion of project transfer the information to final submitted "Project Record" set. All notations on the "Project Record" set shall be in red ink made in a neat and legible manner, with additional explanatory drawings or sketches as required. The Project Record Drawings shall have marked the correct location of Work items and equipment where it differs from the location shown on the drawings, and any other information pertinent or useful in nature.

H. Project Manual and Addenda: Contractor shall legibly mark up each section to record:

1. Manufacturer, trade name, catalog number and supplier of each product and item of equipment actually installed.

2. Changes made by change order or field order.

3. Other items not originally specified.

I. At completion of Project, deliver 3 copies of the Project Record Documents to the Owner prior to request for final payment. Accompany submittal with transmittal letter containing:

1. Date.

2. Project title and number.

3. Contractor's name and address.

4. Title and number of each Record Document.

5. Certification that each document as submitted is complete and accurate.

6. Signature of Contractor or his authorized representative.

1.6 OPERATIONS AND MAINTENANCE DATA

A. The Contractor shall deliver to the Owner at the final inspection all operations and maintenance data as required elsewhere in this Specification. This data shall be provided in loose-leaf binders.

1.7 WARRANTIES

A. The Contractor shall provide a general one year warranty for all work performed.

B. As required by individual Specification Sections, provide extended warranties on parts of the Work as specified.

C. Provide the Owner with four executed copies of all required warranties.

D. Deliver to the Owner all required warranties prior to the application for Final

Payment.

E. Delivery of required warranties does not relieve the Contractor of obligations assumed under provisions of the Contract.

F. Warranties provided directly by contractor are to be written using company letterhead documents.

G. A warranty may require multiple signatures if specified to be a joint warranty. Refer to individual warranty requirements in the appropriate Specification Section.

H. The warranty format shall be as follows:

Name of Project

Scope of Work

We warrant the Work to be in accordance with the Contract Documents. We shall provide all labor, material, tools and equipment necessary to correct work not in conformance with the Contract Documents or that becomes or is found to be defective within years after the Date of Substantial Completion. We will bear the cost of making good any damage caused by the defective work, including damage caused by its correction or removal, to the Owner's property or to property for which the Owner is liable. This warranty shall not apply to work which has been abused, neglected or altered by others or to work for which the Owner has previously given the Contractor a written acceptance of the defect. The warranty period shall begin at Noon on the date of Substantial Completion.

Company

Signature

Date

Title

1.8 SPARE PARTS AND MAINTENANCE MATERIALS

A. The Contractor shall deliver all spare parts and maintenance materials as required elsewhere in this Specification to the Owner at the final inspection.

1.9 CLOSEOUT PROCEDURES

A. Removal of Protection: Except as otherwise indicated or requested by the Owner, remove temporary protection devices and facilities which were installed during the course of the Work to protect existing or previously completed Work during the remainder of the construction period.

B. Compliance: Comply with safety standards and governing regulations for cleaning operations. Do not discharge volatile or other harmful or dangerous materials into drainage systems. Remove waste materials from the site and dispose of in a lawful manner. Where extra materials of value remaining after completion of associated work have become the Owner's property, dispose of these materials to the Owner's best advantage as directed.

PART 2 PRODUCTS - NOT USED.

PART 3 EXECUTIONS - NOT USED.

END OF SECTION

DIVISION 02 – EXISTING CONDITIONS

SECTION 024119

SELECTIVE STRUCTURE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. All labor, material, equipment, special tools and services to complete selective demolition work required for the project, as indicated on the Drawings and in the Specifications, but not limited to:

a. Demolition of selected portions of the building as indicated in the Contract Documents.

b. Demolition and removal from the job site of miscellaneous features as indicated in the Contract Drawings.

c. Removal from the job site and legal disposal of existing debris and accessories as shown on the Drawings.

d. Supply and maintenance of dumpsters to accommodate debris removals.

e. Maintenance of drains to accommodate storm water during demolition.

2. Materials Ownership:

a. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain the Owner's property, demolished materials shall become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

b. Storage or sale of removed items or materials on-site will not be permitted.

1.2 REFERENCES AND REGULATORY REQUIREMENTS

A. Conform to applicable laws, ordinances, and the State Building Code for demolition of structures, safety of adjacent structures, dust control, runoff control, and disposal.

B. Comply with ANSI A10.6.

C. Comply with applicable requirements of NFPA Standard No. 241.75 - Safeguarding Building Construction & Demolition Operations.

D. Obtain required permits from authorities.

E. Do not close or obstruct roadways, sidewalks, and hydrants without permits.

F. Do not close or obstruct egress width to any building or site exit.

G. Do not disable or disrupt building fire or life safety systems without three days prior written notice to the Owner.

H. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.

1.3 SUBMITTALS

A. Schedule of selective demolition activities indicating the following:

1. Detailed sequence of selective demolition and removal work, with starting and ending dates for each activity.

2. Detailed sequence of selective demolition and removal work to ensure uninterrupted progress.

3. Coordination of Owner's continuing occupancy of the Building.

B. Inventory: After demolition is complete, submit a list of items that have been removed and salvaged for Owner.

C. Pre-demolition Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces, which might be misconstrued as damage caused by demolition operations. This submittal should be delivered before Work begins.

1.4 QUALITY CONTROL

A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project. The firm shall have successfully performed at least three verifiable projects, similar to this project, within the last seven years.

B. Work in this Section shall be under the immediate control of a person (Contractor's superintendent or other designated person) experienced in this type of work. The person identified with immediate control of the work shall have supervised three verifiable projects of similar magnitude and type. Supervising person shall be present during all operations.

C. Pre-Demolition Conference: 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 and finalize selective demolition schedule; verify availability of all materials, demolition personnel, equipment, and facilities needed to maintain the schedule.

3. Review requirements of work performed by other trades that rely on substrates

exposed by selective demolition operations.

4. Review areas where existing construction is to remain and requires protection.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store materials under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes.

1.6 PROJECT CONDITIONS

A. Contractor shall coordinate with the Owner for the required access and staging areas needed to accommodate demolition operations at grade areas.

B. The Owner will continue to occupy portions of the Building immediately adjacent the selective demolition area. Conduct selective demolition so that the Owner's operations will not be disrupted. Provide not less than 72 hours' notice to the Owner of activities that will temporarily affect the Owner's operations.

C. Demolition Efforts:

1. The Contractor shall collect all debris generated by the demolition process and legally dispose of off the Owner's property. Do not over stockpile debris on paved areas. Remove dumpsters containing debris upon filling to capacity or completion of the work.

2. The Owner assumes no responsibility for actual condition of features and components to be selectively demolished.

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

D. Utility Services:

1. Maintain existing utilities required to remain, keep in service, and protect against damage during demolition operations.

2. Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by authorities having jurisdiction and the Owner. Provide temporary services during interruptions to existing utilities, as acceptable to the governing authorities and Owner.

3. Disconnect, seal, and remove utilities or services in selective demolition area before starting selective demolition operations.

E. Damages: Promptly repair damages to adjacent construction, on or off site, caused by demolition operations at no cost to the Owner.

F. Prevent insect and rodent infiltration. If necessary, employ an exterminator and treat entire building in accordance with governing health regulations for rodent and insect

control.

G. Hazardous Materials:

1. Notify the Owner if asbestos-containing materials are encountered during demolition.

PART 2 PRODUCTS - (NOT USED)

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas intended for demolition and note conditions or defects that will adversely affect the execution and/or quality of the work.

