



ADDENDUM NO. 2

July 24th 2012

ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR

BIDS DUE – TUES. AUGUST 7th, 2012 until 2:00PM

This document consists of one (1) page plus the following documents:

- 1) Section 000100 – Table of Contents – **ADD. NO. 2**
- 2) Section 000150 – Invitation to Bid – **ADD. NO. 2**
- 3) Section 000412B – Statement of Bidder's Qualifications – **ADD. NO. 2**
- 4) Section 000930.1.01 – Scope of Work 1.01 – Site Preparation – **ADD. NO. 2**
- 5) Section 000930.2.01 – Scope of Work 2.01 -Demolition, Abatement - **ADD. NO. 2**
- 6) Section 000930.3.01 – Scope of Work 3.01 – Concrete – **ADD. NO. 2**
- 7) Section 000930.4.01 – Scope of Work 4.01 – Masonry – **ADD. NO. 2**
- 8) Section 000930.5.01 – Scope of Work 5.01 - Structural Steel - **ADD. NO. 2**
- 9) Section 000930.5.02 – Scope of Work 5.02 – Metal Fabrications – **ADD. NO. 2**
- 10) Section 000930.6.01 – Scope of Work 6.01 – General Trades – **ADD. NO. 2**
- 11) Section 000930.6.02 – Scope of Work 6.02 – Architectural Millwork – **ADD. NO. 2**
- 12) Section 000930.7.01 - Scope of Work 7.01 - Roofing - **ADD. NO. 2**
- 13) Section 000930.8.01 – Scope of Work 8.01 - Windows, Glazing & Storefronts – **ADD. NO. 2**
- 14) Section 000930.9.01 - Scope of Work 9.01 - Ceramic & Terrazzo Tile - **ADD. NO. 2**
- 15) Section 000930.9.02 - Scope of Work 9.02 - Resilnt, Carpet, Fluid App. and Wood - **ADD. NO. 2**
- 16) Section 000930.9.03 - Scope of Work 9.03 - Acoustical and Wood Susp. Ceilings - **ADD. NO. 2**
- 17) Section 000930.11.01 – Scope of Work 11.01 – Food Service Equipment – **ADD. NO. 2**
- 18) Section 000930.21.01 – Scope of Work 21.01 – Fire Suppression – **ADD. NO. 2**
- 19) Section 000930.23.01 – Scope of Work 23.01 - Plumbing & HVAC – **ADD. NO. 2**
- 20) Section 000930.26.01 – Scope of Work 26.01 – Electrical – **ADD. NO. 2**
- 21) Section 000930.31.01 – Scope of Work 31.01 – Sitework – **ADD. NO. 2**
- 22) Section 000930.31.04 – Scope of Work 31.04 – Athletic Fields – **ADD. NO. 2**
- 23) Section 000940 – Supplemental Scope of Work – **ADD. NO. 2**
- 24) Section 000971 – Pre-Bid Conference Sign-In 7-12-12 – **ADD. NO. 2**
- 25) Section 000972 – Pre Bid Conference Sign-In 7-13-12 – **ADD. NO. 2**
- 26) Section 000981 – Fusco Responses to Pre-Bid Requests for Information (RFIs) – **ADD. NO. 2**
- 27) **Section 000992 – Antinozzi Associates – Addendum #2 – ADD. NO. 2**

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INTRODUCTORY INFORMATION

Document 000000	Project Manual Cover
Document 000100	Table of Contents – ADD. NO. 2

PROCUREMENT REQUIREMENTS

Document 000150	Invitation to Bid – ADD. NO. 2
Document 000160	AIA Document A701 - Instructions to Bidders
Document 000200	Bidder Request for Information Form
Document 000310	Bid Security Form AIA Document A310 - “Bid Bond”
Document 000315	Form of Surety Guaranty
Document 000320	Non-Collusion Affidavit of Prime Bidder
Document 000330	<i>Intentionally omitted</i> – ADD. NO. 2
Document 000340	<i>Intentionally omitted</i> – ADD. NO. 2
Document 000345	Equal Employment Opportunity Agreement
Document 000350-1	AA/EEO Requirements Summary
Document 000350-2	Contractor Minority Business Enterprises
Document 000350-3	Notification to Bidders – CHRO
Document 000360	Certification of Bidder Regarding Equal Employment Opportunity
Document 000370	Certificate as to Corporate Principal
Document 000412A	DAS Update (Bid) Statement
Document 000412B	Statement of Bidders Qualifications – ADD. NO. 2
Document 000845	Wage Rate Requirements CT Department of Labor Prevailing Wage Rates – ADD. NO. 1
Document 000847	Wage Certification Form

CONTRACTING REQUIREMENTS

Document 000900	Subcontract Agreement Form Exhibit A Subcontract Documents – ADD. NO. 2 Exhibit B Scope of Work Exhibit C Final Lien Waiver and Release Exhibit D Partial Lien Waiver and Release Exhibit E Construction Schedule Exhibit F Rider A – Special Conditions – ADD. NO. 2 Exhibit G Insurance Requirements
Document 000910	General Conditions of the Contract
Document 000911	Administrative and Statutory Requirements
Document 000912	Connecticut State Elections Enforcement Commission
Document 000913	Department of Revenue Services – Tax Exempt Certificate

Document 000920	Performance and Payment Bond Form AIA Document A312 2010 – “Performance Bond and Payment Bond”
Document 000925	Project Schedule
Document 000926	Phasing Plan
Document 000930	Exhibit B Scopes of Work:
Bid Package #1.01*	Site Preparation – ADD. NO. 2
Bid Package #1.02*	Temporary Construction Fence
Bid Package #1.03	Moving & Storage
Bid Package #1.04*	Final Cleaning
Bid Package #1.05*	Watchman Services
Bid Package #2.01	Demolition & Abatement – ADD. NO. 2
Bid Package #3.01*	Concrete – ADD. NO. 2
Bid Package #4.01	Masonry & Precast – ADD. NO. 2
Bid Package #5.01	Structural Steel – ADD. NO. 2
Bid Package #5.02*	Metal Fabrications – ADD. NO. 2
Bid Package #6.01	General Trades – ADD. NO. 2
Bid Package #6.02	Architectural Millwork – ADD. NO. 2
Bid Package #7.01	Roofing and Moisture Protection – ADD. NO. 2
Bid Package #8.01*	Windows, Glazing and Storefronts – ADD. NO. 2 <i>Intentionally omitted - ADD. NO. 2</i>
Bid Package #8.03*	Doors, Frames & Hardware (Furnish Only)
Bid Package #9.01*	Ceramic & Terrazzo Tile – ADD. NO. 2
Bid Package #9.02*	Resilient, Carpet & Wood Flooring – ADD. NO. 2
Bid Package #9.03*	Acoustical & Wood Ceilings – ADD. NO. 2
Bid Package #9.04*	Painting & Fireproofing
Bid Package #10.01*	Signage
Bid Package #10.02*	Toilet Compartments
Bid Package #10.03	Operable Panel Partitions
Bid Package #11.01	Food Service Equipment – ADD. NO. 2
Bid Package #21.01	Fire Suppression – ADD. NO. 2
Bid Package #23.01	Plumbing & HVAC – ADD. NO. 2
Bid Package #26.01	Electrical, Communication, Safety & Security Systems – ADD. NO. 2
Bid Package #31.01	Site Work – ADD. NO. 2
Bid Package #31.02*	Fences & Gates
Bid Package #31.03*	Landscaping
Bid Package #31.04*	Athletic Fields – ADD. NO. 2
Document 000940	Supplemental Scope of Work – ADD. NO. 2
Document 000950	Bid Forms A, B, C, D, E, F - ADD. NO. 2
Document 000952	Bid Forms – BP#1.05 – Watchman Security Guard Services
Document 000971	Pre-Bid Conference Sign-In 7-12-12 - ADD. NO. 2

**ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR
ADDENDUM NO. 2**

Document 000972	Pre-Bid Conference Sign-In 7-13-12 – ADD. NO. 2
Document 000980	Fusco Responses to Pre-Bid Requests for Information – ADD. NO. 1
Document 000981	Fusco Responses to Pre-Bid Requests for Information – ADD. NO. 2
Document 000991	Antinozzi Associates Addendum #1 Dated 7-10-12 – ADD. NO. 1
Document 000992	Antinozzi Associates Addendum #2 Dated 7-24-12 – ADD. NO. 2

TO BE INCLUDED WITH BID**SECTION 00412B
STATEMENT OF BIDDER'S QUALIFICATIONS**

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

Date: _____ Year Present Business Started _____

Company Name: _____

Street Address: _____ Phone:(_____) _____

Mailing Address: _____ Facsimile:(_____) _____ - _____

City: _____ State: _____ Zip: _____

Contact: _____ Contact: _____

Federal ID #: _____ Dun & Bradstreet Rating: _____

Trade Work: _____

Annual construction for the last four years:

2011 \$ _____ 2009 \$ _____

2010 \$ _____ 2008 \$ _____

Bank Name: _____ Branch: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact: _____ Phone: (_____) _____ - _____

Financial Statement:

Current Assets: \$ _____ Current Liabilities: \$ _____

Fixed Assets: \$ _____ Long Term Liabilities: \$ _____

Other Assets: \$ _____ Total Liabilities: \$ _____

Total Assets: \$ _____ Net Worth: \$ _____

Note: More detailed financial information may be requested prior to award of a Contract.

Bonding Company: _____

Agent: _____ Phone:(_____) _____ - _____

Bonding Capacity: _____ per job _____ aggregate

Value of work presently bonded: _____

Insurance Company: _____

Agent: _____ Phone:(_____) _____ - _____

List the firm's insurance "Experience Modification Rate" (EMR) for the three most recent years.

2011 _____

2010 _____

2009 _____

Union Affiliations

None: _____

Local: _____ Union #'s: _____

National: _____ Union #'s: _____

Is Firm Certified as:

() MBE () WBE () African American

Cities and States certified in:

Has Company ever failed to complete a Contract? () Yes () No

Has Company ever filed for Bankruptcy? () Yes () No

Does Company have any judgments, claims, arbitration, proceedings or suits pending or outstanding?

If yes, please explain: _____

Number of employees:

Office: _____ Supervisory: _____ Field: _____ Total Employees: _____

Value of Work Presently Under Contract % Work Performed by Own Forces Shop Fabrication Footage

License Nos. and State Issued in:

Present or Previous Connecticut Department of Construction Services Projects:

Project Name: _____ Contract Amount: _____

Project Name: _____ Contract Amount: _____

Project Name: _____ Contract Amount: _____

Current Projects Under Contract:

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____ % Complete: _____

Bonded: _____

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____ % Complete: _____

Bonded: _____

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____ % Complete: _____

Bonded: _____

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____ % Complete: _____

Bonded: _____

Relevant Contracts Recently Completed (Last Four Years)

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____

Project Name: _____ Project Type: _____

GC/CM: _____ Owner: _____

Location: _____ Contract Value: _____

If more space is needed, please attach separate sheets.

Client References (Provide 2 Project Owners)

Client: _____

Contact: _____ Phone:(_____) _____ - _____

Client: _____

Contact: _____ Phone:(_____) _____ - _____

Supplier References (Provide 2 Major Suppliers)

Supplier: _____ City: _____

Contact: _____ Phone:(_____) _____ - _____

Supplier: _____ City: _____

Contact: _____ Phone:(_____) _____ - _____

Trade References (Provide 3 general contractors or sub-contractors)

Company: _____ City: _____

Contact: _____ Phone:(_____) _____ - _____

Company: _____ City: _____

Contact: _____ Phone:(_____) _____ - _____

Company: _____ City: _____

Contact: _____ Phone:(_____) _____ - _____

If a Corporation please list:

State of Incorporation: _____ President's Name _____

Vice President's Names: _____

Secretary's Name: _____ Treasurer's Name: _____

If a sole proprietorship or partnership, please list the names of all parties:

The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the City of Bridgeport in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated: this _____ day of _____, 20__.

(Name of Bidder)

By: _____

Title: _____

STATE OF CONNECTICUT, COUNTY OF _____

ss:

_____ being duly sworn, deposes and says
that he is _____ of _____
(Name of Organization)

and that the answers to the foregoing questions are and all statements therein contained are true and correct.

Subscribed and sworn to before me this

_____ day of _____, 20__.

Notary Public

My Commission Expires:

END OF SECTION 00412B

#2630 -

SUBCONTRACT AGREEMENT

This Subcontract Agreement (“Subcontract”) dated as of _____ between

The Fusco Corporation
555 Long Wharf Drive
New Haven, Connecticut 06511
(hereinafter called the “General Contractor”)

and

(hereinafter called the “Subcontractor”)

WITNESSETH:

1. Scope of Work

(a) The General Contractor has entered into a contract (“Principal Contract”) with **State of Connecticut** (“Owner”) for the construction of **Eli Whitney Connecticut Technical High School, Hamden, Connecticut Project No. BI-RT-837-CMR** (“Project”) according to the Principal Contract Documents which include, without limitation, the Principal Contract, and all general, supplementary and special conditions thereto, the plans and specifications prepared by **Antinozzi Associates** (“Architect”) and its consultants, any addenda, notices, instruction forms or modifications thereto, and any other provisions or documents forming or by reference made a part of the Principal Contract. Subcontractor agrees to furnish, and be responsible for the provision of, all supervision, labor, materials, supplies, equipment, hoisting, scaffolding, tools, appliances, etc., necessary to complete a portion of the Project as described herein. All work is to be performed in strict compliance with the Subcontract Documents, which include the Principal Contract Documents, this Subcontract and the other documents listed on **Exhibit A**. The Principal Contract is specifically incorporated herein and made a part hereof by reference. In case of a conflict between this Subcontract and the Principal Contract as incorporated herein, the terms of this Subcontract shall control.

(b) Subcontractor’s work is as set forth in **Exhibit B** and includes, without limitation, the installation of any temporary facilities in its scope of work required in the construction of the Project and the furnishing of all required information for shop drawings, as-built drawings, samples, tests, third-party inspections, installation, supervision by factory-trained experts, offsite inspections, etc., and other requirements of the Owner concerning quality control within the Subcontractor’s scope of work (“Work”).

(c) In the performance of this Subcontract, the Subcontractor shall be bound to the General Contractor in the same manner, to the same extent, and with the same force and effect that the General Contractor is bound to the Owner by all the terms, provisions, general conditions, and special conditions of the Principal Contract Documents, except as may be expressly modified by this Subcontract. Subcontractor has carefully examined, or has been afforded the opportunity to do so, and fully understands all the Subcontract Documents, including the Principal Contract Documents as incorporated therein and confirms that they are sufficiently complete and detailed for the Subcontractor to perform the Work intended thereby whether shown, described, or reasonably inferred as necessary for the completion of the Work.

(d) Subcontractor acknowledges that the drawings and specifications may not be fully developed and the Subcontractor agrees to perform all Work which may not be specifically mentioned in these Subcontract Documents, but which is required to make the Work complete, functional, and operational as determined by the General Contractor and Owner.

(e) Subcontractor represents that it has examined the Subcontract Documents and is familiar with them and has or will, immediately upon discovery, call to the attention of the General Contractor any errors or omissions contained therein and discovered by Subcontractor. Subcontractor agrees that it is responsible for coordination of the Work with the adjacent and prior work and the fitting of the Work to such work. Subcontractor agrees to furnish and install all materials per requirements of applicable Federal, State and local codes.

(f) Subcontractor represents that it is fully qualified to perform this Subcontract, and acknowledges that, prior to the execution of this Subcontract, it has (a) by its own independent investigation ascertained (i) the Work required by this Subcontract, (ii) the conditions involved in performing the Work, and (iii) the obligations of this Subcontract and the Principal Contract Documents incorporated herein; and (b) verified all information furnished by General Contractor or others satisfying itself as to the correctness and accuracy of that information. Any failure by Subcontractor to independently investigate and become fully informed will neither relieve Subcontractor from its responsibilities hereunder nor be the basis of any claim. The Subcontractor shall have no claims in connection with any concealed or unconcealed condition which does not differ materially from those conditions discovered, or which reasonably should have been discovered by Subcontractor's prior inspections, tests and reviews which Subcontractor performed or which Subcontractor had the opportunity to perform in connection with the Project.

(g) Subcontractor warrants its Work to General Contractor on the same terms, and for the same period, as General Contractor warrants the Work to Owner under the Principal Contract Documents. In addition, Subcontractor warrants that all materials, equipment and workmanship shall be sufficient for the purpose intended, merchantable, of good quality, and free from defects.

(h) Subcontractor shall obtain and pay for all permits, licenses, and certificates of inspection necessary for the prosecution and completion of the Work. Subcontractor shall be duly licensed to operate under the law of the applicable jurisdiction.

2. Payment -

(a) General Contractor agrees to pay Subcontractor, subject to additions and deductions by written change order, the total sum of

for the Work covered by this Subcontract (“Subcontract Price”).

(b) Prior to the start of the Work, Subcontractor shall submit, for the General Contractor’s approval, a breakdown of the Subcontract Price on General Contractor’s standard schedule of values which shall include a separate value for labor and material for each part of the Work. In addition, and as a condition precedent to any payment hereunder, the Subcontractor shall, at the time it submits its first application for payment, furnish to the General Contractor, a certified list of all sub-subcontractors, suppliers and/or materialmen that the Subcontractor intends on using to perform all its obligations hereunder. As necessary, the Subcontractor shall update said list as additional sub-subcontractors, suppliers and/or materialmen are utilized.

(c) Progress payments will be made on a monthly basis following General Contractor’s receipt of payment by Owner on Subcontractor’s applications for payment submitted not later than the 25th of the month. Failure to comply will delay Subcontractor’s payment until the following billing date. Within thirty (30) days of General Contractor’s receipt of payment by the Owner in which payment allowance has been made by the Owner for Work performed and/or materials delivered by the Subcontractor, the General Contractor will pay to the Subcontractor **Ninety Two and a Half Percent (92.5%)** of the value of said Work and/or materials as accepted by the General Contractor and Owner, but this payment shall in no event exceed the payment that the General Contractor actually receives from the Owner for said Subcontract Work.

(d) Commencing with the second application for payments, partial lien waivers and releases in the form as attached as **Exhibit D** as executed by Subcontractor and its sub-subcontractors and suppliers covering all labor and materials furnished through the immediately preceding pay period, shall be submitted by Subcontractor with each application for progress payment. In addition to the requirements for payment in the Principal Contract Documents, as requested by the General Contractor, the Subcontractor may be required to furnish with any payment application an affidavit stating that all obligations directly or indirectly related to any payment have been paid. The Subcontractor shall also furnish to the General Contractor, if so requested, all information concerning materials, supplies and equipment to be purchased in connection with the Work to be performed under the Subcontract, including copies of all purchase orders, bills of lading, shipping documents, receipts, sub-subcontracts of the Subcontractor or any payroll or payroll-related information of the Subcontractor with respect to the Work covered by this Subcontract.

(e) All material and Work covered by partial payments shall become property of the General Contractor or, if the Principal Contract Documents so provide, the property of Owner immediately upon payment; provided that nothing shall relieve Subcontractor from the sole responsibility and liability for all Work upon which payments have been made until final acceptance thereof by General Contractor and Owner. No partial payment made under this Subcontract shall be considered an acceptance of the Work in whole or in part.

(f) Final payment, including retainage, will be made ten (10) days after receipt of final payment by General Contractor from the Owner provided that Subcontractor has furnished General Contractor with (i) an executed Final Release and Waiver of Lien, in a form as set forth on **Exhibit C** and acceptable to General Contractor and Owner from Subcontractor, and all persons or entities furnishing labor and/or materials in the performance of the Subcontract, (ii) any warranties required by the Subcontract Documents furnished by a manufacturer and any warranties or guarantees, instruction manuals and spare parts, information for as-built drawings and technical information required by the Owner in the above referenced documents in form satisfactory to the Owner, (iii) other documents or instruments as General Contractor may reasonably require or which are required by the Subcontract Documents, and (iv) Subcontractor has otherwise completed his Work in a manner satisfactory to the General Contractor, Architect and Owner. Acceptance of final payment by the Subcontractor shall be a complete waiver of any and all claims of any nature against the General Contractor and its surety, if any, the Owner, and the Architect.

(g) Subcontractor expressly agrees that payment by the Owner to the General Contractor for any Work performed by the Subcontractor is an express condition precedent to any payment by the General Contractor to the Subcontractor and that the General Contractor is under no obligation to make any payment to Subcontractor until and unless the General Contractor has been paid by the Owner for the Work in question. Payment by Owner is also an express condition precedent to the liability of any surety on any payment bond furnished on behalf of General Contractor as principal. Subcontractor agrees to share the risk with General Contractor of non-payment by Owner for whatever reason. At its sole and absolute discretion, General Contractor may assign its payment rights against Owner to Subcontractor to prosecute at Subcontractor's sole expense.

(h) At any point up until five (5) years after final payment is made hereunder, the General Contractor, at its sole discretion, is hereby authorized to audit the Subcontractor's books and records with regard to all costs incurred by the Subcontractor in performing Work covered by this Subcontract. Subcontractor shall cooperate with General Contractor in arranging for such an audit. The Subcontractor shall maintain, at its own expense, all such books and records relating to the Project for a period of five (5) years after final payment.

(i) The General Contractor at its discretion may make payment by joint check, or otherwise, directly to any sub-subcontractor, materialmen, supplier or person or firm furnishing labor, equipment or materials to the Subcontractor with respect to the Work covered by the Subcontract and any such payments shall be applied against the aggregate sum payable to the Subcontractor hereunder, and, at the option of the General Contractor, may be deducted from the next sums payable to the Subcontractor.

(j) General Contractor may withhold from any payment to the Subcontractor, including final payment, such amount as General Contractor, in its sole discretion, deems reasonably necessary to protect itself against any action or potential liability or damage directly or indirectly relating to the Subcontract arising from, or alleged to arise from, any act or omission of Subcontractor, its sub-subcontractors, suppliers, or employees or anyone else for whom the Subcontractor is legally liable, regardless of whether or not the Owner has actually withheld payment from the General Contractor.

(k) The General Contractor shall be entitled to set off any monies due and owing to by General Contractor to Subcontractor under this Subcontract by any other sum alleged to be owed by Subcontractor to General Contractor by reason of any backcharge or payment to any third party under any other contract or agreement with General Contractor, or on account of any reason whatsoever.

(l) Subcontractor shall ensure that all sub-subcontractors, employees and suppliers, at all times, are paid all amounts due in connection with the performance of the Subcontract. The Subcontractor shall pay any amounts to its sub-subcontractors, whether for labor performed or materials furnished, within seven (7) days after the Subcontractor receives payment from the General Contractor, which encompasses labor or material furnished by such sub-subcontractor. Subcontractor shall not submit an application to General Contractor for any monies, on account of its sub-subcontractors, employees or suppliers, including retainages that Subcontractor does not immediately intend to pass on to its sub-subcontractors, employees and suppliers. Subcontractor shall not use any payment received by Subcontractor from General Contractor for any purpose other than to satisfy indebtedness incurred in the performance of this Subcontract; such payments from General Contractor being deemed to be trust funds solely for the payment of such sub-subcontractors, suppliers and vendors. General Contractor shall have the right, at any time, to contact the Subcontractor's sub-subcontractors and suppliers for the purpose of verifying that Subcontractor's payment obligations are being met. In the event General Contractor has reason to believe that Subcontractor is not fulfilling its payment obligations, General Contractor may take any steps necessary to ensure that progress payments are utilized to pay such obligations, including, but not limited to, the right to withhold out of subsequent progress payments, a reasonable amount to protect the General Contractor from any and all claims, loss or damages, including attorneys' fees, arising out of any claim or lien until Subcontractor submits evidence satisfactory to Contractor that all previous amount owed in connection with the performance of this Subcontract or any other contractual arrangements between the parties have been paid. All materials for which a requisition has been approved shall not be removed from the Project site without General Contractor's written permission.

3. Schedule; Time; Coordination; Remedial Plans -

(a) Subcontractor will proceed with the Work in a prompt and diligent manner in accordance with the Project Schedule attached hereto as **Exhibit E**, as amended from time to time by General Contractor. TIME IS OF THE ESSENCE OF THIS SUBCONTRACT. Subcontractor shall be entitled to additional compensation for compliance with schedule adjustments only to the extent, if any, that General Contractor receives reimbursement from the Owner.

(b) Subcontractor will furnish a detailed construction schedule of the Work, including Submittals, etc., for General Contractor's review and approval which will comply with all scheduling requirements of paragraph 3(a) and the Principal Contract Documents. Subcontractor is to coordinate all Work on the jobsite with General Contractor's Project Superintendent and Project Manager, follow any instructions they may give concerning scheduling of Work and report to them, upon request, the status of Subcontractor's equipment or materials to be furnished to the Project. Subcontractor is to coordinate its Work with the work of the General Contractor, other subcontractors, and others on the Project so as to expedite the Work without causing any delays to other trades or the Project. All Submittals shall be submitted to General Contractor in compliance with the Principal Contract as amended.

(c) Subcontractor is to assume and pay for liquidated damages, assessed by the Owner against the General Contractor and/or additional expenses incurred by the Owner or General Contractor because of delays caused by this Subcontractor. Such amounts are deductible from any amounts due to Subcontractor pursuant to the terms of this Subcontract.

(d) Subcontractor shall at all times supply necessary materials and equipment and a sufficient number of skilled workers to perform the Work with diligence and in strict accordance with General Contractor's scheduling requirements. In the event that General Contractor determines that the Subcontractor has fallen behind the schedule at any time, upon written notice, Subcontractor shall promptly submit a remedial plan of action in a form which is satisfactory to General Contractor. When a satisfactory remedial plan is not proposed and promptly implemented in the opinion of the General Contractor, then the General Contractor, at its sole discretion, may either (i) require the Subcontractor to expedite material and equipment deliveries and/or increase its work force, construction plant and equipment, the number of hours of work, number of shifts or any combination of the aforementioned, without any additional cost to the General Contractor or (ii) supplement the Subcontractor's forces with additional workers and/or purchase necessary materials and equipment from suppliers of its choice and deduct the cost of same from payments due Subcontractor. The exercise of either of the General Contractor's aforementioned options shall be in addition to any and all rights or remedies of the General Contractor set forth in this Agreement.

(e) Notwithstanding anything to the contrary in the Principal Contract Documents, if the Subcontractor is delayed or disrupted in the commencement, prosecution, or completion of the Work, without fault on its part or on the part of any entity for which it is responsible, as a direct result of any breach, negligence, or wrongful act of the Owner, General Contractor, or Architect, or by changes ordered in the Work, or by other causes which were unforeseeable, unanticipated and beyond the control of the Subcontractor, then, to the extent the Subcontractor demonstrates actual impact to the critical path of its scheduled Work, and expressly conditioned upon an extension of time being given to the General Contractor by the Owner under the terms of the Principal Contract Documents, the Subcontractor shall be entitled to an equitable extension of the Project Schedule. In addition, Subcontractor's entitlement to such equitable extension is expressly contingent upon written notice given by the Subcontractor to the General Contractor within five (5) days of when the Subcontractor is aware, or should have become aware, of the occurrence or facts giving rise to such delay or disruption. Within thirty (30) days of receipt of a written request by General Contractor, Subcontractor shall fully substantiate the impact of any delay or disruption, including furnishing an impact study which details specific activities allegedly affected by such delay or disruption. In no event will any time extension be given on account of delay or disruption which could have been anticipated by the Subcontractor or, in circumstances where the performance of the Work is, was, or would have been delayed, by any other cause for which the Subcontractor is not entitled to an extension. The Subcontractor's entitlement to an equitable extension of time as provided herein shall be the sole and exclusive remedy in the event of any delays, interferences, suspensions, reschedulings, changes in sequence, disruptions, or the like ("Delays") arising from or out of any act or omission of the Owner, General Contractor, or the Architect, or caused or claimed to be caused by any other reason whatsoever, whether foreseeable or unforeseeable or contemplated or unanticipated. In no event will the General Contractor be obligated or liable to Subcontractor, and the Subcontractor expressly waives any claim against General Contractor, for or on account of any damages, costs, expenses of any nature which the Subcontractor or any of its sub-subcontractors or any other person may incur as a result of any Delays, it being understood and agreed that the Subcontractor's sole remedy in such an event shall be an extension of the Project Schedule in strict accordance with the provisions of the Subcontract Documents and all at no additional cost to or compensation from the General Contractor or Owner. Furthermore, the exercise by the Owner or the General Contractor of any of its rights or remedies under the Principal Contract Documents or Subcontract Documents, respectively, including, without limitation, ordering changes in the Work, directing suspensions, rescheduling, or correcting Work, regardless of the extent or frequency of the exercise of such rights or remedies, shall not be construed as active interference with the Subcontractor's performance of the Work.

(f) If the General Contractor shall desire the Work hereunder to be performed with greater speed than is herein contracted for, the Subcontractor shall, without affecting or abridging the rights of the General Contractor set forth in any Article hereof, upon receipt of a written order from the General Contractor, employ overtime work as so directed. The actual premium cost of such overtime work as shown on the time slips checked and approved each day by the General Contractor shall be paid by the General Contractor to the Subcontractor, but no overhead, supervision costs, commission, etc. or other costs shall be charged thereon. Jobsite supervision is included.

4. Labor; Insurance -

(a) To the extent that General Contractor is a signatory to any union collective bargaining agreement(s), Subcontractor shall perform its work on this Project in strict accordance with all union rules and regulations affecting the Subcontractor's work, including, if applicable, the utilization of union labor.

(b) Should a jurisdictional dispute involve one or more of the trades, Subcontractor will avoid a work-stoppage in any form by withdrawing its workmen and resume as directed by General Contractor without delay.

(c) The Subcontractor shall comply with the insurance requirements set forth on **Exhibit G**.

5. Taxes -

(a) Subcontractor shall pay any taxes or contributions of any nature assessed or levied against Owner, General Contractor or Subcontractor by the federal government, any state or political subdivision thereof, relating to labor performed or materials or equipment furnished by Subcontractor, including any interest or penalties. Subcontractor shall defend, indemnify and hold harmless General Contractor for failure to make payment of any such taxes or contributions, which indemnity shall survive the completion or termination of this Subcontract. If this Project is subject to Connecticut Sales and Use Tax, then Subcontractor shall show any applicable Sales and/or Use Tax(es) separately on all invoices submitted for payment.

(b) If the Subcontractor is not a resident of the State of Connecticut, the law offers two procedural options:

1. You may furnish the Connecticut Department of Revenue Services (DRS) a guarantee bond for 5% of the total contract. You have 120 days from the commencement of the contract to file Form AU-766 with DRS and obtain the bond. You will then be issued a Certificate of Compliance from DRS and you must forward a copy to us.

2. If we do not receive a copy of your Certificate of Compliance prior to the issuance of any payment to you under the contract, we shall be required to withhold 5% of the contract price and to remit the amount as a deposit to DRS.

On completion of the job you must request DRS to determine if it has been over/underpaid. Under either option, you must complete and submit to DRS a Form REG-1 (Business Taxes Registration Application) and be issued a Connecticut Tax Registration Number.

You can obtain more detailed information concerning these rules in DRS Special Notice 2003 (20).

6. Changes, Claims -

(a) General Contractor may, at any time, unilaterally or by agreement with Subcontractor, and without notice to sureties, make changes including additions and deletions in the Work. Subcontractor shall immediately proceed with performance of any changed Work without delay.

(b) Subcontractor shall submit in writing to General Contractor, along with substantiating evidence deemed satisfactory by General Contractor, any claims for adjustment in the Subcontract Price, schedule or other provisions of the Subcontract claimed by Subcontractor for changes directed by Owner, or for damages for which the Owner is liable, or as a result of deficiencies or discrepancies in the Principal Contract Documents, at least five (5) business days prior to the time specified in the Principal Contract Documents, otherwise such claims are waived. Subcontractor assumes, with respect to his Work, all of the responsibility of General Contractor to the Owner under the sections of the Principal Contract concerning such changes, claims and extensions of time. General Contractor agrees to forward to the Owner any notice from Subcontractor of any change or claim and to process any change orders, claims and requests for extensions of time according to the provisions of the Principal Contract Documents so as to protect the interests of Subcontractor and others, including the General Contractor. In no event shall the General Contractor be required to pay Subcontractor for a claimed change or for a change order more than General Contractor actually receives from Owner on account of Subcontractor's Work. It is expressly acknowledged that receipt of payment by General Contractor from Owner on account of any such Subcontractor changes or claims is an express condition precedent to any obligation of General Contractor or its surety, if any, to pay Subcontractor for any such changes or claims.

(c) For changes ordered by General Contractor independent of Owner or the Principal Contract Documents, Subcontractor shall be entitled to an equitable adjustment of the Subcontract Price or Project Schedule, or both to the extent that impact can be substantiated to the General Contractor's satisfaction.

(d) Subcontractor shall provide any certification required by the Principal Contract Documents or applicable law for change orders, claims and pricing data. Subcontractor shall indemnify, defend and hold harmless General Contractor from any cost, expense, fine or liability resulting from a claim or claim certification deemed wrongful in whole or in part.

(e) Field slips signed by General Contractor's employees acknowledge only the verification of labor and materials indicated thereon and do not constitute or imply acceptance or approval of payment by General Contractor or by Owner which is to be obtained by the separate Change Order procedure referred to above.

(f) Overhead and Profit ("OH&P") shall **be in accordance with the Owner's General Conditions Article 13** for Subcontractor, all sub-subcontractors and suppliers on any Subcontractor change or claim. Subcontractor's labor rate for time and material work performed, including OH&P, shall be in accordance with Exhibit B.

7. Remedies of General Contractor -

(a) On default by the Subcontractor or on occurrence of circumstances that reasonably lead the General Contractor to anticipate the Subcontractor's inability to perform the Subcontractor's Work properly or on schedule or comply with any of the provisions of this Subcontract or meet the financial obligations that the Subcontractor will occur in the course of performance of this Subcontract in a timely manner, the General Contractor may, after seven (7) day written notice, and without prejudice to any other remedies it may have, (i) take such steps as are necessary to overcome the condition, in which case the Subcontractor shall be liable to the General Contractor for the costs thereof; (ii) terminate this Subcontract in the manner prescribed herein, and any loss resulting therefrom shall be borne by the Subcontractor; or (iii) pursue any other remedy allowed at law or equity.

(b) Without limitation to other possible grounds, the following events shall, at the option of the General Contractor, be deemed to be sufficient cause for determining the Subcontractor to be in default: filing of a petition under any of the provisions of the Federal Bankruptcy Code with respect to the Subcontractor; the commission of any act of bankruptcy as that term is used in connection with the Federal Bankruptcy Code by the Subcontractor; the appointment of a Receiver under the laws of any state with respect to the Subcontractor; the failure to discharge any lien as provided in paragraph 10 of the Subcontract; the garnishment of funds due or coming due from the General Contractor to the Subcontractor or the attachment of any property of the Subcontractor for the recovery of such property by a person holding title under a Title Retention Security Agreement used in connection with the Work to be done under this Subcontract which are not removed in seven (7) days if an attachment or in fifteen (15) days if a garnishment; imposition of a Federal or State Tax Lien; failure to provide sufficiently trained workmen or materials of the proper quality; failure to commence or carry forward Subcontractor's Work in accordance with the Project Schedule.

(c) In the event of a termination of this Subcontract for default, the General Contractor, at its option, may (i) enter on the premises and take possession of all materials and equipment of Subcontractor for the purpose of completing the Work; (ii) assume, and the Subcontractor hereby agrees to assign, any sub-subcontract or purchase orders made by the Subcontractor relating to this Project; or (iii) complete the Work by itself or through others by whatever method the General Contractor deems expedient. After a default termination, no monies shall be due and owing to Subcontractor until (i) the scope of the Work has been completed and Subcontractor has paid General Contractor for all costs that the General Contractor incurred in completing the Work (including an overhead fee of 10%) and (ii) a determination made as to the extent of damages suffered by General Contractor as a result thereof and Subcontractor has paid General Contractor any and all such damages incurred by the General Contractor.

(d) Any default termination that is subsequently deemed to be wrongful will be converted into a termination for convenience.

8. Termination for Convenience

Notwithstanding any provision herein to the contrary, this Subcontract may be terminated, in whole or in part, by the General Contractor, for its convenience and at its sole discretion, and regardless of whether the Owner has terminated the Principal Contract, upon giving at least seven (7) days written notice to the Subcontractor. In the event of such termination, the General Contractor shall pay to the Subcontractor any sums properly requisitioned and due and owing at that time (including retainage) plus the value of the Work (in accordance with the approved schedule of values) performed by the Subcontractor since the last requisition, after payment therefore by the Owner to the General Contractor, less any backcharges the General Contractor has against that Subcontractor. Such payment shall be the Subcontractor's exclusive remedy and in no event will the Subcontractor be entitled to lost profits or any other damages.

9. Subcontractor's Liability; Bonds -

(a) To the maximum extent permitted by law, the Subcontractor shall indemnify, defend and hold harmless the General Contractor, Owner, Architect, and their respective agents, consultants and employees ("Indemnitees"), from and against any and all claims, losses, costs, damages, expenses (including but not limited to defense costs and attorneys' fees, whether incurred in court, out of court, or on appeal or as part of any regulatory, administrative or bankruptcy proceeding), fines, penalties and causes of action, whether for personal or bodily injury, property damage, death, disease, damage to business, or otherwise, and any and all liabilities of any nature whatsoever, direct or consequential (collectively "Claims"), brought by or on behalf of any person or entity including, without limitation, any persons or entities affiliated with or employed by the Subcontractor relating to, arising out of, or claimed to relate to or arise out of, or occurring in connection with performance of the Subcontract or the Work; except this indemnification obligation expressly excludes Claims for bodily injury or property damage resulting from the negligence of the Indemnitees or

their agents or employees. Such indemnity shall not be in derogation or limitation of any other obligation or liability of the Subcontractor or rights of the General Contractor under

other provisions of the Subcontract Documents. The Subcontractor's indemnity obligation shall not be limited in any way by the amount or types of damages, compensation or benefits payable by or for the Subcontractor under any Worker's Compensation Act, Disability Benefit Acts, or Employee Benefit Acts. This obligation shall survive the completion of the Work or termination of the Subcontract. Independent of this indemnity obligation, the Subcontractor shall maintain contractual liability insurance to secure its indemnification obligation as set forth herein.

(b) Subcontractor hereby assumes the entire responsibility and liability for all Work, supervision, labor and materials provided hereunder, whether or not erected in place, and for all plant, scaffolding, tools, equipment, supplies and other things provided by Subcontractor until final acceptance of the entirety of the Work by General Contractor or Owner. In the event of any loss, damage or destruction thereof from any cause, Subcontractor shall be liable therefor, and shall repair, rebuild and make good said loss, damage or destruction at Subcontractor's cost, subject only to the extent that any net proceeds are payable under any builder's risk property insurance that may be maintained by Owner or General Contractor, if any.