B. Notify Owner in writing of any such conditions or defects. Do not begin work until unsatisfactory conditions are corrected. Failure to notify Owner prior to beginning work constitutes acceptance by Contractor of the surfaces and conditions under which the work is to be performed, and acceptance by Contractor for the performance of the work.

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

D. Engage a professional demolition engineer to perform an engineering survey of existing conditions of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.

E. Verify that hazardous materials have been remedied before proceeding with selective demolition operations.

3.2 PREPARATION

A. Protection:

1. Provide temporary protection during the course of the work to prevent water entry into the building and walls and to maintain the building in a weather tight condition. Ensure that protection is in place and water tight before ending day's work.

2. Be prepared for unexpected weather changes so that temporary protection can be quickly installed.

3. Provide, erect, and maintain temporary barriers and security devices. Prevent spread of dust, odors, and noise to permit continued Owner’s occupancy.

4. Provide protection on existing surfaces and features to remain. Secure protection to prevent wind events from shifting or moving temporary protection. Securement methods shall not penetrate the surfaces or features. Protection shall define the

path over which demolished material will be transported.

5. Conduct demolition operations and remove debris to ensure minimum interference with the interior of the Building, roads, streets, walks, adjacent structures, and utilities.

6. Conduct operations with minimum interference to public or private accesses. Maintain protected egress and access at all times.

7. Protect existing landscaping materials, structures, and utilities which are not to be demolished.

3.3 DEMOLITION REQUIREMENTS

A. Coordinate regular removal and replacement of filled dumpsters from the job site during off hours only, unless pre-approved by the Owner in advance.

B. Do not remove any part of the work that will leave the remaining work unstable, until adequate temporary bracing and shoring have been provided, or until permanent bracing or construction is in place. Cease operations immediately if adjacent structures appear to be in danger. Notify Owner and authority having jurisdiction. Do not resume operations until directed.

C. If deteriorated materials, not intended for removal, are encountered during demolition, stop all work in that area and notify the Owner immediately.

D. Demolish and remove existing construction to the extent required and as indicated. Use methods required to complete work within limitations of governing regulations and as follows:

1. Where required, neatly cut materials to be removed. Use cutting methods least likely to damage construction to remain or adjoining construction. To minimize disturbance of adjacent surfaces, use hand or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.

2. Remove temporary work.

E. Explosives: The use of explosives will not be permitted.

3.4 DISPOSAL OF DEMOLISHED MATERIALS

A. General: except for items to be salvaged, etc, 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.

3. Remove debris from elevated portions of building by chute, hoist, or other device

that will convey debris to grade level in a controlled descent.

B. Separate recyclable demolished materials from other demolished materials to the maximum extent possible. Separate recyclable materials by type.

1. Provide containers or other storage method for controlling recyclable materials until they are removed from Project site.

2. Stockpile processed materials on site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

3. Stockpile materials away from demolition area. Do not store within the drip lines of remaining trees.

4. Store components off the ground and protect from the weather.

5. Transport materials off Owner's property and legally dispose of them.

C. Remove from site and legally dispose of debris, rubbish, and other materials resulting from demolition operations.

D. Burning of removed materials will not be permitted on the site.

3.5 PATCHING AND RESTORATION

A. Neatly patch and finish disturbed existing surfaces damaged by demolition.

B. Verify all patch locations, methods, and procedures with Engineer prior to beginning repairs.

3.6 STORM DRAINAGE MAINTENANCE

A. Maintain all drains during construction. Keep free and clear of debris to allow for proper drainage. Construction and construction barriers should not impede normal site drainage.

3.7 CLEANING

A. Clean adjacent floor and wall surfaces to remove dust, dirt, debris, sludge, etc., regardless of existing conditions prior to demolition.

END OF SECTION

DIVISION 03 – CONCRETE

SECTION 030100

CONCRETE REPAIRS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. All labor, material, tools, equipment and services to perform concrete repairs at areas indicated on the Drawings and in the Specifications, including but not limited to:

1. Horizontal concrete repairs.

2. Overhead concrete repairs.

3. Concrete beam corner repairs.

4. Vertical surface repairs.

1.2 RELATED SECTIONS

A. Allowances – Refer Section 012100.

B. Payment Procedures – Refer Section 012900.

C. Barriers - Refer Section 015600.

D. Silane Water Repellant - Refer Section 071916.

E. High Performance Coatings – Refer Section 099101

1.3 UNIT PRICES

A. Unit prices are taken for the work items listed in Section 012100, for the quantity measurements listed in Section 012900.

B. Include in the lump sum bid the quantities in Section 012100.

C. Final adjustment to the contract amount will depend on actual quantities of repair performed.

D. Repair quantities will be determined by measurements made jointly by the owner or its representative and the contractor. The contractor will record the measurements with both parties signing the record to attest to its accuracy.

1.4 REFERENCES

A. American Concrete Institute (ACI):

1. ACI 301 - Specification for Structural Concrete for Buildings.

2. ACI 305R - Hot Weather Concreting.

3. ACI 306R - Cold Weather Concreting.

4. ACI 318 - Building Code Requirements for Reinforced Concrete.

B. American Society for Testing and Materials (ASTM):

1. ASTM A185 - Specification for Steel Welded Wire, Fabric, Plain, for Concrete Reinforcement.

2. ASTM A615 - Specification for Deformed and Plain-Billet Steel Bars for Concrete Reinforcement.

3. ASTM A775 – Standard Specification for Epoxy-Coated Reinforcing Steel Bars.

4. ASTM C31 - Method of Making and Curing Concrete Specimens in the Fields.

5. ASTM C33 - Concrete Aggregates.

6. ASTM C39 - Test Method for Compressive Strength of Cylindrical Concrete Specimens.

7. ASTM C94 - Specification for Ready-Mixed Concrete.

8. ASTM C143 - Standard Test Method for Slump of Portland Cement Concrete.

9. ASTM C150 - Specification for Portland Cement Concrete.

10. ASTM C260 - Specification for Air-entraining Admixtures for Concrete.

11. ASTM C494 - Specification for Chemical Admixtures for Concrete.

12. ASTM C881 – Specification for Epoxy-Resin-Base Bonding Systems for Concrete.

13. ASTM C882 – Standard Test Method for Bond Strength of Epoxy-Resin Systems Used with Concrete.

C. Structural Steel Painting Council (SSPC):

1. Surface Preparation Specification No. 3 (SP3) – Wire Wheel Cleaning.

2. Surface Preparation Specification No. 6 (SP6) – Commercial Blast Cleaning.

D. American Association of State Highway and Transportation Officials (AASHTO): AASHTO M182 - Specifications for Burlap Cloth Made from Jute or Kenaf.

E. Keep a copy of the referenced specifications cited in this section in the on-site

field office.

1.5 SUBMITTALS

A. Submit literature for manufactured products, including manufacturer's specifications, test data and installation instructions.

B. Letter stating this Contractor and supplier are familiar with the referenced standards.

C. The Owner's review of details and construction operations shall not relieve this Contractor of his responsibility for completing the work successfully in accordance with the Contract Documents.

1.6 QUALITY ASSURANCE

A. Concrete that does not conform to the specified requirements, including bond to substrate, strength, finish and tolerances shall be subject to removal and replacement, including necessary preparatory work, at no additional cost to the Owner and without extension to the Contract Time.

B. Contractor shall be responsible for restoration of other components of the Work damaged during placement of concrete or damaged during removal of unsatisfactory concrete.

C. ACI 301, ACI 305R and ACI 306R are a part of the Contract Documents, are incorporated herein as fully as if here set forth and are referred to as General Concreting Requirements.

D. Chloride Ion Limitations: Maximum acid-soluble chloride ion concentration, in hardened concrete shall not exceed .10% by weight of cement.

E. Concrete testing and certification shall be as described in ACI 301, Chapter 16.

F. Mock-up (Exposed Aggregate repairs at High School)

a. Provide mock-up of repair in an area as selected by Owner for repairs to be made at the High School.

b. Each mock-up is to demonstrate final approach of repaired area.

c. Approved mock-ups should be maintained as part of the completed work.

d. If mock-up is unacceptable, additional mock-ups will be performed in other locations as selected by the Owner as part of the Base Bid until a mock-up is accepted by the Owner.

1.7 WARRANTY

A. A warranty period of two (2) years shall be provided for concrete work performed under this Section against defects, as determined by the Owner, including but not

limited to debonding, excessive cracking and surface scaling.

PART 2 PRODUCTS

2.1 MATERIALS

A. Fine and Coarse Aggregates:

1. Meeting requirements of ASTM C-33.

B. Water:

1. Mixing water shall be potable meeting requirements of ASTM C-94.

C. Pre-packed Concrete Materials:

1. Horizontal Application – Typical Repair Areas (Patch Material Type A):

a. MasterEmaco T430 by BASF

b. SikaQuick 1000 by Sika Corp.

c. MasterEmaco T1061 by BASF

d. SikaTop 122 Plus by Sika Corp.

2. Vertical and Overhead Repair Areas (Patch Material Type B):

a. MasterEmaco S488Cl by BASF

b. SikaTop 123 Plus by Sika Corp.

c. MasterEmaco N400 by BASF

d. MasterEmaco S440 by BASF

3. Cementitious Parge Coat:

a. Bases of Design: Tilt Finish by Mapei.

D. Bar Coating:

1. MasterProtect P8100 AP by BASF

2. ZRC Cold Galvanizing Compound by ZRC Worldwide.

3. Zinc Clad by The Sherwin Williams Company

E. Welded Wire Reinforcement:

1. Conforming to ASTM A185.

F. Reinforcing Steel:

1. All reinforcing steel shall have a minimum Fy of 60 ksi.

2. Provide epoxy coated steel where shown on Drawings.

G. Curing Materials:

1. 10 oz. burlap meeting the requirements of AASHTO M-182.

2. Visqueen: 6 mil polyethylene (white).

H. Curing Compound:

1. Epoxy Water Emulsion Primer/Sealer by The Sherwin Williams Company.

2. MasterKure CC 1315WB by BASF

3. Liquid membrane forming curing compound shall conform to the requirements of ASTM C1315, Type 1, Class A and have data from an independent laboratory indicating a maximum moisture loss of 0.40 grams per square cm. when applied at a coverage rate of 300 square feet per gallon.

I. Form Lumber:

1. New fire retardant material, grade and size to adequately form, support and brace concrete and to provide finishes that match adjacent surfaces.

J. Epoxy Grout:

1. Sikadur 32 epoxy mixed with silica sand.

K. Patch Anchors:

1. Stainless steel spikes by Powers Rawl.

PART 3 EXECUTIONS

3.1 GENERAL

A. Prior to the start of work, the Contractor shall survey areas to receive repair concrete to determine locations and approximate quantity of material.

B. Prior to start of excavations, perform an on-site review of the work areas with the Owner. Provide a minimum of 2 working days notice prior to the requested review day.

C. Prior to performing operations such as jack hammer work, the Contractor shall make a careful and thorough survey of the underside of the level on which he

intends to work and shall remove all loose soffit concrete which may fall as a result of those operations. The Contractor shall also be responsible for posting all signs and erecting all barricades as necessary to prevent pedestrians and vehicles from entering the area below hazardous work.

D. During concrete removal work, Contractor shall not damage existing mild steel reinforcement. Mild steel reinforcement that is damaged by the Contractor, as determined by the Owner, shall have a new reinforcing bar the same size as the damaged bar lapped to each side of the damaged area. Lap lengths shall be determined by ACI 318. Cost of new reinforcing bar, concrete removal and patching for lap length shall be borne by the Contractor.

E. It is intended that the existing reinforcement steel exposed during the work shall remain in place (unless noted on Drawing for removal) and undamaged during removal of the unsatisfactory concrete. Tie loose reinforcement bars in place in an approved manner prior to placing patch mix. If the reinforcement is deteriorated, as determined by the Owner, the Owner may direct that it be replaced and spliced in accordance with ACI splice and development requirements for reinforcement bars. Additional concrete removal may be required to expose undamaged reinforcing. If required, compensation will be made in accordance with the established Unit Prices.

F. Concrete placement for patches or overlays on sloping surfaces shall begin on the low elevation end and proceed upwards to the high elevation end.

3.2 PROTECTION

A. Contractor shall protect all open excavations, and reinforcing therein, from damage due to mechanical disturbance, weather conditions or other causes.

B. Contractor shall protect occupied areas below the work area during all phases of the work including removal, preparation and placement of materials.

C. Provide barricades to close areas immediately below the work area. Coordinate the time closing of required areas with the Owner.

3.3 HORIZONTAL CONCRETE REPAIR PROCEDURE

A. Refer to the Drawings for repair details. Contractor shall sound the concrete deck using chain drag method and hammer survey to identify the limits of deteriorated concrete within the Work Area. Mark with paint each area to be repaired. Location of paint marks must be approved by the Owner’s representative.

B. Before removal of floor concrete within a Work Area, the Contractor and the Owner’s representative will record the area bounded by the paint marks. Take measurements to the nearest inch in such a way that results in a total plan area at each location.

C. Contractor and Owner's representative shall affix their signatures to each measurement sheet completed, attesting to the agreed-upon accuracy of the measurements. Furnish copies of measurement sheets to both parties for their records.

D. Sum and calculate the total repair area to yield total square feet. Measurements are the sole basis for calculation of final payment, based upon the item's unit price. Refer to Section 012100 and Section 012900. Base unit price on the area of the repair and the depths indicated on the repair details.

E. Remove floor concrete within the Work Area by conventional chipping methods.

F. Conventional Chipping Method:

1. Sawcut the concrete deck surface along the perimeter of the paint marks which define the removal area. Do not cut existing reinforcement. Depth of sawcuts shall be 3/4 inch. Cut perimeter of removal area before beginning chipping hammer work. Do not over cut corners of patch area.

2. Perform concrete removal with no larger than 18 pound chipping hammers.

3. Begin concrete removal at the center of the removal area and work towards the sawcut perimeter. Maintain vertical sawcut edge at perimeter. Re-saw if necessary to maintain required edge.

4. Contractor shall use due diligence to perform concrete chipping operation in a manner to avoid punching through slab. Means such as utilizing wide chipping blades and performing chipping procedures on a low angle are recommended.

G. The surface of the sound, exposed concrete shall be relatively flat with 1/4" amplitude over the repair area for new concrete patches and overlays. Contractor is responsible for insuring that the final concrete repair area is sound.

H. Within 24 hours of concrete repair material placement, sandblast the excavation and the immediately adjacent surface. Reinforcing steel shall be cleaned to a SSPC-SP6 condition unless otherwise indicated.