(c) Subcontractor agrees to defend, indemnify and hold harmless General Contractor from any and all claims for bodily injury (including death) or property damage arising out of or relating to in any way the use of General Contractor's hoists, cranes, elevators or other equipment by or for the benefit of Subcontractor; except this indemnity expressly excludes claims for bodily injury or property damage resulting from the negligence of the General Contractor, its agents or employees.

(d) Subcontractor shall, furnish Payment and Performance Bonds in the full amount of the Subcontract Price, with such sureties as shall be satisfactory to General Contractor. All bond must have A.M. Best ratings of A-VII or better and be qualified to conduct business in the state of Connecticut.

10. Liens -

In the event that liens are filed by anyone in relation to the labor or material being furnished through Subcontractor, Subcontractor agrees to have the same discharged at Subcontractor's sole expense, by posting a bond or otherwise within five (5) days of notice and to otherwise indemnify, defend and hold harmless the General Contractor and Owner from and against any costs or expenses (including attorneys' fees) arising therefrom. In the event any such lien is not so discharged, General Contractor shall have the right to discharge said lien and recover from the Subcontractor all costs associated therewith, including, but not limited to, attorneys' fees and bond costs.

11. Disputes -

(a) In case of any dispute between General Contractor and Subcontractor due to any act or omission of Owner or involving the Principal Contract Documents, and except as otherwise expressly provided herein including but not limited to paragraph 3 hereof prohibiting damages for delay and disruption, Subcontractor agrees to be bound to the General Contractor to the extent that General Contractor is bound to Owner, by the terms of the Principal Contract Documents or by law, whether or not Subcontractor is a party to such proceedings. In case of such dispute, Subcontractor, at its own expense, will comply with all provisions of the Principal Contract Documents allowing reasonable time for General Contractor to analyze and forward to Owner any required communications and thereafter (i) present to Owner, in General Contractor's name, or (ii) authorize Subcontractor to present to Owner, in General Contractor's name, all of the Subcontractor's claims and answer Owner's claims involving Subcontractor's Work, when permitted to do so by the terms of the Principal Contract Documents. If such dispute is prosecuted or defended by General Contractor, Subcontractor agrees to furnish all documents therewith.

(b) With respect to any controversy between General Contractor and Subcontractor not involving Owner or the Principal Contract Documents, the General Contractor shall issue a final decision which shall be binding unless within ten (10) days of receipt of such decision, Subcontractor delivers the General Contractor a notice of its intention to appeal such decision to a court of competent jurisdiction in the State of Connecticut, if it disagrees with General Contractor's final decision.

(c) Any other provision of the Subcontract Documents to the contrary notwithstanding, including paragraph 1, no dispute or claim of any nature arising out of or relating to the Subcontract will be subject to arbitration. Subcontractor agrees it will not commence any action in law or equity against the General Contractor because of any matter whatsoever arising out of or relating to this Subcontract or Work thereof, except in a court of competent jurisdiction in the New Haven Judicial District of the State of Connecticut at New Haven. In no case shall Subcontractor, during the pendency of any dispute or claim including, but not limited to, the commencement of any such action, suspend or terminate the performance of its Work hereunder and Subcontractor shall proceed diligently with its Work.

(d) Subcontractor expressly waives its right to notice and hearing under Connecticut General Statutes §§ 52-278a through 52-278q inclusive, relative to prejudgment remedies, and agrees that General Contractor may issue a writ for prejudgment remedy (attachment, foreign attachment, garnishment, or replevin) by its attorney without securing a court order.

(e) In no event will General Contractor be liable to Subcontractor on account of consequential, special or incidental damages arising out of the Subcontract whether based on breach of contract, warranty, tort, strict liability or otherwise, including, but not limited to, loss of profits, loss of bonding capacity, business interruption or the like.

12. Safety

The Subcontractor shall perform its Work in a safe and workmanlike manner. The prevention of accidents to workers engaged in the Work or others affected by the performance of the Work is the Subcontractor's sole responsibility and Subcontractor agrees to comply with all federal, state and local laws, regulations and codes concerning safety as it shall be applicable to the Work. The Subcontractor shall also follow any safety directions from General Contractor although any direction given or action taken by the General Contractor will not relieve the Subcontractor of its responsibilities hereunder. The Subcontractor shall, at its own expense, preserve and protect from injury all property and persons which may be affected by its operations in performing the Work. Subcontractor shall, at its own expense, protect the Work and the areas where the Work is performed with such lights, barricades and warning signs as are necessary for that purpose or may be required by the General Contractor.

13. Governing Law

The laws of the State of Connecticut, without regard to conflict of law principles, shall govern the interpretation of the Subcontract.

14. Equal Employment Opportunity -

(a) Subcontractor shall not discriminate in its hiring and employment practices against any employee or applicant for employment because of his or her race, color, religion, national origin, sex, handicap or age.

(b) Subcontractor shall indemnify, defend and hold Owner and General Contractor, their agents, servants and employees, harmless from any and all, claims, demands, liabilities and lawsuits, including reasonable attorneys fees incurred thereby, resulting from or pertaining to any alleged violations by Subcontractor or any of its sub-subcontractors of any and all applicable federal, state and local discriminatory employment laws, rules and regulations in effect and applicable for the Project.

15. Special Provisions

See Rider "A" attached hereto as **Exhibit F** and made a part hereof for the special conditions or provisions included in this Subcontract.

16. Miscellaneous -

(a) This Subcontract is conditioned upon General Contractor entering into a corresponding Principal Contract with the Owner and upon receiving a "notice to proceed" from the Owner. It is further conditioned upon the Owner's approval of Subcontractor herein and of this Subcontract, if that right is reserved to the Owner in the Principal Contract. This Subcontract is conditioned upon the Owner's approval of any materials and equipment which are to be furnished by the Subcontractor in accordance with the Prime Contract Documents.

Subcontractor recognizes that approval of “or equal” materials and equipment is solely at the discretion of the General Contractor and/or appropriate consultant and Owner.

(b) The Work, or portions thereof, covered by this Subcontract may not be subcontracted without General Contractor’s written approval. Subcontractor shall be fully responsible for the acts, errors, omissions, defaults and conduct of all its sub-subcontractors, employees and suppliers. Neither this Subcontract nor the right to receive any money payable or to become payable to Subcontractor may be assigned without General Contractor’s written approval. The General Contractor reserves the right to approve the Subcontractor’s sub-subcontractors and material suppliers. Any sub-subcontracts or purchase orders entered into by the Subcontractor for any portion of the Work shall incorporate the provisions of the Subcontract to the extent relevant to the scope of such subcontract or purchase order. General Contractor shall have no obligation to recognize any assignment or sub-subcontract made in violation of this Subcontract.

(c) Subcontractor agrees to indemnify, defend and hold General Contractor harmless from any loss, cost or damage arising out of any claim of patent infringement, except with respect to any material, method, process or design expressly identified in the Principal Contract Documents furnished by Owner and in the latter case, Subcontractor agrees to notify General Contractor of any potential claims falling into such category that are known to it promptly.

(d) Amendments or modifications to this Subcontract shall not be valid unless they are in writing and signed by the party to be charged.

(e) If the Principal Contract is terminated for any reason, the Subcontract shall also be automatically terminated and rendered null and void, and General Contractor’s liability to Subcontractor shall be limited to an equitable portion of the amount actually paid to General Contractor by Owner with respect to Subcontractor’s Work.

(f) Attention is called to the provisions of the Principal Contract authorizing the Owner to omit any item of work. In the event Owner elects to omit any item of Work included in this Subcontract, any such omission shall be binding upon the Subcontractor and the determination of the Architect with respect to any deductions taken by it under the General Contractor’s Principal Contract shall be binding upon the Subcontractor. In no event shall the General Contractor’s liability to the Subcontractor exceed the amount actually paid to the General Contractor by the Owner with respect to Subcontractor’s Work, it being agreed that the receipt of payment by the Owner is a condition precedent to the General Contractor’s obligation to pay Subcontractor.

(g) Attention is called to provisions of the Principal Contract relating to inspection and testing of Work and uncovering of Work for the Owner’s Architect or engineer. Subcontractor hereby assumes all of General Contractor’s obligations to Owner thereunder with respect to Subcontractor’s Work.

(h) Subcontractor agrees to furnish to the General Contractor as-built drawings of all Work performed by Subcontractor to the extent required by the Principal Contract Documents, the General Contractor, or Owner.

(i) Subcontractor agrees that it will require its employees to park in areas designated by General Contractor if parking is provided on site.

(j) Subcontractor agrees that if shipments of materials or supplies arrive at the jobsite for the account of Subcontractor and if Subcontractor does not have adequate men or equipment available to unload such materials and supplies and place them in proper storage or deliver them to the working area, then General Contractor may do so and charge Subcontractor. In addition, the Subcontractor shall remain liable for and shall indemnify the General Contractor with respect to any bodily injury or property damage arising out of General Contractor's efforts in such respect, except to the extent of the negligence of General Contractor, its agents or employees.

(k) The partial or incomplete validity of any one or more provisions of this Subcontract shall not affect the validity or continuing force and effect of any other provision. The failure of either party to insist, in any one or more instances, upon the performance of any of the terms, covenants, or conditions of this Subcontract, or to exercise their right herein, shall not be construed as a waiver or relinquishment of such term, covenant, condition or right as respects further performance.

(l) The Subcontract contains the entire agreement between the parties hereto with respect to the matters covered herein. No other agreement, representations, warranties, or other matters, oral or written, shall be deemed to bind the parties hereto.

(m) The Subcontractor acknowledges that it is, and will remain during the performance of its Work, an independent contractor.

(n) Cleaning work shall be the responsibility of the Subcontractor for his respective trade regardless of what the Principal Contract Documents may or may not require. Cleaning work shall be promptly accomplished at the direction of General Contractor's Project Superintendent. See **Exhibit B** for further details. When such direction is not complied with, the General Contractor will perform such work and charge all costs to the Subcontractor's account.

(o) All required reports, certificates, invoices, submittals, samples, shop drawings, etc., shall be sent to General Contractor at the addresses identified above. All notices shall be addressed to the appropriate party at the address set out herein and shall be considered as delivered when postmarked, if sent by registered or certified mail, or when received in all other cases, including facsimiles.

IN WITNESS WHEREOF, we have hereunto set our hands and seals as of the day and year first above written.

With Attachments.

- Exhibit A - Subcontract Documents
- Exhibit B - Scope of Work
- Exhibit C - Final Release & Waiver of Lien
- Exhibit D - Partial Release & Waiver of Lien
- Exhibit E - Project Schedule
- Exhibit F - Rider A - Special Conditions
- Exhibit G - Insurance Requirements

THE FUSCO CORPORATION,
GENERAL CONTRACTOR

By: _____
Joe Castellano, Director of Purchasing & Contracts

Date: _____

SUBCONTRACTOR:

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT A
SUBCONTRACT DOCUMENTS

1) Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Schedule of Drawings: Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Addenda:

Addendum No. 1 dated July 10, 2012

Addendum No. 2 dated July 24, 2012

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR
ADDENDUM NO. 2

**EXHIBIT B
SCOPE OF WORK**

(INCLUDING SUPPLEMENTAL SCOPE OF WORK)

EXHIBIT C
FINAL LIEN WAIVER AND RELEASE

The undersigned,
("Releasing Party") located at
having performed or furnished, or having caused to be performed or furnished, labor,
services or materials in the construction, alteration or improvement of that property of
("Owner") described as:

(the "Project" which term includes the real property on which construction is taking place)
acknowledges receipt of final payment in the amount of \$ _____ for all labor,
materials, equipment or services performed or furnished to the Project pursuant to a contract
("Subcontract") with Fusco Corporation ("General Contractor").

Travelers Casualty and Surety Company of America ("Surety") has furnished a payment
bond ("Payment Bond") on the Project.

The Releasing Party does hereby remise, release and forever discharge, for itself and its
successors, the Owner, Surety and General Contractor, and their successors, heirs, executors
and administrators, of and from all, and all manner of action and actions, cause and causes of
actions, suits, liens, debts, dues, sums of money, accounts, reckonings, bonds, bills,
specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses,
damages, judgments, extents, executions, claims and demands whatsoever, in law, in
admiralty, or in equity which against the said the Owner, Surety and General Contractor, the
Releasing Party ever had, now has, or which it or its successors, hereinafter can, shall or may
have in connection with any and all claims of any nature whatsoever arising out of or relating
to the Project.

Further, the Releasing Party certifies, under oath, and in accordance with all applicable
statutes, laws and regulations, that all laborers, subcontractors or materialmen, have been
paid in full for all materials, equipment, fees, licenses, insurances and taxes of every
description, and that there are no liens, causes for liens or claims against the Releasing Party
for such items. The Releasing Party certifies that he will indemnify and save harmless the
Owner and General Contractor from any and all manner of claims, liens, suits, losses, costs,
expenses and damages, including, but not limited to, reasonable attorneys fees, arising out of
or resulting from the Subcontract referred to above, or any work performed or material
supplied thereunder, and hereby releases forever all claim, title and interest in the Project for
the same.

Further, the Releasing Party, for value received, does hereby forever waive, relinquish and
release the Project from any and all mechanics, materialman's or like liens, and all claims of
liens it now has or may have against the project for any and all labor, equipment, services
and materials furnished to the project.

FINAL LIEN WAIVER AND RELEASE (con't)

Further, and in addition to the foregoing, the Releasing Party for value received, does hereby expressly release, waive and relinquish any and all right or claim it may now have or may hereafter have under the Payment Bond provided on the Project for any and all labor, services, materials or equipment furnished on the Project.

Further, the Releasing Party warrants that no assignment of claims for payments or rights to perfect a lien or claim against the Payment Bond or against the Project have been made, and that the undersigned has the authority to execute this Final Release and Waiver of liens and has performed the labor and services supplied the materials required of the Releasing Party. The undersigned has personal knowledge that the statements made herein are true and correct.

Dated: _____

By: _____

Title:

State of _____ County of _____

The foregoing instrument was acknowledged before me this _____ day of _____,

By _____, as _____,

Of _____, a _____ corporation on behalf of the corporation

He/She is personally known to me or has produced _____ as identification and did (did not) take an oath.

My Commission Expires _____

(Signature)

(AFFIX OFFICIAL SEAL)

Name: _____
(Legibly Printed)

Commissioner of the Superior Court/Notary Public State of _____

EXHIBIT D
PARTIAL LIEN WAIVER AND RELEASE

The undersigned _____ (“Releasing Party”) located at _____, having performed or furnished, or having caused to be performed or furnished, labor, services or materials in the construction, alteration or improvement of that property of (“Owner”) described as:

(the “Project” which term includes the real property on which construction is taking place) hereby certifies that the Releasing Party has been paid by Fusco Corporation (“General Contractor”) pursuant to a contract with the General Contractor (“Subcontract”) all the monies due it for all labor, materials or services performed on or furnished to the Project up to and including the date of _____ (date payment is made through) (referred to hereinafter as the “Release Date”).

Travelers Casualty and Surety Company of America (“Surety”) has furnished a payment bond (“Payment Bond”) for the Project.

The Releasing Party, up through and including the Release Date, does hereby remise, release and forever discharge, for itself and its successors, the Owner, Surety and General Contractor, and their successors, heirs, executors and administrators, of and from all manner of actions and actions, cause and causes of actions, suits, liens, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, extents, executions, claims and demands whatsoever in law, or in equity which the Releasing Party ever had, now has, or which it or its successors, hereafter can, shall or may have from the beginning of the world to the Release Date in connection with any and all claims of any nature whatsoever arising out of or relating to the Project.

Further, the Releasing Party certifies, under oath, and in accordance with all applicable statutes, laws and regulations, that all laborers, subcontractors or materialmen, have been paid in full up through the Release Date for all materials, equipment, fees, licenses, insurances and taxes of every description and that there are no liens, causes for liens or claims against the Releasing Party for such items. The Releasing Party certifies that it will indemnify and save harmless the Owner, Surety and General Contractor from any and all manner of claims, liens, suits, losses, costs, expenses and damages, including, but not limited to, reasonable attorneys fees arising out of or resulting from the Subcontract referred to above, or any work performed or material supplied thereunder, and hereby releases forever all claim, title and interest in the Project for the same through the Release Date.

Further, the Releasing Party for value received does hereby release, waive and discharge the Project from any and all mechanic’s liens and claims of liens, equitable or legal, or claims against the Payment Bond, which the undersigned has or may have against the Project and or Payment Bond for labor, services, materials or equipment through the Release Date. Lien rights or Payment Bond rights which the Releasing Party may acquire for labor, services, materials or equipment furnished subsequent to the Release Date are not released by this instrument.

PARTIAL LIEN WAIVER AND RELEASE (con't)

Further, the Releasing Party warrants that no assignment of claims for payments relating to the Project has been made, and that the undersigned has the authority to execute this Partial Release and Waiver has performed the labor and services supplied and the materials required of the Releasing Party to the state of completion of said improvements for which payment is being applied. The undersigned has personal knowledge that the statements made herein are true and correct.

Dated: _____

By: _____

Title:

State of _____ County of _____

The foregoing instrument was acknowledged before me this _____ day of _____,

By _____, as _____,

Of _____, a _____ corporation on behalf of the corporation

He/She is personally known to me or has produced __as identification and did (did not) take an oath.

My Commission Expires _____

(Signature)

(AFFIX OFFICIAL SEAL)

Name: _____

(Legibly Printed)

Commissioner of the Superior Court/Notary Public State of _____

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR
ADDENDUM NO. 2

EXHIBIT E
CONSTRUCTION SCHEDULE

EXHIBIT F

RIDER A - SPECIAL CONDITIONS

The following documents/forms, hereto attached, shall be included as part of the Contract Documents. – ADD. NO. 2

1. Document 000950: Bid Forms A through F
2. Document 000310: Bid Bond and Form of Surety
3. Document 000315: Form of Surety Guarantee
4. Document 000320: Non-Collusion Affidavit of Prime Bidder
5. Document 000350-2: Contractor's Minority Business Enterprises - CHRO
6. Document 000350-3: Notification to Bidders – CHRO
7. Document 000360: Certification of Bidder Regarding Equal Employment Opportunity
8. Document 000370: Certificate as to Corporate Principal
9. Document 000412A: Department of Administrative Services (DAS) "Contractor Prequalification Certificate and **Update Statement**
10. Document 000412B: Statement of Bidders Qualifications
11. Document 000847: Contractors Wage Certification Form
12. S/M/W/DisBE Certificate from the State of Connecticut for Set-Aside Bid Packages.

EXHIBIT G INSURANCE REQUIREMENTS

The Subcontractor shall secure and maintain the following insurance coverages in the amounts as specified and in accordance with the terms hereof:

1. GENERAL PROVISIONS

- (a) All insurers must have A.M. Best ratings of A-VII or better and be qualified to conduct business in the state in which the Project is located.
- (b) Evidence of all the aforementioned insurance coverages must be provided by the Subcontractor to the General Contractor before the commencement of Work by the furnishing of a certificate of insurance executed by a duly authorized representative of each insurer. Subcontractor shall provide General Contractor with a copy of an insurance policy when requested by General Contractor.
- (c) All policies shall be endorsed to require at least a sixty (60) day written notice by the insurer of cancellation, non-renewal, or material changes, except for a ten (10) day notice for non-payment of premium. This notice shall be sent to General Contractor as a certificate holder.
- (d) All policies must include an express waiver of subrogation whereby the insured waives the right to subrogate against Owner, General Contractor and Architect, and their respective subsidiaries, employees, volunteers, directors and officers.
- (e) All policies must include a clause which states that the Subcontractor's policy is primary and the insurer shall not seek contribution from other insurance maintained by or available to the additional insured.
- (f) All deductibles or self-insured retentions are the responsibility of Subcontractor, including claim handling or legal expenses.
- (g) All exclusions or restrictions of coverage not found in standard policies must be clearly identified and accepted by the General Contractor.
- (h) All insurance must be effective on or before Work commences and remain in effect until final completion and acceptance of the Work, if not otherwise provided by this Subcontract.
- (i) It is responsibility of the Subcontractor to be certain that all of its sub-subcontractors and suppliers procure and maintain the same insurance required of the Subcontractor as specified herein. Subcontractor shall furnish copies of certificates of insurance evidencing coverage for each sub-subcontractor and supplier.

- (j) Failure to comply with all the insurance provisions herein shall in no way relieve the Subcontractor of its indemnification obligations as provided in the Subcontract Documents.
- (k) In addition to the insurance coverages set forth in this **Exhibit G**, Subcontractor shall also comply with any insurance requirements of the Principal Contract which are imposed upon the Subcontractor pursuant to the terms of this Subcontract.

1. **WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE**

- (a) Full statutory coverages required by law.
- (b) Employer's Liability Insurance limits of at least \$500,000 each accident for bodily injury by accident and \$500,000 each employer for bodily injury by disease.
- (c) Where applicable, U.S. Longshore and Harborworker's Compensation Act Endorsement shall be attached to the policy.

2. **COMMERCIAL GENERAL LIABILITY (CGL)**

- (a) Limits of insurance of not less than \$1,000,000 per occurrence with a \$2,000,000 annual aggregate
- (b) If the CGL coverage contains a General Aggregate limit, such General Aggregate shall apply separately to each project.
- (c) Coverage shall be written on ISO occurrence form CGL 00 01 10 01, or a substitute occurrence-based form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, products/completed operations, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).
- (d) General Contractor, Owner, and Architect shall be included as additional insureds under the CGL using ISO Additional Insured Endorsement CG 20 11 85 or an endorsement providing equivalent coverage for these additional insureds. Insurance for additional insureds shall be as broad as the coverage provided for the named insured. It shall apply as Primary Insurance before any other insurance or self-insurance, including any deductible maintained by or provided to the additional insureds.
- (e) Subcontractor shall maintain CGL coverage for itself and all additional insureds for the duration of the Project and maintain completed operations coverage for itself and additional insureds for at least three (3) years after completion of the Work.

- (f) There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion or underground property damage.

3. **AUTOMOBILE LIABILITY**

- (a) Business Auto Liability with limits of at least \$1,000,000 per accident for bodily injury and property damage.
- (b) Business Auto coverage must include coverage for liability arising out of all owned, leased, hired, and non-owned automobiles.
- (c) General Contractor, Architect, and all other parties of the General Contractor shall be included as additional insureds under the policy.

4. **COMMERCIAL UMBRELLA/EXCESS LIABILITY**

- (a) Limits must be at least \$3,000,000 providing excess coverage over the Subcontractor's CGL, Business Auto and Employer's Liability insurance coverages.
- (b) Umbrella coverage must include as additional insureds all entities that are additional insureds on the CGL.
- (c) Umbrella coverage for such additional insureds shall apply as primary before any other insurance or self-insurance, including any deductible, maintained by or provided to the additional insured, other than the CGL, Business Auto Liability, and Employer's Liability coverage maintained by the Subcontractor.
- (d) Coverage must be on an occurrence basis.

5. **PROPERTY INSURANCE**

- (a) Subcontractor shall provide property and equipment insurance for the full value of the Work, including property and equipment insurance coverage for all materials and equipment stored off-site or in transit whether or not such Work is covered under any Project property insurance, unless the General Contractor issues a specific written waiver of the requirement that the Subcontractor provide property and equipment insurance for the full value of the Work.
- (b) In addition to the foregoing, Subcontractor shall provide an equipment and installation floater in the broadest coverage form available covering Subcontractor's tools and also materials not accepted by the Owner.

6. **POLLUTION LIABILITY INSURANCE**

The Contractor shall provide pollution, lead, mold and asbestos Liability Insurance.

The policy must be specifically endorsed to include coverage for “asbestos, lead paint, and other hazardous building materials such as PCB’s, abatement operations” and have the “Pollution Exclusion” eliminated or modified so as not to apply to any bodily injury, including but not limited to asbestos, lead paint, and other hazardous building materials such as PCB’s abatement, handling, transport or disposal. General Liability coverage shall not be provided on a “claims made” basis. All policies shall be written on an occurrence basis.” Limits are as follows:

Aggregate \$2,000,000, Occurrence \$1,000,000 plus a \$5,000,000 pollution umbrella policy.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package 1.01
Site Preparation
(Early Release Package)**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Site Preparation** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Site Preparation** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE 1.01 – Site Preparation:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Site Preparation** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification

Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manual:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

020100	Site Preparation (As Applicable)
024113	Site Clearing, Site Demolition and Removals (As Applicable)
Division 22	Plumbing (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 31	Earthwork (As Applicable)
Division 32	Exterior Improvements (As Applicable)
Division 33	Utilities (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Site Preparation in accordance with Early Release Package Plan (Document 000926) and the Contract Documents (As Applicable);

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Fusco Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Progress Photography:

In addition to the Work depicted on the Contract Documents, this Subcontractor shall be responsible to provide the following:

- a) **Pre-Work Photographs:** This Subcontractor shall document the existing conditions photographically of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by Site Preparation and submit prior to commencing the Work.
- b) **Post-Work Photographs:** This Subcontractor shall document the existing conditions photographically of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by Site Preparation and submit after to commencing the Work.

5) Site Preparation:

- a. This Subcontractor shall furnish, install and remove a minimum of **six (6) construction signs and bases** at surrounding City streets stating "Construction Equipment and Trucks Entering Road" or other language as specified by the Construction Manager. Additional signs may be required by the Town of Hamden and is included in the Subcontract price.
- b. *Intentionally omitted – ADD. NO. 2*

- c. This Subcontractor shall also furnish and deliver to the Construction Manager **ten (10) heavy duty master locks w/ keys** in unopened boxes and ten heavy duty chains, each at 36" long at the start of the project.
- d. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to Work areas. This Subcontractor shall be required to provide tree protection for existing trees to remain.
- e. This Subcontractor shall provide and maintain erosion control measures as required to perform this Scope of Work including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking pads at the construction entrances and exits including all associated filter fabric and large stone, as detailed and approved in the aforementioned Early Release Package Plan (Document 000926). All truck tires are to be free of dirt, dry and clean before leaving the construction site.
- f. This Subcontractor shall provide dust control (watering trucks) as required by the Construction Manager and/or by any state or local agency.
- g. This Subcontractor shall protect asphalt, concrete and existing site improvements while performing the Work. In the event asphalt, concrete or other site improvements intended to remain, this Subcontractor shall repair and restore the asphalt, concrete and site improvements to its original condition.
- h. This Subcontractor is responsible for construction of crushed stone temporary roads to adequately support loading and withstand exposure to heavy construction traffic per the Site Logistics Plan. Obtain approval from the Construction Manager to locate temporary roads, storage and parking areas.
- i. This Contractor shall be responsible for all costs and coordination of water line taps and any other work related to the new water services to the Office Trailers. The water authority will provide a list of qualified Contractors who can be used for the Taps, disconnects, and any other work that needs qualifications.
- j. This Subcontractor shall prepare the following areas depicted on the Early Release Package Plan (Document 000926):
 - i. Construction Offices Trailer Location : Prepare existing tennis court area and remove tennis court fencing as directed by the Construction Manager. Include the removal of all vegetation and other items needed to move construction field trailers to the existing tennis courts.
 - ii. Construction Parking and Material Storage Location: Grade to final sub-grade and install 6" of compacted processed stone at 30,000 square feet

and install perimeter erosion control, all acceptable to the Construction Manager.

- iii. Construction Manager's Office Trailer & Owner Office Trailer: Provide a pressured treated wood deck and shed roof (watertight) to connect the entrances between the Owner's jobsite trailer and the Construction Manager's jobsite trailer – approx. 40x12 in size deck with 2-48” wide stairs/rails built to all applicable codes and as directed by the CM.
- iv. Construction Manager's Office Trailer & Owner Office Trailer: For each the Owner and Construction Manager's Trailer - Provide two base cabinets and two wall cabinets and countertop to fill twelve foot long space in two locations in both Construction Manager's and Owner's Office Trailers.

This Subcontractor shall include within their Base Bid the following; two (2) large white mailbox installed on 4 x4 post for CM and Owner.

This Subcontractor shall provide a case each of white, blue and yellow Marking spray paint, 10 rolls each of “Caution Tape” and “Danger”.

This Subcontractor shall include **five (5) round trips** from the Construction Managers warehouse/office in New Haven to the Project Site with a rack body truck (provided by this Contractor) to bring, furniture and incidentals to the site. Include **two (2) laborers** to move carry and distribute these incidentals.

- l. This Subcontractor shall provide conduit and wire for all required Power and Telecom and Data for Construction Manager Trailer and Owner Trailer. Include 2 overhead poles and power backboard systems. Make final connections to trailers for power, telecom and data. The temporary electrical power to the trailers shall be a minimum of a 400 amp single phase service.
- k. This Subcontractor shall provide all Site Preparation, Sediment Erosion Control Protection, and Clearing and Grubbing to remove all Trees, Tree Roots, Stumps, Shrubs and other existing Plant materials as required to perform this Scope of Work.
- m. This Subcontractor shall provide and maintain all erosion control measures as required to perform this Scope of Work including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking at all construction entrances and exits including all associated filter fabric and large stone, as detailed and approved in the aforementioned Early Release Package Plan (Document 000926). All truck tires are to be free of dirt, dry and clean before leaving the construction site.

6) Temporary Roads, Paving, Access

This Contractor shall construct temporary roads and paving that will adequately support loading and withstand exposure to traffic and equipment during the construction period. Locate temporary roads, storage, staging and parking areas where the same permanent facilities will be located whenever possible.

This Contractor shall be responsible to professionally sweep clean public roads around the project site on a daily basis as result of construction traffic for this Scope of Work.. Additionally, this Contractor shall professionally sweep all pavement, sidewalks, and entry steps as directed by the Construction Manager from the time this Contractor mobilizes until the Construction Manager deems this Work is substantially complete.

7) Soil Erosion and Sediment Control

This Contractor is responsible for the furnishing of Erosion and Sedimentation Controls including anti-tracking pads as shown on the Early Release Package Plan (Document 000926).

This Contractor is responsible for cleaning and /or washing down the tires of his or her construction vehicles and equipment including but not limited to visitors and vendors exiting the site at the anti-tracking aprons located at each construction entrance to avoid tracking mud, dust, and etc. from the site and onto public streets.

8) Survey / Layout:

This Contractor shall provide all other layout required to perform and complete his or her Work.

9) Temporary Works:

This Contractor shall provide:

- a. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to Work areas. This Contractor shall be required to provide tree protection for existing trees to remain for this Scope of Work.
- b. This Subcontractor shall include protection of utilities to remain within the area of this Scope of Work as indicated in the Contract Documents.
- c. Remove all trees, shrubs, landscaping, fencing and other items as needed and as directed by the Construction Manager to complete the mobilization work shown and to access the construction trailer area. Remove all fencing around the existing tennis courts as directed by the Construction Manager.

10) Site Utilities:

This Contractor shall provide all Site Utilities as shown on the Early Release Package Plan (Document 000926), including but not limited to:

- a. This Contractor shall provide the above services from the point of origin coordinate same with the appropriate utility.
- b. This Contractor will be responsible for coordination with the appropriate utility and provide and pay for all Permit, Fees, etc. and the coordination of inspections within the Contractor's Scope of Work as required by the service provider and/or the authority having jurisdiction.
- c. This Contractor shall include in the Scope of Work any costs associated with shut downs that may be required to complete the Work.
- d. This Contractor shall include in the Scope of Work any costs associated with shut downs to complete the Work.
- e. This Contractor is to contact and coordinate with all utilities prior to the start of Work. Subcontractor to verify all existing utilities that are to remain that are in Subcontractor's area of work. Subcontractor is required to employ, at their expense, professional underground utility locating services for their onsite work. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs passed on to Subcontractor. Stake, flag, and protect all existing utilities to remain.

11) Site Security:

This Contractor shall be responsible on a *daily basis* to secure all access points to the site at the direction of the Construction Manager until completed with its scope of work.

12) Office Trailer Utilities:

This Subcontractor shall provide conduit and wire and connections for all required Power, Telephone and Data for Construction Manager and Owner's Site Office Trailers. Include 2 overhead poles and power backboard systems. Make final connections to trailers for power, telephone and data. The temporary electrical power to the trailer area shall be a minimum of a 400 amp single phase service.

This Subcontractor shall provide wastewater sewer connection for Construction Manager and Owner's Site Offices.

This Subcontractor shall provide water service connections for Construction Manager and Owner's Site Offices.

13) Site Excavation and Stockpile:

Any excess soil is to be removed offsite by this Subcontractor. Stockpiles are not allowed. All spoils or any other soil being removed from the site must be tested and characterized prior to leaving the site and legally disposed of off-site.

14) Dust Control:

This Contractor shall provide all Dust Control. This Contractor will provide dust control (watering trucks) as required or as requested by the Construction Manager and/or by any state or local agency for this Scope of Work.

15) Neighboring Property Owners:

This Contractor shall provide any and all coordination (through the Construction Manager) with neighboring property owners while conducting Work in the vicinity of the property line, including but not limited to rock removal, excavation, site demolition and brush and tree removals.

16) Dumpsters, Clean-up, Wash-Out & Waste Removal:

- a. Include any dumpsters required for this scope of work and off-haul of all materials.

CLARIFICATIONS

a.) Subcontractor shall include the following:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Complete all work shown on Early Release Package Plan (Document 000926) except for the temporary construction fencing and gates. Include the installation of three (3) Anti-Tracking pads to be located as directed by the Construction Manager. Also include an access road 24 feet wide with the same section as the Anti-Tracking pad for 800 linear feet to be located as directed by the Construction Manager. Include sedimentation and erosion control systems around the perimeter of the fenced construction zones shown and as required for this Scope of Work. Include the temporary asphalt driveway shown in the

early release site plan. Provide electric power, telephone, data, water and sewer utilities to two construction field trailers. Sheet C-7 Detail 3 – Use this detail for the Anti-Tracking pads and access road as described above.

3. ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
 - a. BP#1.01 Site Preparation*;
 - b. BP#2.01 Demolition & Abatement*
 - c. BP#7.01 Roofing* – **ADD. NO. 2**
 - d. BP#31.04 Athletic Fields*

*These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #2.01
Structure Demolition, Selective Demolition & Abatement**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to all labor, materials, equipment, tools, services, coordination, supervision, shop drawings, permits, engineering and all incidental work associated with **Structure Demolition, Selective Demolition and Abatement** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Structure Demolition, Selective Demolition and Abatement** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) BID PACKAGE #2.01 – Structure Demolition, Selective Demolition and Abatement:**
This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Structure Demolition, Selective Demolition and Abatement** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. Work shall comply will all applicable codes and authorities. The

Scope of Work shall include, but not be limited to, the General Conditions, all Division 00 and 01 Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

- 024119 Selective Demolition**
- 024216 Building Demolition**
- 026123 Removal & Disposal of PCB Contaminated Soils**
- 028100 Removal and Handling of Regulated Materials**
- 028213 Asbestos Abatement**
- 028433 Removal and Disposal of PCBs**

- Division 21 Fire Suppression (As Applicable)
- Division 22 Plumbing (As Applicable)
- Division 23 Mechanical (As Applicable)
- Division 26 Electrical (As Applicable)
- Division 27 Communications (As Applicable)
- Division 28 Electronic Safety and Security (As Applicable)
- Division 31 Earthwork (As Applicable)
- Division 33 Utilities (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Selective Demolition, Building demolition including but not limited to: Roof Removal as Required (Total Roof Removal and Roof Abatement by BP#7.01), Wall, Partitions; Doors and Frames; Flooring; Ceilings; Masonry; Soffits; Bulkheads; Cabinets and Casework; Shelves; Column Enclosures demolition (and the legal disposal of same); sheeting; shoring; bracing; openings for all trades as described in the Contract Documents and listed below.

The intent of the Scope of Work is for the **Structure Demolition and Abatement** bidder to remove and dispose of all materials and equipment noted on the Contract Documents, unless specifically noted to remain or be removed and/or disposed by others. Salvage of existing Face Brick is required.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Construction Schedule:

It is understood that TIME IS OF THE ESSENCE and as such the Schedule, included with the Bid Documents along with the Construction Phasing must be maintained.

- a. Subcontractor includes all overtime required to meet the schedule and as needed as a result of this Subcontractor's failure to meet the project schedule.
- b. Subcontractor includes all mobilizations necessary to complete Work.
- c. Subcontractor will be responsible for overtime costs for Construction Manager's supervision if the Subcontractor falls behind schedule, by its own fault, and overtime is required by this Subcontractor to make up the schedule.
- d. All provisions for Schedule compliance both in the Bid Documents and as covered in Fusco's Standard Form of Contract will be strictly enforced. Further,

this Contractor shall be held to all of the same Schedule constraints and penalties that have been agreed to and have been stipulated to in the agreement between Fusco Corporation and the Owner.

- e. Subcontractor acknowledges that minor adjustments to the schedule will be required as all parties progress through project construction, and agrees to accomplish such minor adjustments at no increase in price.

5) Mechanical, Electrical, Fire Suppression, Plumbing and HVAC Demolition: This Subcontractor shall be responsible to properly dispose of all **Mechanical, Electrical, Fire Suppression, Plumbing and HVAC** installations as indicated on the Contract Documents:

- a. The Plumbing and HVAC Contractor shall cut, cap and drop the system identified to be removed.
- b. The Fire Suppression Contractor shall cut, cap and drop the system identified to be removed.
- c. The Electrical Contractor shall cut, cap and drop the system identified to be removed.
- d. Removal and proper disposal of all Mechanical, Electrical, Fire Suppression, Plumbing and HVAC systems shall be by the Demolition and Abatement Contractor.
- e. Removal and proper disposal of all fluorescent lights and ballasts (placed in a suitable container by the Electrical Contractor) shall be properly disposed by the Demolition and Abatement Contractor.
- f. The Plumbing and HVAC Contractor shall be responsible to remove and properly dispose of the existing HVAC Rooftop Units.
- g. The Plumbing and HVAC Contractor shall be responsible to remove and properly dispose of the existing Steam Boilers.

6) Structure and Selective Demolition:

In addition to the Work depicted on the Contract Documents, this Subcontractor shall be responsible to provide the following:

- a. **Pre-Demolition Photographs:** This Subcontractor shall document the existing conditions photographically of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by building demolition operations and submit prior to commencing the Work.
 1. **Salvage of Owner Items:** This Subcontractor shall remove, clean and submit to Owner any items requested to be salvaged by the Owner prior to performing any demolition or abatement.