I. After completion of all cleaning operations, blow-out excavations with oil-free and water-free compressed air. Previously cleaned excavations that are subjected to contamination must be re-cleaned.

J. The Owner will inspect excavations prior to coating reinforcing steel. Final touch-up of excavations and reinforcing steel shall be performed before proceeding.

K. Within 8 hours after cleaning, coat all surfaces of exposed steel with one coat of bar coating. Allow coating to become tack free before proceeding with second coat.

L. Apply second coat of bar coating to previously coated steel. Do not apply coating

to substrate or allow coating to puddle in low areas of excavation.

M. Thoroughly saturate all concrete surfaces to be in contact with new concrete as necessary to provide a saturated surface dry condition.

N. Just prior to concrete placement blow-down area with oil-free compressed air to remove standing and puddled water.

O. Place Patch Material Type A in the excavations. Vibrate new patch material to ensure consolidation in maximum-depth areas and at the excavations perimeter. Screed material flush with adjacent surfaces and finish with a float or light trowel.

P. After finishing, fog concrete surfaces with water using approved fog spray device (hose not permitted) to prevent surface drying prior to start of curing.

Q. Cure Patch Material Type A in accordance with manufacturer's written instructions.

3.4 OVERHEAD AND VERTICAL REPAIR PROCEDURE

A. Refer to the Drawings for repair details. Contractor shall sound overhead and vertical concrete surfaces using hammer sounding techniques to identify the limits of deteriorated concrete within the Work Area. Mark with paint each area to be repaired. Location of paint marks must be approved by the Owner's representative.

B. Before removal of overhead or vertical concrete within a Work Area, the Contractor and the Owner's representative will record the area bounded by the paint marks. Take measurements to the nearest inch in such a way that results in a total plan area at each location.

C. Contractor and Owner's representative shall affix their signatures to each measurement sheet completed, attesting to the agreed-upon accuracy of the measurements. Furnish copies of measurement sheets to both parties for their records.

D. Calculate and sum the total repair area to yield total square feet. Measurements are the sole basis for calculation of final payment, based upon the item's unit price. Refer to Section 012100 and Section 012900. Base unit price on the area of the repair and the depths indicated on the repair details.

E. Remove concrete within the Work Area by conventional chipping methods.

F. Conventional Chipping Method:

1. Saw cut the concrete surface along the perimeter of the paint marks which define the removal area. Do not cut existing reinforcement. Depth of saw cuts shall be 1/2 inch. Cut perimeter of removal area before beginning chipping

hammer work. Do not over cut corners of patch area.

2. Perform concrete removal with no larger than 18 pound chipping hammers.

3. Begin concrete removal at the center of the removal area and work towards the saw cut perimeter. Maintain vertical saw cut edge at perimeter. Resaw if necessary to maintain required edge.

4. Contractor shall use due diligence to perform concrete chipping operation in a manner to avoid punching through a slab. Means such as utilizing wide chipping blades and performing chipping procedures on a low angle are recommended.

G. The surface of sound, exposed concrete shall be relatively flat with a ¼" amplitude over the repair area. Contractor is responsible for insuring that the final concrete repair area is sound.

H. Within 24 hours of concrete repair material placement, sandblast the excavation and the immediately adjacent surface. Reinforcing steel shall be cleaned to a SSPC-SP6 condition unless otherwise indicated.

I. After completion of all cleaning operations, blow-out excavations with oil-free and water-free compressed air. Previously cleaned excavations that are subjected to contamination must be re-cleaned.

J. The Owner will inspect excavations prior to coating reinforcing steel. Final touch-up of excavations and reinforcing steel shall be performed before proceeding.

K. Within 8 hours after cleaning, coat all surfaces of exposed steel with one coat of bar coating. Allow coating to become tack free before proceeding with second coat.

L. Apply second coat of bar coating to previously coated steel. Do not apply coating to substrate.

M. Maintain all concrete surfaces of repair areas in a wet condition to provide a surface saturated dry condition.

N. Just prior to material placement, blow-down area with oil-free compressed air to remove any standing water near vertical repair locations.

O. Place Patch Material Type B in the excavations per manufacturer's written instructions. Vibrate new patch material at vertical repairs to ensure consolidation in maximum-depth areas. Screed material flush with adjacent surfaces and finish with a light trowel.

P. After finishing, fog concrete surfaces with water using approved fog spray device (hose not permitted) to prevent surface drying prior to start of curing.

Q. Cure Patch Material Type B in accordance with manufacturer's written

instructions.

3.5 CEMENTITIOUS PARGE COAT (ELEMENTARY SCHOOL).

A. Contractor shall sound all concrete surfaces using hammer sounding techniques to identify the limits of debonded existing parge coat. Engineer to be on site during sounding. Existing parge coat may be loosely bonded. Care shall be taken not to remove more of the existing parge coat than required.

B. Contractor and the Owner's representative will record the area of the loose existing parge coat to be removed. Take measurements to the nearest inch in such a way that results in a total plan area at each location.

C. Contractor and Owner's representative shall affix their signatures to each measurement sheet completed, attesting to the agreed-upon accuracy of the measurements. Furnish copies of measurement sheets to both parties for their records.

D. Calculate and sum the total repair area to yield total square feet. Measurements are the sole basis for calculation of final payment, based upon the item's unit price. Refer to Section 012100 and Section 012900. Base unit price on the area of the repair and the depths indicated on the repair details.

E. Remove parge coat within the Work Area by conventional hand held hammer methods as follows.

1. Saw cut / score the limits of the parge coat to be removed.

2. Perform loose parge coat removal with hand held hammer.

3. Begin existing parge coat removal at the center of the removal area and work towards the saw cut / scored perimeter. Maintain vertical saw cut edge at perimeter. Resaw if necessary to maintain required edge.

4. Contractor shall use due diligence to perform loose parge coat removal in a manner to avoid loosening additional parge coat.

5. Apply new parge coat repair material within 24 hours of the removal of the loose material as follows.

F. Sandblast (brush blast) the surface of the concrete to be parged. Any surface becoming contamination must be re-cleaned.

G. The Engineer must inspect surfaces to be parged prior to applying new parge coat.

H. Maintain all concrete surfaces of repair areas in a wet condition to provide a surface saturated dry condition.

I. Just prior to material placement, blow-down area with oil-free compressed air to

remove any standing water near vertical repair locations.

J. Place parge coat within repair area per manufacturer's written instructions. Sponge float material flush with adjacent surfaces. New parge coat to match existing parge coat adjacent to repair area. Follow manufacturer's requirements for tinting / color matching.

K. Cure parge coat in accordance with manufacturer's written instructions.

3.6 FIELD QUALITY CONTROL

A. All excavations shall be inspected and approved prior to placing concrete. The Contractor shall notify the Owner 2 working days in advance of required inspection.

B. Notify the Owner at least 2 working days prior to placing concrete.

C. Acceptance of Structure:

1. Acceptance of Structure shall be in accordance with ACI 301 Chapter 18.

2. Contractor shall bear all costs of correcting rejected work, including the cost of Owner's services thereby made necessary.

3.7 CLEANING

A. Empty containers shall be removed from the Garage at the end of each working day. Cloths soiled with adhesive materials that might constitute a fire hazard shall be placed in suitable metal safety containers or shall be removed from the building at the end of each working day. Special care shall be taken in storage of disposal of flammable materials. Comply with health, fire and environmental regulations.