- b. **Post-Demolition Photographs:** This Subcontractor shall document the existing conditions photographically of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by building demolition operations and submit after completing the Work.
1. **Snaking and Video of Underground Pipe:** This Subcontractor shall provide snaking and video of existing underground piping to City Structures to the Construction Manager with six (6) copies of a written report and DVD media. This shall be done before any work begins and again after the Project is Substantially Complete.
- c. **Protect Existing Door Frames and Walls:** This Subcontractor shall protect the existing door frames and wall, wherever necessary, prior to beginning the Work. Protection shall be focused on areas where damage to the existing door frames and walls is likely. This Subcontractor shall maintain and repair any damage to existing door frames and walls to the satisfaction of the Architect and Construction Manager, in their sole discretion, immediately during the performance of the Work and at the final completion of the Work as a prerequisite to closeout.
- d. **Protection of Existing Stairs:** This Subcontractor shall provide and maintain (until taken over by the General Trades Contractor, at the direction of the Construction Manager) temporary protection throughout the entire construction phases to ALL Stairs, Stair Treads, Stair Risers, Stair Landings, Railings and Guardrails.

The following Stair protection system shall be utilized:

- i. **6 mil poly (Overlap 12" and Duct Tape Joints); and**
ii. **3/4" Plywood**
- e. **Temporary Shoring and Bracing:** This Subcontractor shall furnish, install, maintain and remove any shoring and/or Bracing as may be required. Shoring/Bracing plan(s) shall be designed and stamped by a Structural Engineer licensed to practice in the State of Connecticut and approved by the project engineer prior to the start of work.
- f. **Temporary Closure Walls @ Building Demolitions:** This Subcontractor shall provide a 6" Steel Stud (12" O.C.) Insulated Wall with two layers of 3/4" Plywood and batt insulation sealed off completely and in all respects to the weather and for the purposes of safety and security (specifically at the building doorways and hallways) where the building is to be demolished is severed from the existing occupied building to remain. Wall shall be weathertight, soundproof and secure in all respects. Walls shall

adequately isolate temperature, sound, dust, odors, and fumes and meet applicable building and fire codes.

- g. Temporary Roofing and Waterproofing:** This Subcontractor shall provide Temporary Roof Membrane wherever required to be sealed off completely and in all respects to the weather and (specifically at the building interface) where the building to be demolished is severed from the existing building to remain. Temporary roofing shall also be provided where the existing Building Envelope is compromised as a result of the demolition and abatement. The entire building envelope including but not limited to caulking and flashings and specifically Roofing shall be weathertight in all respects.
- h. Existing Foundation:** This Subcontractor shall REMOVE the existing foundation and slab where Building Demolition is indicated on the Contract Documents. This Subcontractor shall REMOVE all pier footing where the Portable Classrooms are removed or where pier footings exist from former portable classrooms. Provide OSHA safe sloping to the satisfaction of the Construction Manager, in its sole discretion, at all underground removals. – **ADD. NO. 2**
- i. VAT, VCT, Carpet and Mastic Removal:** This Subcontractor shall remove and properly dispose of all VAT, VCT, Carpet and other flooring and Mastic as indicated on the Contract Documents. The existing slabs shall be completely clean of all mastic. The existing slabs shall be free of any abrasions, rills or damage resulting from the abatement/demolition process. In the event the slabs are damaged, in the sole discretion of the Construction Manager, this Subcontractor shall repair those areas so as to leave the slab in a condition acceptable to receive floor finishes, in the sole discretion of the Construction Manager.
- j. Encapsulant Adhesives:** This Subcontractor shall remove any and all residue left behind by encapsulant adhesives so as to leave the existing substrate in a condition to receive finishes, in the sole discretion of the Construction Manager. In the event the existing substrates are damaged, in the sole discretion of the Construction Manager, this Subcontractor shall repair those existing substrates.
- k. Ceiling Demolition:** This Subcontractor shall remove and properly dispose of all ceilings and soffits as indicated on the Contract Documents including but not limited to: acoustical grid, acoustical grid wires, metal pans, black iron, welded metal tube ceiling support, batt insulation, light fixtures, stud framing and drywall, transfer ducts and grilles.

- l. Movable Partitions Demolition:** This Subcontractor shall remove and properly dispose of all movable partitions as indicated on the Contract Documents.
- m. Millwork and Lockers Removal and Disposal:** This Subcontractor shall remove and properly dispose of all millwork and lockers as indicated on the Contract Documents.
- n. Interior Door Removal and Disposal:** This Subcontractor shall remove and properly dispose of all interior doors as indicated on the Contract Documents.
- o. Window Treatments Removal and Disposal:** This Subcontractor shall remove and properly dispose of all window treatments as indicated on the Contract Documents.
- p. Roof Demolition & Abatement:** The Roofing Contractor (Bid Package #7) shall remove and properly dispose of the existing roofing materials.
- q. Existing Roof Drains:** This Subcontractor shall protect and leave in place all roof drains and discharge piping during the Project. In the event a roof drain is damaged it shall be replaced by this Subcontractor at no cost to the Project. In the event a roof drain must be removed in the proper execution of the Work, this Subcontractor shall replace it and include such cost in its bid as required to maintain proper roof drainage at all times. Also include furnishing, installing and removing temporary gutters and rain water downspouts as required to maintain proper drainage from the roofs at all times during construction.

 - 1.** Where Abatement of existing roof drains, pipes and leaders is required, this Subcontractor shall properly remove all hazardous pipe insulation including where pipe insulation may be concealed in an existing walls, chases and or ceilings.
- r. Existing Masonry Unit Salvage:** This Subcontractor shall salvage, clean, count, palletize, plastic wrap and store on-site at the direction of the Construction Manager the following quantities of existing face brick masonry units (in the event this Subcontractor is unable to salvage the following quantities of brick and cannot substantiate to the Construction Manager, in its sole discretion, why there is a shortage, this Subcontractor shall purchase and provide brick to the Project at its own cost up to the required amounts) :

 - 1. 3,000 exterior square feet of bricks – This includes the 1,000 exterior square feet of bricks referenced on sheet A-302. The percent of each type of brick that is salvaged should be roughly**

proportional to the brick that is removed and as directed by the Construction Manager.

- s. **Existing Wheelchair Lift Removal and Disposal:** This Subcontractor shall be responsible to remove and properly dispose of the existing wheelchair lift including but not limited to the doors and frames, push button stations and all components complete.
- t. **Miscellaneous Items:** This Subcontractor shall be responsible to remove (including all attachment hardware while minimizing damage to existing substrate) and properly dispose of the following: tackboards, whiteboards, markerboards, water coolers (including electrical and plumbing supply/waste), signage, hose cabinets, emergency lighting, door hold opens, thermostats, fire extinguisher cabinets, area of refuge call boxes, wiremold, embedded wall anchors, coat racks, flags and holders, clock and speakers, telephone and supporting bracket, shelving and standards, surface mounted conduit and piping, miscellaneous hardware and bolts, refrigerant piping and any other item affixed to the walls not intended to remain.
- u. **Disposal of Liquids:** Include the legal disposal of any refrigerant, petroleum or any other hazardous liquid. Provide disposal of shed filled with hazardous materials.
- v. **Temporary Swing Space Classrooms:** This Subcontractor shall demolish and properly dispose of the Temporary Swing Space Classrooms constructed during the Project. Area approximately 2000 square feet.

7) Sheeting, Shoring, Underpinning, Bracing and Open Hole Protection:

In addition to that required by the Contract Documents, this Subcontractor is responsible to provide all Sheeting, Shoring and Underpinning as required, whether shown or not on the Contract Documents.

- a. This Subcontractor shall furnish, install, maintain and remove any shoring and/or Bracing as may be required. Shoring/Bracing plan(s) shall be designed and stamped by a Structural Engineer licensed to practice in the State of Connecticut and approved by the project engineer prior to the start of work.
- b. Any and all work in or along edges of roadways will be coordinated and scheduled with the proper authorities two weeks prior to beginning work.
- c. Protect all open excavations, access and haul roads, and staging areas as required.

8) Dumpsters, Clean-up & Waste Removal:

- a. This Subcontractor shall provide chutes, dumpsters and whatever other disposal tools are required for its Work and the work of its subcontractors. This Subcontractor is responsible for all necessary cleanup associated with the Work and Contract Documents and shall provide all necessary manpower and equipment for proper disposal. Cleaning is necessary in order to maintain a safe working and productive environment, and will be strictly enforced by the on-site Construction Management and supervisory personnel.
- d. Given this Subcontract responsibility, the Subcontractor is required to perform all necessary clean-up associated with the Work, and shall provide the necessary personnel and equipment to bring out all debris and dispose of safely and properly. All First Floor debris which cannot be disposed of in debris chutes, or debris carts must be placed directly into the appropriate dumpster. If it is determined by the Fusco onsite personnel that the Subcontractor is failing to perform the clean-up responsibilities, they will be put on notice and given a single work day to rectify this failure. If it is not rectified within that 24 hour period Fusco will upon written notice immediately perform this delinquent clean-up work and will back charge the appropriate Subcontractor for all costs incurred by Fusco in the performance of this cleanup.
- e. Subcontractor is to maintain a clean and safe work area. Housekeeping is a daily priority. The Subcontractor is responsible for daily clean up of their Work and debris. If the Subcontractor fails to clean up, all material and debris will be cleaned up by others and all costs associated will be charged to the responsible Subcontractor. In the event this Subcontractor encounters labor jurisdictional issues over this Work, this Subcontractor agrees to make whatever arrangements or provisions required to complete same and has included all associated costs.
- f. Any trucks leaving site with loads must be covered by this Subcontractor.

9) Minor Work/Provisions:

This Contractor shall carry in their base bid the **removal of 150 additional mudded insulation on pipe fittings/elbows above ceiling and behind walls/pipe chases.**

This Contractor shall carry in their base bid the **removal of 200 additional linear feet of asbestos containing pipe insulation.**

10) CLARIFICATIONS

- a.) The Structure Demolition, Selective Demolition and Abatement Subcontractor shall include:
1. The Structure Demolition, Selective Demolition and Abatement Contractor must undertake the exterior wall demolition in order to salvage the required amount of face brick. This Contractor shall be responsible for cleaning all salvaged brick, stacking them neatly on pallets, and covering them with shrink wrap. Once completed they shall be turned over to the Masonry Trade Contractor who shall be responsible for protecting them and ultimate use in closing up existing openings. In the event this Contractor is unable to satisfy the required salvage quantities, the burden shall be on this Contractor to substantiate why the required quantities were not attained, and in the sole discretion of the Construction Manager, this Contractor may be responsible to provide brick at its own cost to attain the required quantity.
 2. Remove and properly dispose of all roof penetration/perimeter flashing as ACM typical unless otherwise noted. Replace flashing that is removed by this Contractor with a temporary flashing that is weather tight and acceptable to the Construction Manager.
 3. Provide the removal of the grease interceptors including but not limited to the pumping and proper disposal of all grease, fat and solids that remain in the tanks.
 4. Provide OSHA safe sloping to the satisfaction of the Construction Manager, in its sole discretion, at all underground removals.
 5. Sheet INFO.2 – Include all sawcutting at slabs and all building sawcutting. Include all building sawcutting for mechanical, plumbing and electrical work.
 6. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
 7. Sheet ASB-1 - Include all work indicated on this sheet except for the “Work To Be Performed By Term Contractor”.
 8. Sheet ASB-2 - Include all work indicated on this sheet except for the “Work To Be Performed By Term Contractor”. Include all the work for the note indicating ‘REMOVE ALL ACM VINYL FLOOR TILE AND MASTIC PRESENT BENEATH LOCKERS IN CORRIDOR (TYP).’
 9. Sheet PCB-1 - Include all work indicated on this sheet.
 10. Sheet PCB-2 - Include all work indicated on this sheet.
 11. Sheet PCB-3 - Include all work indicated on this sheet.

12. Sheet PCB-4 - Include all work indicated on this sheet.
13. Sheet PCB-5 - Include all work indicated on this sheet.
14. Sheet PCB-6 - Include all work indicated on this sheet.
15. Sheet PCB-7 - Include all work indicated on this sheet.
16. Sheet PCB-8 - Include all work indicated on this sheet.
17. Sheet D-101 - Include all work indicated on this sheet.
18. Coordinate with other trades and remove all ACM flashings at exterior walls and other locations required for penetrations. Replace all removed flashings to ensure that all buildings remain water tight at all times during construction and after project completion.
19. Sheet D-102 - Include all work indicated on this sheet.
20. Sheet D-104 - Include all work indicated on this sheet.
21. Sheet D-105 - Include all work indicated on this sheet.
22. Sheet D-106 - Include all work indicated on this sheet except for Specific Demolition Note A7 indicating to remove the existing gymnasium court markings and Demolition Note 117 indicating to remove floor sleeve covers. Work described in Specific Demolition Note A7 and Demolition Note 117 to be completed by Carpet, Resilient & Wood Flooring Subcontractor.
23. Sheet D-107 - Include all work indicated on this sheet.
24. Sheet D-108 - Include all work indicated on this sheet.
25. Sheet D-109 – Include all work indicated on this sheet. Include all of the abatement and demolition for “D” Wing and “G” Wing (including “D” Wing roof which will be demolished and abated by this Contractor). – **ADD. NO. 2**
26. Sheet D-110 - Include all work indicated on this sheet including for the demolition of all of "D" Wing and "G" Wing.
27. Sheet D-111 - Include all work indicated on this sheet including the demolition of all of "D" Wing and "G" Wing.
28. Sheet D-112 - Include all work indicated on this sheet except for work at equipment noted to be reused. Equipment noted to be reused will be addressed by the Food Service Subcontractor. Legally capture and dispose of any refrigerant in items to be disposed of including kitchen equipment, mechanical equipment, and any other equipment in the project.
29. Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work. Include all items relating to sawcutting and demolition or removal of materials.
30. Sheet S-100 General Note 4 – Provide all shoring necessary for this scope of work.
31. Sheet S-102.2 – Include all sawcutting at slabs and all building sawcutting.
32. Sheet S-102.3 – Include all sawcutting at slabs and all building sawcutting.
33. Sheet S-103.1 – Include the demolition of the existing piles as indicated.
34. Sheet S-103.4 – Include all shoring.
35. Sheet S-220 Detail 1 – Include the demolition of the concrete keys.
36. Sheet S-220 Detail 4, 8 and 10 – Include all sawcutting at slabs and all building sawcutting.
37. Sheet S-221 Detail 12 – Include the demolition of the foundation wall.
38. Sheet S-221 Detail 15 – Include the removal of concrete slab needed to achieve specified new concrete thickness.

39. Sheet S-221 Detail 13 - Complete all interior and building saw cutting including saw cutting needed to complete the work of other trades. Include saw cutting the slab for new footings and saw cutting for all utilities.
40. Sheet S-222 Detail 28 – Include the removal of slabs on grade as indicated.
41. Sheet S-320 Detail 1 – Include concrete removal to achieve specified thickness.
42. Sheet S-320 Detail 9 - Include cutting the beam pockets in the existing walls.
43. Sheet S-321 Detail 13 – Include all demolition including the sawcutting and demolition of the gyp deck.
44. Sheet S-321 Detail 15 - Include shoring and all provisions necessary to support the parapet wall at the roof as shown.
45. Sheet S-323 Detail 38 - Include all shoring.
46. Architectural Drawings – Include all demolition and abatement indicated in the architectural drawings.
47. Sheet A-102.1 – Include removal of wood flooring and concrete as indicated.
48. Sheet A-102.2 – Include removal of wood flooring as indicated.
49. Sheet A-110.0, A-110.1 and A-110.2 – Include Roof Demolition Notes 9, 12, 16, 17, 18, 19, 22 & 23 typical and as noted.
50. Sheet F-102.2 – Include demolition of all wood flooring to be demolished including the wood flooring in the new Theory Room B111.
51. Sheet P-003.2 - Include all interior building slab sawcutting and demolition required for new and existing utilities and included for the demolition of utilities including as shown on this sheet.
52. Sheet E-103.3 - Include all slab demolition for floor boxes throughout the project including in the Lobby C102B.
53. Include all hazardous material abatement including the removal of all asbestos, lead and PCBs and all other hazardous materials.
54. Include the construction, maintenance, and removal of all barriers required to isolate the abatement areas.
55. Include all demolition and abatement required for the construction of temporary school spaces. Include demolition in Building D for the construction of two temporary classrooms which will include the removal of flooring and items attached to the floors and walls.
56. Saw cut or chip out slabs as required and indicated to achieve the specified drainage. See Sheet S102.1 as an example.
57. Include the demolition and removal of all existing items not shown to remain and as directed by the Construction Manager. This includes the demolition and removal of all remaining equipment not shown in the drawings but observed during the Pre-Bid Conference located throughout the project including in the shop spaces and garage.
58. Include Demolition of “D” Wing (listed as “D” Wing and “G” Wing on some sheets).
59. Include demolition of the garage as a separate phase as directed by the Construction Manager.
60. Protect the existing science lab teacher and student work stations as they will be removed and relocated by the General Trades Subcontractor.
61. Include demolition of any temporary construction, rooms and spaces.
62. Include demolishing the flooring and base in the elevator cab.
63. Include all sawcutting at slabs and all building sawcutting throughout the project.

64. ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
 - a. BP#1.01 Site Preparation*;
 - b. BP#2.01 Demolition & Abatement*
 - c. BP#7.01 Roofing – **ADD. NO. 2**
 - d. BP#31.04 Athletic Fields*
 - e. *These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.
65. Include the removal of walls and windows as needed for removal of existing boilers and other equipment (by others) and for installation of new boilers (by others) and installation of other equipment (by others) in the boiler room.
66. Include off-hours work as directed by the Construction Manager as required to minimize impact to the school. No extra compensation will be issued for off-hours work.
67. Provide manifests and other specified documents for abatement and removal to the Construction Manager as indicated in the specifications, all applicable codes and laws.
68. Include the demolition and lawful disposal of all in-wall/window air conditioning systems.
69. Include paying for and obtaining all permits including but not limited to asbestos disposal authorizations, asbestos abatement notifications, asbestos management plans, demolition notification forms, lead-based paint, building demolition permit, and all other permits and fees related to this scope of work.
70. Specification 024216.2.3.E.2 – After Building Demolition leave all remaining excavation (hole slopes) OSHA safe. Backfill by the Bid Package 31.01 Sitework Contractor. – **ADD. NO. 1**
71. Provide removal and proper disposal of the caulk, window and four courses of CMU below the sill typical and as noted on PCB-6. – **ADD. NO. 2**

EXCLUSIONS

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package 3.01
Concrete**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Concrete** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Concrete** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and General Contractor. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) BID PACKAGE #3.01 – Concrete:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Concrete** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

033000	Cast-In-Place Concrete
035319	Concrete Densifier/Sealer/Hardener
035400	Self-Leveling Underlayment
051200	Structural Steel (As Applicable)
053100	Metal Decking (As Applicable)
055000	Metal Fabrications (As Applicable)
055100	Metal Stairs (As Applicable)
072100	Building Insulation (As Applicable)
078413	Through-Penetration Firestop Systems (As Applicable)
078443	Fire Resistive Joint Systems (As Applicable)
Division 21	Fire Suppression (As Applicable)
Division 22	Plumbing (As Applicable)
Division 23	Mechanical (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)
Division 31	Earthwork (As Applicable)
Division 32	Exterior Improvements (As Applicable)
Division 33	Utilities (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.:
BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Cast-in-Place Concrete and Accessories; Concrete Forms; Shores and Re-Shores; Admixtures; Curing Materials and Compounds; Bonding Agents; Adhesives; Interior Pads for Mechanical/Electrical Equipment per the MEP drawings; Housekeeping Pads; Concrete Reinforcement; welding of reinforcement, Wire Welded Mesh, Slabs on Grade; Slabs on Metal Deck; Concrete Fill for Metal Pan Stairs; Vapor Barriers; Opening Blockouts; Water Stops; Anchor Bolt Placement and Layout; Grouting of Columns Bases; Grouting of Bearing and/or Leveling Plates; Installation of Embedded Items; Elevator Wall Footings/Pit/Sump; Concrete Buttress Walls; Concrete Haunches, Lightweight Concrete; Drilling and Grouting of Reinforcing; Drilling and Epoxy of Reinforcing; Slab Expansion Joints; Sawcutting of Slab Control Joints; Setting of Anchor Bolts; Grouting of Base Plates; Concrete Foundations Scored Forms; Rubbing of Exposed Concrete; Winter Protection of Concrete Placements; Masonry Shear Wall Footings; etc.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Structural and Site Excavation, Bedding and Backfill:

The Sitework Subcontractor shall provide Excavation, Bedding, Backfill for the Concrete Subcontractor for all structures including: Structures Footings and Foundations.

5) Vapor Barriers:

The Concrete Contractor shall provide all Under-slab Vapor Barriers and vapor retarders and accessories as noted on the Contract Documents.

6) Sumps and Pits:

This Concrete Subcontractor is responsible for all sump pits and elevator pits. Excavation and backfill will be by the Site Work Subcontractor.

7) Metal Pan Stairs & Decks:

- a. The Concrete Contractor shall install Concrete Fill, Wire Mesh, Reinforcing Bar, Nosing (if applicable) to all Metal Pan Stairs and Platforms and decks in accordance with the Contract Documents. The placement of concrete for the above mentioned work must be scheduled as a separate placement from any concrete/slab placements. The Concrete Contractor is responsible for providing, installing, removing and disposing of temporary wood slip resistant stair treads in all stairs/landings and cleaning (include vacuuming to a spotless condition) of pans prior to placement of concrete. The temporary treads shall be installed immediately after steel stair erection and will remain in place until concrete fill is ready to be placed.
- b. The Concrete Contractor must provide protection, barricades, etc., for the entire process of the above work. This includes protecting and cleaning stair components including any adjacent surfaces from concrete splatter. This also includes repairing any resulting damage to the satisfaction of the General Contractor.
- c. The Concrete Contractor shall provide concrete and reinforcing at all Cast in Place Concrete Stairs, Metal Pan Stairs, and Ramps, and include all including Cast in Nosings (note also indicated in Structural Steel) and embeds with the exception of any Site Concrete Stairs as shown on the Contract Documents. All Site Work Concrete shall be provided by Sitework Contractor.

8) Structural Steel Coordination and Embeds:

- a. The Concrete Contractor shall layout and install Leveling Plates, Bolts, Inserts and other Structural Elements (including grouting of same) that are to be incorporated into the concrete work. The above steel materials shall be provided by others for installation by the Concrete Contractor.
- b. This Subcontractor shall coordinate the location of and include the unloading and installing of all embeds, bolts, anchor bolts, inserts and/or sleeves with the appropriate trade Subcontractor to ensure that they are installed in the proper locations.
- c. This Subcontractor will coordinate and install all embedded hardware, inserts and blockouts required to connect the structural members to foundation system.
- d. The Structural Steel Contractor will provide a certified survey of installed anchor bolts and bearing plates and/or leveling nuts prior to scheduled start of structural

steel erection. This Contractor will correct any errors immediately upon notification of any work that must be corrected so that the Structural Steel Contractor will not be delayed.

- e. The Concrete Contractor is responsible to unload, receive, inventory (verify quantities on the spot), store (as approved by CM) and then install all embeds, anchor bolts, base plates (as required) nuts and washers, angles, frames, plates, channels, or any other steel component noted to be cast into the concrete as an embedded item, provided by others to be installed in the work of this bid package.
- f. The Concrete Contractor shall properly store, maintain and turn over the proper quantity of nuts and washer to the Steel Contractor/Erector.

9) Grouting and Dry-Packing:

The Concrete Contractor shall provide all grouting and/or dry-packing throughout, including but not limited to grouting of column bases, bearing and leveling plates, unless specifically specified to be provided by others.

10) Pipe and Tube Railings:

The Concrete Contractor shall install Inserts, Anchors, etc. as provided by others, into the concrete to allow for the installation of pipe railings, tube railings, and guard rails provided by others.

11) Winter Protection, Dewatering and Runoff Control:

- a. The Site Subcontractor shall provide all dewatering and surface water control for all open excavations, foundations, footings, access and haul roads, and staging areas as required until the site drainage system has been completed.
- b. The Site Subcontractor shall provide and maintain all winter protection up to the point where the area is taken over by the Concrete Subcontractor. The Sitework Subcontractor shall include preparation, protecting and/or pre-heating/thawing (including but not limited to blankets, ground heaters, etc.) required to complete its Work and will provide the Concrete Subcontractor with “non-frozen” conditions.
- c. The Concrete Subcontractor will be responsible for Winter Protection and Dewatering its own Work. This Contractor shall include Cold/Hot Weather Concrete placing procedures per current revision to ACI 306-88 including all required temporary heat, and blankets. This shall include time to stay late and complete the winter conditions Work. This Subcontractor includes all labor, materials, and equipment necessary to provide snow, ice and water removal that affects the performance of this Scope of Work.

12) Housekeeping Pads:

The Concrete Contractor shall include in the Contract Value all Housekeeping and Equipment Pads as noted on the Contract Documents. The Concrete Contractor shall coordinate the size and location of all pads with the respective trade contractor supplying that equipment.

House Keeping Pad design shall be the responsibility of the Subcontractor whose equipment is placed on the pad and in accordance with the Contract Documents. The Concrete Subcontractor shall form, place, install any embeds and finish the concrete housekeeping pads and curbs as shown on all Contract Documents. Any necessary seismically designed work that needs to be incorporated into the pads shall be the responsibility of the Subcontractor who requires the seismically designed housekeeping pad.

13) Sleeves:

The Concrete Contractor shall install all sleeves and/or inserts as indicated on the Contract Documents into the Work. Sleeves and Sealing of same shall be provided by the Contractor providing the Sleeve. This includes coordinating and providing all openings in formwork for other trades as required. This includes penetrations in walls and slabs for MEP items and any related gym equipment as noted on the contract documents. Sleeves and/or Inserts at Metal Decks shall be furnished and installed by the contractor requiring that sleeve or insert.

14) Joint Sealant/Fillers:

The Concrete Contractor shall provide Joint Sealant, Joint Fillers and Premolded Joint Fillers at Construction Joints, and Control Joints within the Concrete Contractors Scope of Work and as shown and as required for all Concrete-to-Concrete work. This includes but not limited to the construction of Joints by saw cutting, forming of cold pours, etc.

15) Concrete Delivery:

- a. This Subcontractor shall be responsible for cleaning and blowing off all surfaces prior to Concrete Delivery and Placement, including but not limited to, metal deck.
- b. This Subcontractor is responsible for transporting all concrete from source to final destination. This includes, but not limited to, the use of cranes, buckets, concrete chutes, concrete pumps, slick lines, conveyors, buggies, etc. which shall be provided by this Subcontractor where and as required. Staging and location of concrete trucks, etc. will be coordinated with, and approved by Fusco Corporation.
- c. This Concrete Subcontractor will work closely with the Site Work Subcontractor to coordinate the scheduling and excavation for concrete footing/foundations as shown.
- d. This Concrete Subcontractor shall provide the specified vapor barrier before placing the slab on grade.

- e. This Concrete Subcontractor shall provide all water stops as required.
- f. This Concrete Subcontractor shall provide all shoring and re-shoring, as required whether shown or not shown, to complete the Work.
- g. This Subcontractor is responsible for providing concrete to the jobsite that meets or exceeds the specified concrete mix, and the guarantee of test results meeting 28 day strength. This Subcontractor includes all costs of testing for defective concrete and rebar placement where and when directed by Fusco Corporation. Any extra cylinders, coring, Windsor Probe (etc.) or testing of any kind required for non-conforming items will be at this Subcontractor's cost.
- h. This Concrete Subcontractor will assist the testing agency taking the necessary concrete ready-mix samples to be tested. This Subcontractor will be responsible for providing the testing agency with an area large enough for cylinder slump testing, next to the designated/specified testing location, whether at point of discharge from the concrete truck, end of chute from pump truck or slick line, or at point of placement. Also provided and maintained by this Subcontractor shall be two (2) insulated concrete curing boxes with inside dimensions of 5' x 3' x 2'-6" high. Each curing box will be equipped with a Hi/Low thermometer and an interior outlet for heaters and lighting. Heaters, lighting and Hi/Low thermometers are to be provided by this Subcontractor. Each curing box will be insulated to maintain specified temperatures of 60-80 degrees prior to transfer of molds to testing lab. It will be this Subcontractor's responsibility to locate these boxes to the required location prior to the start of concrete placement. It is also this Subcontractor's responsibility to provide concrete pour cards designating locations, elevations, outside temperature and weather conditions, and expected quantities prior to placement.

16) Reinforcement:

- a. The Concrete Contractor shall provide Concrete Reinforcement as noted on the Contract Documents.
- b. The Concrete Contractor shall drill and epoxy all reinforcing bars and hooks into existing substrates abutting new concrete as noted on the Contract Documents. The Concrete Subcontractor shall drill and epoxy for all items indicated to be imbedded in new or existing concrete.
- c. The Concrete Trade Contractor is responsible to furnish and install all reinforcing steel, anchors, dowels and accessories within his or her Scope of Work as noted on the Contract Documents. All reinforcing entirely in Masonry Walls and/or Partitions shall be provided by the Masonry Contractor. All reinforcing bars from any concrete slab to unit masonry or concrete shall be furnished and installed by the Concrete Contractor or may be drilled in by the Mason Contractor as approved by the Structural Engineer. – ADD. NO. 2
- d. The Concrete Contractor is responsible for supplying and installing all reinforcing steel, wire welded mesh, any necessary or required supports and required shop drawings to complete this scope of work.
- e. All reinforcing steel from any concrete placement must be tied in place and inspected prior to placement of any concrete. Additionally, all reinforcing steel

from any concrete structure to any unit masonry or to any other concrete structure (I.E. concrete footing to concrete wall, etc.) shall be installed by the Concrete Contractor or may be drilled in by the Mason Contractor as approved by the Structural Engineer. If for any reason the Concrete Trade Contractor misses any reinforcing steel, anchors, dowels or accessories, the Concrete Trade Contractor at his or her expense shall make any necessary corrections or changes as approved by the Engineer. – **ADD. NO. 2**

- f. All reinforcing steel must be kept organized and out of any soil or mud. Additionally, all cutoffs, scraps, etc. must be disposed of on a DAILY basis.
- g. All reinforcing causing a safety issue of falling upon or walking into shall be protected by the Concrete Contractor.

17) Concrete Finishing:

- a. This Subcontractor includes all labor, materials, and equipment necessary to strip all forms, and break off ties. All concrete forms must be in like-new condition and free of any defects. All excess slag, concrete or slurry spills, will be removed and rubbed smooth. Walls, columns, slab on grade, slab of deck or ramps not conforming to specified and or ACI tolerances will be removed and replaced at this Subcontractor's cost.
- b. It shall be the responsibility of this Subcontractor to check and accept excavations and sub grades established by the Sitework Subcontractor, to ensure they were established within the required tolerances prior to placing concrete. All site work shall be graded within ½". Any deviation or issues with the sub grade needs to be reported to Fusco Corporation prior to placing concrete.
- c. All dowels and dovetail for CMU to be coordinated and placed by this Subcontractor and provided by others.
- d. This Subcontractor includes all labor, material and equipment necessary to saw cut control joints.
- e. This Subcontractor shall coordinate, supply and install all construction/control joint material as shown on Contract Drawings and/or as described in the Specifications, and as required for all concrete-to-concrete Work and concrete-to-steel Work at column diamond locations and concrete-to-masonry or any and all existing substrates, and shall coordinate and perform all saw cuts for control joints for SOG as indicated on the drawings, including all caulking and sealants.
- f. This Subcontractor includes all labor, materials, and equipment necessary to furnish and install admixtures, curing materials and compounds, bonding agents, adhesives and concrete sealers as specified.
- g. Exposed Concrete Foundation Walls shall be finished in accordance with Contract Documents.

18) Concrete Washouts and Debris:

The Concrete Contractor shall remove and properly dispose of all concrete debris, formed concrete demo, spoils, and concrete accumulated from truck/pump wash outs.

This Contractor is responsible for cleaning and /or washing down the tires of his or her construction/concrete vehicles and equipment including but not limited to visitors and vendors exiting the site at the anti-tracking aprons located at each construction entrance to avoid tracking mud, dust, and etc. from the site and onto public streets.

19) Concrete Haunches and Thickened Slabs:

The Concrete Contractor shall provide any concrete haunches and thickened slabs as noted on the contract documents.

20) Rigid Under Slab and Foundation Insulation:

All Extruded-Polystyrene Insulation inside and outside and underneath the Foundation walls and footings, where indicated on the Contract Documents, shall be furnished and installed by the Sitework Subcontractor.

21) Floor Recesses:

The Concrete Contractor shall provide and coordinate with the General Trades Subcontractor and Flooring Subcontractor any and all recess in any concrete slab as required for floor finishes.

22) Waterstop:

The Concrete Contractor shall provide all Waterstop as noted on the Contract Documents.

23) Substrates:

- a. The Concrete Contractor shall prepare substrates so that they meet or exceed the requirements of the specification for the final finishes. The Substrate shall meet or exceed flatness, levelness and/or surface texture required per the contract documents.
- b. The Concrete Contractor shall review the Specification Divisions related to all Finished Flooring and verify that the substrate and substrate finish anticipated is achievable and there are no conflicts with the contract documents as it related to the Flooring Contractor floor finishes. It is the responsibility of the Concrete Contractor to coordinate all curing and sealing compounds with the Flooring Contractor to verify compatibility with all flooring adhesives and installation methods. This Contractor shall notify the Fusco Corporation of any conflicts or deficiencies prior to placing of any slabs.
- c. The Concrete Contractor shall coordinate the Work, including but not limited to additives and curing methods, for compatibility with the Flooring Contractors, the Architect and specified Flooring Adhesives.

24) Duct / Equipment, Slab Edges and Openings:

- a. Any closures or bulkheads required for the placement of concrete shall be constructed of wood and shall be furnished and installed by the Concrete Contractor. This shall include, but not limited to, mechanical/electrical box-outs, chase spaces, curbs, mechanical pads, box-outs for drainage, etc., that are shown on the contract documents. It shall be the responsibility of the Mechanical, Plumbing, Electrical and Fire Protection Contractors to furnish and install all required floor sleeves and appropriate fire seal ratings.
- b. The Structural Steel Subcontractor shall furnish and install framing and support steel for Ducts, Equipment and other openings as indicated on the Contract Drawings. The Structural Steel Subcontractor shall coordinate framing for these openings with the appropriate Contractor.

25) Expansion Joint Assemblies:

- a. The Concrete Contractor shall perform all box-out work as required for floor and wall expansion joint assemblies.

26) Food Service Freezer / Cooler:

- a. The Food Service Equipment Contractor shall coordinate with the Sitework Subcontractor and Concrete Subcontractor for the size and locations of all depressions.
- b. The Concrete Contractor shall provide the Concrete Fill for the Freezer / Cooler floors.

27) Hollow Metal Doors, Door Frames and Access Doors:

- a. The General Trades Subcontractor shall Furnish, Receive, Handle, Distribute, Set, Protect, Install and Adjust all Steel/Hollow Metal Doors, Borrowed Lights, Vision Panels and including all other Hollow Metal Frames and access doors, including access doors furnished by others, Hollow metal frames contained within Masonry Partitions and Concrete Partitions (if required-openings/forming by Concrete Contractor) shall be set and plumbed by the General Trades Subcontractor who will work with the Masonry Subcontractor/Concrete Subcontractor to ensure that the frames are blocked and grouted as set by the General Trades Subcontractor. The General Trades Subcontractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trades Subcontractor, from damage during grouting operations.
- b. The General Trades Subcontractor shall furnish all access doors and panels that are shown on the Contract Drawings to be installed by the Masonry Subcontractor in his or her partitions/work and the General Trades/Acoustical Contractor in his

or her partitions, drywall ceilings, acoustical ceilings/work. Any access doors or panels (consistent with the surrounding assembly) that are not shown on the Contract Drawings, but required by the Plumbing, Mechanical, Fire Protection or Electrical Contractors, shall be provided by the Contractor who requires the access doors or panels. The access doors or panels shall be furnished to the Mason Contractor for installation in his or her work and the General Trades/Acoustical Contractor into his or her partitions, drywall ceilings or acoustical ceilings.

28) Concrete Pumping and Concrete Tickets:

- a. The Site Work and Concrete Contractors shall be responsible for any and all concrete pumping including any approved necessary means to place concrete for their work. Additionally, original copies of concrete tickets after every concrete delivery shall be provided to the Construction Manager.

29) Additional Concrete:

The Concrete Contractor shall include any and all additional concrete required to compensate for the deflection of beams and metal deck.

30) Concrete Slab Finish / Curing:

All slabs shall be wet cured in addition to and prior to any other specified curing methods not in the Contract Documents. The Concrete Contractor shall also coordinate the slab finish as specified and depicted in the flooring specifications.

31) Concrete Testing Boxes:

The Concrete Contractor shall assist the Owner's testing agency taking samples that need to be tested. This Contractor shall provide two (2) insulated wood boxes no larger than 5' wide x 3' long x 2'-6" feet high with hinged access doors for easy access, including heat if necessary. This Contractor shall move cylinders to a location on site as prescribed by the General Contractor.

32) Keyways:

The Concrete Contractor shall provide wood keyways that are fixed into any form and shall be removed with or when the forms can be contractually removed. No dragging of Angle Irons or any other material can be used as keyways.

CLARIFICATIONS

- a.) The Concrete Contractor shall include the following work:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Furnish and install all concrete reinforcing and rebar.
3. Sheet C-18 Detail 3 - Include all concrete work indicated in the detail listed. Include attachments for Artwork. Coordinate with artist by Owner.
4. Sheet D-105 – Include new concrete structure project north of existing Culinary Kitchen and coordinate with General Trades Subcontractor.
5. Sheet EV-101 - Provide concrete, reinforcing and vapor barrier and geotextile grid for the active soil depressurization radon systems.
6. Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work.
7. Sheet S-100 – Include all work indicated related to cast in place concrete, reinforcing and bonding agents. Provide all shoring necessary for this scope of work as indicated under General Note 4.
8. Sheet S-101.1 – Include all work indicated on this sheet. Include all drilling and doweling into concrete with epoxy.
9. Sheet S102.1 – Include all house keeping pads.
10. Sheet S102.2 – Include slab and footings for dust collector. Also see mechanical drawings for information.
11. Sheet S104.6 – Include all house keeping pads.
12. Sheet S-106 Include all concrete work as applicable to this scope of work as indicated on this sheet for the E House.
13. Sheet S-201 – Include all work indicated on this sheet.
14. Sheet S-202 – Include all work indicated on this sheet. Include compressible filler.
15. Sheet S-210 – Include all work indicated on this sheet. Include installing all items embedded into concrete. Furnish and install the galvanized angle shown in detail 2 and 10 /S-210.
16. Sheet S-220 – Include all work indicated on this sheet.
17. Sheet S-221 – Include all work indicated on this sheet. Include concrete bonding agents as required and specified.
18. Sheet S-222 – Include all work indicated on this sheet except for the helical piles. Include pile caps.
19. Sheet S-301 – Include all concrete, grout, and reinforcing in concrete.
20. Sheet A102.1 – Include concrete infill at existing wood flooring.
21. Sheet A-102.2 Detail A – Furnish and install concrete bases for the lockers including the wood sleepers. Furnish and install all self-leveling flooring compounds.
22. Sheet A102.3 – Include all house keeping and equipment pads.
23. Sheet A102.4 – Include all house keeping and equipment pads.
24. Sheet A-103.3 – Include concrete and reinforcing for interior Dango system. Furnish and install all self-leveling flooring compounds.
25. Sheet A104.4 – Include all house keeping and equipment pads.
26. Sheet F-102.2 – Include all self-leveling mix including in new Theory Room B111.
27. Sheet E-103.3 - Include all patching for slab demolition at floor boxes throughout the project including in the Lobby C102B.