B. All spilled materials shall be completely removed from hardware, adjacent floor areas, metal work, etc. Remove spilled coating by approved methods.

C. Repaint in matching color all curbs, columns, walls, etc., where existing paint was removed during preparation of adhesive materials installations.

D. All hardware, adjacent floor areas, metal work, etc., and the general premises shall be left clean and free of all construction dust, dirt and debris.

END OF SECTION

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

SECTION 071916

WATER REPELLENT

GENERAL

1.1 SUMMARY

A. Section Includes:

1. All labor, material, equipment, special tools and services to prepare and install penetrating water repellent on surfaces as indicated on the Drawings and in the Specifications, including but not limited to:

a. Elementary School concrete beams and columns.

b. High School entrance concrete beams and columns.

c. Inspection of surfaces to receive water repellent.

d. Preparation and cleaning of surfaces to receive water repellent.

e. Application of water repellent on surfaces where indicated on the drawings.

f. Temporary protection of doors, windows, roof areas, and interior spaces during construction.

g. Provide access to work area for Owner representative or Engineer to inspect quality of work, progress, unit price items and field conditions. Access to be completed during normal working. If access requires mechanical equipment (man-lift, swing stage, etc.), provide necessary operators.

B. Products Supplied But Not Installed Under This Section:

C. Products Installed But Not Supplied Under This Section:

D. Related Sections:

1. Barriers - Refer Section 015600.

2. Concrete Repair – Refer Section 030100.

3. High Performance Coatings – Refer Section 099101.

E. Allowances:

1. Refer to Section 012100 for Allowances that pertain to this Section

F. Unit Prices:

1. Refer to Section 012900 for Unit Prices that pertain to this section.

G. Alternates:

1. Refer to Section 012300 for Alternates that pertain to this Section.

1.2 DEFINITIONS

A. Where the term "manufacturer's recommendations," or variations thereon, are found in this Specification, it shall mean "manufacturer's recommendations which are found in publications available to and commonly used by the general architectural and engineering professions."

1.3 SUBMITTALS

A. Literature for manufactured products, including manufacturer's specifications, test data and installation instructions or applicator's manual.

B. Manufacturer's letter of applicator approval per Paragraph 1.4.A.

C. Listing of completed projects per Paragraph 1.4.B.

D. Submit personal resume to verify compliance with Paragraph 1.4.D.

E. Letter of compatibility per Paragraph 1.4.F.

1.4 QUALITY ASSURANCE

A. Work under this Section shall be performed by organizations which have successfully performed at least three projects of similar size and type, in a similar climate within the past five years.

B. Final selection of the water repellent applicator shall be subject to the approval of the Owner.

C. All work under this Section shall be under the immediate control of a person (Contractor's superintendent or other designated person) experienced in this type of work. This person shall have supervised three prior projects of similar magnitude and type, shall be present during all operations, and shall be approved by the Owner.

D. A technically competent employee of the manufacturer (not associated with the installation crew), approved by the Owner, shall perform sub-items 1 through 8 listed below. The General Contractor shall provide Owner’s Representative with 2 weeks advance notice of initial water repellent installation and 3 days advance notice for all subsequent installations requiring the manufacturer’s representative’s review.

1. Witness and approve in writing the surface cleanliness and preparation procedures. If application of water repellent is on different materials, and/or different areas remote from each other, written approval shall be provided for each material and/or each area.

2. Witness the application of water repellent on at least one phase of all of the specifically identified surfaces as indicated on Drawings.

3. Advise the contractor where and when modifications to procedures are required to obtain Specification compliance.

4. After the field sample application and prior to the next application, establish in writing procedures to be used for the remainder of the work area(s). The procedures shall be written particularly for this project based on field sample(s) application observations and anticipated condition for the remainder of the work. Manufacturer's standard published literature is not acceptable. The procedures shall address, but not be limited to:

    a. If applicable, preparation and clean-up procedures for surface(s) to receive water repellent.

    b. Surface preparation acceptance criteria.

    c. Special surface preparation procedures, if any, for particular areas, such as heavily stained areas.

    d. Allowable moisture and atmospheric conditions site specific to this project.

    e. Modifications to application rates and techniques to limit potential glazing or discoloration from over application of material.

    f. All other special instructions necessary to ensure proper installation.

5. Prior to leaving the site, submit to the Owner for review and approval (2) copies of the written procedures developed for the remainder of the work area(s).

6. Give a copy of the written procedures to the contractor.

7. Review in person with the contractor's superintendent (or person in charge of this work) the written procedures in the presence of the Owner.

8. Provide an additional copy of the written procedures which shall remain on site at all times for the duration of the work.

E. The water repellent and substrate surfaces shall be certified in writing as being compatible prior to beginning the work by the water repellent manufacturer.

F. Verify in writing, from both the sealant and water repellent manufacturers that the approved sealant is compatible with the approved water repellent.

G. Field Samples

1. Prior to ordering water repellent, apply material to an area of each material specified to receive water repellent. Area(s) to be selected by the Owner.

2. If application of water repellent is in several areas remote from each other, apply sample in each area.

3. Each area shall be 100 sq. ft. (10’ x 10’).

4. Review of sample area(s) shall be performed by the contractor, engineer and Owner no sooner than 72 hours after application of the water repellent.

H. Pre-Installation Meeting: A minimum of 1 week prior to the start of work in this Section, the contractor shall schedule a pre-installation meeting with the Owner's representative, the Engineer, and the manufacturer's technical representative to review preparation, installation, cleaning procedures and schedule.

I. Provide access to work area for Owner representative or Engineer to inspect quality of work, progress, unit price items and field conditions. Access to be completed during normal working hours. If access requires mechanical equipment (man-lift, swing stage, etc.), provide necessary operators.

1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver all materials to job site in sealed, undamaged containers.

B. Each container shall be identified with materials name, date of manufacture, lot and batch number.

C. Store materials not being used in the work shift in an approved storage area which is well ventilated, lighted and not subject to direct sun rays.

D. Storage area shall be heated or cooled as required to maintain the temperature within the range recommended by the water repellent manufacturer.

E. Materials shall be kept sealed when not in use.

F. Keep storage area neat and clean and secure from vandalism and theft.

G. Perform work in strict accordance with all safety and weather conditions required by product literature or as modified by applicable rules and regulations of Local, State and Federal authorities having jurisdiction.

H. When toxic or flammable solvents are used, the water repellent applicator shall take all necessary precautions as recommended by the manufacturer. In all cases, the handling and use of toxic or flammable solvents, including adequate ventilation and personal protective equipment, shall conform to the requirements of the applicable safety regulatory agencies.

1.6 SEQUENCING

A. Complete all masonry and concrete repairs, and sealant work prior to application of water repellent.

1.7 NOT USED

PRODUCTS

1.8 WATER REPELLENT MATERIALS

A. Concrete (Elementary School):

1. Protectosil Chem-Trete BSM 400 by Degussa Corp., Parsippany, N.J.

B. Alternative products approved during bidding process with following requirements.

1. Active Content: 100% silane by weight.

2. Must have acceptable VOC contents in state where it is being used.

3. Must be submitted for review by the Engineer a minimum of seven days prior to bid date.

EXECUTIONS

1.9 EXAMINATION

A. Examine surfaces intended to receive the specified work and note conditions or defects that will adversely affect the execution and/or quality of the work.