28. Include patching or infilling of all concrete floor, wall and roof openings that are indicated on the Contract Documents and coordinate the demolition, plumbing, HVAC, and electrical drawings for existing areas to be removed and infilled.
29. Include vapor and moisture barrier under all new concrete slabs on grade to prevent flooring moisture issues.
30. Include all topping slabs, house-keeping slabs, and equipment pads on top of, inside, or within 20 feet of the buildings.
31. Include all reinforcing.
32. Include all construction joints, control joints, expansion joints, score joints, or any other joints in or abutting the building concrete.
33. Include all leveling of concrete.
34. Include the drilling, doweling, and epoxying for attachment of structural steel to concrete where required. Include drilling, doweling and epoxying for anchor rods and bolts where indicated to be epoxied.
35. Include all building curbs.
36. Furnish and install all compressible materials around columns and any brace frame systems prior to placing concrete.
37. Provide all self-leveling underlayment as indicated in specification section 035400 and the drawings.
38. Strip and remove all form materials.
39. Sheet FS-5 – This Contractor shall box-out for the floor trough drain as furnished by the Food Service Equipment Subcontractor.
40. Sheet E-703 Detail 3 – Include all concrete work indicated in this detail.
41. Furnish and install Barrier-1 concrete moisture vapor reducer admixture at all new concrete slabs.
42. Sheet S103.1 - Include all work for cast in place concrete walls, stairs and slab at the loading dock typical and as noted on S103.1. – **ADD. NO. 1**
43. Sheet S103.3 – Include all work for cast in place concrete piers supporting the entrance canopy typical and as noted on S103.3. – **ADD. NO. 1**
44. Sheet A103.3 – Include all work for the cast in place concrete interior and exterior “Dango” Art Pedestals typical and as noted on A103.3. – **ADD. NO. 1**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1: WINTER CONDITIONS - \$150,000

The Concrete Trade Contractor shall include in its base bid the allowance of **\$150,000** to provide Winter Conditions, i.e., blankets, temporary enclosures, temporary heating devices and temporary heating fuels, etc if required. All other costs required by the Concrete Trade Contractor to perform their work around the Buildings shall be included in this Trade Contractor's Base Bid.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #4.01
Masonry & Precast**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Masonry & Precast** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Masonry & Precast** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #4.01 – Masonry & Precast:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Masonry & Precast** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections,

as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

030130 Concrete Retaining Wall Cleaning & Staining

034100 Plant-Precast Structural Concrete

034500 Precast Architectural Concrete

040120 Clay Masonry Restoration & Cleaning

042000 Unit Masonry Assemblies

042300 Glass Unit Masonry Assemblies

071113 Bituminous Dampproofing

072100 Building Insulation (As Applicable)

076200 Sheet Metal Flashing and Trim (As Applicable)

078413 Through-Penetration Firestop Systems (As Applicable)

078443 Fire Resistive Joint Systems (As Applicable)

079005 Joint Sealants (As Applicable)

10 14 00 Signs (As Applicable)

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Brick and Concrete Masonry Units (CMU's); Interior and Exterior Masonry Restoration and Cleaning; CMU Shaft Walls; Mortar and Grout; Reinforcing Steel; Masonry Joint Reinforcing; Ties and Anchors; Embedded Flashings; Installation of Embedded Flashings provided by others; Masonry Lintels; Steel Lintels (installation only, materials by others); Masonry Accessories; Cavity Wall Insulation; Air and Vapor Barriers; Weeps, Cavity Drainage and Vents; Masonry Cleaners; Water Repellents; Concrete Brick; Compressible Fillers; Grouting of Door Frames Cavity (including elevator frames/jambs); Fire Safing at top of Masonry Walls; Cast Stone; Sills and Water Table; Setting of Beam Pocket Base Plates (beam pocket baseplates – installation only, materials by others); Grouting of Beam Pocket Base Plates (beam pocket baseplates); Grouting Solid All Beam Pockets.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Survey / Layout:

- a. This Subcontractor shall provide all layout required to complete your Scope of Work (including but not limited to base plates layout and elevation per shop drawings by others).

- b. This Subcontractor shall pay particular attention to the survey / layout requirements for installing perimeter relieving angles.

5) Substrates:

- a. The Mason Contractor shall prepare all substrate so that they meet or exceed the requirements of the specification for the final finishes.
- b. The Substrate shall meet or exceed Flatness, Levelness and/or surface texture required.

6) Masonry Debris:

- a. This Subcontractor shall remove and properly dispose of all masonry debris, including but not limited to block, mortar, grout and cutting slurries.

7) Snow, Ice and Water Removal

The Masonry Contractor shall be responsible for all snow, ice and water removal from the staging provided by the Masonry Contractor and as directed by the Construction Manager.

8) Access to Scaffolding:

The Masonry Contractor shall provide others with access and use of the scaffolding erected at the exterior of the building while erected for the purpose of completing the Masonry Work.

9) Winter Conditions and Temporary Heat:

The Masonry Contractor shall provide all necessary Winter Conditions and Temporary Heat for his or her work (Interior and Exterior) in accordance with *ACI 530.1-02 / ASCE 6-02 / TMS 602-02* for the duration of the project. Also see the Contract Documents which contains additional requirements for both Cold and Hot Weather conditions.

10) Special Shapes:

The Masonry Trade Contractor shall provide all special shape bricks and all custom special unit masonry shapes as indicated in the contract documents.

11) Structural Steel and Metal Fabrications:

The Masonry Contractor shall install Bearing & Leveling Plates, Bolts, Inserts, Embedded Angles, Loose Lintels and other Structural Elements that are to be incorporated into the Masonry Work. The above materials shall be provided by others.

Additionally this Contractor shall furnish reinforcing steel to the Structural Steel Contractor (where reinforcing is attached to the Structural Steel by welding) required to complete the Masonry Scope of Work. All layout required for this operation is the responsibility of the Masonry Contractor.

The masonry contractor is responsible to unload, receive, inventory (verify quantities on the spot) and store (as approved by CM) then install lintels, access doors, embeds, elevator hoist beam, beams or any other steel component noted as loose, provided by others to be installed in the work of this bid package.

12) Sheet Metal and Fabric Flashings:

The Roofing Contractor shall furnish and install all Sheet Metal Flashings, Metal Copings, Trim and Roof Accessories as described in the Contract Documents and furnish all exposed Metal through Wall Flashings, including metal reglets for installation by the Masonry Subcontractor.

- a. Any concealed and exposed (partially into **NEW** masonry) flashings and any metal flashing requiring a fabricated bend shall be supplied by the Roofing Contractor and installed by the Masonry Contractor at Cavity Walls, Unit Masonry Steel Lintels, Relieving Angle and other areas in contact with Masonry as indicated on the Contract Documents.
- b. The Roofing Contractor shall furnish and install all Prefinished ZINC Cap, ZINC Fascia and/or Prefinished Aluminum Flashings, Counter Flashings, Copings, Metal Gravel Stops and other Sheet Metal contiguous with the Roofing system.
- c. The Roofing Contractor shall furnish to the Masonry Contractor, for installation into the Mason's **NEW** work, all other Metal Flashing and Metal Thru Wall Flashings as noted in the Contract Documents.
- d. Membrane Flashings contiguous to the Mason's work shall be provided and installed by the Mason Contractor.
- e. The Windows, Glazing and Storefronts Contractor shall furnish and install all Flashings and Sheet Metal that is contiguous with his or her work; such as but not limited to: Flashings required to be installed prior to window or Panel installations.
- f. The Roofing Contractor shall provide all flashings and reglets and accessories into existing masonry as noted on the Contract Documents. This shall include cutting and patching of all reglets into existing masonry necessary to provide a complete system.
- g. The Roofing Contractor shall supply to the Masonry Contractor all flashings and reglets and accessories into new masonry and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Masonry Contractor.
- h. The Roofing Contractor shall supply to the Window Contractor all flashings and reglets and accessories into Window System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar.

The Roofing Contractor shall supply the receiver (reglet) to the Window Contractor.

- i. The Roofing Contractor shall supply to the General Trades Contractor all flashings and reglets and accessories into DAFS System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the General Contractor.
- j. All metal drip flashings shall be furnished by the Roofing Contractor and installed by the Masonry Contractor.

13) Dampproofing:

The Masonry Contractor shall furnish and install air and vapor barriers, rigid insulation, and all damp-proofing as indicated on the contract documents, including, but not limited to the exterior walls, including where the wall passes steel beams and other materials. This Contractor shall provide the cavity construction in its entirety.

14) Building Insulation:

The Masonry Contractor shall provide all Cavity Wall Insulation as indicated on the contract documents, including, but not limited to the exterior walls where the wall passes steel beams and other materials. This includes all compressible filler materials in the wall cavity and all insulation incorporated in the masonry units' cells/cavity. Include all insulation inserts at insulated concrete masonry as indicated.

15) Reinforcement:

- a. The Concrete Contractor shall provide Concrete Reinforcement as noted on the Contract Documents.
- b. The Concrete Trade Contractor is responsible to furnish and install all reinforcing steel and rebar, anchors, dowels and accessories within his or her Scope of Work as noted on the Contract Documents. All reinforcing entirely in Masonry Walls and/or Partitions shall be provided by the Masonry Contractor. All reinforcing bars from any concrete slab to unit masonry or concrete may be furnished and installed by the Concrete Contractor or drilled in by the Mason Contractor as approved by the Structural Engineer. – ADD. NO. 2
- c. All reinforcing steel from any concrete placement must be tied in place and inspected prior to placement of any concrete. Additionally, all reinforcing steel from any concrete structure to any unit masonry may be installed by the Concrete Contractor or drilled in by the Mason Contractor as approved by the Structural Engineer. If for any reason the Concrete Trade Contractor misses any reinforcing steel, anchors, dowels or accessories, the Concrete Trade Contractor at his or her expense shall make any necessary corrections or changes as approved by the Engineer. – **ADD. NO. 2**

- d. The Masonry Contractor shall furnish and Install all reinforcing steel and concrete/grout for “U” block (bond beams-Lintels) and in masonry units. All grouting (including reinforcing bars) of masonry units is the responsibility of the Masonry Subcontractor, including but not limited to, the grouting between steel and masonry units, “U” block Lintels and Masonry Walls.
- e. The Masonry Contractor shall furnish and install all reinforcing in his or her masonry walls and grouting of the cavities solid where any reinforcing has been installed or as grouting is called for in the Contract Documents.
- f. All reinforcing steel must be kept organized and out of any soil or mud. Additionally, all cutoffs, scraps, etc. must be disposed of on a DAILY basis.

16) Drainage Material & Weep Vents:

The Masonry Contractor shall provide all in Wall Drainage Material, “Mortar Net”, Grout Beds and Weeps/Vents as called for on the Contract Documents.

17) Joint Sealants:

The Masonry Contractor shall provide Joint Sealers and Sealants at Expansion & Control Joints, interior and exterior, including all joint sealants that are to be incorporated into masonry work and as indicated on the Contract Documents.

18) Layout/Coordination:

The Masonry Contractor shall layout all walls by painting and snapping lines including openings. The Masonry Trade Contractor shall check for square and parallel after layout is complete and report any discrepancies to the Construction Manager prior to the installation of any masonry units. The Masonry Contractor shall check the floor slab elevations, adjusting base course for level. The Masonry Contractor shall provide a benchmark on all masonry walls and shall snap lines horizontally in order to check from the top of wall to the line to ensure that all coursings are level and in line. The Masonry Contractor shall check all hollow metal frames set by the General Trade Contractor to maintain plumb and level and shall notify the CM if any hollow metal frames were set by the General Trade Contractor out of Plumb and/or level prior to setting any masonry units against frame. The Masonry Contractor shall not remove any door spreaders furnished and installed by the General Trade Contractor until masonry erection is complete. The Masonry Contractor shall provide and layout a storey pole showing all coursing, masonry sills, window openings, door openings, lintels, louvers, etc., to make sure that all coursing is level in line and works from floor to floor.

The Masonry Contractor shall review the Contract Documents for all purposes including but not limited to layout and any discrepancies or omissions that might exist.

The Masonry Contractor shall coordinate with the Structural Steel, General Trades, Window Contractors to establish elevation and plane to allow the metals contractor to set

their hanging lintels and other steel from the building structure to proper elevation and plane of the building face and the work of others.

19) Hollow Metal Door & Frames (Install) and Access Doors:

The General Trades Subcontractor shall Receive, Handle, Distribute, Set, Protect, Install and Adjust *all* Steel/Hollow Metal Doors, Borrowed Lights, Vision Panels and including all other Hollow Metal Frames or access doors furnished by others. Hollow metal frames contained within Masonry Partitions shall be set and plumbed by the General Trades Subcontractor who will work with the Masonry Subcontractor to ensure that the frames are blocked and grouted as set by the General Trades Subcontractor. The Masonry Subcontractor shall be responsible for all cost associated with re-setting any frame that is knocked or banged out of position. The General Trades Subcontractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trades Subcontractor, from damage during grouting operations. The Masonry Contractor shall install all borrowed lights in his or her work as provided by the General Trade Contractor.

The Masonry Contractor shall make provisions to protect the above hollow metal frames and hardware mounting holes protective padding installed by the General Trade Contractor from damage during grouting operations. The Masonry Contractor shall be responsible to grout all hollow metal frames and install access panels. Hollow metal frames and access doors shall be provided by others.

20) Masonry Partition and Bracing Anchorages:

The Masonry Contractor shall coordinate and work in harmony with the Structural Steel Contractor regarding the installation of any required Masonry Partition Anchorage and Bracing Systems. The Structural Steel Contractor shall furnish and install all Partition Anchorage and Bracing Systems as shown on the Contract Documents.

The Masonry Contractor will supply and install all fire safing and smoke sealing at tops of masonry walls, and at control joints in walls. This includes tops of walls at steel decking and bottoms of steel beams. The Mason Contractor will also safe or seal the tops of steel beams to the deck where there is a masonry wall below the beam.

21) Masonry Anchors

The Structural Steel Contractor shall furnish and install all masonry anchors that are to be welded to any steel. (i.e., columns, beams, etc.) The Structural Steel Trade Contractor must weld anchors onto the structural steel and must make any accommodations to these anchors/ties and/or welds to make sure the anchor or tie projects pass the finished coat of the spray fireproofing. This must be done so that the male anchor or tie furnished and installed by the Masonry Trade Contractor does not disrupt the spray fireproofing finish coat. The Structural Steel Contractor shall be responsible for any cost associated with

patching of spray fireproofing if the welded anchor is supplied on site and does not protrude past the spray fireproofing finish coat.

Furnish and install all masonry anchors and expansion/control joint materials including all Dur-O-Wal or equal anchors and expansion/control joint materials.

22) Mockup

The Masonry Subcontractor shall carry all cost to provide and eventually remove all mockups as specified on the concrete pads as listed below.

23) Temporary Enclosures:

The Masonry Contractor shall provide temporary enclosures and/or protection during the construction for his materials, equipment, etc. The Masonry Contractor shall furnish and install roof felt and plywood as needed to protect the new roof where scaffolding must be constructed over the new roof in order to complete the masonry work. Any damage to the new roof caused by the mason's work will be his or her responsibility.

24) Temporary Heating and Cooling:

The patching of holes in partitions made as required for Temporary Heating and Cooling is to be patched by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

25) Temporary Power:

The patching of holes in partitions left by temporary power is to be done by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

26) Seismic Bracing, Clips and Angles at Top of Partitions:

This Subcontractor shall provide Dur-o-wall DA2200 or equal joint stabilizing anchors at top of wall typical and as noted on the Contract Documents. If the anchor requires welding to the structure, the Structural Steel Contractor shall weld the anchor provided by the Masonry Contractor.

27) Temporary Bracing and Support:

The Masonry Contractor shall provide all necessary temporary bracing and support of CMU and/or brick walls as required.

28) Wall-Hung Plumbing Fixtures:

The Plumbing Contractor shall coordinate with the Masonry and General Trades Contractor for installation of any wall anchors required during masonry or drywall wall construction for support of wall-hung plumbing systems. The Plumbing Contractor will be responsible for furnishing and installing all necessary wall anchors or carries in strict accordance with the manufacturer's specification for their wall-hung systems.

29) Grouting of Hollow Metal Frames:

The Masonry Subcontractor shall grout all Hollow Metal Frames as noted on the Contract Documents.

30) Protection of Masonry Work:

The Mason Contractor shall be responsible to cover and protect his or her work for the duration of the project. This includes keeping the tops of walls covered to prevent water, snow, ice, etc., from entering into the concrete masonry unit or the cavity. Once a section of a masonry wall is topped off to the roof line, it shall become the responsibility of the Roofing Trade Contractor to keep all water, snow, ice, etc., from entering into the concrete masonry unit or the cavity until the permanent or temporary cap or cover is installed by the Roofing Trade Contractor.

31) Snow and Ice:

The Masonry Subcontractor shall provide removal of snow and ice from his or her staging and work areas for his or her work.

32) Wash-Out:

The Masonry Contractor shall be responsible for washing out concrete trucks, pumping trucks, pipe lines, etc., for his work off-site (take back to plant) or at a designated place (coordinated with the Site Contractor) on site which can be cleaned and disposed of at his or her expense. Additionally, the cost of cleaning of all concrete, mortar, grouting, etc. splatter from all surfaces immediately after placement of concrete, and repairing any resulting damage to the satisfaction of the Construction Manager shall be included in this Contractor's bid proposal. NO WASHING OF TOOLS, EQUIPMENT, ETC. OR ANY MATERIALS INTO STORM OR SANITARY SYSTEMS.

33) Masonry Demo:

Cutting and patching of existing masonry walls for new opening and penetrations shall be performed by the Masonry Contractor in accordance the Contract Documents. The Masonry Contractor shall cut and patch existing masonry walls as required by the Contract Documents. The Masonry Contractor shall patch existing masonry walls

where any existing item has been removed by others and fastener holes, indentations and other irregularities in the existing masonry walls require patching/restoration.

- 34) New Ductwork Penetrations in Existing Walls:** The Plumbing and Mechanical Trade Contractor and Electrical Subcontractor shall be responsible for laying out all new, plumbing, ductwork, and electrical penetrations that are required to be installed into existing masonry walls. It shall be the responsibility of the Masonry Trade Contractor to cut out the masonry in order for the Plumbing and Mechanical Trade Subcontractor and Electrical Subcontractor to be able to install their work. The Masonry Trade Contractor shall furnish and install any masonry lintels that may be required to support the existing masonry openings.

CLARIFICATIONS

a.) The Masonry Subcontractor shall include:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet C-10 Detail 5 – Include all work above the top of the concrete footing. Include all masonry, cap, flashing, coping caulking, the precast stone sign. Provide shop drawings for this sign at least 8 weeks before the concrete footing is scheduled to be poured and earlier if otherwise noted. Coordinate Cast Metal Letter installation with the BP#10.01 Signage Contractor.
- 3) Sheet C-18 Detail 2 – Include furnishing and installing all brick veneer and coordinate with Sitework Subcontractor.
- 4) Sheet C-18 Detail 3 - Include all granite work indicated in the details listed. Include pedestal base systems with granite. Also include the pedestal base system with granite inside the building as shown on Sheet A-103.3.
- 5) Demolition Drawings Specific Demolition Note A9 – Provide masonry infill at demolition locations as indicated.
- 6) Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work. Include all masonry, masonry reinforcing, mortar, grout, bond beams, joints and other masonry related work. Provide all deformed bars in masonry and give to Structural Steel Subcontractor for welding.
- 7) Sheet S-100 General Note 5 – Provide all temporary bracing, guys, etc. for masonry walls.
- 8) Sheet S-100 – Include all work indicated related to Masonry and Precast Concrete. Include all items under Concrete Masonry Notes and Precast Prestressed Hollow Core Slab Notes. Include masonry lintels as described under Concrete Masonry Note 14. Also, include lintels per Lintel Notes section on this sheet. Included calculations by a professional engineer registered in the state and shop drawings. General Note 4 – Provide all shoring necessary for this scope of work.
- 9) Sheet S-102.3 - Include all work described under the Masonry Chimney Repair Notes. Include all repointing required at the chimney.
- 10) Sheet S-210 Detail 12 – Include all work indicated in the detail listed. Include bond beams in masonry.

- 11) Sheet S-222 Detail 26 – Include drilling through concrete decks and slabs for wall reinforcing and include grout at CMU walls near decks.
- 12) Sheet S-310 – Include all masonry, masonry reinforcing, precast concrete planks, chipping, reinforcing and grout at concrete planks, and perimeter concrete closure pour metal adjacent masonry walls and precast concrete planks.
- 13) Sheet S-310, S-311, S-313 – Provide all deformed bar anchors and weldable rebar that interfaces with masonry to Structural Steel Subcontractor as shown on these sheets and throughout the drawings. Structural Steel Subcontractor will weld as specified.
- 14) Sheet S-313 Detail 37, 38, 39 - Include all chipping, reinforcing and grout at precast concrete planks including at these details.
- 15) Sheet S-401 – Include all work indicated on this sheet except for structural steel , metal deck and concrete slabs and footings. Provide all deformed bar anchors and weldable rebar that interfaces with masonry to Structural Steel Subcontractor as shown on these sheets and throughout the drawings. Structural Steel Subcontractor will weld as specified.
- 16) Architectural Drawings – Include all masonry work in the architectural drawings.
- 17) Sheet A-101.1, A-101.2, A-101.3 and A-101.4 – Include all masonry infill, infill at existing radiators and new door recesses including at the Building A corridors.
- 18) Sheet A-102.2 Detail B – Include all work in the Containment Curb detail.
- 19) Sheet A-103.1, A-103.2, A-103.3 and A-103.4 – Include all masonry work and infill.
- 20) Sheet A-104.1, A-104.2, A-104.3, and A-104.4 – Include all masonry work and infill.
- 21) Sheet A-105.1 & A-105.2 – Include all masonry work and infill.
- 22) Sheet A-110.1 & A-110.2 – Include all masonry work and infill. Include infill at existing louver vents. Raise masonry chimney.
- 23) Sheet A-804.3 – Include all masonry bases for casework including the casework in room D167 and D168. Include all masonry bases throughout the project.
- 24) Sheet F-003 – Include patching at temporary Fire Department Connection location as required for this scope of work.
- 25) Include any and all necessary sawcutting, cutting and patching in masonry walls. For example, include cutting existing walls to tie in new steel or cutting existing wall for new vent pipe in the wall that cannot be exposed or cutting an existing wall for new electrical outlets or hose bibs. Include Patching of the same. Include patching of existing holes in walls, for example, where old outlets are removed, where old handrails are removed, etc.
- 26) Include drilling and epoxying dowels in concrete and masonry for all masonry work.
- 27) Include all reinforcing inside masonry.
- 28) Provide all joints and sealant at masonry and provide shop drawings for joint locations.
- 29) Pointing holes or defective mortar joints are not acceptable. Cut out and repoint defective joints as necessary.
- 30) Provide all core drilling and patching of cores required for testing.
- 31) Include sack finish as required per plans and specifications.
- 32) Subcontractor is responsible to clean concrete surfaces to receive masonry units. Roughen the foundation bed to expose aggregate and remove loose particles before laying mortar / blocks.

- 33) Clean all existing and exposed clay masonry surfaces as indicated in specification section 040120.
- 34) Furnish and install all stone and slate stools. Include the stools shown typical and as noted in detail 1/A-501.
- 35) Install loose lintels above masonry openings typical and as noted on 9/S401. – **ADD. NO. 2**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1: WINTER CONDITIONS \$150,000

The Masonry Trade Contractor shall include in its base bid the allowance of **\$150,000** to provide Winter Conditions, i.e., tarping, tenting, temporary enclosures, temporary heating devices and temporary heating fuels, etc if required. All other costs including but not limited to for the erection and dismantling of scaffolding required by the Mason Trade Contractor to perform their work around the perimeter of the Buildings shall be included in this Trade Contractor's Base Bid.

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR
ADDENDUM NO. 2

BID PACKAGE #4.01 MASONRY & PRECAST
000930.4.01- 14

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #5.01
Structural Steel & Metal Decking**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Structural Steel & Metal Decking** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Structural Steel & Metal Decking** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **Bid Package 5.01 Structural Steel & Metal Decking:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Structural Steel & Metal Decking** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the

Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

033000 Cast-In-Place Concrete (As Applicable)

051200 Structural Steel Framing

052100 Steel Joists Framing

053100 Steel Decking

055000 Metal Fabrications (As Applicable)

055100 Metal Stairs

078443 Fire Resistive Joint Systems (As Applicable)

116623 Gymnasium Equipment (As Applicable)

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

312000 Building Earthwork (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:
 - i. All Structural Steel; Metal Deck; Metal Stairs; Steel Bar Joist; Anchor Bolts; Inserts; Corrosion Protection; All Steel Galvanizing; Touch-up Painting at Field Welds. Installation of OSHA Compliant Perimeter Protection Cables at all Decks including the Roof;

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Equipment Framing:

This Contractor is responsible to furnish, install and coordinate all steel equipment framing for rooftop equipment, Roof Drains and all other steel supported equipment. In addition to the Structural Drawings, the Steel Contractor shall refer to other Drawings provided for coordination of equipment locations.

5) Stair Erection:

The Structural Steel Contractor shall erect all stairs simultaneously with structural steel erection. If stairs cannot be fabricated and installed concurrently with the steel erection

(per the construction schedule), Subcontractor is responsible to provide temporary stairs and rails with multiple move-ins until permanent stairs are in place.

6) Winter Protection:

This Subcontractor will be responsible for Winter Protection for its Work.

7) Seismic Bracing, Clips and Angles at Top of Partitions:

This Subcontractor shall provide any and all top of wall miscellaneous metal bracing to the structure typical and as noted on the Contract Documents.

8) Perimeter Cable Protection:

The Structural Steel Contractor shall install and maintain OSHA-compliant perimeter protection guardrail cables at all decks. Include one loading leave-out bay at each floor level as requested by the Construction Manager. Removal of perimeter cable protection at all levels (except the roof) shall be by the General Trades Contractor. Removal of perimeter cables at the roof shall be by the Roofing Contractor. Structural Steel Subcontractor shall grind down steel flush at removed post locations.

9) Temporary Pads for Crane:

The Site Work Contractor shall provide **five (5) separate compacted (90% compaction)** dry pads suitable for the crane that will be used in erecting the building structural steel from outside of building foot print as located and as prescribed by the CM. These **five (5) separate compacted pads** shall be a minimum of thirty-five feet by thirty five feet. The Structural Steel Subcontractor shall include any additional pads or provisions needed for its cranes.

10) Leveling and Bearing Plates, Bolts and etc.:

The Structural Steel Contractor shall furnish all interior and exterior loose materials such as but not limited to inserts, frames, anchor bolts, bolts, bearing and leveling plates to the appropriate Contractor for installation into the appropriate assembly.

These items are required to be on site at the start of concrete operations along with a complete set of approved layout drawings and templates.

11) Survey:

The Steel Trade Contractor shall provide all other layout required to perform and complete his or her Work. The cost to replace or repair lost or damage control points shall be charged to the offending Contractor.

The Structural Steel Trade Contractor shall submit (7 full sized paper copies and 1 digital copy) a detailed As-Built Survey of all Anchor Bolts, Base Plates, embedded items, etc., by a Connecticut Licensed Land Surveyor to the Fusco Corporation/Engineer prior to any steel erection. Submission shall be in AutoCAD “.dwg” and Adobe “.pdf” formats and shall highlight any deviations. All cost regarding these submissions is to be included in the Structural Steel Trade Contractor lump sum proposal. Each Submission must be submitted within 3 days of the foundation and bearing plates completion. This survey shall be done in a timely fashion so that any discrepancies can be corrected prior to the start of steel work. Failure to notify the Construction Manager shall be construed as acceptance of the existing condition. If any anchor bolt(s) is not located in its intended position, and the Structural Trade Contractor agrees that it can remain where it is located and with the approval of the Engineers, the anchor bolt(s) can remain, but the Concrete Trade Contractor shall bear any and all costs related to any adjustment or modifications necessary to the column bearing plate(s) or structural steel member to rectify the situation. If the anchor bolt(s) need to be relocated, the Concrete Trade Contractor and the Mason Contractor shall immediately do so without delaying the installation of the structural steel and/or the project schedule.

Additionally the Structural Steel Contractor shall provide a certified (by a Connecticut Licensed Land Surveyor) survey of the plumbness of all columns as well as the elevations of all column splices for submission to the engineer. This survey must be submitted immediately upon the completion of structural steel leveling, plumbing, squaring, etc. (7 full sized paper copies and 1 digital copy in AutoCAD “.dwg” and Adobe “.pdf” formats).

12) Metal Deck:

The Structural Steel Contractor shall furnish and install a complete Metal Deck system and include all items required for a complete functioning system even if details are incomplete. The Structural Steel Contractor shall also provide for all pour stops, edge forms, cover plates, closure strips, roof sump pans, ridge plates, edge angles, and cell closures, shear connectors, framing for all openings, galvanizing and shop priming accordingly.

The Structural Steel Contractor shall install metal decking over all mechanical openings (both new and abandoned). Cutting and removal of the new metal deck at new openings shall be performed by the Trade Contractor using the opening (except for roof drain sump pans which shall be the responsibility of the Structural Steel Contractor).

13) Roof Drain Sumps:

The Structural Steel Contractor shall furnish, install and cut roof drain sumps to accommodate the roof drains.

12) Duct/Equipment, Slab Edges and other Openings:

The Steel Trade Contractor shall furnish and install all metal closures at the edges of slabs, around columns, framed openings, and as required to prevent concrete from passing through any deck or closure. Any additional closures or bulkheads required for the placement of concrete shall be constructed of wood and shall be furnished and installed by the Concrete Contractor. This shall include but not limited to mechanical/electrical box-outs, chase spaces, curbs, mechanical pads, that are shown on the contract documents. It shall be the responsibility of the Mechanical, Plumbing and Electrical Contractors to furnish and install all required floor, wall and roof sleeves.

14) Supplementary Steel and Miscellaneous Support Steel:

The Structural Steel Contractor is responsible to furnish and install any and all bent plates and angles that are indicated on the Contract documents for installation and support of surrounding construction, i.e. bent plates attached to perimeter beams, metal deck, etc., for masonry and drywall wall supports, and masonry wall bracing supports shown on the Contract Documents. This also includes any welding of deformed bars to tops of metal beams for masonry wall supports or reinforcing.

15) Welded Steel Masonry Anchors

The Structural Steel Contractor shall furnish and install all masonry anchors that are to be welded to any steel. (i.e., columns, beams, etc.) The Structural Steel Trade Contractor must weld anchors onto the structural steel and must make any accommodations to these anchors/ties and/or welds to make sure the anchor or tie projects past the finished coat of the spray fireproofing. This must be done so that the male anchor or tie furnished and installed by the Masonry Trade Contractor does not disrupt the spray fireproofing finish coat. The Structural Steel Contractor shall be responsible for any cost associated with patching of spray fireproofing if the welded anchor is supplied on site and does not protrude past the spray fireproofing finish coat.

Additionally this Contractor shall install (weld) re-enforcing steel furnished by the Masonry Contractor required to complete the Masonry Scope of Work.

16) Lintels/Embeds:

The Structural Steel Contractor shall provide all interior and exterior loose lintels, hung lintels, angles, sill angles, steel embeds, plates, non slip stair nosings as noted on the Contract Documents for installation by others. Adhesive anchors from steel into masonry shall be installed by the Structural Steel Contractor.

The Structural Steel Contractor shall coordinate with all contractors (Glass & Glazing, General Trades, Masonry, etc.) for elevation, line, grade typical and as noted on the contract documents prior to installations.

17) Shoring/Bracing and Temporary Connections:

The Demolition and Abatement Contractor shall furnish, install, maintain and remove any shoring and/or Bracing as may be required to complete the demolition scope of work. The shoring shall be coordinated with the Structural Steel Contractor to allow for installation of structural steel. – **ADD. NO. 2**

The Structural Steel Contractor will provide all necessary bracing and temporary connections required for the structural steel scope of work. Included is minor shoring in the existing building where the work requires the Structural Steel Contractor to directly attach to existing structural steel – **ADD. NO. 2**

18) Touch Up Paint/Shop Priming

The Structural Steel Contractor shall be responsible for touch up painting of field welds. The Steel Fabricator shall be responsible for all shop priming. Additionally, the Structural Steel Contractor shall touch-up paint any damage in the field especially to the steel receiving High Performance Coatings.

19) Temporary Power:

Temporary power may not be available at the building; include any generators required to provide temporary power for the steel work operations. Regardless if the power is available or not, this Contractor is to furnish, supply and pay for all gas/diesel or generator driven equipment to erect and weld the steel and all cost associated with this is ***to be included*** in this Contractor's proposal. All electric generators shall have noise abatement features.

20) Roof/Slab Openings:

The Structural Steel Contractor is responsible to carry all slab and roof frame openings as shown on the Contract Documents, including but not limited to architectural, mechanical, electrical and structural drawings.

21) Hangers/Supports/Dunnage:

The Structural Steel Contractor shall furnish and install all supporting steel work shown on the contract documents for support of rooftop equipment and rooftop units. The Mechanical/HVAC/Plumbing Contractor shall be responsible for providing any loose dunnage required for proper installation of any rooftop equipment and rooftop mechanical units.

22) Miscellaneous Framing:

The Structural Steel Contractor shall provide all steel framing as noted on the Contract Documents to support Exterior Building Skins and Soffits.

The Structural Steel Contractor shall provide all soffit, window, Aluminum Storefront, Aluminum Curtain-wall, skylight, parapet, structural incidental and miscellaneous steel framing.

23) Anchor Bolt Templates:

The Structural Steel Contractor shall furnish 20 gauge steel anchor bolt templates (1 per each anchor bolt configuration) to the Concrete Trade Contractor prior to placing of concrete foundations with anchor bolts.

CLARIFICATIONS

a.) The Structural and Contractor shall:

- 1.) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2.) Sheet S-100 – Include all work related to structural steel indicated on this sheet including all items listed under Structural Steel Notes, Steel Joist Notes, and Steel Deck Notes. Also include the work under Concrete Masonry Note 14 and furnish and install hung steel lintels and furnish only loose lintels at locations where steel lintels are shown and where required at masonry openings. Include lintels per Lintel Notes section on this sheet. Include shop drawings and calculations for structural items. Include all connections, welding, and hardware. Provide all shoring necessary for this scope of work as indicated under General Note 4. – **ADD. NO. 2**
- 3.) Structural (“S”) Drawings – Furnish and install all metal indicated in the structural drawings except for reinforcing bar for concrete and masonry. Include all beams, columns, base plates, bent plates, lintels, roof framing, roof penetration framing, braces, connections, metal deck, deck closures and edge form, stairs, clips, angle, shims, threaded rods, headed and threaded studs, embeds, bolts, metal framing and welded studs, stiffener plates, outriggers, struts, trusses, fascia, anchor bolts, kickers etcetera.
- 4.) Sheet S-100 Structural Steel Note 11 - All exterior steel and bolting to be exposed to the weather shall be hot-dipped galvanized as noted. All steel lintels at exterior masonry walls shall be hot-dipped galvanized as noted in Lintel Note 11.
- 5.) Sheet S-301 – Include all work indicated on this sheet except for concrete and concrete reinforcing. Include headed stud shear connectors, threaded studs for nailers, metal decking, columns, beams, joists, base plates, anchor rods, braces, and all other work shown. Include steel framing and supports for roof penetrations

- at all penetrations shown and not shown in the drawings. Include all pour stops for the metal decking, landings, and stairs. Include all angle including “L” members such as L3x3 and include all tube steel such as “HSS”. Include all masonry clips.
- 6.) Sheet S-310 – Include all work indicated on this sheet except for concrete, concrete reinforcing, masonry, masonry reinforcing and guardrails. Include headed studs, angles, beams, joists, lintels, columns, metal deck, clips, supports, kickers, stiffeners, bent plate and all other work. Include the installation and welding of deformed bar anchors provided by others.
 - 7.) Sheet S-311 - Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, and concrete reinforcing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others.
 - 8.) Sheet S-312 - Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, and concrete reinforcing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others.
 - 9.) Sheet S-313 - Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, and concrete reinforcing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others.
 - 10.) Sheet S-320 – Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, concrete reinforcing, demolition and metal stud framing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others.
 - 11.) Sheet S-321 – Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, concrete reinforcing, demolition and metal stud framing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others. Include all metal angle including all L3x3x throughout the project.
 - 12.) Sheet S-321 – Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, concrete reinforcing, demolition and metal stud framing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others. Include all metal angle including all L3x3x throughout the project.
 - 13.) Sheet S-322 – Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, concrete reinforcing, demolition and metal stud framing. Include welding and installing all deformed bar anchors and weldable rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others. Include all metal angle including all L3x3x throughout the project.
 - 14.) Sheet S-323 – Include all work indicated on this sheet except for masonry, masonry reinforcing, concrete, concrete reinforcing, demolition and metal stud framing. Include welding and installing all deformed bar anchors and weldable

rebar at all locations including as shown on this sheet as examples. Deformed bar anchors will be provided by others. Include all metal angle including all L3x3x throughout the project.