B. Notify Owner in writing of any such conditions or defects. Do not begin work until unsatisfactory conditions are corrected. Failure to notify Owner prior to beginning work constitutes acceptance by Contractor of the surfaces and conditions under which the work is to be performed, and acceptance by Contractor for the performance of the work.

1.10 PREPARATION

A. Protection:

1. Provide temporary protection during the course of the work to prevent water entry into the building and walls and to maintain the building in a weather tight condition. Ensure that protection is in place and water tight before ending day's work.

2. Be prepared for unexpected weather changes so that temporary protection can be quickly installed.

3. Protect all existing adjacent surfaces that are to remain and are not included in the work of this Section.

4. Provide safeguards from work of this Section for pedestrian traffic and adjacent property. Do not permit drift of dust or liquids.

5. Use safeguards recommended by manufacturers of products specified herein for personnel handling and applying said materials.

6. Protect surrounding areas from construction activities, dirt, dust and debris.

7. Protect all plantings and landscape materials that may come in contact with water

repellent

8. Protect glass, metals, specialty coated glass, plastic and vinyl components of windows, and roofing materials as recommended by the water repellent manufacturer. Do not allow overspray to be deposited on adjoining surfaces not specified to receive water repellent. Remove water repellent immediately from adjoining surfaces.

B. Cleaning

1. Clean all surfaces prior to application of water repellent to remove all traces of dirt, dust, efflorescence, mold, salt, grease, laitance, paint, coating, biological growth, staining and other foreign materials. Refer to Section 090101 for cleaning of surfaces.

2. All surface preparation and cleaning procedures shall be in strict accordance with this Specification, unless more stringent requirements are asked for by the water repellent manufacturer.

3. Areas scheduled to receive penetrating water repellent as shown on the Drawings shall be cleaned to achieve a standard of cleanliness acceptable to the Owner and water repellent manufacturer.

4. Prior to beginning surface preparation, prepare a sample area of all surfaces to be used as the minimum standard of acceptability for cleanliness and surface texture to be achieved throughout the work. Size and location shall be as directed by the Engineer. The standard shall be jointly reviewed and approved by both the Engineer and the Manufacturer relative to paragraph 3.1.B prior to start of full scale surface preparation work. The approved standard shall remain untreated until all surface preparation work is completed. Protect sample area from contamination and dirt.

5. Minimum standard of acceptability applies to all surfaces intended to receive penetrating water repellent, regardless of surface preparation procedure or process.

6. Obtain approval from the Owner for the surface preparation standard locations prior to proceeding with the surface preparation work.

1.11 GENERAL

A. Surface temperature of substrate must be between 20º and 100º F.

B. Do not apply material is rain is anticipated within two hours following the application, or if high winds are present.

C. If rain has preceded the anticipated application time, allow the surface to dry a minimum of 24 hours

D. Do not apply to a wet substrate.

E. All re-pointing mortar must be allowed to cure a minimum of three days.

F. All patching materials and sealants must be fully cured prior to application.

1.12 APPLICATION

A. Apply material with low pressure (15 to 25 psi) pumping equipment with a wet fan type spray nozzle. Alternate application may include power roller with 1" nap, or by brush.

B. Apply water repellent on all specified surfaces from the bottom up.

C. Apply water repellent in a flooding application so material runs down 6" to 8" below point of application.

1.13 CLEAN-UP

A. During the progress of the Work, remove from the project all discarded water repellent materials, rubbish, cans, and rags in a lawful manner.

B. Clean all surfaces affected by material overspray and repair all damage caused by overspray to adjacent construction or property at no cost to the Owner.

C. All hardware, adjacent areas, metal work, etc., and the premises shall be left clean and free of all construction dust, dirt and debris.

D. Empty containers shall be removed from the building at the end of each working day. All cloths soiled with water repellent that might constitute a fire hazard shall be placed in suitable metal safety containers or shall be removed from the building at the end of each working day. Special care shall be taken in storage or disposal of flammable materials. Comply with health and fire regulations.

E. Remove protection from adjoining surfaces not scheduled to receive water repellent. Clean all residue from protection method from surfaces.

1.14 APPLICATION SCHEDULE

A. Protectosil ChemTrete BSM 400:

1. Elementary School concrete beams and columns..... 200 SF per gallon.

2. High School exposed concrete beams and columns..... 150 SF per Gallon

END OF SECTION

DIVISION 9 – FINISHES

SECTION 099101

HIGH PERFORMANCE COATINGS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. All labor, material, equipment, special tools and services required to clean and/or prepare surfaces and apply new coatings, as required by the Drawings and this Specification, including but not limited to the following:

   a. Complete cleaning, surface preparation, primer installation where necessary and new coating on steel and metal surfaces.

   b. Complete cleaning, including removal of abandoned forms, conduit and junction boxes of exterior façade concrete surfaces.

   c. Surface preparation, priming, and coating or finishing of metal handrails, stairs, bollards, EIFS, Concrete, and Masonry as indicated on drawings.

   d. Surface preparation, priming, and coating or finishing of precast concrete panels as indicated on drawings.

   e. Temporary protection of doors, windows, roof areas, and interior spaces during construction. Refer to Specification Section 015600.

   f. Provide access to work area for Owner representative or Engineer.

B. Related Sections:

1. Barriers – Refer to Section 015600

2. Concrete Repairs – Refer to Section 030100

3. Silane Water Repellant – Refer to Section 071916

C. Alternates:

1. Alternates – Refer to Section 012300.

1.2 REFERENCES

A. ASTM D 16 – Terminology Related to Paint, Varnish, Lacquer, and Related Products.

B. Structural Steel Painting Council (SSPC): SSPC-SP 1 – Solvent Cleaning.

C. Structural Steel Painting Council (SSPC): SSPC-SP 2 – Hand Tool Cleaning.

D. Structural Steel Painting Council (SSPC): SSPC-SP 3 – Power Tool Cleaning.

E. Structural Steel Painting Council (SSPC): SSPC-SP 6/NACE 3 – Commercial Blast Cleaning.

F. Structural Steel Painting Council (SSPC): SSPC-SP 13/NACE 6 – Surface Preparation of Concrete.

1.3 DEFINITIONS

A. "Coating" as used herein means all paint systems materials, including primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.

B. “Dry Film Thickness” as used herein means the thickness of a coat in a fully cured state measured in mils (1/1000 inch).

C. “Well-adhered” as used herein means materials that cannot be removed by lifting with a dull putty knife.

1.4 SUBMITTALS

A. Submit manufacturer's technical information including coating label analyses and application instructions.

B. Submit complete line of manufacturer’s color samples for each product.

C. Letter of approval per Paragraph 1.5.A.

D. Prior project experience per Paragraph 1.5.B.

E. Name and resume of persons per Paragraph 1.5.C.

F. Manufacturer’s sample warranty.

1.5 QUALITY ASSURANCE

A. The contractor shall be a certified installer by the manufacturer.

B. The contractor shall be approved by the manufacturer and shall have no less than (5) years experience in performance of similar work in size and complexity.

C. All work under this Section shall be under the immediate control of the Contractor's superintendent(s) experienced in this type of work. The person(s) shall have supervised three prior projects of similar magnitude and type, and shall be present during all operations. This person(s) shall be approved by the Owner.

D. Regulatory Requirements:

1. Comply with applicable laws, ordinances, and the Local Building Code.

E. Mock-Up:

1. Provide mockup of coating preparation and coating system for review by Owner and Engineer. Maintain approved mock-ups during the job as reference for minimal standard of acceptance and quality of coating application.

F. Pre-installation meeting.

G. Provide access to work area for Owner representative or Engineer to inspect quality of work, progress, unit price items and field conditions. Access to be completed during normal working hours. If access requires mechanical equipment (man-lift, swing stage, etc.), provide necessary operators.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to job site in original, new and unopened packages and containers bearing manufacturer's name and label, and following information:

1. Name or title of material.

2. Fed. Spec. number, if applicable.

3. Manufacturer's stock number and date of manufacture.

4. Manufacturer's name.

5. Contents by volume, for major pigment and vehicle constituents.

6. Thinning instructions.

7. Application instructions.

8. Color name and number.

B. Storage and Protection:

1. Protect materials in a dry place, off ground and under cover to protect them from moisture and other damage.

2. Do not use materials showing evidence of water or other damage.

3. Storage and handling of materials shall conform to the requirements of the applicable safety regulatory agencies.

4. Storage areas shall be heated or cooled as required to maintain the temperatures within the range recommended by the manufacturer.

1.7 PROTECTION

A. Place coating or solvent soaked rags, waste, or other materials which might constitute a fire hazard in metal containers and remove from premises at the close of each day's work.

B. Protect the work of all other trades against damage, marking or injury by suitable

covering during the progress of the coating and finishing work. Repair any damage done.

C. Protect and filter debris and chemicals from entering storm drains. Direct water runoff from all cleaning processes to the filtration system before allowing it to enter the storm drain system.

D. During all cleaning operations, coordinate drain protection with the local municipality.

1.8 PROJECT CONDITIONS

A. Environmental requirements:

1. Install coating materials in strict accordance with all safety and weather conditions required by product literature or as modified by applicable rules and regulations of Local, State and Federal authorities having jurisdiction.

2. Fumes and dust shall be controlled to prevent harmful or undesirable effects in surrounding areas. Do not allow fumes, dirt, dust or debris to enter building.

3. When toxic or flammable solvents are used, the Contractor shall take all necessary precautions as recommended by the manufacturer. In all cases, the handling and use of toxic or flammable solvents, including adequate ventilation and personal protective equipment, shall conform to the requirements of the applicable safety regulatory agencies.

4. Apply water base coatings only when temperature of surfaces to be coated and surrounding air temperatures are between 50 Deg. F. (10 Deg. C.) and 90 Deg. F. (32 Deg. C.), unless otherwise permitted by coating manufacturer's printed instructions.

5. Apply solvent-thinned coatings only when temperature of surfaces to be coated and surrounding air temperatures are between 45 Deg. F. (7 Deg. C.) and 95 Deg. F. (35 Deg. C.), unless otherwise permitted by coating manufacturer's printed instructions.

6. Do not apply coating in snow, rain, fog or mist; or when relative humidity exceeds 85 percent or to damp or wet surfaces unless otherwise permitted by coating manufacturer's printed instructions.

7. Apply coating to surfaces that are cured and dry per manufacturer’s tolerances.

1.9 SEQUENCE

A. Prior to beginning coating preparation complete all concrete and sealant repairs including curing periods.

1.10 WARRANTY

A. Coating System Warranty:

1. The applicator shall furnish a (5) year warranty to the Owner for all types of new coating installed. New coating work shall be warranted against defects due to installation, including but not limited to debonding and inadequate preparation.

    a. All required testing and quality assurance operations necessary to furnish warranty are Contractor and manufacturer's responsibility.

2. The manufacturer shall furnish a (5) year warranty to the Owner for all types of new coating installed. New coating work shall be warranted against material defects, including but not limited to debonding, cohesive failure, cracking, and ultra violet exposure degradation.

    a. All required testing and quality assurance operations necessary to furnish warranty are Contractor and manufacturer's responsibility.

1.11 MAINTENANCE

A. Contractor to coordinate providing the owner with surplus materials.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Sherwin Williams.

B. Tnemec Company.

C. ICI Paints.

2.2 MATERIALS

A. No lead-based products are permitted.

B. Use no thinners other than those specified by manufacturer.

C. Use only paints and coatings that are compatible with concrete and previously coated surfaces.

D. Use only primers and undercoats that are suitable for each surface to be covered and that are compatible with finish coating required.

E. Notify Engineer in writing of any anticipated problems in using coating systems specified on existing substrates.

F. Provide cleaners for removal of loose paint, dirt, and pollutants; which are compatible with all primers, intermediate coats, and finish coat. Thoroughly rinse all clean agents before applying primer or finish coats. Pre-approve cleaning agents with paint manufacturer.

G. All products must be provided by a single manufacturer.

2.3 MATERIALS AND PROCEDURES

A. General Cleaning Requirements.

1. All existing area drains shall be clear and protected prior to beginning any work.

2. All biological growth must be removed prior to coating.

3. All efflorescence, lime run, and surface contaminants should be removed prior to application of new coating.

4. If previously coated, existing coating must be adhered to the substrate per the manufacturer's requirements. Manufacturer shall approve the surface preparation and existing conditions before the contractor applies coating to ensure the product warranty will be honored.

B. Exterior Concrete at Parge Coat Repairs on Elementary School: materials and procedures are listed in order of process/application. Apply per manufacturers recommendations.

1. Surface Preparation:

a. SSPC-SP13 – Low pressure, warm water cleaning.

~~b.~~ Cleaner: Provide cleaners for removal of soot, dirt, and pollutants; which are compatible with all primers, intermediate coats, and finish coat. Thoroughly rinse all clean agents before applying primer or finish coats.

2. Approved manufacturer's systems:

a. Bases of Design: Sherwin Williams:

1) Primer: SW Loxon Primer – One (1) Primer coat. Application rate recommended by the manufacturer to achieve a total dry film thickness of 4.0-6.0 mils.

2) Finish Coats: SW Loxon Exterior Acrylic Coating – Two (2) coats. Application rate recommend by manufacturer to achieve a total dry film thickness of 6.0 - 7.5 mils per coat.

B. Exterior Concrete: materials and procedures are listed in order of process/application. Apply per manufacturers recommendations.

1. Surface Preparation:

a. SSPC-SP13 – Low pressure, warm water cleaning.

b. Cleaner: Provide cleaners for removal of soot, dirt, and pollutants; which are compatible with all primers, intermediate coats, and finish coat. Thoroughly rinse all clean agents before applying primer or finish coats.

2. Approved manufacturer's systems:

   a. Sherwin Williams:

      1) Conditioner: Loxon Conditioner

      2) Primer: Loxon Concrete & Masonry Primer – One (1) Primer coat. Application rate recommended by the manufacturer to achieve a total dry film thickness of 4.0-6.0 mils.

      3) Finish Coats: Conflex XL – Two (2) Finish coats. Application rate recommended by the manufacturer to achieve a total dry film thickness of 6.0-7.5 mils per coat.

   b. Tnemec:

      1) Conditioner: Apply one coat of conditioner per manufacturer's recommendations to previously coated surfaces to adhere minor existing chalk to the substrate before applying primer.

      2) Primer: Elastogrip FC 151 – One (1) Primer coat. Application rate recommended by the manufacturer to achieve a total dry film thickness of 4.0-6.0 mils.

      3) Finish Coats: Enviro-Crete 156 – Two (2) Finish coats. Application rate recommended by the manufacturer to achieve a total dry film thickness of 4.0-8.0 mils per coat.

   c. ICI Paints:

      1) Conditioner: Apply one coat of conditioner per manufacturer's recommendations to previously coated surfaces to adhere minor existing chalk to the substrate before applying primer.