- 15.) Sheet M-102.3 - Include framing for all roof penetrations including for mechanical, plumbing, electrical, and all other penetrations as shown on sheet M-102.3 as an example and as noted on S-100 General Note .
- 16.) Sheet M-201 – Include dunnage for cooling towers as indicated.
- 17.) Include lintels for all openings, doors, windows, ducts and other penetrations added to existing walls or specified for new walls.
- 18.) Include all adhesive anchors, drilling, doweling and epoxying, for steel attaching to concrete or masonry.
- 19.) Include shop drawings and calculations prepared by and stamped by a qualified Professional Engineer as indicated in specification section 051200, 055100 and other locations throughout the contract documents.
- 20.) Include all welding to structural steel and all welding of reinforcing steel throughout the project.
- 21.) Include cranes as required to erect all steel and include required permits for crane operation/service and transport.
- 22.) Subcontractor shall repair any damaged areas due to field welding or general handling of structural steel. Any touch up or repairs of damaged steel work requiring field welding, shall be repaired by a certified welder of the Subcontractor.
- 23.) Any metal that is exposed for final finish must be of high architectural grade quality with true members and welds ground smooth. Burrs are not acceptable.
- 24.) Submit all shop drawings and submittals for “E”, “B” and “C” Wing within 20 calendar days of receiving a notice to proceed.
- 25.) All exterior steel shall be galvanized. Galvanize all steel lintels, shelf angle, bearing and leveling plates, exterior trim as indicated in the specifications.
- 26.) Include all top of wall miscellaneous metal bracing to the structure including all seismic bracing, clips, angles and all other components complete.
- 27.) Include beams and all structural steel for supporting operable partitions.
- 28.) Include the abatement of all lead paint on steel as applicable for this scope of work. Assume that all paint on steel is lead unless verified otherwise.
- 29.) Furnish loose lintels above masonry openings typical and as noted on 9/S401. – **ADD. NO. 2**
- 30.) Furnish 2'-0" x 5'-0" x 1/2" Plate (with holes punched, coordinate with General Trades for hole locations/requirement) to General Trades Contractor typical and as noted on Dwg. A/A-549. – **ADD. NO. 2**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #6.01
General Trades**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **General Trades** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **General Trades** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #6.01 – General Trades:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **General Trades** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification

Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

024119 Selective Demolition (As Applicable)

054000 Cold-Formed Metal Framing

061053 Miscellaneous Carpentry

061800 Structural Glue-Laminated Timber

062013 Exterior Finish Carpentry

072100 Building Insulation

074243 Aluminum Composite Systems

074423 Ceramic Tile Cladding – ADD. NO. 1

078413 Through-Penetration Firestop Systems (As Applicable)

078443 Fire Resistive Joint Systems

079200 Joint Sealants (As Applicable)

079500 Architectural Joint Systems

081119 Steel Doors and Frames (Install Only)

081416 Flush Wood Doors (Install Only)

083323 Overhead Coiling Doors – ADD. NO. 2

083326 Overhead Coiling Grilles – ADD. NO. 2

083000 Special Doors (Install Only)

083113 Access Doors and Frames (As Applicable)

083116 Floor Door Access

083459 Custom Steel Vault Doors and Frames

083473 Acoustically Rated Doors (Install Only)

087100	Door Hardware (As Applicable - Install Only)
087112	Acoustically Gasketed Doors (Install Only)
089000	Louvers and Vents
092116	Gypsum Board Assemblies
092123	Gypsum Board Shaft-Wall Assemblies
092400	Portland Cement Plaster
093013	Ceramic Tile (As Applicable)
095100	Acoustical Panel Ceilings (As Applicable)
095426	Suspended Wood Ceilings Systems (As Applicable)
098413	Acoustical Panels
100000	Specialties
101100	Visual Display Surfaces
101200	Display Cases
102100	Cubicles
102213	Wire Mesh Partitions
104400	Fire-Protection Specialties
105113	Metal Lockers
111300	Loading Dock Equipment
115213	Projection Screens
116143	Stage Curtains
116623	Gymnasium Equipment
116643	Gymnasium Scoreboards
122400	Window Shades
125716	Trade Equipment
144200	Wheelchair Lifts
Division 21	Fire Suppression (As Applicable)
Division 22	Plumbing (As Applicable)
Division 23	Mechanical (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

All Miscellaneous Carpentry; Cold Formed Metal Framing; Framing Accessories; Gypsum Sheathing; Glass-Fiber Blanket Insulation; Gypsum Board; Glass-Matt Water-Resistant Board; Gypsum Board Accessories; Gypsum Board Shaft Walls; Gypsum Board Assemblies; Drywall Partitions; Cementitious Backer Board as Tile Substrate; Drywall Ceiling and Soffits and other Gypsum and Light Gage Framing; Non-Structural Metal Framing; Wood Framing; Stage Wood Floor Infills; Wood Wall Base; Rough Carpentry; Safety (O.S.H.A. Protection); Blocking; Furring, Grounds; Backboards; Acoustical and other Sealants/Caulking; Fire-Resistive Joint System; Firestopping; Joint Sealants; Expansion Joint Cover Assemblies Louvers and Vents and installation of Steel Doors and Frames; installation of Flush Wood Doors; Access Doors and Frames; Door Hardware; Acoustical Ceilings; Signage; Cubicles;; Fire-Protection Cabinets; Fire Extinguishers; Projection Screens; Library Equipment; Gymnasium Equipment; Stage Curtains; Studio Curtains; Welding Curtain Systems; Selective Structure Demolition; DAFS Systems; Visual Display Boards; Temporary Work; Wheelchair Lifts; Coordination with project schedule and other trades; Submittals, Samples, Product Data;

Acoustical Wall Panel Systems; Coordination with project schedule and other trades; Submittals, Samples, Product Data - **ADD. NO. 2**

Overhead Coiling Doors; Overhead Coiling Grilles; Coordination with project schedule and other trades; Submittals, Samples, Product Data - **ADD. NO. 2**

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Building Insulation:

- a. The General Trades Contractor shall furnish and install Building Thermal And Acoustical Insulation as required to complete its Scope of Work as noted on the Contract Documents except for the below grade rigid building insulation at the foundation walls and footings completed by the Sitework Subcontractor. Include acoustical insulation at the new walls and ceilings of all toilet rooms even if it is not shown in the drawings.
- b. Provide and install all insulation at all buildings required to complete project. This includes but is not limited to thermal and acoustical insulation as specified at:
 - i. Exterior walls
 - ii. Interior walls
 - iii. Voids at doors and windows
 - iv. Ceiling and Floor Insulation
- c. Provide all mineral wool, sound attenuation fiberglass batts and thermal insulation.

5) Sheet Metal and Fabric Flashings

The Roofing Contractor shall furnish and install all Sheet Metal Flashings, Metal Copings, Trim and Roof Accessories as described in the Contract Documents and furnish all exposed Metal through Wall Flashings, including metal reglets for installation by the Masonry Subcontractor.

- a. Any concealed and exposed (partially into **NEW** masonry) flashings and any metal flashing requiring a fabricated bend shall be supplied by the Roofing Contractor and installed by the Masonry Contractor at Cavity Walls, Unit Masonry Steel Lintels, Relieving Angle and other areas in contact with Masonry as indicated on the Contract Documents.
- b. The Roofing Contractor shall furnish and install all Prefinished ZINC Cap, ZINC Fascia and/or Prefinished Aluminum Flashings, Counter Flashings, Copings, Metal Gravel Stops and other Sheet Metal contiguous with the Roofing system.
- c. The Roofing Contractor shall furnish to the Masonry Contractor, for installation into the Mason's **NEW** work, all other Metal Flashing and Metal Thru Wall Flashings as noted in the Contract Documents.
- d. Membrane Flashings contiguous to the Mason's work shall be provided and installed by the Mason Contractor.
- e. The Windows, Glazing and Storefronts Contractor shall furnish and install all Flashings and Sheet Metal that is contiguous with his or her work; such as but not limited to: Flashings required to be installed prior to window or Panel installations.

- f. The Roofing Contractor shall provide all flashings and reglets and accessories into existing masonry as noted on the Contract Documents. This shall include cutting and patching of all reglets into existing masonry necessary to provide a complete system.
- g. The Roofing Contractor shall supply to the Masonry Contractor all flashings and reglets and accessories into new masonry and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Masonry Contractor.
- h. The Roofing Contractor shall supply to the Window Contractor all flashings and reglets and accessories into Window System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Window Contractor.
- i. The Roofing Contractor shall supply to the General Trades Contractor all flashings and reglets and accessories into DAFS System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the General Contractor.
- j. All metal drip flashings shall be furnished by the Roofing Contractor and installed by the Masonry Contractor.

6) Layout/Survey:

The General Trades Contractor shall provide layout/surveys for his or her own Scope of Work.

The General Trades Contractor shall provide Horizontal and Vertical Control Lines. This information shall be provided by a Connecticut Licensed Surveyor who shall install permanent offset points and bench marks that will allow for the reproduction of lines and grades by other Trades. This Contractor shall include per floor and per building wing the following: 4 bench marks and 4 offsets at locations directed by the Construction Manager.

7) Perimeter Cable Protection:

The Structural Steel Contractor shall install and maintain OSHA-compliant perimeter protection cables and supporting steel at all decks, where required by OSHA. Removal of perimeter cable protection and supporting steel at all levels (except the roof) shall be by the General Trades Contractor. Removal of perimeter cables at the roof shall be by the Roofing Contractor.

8) Seismic Framing at Top of Partitions:

This Subcontractor shall provide seismic framing and kickers at top of wall typical and as noted on the Contract Documents.

9) Light Gage Framing, Wood Framing, Gypsum Partitions and Gypsum Ceilings

The General Trades Contractor shall furnish and install Stud Framing, Gyp Board Sheathing, and/or 3/4" Pressure Treated Plywood, Batt and/or Semi-Rigid Insulation, Clips, firestopping and any and all accessories required to complete the substrate for all Trades as noted on the Contract Documents.

Subcontractor shall furnish and install all rough carpentry as required. This includes but is not limited to furnishing and installing all framed walls, framed ceilings, framed soffits, framed roofs and framed floors, framing at doors and windows and access doors, framing at fire extinguisher cabinets and hatches and all other openings, plywood, hangers, clips, hold-downs, straps, wood posts, wood beams, shop fabricated structural wood, sawn-timber beams, glue laminated timber (glu-lams), wood I-joists, PSLs, blocking, bracing, bridging, nailers, furring, cants, anchorage, fasteners, shims, roof sheathing, soffit sheathing, wall sheathing, and floor sheathing, parapet walls, backing, furring, soffit framing, roof rafters, building paper, all sheathing, wood fascia, partition framing etcetera at all buildings.

The General Trade Contractor shall furnish and install **ALL INTERIOR AND EXTERIOR WOOD AND METAL BLOCKING AND BACKING**, including but not limited to, general wood blocking, all roofing blocking and nailers required to form Fascias, Parapets, Rakes, Expansion Joints, etc., as shown on the drawings. This includes furnishing and installing any required anchors, bolts, screws, nails, anchor bolts. Etc. This Contractor is responsible for any approved method to furnish and install anchors for attaching wood to metal or concrete masonry units. This Contractor is responsible for all wood nailers to receive Pre-Manufactured HVAC Curbs at the roof. Additionally, this Contractor shall furnish to the Masonry Contractor any Anchor Bolts that will be installed in Masonry units for the purpose of anchoring any wood products. Include all blocking and backing required to support all items attaching to walls or ceilings throughout the project.

Provide all Firestopping/Safing/Fire/Smoke Sealants including at head and base of walls and at edge of slabs and decks as required to achieve required fire ratings; work includes filling voids & caulking as required. Provide all insulation and sealants to meet code, project documents and applicable requirements.

Include all interior and exterior building caulking and sealants unless specifically noted to be included in another scope. Furnish and install all caulking at dis-similar surfaces/conditions/transitions. Furnish and install all caulking including, but not limited to, caulking at louvers and vents, rails, serving windows, lockers, operable partitions, signage, miscellaneous metal, non-masonry expansion joint covers, overflow drain openings, etcetera per plans and specifications. Include backer rod as required.

Additionally the General Trades Contractor shall furnish and install all Drywall Partitions, Insulation, Clips and/or accessories as required to complete Drywall Partitions

types as noted on the Contract Documents including, Smoke, Fire, Acoustical, Architectural and other Sealant and Safing as noted. Fire Safing at Metal Deck/Steel intersection shall be completed by the General Trades Subcontractor. Neoprene Gasket between Drywall Partitions and Exterior Wall Systems shall be provided by the General Trades Subcontractor.

Subcontractor is responsible for all items, including, but not limited to all wall/partition anchors, bolts (including anchor & track bolts), clips, plates, metal stud framing, drywall, taping and finishing. Furnish, install and finish all gypsum board assemblies including screws, metal trim, resilient channels, sealants and joint-treatment materials. Subcontractor is responsible for all connections of metal stud systems to building steel. Finish drywall to levels indicated on plans and specifications. Include fire taping of all sheetrock. Provide fire caulk to structure as needed. Furnish and install air tight drywall ceiling plenums for mechanical systems. Furnish and install all gypsum board beam and column wraps and associated sealants/fire caulking. Include sheetrock at fire-extinguisher cabinets for fire-ratings. All installed sheetrock, cement board, etcetera must be plumb, line and free of warped planes. Subcontractor is responsible to ensure smooth walls and may use felt/furring strips if necessary to maintain level surfaces. Subcontractor is required to construct walls in compliance with the rating requirements specified or implied on the bid documents. Prepare all surfaces to be finished, include cleaning and sanding. Finished wall shall be flat. Protect floors and other adjoining surfaces from taping mud droppings and spillage of materials. Remove all drips from any finish surface. Furnish and install cement backer board at all tile and FRP areas. Include any required waterproofing behind the cement backer board. Provide all labor, material and equipment to furnish and install the exterior wall framing & sheathing systems including metal studs, track, runner tracks, metal channels, tie wire, pins and fasteners, backing plates, and compression or isolation strips, densglass sheathing, complete per plans and specifications. Provide all labor, material and equipment to furnish and install all metal stud and drywall systems on the interior of building. Include all rated head of wall conditions. Furnish and install cold rolled channel, angle, king studs, header boxes, notch backing and flat strap backing. Furnish and install ceiling suspensions systems for gypsum board ceilings including metal channels, all wire, fasteners, clips, and stiffeners complete per plans and specifications. Furnish and install rated stair cores. Include the installation of top track at all floors prior to any fireproofing of the structural steel. Include all block-out framing, rocking and finishing at locations of mechanical, electrical, toilet accessories and other equipment or items which penetrate metal framed walls and soffits. These items may not be found in the A drawings – refer to entire set of drawings for quantity and locations of penetrations. Frame, drywall and tape around smoke and fire/smoke dampers as required by the product specifications. Furnish and install all high impact gypsum. Also include all abuse resistant gypsum board. Furnish and install all fire rated enclosure systems around all light fixtures recessed in fire rated ceilings. Include all caulking for a complete fire rated system. Furnish and install a gypsum board system or a pre-manufactured enclosure system.

10) Winter Conditions and Temporary Heat:

The General Trades Contractor shall provide all necessary Winter Conditions and Temporary Heat for his or her work (Interior and Exterior) in accordance with **ACI 530.1-02 / ASCE 6-02 / TMS 602-02** for the duration of the project. Also see the Contract Documents which contains additional requirements for both Cold and Hot Weather conditions.

11) Snow, Ice and Water Removal

The General Trades Contractor shall be responsible for all snow, ice and water removal from **Interior of the Building** and staging provided by the General Trades Contractor and as directed by the Construction Manager for the duration of the Project. Snow, ice and water removal shall be required on a daily basis as directed by the Construction Manager at its sole discretion. This Contractor shall be responsible to provide whatever means necessary to remove snow, ice and water from the interior of the building including but not limited to pumping, piping and vacuuming.

12) Sound Attenuation at Mechanical Curbs:

The General Trades Contractor shall furnish and install all materials and equipment to construct Sound Attenuation Assemblies. This includes, but is not limited to, any framing, sheetrock, insulation, etc.

13) Hollow Metal Doors, Hollow Metal Door Frames (INSTALL ONLY):

The General Trade Contractor shall Receive, Handle, Distribute, Set, Protect, Install and Adjust *all* Steel/Hollow Metal Doors, Borrowed Lights, Vision Panels, Hardware, including access doors and panels, including access doors and panels furnished by others. Hollow metal frames contained within Masonry Partitions and Concrete Partitions (if required-openings/forming by Concrete Contractor) shall be set and plumbed by the General Trades Contractor who will work with the Mason/Concrete Contractor to ensure that the frames are blocked with CMU's and grouted properly.

The General Trades Contractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trade Contractor, from damage during grouting operations performed by the Masonry Contractor.

- a. The General Trades Contractor shall make provisions to protect Hollow Metal Frames and Hardware mounting holes, installed by the General Trades Contractor, from damage during grouting operations.
- b. The General Trades Contractor shall prepare all frames to accept all hardware and technology.

14) Wood Doors (INSTALL ONLY):

The General Trade Contractor shall install all Wood Doors.

15) Acoustically Rated Doors (INSTALL ONLY):

The General Trade Contractor shall Receive, Handle, Distribute, Set, Install Adjust and Protect Sound Control Doors.

16) Finish Hardware (INSTALL ONLY):

The General Trade Contractor shall Receive, set, install, adjust and protect all Finish Hardware for this Scope of Work.

Additionally the General Trade Contractor shall also be responsible for the following:

- a.) Complete coordination between all hardware, doors, and frames
- b.) Install all doors, wood and hollow metal, pre-machined and pre-fit for glass lites, louvers, hardware, etc.
- c.) Install all electrified hardware for this Scope or Work including but not limited to electric locks, electric strikes, key cards/readers, electric operators/openers, transformers and any and all necessary accessories as noted on the Contract Documents.
- d.) Coordinate with the Hardware Contractor (BP#8.03) and meet with the Owner to set up the cabinet in an initial meeting and then turnover the key cabinet at a follow-up meeting.
- e.) Install and later remove at the direction of the Construction Manager temporary construction cores for all locksets.
- f.) This Contractor shall install all construction cores and permanent cores in each lockset. The Owner will not be doing ANY of this work.
- g.) This Contractor is responsible for coordinating the Master Key System with the owner including as many meetings as necessary to accomplish this coordination.
- h.) This Contractor will return to the Project (6) months after the date of Substantial Completion to examine, re-adjust, consult, replace hardware items, and prepare a detailed written report to the Owner.
- i.) This Contractor shall install the magnetic door hold open contact plate (furnished by the Electrical Contractor) on doors as noted on the Contract Documents.
- j.) This Contractor shall coordinate the Hollow Metal Frames and Doors to receive the Electrical Contractor's Door Contacts (contacts installed by Electrical Contractor).
- k.) Subcontractor responsible for all shims, sealants and/or backer rods required for door frame installation.
- l.) Install door opening assemblies including associated exit devices, closers, and gaskets complete.
- m.) Include unloading, inventorying, storing, protection, distribution, and installation of all doors, frames and finish hardware. General Trades Subcontractor is responsible for any theft, damage, or other loss to items once items are delivered to the project site.

- n.) Include all adjusting and balancing of doors for proper operation. Include the adjusting and balancing of doors and closers and comply with all applicable codes. Subcontractor shall perform the adjusting and balancing when directed by the Construction Manager in writing to minimize repeat visits and shall submit a report identifying any doors or closers that are not balanced as specified and the reason why.
- o.) Install thresholds, seals, smoke seals, fasteners, door stops, door hold-opens, finish hardware, kickplates, gasketing and weather stripping, sweeps, astragals and door silencers complete.

17) Blocking & Backing:

- a. The General Trades Contractor shall coordinate the Blocking requirements for the Work of the Window, Glazing and Storefront Trades Contractor.
- b. Any Blocking indicated on the Contract Documents or as required by the window and storefront manufacturer and the Window, Glazing and Storefront Contractor shall be furnished and installed by the General Trades Contractor.
- c. The blocking coordination responsibility amongst this Contractor and General Trades Contractor shall be ongoing for the duration of the project.
- d. The Window, Glazing and Storefront Contractor shall provide all Clip Angles, Steel Angles, Furring Channels, Miscellaneous Metal Framing and Shims to complete installation of the Windows and Storefronts before and after the General Trades Contractor has provided coordinated Blocking.

The General Trade Contractor shall furnish and install ALL WOOD AND METAL BLOCKING AND BACKING required by the Contract Documents. Wood Blocking shall include, but not be limited to, plywood blocking, furring, dimensional lumber and any and all wood required by the contract documents indicated for the purpose of blocking for any and all trades. The General Trades Contractor shall prepare a blocking location plan and conduct all required meetings in the presence of the Construction Manager. The blocking location plan shall be signed off by all trades requiring blocking (including the Architect for FF&E). Metal backing or blocking can only be used in lieu of specified wood backing or blocking if approved in writing by the Architect and Construction Manager.

18) Plywood Sheathing:

The General Trade Contractor shall provide all plywood sheathing throughout the project except for the following:

- a. The Roofing Subcontractor shall provide plywood sheathing where: (1) plywood sheathing is directly fastened to the Roof and or Canopy Metal Deck; and (2) plywood sheathing is directly fastened to roofing insulation.

19) Backboards:

The General Trade Contractor shall provide all Electrical/Mechanical/Communication and other Backboards and as described in the Specification and as shown on the Contract Drawings. This Contractor shall provide **thirty (30) additional four foot x eight foot ¾” plywood backboards** in addition to what is required by the Contract Documents. All plywood for backboards shall be fire rated plywood and labels shall not be covered.

20) Architectural Louvers, Grilles and Vents

This Contractor shall provide and install **ALL** Architectural Louvers/Grilles/Vents.

All “Architectural Louvers and Grilles” (as indicated on the architectural drawings) shall be provided by the General Trades Contractor. All “Mechanical Louvers and Grilles” (as indicated on the mechanical drawings) shall be the responsibility of the Plumbing and HVAC Contractor. – **ADD. NO. 2**

The Plumbing and HVAC Contractor shall be responsible for all final connections to the Architectural Louvers provided by the General Trades Contractor.

The General Trades Subcontractor shall block out areas behind louvers not needed for the free air requirements as indicated for louvers included in this scope.

21) Substrates:

The General Trade Contractor shall prepare drywall substrate so that they meet or exceed the requirements of the specification for the final finishes. The Substrate shall meet or exceed flatness, Levelness and/or surface texture required.

22) Inspections:

The General Trade Contractor shall be responsible for properly coordinating and scheduling all inspections with the Construction Manager including but not limited to framing, insulation and other inspection that may be required in the execution of his or her Scope of work by the Authority having Jurisdiction.

23) Expansion Joints:

Except for expansion joints located on the roof, the General Trade Contractor shall furnish and install all **interior and exterior** floor, wall and ceiling expansion joint assemblies as shown on the contract documents. – **ADD. NO. 2**

24) Saddles, Thresholds and Sills (INSTALL ONLY):

The General Trades Contractor shall install all saddles, thresholds and sills that are a component of your assembly.

25) Proper Manpower Management:

The General Trades Contractor shall have figured in their bid price multiple crews to perform the work of this bid package but not limited to; work both interior and exterior framing simultaneously in addition to separate crews for other work such as, but not limited to; installing gypsum, interior/exterior wall panels, taping and ceiling installation to meet the project schedule.

26) Floor Recesses:

The Concrete Contractor, General Trade Contractor and Flooring Contractor shall coordinate all recess in any concrete slab as required for floor finishes.

27) Temporary Entrance Doors and Exterior Openings:

This Contractor shall be responsible for enclosing the entire building with temporary protection, as described herein, during its demolition process:

- At **ALL exterior door** (ie. Aluminum, Hollow Metal, etc.) locations this Contractor shall include in his or her bid proposal the cost to provide and eventually remove and dispose temporary [exterior grade wood doors] with heavy duty locks and keys, all other necessary hardware, partition walls at these locations only, and closers. Temporary enclosures shall be free of drafts utilizing a method acceptable to the Construction Manager.
- At **ALL exterior punched openings** (ie. Window, Curtainwall, Storefront, Louvers, Coiling Doors, Roof Openings) this Contractor shall provide and eventually remove and dispose closing in of using weather/wind-tight enclosures [2x4 wood-framed heavy-duty-reinforced-clear-plastic barriers] acceptable to the Construction Manager. Temporary enclosures shall be free of drafts utilizing a method acceptable to the Construction Manager.
- At **ALL open facades** (ie. Building B & C Shop Wings, Openings Created as a Result of Structure Demolition, etc), the Contractor shall provide and eventually remove and dispose closing in of using weather/wind-tight enclosures [2x6 wood-framed heavy-duty-reinforced-clear-plastic barriers] acceptable to the Construction Manager.

This Contractor shall be responsible for security of the building with temporary doors, chains, locks, etc. Any associated cost shall be included in their base bid (distribution of 10 Sets of keys free of charge as directed by the Construction Manager.) Provide and

eventually remove and dispose temporary doors with permanent door rating and lockset to mechanical room, electrical rooms, electrical closets, elevator machine room, switch-gear room(s), as directed by the CM. All temporary doors shall have closers and locks on them.

This Contractor shall provide and eventually remove and dispose Six (6) access locations (at upper levels) for access of temporary works into the building by others and for general access to load the upper floors as work progresses.

This Contractor shall be responsible on a daily basis to secure all access points to the building at the direction of the Construction Manager.

28) Temporary Heating and Cooling:

The patching of holes in partitions made as required for Temporary Heating and Cooling is to be patched by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

29) Temporary Power:

The patching of holes in partitions made for Temporary Power shall be provided by the General Trades Contractor for drywall and the Masonry Contractor for masonry

30) Construction Ventilation:

The General Trades Contractor shall be responsible for providing Six (6) Five Foot (5') diameter hi-speed, heavy duty portable fans for the duration of the Project. This includes setting up, locating, moving as needed, plugging or wiring as needed and maintaining at all times during this duration.

31) Architectural Joint Systems:

The General Trade Contractor shall furnish and install all Architectural Joint Systems Assemblies and expansion joints that are to be incorporated into this Scope of Work.

32) Minor Work/Provisions:

The General Trades Contractor shall carry in their base bid **240 hours of carpentry hours with small tools to perform additional minor work directed by the Construction Manager.**

The General Trades Contractor shall carry in their base bid **240 hours of laborer hours with small tools to perform additional minor work directed by the Construction Manager.**

The General Trades Subcontractor shall provide **2 hr fire separation walls with a total one-sided area of 7,200 total square feet and 5 pairs of double doors and panic hardware at locations to be specified by the Construction Manager.** General Trades Subcontractor shall also include code compliant temporary exit signage at these door locations. Include removal of these items and patching the adjacent surfaces as directed by the Construction Manager.

33) Man Lifts:

The General Trades Contractor shall allow use of its man lifts by the Construction Manager and others for inspection purposes and as directed by the Construction Manager. Provide training and any necessary safety equipment.

34) Fire Extinguishers and Cabinets:

The General Trades Contractor shall provide all Fire Extinguisher Cabinets and Permanent Fire Extinguishers as noted on the Contract Documents.

35) Overhead Doors and Coiling Grilles: - ADD. NO. 2

The General Trades Contractor shall provide all Overhead Doors and Coiling Grilles as noted on the Contract Documents. – **ADD. NO. 2**

1. Provide all labor, materials, tools, equipment and services necessary to furnish and install all overhead coiling doors and grilles including the service doors, coiling grilles, and coiling serving doors/windows with stainless steel counter top sill system. – **ADD. NO. 2**
2. Include complete motorized systems for service doors. Include furnishing and installing all controls, switching, and all low voltage wiring. Electrical Subcontractor will provide line voltage. – **ADD. NO. 2**
3. Include fire-activated hold opens if applicable. – **ADD. NO. 2**
4. Furnish and install all frames, trim, locks and hardware. Key all locks to match the locks of the other doors as directed by the Construction Manager. Include compatible lock cores, cylinders and keyway systems. – **ADD. NO. 2**
5. Provide samples and shop drawings as indicated. – **ADD. NO. 2**

CLARIFICATIONS

a.) The General Trades Contractor shall:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet C-19 Notes For Irrigation 2 – Include backboard for irrigation controller.
- 3) Sheet D-105 – Include new hatch and cover for concrete structure project north of existing Culinary Kitchen and coordinate with Cast In Place Concrete Subcontractor.
- 4) Structural (“S”) Drawings – Furnish and install all metal stud framing work in the structural drawings and throughout the rest of the drawings.
- 5) Sheet S-100 – Include all of the work described under the Cold Formed Metal Framing Notes. Provide all shoring necessary for this scope of work as indicated under General Note 4.
- 6) Sheet S-220 Detail 5 – Include all of the metal stud framing shown.
- 7) Sheet S-301 Detail 2 – Include all wood nailers to receive Pre-Manufactured Curbs.
- 8) Sheet S-320 – Include all of the metal stud framing shown throughout this project and on this sheet. Include all clips that connect to metal studs and include all drilling, doweling and epoxying for metal stud attachment.
- 9) Sheet S-321 - Include all of the metal stud framing shown throughout this project and on this sheet. Include all clips that connect to metal studs and include all drilling, doweling and epoxying for metal stud attachment.
- 10) Sheet S-322 - Include all of the metal stud framing shown throughout this project and on this sheet. Include all clips that connect to metal studs and include all drilling, doweling and epoxying for metal stud attachment. Include all plywood sheathing and nailers.
- 11) Sheet A-101.1 Typical – Complete all work described under Construction Note 12 relating to the elevator system.
- 12) Sheet A-101.3 – Furnish and install all goggle cabinets throughout the project including the goggle cabinets in the science classroom labs.
- 13) Sheet A-102.2 – Furnish and install floor hatch in Carpentry B-108.
- 14) Sheet A-103.2 – Include all replacement/repair work at the existing bleachers. Move the bleachers as required to facilitate the replacement/repair of the existing bleachers.
- 15) Sheet A-110.0 – Provide Note 14. – **ADD. NO. 2**
- 16) Sheet A-110.1 & A110.2 – Patch and infill all Tectum, gypsum, concrete and steel roof decks typical and as noted. Include all metal studs, sheathing and insulation assemblies at existing louver vents. – **ADD. NO. 2**
- 17) Sheet A-549 Detail 2 – Include maple glulam media center entrance system. Include stamped shop drawings as indicated. Provide adequate space for concealed light fixtures and wiring. – **ADD. NO. 2**
- 18) Sheet EQ-101 – Install all general related equipment indicated to be owner furnished and contractor installed. Install the following items:
 - a. Shop Equipment Schedule – Automotive Production Shop
 - i. Item 14 – Welding Bench
 - ii. Item 19 – Metal Shelving
 - iii. Item 29 – Work Bench
 - iv. Item 32 – Welding Bench
 - v. Item 33 – Drill Press
 - vi. Item 34 – Pedestal Grinder

- 19) Sheet EQ-101 – Furnish and install all general related equipment and work indicated to be contractor furnished and contractor installed. Furnish and install the following items:
- a. Shop Equipment Schedule – Automotive Production Shop
 - i. Item 23 – Welding Curtain
 - ii. Item 27 – Flammable Storage Cabinet
 - iii. Item 28 – Tool Storage Cabinet With Doors
 - iv. Item 35 – Germicidal Goggle Cabinet
- 20) Sheet EQ-102 – Install all general related equipment indicated to be owner furnished and contractor installed. Install the following items:
- a. Shop Equipment Schedule – Electrical
 - i. Item 6 – Storage & Tool Cabinet – **ADD. NO. 1**
 - ii. Item 11 – Drill Press
 - iii. Item 12 – Grinder
 - b. Shop Equipment Schedule – Carpentry
 - i. Item 32 – Tool Storage Cabinet Or Industrial Shelving – **ADD. NO. 1**
- 21) Sheet EQ-102 – Furnish and install all general related equipment indicated to be contractor furnished and contractor installed. Furnish and install the following items:
- a. Shop Equipment Schedule – Electrical
 - i. Item 15 – Flammable Storage Cabinet
 - ii. Item 18 – Germicidal Goggle Cabinet
 - b. Shop Equipment Schedule – Carpentry
 - i. Item 30 – Flammable Storage Cabinet
 - ii. Item 33 – Germicidal Goggle Cabinet
- 22) Sheet EQ-103 – Furnish and install all general related equipment indicated to be contractor furnished and contractor installed. Furnish and install the following items:
- a. Shop Equipment Schedule – Plumbing
 - i. Item 6 – Welding Curtain
 - ii. Item 20 – Flammable Storage Cabinet
 - iii. Item 30 – Germicidal Goggle Cabinet
 - b. Shop Equipment Schedule – Graphics
 - i. Item 15 – Flammable Storage Cabinet
- 23) Sheet EQ-103 – Install all general related equipment indicated to be contractor furnished and contractor installed. Install the following items:
- a. Shop Equipment Schedule – Plumbing
 - i. Item 9 – Welding Bench
 - ii. Item 11 – Work Bench
 - iii. Item 12 – Tool Storage Cabinet
 - iv. Item 16 – Work Bench
 - v. Item 17 – Drill Press
 - vi. Item 18 – Pedestal Grinder
 - vii. Item 19 – Plasma Cutter
- 24) Sheet EQ-106 – Furnish and install all general related equipment indicated to be contractor furnished and contractor installed. Furnish and install the following items:
- a. Shop Equipment Schedule – Manufacturing

- i. Item 40 – Germicidal Goggle Cabinet
 - ii. Item 42 – Flammable Storage Cabinet
 - b. Shop Equipment Schedule – Cosmetology
 - i. Item 5 – Flammable Storage Cabinet
 - ii. Item 8 – Pedicure Station
- 25) Sheet F-003 – Include patching at temporary FDC location as required for this scope of work.
- 26) Sheet E-001 Note 37 - Furnish and install plywood in all electrical and data rooms and as noted.
- 27) Patch existing plaster work in all A Wing locations including as shown in detail 1/A502.
- 28) Include temporary protection at C Wing where culinary area is demolished. Also include it where roof gets removed and replaced at C Wing.
- 29) All doors, windows, walls, and other assemblies must comply with specified STC ratings including the ratings indicated on drawing INFO.1
- 30) Include blocking for smart boards and other owner furnished and installed equipment.
- 31) Remove and reinstall stairs for access in kitchen tunnel per sheet P003.1.
- 32) Include the careful removal of the existing science lab teacher and student work stations including the chemical resistant tops and casework below and relocate to the two temporary lab spaces as directed by the Construction Manager. Demolish and remove the lab stations when the temporary labs are no longer needed as directed by the Construction Manager.
- 33) Provide all labor, materials, tools, equipment and services necessary to furnish and install all stage curtain systems and studio curtain systems. Include the track, pulleys, blocks, cable, supports, curtain, clamps, brackets, fasteners and all accessories. Ensure curtain is installed level and plumb and operation of curtain is satisfactory to the Construction Manager. Submit shop drawings for approval. Include owner training for the system.
- 34) Provide new sleeve cover to match existing typical for all 3 volleyball courts typical and as noted on Dwg. A103.2. – **ADD. NO. 2**
- 35) Furnish and install wood soffits and tongue and groove including soffit vents and screens.
- 36) Include any calculations and shop drawings prepared and stamped by a qualified professional engineer required for this scope of work. Include professional engineering for specification section 054000, 074213, 089000, 116623 and all other sections as it relates to this scope of work.
- 37) Provide all access doors and panels shown in the drawings and required for this scope of work. Install all access doors and panels for this scope of work and install all access doors and panels provided by other trades. The Construction Manager shall select the manufacturer of the access doors and panels from a manufacturer listed in the specifications for all trades to use, so a single manufacturer is used throughout the project.
- 38) The acoustical rated doors shall be installed by factory-trained or approved representatives or contractors as indicated in the specifications.
- 39) Furnish and install all back mounted acoustical panels.

- 40) Furnish and install all sanitizing eyewear cabinets, goggle cabinets, fire blankets and cabinets, flammable liquids storage cabinets, corrosive material storage cabinets, and “Knox Box” units.
- 41) Furnish and install all visual display surfaces including the markerboards and tackboards.
- 42) Furnish and install all display cases.
- 43) Furnish and install all cubicle curtains, tracks and curtain carriers.
- 44) Furnish and install all wire mesh partitions.
- 45) Furnish and install all portable fire extinguisher systems including fire extinguishers, cabinets, and mounting brackets.
- 46) Furnish and install all loading dock equipment.
- 47) Furnish and install all projection screens including motorized projection screens. Provide key operated switches and all accessories for the motorized projection screens and coordinate with Electrical Subcontractor for wiring. Include training on how to operate and maintain the system on two separate days as directed by the Construction Manager
- 48) Furnish and install stage curtains and valance and studio curtain systems. Include shop drawings for stage curtains and valance. Include training on how to operate and maintain the system on two separate days as directed by the Construction Manager.
- 49) Furnish and install all gymnasium equipment including basketball equipment and wall mounted safety pads. Furnish and install motors for basketball goal systems and furnish all switches for installation by the Electrical Subcontractor.
- 50) Furnish and install all gymnasium scoreboard systems. Include training on how to operate and maintain the system on two separate days as directed by the Construction Manager.
- 51) Coordinate the installation of all recessed door contacts and card readers with the owner’s security consultant and the Construction Manager before proceeding with the work. Refer to the SEC drawings.
- 52) Include all floor door access. Furnish and install.
- 53) Furnish and install all welding curtains and support rods and welding tables.
- 54) Install all owner furnished tool storage cabinets.
- 55) ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
 - a. BP#1.01 Site Preparation*;
 - b. BP#2.01 Demolition & Abatement*;
 - c. BP#7.01 Roofing* – **ADD. NO. 2**
 - d. BP#31.04 Athletic Fields*;

*These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.
- 56) Furnish and install all window shades and window coverings.
- 57) Furnish and install new volleyball sleeve covers noted in the drawings.
- 58) Subcontractor shall furnish and install all lockers as required including all associated hardware, sealants, base, hooks, shelves, numerals, sloping tops, panels and trim accessories. Furnish shop drawings for approval prior to fabrication. Installation to be neat and level. Provide touch-up paint as extra material. Furnish and install benches and pedestals at lockers.
- 59) Provide layout of locker bases for the Concrete Subcontractor.

- 60) Ceramic tile cladding described in specification section 074423 to be completed by bid package 6.01 General Trades. – **ADD NO. 1**
- 61) Provide Wood Framed Structure in Electrical Shop B114 typical and as noted on 5/A514. – **ADD. NO. 2**
- 62) Provide batt insulation typical and as noted on 31&32/A-110.7. – **ADD. NO. 2**
- 63) Install 2'-0" x 5'-0" x 1/2" Plate (coordinate with Structural Steel Contractor for hole locations/requirement) typical and as noted on Dwg. A/A-549. – **ADD. NO. 2**
- 64) Provide exterior 1x6 T-G Cedar ceiling/soffits typical and as noted on Dwg. 1/A203.3. – **ADD. NO. 2**
- 65) Provide wire mesh partitions per keyed construction note #9. – **ADD. NO. 2**

Wheelchair Lift Clarifications

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet A-103.2 – Re-wire existing wheelchair lift near stage to make lift operate without the use of keys and plug existing keyholes as indicated.
- 3) Sheet A-101.2 – Furnish and install a complete wheelchair lift system in Building A as indicated.
- 4) Provide all labor, materials, tools, equipment and services necessary to furnish and install complete wheel chair lift systems.
- 5) Furnish and install wheel chair lift interiors.
- 6) Furnish and install flooring for lifts.
- 7) Include all costs and coordination associated with the inspection and permits of the wheel chair lifts.
- 8) Furnish all inserts and embeds required for installation.
- 9) All lift interior and exterior dimension are to be in accordance with the plans, specifications and applicable codes.
- 10) Furnish and install life/safety and accessibility signage at wheelchair lift per plan and specifications.
- 11) Include all required programming, balancing and adjusting.
- 12) Furnish and install lift sills and grouting of sills.
- 13) Provide OSHA compliant removable temporary barriers during installation of lift.
- 14) Include operation and maintenance manual per the specifications.
- 15) Include all electrical terminations for the electrical power provided by the Electrical Subcontractor.
- 16) Include all samples, shop drawings, and other submittals required per the specifications. All submittals must be submitted to Construction Manager within 60 calendar days after issuance of the contract or notice to proceed.
- 17) Include all inspections and permits required.
- 18) Include a two year warranty period and 1 year full maintenance service beginning from the date of substantial completion as indicated in the specifications. Check the operation of the lift with the Owner's personnel present before the warranty period is over but no earlier than 1 month before the end of the warranty period and address any warranty issues.

- 19) Include owner training to maintain and use the lift on two separate occasions as directed by the Construction Manager.

Overhead Doors and Coiling Grilles Clarifications

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work. – **ADD. NO. 2**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1 – TEMPORARY COVERED WALKWAYS - \$20,000

Provide safe covered temporary egress paths as directed by the Construction Manager.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #6.02
Architectural Millwork**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Architectural Millwork** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Architectural Millwork** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #6.02* – Architectural Millwork:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Architectural Millwork** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification

Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

062023 Interior Architectural Woodwork

079200 Joint Sealants (As Applicable)

083113 Access Doors and Frames (As Applicable)

123400 Manufactured Plastic-Laminate-Clad Casework

123553 Wood Laboratory Casework and Furnishings

123570 Health Care Casework

125653 Fixed Computer Tables

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Millwork; including but not limited to: Interior Architectural Woodwork; Plastic-Laminate-Clad Architectural Cabinets; Base Cabinets; Wall Cabinets; Countertops; Window Sills; Toe Base Frames; Shelves; Miscellaneous Casework; Coat Rod and Shelf; Supply Air Grills contained within the Casework; Grommets; Wall Shelves; Support Framing (steel or otherwise); Furring and/or Bracing within your Scope of Work; Standards and Brackets; Mail Box Cabinet/slots; Laminate Casework; Laminate Countertops; All Glass in Woodwork & Casework; Specialty Casework; Specified Accessories; Furring Blocking and Accessories necessary to install Casework; Wire Grommets; Joints Sealants; Fixed Computer Tables; Cosmetology furniture; Shampoo Stations; Furring and/or Bracing within your Scope of Work as described in the Specifications

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Finish Hardware:

The Millwork Contractor shall provide all Finish Hardware for the Millwork as indicated on the Contract Documents.

5) Millwork Finishes:

The Millwork Contractor shall provide consistent Millwork Finishes that are identical to the approved Millwork Finish samples.

6) In Wall Blocking And Backing:

The Millwork Contractor shall provide coordination drawings indicating in-wall blocking and backing and or grounds that shall be required for proper installation of Millwork/Casework. The actual in-wall blocking and backing, grounds and etc., shall be provided by the General Trades Contractor.

7) Service Connections (Plumbing/HVAC/Electrical)

The Millwork Contractor shall coordinate with the Plumbing and HVAC, and Electrical Subcontractor all Fittings, fixtures and etc. that are to be incorporated into the Millwork.

- a. The Millwork Contractor shall coordinate with the above Contractors to assure all services are complete in all respects.
- b. The Millwork Contractor shall coordinate the location and size of all openings to access fittings and/or equipment, Failure to notify the Fusco Corporation of any discrepancies shall be construed as acceptance of the condition.
- c. The Millwork Contractor shall coordinate with the Plumbing/HVAC and Electrical Contractors all Fittings, Fixtures and etc. that are to be incorporated into the Millwork.
- d. The Plumbing/HVAC and Electrical Contractors shall be responsible for all final connections to Service fitting.
- e. The Millwork Contractor shall coordinate with the above Contractors to assure all services are complete in all respects. Cutting and, or modification of casework/millwork for MEP rough in will be by this Contractor.
- f. The Millwork Contractor shall coordinate the location and size of all openings to access fittings and/or equipment.
- g. Failure to notify the Fusco Corporation of any discrepancies shall be construed as acceptance of the conditions.

8) Access Doors:

The Millwork Contractor shall provide Access Doors and/or Panels where appropriate so as to allow for service connections or access to equipment for all Trades.

9) Sealants and Caulking:

The Millwork Contractor shall furnish and install all sealants and caulking as required to complete his or her scope of work. This shall include the caulking of any millwork/casework to any other surface.

10) Residential Appliances:

The Millwork Contractor shall coordinate with the size and location of residential appliances that are to be incorporated into the Millwork

11) Cut-outs:

The Millwork Contractor is responsible for providing cutouts in all Millwork that are required by the Contract Documents and Coordination Drawings approved by the Construction Manager. Seal all exposed edges of cutouts with silicone caulking to prevent water damage.

CLARIFICATIONS

a.) The Millwork Contractor shall:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet A101.3 – Include all tables, counters, cabinets, drying racks, microscope cabinets, flammable material cabinets, wardrobe cabinets, closets, and other casework items in room A-202, A-205, A-206, A-207, A-208, and A-209. The General Trades Subcontractor will furnish and install portable fire extinguishers and cabinets, fire blankets and cabinets and goggle cabinets.
- 3) Sheet A104.1 - Furnish and install all healthcare casework including all stainless steel cabinets, counter tops, integral sinks, integral glass, shelving and other casework. See Rooms 167 and 168. See Elevations A804.3.
- 4) Sheet EQ-106 - Furnish and install all Architectural Millwork related equipment indicated to be contractor furnished and contractor installed for the Cosmetology program. Furnish and install the following items: - **ADD. NO. 2**
 - a. Shop Equipment Schedule - Cosmetology
 - i. Item 1 - Two-Station Cosmetology Stand
 - ii. Item 2 - Shampoo Station With Seating
- 5) Furnish and install all wood paneling and trim, plastic laminate, cabinets, countertops, splashes, drawers, caps and trim, wood base, trim, millwork doors, millwork accessories, closet and utility shelving, shelving, metal grilles set in millwork, solid surfacing at window sills, glazing in millwork, finish carpentry, and all other millwork items.
- 6) Field verify all work prior to fabrication. Field verify all components to fit around mechanical, electrical and plumbing, security and audio/visual systems prior to fabrication. Provide locations of said items on shop drawings.
- 7) Include keying for all millwork under this scope.
- 8) Furnish and install all fixed computer tables.
- 9) Furnish and install all metal laminate.
- 10) Subcontractor is responsible for anchoring into concrete and other materials and associated clips.
- 11) Prepare all millwork and cabinetry for fixtures and utilities. Refer to the mechanical, electrical and plumbing, security and audio/visual systems drawings for cutouts, light

- coves, and framing for these items. Attend coordination meetings with others to detail exact layouts of equipment installed.
- 12) Furnish and install steel support & counter brackets for millwork.
 - 13) Furnish and install tube steel supports for millwork as required.
 - 14) Provide shop drawings prior to fabrication, per specifications.
 - 15) Coordinate with plumber on size of cut-outs in millwork items for plumbing fixtures (i.e., sink, faucets, etc.)
 - 16) Furnish and install all interior wood trim.
 - 17) Furnish and install all wood sills, stools and aprons.
 - 18) Furnish and install locks and hardware for cabinetry and display cases as indicated in the drawings and specifications.
 - 19) Furnish and install all caulking and sealants for millwork, counters and cabinetry, and for where these items interface with other surfaces.
 - 20) Field measure and accept floor and wall surfaces prior to installing any casework, or finished carpentry. Commencement of carpentry constitutes acceptance of surfaces.
 - 21) Provide casework grommets, embedded metals, and painted angles as required for connection of casework panels.
 - 22) Furnish, install, and remove materials to protect all of the work in your scope.
 - 23) Include all caulking and sealants at the laboratory casework, healthcare casework and equipment.
 - 24) Include all shop drawings.
 - 25) Include all laboratory casework items shown in the details on sheet A-801.3 and A-801.4.
 - 26) Include all science fume hoods and blowers. Include all enclosures for exhaust ducts.
 - 27) Subcontractor is responsible for anchoring into concrete and other materials and associated clips.
 - 28) Field verify all components to fit around mechanical, electrical and plumbing, security and audio/visual systems prior to fabrication. Provide locations of said items on shop drawings.
 - 29) Field measure and accept floor and wall surfaces prior to installing any items. Commencement of installation constitutes acceptance of surfaces.
 - 30) Include all glazing integral to work.
 - 31) Furnish and install all metal supports, braces and brackets as required for this scope of work.
 - 32) Include all work, equipment, finish, and hardware listed in specification section 123553 and 123570.

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #7.01
Roofing**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Roofing** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Roofing** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #7.01 – Roofing:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Roofing** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

024119 Selective Demolition (As Applicable)
028234 Asbestos-Containing Roofing Material Removal

075216 SBS-Modified Bituminous Membrane Roofing
076200 Sheet Metal Flashing and Trim
077200 Roof Accessories
079200 Joint Sealants (As Applicable)

086200 Unit Skylights

Division 21 Fire Suppression (As Applicable)
Division 22 Plumbing (As Applicable)
Division 23 Mechanical (As Applicable)
Division 26 Electrical (As Applicable)
Division 27 Communications (As Applicable)
Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

BID PACKAGE #7.01 ROOFING
000930.7.01- 2

Roofing Systems; Canopy Roofs; Roof Insulation; Snow Guards; Gutters, Leaders and Down Spouts; Primers and Adhesives; Clips and Accessories; Splash Blocks; Reglets; Tapered Roof Insulation; Roof Cants; Roof Edge System; Roof Walkways; Nail Base with Slip Sheet and Membrane Barrier Underlayment; Metal Flashing and Trim; Roof Edge Flashings; Roof Hatches; Underlayments; Roof Expansion Joints; Fasteners and Plates; Wall Flashing and Trim; Metal Copings; Membrane Flashing; Metal Soffits and Fascias, Parapet Flashing; Roof Accessories; Pipe Flashings; Skylights; Sealants; Cant Strips and Accessories; Exterior Plywood Coverboard on Roofing Insulation; Exterior Plywood Coverboard on Metal Deck; Metal Fascia; Metal Trims and Flashings; Coordination of Roof Drains; Flashing of Electrical and Mechanical Roof Penetrations and Roofing Demolition and Abatement. Coordination with project schedule and other trades; Submittals, Samples, Product Data and etc.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Fusco Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Sealants and Caulking:

The Roofing and Moisture Protection Contractor shall furnish and install all sealants and caulking required within the roofing system, including sealing and caulking of all roof penetrations such as but limited to stacks, rails, ductwork, pipes, conduits and etc.

5) Miscellaneous Rough Carpentry and Sheathing

The Roofing and Moisture Protection Contractor shall provide plywood sheathing where:
(1) plywood sheathing is directly fastened to the Roof and or Canopy Metal Deck; and
(2) plywood sheathing is directly fastened to roofing insulation.

6) Building Insulation:

- a. The Roofing Contractor shall furnish and install all insulation associated with the Roofing Systems.
- b. The Roofing Contractor shall provide cover board on roofing insulation as noted on the Contract Documents.

7) Roofing Coordination:

- a. The Roofing Contractor shall coordinate the installation of the roofing with the Construction Manager, Window Contractor, General Trades Contractor, Steel Contractor, Masonry Contractor, Mechanical and Electrical Contractors to allow for the proper sequence of the work.
- b. The Roofing and Moisture Protection Contractor shall provide unlimited return visits to the site to patch the new roofing system as required after installation of Electrical and Mechanical conduits, piping, and equipment by the MEP Contractors.
- c. This roofing coordination responsibility shall be ongoing for the duration of the project.
- d. This Contractor shall make for provisions to maintain the water tightness of the roof at mechanical curbs installed for packaged rooftop mechanical unit, in advance of the delivery and during the installation of the rooftop units.

8) Perimeter Cable Protection:

The Structural Steel Contractor shall install and maintain OSHA-compliant perimeter protection cables at all decks, where required by OSHA. Removal of perimeter cable and supporting steel protection at all levels (**except the roof**) shall be by the General Trades Contractor. Removal of perimeter cables and supporting steel (**at the roof**) shall be by the Roofing Contractor.

9) Temporary Roofing:

The Roofing Contractor shall provide, maintain and eventually remove any temporary roofing required to complete its scope of work and any other trades scope of work at the Roof. The Roofing Contractor shall be solely responsible for any and all water infiltration from the existing roof during the re-roofing (from Roof Demolition to Permanent Roofing) process.

The Roofing Contractor shall provide and eventually remove temporary roofing over any and all roof penetrations as directed by the Construction Manager.

The Roofing Contractor shall provide draping of the roof in a temporary manner for a watertight condition while others complete work including but not limited to exterior walls, parapets, curbs and temporary flashings up vertical surfaces requiring coordination with other trades.

10) Roof Top Equipment Curbs:

The Roofing Contractor shall furnish and install all Roof Flashing as indicated to complete the installation for Roof Top Equipment Curbs. The Roofing Contractor shall furnish and install all required flashings as it pertains to the installation of the roof system and roof curbs. All Contractors should note that if the roof slopes all consideration must be considered in shop drawings and fabrication of any unit, curb, etc., being installed in these sloped areas.

11) Roof Drains, Vent and other Through Roof Penetrations:

The Roofing Contractor shall furnish and install all flashing and other materials required to seal all Roof Drains, Vents and other through Roof Penetrations.

12) Expansion Joints:

The Roofing Contractor shall furnish and install all Expansion Joints associated with the Roofing systems including contiguous non wood blocking, firestopping, flashings as shown on the Contract Documents.

13) Insulation:

The Roofing Contractor shall furnish and install all insulation associated with the Roofing Systems.

14) Sheet Metal and Fabric Flashings:

The Roofing Contractor shall furnish and install all Sheet Metal Flashings, Metal Copings, Trim and Roof Accessories as described in the Contract Documents and furnish all exposed Metal through Wall Flashings, including metal reglets for installation by the Mason Contractor.

- a. Any concealed and exposed (partially into **NEW** masonry) flashings and any metal flashing requiring a fabricated bend shall be supplied by the Roofing Contractor and installed by the Masonry Contractor at Cavity Walls, Unit Masonry Steel Lintels, Relieving Angle and other areas in contact with Masonry as indicated on the Contract Documents.
- b. The Roofing Contractor shall furnish and install all Prefinished ZINC Cap, ZINC Fascia and/or Prefinished Aluminum Flashings, Counter Flashings, Copings, Metal Gravel Stops and other Sheet Metal contiguous with the Roofing system.
- c. The Roofing Contractor shall furnish to the Masonry Contractor, for installation into the Mason's **NEW** work, all other Metal Flashing and Metal Thru Wall Flashings as noted in the Contract Documents.
- d. Membrane Flashings contiguous to the Mason's work shall be provided and installed by the Mason Contractor.
- e. The Windows, Glazing and Storefronts Contractor shall furnish and install all Flashings and Sheet Metal that is contiguous with his or her work; such as but not

limited to: Flashings required to be installed prior to window or Panel installations.

- f. The Roofing Contractor shall provide all flashings and reglets and accessories into existing masonry as noted on the Contract Documents. This shall include cutting and patching of all reglets into existing masonry necessary to provide a complete system.
- g. The Roofing Contractor shall supply to the Masonry Contractor all flashings and reglets and accessories into new masonry and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Masonry Contractor.
- h. The Roofing Contractor shall supply to the Window Contractor all flashings and reglets and accessories into Window System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Window Contractor.
- i. The Roofing Contractor shall supply to the General Trades Contractor all flashings and reglets and accessories into DAFS System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the General Contractor.
- j. All metal drip flashings shall be furnished by the Roofing Contractor and installed by the Masonry Contractor.

15) Roof Installation:

This Contractor shall include the cost to temporarily adhere all new roof edges for water tight seal until completion of parapets, masonry, and all final roof terminations can be completed.

This Contractor will be required to make all mobilizations in order to meet the project schedule. No additional compensation will be issued for any and all mobilizations.

This Contractor's manufacturer's representative for the roofing system shall certify in writing, along with applicator's acceptance that the substrate to receive their system is acceptable and approved. It is understood that this manufacturer's representative will be required to visit the jobsite on a periodic basis during the installation operations to verify conformance of the application and shall issue site visit reports to the installer and directly to the Construction Manager for each trip acknowledging same.

This Contractor will install and flash all roof curbs which are provided by the MEP Contractors, with exception of the Roof Air Handling Unit curbs which will be installed by the HVAC Contractor and flashed by the Roofing Contractor.

This Contractor shall provide OSHA required fall arrest or prevention systems required to perform his or her work. At the direction of the Construction Manager this Contractor shall remove all roof perimeter safety cable systems and deliver to the Construction Manager. This Contractor shall also include patching the roof at all locations where perimeter safety cable stanchions or supports are removed.

This Contractor shall provide all roof hatches, smoke vents, as noted on the Contract Documents.

16) Protection of Masonry Work:

When a masonry wall is topped off to the roof line, it shall become the responsibility of the Roofing Contractor to keep all water, snow and ice from entering into the concrete masonry unit or the cavity until the permanent or temporary cap or cover is installed by the Roofing Contractor.

22) Snow, Ice and Water Removal

The Roofing Contractor shall be responsible for all snow, ice and water removal from the roof and roof deck and staging provided by the Roofing Contractor before, during and after the installation of the roof and as directed by the Construction Manager.

17) Down Spouts:

The Roofing Contractor shall include any roofing work related to down spout nozzles.

18) Roof Edge Protection:

The Roofing Contractor shall provide all OSHA Approved temporary roof edge protection acceptable to the Construction Manager. Provide adequate amount of sturdy stanchions and counterweights with bright colored flagging strung along all perimeter edges. The Roofing Contractor shall maintain the roof edge protection for the duration of the Project. The Roofing Contractor shall remove the roof edge protection at the direction of the Construction Manager.

19) Metal Deck Penetrations:

The Roofing Contractor shall include all cutting and removing of metal deck for Roofing Contractor's own Scope of Work installations as noted on the Contract Documents.

20) Final Cleaning of Roof:

The Roofing Contractor shall perform final cleaning of the roof as directed by the Construction Manager.

CLARIFICATIONS

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Sheet A-110.0 – Include Roofing Demolition Notes 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 20, 21, 24 & 25 and all General Notes typical and as noted.
3. Sheet A-110.1 & A-110.2 – Include all roofing work indicated. Include all new roofing and re-roof at all existing roofing locations. Furnish and install all skylights and flashing.
4. Sheet A-110.3 & A-110.4 – Include all work indicated on these sheets and all roof insulation and flashing.
5. Sheet A-110.5, A-110.6, A-110.7, & A-110.8 – Include all roofing and insulation and flashing. Include all work at penetrations so they are water tight.
6. Furnish and install all gutters and downspouts.
7. Include all work at an additional 10 roof penetration locations not indicated in the drawings or specifications to make those penetrations water tight.
8. Include all removal, abatement and disposal of existing roofing as required to install new roofs (excluding “D” Wing roof which will be demolished and abated by Bid Package 2.01). – **ADD. NO. 2**
9. Include paying for and obtaining all permits including but not limited to asbestos disposal authorizations, asbestos abatement notifications, asbestos management plans, demolition notification forms, lead-based paint, building demolition permit, and all other permits and fees related to this scope of work.
10. ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
 - a. BP#1.01 Site Preparation*;
 - b. BP#2.01 Demolition & Abatement*
 - c. BP#7.01 Roofing* – **ADD. NO. 2**
 - d. BP#31.04 Athletic Fields*

*These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.

EXCLUSIONS

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #8.01
Windows, Glazing & Storefronts**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Windows, Glazing & Storefronts** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Windows, Glazing & Storefronts** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #8.01* – Windows, Glazing & Storefronts:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Windows, Glazing & Storefronts** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s)

and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

074213 Metal Wall Panels

078443 Fire Resistive Joint Systems (As Applicable)

079200 Joint Sealants (As Applicable)

084113 Aluminum-Framed Entrances & Storefronts

084400 Glazed Aluminum Curtain Walls

085113 Aluminum Windows

085119 Steel Windows

085673 Sound Retardant Windows

087100 Door Hardware (As Applicable)

088000 Glazing

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Metal Wall Panels; All Aluminum Frames; All Aluminum-Framed Entrances, All Storefronts and Accessories; Glazed Aluminum Curtain Walls and Accessories; Aluminum Windows; Steel Windows; Sound Retardant Windows; Aluminum Trim; Aluminum In-Fills at Column Lines and at Steel Columns; Glazing; Special Function Glazing; Fire-Rated Glazing; Safety Glazing; Fasteners and Accessories; Float Mirrors; Aluminum Thresholds/Saddles/Sills; Firestopping and Safing; Flashings; Aluminum Closure Pieces; Insulation within its Scope of Work; Screens; Caulking and Sealants and backer rod (in and out); Stays; Glazing Compounds; Setting blocks; Shims; Gaskets; Glass Channels; Tracks; Aluminum Caps; Flashings; Closures; Coping; Weep Screeds; Sill Stools; Angles; Clips; Support Members; Furring; Brackets; Seismic Bracing; Glazing Tape; Mullions; Panning; Expanders; Sill Anchorage; and all other accessories required. – **ADD. NO. 2**

Include shop drawings and structural analysis data signed and sealed by a qualified professional engineer as indicated in the specifications. Verify all dimensions in the field prior to fabrication or installation.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Firestopping and Fire Safing:

This Contractor shall furnish and install Firestopping and Fire Safing as required to complete the Windows, Glazing and Storefront Contractor's Scope of work and as indicated in the Contract Documents.

5) Shimming:

This Contractor shall coordinate the shimming to assure proper installation. All shimming, whether it is wood, plastic or any other material is to be furnished and installed by the Aluminum Windows, Storefronts, Metal Wall Panel Assemblies & Curtain Wall Contractor.

6) Window and Storefront Blocking:

- a. This Contractor shall coordinate the Blocking requirements for its Work with the General Trades Contractor.
- b. Any Blocking indicated on the Contract Documents or as required by the manufacturer and Window, Glazing and Storefront Contractor shall be furnished and installed by the General Trades Contractor.
- c. The blocking coordination responsibility amongst this Contractor and General Trades Contractor shall be ongoing for the duration of the project.
- d. This Contractor shall provide all Clip Angles, Steel Angles, Furring Channels, Miscellaneous Metal Framing and Shims to complete installation of the Work before and after the General Trades Contractor has provided coordinated Blocking.

7) Sealants and Caulking:

This Contractor shall provide all sealants and caulking as required to complete his or her scope of work.

- a. This Contractor shall provide the appropriate Backer Rod, Joint Sealant/Caulking at all exterior and interior Windows, Curtain Walls, Entrances and others surfaces contiguous to your Scope of Work, as described and noted on the Contract Documents.
- b. The Intent of this Joint Sealant/Caulking Scope of Work is for this Contractor is to provide a complete and weather tight system in all respects.

8) Window Flashing and Sheet Metal:

This Contractor shall furnish and install all Flashings and Sheet Metal that is contiguous with its Work; such as but not limited to: Flashings required to be installed after roofing work and prior to Window or Panel installations; Prefinished Aluminum Flashing at transitions and the like.

- a. This Contractor shall provide all Flashings and Sheet Metal that is contiguous with his or her work, such as but not limited to: Flashings required to be installed prior to window or Panel installations, Prefinished Aluminum Flashing.

- b. Prefinished Aluminum Flashings, Counter Flashings, Sill Closure Pieces and other Sheet Metal contiguous with the Window systems shall be provided by this Contractor.
- c. This Contractor shall provide all Flashings and Sheet Metal that is contiguous with his or her work; such as but not limited to: Flashings required to be installed prior to window or Panel installations.
- d. This Contractor shall provide all Flashings and Sheet Metal above the receiver (reglet) and install the receiver (reglet) provided by others.

9) Sheet Metal and Fabric Flashings:

The Roofing Contractor shall furnish and install all Sheet Metal Flashings, Metal Copings, Trim and Roof Accessories as described in the Contract Documents and furnish all exposed Metal through Wall Flashings, including metal reglets for installation by the Mason Contractor.

- a. Any concealed and exposed (partially into **NEW** masonry) flashings and any metal flashing requiring a fabricated bend shall be supplied by the Roofing Contractor and installed by the Masonry Contractor at Cavity Walls, Unit Masonry Steel Lintels, Relieving Angle and other areas in contact with Masonry as indicated on the Contract Documents.
- b. The Roofing Contractor shall furnish and install all Prefinished ZINC Cap, ZINC Fascia and/or Prefinished Aluminum Flashings, Counter Flashings, Copings, Metal Gravel Stops and other Sheet Metal contiguous with the Roofing system.
- c. The Roofing Contractor shall furnish to the Masonry Contractor, for installation into the Mason's **NEW** work, all other Metal Flashing and Metal Thru Wall Flashings as noted in the Contract Documents.
- d. Membrane Flashings contiguous to the Mason's work shall be provided and installed by the Mason Contractor.
- e. The Windows, Glazing and Storefronts Contractor shall furnish and install all Flashings and Sheet Metal that is contiguous with his or her work; such as but not limited to: Flashings required to be installed prior to window or Panel installations.
- f. The Roofing Contractor shall provide all flashings and reglets and accessories into existing masonry as noted on the Contract Documents. This shall include cutting and patching of all reglets into existing masonry necessary to provide a complete system.
- g. The Roofing Contractor shall supply to the Masonry Contractor all flashings and reglets and accessories into new masonry and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the Masonry Contractor.
- h. The Roofing Contractor shall supply to the Window Contractor all flashings and reglets and accessories into Window System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar.

The Roofing Contractor shall supply the receiver (reglet) to the Window Contractor.

- i. The Roofing Contractor shall supply to the General Trades Contractor all flashings and reglets and accessories into DAFS System and necessary to accept Roofing Contractor's cap flashing that goes over Roofing Contractor's termination bar. The Roofing Contractor shall supply the receiver (reglet) to the General Contractor.
- j. All metal drip flashings shall be furnished by the Roofing Contractor and installed by the Masonry Contractor.

9) Saddles, Thresholds and Sills:

This Contractor shall provide all saddles, thresholds and sills that are a component of your assembly. Subcontractor to ensure all exterior thresholds slope away from the buildings.

10) Anchorage:

This Contractor shall furnish and install all appropriate anchorage systems for his or her Scope of Work.

This Contractor shall furnish and install any additional structural members necessary for the installation of all items in this bid package that are not shown on the contract documents.

This Contractor shall provide and include all necessary attachments (clips, angle, reinforcement, hardware, shims, aluminum shapes, fasteners, or anything that is industry standard to this work, etc.) as required, whether or not shown on Contract Documents, to properly erect and install this work.

11) Glass and Glazing:

This Contractor shall furnish and install all Glass and Glazing for but not limited to Hollow Metal Doors, Sidelights, Borrowed Lights and Wood Doors and Mirrors in addition to the Metal Windows, Curtainwall and Aluminum Entrances.

This Contractor shall provide all safety laminated and fire rated glass shown on the Contract Documents.

12) Finish Hardware:

This Subcontractor shall Furnish and Install all Finish Hardware required for this Scope of Work.

For clarification, this Contractor shall also install factory electrified hardware for this Scope or Work including but not limited to electric locks, electric strikes, operators,

transformers and any and all necessary accessories as noted on the Contract Documents, including but not limited to all necessary prep work for security, technology, operators, etc., for this bid package and any other bid package.

The Electrical Trade Contractor shall furnish to the Doors, Frames and Hardware Contractor, General Trades Contractor and Window & Curtainwall Trade Contractor complete information, layout requirements and templates or actual samples of the door contacts as it relates the Security System.

This Contractor shall receive this information and have all doors and frames **factory** prepared in order to receive this material. The installation of the actual door contact shall be by the Electrical Contractor.

This Contractor shall install the magnetic door hold open contact plate (furnished by the Electrical Contractor) on its doors as noted on the Contract Documents.

13) Insulation:

This Contractor shall furnish and install all Insulation as noted on the Contract Drawings associated with the Aluminum Doors, Windows, Storefront, and Curtainwall.

This Contractor shall furnish and install all rigid insulation shown at header and sill conditions between Storefront / Curtainwall and Masonry as noted on the Contract Documents.

14) Aluminum Closure Pieces, Break metal and Miscellaneous Items:

This Contractor shall provide all Channels, Closure Pieces, Break metal, Anchors, Angle Clips, Sills, and Soffits associated with your Work as specified by the Contract Documents.

This Contractor shall provide all support clips that anchor your Work to Structural Steel or other contiguous substrate.

15) Weatherstripping:

This Contractor shall provide all Weatherstripping for your Scope of Work.

16) Finish Hardware:

This Contractor shall furnish, set, install, adjust and protect all Finish Hardware for this Scope of Work.

Additionally this Contractor shall also be responsible for the following:

- a.) Complete coordination between all hardware, doors, and frames

- b.) Install all pre-machined and pre-fit for glass lites, louvers, hardware, etc.
- c.) Install all electrified hardware for this Scope or Work including but not limited to electric locks, electric strikes, key cards, transformers and any and all necessary accessories as noted on the Contract Documents.
- d.) Coordinate with the Hardware Contractor (BP#8.03) and meet with the Owner to set up the cabinet in an initial meeting and then turnover the key cabinet at a follow-up meeting.
- e.) Install and later remove at the direction of the Construction Manager temporary construction cores for all locksets for items under this scope.
- f.) This Contractor shall install all construction cores and permanent cores in each lockset for items under this scope. The Owner will not be doing ANY of this work.
- g.) This Contractor is responsible for coordinating the Master Key System with the owner including as many meetings as necessary to accomplish this coordination.
- h.) This Contractor will return to the Project (6) months after the date of Substantial Completion to examine, re-adjust, consult, replace hardware items, and prepare a detailed written report to the Owner.
- i.) This Contractor shall install the magnetic door hold open contact plate (furnished by the Electrical Contractor) on it doors as noted on the Contract Documents.
- j.) This Contractor shall coordinate the Aluminum Doors to receive the Electrical Contractor's Door Contacts (contacts installed by Electrical Contractor).
- k.) Subcontractor responsible for all shims, sealants and/or backer rods required for door frame installation.
- l.) Install door opening assemblies including associated exit devices, closers, and gaskets complete.
- m.) Include unloading, inventorying, distribution, and installation of all finish hardware.
- n.) Include all adjusting and balancing of doors for proper operation. Include the adjusting and balancing of doors and closers and comply with all applicable codes. Subcontractor shall perform the adjusting and balancing when directed by the Construction Manager in writing to minimize repeat visits and shall submit a report identifying any doors or closers that are not balanced as specified and the reason why.
- o.) Install thresholds, seals, smoke seals, fasteners, door stops, door hold-opens, finish hardware, kickplates, gasketing and weather stripping, sweeps, astragals and door silencers complete.

17) Insulation/Expansion:

This Contractor shall furnish and install any insulation and expansion assemblies that are shown within the Contract Documents for your Scope of Work.

CLARIFICATIONS

- a.) The Windows, Glazing and Storefronts Contractor shall:
- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
 - 2) Subcontractor to protect exterior glass from damage immediately after installation.
 - 3) All glass to be turned over without smudges, markings, stains, stickers or space pads. Leave all work clean of all fabrication and installation materials including caulking and sealant.
 - 4) Include final adjustments of all doors for smooth and proper operation and tight fit, and in compliance with ADA requirements and all applicable codes.
 - 5) Include all welding required for this scope.
 - 6) Include the field testing of a qualified independent testing agency to test sound retardant windows as indicated in the specifications.
 - 7) Include all independent testing specified for this scope of work.

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR
ADDENDUM NO. 2

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #9.01
Ceramic & Terrazzo Tile**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Ceramic & Terrazzo Tile** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Ceramic & Terrazzo Tile** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #9.01 – Ceramic & Terrazzo Tile:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Ceramic & Terrazzo Tile** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification

Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

033000 Cast-In-Place Concrete (As Applicable)

ADD. NO. 1

078443 Fire Resistive Joint Systems (As Applicable)

079200 Joint Sealants (As Applicable)

093113 Access Doors and Frames (As Applicable)

093013 Ceramic Tile

096616 Terrazzo Tile

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Terrazzo Tile; Ceramic Tile; Quarry Tile; Stone and Marble Thresholds, Edge strips; Reducer Strips; Setting Materials and/or Adhesives; Grout; Bonding Agents; Mesh; Crack Isolation Membranes; Epoxy Grout; Flash Patching/Leveling; Expansion Joint Materials; Mixes; Transition/Reducing Strips; Expansion; Trim Pieces; All Accessories; Extra Materials; Cleaning and Protection and Final Sealing; All Guarantees and Warranties; Coordination with project schedule and other Trades; Submittals and Samples; Product Data as described in the Contract Documents.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Temporary Protection:

This Contractor shall provide and maintain floor protection as directed by the Construction Manager until final cleaning.

5) Preparation and Acceptance of Substrate:

This Contractor is responsible for all floor and wall preparation that is required to bring the substrate up to compliance with manufacturer's standards for the installation of materials under this Bid Package. This requirement shall also include, but not be limited to, any additional prep that may be required at floor boxes, plumbing drains, cleanouts, small cracks, small depressions/chips or other floor penetrations made by other Contractors. Also, provide floating at walls as needed to ensure smooth/flat wall surfaces.

This Contractor shall review the Specification, including but not limited Cast In Place Concrete, as it is related to all finished flooring and verify that the substrate and substrate finish anticipated is achievable and it will not affect the installation of any floor finish and base within This Contractor's Scope of Work. It is the responsibility of This Contractor to coordinate all curing and sealing compounds with the Concrete Contractor to verify compatibility with all flooring adhesives and installation methods. This Contractor shall notify the Construction Manager of any conflicts or deficiencies 30 calendar days prior to placing of any slabs. Failure to notify the Fusco Corporation of any deficiencies shall be construed as acceptance of substrate conditions.

This Contractor shall also include in the Contract Value all necessary Flash Patching and buffing to level and to fill depressions and or imperfections in the substrate to which the floor finishes are to be applied. Additionally This Contractor shall provide all necessary Flash patching at transitions from one floor finish to the other.

This Contractor shall examine and verify in writing that the concrete slab is dry according to test methods recommended by the appropriate flooring manufacturer.

This Contractor shall also examine and verify in writing that the concrete slab is in accordance with manufactures requirements for level and flatness when measured with a ten foot straight edge with a maximum deviation of 1/8".

This Contractor shall include all costs to perform testing for adhesion and moisture and pH levels at least 30 days prior to installation as detailed in the contract documents at all new and existing locations. All data and reports shall be reported to the Construction Manager. If the results are too high for the installation of flooring, then this Contractor and the Construction Manager shall implement and execute a plan of remedial measures to make the slab moisture content acceptable.

This Contractor shall remove paint applied to floors by the Owner's abatement contractor. – **ADD. NO. 2**

6) Cementious Underlayment/Flash Patching:

This Contractor shall provide all necessary Crack Isolation Membrane/Cementious Underlayment/Flash Patching and Buffing to fill depressions and or imperfections in the substrate to which the floor finishes are to be applied. Additionally, this Contractor shall provide all necessary flash patching at transitions from one floor finish to the other.

7) Mechanical / Plumbing / Electrical / Communications Coordination:

This Contractor shall coordinate devices and the like with appropriate Contractor and shall flash patch to these floor penetrating items.

8) Finish Schedule:

All finishes shall be in accordance with the Finishes Schedule, Drawings and Specifications, any conflicts between the above, the most restrictive, greatest quantity and highest quality shall prevail.

9) Freezer / Cooler Floor Finish:

This Contractor shall provide the floor finish in the Freezer / Cooler as noted on the Contract Documents which shall be, unless otherwise noted, quarry tile similar to that which is to be installed in the main Kitchen area.

10) Saddles, Thresholds, Trim and Sills:

This Contractor shall provide all marble and stone thresholds and all trim at tile wall or floor transitions.

11) Installation and Protection:

This Contractor shall provide adequate ventilation during the performance of this work and shall include but not be limited to portable fans if necessary

This Contractor shall provide and maintain barriers and protection to prevent other Contractors from damaging finished work during and after the installation period.

This Contractor shall include in the contract value minimum protective measures as follows:

**Over Ceramic &
Quarry Tile**

Two Layers Of 40# Reinforced Kraft Paper (or equal) With Tape

Terrazzo

**One Layer Of 40# Reinforced Kraft Paper (or equal) With Tape
Under 1/8" Thick Masonite Hardboard**

This Contractor shall remove and dispose of the Flooring Protection measures when directed by the Construction Manager, at its sole discretion.

This Contractor shall provide transition strips at dissimilar materials.

This Contractor is responsible for all layout patterns for wall and flooring work to be installed under this bid package and shall be reviewed by the Architect and Construction Manager prior to installation.

12) Floor Recesses:

The Concrete Contractor, General Trades Contractor and Flooring Contractor shall coordinate all recess in any concrete slab as required for floor finishes.

13) Floor Sealing:

In addition to that as noted on the Contract Documents, this Contractor shall also provide the following:

- a.) Comply with manufacturer's instructions for cleaning operations.
- b.) This Contractor shall broom, vacuum and mop clean all flooring surfaces under this Scope of Work prior to sealing.