      2) Primer: Dulux Professional Primer 2000 - One (1) Primer coat. Application rate recommended by the manufacturer to achieve a total dry film thickness of 4.0-6.0 mils.

      3) Finish Coats: Devflex 4206 – Two (2) Finish coats. Application rate recommended by the manufacturer to achieve a total dry film thickness of 2.0-3.0 mils per coat.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine surfaces intended to receive coatings and note conditions or defects that will adversely affect the execution and/or quality of the work.

B. Starting of cleaning and coating work will be construed as applicator's acceptance of surfaces and conditions within any particular area.

C. Notify Owner in writing of any such conditions or defects. Do not begin work until unsatisfactory conditions are corrected. Failure to notify Owner prior to beginning work constitutes acceptance by Contractor of the surfaces and conditions under which the work is to be performed, and acceptance by Contractor for the performance of the work.

3.2 PREPARATION

A. Protection

1. Provide adequate protection of all surrounding surfaces not intended to receive coating from damage due to preparation, cleaning or coating procedures. Repair damage at no cost to the Owner.

2. Program coating so that construction dirt, dust, and debris will not fall onto wet, newly coated surfaces.

3. When toxic or flammable solvents are used, the coating contractor shall take all necessary precautions as recommended by the manufacturer. In all cases, the handling and use of toxic or flammable solvents, including adequate ventilation and personal protective equipment, shall conform to the requirements of the applicable safety regulatory agencies.

4. Provide the necessary protection to contain all dust, dirt, debris and coating chips within work area. Do not allow to migrate into building interior spaces or storm drain system.

5. Provide "Wet Paint" signs as required to protect newly coated finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of coating operations.

B. Surface Preparation

1. Perform preparation and cleaning procedures in accordance with coating manufacturer's instructions and as herein specified, for each particular substrate condition.

2. Remove all surface contamination such as chalk, loose coating, mill scale dirt, foreign matter, rust, rust stains, mold, mildew, mortar, efflorescence, weld splatter and slag, and sealers from surfaces to be coated.

3. Remove hardware, hardware accessories, machined surfaces, plates, lighting fixtures, and similar items in place and not to be finish-coated, or provide surface-applied protection prior to surface preparation and coating operations. Remove, if necessary, for complete coating of items and adjacent surfaces. Following completion of coating of each space or area, reinstall removed items.

4. Prepare hair line cracks (1/64” or less) per manufacturer’s instructions. Reference the Details to repair cracks larger than 1/64”.

5. Do not field coat the following work:

   a. Sealant Joints

   b. Prefinished and natural finished items including but not limited to prefinished equipment, acoustic materials, finished mechanical and electrical equipment such as light fixtures and grilles.

   c. Non-ferrous metal surfaces including aluminum, stainless steel, chromium plate, copper, and tern coated stainless steel except where noted coated.

   d. Operating parts and labels.

C. MATERIALS PREPARATION

1. Mix and prepare coating materials in accordance with manufacturer's directions.

2. Stir materials before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using. Continuously agitate zinc-rich primers.

3. Store materials not in actual use in tightly covered containers. Maintain containers used in storage, mixing and application of coating in a clean condition, free of foreign materials and residue.

3.3 APPLICATION

A. General:

1. Apply coating in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

2. Apply additional coats when undercoats, stains, or other conditions show through final coat of coating, until coating film is of uniform finish, color, and appearance. Give special attention to insure that surfaces, including edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.

3. Generally, coating surfaces behind movable equipment same as similar exposed surfaces. Coating surfaces behind permanently-fixed equipment or furniture with prime coat only before final installation of equipment.

4. Do not coat over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions otherwise detrimental to formation of a durable coating film.

B. Scheduling Coating:

1. All caulking and sealants shall be in place and thoroughly cured prior to application of coatings.

2. Apply first-coat material to surfaces that have been cleaned, pretreated, or otherwise prepared for coating as soon as practicable after preparation and before subsequent surface deterioration.

3. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until coating has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and application of another coat of coating does not cause lifting or loss of adhesion of the undercoat.

4. Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate, to establish a total dry film thickness as indicated or, if not indicated, as recommended by coating manufacturer.

C. Application:

1. Apply prime coat of materials which is required to be coated or finished, and which has not been prime coated by others.

2. Recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other defects due to insufficient sealing.

3. Pigmented (Opaque) Finishes: Complete cover to provide an opaque, smooth surface of uniform finish, color, appearance and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections will not be acceptable.

4. Completed Work: Match approved samples for color, texture and coverage. Remove, refinish, or recoat work not in compliance with specified requirements.

3.4 CLEANING

A. During progress of work, remove from site discarded coating materials, rubbish, cans, and rags at end of each work day.

B. Upon completion of coating work, clean window glass and other coating-spattered surfaces. Remove spattered coating by proper methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

3.5 SCHEDULES

A. Coating colors shall be as indicated below:

1. Color to be selected by Owner.

END OF SECTION

Notice to Bidders

Separate, sealed proposals for the Winton Woods School District's 2016 Elementary School and High School Concrete Repairs project will be received at the Offices of **Winton Woods City School District, 1215 West Kemper Road, Cincinnati OH 45240** until **12:00 Noon – LOCAL TIME, Thursday, June 9, 2016** and will be publically opened and read immediately thereafter at the usual place of meeting, and a report thereof made to the board at their next meeting. **LATE PROPOSALS WILL NOT BE ACCEPTED.**

It is strongly encouraged that all bidders attend the pre-bid meeting which will be held at the main entrance to the Elementary School (1501 Kingsbury Dr, Cincinnati, OH 45240) on **Thursday May 26, 2016 at 10am**.

Copies of the proposal documents and specifications may be obtained on or after May 95, 2016 from:

www.wintonwoods.org > BIDDING OPPORTUNITIES > PUBLIC NOTICES **OR** Winton Woods City School District, Office of Business Affairs, 1215 West Kemper Road, Cincinnati, Ohio 45240, (513) 619-2400. PROPOSALS MAY BE HAND-DELIVERED OR MAILED to the above address.

Inquiries for information should be directed to to Josh Hollis (THP) via email at jhollis@thpltd.com.

Proposals shall be submitted on forms enclosed in the bidding specifications documents. NOTE: **Failure to follow bid procedures as outlines in the bid specification documents may result in rejection of bid.** All prices must be firm for ninety (60) days.

Bidders shall accompany their bids with a bid bond for the full amount of bid; **OR** a certified check, cashier's check, or letter of credit made payable to the Board of Education, Winton Woods City School District, in the amount of ten percent (10%) of the bid submitted.

Said Board of Education reserves the right to accept or reject any or all bids. The purchaser may waive defects in the form of the bid with no prejudice will result to the rights of any bidder or the public.

Board of Education – **Winton Woods City School District**

By: Steve Denny, Director of Business Affairs

The estimate for the base bid is $68,000

Advertisement in publication of general circulation: May 19, 2016

The second advertisement shall be posted on the Winton Woods City School web site shown above through time period until June 9, 2016.

Commented [JBH1]: This may change to early next week.

Commented [JBH2]: Mention when questions are due. Fix specs.

Commented [JBH3]: We are not doing this correct?

Commented [JBH4]: We are just putting it on your website for at least 2 weeks only, correct?