CLARIFICATIONS

This Contractor shall:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Sheet A-803.2 – Install ceramic tiles provided by artist as indicated.
3. Provide extra stock at the completion of the project per project specifications.
4. Sheet FS-5 – This Contractor shall install the floor trough drain as furnished by the Food Service Equipment Subcontractor.
5. Ceramic tile cladding described in specification section 074423 to be completed by bid package 6.01 General Trades. – **ADD NO. 1**

EXCLUSIONS

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision,

overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #9.02
Resilient, Carpet, Fluid-Applied & Wood Flooring**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Resilient, Carpet & Wood Flooring** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Resilient, Carpet & Wood Flooring** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #9.02 – Resilient, Carpet & Wood Flooring:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Resilient, Carpet & Wood Flooring** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s)

and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

033000 Cast-In-Place Concrete (As Applicable)

079200 Joint Sealants (As Applicable)

096400 Wood Flooring
096500 Resilient Floor Tile
096566 Resilient Athletic Flooring
096700 Fluid-Applied Flooring
096800 Carpet

124813 Floor Mats And Frames

144200 Wheelchair Lifts (As Applicable)

Division 21 Fire Suppression (As Applicable)
Division 22 Plumbing (As Applicable)
Division 23 Mechanical (As Applicable)
Division 26 Electrical (As Applicable)
Division 27 Communications (As Applicable)
Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Wood Strip Flooring; Bamboo Flooring; Refinishing Of Wood Flooring; Urethane Finishing System; Wood Filler; Felt Underlayment; Fasteners; Steel Wall Base Angle Resilient Athletic Flooring; Vinyl Composition Tile; Slip Resistant Floor Tiles; Resilient Wall Base and Accessories; Concrete Slab Primer; Stair Nosing/Treads/Risers; Leveling & Patching; Fluid Applied Athletic Flooring; Epoxy Flooring and Base; Resinous Flooring and Base; Carpet; Floor Mats; Edge strips; Reducer Strips; Setting Materials and/or Adhesives; Flash Patching/Leveling; Expansion Joint Materials; Mixes; Transition/Reducing Strips; Expansion; Trim Pieces; All Accessories; Extra Materials; Cleaning and Protection and Applied Protective Floor Polish; Re-staining and Refinishing of Wood Stage Floor and Stage Trim and Stage Components All Guarantees and Warranties; Coordination with project schedule and other Trades; Submittals and Samples; Shop Drawings; Product Data as described in the Contract Documents.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Temporary Protection:

The Flooring Contractor shall provide and maintain floor protection as directed by the Construction Manager until final cleaning.

5) Preparation and Acceptance of Substrate:

The Flooring Contractor is responsible for all floor preparation that is required to bring the substrate up to compliance with manufacturer's standards for the installation of materials under this Bid Package. This requirement shall also include, but not limited to, any additional prep that may be required at floor boxes, plumbing drains, cleanouts, small cracks, small depressions/chips or other floor penetrations made by other Contractors.

The Flooring Contractor shall be aware the Bid Package #2.01 Contractor is removing and abating the existing floor mastic by mechanical means.

The Flooring Contractor shall review the Specification, including but not limited Cast In Place Concrete, as it is related to all finished flooring and verify that the substrate and substrate finish anticipated is achievable and it will not affect the installation of any floor finish and base within the Flooring Contractor's Scope of Work. It is the responsibility of the Flooring Contractor to coordinate all curing and sealing compounds with the Concrete Contractor to verify compatibility with all flooring adhesives and installation methods. This Contractor shall notify the Fusco Corporation of any conflicts or deficiencies 30 calendar days prior to placing of any slabs. Failure to notify the Fusco Corporation of any deficiencies shall be construed as acceptance of substrate conditions.

The Flooring Contractor shall also include in the Contract Value all necessary Flash Patching and buffing to level and to fill depressions and or imperfections in the substrate to which the floor finishes are to be applied. Additionally the Flooring Contractor shall provide all necessary Flash patching at transitions from one floor finish to the other.

The Flooring Contractor shall examine and verify in writing that the concrete slab is dry according to test methods recommended by the appropriate flooring manufacturer.

The Flooring Contractor shall also examine and verify in writing that the concrete slab is in accordance with manufactures requirements for level and flatness when measured with a ten foot straight edge with a maximum deviation of 1/8".

Remove all dirt, fireproofing if applicable, paint, grease, curing compounds etcetera from the floors.

The Flooring Contractor shall include all costs to perform testing for adhesion and moisture and pH levels at least 30 days prior to installation as detailed in the contract documents at all new and existing locations. All data and reports shall be reported to the Construction Manager. If the results are too high for the installation of the flooring, then the Flooring Contractor and the Construction Manager shall implement and execute a plan of remedial measures to make the slab moisture content acceptable.

This Contractor shall remove paint applied to floors by the Owner's abatement contractor. – **ADD. NO. 2**

6) Cementious Underlayment/Flash Patching:

The Flooring Contractor shall provide all necessary Cementitious Underlayment/Flash Patching and Buffing to fill depressions and or imperfections in the substrate to which the floor finishes are to be applied. Additionally, the Flooring Contractor shall provide all necessary flash patching at transitions from one floor finish to the other. At a minimum this will be a requirement in all areas where the Abatement Trade Contractor will have removed tile and mastic.

7) Mechanical / Plumbing / Electrical / Communications Coordination:

The Flooring Contractor shall coordinate devices and the like with appropriate Contractor and shall flash patch to these floor penetrating items.

8) Finish Schedule:

All finishes shall be in accordance with the Finishes Schedule, Drawings and Specifications, any conflicts between the above, the most restrictive, greatest quantity and highest quality shall prevail.

9) Elevator Floor Finish:

This Contractor shall provide the floor finish in the Elevator Cab as noted on the Contract Documents.

10) Installation and Protection:

The Flooring Contractor shall provide adequate ventilation during the performance of this work and shall include but not be limited to portable fans if necessary

The Flooring Contractor shall provide and maintain barriers and protection to prevent other Contractors from damaging finished work during and after the installation period.

This Contractor shall include in the contract value minimum protective measures as follows:

Over Carpet	Poly-Tak Protection (or equal) With Tape
Over VCT (Non-Hallways)	2 Layers Of 40# Reinforced Kraft Paper(or equal)With Tape
Gymnasium & Other Flooring	Coverguard Poly 40 Mil w/Diamond Traction (or equal) With Tape
All Hallways	One Layer Of 40# Reinforced Kraft Paper (or equal) With Tape Under 1/8" Thick Masonite Hardboard

The Flooring Contractor shall provide transition strips at dissimilar materials.

The Flooring Contractor is responsible for all layout patterns for wall and flooring work to be installed under this bid package and shall be reviewed by the Architect and Construction Manager prior to installation.

This Contractor shall strip, clean and wax all VCT and Sheet Vinyl floors upon completion of its Work and at the Construction Manager's direction. This Contractor shall apply one **(1) coat of sealer (coordinate with Final Cleaning Contractor Bid Package 1.04)** prior to installing floor protection specified above. All products must be applicable to what the owner uses for their regular maintenance.

11) Floor Recesses:

The Concrete Contractor, and General Trades Contractor and Flooring Contractor shall coordinate all recess in any concrete slab as required for floor finishes.

CLARIFICATIONS

This Contractor shall:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Demolition Drawings – Include Specific Demolition Note A20 to prepare floors as required for VCT and rubber finishes.
- 3) Sheet D-106 - Include Specific Demolition Note A7 and remove the existing gymnasium court markings. Include Demolition Note 117 and remove floor sleeve covers and prepare for new. Include photographing the striping of the existing gymnasium flooring and creating a shop drawing of the existing striping for review and approval for the new striping after the flooring has been refinished.
- 4) Sheet A-102.1 – Include epoxy flooring in Electrical B114.
- 5) Sheet A-103.2 – Refinish the entire gym floor including the areas under the bleachers. Move the bleachers as required to refinish all of the flooring.
- 6) F-102.2 – Include all new resilient flooring including the flooring and thresholds in the new Theory Room B111.
- 7) Layout, furnish, and install game lines and markings as indicated with mascot artwork. Include a contrasting stripe at the edge of the stage.
- 8) Coordinate with the General Trades Contractor supplying the volleyball sleeve covers noted in the drawings.
- 9) Include all patching required at the existing wood floors to remain.
- 10) Include all flooring and base in the elevator cab.
- 11) Include all epoxy flooring.
- 12) Include all sanding and finishing of wood floors.
- 13) Provide extra stock for all materials as indicated in the specifications.

- 14) Provide and install wall base steel angle iron at the shops as indicated in the specifications.
- 15) Include the specified base and transitions at all flooring under this scope.
- 16) Furnish and install all floor mats and frames.
- 17) FI-103.2 – Provide Re-staining and Refinishing of Wood Stage Floor and Stage Trim and Stage Components

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1 – NEW FLOOR REPAIR - \$15,000

Provide flooring repair of new flooring damaged during construction as directed by the Construction Manager.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #9.03
Acoustical & Wood Suspended Ceilings**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Acoustical and Wood Suspended Ceilings** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Acoustical and Wood Suspended Ceilings** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #9.03* – Acoustical and Wood Suspended Ceilings:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Acoustical and Wood Suspended Ceilings** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the

following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

079200 Joint Sealants (As Applicable)

083113 Access Doors and Frames (As Applicable)

092116 Gypsum Board Assemblies (As Applicable)

095113 Acoustical Panel Ceilings

095426 Suspended Wood Ceiling Systems

114000 Food Service Equipment (As Applicable)

123553 Wood Laboratory Casework and Furnishings (As Applicable)

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Acoustical Ceilings; Metal Panel Ceilings; Suspended Wood Ceiling Systems; Metal Suspension Systems; All Seismic Ceiling Details; Hanger Wires; Braces; Clips; Wall Angles; Compression Struts; Adhesives; Edge Molding and Trim; Perimeter Trim; Sealant (acoustical or otherwise); Ceiling Insulation; Coordination with project schedule and other trades; Submittals, Samples, Product Data; Shop Drawings. – **ADD. NO. 2**

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Layout/Survey:

This Contractor shall provide layout/surveys for his or her own Scope of Work.

Coordinate Installation with Approved MEP Coordination Drawings.

Shoot high and low points of mechanical systems prior to commencing work; installation of any acoustical ceiling components constitutes acceptance of ceiling heights. Coordinate layout and installation of grid systems with Mechanical, Fire Suppression, Electrical, General Trades and other subcontractors as required. It is the Acoustical and Wood Ceiling Subcontractor's responsibility to determine that the finished ceiling heights noted on drawings cannot be obtained with existing installations. Any conflicts need to be brought to the Construction Manager's attention prior to installation.

5) Acoustical Ceiling Coordination:

This Contractor shall coordinate the Acoustical Ceiling Work with the Structural Steel, Miscellaneous Metals, Mechanical, General Trades, Fire Suppression and Electric Trade Contractors. Coordination meetings will be held at the Fusco Field Office as directed by Fusco Corporation. A final set of Coordination Drawings will be signed-off by all Trade Contractors (Including the General Trades Contractor) that were required for this coordination process. Furnish and install all wires for light fixtures, registers, and all other mechanical, plumbing, fire suppression, and electrical equipment. All wires and seismic wires are to be completed in compliance with all applicable codes.

6) Acoustical Ceiling Touch-Up & Extra Stock:

This Contractor shall furnish the Construction Manager with twenty (20) shoe polish cans (1 1/8 oz., Net Weight) of touch up paint. If color varies, touch up shall be proportionate to the square footage of each color and type. This Contractor shall provide the Construction Manager with an additional **One Hundred and Twenty (120) Hours of Labor for touch up** at the direction of the Construction Manager. Provide extra stock of all materials as indicated in the specifications.

7) Man Lifts:

This Contractor shall allow use of man lifts by the Construction Manager and others for inspection purposes and as directed by the Construction Manager. Provide training and any necessary safety equipment.

CLARIFICATIONS

a.) This Contractor shall:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Furnish and install all acoustical and wood ceiling systems complete.
- 3) Provide metal reveal typical and as noted on 2/A-203.1. – **ADD. NO. 2**
- 4) Provide 4” steel channels typical and as noted on 2/A205.2. – **ADD. NO. 2**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #11.01
Food Service Equipment**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Food Service Equipment** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Food Service Equipment** as required, shown, described and specified under this Bid Package, and all related scope and services required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #11.01* – Food Service Equipment:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Food Service Equipment** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification

Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

079200 Joint Sealants (As Applicable)

114000 Food Service Equipment

Division 21	Fire Suppression (As Applicable)
Division 22	Plumbing (As Applicable)
Division 23	Mechanical (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)
Division 31	Earthwork (As Applicable)
Division 32	Exterior Improvements (As Applicable)
Division 33	Utilities (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Food Service Equipment;

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Layout/Survey:

This Contractor shall provide layout/surveys for his or her own Scope of Work. Provide layout for all blocking and backing by others.

The General Trade Contractor shall furnish and install ALL WOOD AND METAL BLOCKING AND BACKING required by the Contract Documents. Wood Blocking and Backing shall include, but not be limited to, plywood blocking, furring, dimensional lumber and any and all wood required by the contract documents indicated for the purpose of blocking for any and all trades. The General Trades Contractor shall prepare a blocking and backing location plan and conduct all required meetings in the presence of the Construction Manager. The blocking and backing location plan shall be signed off by all trades requiring blocking (including the Architect for FF&E). Metal backing or blocking can only be used in lieu of specified wood backing or blocking if approved in writing by the Architect and Construction Manager.

5) Food Service Drawing Coordination:

The Food Service Equipment Contractor is solely responsible for providing accurate information on shop drawings accurately laid out for electrical, plumbing, and HVAC coordination and all connections required for each piece of kitchen equipment supplied under this bid package. The Food Service Equipment Contractor shall **take the lead** for the Food Service Equipment and the Plumbing, Mechanical and Electrical Contractors coordination efforts. Any costs incurred by other trades to modify installed electrical or mechanical rough-ins due to incorrect information supplied by this Contractor shall be at this Contractor's cost.

The detailed shop drawings shall include a detailed point to point shop drawing which shall be accompanied by a digital copy in AutoCAD and shall be used for all Contractor coordination. A coordination meeting shall take place between the Food Service Contractor and the MEP Contractors plus or minus 3 to 4 weeks prior to the placement of the concrete slab in the kitchen areas to confirm the exact quantity and location of all under-slab rough in that is required to be installed by the MEP Contractors as it relates to the Food Service Equipment. The Food Service Contractor shall be responsible to inspect and formally confirm the final locations of ALL under slab roughing as installed by the MEP Contractors within 1 or 2 days of the slab placement.

6) Food Service Digital Point-to-Point Drawing:

The Food Service Equipment Contractor shall provide a digital point-to-point AutoCAD drawing indicating any and all rough in locations including but not limited to plumbing rough, mechanical rough, finish floor elevations, finish ceiling elevations and the like to coordinate the requirements of other trades with the Food Service Equipment.

7) Freezer/Cooler and Drain Troughs:

The Food Service Equipment Contractor shall coordinate with the Site and Concrete Contractors for the size and locations of all depressions.

The Food Service Equipment Contractor shall furnish and install all materials for the insulated pit for the walk-in cooler as shown on the Contract Documents.

The Food Service Equipment Contractor shall coordinate with the Plumbing, Mechanical and Electrical Contractors.

The Ceramic Tile Subcontractor shall install the floor grate drain as furnished by the Food Service Equipment Subcontractor.

The Food Service Equipment Contractor shall cut and seal all holes in the Coolers and Freezers, but not limited to, sprinkler piping and heads, etc. This shall be coordinated with the Fire Protection Contractor for locations.

The Food Service Equipment Contractor shall provide all components of the Freezer / Cooler.

The Concrete Contractor shall provide the Concrete Fill for the Freezer / Cooler floor. Food Service Equipment Subcontractor to furnish and install all insulation for the freezer and refrigerator systems.

The Food Service Contractor shall provide the compressor system for the Freezer / Cooler in its entirety including but not limited to any applicable accessories, dunnage, piping, disconnects and wiring for a complete functioning Freezer / Cooler.

The Food Service Contractor shall provide any and all curbs including but not limited to roof curbs for roof mounted kitchen equipment / remote condensers and all other work on the roof such as refrigerant lines.

8) Equipment, Control Devices and Starters for Food Service Equipment:

Switches, fuses, terminal boxes, cords, flexible connectors, control devices, starters, disconnect, and plugs for food service equipment shall be furnished by the Food Service Equipment Contractor unless specifically noted otherwise. The Electrical Contractor shall be responsible for line voltage connections and the Mechanical Contractor shall be responsible for Plumbing and Mechanical connections. **All interconnecting wiring shall be the responsibility of the Electrical Contractor.**

The Food Service Equipment Contractor shall coordinate the location of connections for equipment and shall notify the Construction Manager of any discrepancies. Failure to notify the Fusco Corporation shall be construed as acceptance of the condition.

The Food Service Equipment Contractor shall submit in writing, as a separate submission, that all electrical requirements for all food service equipment, i.e., quantity, location phase, voltage, etc., is correctly shown on the contract drawings. This separate submission shall be submitted to the Construction Manager and forwarded to the Electrical Trade Contractor.

9) Kitchen Equipment Exhaust Ventilator:

The Food Service Equipment Subcontractor shall provide (furnish and install) the Kitchen Equipment Exhaust Ventilator.

The Plumbing and HVAC Contractor shall make all final connections to the Exhaust Ventilator. The Plumbing and HVAC Contractor shall provide any and all accessories required, including but not limited to access doors, as noted on the Contract Documents or as required by the applicable inspector.

10) Kitchen Equipment Fire Suppression System:

The Food Service Equipment Contractor shall furnish Gas Valve(s) to the Plumbing and HVAC Contractor for installation, and coordinate all the necessary requirements for a fully functioning system. – **ADD. NO. 2**

The Food Service Equipment Contractor shall provide the Fire Suppression System for the Food Service Equipment and shall be interlocked with the building fire alarm system. The Electrical Trade Contractor shall be responsible for all tie-ins to the building fire alarm system. The Food Service Equipment Contractor shall be responsible to coordinate the tie-ins from the Fire Alarm to the Food Service Equipment.

The Food Service Equipment Contractor shall furnish the emergency shutoff gas Ansul valve to the Mechanical Contractor for installation and coordinate all the necessary requirements for a fully functioning system.

11) Firestopping

The Food Service Equipment Contractor shall provide sleeves and/or other firestopping through wall penetration materials to the appropriate Contractor for installation in the appropriate assembly. These sleeves shall provide for U.L. Listings appropriate for the condition. The Food Service Equipment Contractor shall be responsible for Firestopping all of his or her penetrations through rated and/or smoke partitions/walls/floors.

12) Caulking & Sealing:

The Food Service Equipment Contractor is responsible for all caulking and sealing of his work to adjacent dissimilar surfaces as required by the contract documents.

The Contractor shall provide all expansion joint fillers as required to perform the Work.

13) Tagging & Labeling:

The Food Service Equipment Contractor is responsible for properly tagging and labeling all keys to locks that may be installed on equipment. Keys must be turned over to Fusco Corporation and not left in the cabinets.

14) Health Department Inspection and Certificate:

The Food Service Equipment Contractor shall return to the site prior to substantial completion to thoroughly clean all food equipment, install and set up all equipment accessories, and walk through the kitchen areas with the Health Department Inspector to confirm and demonstrate the proper operation of the food service equipment to allow for issuance of Certificate of Operation. In addition to the above, this Contractor shall have lead responsibility in arranging a kick off meeting with the local health department. This Contractor shall continue to take the lead and walk through for all inspections and meetings through final Health Department Approval and Sign-off.

The Food Service Equipment Contractor shall respond and rectify any and all punchlist items required by the Health Department Inspector in a timely manner, time is of the essence, and coordinate any and all re-inspections required to attain the Certificate.

The Food Service Equipment Contractor shall be responsible for procuring and paying for all permits that are required by all of the authorities having jurisdiction over the operation of the Kitchen and Cafeteria so that the Owner can begin using the entire

Kitchen and Cafeteria upon the issuance of the Certificate of Occupancy and the Certificate of Health Compliance by the State of Connecticut.

15) Commissioning and Training:

Engage factory-authorized service representatives to perform startup services and to demonstrate and train Owner's maintenance personnel as described in the Project manual and as specified below on two (2) separate occasions as directed by the Construction Manager.

- a.) Coordinate food service equipment startup with service-utility testing, balancing, and adjustments. Do not operate steam lines before they have been cleaned and sanitized.
- b.) Remove protective coverings and clean and sanitize equipment, both inside and out, and relamp equipment with integral lighting. Where applicable, comply with manufacturer's written cleaning instructions when final cleaning.
- c.) Test each equipment item for proper operation. Repair or replace equipment that is defective in operation, including units that operate below required capacity or that operate with excessive noise or vibration.
- d.) Test refrigeration equipment's ability to maintain specified operating temperature under heavy-use conditions. Repair or replace equipment that does not maintain specified operating temperature.
- e.) Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- f.) Test motors and rotating equipment for proper rotation and lubricate moving parts according to manufacturer's written instructions.
- g.) Test water, drain, gas, steam, oil, refrigerant, and liquid-carrying components for leaks. Repair or replace leaking components.
- h.) Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance for each food service equipment item.
- i.) Review data contained in the operation and maintenance manuals. Schedule training with Owner, through Architect, with at least 7 days' advance notice.

16) Final Cleaning:

The Food Service Equipment Contractor is responsible for final cleaning (within his or her Scope of Work) of all but not limited to, all surfaces, interior and exterior of all equipment/counters/shelves, etc, immediately upon installation completion or at the sole discretion of the Construction Manager..

17) Access Doors:

The Food Service Equipment Contractor shall provide access doors to the appropriate Contractor for installation of same in the appropriate assembly to access the Food Service Contractor work or equipment.

CLARIFICATIONS

a.) This Subcontractor shall include:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet D-112 - Food Service Equipment Subcontractor to take photographic records, remove, label, clean, service, move, store, move and reinstall all food service equipment noted to be reused. Include all costs for moving and storing the equipment noted for reuse in a secure facility and as noted.
- 3) Include kitchen refrigeration curbs.
- 4) Include all Food Service Equipment including the exhaust hoods in kitchen areas, counters at pass-through windows, washers and dryers and cartridge-operated and Ansul fire protection systems. Include all equipment indicated in specification section 114000 and the “FS” Food Service drawings.
- 5) The Food Service Equipment Subcontractor shall provide the Kitchen Equipment Exhaust Ventilator.
- 6) Furnish and install all sealants for this scope of work.
- 7) The Food Service Equipment Contractor shall furnish Gas Valve(s) to the Plumbing and HVAC Contractor for installation, and coordinate all the necessary requirements for a fully functioning system. See Dwg. P-201. – **ADD. NO. 2**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #21.01
Fire Suppression**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Fire Suppression** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Fire Suppression** as required, shown, described and specified under this Bid Package, and all related scope and services, required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #21.01 - Fire Suppression:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Fire Suppression** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification

Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

078413 Through-Penetration Firestop Systems (As Applicable)

079200 Joint Sealants (As Applicable)

083113 Access Doors and Frames (As Applicable)

114000 Food Service Equipment (As Applicable)

210000 Fire Protection

Division 22 Plumbing (As Applicable)

Division 23 Mechanical (As Applicable)

230500 Demolitions And Removals (As Applicable)

Division 26 Electrical (As Applicable)

Division 27 Communications (As Applicable)

Division 28 Electronic Safety and Security (As Applicable)

Division 31 Earthwork (As Applicable)

Division 33 Utilities (As Applicable)

Commissioning (note included in 019100, DIV 1)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

All Fire Suppression Demolition throughout existing buildings and tunnels;

Fire Protection Systems; Sprinkler Zone Control Assemblies; Fire Department Connections; Galvanized Sprinkler Test System; Riser Check Valve As Fire Protection Systems; Fire Department Connections; Galvanized Sprinkler Test System; Riser Check Valve Assembly; Dry Sprinkler Systems; Fire Department Valves; Glass Door Fire Protection System; Specialty Valves; Standpipe and Hose Systems; Tamper and Pressure Switches; Supervisory Switches; Interior and Exterior Pipe and Fittings; Escutcheons; Sleeves; Alarm Devices and Equipment; Fire Department Valve Cabinets; Equipment; General Valves; Pipe Hangers; Supports and Seismic Restraint; Wet and Dry Pipe Valve Assembly; Dry Systems Alarm Devices; Sprinkler Heads; Spare Head Cabinet; Equipment Testing; Pressure Gauges; Sprinkler Control Valve Cabinets; Access Doors; Charts and Markers; Alarm Bells; Sprinkler Head Guards; Pipe/Valve/Equipment; Motors; Starters and Disconnects (unless specifically noted otherwise shall be provided by the Fire Protection Contractor); Core Boring; Firestopping and Through-Penetration Firestop Systems for your scope of work. The Fire Protection Contractor shall include coordination of Fire Protection systems with Electrical/Mechanical systems and Architectural elements (ceilings, soffits, etc.)

Shop Drawings and Hydraulic Calculations; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing and Commissioning.

Line Voltage for all equipment as noted in the Contract Documents shall be provided by the Electrical Contractor; unless specifically noted to be provided by others.

Excavation; Concrete Encasement; Bedding and Backfill for the Fire Protection Contractor's Scope of Work shall be provided by Site Contractor.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be

provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

- 4) Fire Protection Demolition:** This Subcontractor shall be responsible to remove and properly dispose of all **Fire Protection** installations as indicated on the Contract Documents. This Subcontractor shall also be required to cap all existing utilities services at the interface of the building to be demolished and the existing building interface. It is the intent of the Contract Documents that this subcontractor coordinate systems, so that, they remain active during the construction and renovation of this phased project. This includes temporary measures and expansion of existing systems required for occupancy in occupied areas of the building. Include all temporary work required including but not limited to all cutting, capping, rerouting, adding new and interconnecting piping, ducting, control wiring, devices, and equipment to maintain all existing fire suppression services. Existing systems shall not be demolished until new systems are running for existing buildings to remain. All parts of existing systems not to be part of the permanent systems shall be demolished.
- a. This Subcontractor shall identify and mark Fire Suppression systems to be demolished as per the Contract Documents and in accordance with the Phasing Plan (Document 000926).
 - b. This Subcontract shall cut, cap and drop the piping identified to be removed.
 - i. Systems shall be cut into manageable pieces not greater than ten (10') feet in length. – **ADD. NO. 2**
 - c. Removal and proper disposal shall be by the Demolition and Abatement Contractor (Bid Package 2.01).

5) Fire Sprinkler Permit:

- a. This Fire Suppression Subcontractor shall provide a complete set of Stamped and Sealed Fire Sprinkler Drawings and Calculations for the entire building prepared by a State Licensed Engineer for the Fire Sprinkler Permit Filing.
- b. This Fire Suppression Subcontractor shall provide manpower, participate and coordinate all fire alarm, dry pipe, tamper switch, low pressure alarm devices, trouble indicators and alarm bell testing with the Fire Marshall and other trades, as it relates to its scope of Work.

6) Electrical Connections for Equipment:

- a. The Electrical Contractor shall provide single source line voltage to all equipment provided within this project for all trades unless specifically noted otherwise.
- b. Starters, Disconnects Low Voltage and Control Wiring shall be provided by the Fire Suppression Contractor unless specifically noted to be provided by the Electrical Contractor.
- c. The Fire Suppression Contractor shall furnish and install any tamper switches, to be wired by the Electrical Subcontractor.

7) Through-Penetration Firestop and Smoke Caulking Systems:

The Fire Suppression Trade Contractor shall provide Fire Caulk/Safing and Smoke Caulking as required for all penetrations through rated and/or smoke partitions/walls/floors for his or her scope of work.

8) Equipment:

The Electrical Contractor shall provide line voltage to electrical equipment provided within this project for all Trades unless specifically noted otherwise. Starters and disconnects shall be provided by the Contractor that is providing the motorized equipment unless specifically noted to be provided by the Electrical Contractor.

The Fire Protection Contractor shall coordinate the location of connections for equipment; Failure to notify the Construction Manager of any discrepancies shall be construed as acceptance of the condition.

9) Fire Suppression Calculations and Drawings:

The Fire Suppression Contractor shall be responsible to expedite all drawings and calculations through the approval process, which includes proper sign off by the Division of Construction Services. This Contractor is also responsible to ensure that the Owner's Insurance Underwriter also obtains copies of these drawings and encompasses any additional requirements to satisfy the same. This shall be completed in accordance with the project schedule.

10) Work Criteria:

The Fire Suppression Contractor shall design, furnish and install a complete fire protection system including all sprinkler heads to the satisfaction of the specification sections referenced above and to the related specifications sections referenced within them. It is mutually agreed that this design will be based on the satisfactory review and acceptance of the design submitted by this Contractor from Division of Construction Services, Fire Protection design engineer, and Owner's Insurance Underwriter. This contract is not based on the head count on the Contract Documents, it is based on an

acceptable design conforming to the specifications and approval by the above parties. As many heads that are required to meet this criteria will be provided by this Contractor.

11) Fire Protection Water Service:

The Site Work Contractor shall provide the Fire Suppression Service from the point of origin to within five (5') feet of the building and coordinate same with the appropriate utility.

The Fire Protection Contractor shall be responsible for connections to the Fire Protection service provided by the Site Contractor to complete the installation. Inserts, sleeve, link seals and the like required entering the foundation and/or slabs shall be provided by the Fire Protection Contractor.

12) Cleaning of Fire Suppression Line:

The Fire Suppression Contractor shall test and flush the fire line to the building as specified NFPA and as required by the local Fire Marshall. When Flow testing the Fire Line , it shall be the responsibility of the Fire Suppression Contractor to provide whatever temporary hosing, piping, equipment necessary to dispose of the flow test water or flushing water into the storm drainage system.

13) Fire Protection Devices:

The Fire Suppression Contractor shall provide all fire alarm devices related to the sprinkler system (flow and tamper switches). The Electrical Contractor is responsible to wire these devices to the Fire Alarm System. This Contractor will coordinate with the Electrical Contractor exact number and location of these devices.

14) Fire Hose and Valve Cabinets:

The Fire Protection Contractor shall provide all Fire Hose and Fire Valve Cabinets with appropriate signage as noted on the Contract Documents.

CLARIFICATIONS

a.) The Fire Suppression Subcontractor shall include:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. The Fire Suppression Contractor shall coordinate closely with the work of the Site Contractor to complete the water service(s) connection in a timely

manner, as directed by the Construction Manager in its sole discretion, as not to delay the backfilling of the new water service(s). In the event the Fire Suppression Contractor is not acting timely, in the Construction Manager's sole discretion, the Construction Manager shall direct the Sitework Contractor to complete the installation into the building with cost backcharged to the Fire Suppression Contractor.

3. The Sitework Trade Contractor shall provide fire protection service and domestic water line to within 5'0 of exterior face of exterior foundation wall with a flanged end or a bell end of the ductile iron pipe or similar condition for the other Trade Contractors to connect to. The Plumbing and Mechanical Trade Contractor and the Fire Protection Contractors shall be responsible for making the connections and running the piping into the building from that point.
4. Provide all penetrations and cores required to complete Subcontractor's Work. Include patching, fire caulking, acoustical caulking, and architectural caulking as required.
5. Include shop drawings and calculations prepared and stamped by a qualified professional engineer as specified for this scope of work. Include shop drawings and calculations for seismic restraints.
6. Sheet D-101, 102, 103, 105, 106, 107 Specific Demolition Note A2 – Include all work for this note related to the fire suppression system. Include reinstallation and all work needed to maintain systems during construction in all areas. Include attachment and support for all items.
7. Sheet F-001
 - a. Include new waterflow data in writing for review prior to start of design work.
 - b. Furnish and install all bracing and seismic restraints and seismic bracing. All hanger material including seismic shall be galvanized.
 - c. In addition to those sprinklers required to provide a complete sprinkler protection system throughout the building, include an additional 40 sprinklers including any necessary piping, fittings and hangers required to install the sprinklers as indicated for enhanced protection as directed by the Construction Manager.
 - d. Include a new FDC assembly on the side of the building facing Fairview Avenue and include backflow preventers, riser check valve assemblies, and all other work indicated.
8. Sheet F-003 Detail 1 – Include a temporary FDC and all other temporary work to ensure fire sprinkler protection throughout the project for all areas. Coordinate with the phasing plan.
9. Include demolishing any existing fire suppression system items that are no longer to be used that were not specified to be demolished in the demolition drawings. Verify any and all demolition with the Construction Manager prior to completion and coordinate with the phasing plan to ensure protection of occupied areas at all times. Include all temporary fire protection work indicated throughout the fire protection drawings.

10. Include the maintenance and repair of all new and existing fire suppression systems until the entire project is complete.
11. Include all fire suppression system cutting, capping, and making safe as required.
12. Furnish and install all fire suppression water flow, tamper and pressure switches/alarm systems.
13. Include all fire protection seismic and expansion joints that are required. Refer to the architectural drawings as well as the fire protection drawings for locations requiring expansion joints.
14. Include all antifreeze systems for fire protection.
15. Include all exterior fire protection work including at canopy, loading dock, dust collector and other areas.
16. Include sprinkler towards bottom of elevator shaft.
17. Video For Training, Maintenance & Operation - For equipment which requires training, maintenance and/or operation by operational personnel, provide a professionally developed video DVD with audio for the use of maintenance training for the facility as indicated in the specifications. Each video will be accompanied by a written index which can be utilized to find any specific item of information by time or place on the video. The recordings shall include the equipment being maintained by qualified personnel, the required maintenance tools, and a step by step technique, both verbally and visually demonstrating how to maintain each piece of equipment in a hands on application. Provide 5 copies of the video to the Construction Manager.

EXCLUSIONS

- 1) Sale and Use Taxes.
- 2) The Pre-Engineered Kitchen Hood Extinguishing System as noted on the Contract Documents and on the Food Service Equipment schedule shall be provided by the Food Service Trade Contractor.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1 – ADDITIONAL RELOCATION OF HEADS - \$5,000

Provide the relocation of fire suppression heads that have been installed but require relocation as directed by the Construction Manager.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #23.01
Plumbing & HVAC**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Plumbing & HVAC** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Plumbing & HVAC** as required, shown, described and specified under this Bid Package, and all related scope and services, required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **BID PACKAGE #23.01 – Plumbing & HVAC:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Plumbing & HVAC** and related work as described in the Specifications, Drawings, Site

Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

078413 Through-Penetration Firestop Systems (As Applicable)
079200 Joint Sealants (As Applicable)

083113 Access Doors and Frames (As Applicable)

114000 Food Service Equipment (As Applicable)
123553 Wood Laboratory Casework And Furnishings (As Applicable)
123570 Healthcare Casework (As Applicable)

Division 21 Fire Suppression (As Applicable)

Division 22 Plumbing
Division 23 Mechanical

230500 Demolitions And Removals (As Applicable)

Division 26 Electrical (As Applicable)
Division 27 Communications (As Applicable)
Division 28 Electronic Safety and Security (As Applicable)
Division 31 Earthwork (As Applicable)
Division 32 Exterior Improvements (As Applicable)

328000 Irrigation System (As Applicable)

Division 33 Utilities (As Applicable)

Commissioning (note included in 019100, DIV 1)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

All Plumbing and Mechanical Demolition throughout existing buildings and tunnels;

All Service from five feet outside building into the building unless otherwise noted in the Clarifications Section of this Scope of Work; Plumbing; Heating, Ventilating and Air Conditioning; Supply Connections to equipment of other trades and/or furnished by Owner; Connections to Food Service Equipment and components; Kiln Fume Hoods (including all service connections); Power and Control Wiring beyond the Main Disconnect; Grilles, Registers and Diffusers; Automatic Temperature Control Systems; Installation of equipment furnished by Owner; Access Doors, Motors, Variable Frequency Drives (VFDs), Starters and Disconnects; Hangers, Anchors, Pipe and Duct supports; Cleaning, Lubrication, Testing, Balancing and Adjusting; Coordination Drawings; Record Drawings; Operating and Maintenance Manuals; Instructions; Tests on: all system under your Scope of Work; Commissioning; Coordination with project schedule and other trades; Submittals, Samples, Product Data and etc.

Radiant Panels; Interior and Exterior and including under slab Gas Piping Systems; Condensate Piping; Heating Systems; Cooling Systems; HVAC Piping (HWS+HWR+CWS+CWR); HVAC Pumps; Chemical Water Treatment; Complete Heating Boilers and Accessories; Refrigeration Piping; Air Handling Units; Packaged Air Conditioning Units; Thermal Heat Transfer Units; Fans; Ductwork; Sound Attenuators; Air terminal Units; Air Outlets and inlets; HVAC Control System; Testing, Adjusting, Balancing; Vibration Isolation; Insulation; Pipe and Pipe fittings; Radon Piping; Chemical Water Treatment; Hydronic Piping (excluding excavation and backfill); Motors and Starters; Venting System; Gas Systems; Gas Piping; Accessories and all final connections; Connections and Support systems for Equipment furnished by others; Hanger and Supports; Valves; Pipes; Drains; Vibration Control; Pumps and Controls; Coordination

Drawings; Core Boring; Firestopping and Through-Penetration Firestop Systems and Joint Sealants for your scope of work; Mechanical Connections to Equipment provided by others. Mock-ups; Submittals; Product Data and Samples and Etc; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing; Adjusting; and Balancing; Commissioning; support of Commissioning Agent. The Plumbing and HVAC Contractor shall provide starters and disconnects for fans; pumps; motors; equipment and etc.; provided under your scope of work; unless specifically noted to be furnished by others. Interconnecting wiring (including controls) shall be the responsibility of the Plumbing and HVAC Contractor, as noted on the Contract Documents.

All Plumbing Work; Sanitary Piping Systems; Venting Systems; Waste Systems; Domestic Water Piping; Piping Systems; Storm Piping Systems; Trap Primers and Cleanouts; Water Hammer Arrestors; Plumbing Fixtures and Accessories; Plumbing Equipment; Domestic Water Heater Equipment and Accessories; Vibration Isolation; Insulation; Pipe and Pipe fittings; Motors and Starters; Storm and Roof Drainage Systems; Temporary Roof Drains; Domestic Hot and Cold Water Systems; Fire Service Water Service; Connections and Support systems for Equipment furnished by others; Hangers and Supports; Insulation; Valves; Pipes; Drains; Water Heating Equipment; Vibration Control; Pumps and Controls; Hose Bibbs and Wall Hydrants; Miscellaneous Plumbing Specialties; Coordination Drawings; Core Boring; Down Spout Nozzles; Firestopping and Through-Penetration Firestop Systems and Joint Sealants for your scope of work; Mechanical Connections to Equipment provided by others. Mock-ups; Submittals; Product Data and Samples and Etc; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing and Commissioning

The Plumbing Contractor shall provide starters and disconnects for fans; pumps; motors; equipment and etc.; provided under your scope of work; unless specifically noted to be furnished by others. Interconnecting wiring (including controls) shall be the responsibility of the Plumbing Contractor, as noted on the Contract Documents.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased

specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Plumbing and HVAC Demolition: This Subcontractor shall be responsible to remove and properly dispose of all **Plumbing and HVAC** installations as indicated on the Contract Documents. This Subcontractor shall also be required to cap all existing utilities services at the interface of the building to be demolished and the existing building interface. It is the intent of the Contract Documents that this subcontractor coordinate systems, so that, they remain active during the construction and renovation of this phased project. This includes temporary measures and expansion of existing systems required for occupancy in occupied areas of the building. Include all temporary work required including but not limited to all cutting, capping, rerouting, adding new and interconnecting piping, ducting, control wiring, devices, and equipment to maintain all existing mechanical and plumbing services. Existing systems shall not be demolished until new systems are running for existing buildings to remain. All parts of existing systems not to be part of the permanent systems shall be demolished.

- a. This Subcontractor shall identify and mark Plumbing and HVAC systems to be demolished as per the Contract Documents and in accordance with the Phasing Plan (Document 000926).
- b. This Subcontractor shall cut, cap and drop the system identified to be removed.
 - i. Systems shall be cut into manageable pieces not greater than ten (10') feet in length. – **ADD. NO. 2**
- c. Removal and proper disposal shall be by the Demolition and Abatement Contractor (Bid Package 2.01).
- d. This Subcontractor shall be responsible to remove and properly dispose of the existing HVAC Rooftop Units.
- e. This Subcontractor shall be responsible to remove and properly dispose of the existing Steam Boilers.

5) Electrical Connections for Equipment:

- a. The Electrical Contractor shall provide single source line voltage to all equipment provided within this project for all trades unless specifically noted otherwise.
- b. Starters, variable frequency drives (VFDs), Disconnects Low Voltage and Control Wiring including control voltage transformers shall be provided by the Plumbing and HVAC Contractor for all of your equipment, unless specifically noted to be provided by the Electrical Contractor.
- c. The Electrical Contractor shall provide line voltage to only those the Temperature Control Panels indicated or shown on the Contract Documents.
- d. Power for additional Temperature Panels provided by the Plumbing and HVAC Contractor shall be the responsibility of the Plumbing and HVAC Contractor.

- e. Failure to notify the Fusco Corporation of any discrepancies shall be construed as acceptance of the condition.

6) Seismic Bracing:

- a. This Subcontractor shall furnish and install all seismic bracing as required and indicated in the Contract Documents.
- b. This Subcontractor shall furnish and install all flexible joint assemblies associated with any mechanical restraint collars as indicated in the Contract Documents.

7) Temporary and Permanent Heating and Cooling:

- a. The Plumbing and HVAC Contractor shall utilize both Temporary and Permanent Cooling and Heating Equipment for Temporary Cooling and Heating subject to the approval of the Construction Manager, in its sole discretion. Subcontractor to provide all temporary heating and cooling as required and specified below.
- b. All Temporary Heating and Cooling requirements are per the Project Schedule and Phasing Plan (Document 000926).
- c. The Plumbing and HVAC Contractor shall provide a compatible **temporary low pressure steam boiler** to run the existing steam heating systems for all areas not under construction as indicated in the phasing plan. The temporary boiler must have sufficient capacity (200 Horsepower minimum) to service the areas not under construction. Include all rental, transport, start-up, adjustment, service, temporary piping, inspection, permitting, controls and connection costs with the existing system and temporary utilities for a complete functioning system. It is critical that the temporary boiler system be reliable and Subcontractor must have all necessary service agreements, replacement parts on hand and service technicians available to repair any issues within eight (8) hours. A replacement temporary boiler must be delivered and connected within eight (8) hours of the temporary boiler going off-line if repairs can't be made. A temporary boiler of sufficient capacity must be operating during the winter heating season (October 1 to May 1). Include gas piping of sufficient capacity for the temporary boiler.
- d. The Plumbing and HVAC Contractor shall provide all labor and materials to connect temporary ductwork and all of its components and necessary accessories, including but not limited to hangers, insulation, dampers, vents, from the **exterior located temporary construction heating units (as described in the Allowance under this Bid Package)** with risers to all floors. The temporary ductwork shall be extended down hallways and into individual rooms to maintain distribution of the required minimum temperature. The system shall be fully functional to the approval of the Construction Manager, in its sole discretion. Sufficient

temperature for temporary heating shall be a minimum ambient temperature of 55 degrees Fahrenheit.

- e. The Plumbing and HVAC Contractor shall provide Cooling / Humidity Control with **New Permanent Cooling System** during the summer cooling season (May 1 thru October 1). Sufficient temperature for temporary cooling shall be a maximum ambient temperature of 78 degrees Fahrenheit and a maximum relative humidity of 50 percent.
- f. The Plumbing and HVAC Contractor shall provide **all temporary control wiring** for its temporary heating and cooling systems. At a minimum, thermostat controls shall be provided in a quantity (one per floor per unit) and location (remote from Units), as approved by the Construction Manager, to accommodate an evenly distribution of temporary heating and cooling.
- g. All necessary Equipment, Temperature Controls, Plumbing, Safety Controls that may be required shall be installed and operational prior to requesting approval to utilize the permanent heating or cooling system.
- h. The Plumbing and HVAC Contractor shall provide **temporary filters at all return ducts as required** and at the sole discretion of the Construction Manager, changed at weekly intervals, so as not to allow the migration of construction dirt and dust.
- i. When the **Permanent Cooling System** is utilized for Temporary Cooling, the Plumbing and HVAC Contractor shall be responsible for the maintenance, repair, refurbishing and extension of all required warranties of the HVAC Equipment (including temporary connections).
- j. **Power Consumption** cost (**Usage Only**) to operate the **Permanent Cooling System** shall be by others.
- k. **Fuel Consumption** cost (**Usage Only**) to operate the Temporary and **Permanent Heating System** shall be by others.
- l. The Plumbing and HVAC Contractor shall take adequate precautions to prevent any Damage from occurring to the **Permanent Heating and Cooling Equipment** while providing Temporary Heating and Cooling.
- m. All system filters for liquid or air shall be routinely replaced as required by maintenance intervals, written in the O & M Manuals.
- n. All permanent Plumbing and HVAC Systems and Components utilized for Temporary Heating and Cooling shall be **completely serviced, vacuumed, cleaned and turned over in "As New" condition** prior to acceptance by Owner.

- o. All Plumbing and HVAC Equipment and Filters used for Temporary Cooling shall have the **Warranties and Guarantees Extended** so that their full term as specified is available to the Owner from the date of Substantial Completion of each Phase as required by the Contract Documents.
- p. The Electrical Contractor shall provide all power wiring necessary to accommodate the above Temporary and Permanent Heating and Cooling requirements.

8) Fire Alarm Systems:

The Plumbing and HVAC Contractor shall provide any and all coordination that may be required with the Electrical Contractor as it relates to the Fire Alarm System. This shall include but not be limited to Tie-ins, Equipment, Meetings, Drawings, Sketches, Schematics Tests and etc as indicated on the Contract Documents

It is the intent of the Contract Documents that the Fire Alarm System be complete in all respects. Failure to notify the Construction Manager that discrepancies exist within the Contract Documents shall be construed as acceptance of the information provided.

9) Underground Ducts and Utilities

The Site Contractor and/or Utility Company shall provide water, storm and sanitary service from point of origin to within 5' of the building line. The Site Contractor shall also provide Trenching, Bedding, Backfilling, Concrete Anchors, Thrust Blocks and Encasement as required for your work and the work of other trades.

The Plumbing and HVAC Contractor shall be responsible for connections to each service within your Scope of Work provided by the Site Contractor and/or Utility Co. to complete the installation. Inserts, sleeve and the like required to enter/penetrate Foundation Wall and/or slabs shall be provided and sealed/Waterproofed by the Plumbing and HVAC Contractor

10) Radon Pit Removal Systems:

The Site Contractor shall be responsible for Excavation, Bedding, Backfill, ¾" Pressure Treated Plywood and/or metal deck as indicated in the drawings, Crushed Stone, Concrete Block and accessories for the Radon Removal Systems as detailed on the Contract Documents. The Plumbing and HVAC Contractor will supply and install the Radon Removal Systems in its entirety and all piping including polyurethane sealants typical at all penetrations. The Concrete Contractor will supply and install the vapor barrier.

The Plumbing and HVAC Contractor shall confirm the operation of the Radon Removal Systems after installation as noted on the Contract Documents. The Plumbing and

HVAC Contractor shall be responsible for providing a licensed certified radon testing company to certify all Radon Removal Systems as noted on the Contract Documents.

11) Service Connections:

The Plumbing and HVAC Contractor shall be responsible for all final connections, including, shut off valves, disconnects and etc. for all Equipment, (furnished by others) as it relates to your scope of work, including but not limited to: Millwork and Casework Services, Kitchen Equipment, Owner Supplied Equipment, and etc.

The Plumbing and HVAC Contractor shall coordinate with the appropriated Contractor to assure that all services are complete in all respects. Failure to notify the Construction Manager of any discrepancies shall be construed as acceptance of the connection locations.

The Plumbing and HVAC Contractor shall provide all HVAC, and associated Controls Work required for the Food Service Equipment as noted on the Contract Documents. The Food Service Equipment Contractor shall furnish and install the Exhaust Hoods as noted on the Contract Documents. The Plumbing and HVAC Contractor shall include mechanical final connection for Exhaust Hoods, Kitchen Hood Exhaust ductwork and install Kitchen Hood Exhaust Fans, and required Automatic Temperature Controls per the Contract Documents.

The Plumbing and HVAC and Electrical Contractors shall each be responsible for final connections and control wiring as required for the food service equipment and as noted on the Contract Documents.

12) Wall-Hung Lavatories and Toilets:

The Plumbing and HVAC Contractor shall coordinate with the Masonry and General Trades Contractor for installation of any wall anchors required during masonry or drywall wall construction for support of wall-hung lavatory systems and toilets. The Plumbing and HVAC Contractor will be responsible for furnishing and installing all necessary wall anchors or carries in strict accordance with the manufacturer's specification for their wall-hung lavatory systems.

13) Food Service Drawing Coordination:

The Food Service Equipment Contractor is solely responsible for providing accurate information on shop drawings accurately laid out for electrical, plumbing, and HVAC coordination and all connections required for each piece of kitchen equipment supplied under this bid package. The Food Service Equipment Contractor shall take the lead for the kitchen equipment and the Plumbing and HVAC and Electrical Contractors coordination efforts. Any costs incurred by other trades to modify installed electrical or

mechanical rough-ins due to incorrect information supplied by The Plumbing and HVAC shall be at this Contractor's cost.

The detailed shop drawings shall include a detailed point to point shop drawing which shall be accompanied by a digital copy in AutoCAD and shall be used for all Contractor coordination. A coordination meeting shall take place between the Food Service Contractor and the MEP Contractors plus or minus 3 to 4 weeks prior to the placement of the concrete slab in the kitchen areas to confirm the exact quantity and location of all under-slab rough in that is required to be installed by the MEP Contractors as it relates to the Food Service Equipment. The Food Service Contractor shall be responsible to inspect and confirm the final locations of ALL under slab roughing as installed by the MEP Contractors within 1 or 2 days of the slab placement.

14) Casework:

The Millwork Contractor shall coordinate and be responsible for all locations of rough-ins for the Casework. The Millwork Contractor shall submit detailed shop drawings within 45 days of award that include a detailed point to point location of all MEP rough-ins. These shop drawings shall be accompanied with a digital copy in AutoCAD and shall be used for all Contractor coordination. These drawings will be used by the Plumbing and HVAC and Electrical Contractors to locate penetrations/sleeves that will be core bored by them (Plumbing and HVAC and Electrical Contractors) for this work. All cost associated with core boring shall be included in this bid proposal.

The Plumbing and Mechanical Trade Contractor shall furnish and set all faucets and sinks with tail pieces. The Plumbing and HVAC Contractors shall make all appropriate final connections to these items.

15) Equipment:

The Electrical Contractor shall provide line voltage to all equipment provided within this project for all trades unless specifically noted otherwise. Starters and disconnects shall be provided by the Contractor that is providing the motorized equipment unless specifically noted to be provided by others.

The Plumbing and HVAC Contractor will coordinate and shall furnish all starters and disconnects switches for all Plumbing, HVAC, and ATC equipment and as specified and scheduled on the Plumbing and HVAC Drawings. Installation of such will be by the Electrical Contractor.

16) Balancing Systems:

The Plumbing and HVAC Balancing Subcontractor shall provide extended service on balancing for one-hundred and eighty (180) days beyond full building occupancy during which time any resetting, readjusting or rebalancing shall be performed to any terminal, fan or zone to correct comfort conditions or to confirm information submitted in the

balancing report. The Balancing Contractor shall provide technicians as needed to assist the mechanical engineers in making any test that he or she may require during this time.

The Plumbing and HVAC balancing Contractor must have at least three years experience in testing, adjusting and balancing (TAB) procedures for equivalent sized projects. The personnel conducting the air system TAB must be certified by Associated Air Balancing Council (AABC). All instruments must have documented calibration traceable to the bureau of standards.

17) Kitchen Equipment Exhaust Ventilator:

The Food Service Equipment Subcontractor shall provide the Kitchen Equipment Exhaust Ventilator.

The Plumbing and HVAC Contractor shall make all final connections to the Exhaust Ventilator. The Plumbing and HVAC Contractor shall provide any and all accessories required, including but not limited to access doors, as noted on the Contract Documents or as required by the applicable inspector.

18) Kitchen Equipment Fire Suppression System:

The Food Service Equipment Contractor shall furnish Gas Valve(s) to the Plumbing and HVAC Contractor for installation, and coordinate all the necessary requirements for a fully functioning system. – **ADD. NO. 2**

19) Plumbing and HVAC for Food Service Equipment:

The Plumbing and HVAC Contractor shall be responsible for all Plumbing and Mechanical connections to the Food Service Equipment.

The Plumbing and HVAC Contractor shall install faucets and sinks which are provided by the Food Service Equipment Contractor.

20) Residential Appliances:

The General Trades Contractor shall provide, deliver and set appliances to the required locations; the Plumbing and HVAC and Electrical Contractors shall connect the appliance to their respective utilities in accordance with the Contract Documents or the requirements of the Residential Appliance. The General Trades Subcontractor shall be responsible for leveling and adjusting its final resting location.

21) Gas Connections and Pressure Regulators:

The Plumbing and HVAC Contractor shall install *all* interior and exterior gas piping and shall be responsible for the gas pressure required for all equipment. The Plumbing and

HVAC Contractor shall also be responsible for furnishing and installing all gas pressure regulators, shut off valves and meter whether or not shown on the Contract Documents required for correct operation of all equipment and to be coordinated and compliant with the gas company.

22) Grease Interceptor:

The Site Contractor shall be responsible to furnish and install the Grease Interceptor as shown on the Contract Documents and shall include any necessary openings for, but not limited to, intake piping, exiting (downstream) piping, above access holes, etc. The Plumbing Trade Contractor shall be responsible for furnishing and installing all sanitary piping from the building into the grease interceptor including the heat trace wiring. The Site Contractor shall install all sanitary piping from the downstream side of the Grease Interceptor and any manhole covers, manhole frames, manhole risers, vent lines, etc.

23) Freezer/Cooler:

The Food Service Equipment Contractor shall coordinate with the Plumbing and HVAC and Electrical Contractors for work that they are shown as being responsible for on the Kitchen Drawings with respect to the freezer and the cooler. The plumbing Contractor shall install the floor grate drain as furnished by the Food Service Equipment Contractor. The Plumbing and HVAC Contractor shall install exhaust vent units as furnished by the Food Service Equipment Contractor.

The Food Service Equipment Contractor shall cut and seal all holes in the Coolers and Freezers, but not limited to, sprinkler piping and heads, etc. This shall be coordinated with the Fire Protection Contractor for locations.

24) Ductwork and Terminal Air Equipment:

The Plumbing and HVAC Contractor shall cover all open ends of ductwork and terminal air equipment with air tight seals on a daily basis and shall be maintained until such time as the system is completed and the Construction Manager and the Mechanical Engineer indicates that these seals can be removed. This includes from when the material is delivered to the site to final installation. This Contractor is required to perform air leakage testing per SMACNA requirements and/or per the contract document. If air seals are broken prior to installation, the Construction Manager may require the piece to be HAND Cleaned, resealed, retested.

As indicated in the Project Specification, the Plumbing and Mechanical Trade Contractor shall be responsible for **Cleaning ALL of the Ductwork and HVAC Units** before the Phase and the Project is turned over to the Owner.

25) Louvers and Grilles

This Contractor shall provide and install **ALL** Mechanical Louvers/Grilles/Vents. – **ADD. NO. 2**

All “Architectural Louvers and Grilles” (as indicated on the architectural drawings) shall be provided by the General Trades Contractor. All “Mechanical Louvers and Grilles” (as indicated on the mechanical drawings) shall be the responsibility of the Plumbing and HVAC Contractor. – **ADD. NO. 2**

The Plumbing and HVAC Contractor shall be responsible for all final connections to the Architectural Louvers provided by the General Trades Contractor.

26) Condensate Piping

The Plumbing and HVAC Contractor is responsible for **ALL** condensate drain piping (including insulation) and related pumps and accessories.

27) Temporary Roof Drain Systems, Pans, Metal Deck openings

The Plumbing and HVAC Contractor shall provide temporary roof drains SYSTEM for the proposed roof drains.

The Plumbing and HVAC Contractor shall provide temporarily running and maintaining the roof drains/roof leaders to the exterior of the building to locations as directed by the Construction Manager.

The Plumbing and HVAC Contractor shall provide and be responsible for cutting holes in all roof drain pans and cutting and removal of metal decking for all of their openings.

28) Ductwork and Pipe Testing

The Plumbing and HVAC Contractor shall include all cost associated with duct work and pipe leakage testing, balancing, hydrostatic testing, flushing to industry cleanliness specifications, and chemical pretreatment and all other industry standard testing related to this bid package.

The Plumbing and HVAC Contractor shall be responsible for glycol fill (if specified) of the hydronic system and maintenance of the specified glycol concentration until the system concentration has completely stabilized and is turned over to the Owner. Any needed Replacement glycol shall not be from the Owner’s Attic Stock.

29) New Ductwork Penetrations in Existing Walls: The Plumbing and Mechanical Trade Contractor shall be responsible for laying all new ductwork penetrations that are required to be installed into existing masonry walls. It shall be the responsibility of the Mason Trade Contractor to cut out the masonry in order for the Plumbing and Mechanical Trade Contractor to be able to install their ductwork. The Mason Trade Contractor shall furnish

and install any masonry lintels that may be required to support the existing masonry openings.

30) Under Slab Plumbing

This Subcontractor shall complete ALL under slab plumbing three (3) days prior to the scheduled slab on grade pour time being of the essence.

This Subcontractor shall expedite material submittals for all underslab piping and accessories to complete this Work.

This Subcontractor shall utilize sufficient manpower to complete this Work.

31) Building Management System

Furnish and install the complete building management controls system for the mechanical systems.

32) Heat Trace:

The Mechanical Contractor will furnish and install all electric heat trace cable systems indicated on the Contract Documents and the Electrical Contractor will provide all of the power wiring to these heating cables.

33) Minor Work/Provisions:

This Subcontractor shall carry in their base bid an additional **120 hours of plumber/HVAC time with small tools and materials to perform minor work as directed by the Construction Manager in addition to all other work indicated in this scope.**

CLARIFICATIONS

a.) The Plumbing and HVAC Subcontractor shall include:

1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
2. Sheet C-2 – Provide all plumbing and mechanical demolition throughout existing buildings and tunnels.
3. Sheet C-19 - Include all work inside the building and within 5 feet of the outside of the building except for the electrical connection and controllers. Stub the piping to 5 feet outside of the building terminating in an accessible box. Include water supply line, gate valve, backflow preventer assembly and all items within 5 feet of the outside of the building.

4. Sheet C-19 - Include the cost of furnishing and installing a booster pump system and verify the water pressure prior to ordering equipment or proceeding with the work and review with Construction Manager. If a booster pump is not required provide a credit for the booster pump system. Coordinate with Athletic Fields & Courts Subcontractor.
5. Sheet ASB-1 – Include re-insulating all piping to remain throughout the project including in the areas enclosed by the “WORK TO BE PERFORMED BY TERM CONTRACTOR” symbol and areas not enclosed by this symbol. Also include re-insulating existing pipe that will be used during the project but not to remain as part of a permanent system.
6. Sheet ASB-2 – Include re-insulating all piping to remain throughout the project including in the areas enclosed by the “WORK TO BE PERFORMED BY TERM CONTRACTOR” symbol and areas not enclosed by this symbol. Also include re-insulating existing pipe that will be used during the project but not to remain as part of a permanent system.
7. Sheet D-101, 102, 103, 105, 106 and 107 Specific Demolition Note A2 – Include all work for this note related to the plumbing and HVAC systems. Include reinstallation and all work needed to maintain systems during construction at all areas. Include attachment and support for all items. Include all safe-off required for demolition.
8. Sheet D-112 - Safe-off all mechanical connections for the food service and kitchen equipment.
9. Sheet EV-101 - Include all work required for the active soil depressurization radon systems except for the supply of power, vapor barrier, and concrete. Include the CMU, piping, fans, and all other work.
10. Structural (“S”) Drawings – Include all work in the Structural drawings as it relates to this scope of work.
11. Sheet S-301 Detail 2 – Include fastening of Pre-Manufactured Curb to PT Blocking.
12. Sheet S-301 Detail 2 – Include all mechanical curbs for mechanical and plumbing work.
13. Sheet EQ-101 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
 - a. Shop Equipment Schedule – Automotive Production Shop
 - i. Item 9 – Air Compressors
 - ii. Item 9a – Air Line Dryers
 - iii. Item 12 – Waste Oil Containment System – Complete all work within 5’ of the building. Tank will be furnished and installed by Site Work Subcontractor.
 - iv. Item 16 – Pull Down Air Lines
 - v. Item 20 – Exhaust Removal System
 - vi. Item Between 34 and 35 – Air Station
14. Sheet EQ-102 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
 - a. Shop Equipment Schedule – Carpentry
 - i. Item 10 – Air Compressors

- ii. Item 27 – Dust Collector
- 15. Sheet EQ-103 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
 - a. Shop Equipment Schedule – Plumbing
 - i. Item 3 – Oil Tank – Complete all work within 5’ of the building. Tank will be furnished and installed by Site Work Subcontractor.
 - ii. Item 10 – Concentric Vent Kit
 - iii. Item 13 – Hot And Cold Water Shut Off Valve
 - iv. Item 14 – Sanitary Valve W/ Backflow Preventor
 - v. Item 15 – Emergency Shut-Off Switches
 - vi. Item 22 – All Fuel Flue
 - vii. Item 24 – Natural Gas
 - viii. Item 25 – LP Gas
 - ix. Item 26 - #2 Fuel Oil
 - x. Item 27 – Cold Water Main Stub-In
 - xi. Item 29 – Sanitary
 - xii. Item 32 – Exhaust Hood
 - xiii. Item 33 – Vent
- 16. Sheet EQ-103 – Install all plumbing and mechanical related equipment and work indicated to be owner furnished and contractor installed. Install the following items:
 - a. Shop Equipment Schedule – Plumbing
 - i. ~~Item 5 – Hung Lavatory~~ – **ADD. NO. 1**
 - ii. ~~Item 8 – Hung Urinals~~ – **ADD NO. 1**
 - iii. Item 28 – Water Heater
- 17. Sheet EQ-106 – Furnish and install all plumbing and mechanical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all plumbing and mechanical utilities for all equipment. Furnish and install the following items:
 - a. Shop Equipment Schedule – Manufacturing
 - i. Item 28A – Snorkle Exhausts
 - ii. Item 30 – Compressor
 - iii. Item 43 – Exhaust Hood
- 18. Sheet EQ-101, EQ-102, EQ-103 and EQ-106 – Furnish and install all Utilities including but not limited to air, gas, hot water, and cold water. Include all connections to equipment. – **ADD. NO. 1**
- 19. Sheet MR-101.1, 101.2, 102.1, 103.1, & 103.2 – Include all work on these sheets. Include the demolition of all mechanical systems shown and systems not needed to remain as indicated. Verify all demolition with the Construction Manager.
- 20. Sheet M-201 – Include the demolition of all mechanical systems shown and systems not needed to remain as indicated. Verify all demolition with the Construction Manager. Include all patching at exterior walls and the roof needed to keep the building water tight at demolished pipes, ducts, equipment, and other items.

21. Sheet PR-100, 101, 102, 103, 104, 105, 106 and 107 – Include all work on these sheets. Include the demolition of all plumbing systems shown and systems not needed to remain as indicated. Verify all demolition with the Construction Manager.
22. Sheet PR-102 – Include all work on this sheet. Demolish and remove the gas meter assembly and all piping and related items within 5’ of the exterior of the building.
23. Sheet P-102.1 - Install all regulators furnished by the owner at compressed air outlets throughout the project.
24. Sheet M-201 Detail 3 – Include supplemental steel as required to support piping and duct.
25. Sheet ER-100 – Include all plumbing demolition including the plumbing and gas demolition in B-wing shown.
26. Include the demolition of all mechanical and plumbing items that are not required for the permanent systems including items shown in the drawings and items not shown in the drawings but located on the site. Include the demolition of all above ceiling and roof plumbing and mechanical not indicated to remain as part of the permanent system.
27. Include commissioning and balancing at the end of each phase and a final round of commissioning and balancing at the completion of the project.
28. Sheet M-303 Detail 8 - Include all ductwork insulation, exterior jacketing, ductwork supports and galvanizing of supports as specified.
29. Sheet M102.2 Detail 1 - Include dust collector support framing system and coordinate foundation location with Sitework Contractor.
30. Sheet E-001 Note 13 and 14 - Provide all control wiring.
31. Cut and cap all items as required and complete all work needed to keep temporary systems running. Include all plumbing and HVAC cutting, capping, and making safe as required.
32. Provide all penetrations and cores required to complete Subcontractor's Work. Include patching, fire caulking, acoustical caulking, and architectural caulking as required.
33. Include grease tank/oil tank piping and plumbing connections.
34. Include the maintenance and repair of all new and existing plumbing and HVAC systems until the entire phase is complete.
35. Include providing temporary water and air to the 2 teacher stations in the temporary science labs as indicated in the phasing documents and directed by the Construction Manager.
36. Include shop drawings and calculations prepared and stamped by a qualified professional engineer as specified for this scope of work. Include shop drawings and calculations for seismic restraints.
37. Include all Plumbing and HVAC work for the food service equipment including service rough-ins, shut-off valves, piping, support brackets, vents, adapters, traps, tailpieces and final connections. Install fixtures specified to be provided by the Food Service Subcontractor but installed by the Plumbing and HVAC Subcontractor.
38. Include all sleeves for plumbing and HVAC work including the locations shown in the structural drawings.
39. Provide all access doors and panels required for this scope of work to be installed by others.
40. Include all plumbing and HVAC work at the laboratory casework including service rough ins, shut-off valves, internal piping, support brackets, final connections, hubs, vents adapters, traps, tailpieces, ducts, fans, exhaust stacks and all other mechanical items.

41. Furnish and install all welding hoods and systems. – **ADD. NO. 2**
42. Included all welding at mechanical items. Include welding at roof sleeves and for mechanical support systems.
43. Include all galvanizing of mechanical items and supports.
44. Include all insulation at piping and ductwork.
45. Include all mechanical curbs.
46. Furnish and install expansion joints for piping, ducting, and other equipment at all locations showing or requiring expansion joints.
47. Furnish and install all exhaust removal systems. Refer to the Automotive Production Shop Equipment schedule item 20 and the rest of the EQ sheets.
48. Furnish and install all connections for temporary boiler(s) required for heating. Include all modifications necessary to the existing steam system to provide heat to all existing spaces prior to the completion of the new heating systems.
49. Include all put back and reinstallation of mechanical and plumbing systems at abatement areas.
50. Complete all plumbing connections for laboratory casework stations and sinks and for healthcare stations and sinks.
51. Include all eye wash, shower, and eye wash/shower combination fixtures.
52. Include all air compressors.
53. Include all work indicated in specification section 230500 including Part 1, 1.01 item 3 indicating to remove all equipment, piping, supports, etc. And infrastructure not being reused including items shown in the drawings and existing items in the field not shown on the drawings.
54. Review all specified equipment for the project and provide a letter to the Construction Manager indicating if all existing and new equipment will function properly with the plumbing and mechanical utilities specified in the construction documents 30 calendar days prior to completing related work.
55. Video For Training, Maintenance & Operation - For equipment which requires training, maintenance and/or operation by operational personnel, provide a professionally developed video DVD with audio for the use of maintenance training for the facility as indicated in the specifications. Each video will be accompanied by a written index which can be utilized to find any specific item of information by time or place on the video. The recordings shall include the equipment being maintained by qualified personnel, the required maintenance tools, and a step by step technique, both verbally and visually demonstrating how to maintain each piece of equipment in a hands on application. Provide 5 copies of the video to the Construction Manager.
56. Create weather-tight conditions around all mechanical piping, ducts and equipment to prevent moisture and mold related problems.
57. Sheet C4 / Specification 220000 – Provide piping as specified to tanks from within 5ft of the building. – **ADD. NO. 2**
58. Provide a complete Class I dust collection system consisting of dust collector, ductwork, blast gates, connections to equipment and floor sweeps and refer to Section 237000 for dust collector requirements typical and as noted in Specification Section 233000 Part 2.10. – **ADD. NO. 2**

EXCLUSIONS

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO.1 - TEMPORARY HEATING UNITS - \$120,000

Provide and completely coordinate the delivery, setup, gas connection (including all communications with the local gas supplier), startup, maintenance, operation and dismantling (including all necessary disconnection communications with local gas supplier) and removal of Temporary Heating Units & Exterior Supply and Return Ductwork – with the most stringent OSHA regulation is included in the base bid.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #26.01
Electrical**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Electrical, Communications, Safety and Security Systems** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Electrical, Communications, Safety and Security Systems** as required, shown, described and specified under this Bid Package, and all related scope and services, required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) BID PACKAGE #26.01 - Electrical, Communications, Safety and Security Systems:**
This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Electrical, Communications, Safety and Security Systems** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General

Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manuals:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manuals:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

- 078413 Through-Penetration Firestop Systems (As Applicable)
- 079200 Joint Sealants (As Applicable)

- 083113 Access Doors and Frames (As Applicable)
- 087100 Door Hardware (As Applicable)

- 114000 Food Service Equipment (As Applicable)
- 123553 Wood Laboratory Casework And Furnishings (As Applicable)

- Division 21 Fire Suppression (As Applicable)
- Division 22 Plumbing (As Applicable)
- Division 23 Mechanical (As Applicable)

- 230500 Demolitions And Removals (As Applicable)**

- Division 26 Electrical**
- Division 27 Communications**
- Division 28 Electronic Safety and Security**

- Division 31 Earthwork (As Applicable)
- Division 32 Exterior Improvements (As Applicable)

- 328000 Irrigation System (As Applicable)

Division 33 Utilities (As Applicable)

Commissioning (note included in 019100, DIV 1)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

All Electrical Demolition throughout existing buildings and tunnels;

Electrical; Communications; Electronic Safety and Security Division; Temporary Light and Power; Core Boring; Firestopping and Through-Penetration Firestop Systems for your scope of work; Site Electric and Site Communication; Site Lighting including furnishing of Anchor Bolts for installation by others; Electric Disconnects for equipment, (unless specifically noted otherwise shall be provided by Electrical Contractor); Line Voltage for all equipment as noted in the Contract Documents including but not limited to Fans, Pumps, Projection Screens, Display Cases, Operable Window Treatment, Kitchen Equipment, Appliances, Gymnasium Equipment, Kiln Exhaust Fan, Elevator, Owner Supplied Equipment, Boilers, Heating/Cooling and Air Handling Units, Overhead Doors; Elevator Recall System; Commissioning; Motor Controllers/Starters shall be provided by the contractor or equipment motor supplier furnishing the equipment (unless specifically noted to be provided by the Electrical Contractor); Excavation; Concrete Encasement Bedding and Backfill for Site Electric and Site Lighting shall be by Site Contractor.

All Electrical; Wiring Devices; Pre-Fabricated Electrical and Tele/Communications Raceway Systems and all associated Accessories; Electric Power and Communication Transmission Service from Utility to Building; Site Lighting; Basic Electrical Materials and Methods; Service and Distribution, Service Entrance; Switchboards; Disconnect Switches; Secondary Grounding; Transformers; Panel Boards; Motor Control; All Interior and Exterior Lighting; Theatrical Lighting; Complete Fire Alarm Systems; Conduit and Stubs for Security Systems; Complete Clock and PA Systems; Conduit and Stubs for Voice and Data Systems; Complete Call Systems; Complete Rescue Call for Assistance Systems; Complete Video Telecommunications Systems; Conduit and Stubs for Audio/Visual Systems; All Lighting Control Systems; Interior & Exterior Temporary Light and Power; Core Boring; Firestopping and Through-Penetration Firestop Systems for your scope of work; Site Electric and Site Communications; Site Lighting including furnishing of Anchor Bolts for installation

by others; Electric Disconnects for equipment; HVAC controls; Motor Controllers/Starters shall be provided by the Contractor or equipment motor supplier furnishing the equipment (unless specifically noted to be provided by the Electrical Contractor); Elevator Recall System; Fire Alarm Systems; Mock-ups; Submittals, Product Data and Samples; Record Drawings; Identification Tags and Drawings; Operating and Maintenance Instructions; Testing and Commissioning;

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Electrical Demolition: This Subcontractor shall be responsible to remove and properly dispose of all **Electrical** installations as indicated on the Contract Documents. This Subcontractor shall also be required to cap all existing utilities services at the interface of the building to be demolished and the existing building interface. It is the intent of the Contract Documents that this subcontract coordinate systems, so that, they remain active during the construction and renovation of this phased project. This includes temporary measures, expansion of existing systems and maintenance of all systems required for occupancy in occupied areas of the building. This includes all systems including but not limited to fire alarm, data, phone, communications, security, power, lighting, and all other electrical systems.

- a. This Subcontractor shall identify and mark Electrical systems to be demolished as per the Contract Documents and in accordance with the Phasing Plan (Document 000926).
- b. This Subcontract shall cut, cap, make safe and drop the system identified to be removed.
 - i. Systems shall be cut into manageable pieces not greater than ten (10') feet in length. – **ADD. NO. 2**
- c. Removal and proper disposal shall be by the Demolition and Abatement Contractor (Bid Package 2.01).

- d. This Subcontractor shall be responsible to remove all fluorescent lights and ballasts and place them in a suitable container to be properly disposed by the Demolition and Abatement Contractor (Bid Package No. 2.01).

5) Temporary Construction Manager Site Office:

- a. The Electrical Contractor shall remove all Power and Telecom/Data) for the Construction Managers and Owner's Site Offices as shown on the Site Logistics Plan.

6) Temporary and Permanent Heating and Cooling:

- a. The Plumbing and HVAC Contractor shall utilize both Temporary and Permanent Cooling and Heating Equipment for Temporary Cooling and Heating subject to the approval of the Construction Manager, in its sole discretion. Subcontractor to provide all temporary heating and cooling as required and specified below.
- b. All Temporary Heating and Cooling requirements are per the Project Schedule and Phasing Plan (Document 000926).
- c. The Plumbing and HVAC Contractor shall provide a compatible **temporary low pressure steam boiler** to run the existing steam heating systems for all areas not under construction as indicated in the phasing plan. The temporary boiler must have sufficient capacity (200 Horsepower minimum) to service the areas not under construction. Include all rental, transport, start-up, adjustment, service, temporary piping, inspection, permitting, controls and connection costs with the existing system and temporary utilities for a complete functioning system. It is critical that the temporary boiler system be reliable and Subcontractor must have all necessary service agreements, replacement parts on hand and service technicians available to repair any issues within eight (8) hours. A replacement temporary boiler must be delivered and connected within eight (8) hours of the temporary boiler going off-line if repairs can't be made. A temporary boiler of sufficient capacity must be operating during the winter heating season (October 1 to May 1). Include gas piping of sufficient capacity for the temporary boiler.
- d. The Plumbing and HVAC Contractor shall provide all labor and materials to connect temporary ductwork and all of its components and necessary accessories, including but not limited to hangers, insulation, dampers, vents, from the **exterior located temporary construction heating units (as described in the Allowance under this Bid Package)** with risers to all floors. The temporary ductwork shall be extended down hallways and into individual rooms to maintain distribution of the required minimum temperature. The system shall be fully functional to the approval of the Construction Manager, in its sole discretion. Sufficient

temperature for temporary heating shall be a minimum ambient temperature of 55 degrees Fahrenheit.

- e. The Plumbing and HVAC Contractor shall provide Cooling / Humidity Control with **New Permanent Cooling System** during the summer cooling season (May 1 thru October 1). Sufficient temperature for temporary cooling shall be a maximum ambient temperature of 78 degrees Fahrenheit and a maximum relative humidity of 50 percent.
- f. The Plumbing and HVAC Contractor shall provide **all temporary control wiring** for its temporary heating and cooling systems. At a minimum, thermostat controls shall be provided in a quantity (one per floor per unit) and location (remote from Units), as approved by the Construction Manager, to accommodate an evenly distribution of temporary heating and cooling.
- g. All necessary Equipment, Temperature Controls, Plumbing, Safety Controls that may be required shall be installed and operational prior to requesting approval to utilize the permanent heating or cooling system.
- h. The Plumbing and HVAC Contractor shall provide **temporary filters at all return ducts as required** and at the sole discretion of the Construction Manager, changed at weekly intervals, so as not to allow the migration of construction dirt and dust.
- i. When the **Permanent Cooling System** is utilized for Temporary Cooling, the Plumbing and HVAC Contractor shall be responsible for the maintenance, repair, refurbishing and extension of all required warranties of the HVAC Equipment (including temporary connections).
- j. **Power Consumption** cost (**Usage Only**) to operate the **Permanent Cooling System** shall be by others.
- k. **Fuel Consumption** cost (**Usage Only**) to operate the Temporary and **Permanent Heating System** shall be by others.
- l. The Plumbing and HVAC Contractor shall take adequate precautions to prevent any Damage from occurring to the **Permanent Heating and Cooling Equipment** while providing Temporary Heating and Cooling.
- m. All system filters for liquid or air shall be routinely replaced as required by maintenance intervals, written in the O & M Manuals.
- n. All permanent Plumbing and HVAC Systems and Components utilized for Temporary Heating and Cooling shall be **completely serviced, vacuumed, cleaned and turned over in "As New" condition** prior to acceptance by Owner.

- o. All Plumbing and HVAC Equipment and Filters used for Temporary Cooling shall have the **Warranties and Guarantees Extended** so that their full term as specified is available to the Owner from the date of Substantial Completion of each Phase as required by the Contract Documents.
- p. The Electrical Contractor shall provide all power wiring necessary to accommodate the above Temporary and Permanent Heating and Cooling requirements. Provide **two temporary boiler connections rated at 50 A @ 460V/3 ph/60 cy service** near the exterior of the existing boiler room as directed by the Construction Manager.

7) Light Poles/Bollards/Grounding:

The Electrical Contractor shall furnish all Anchor Bolts and Anchor Bolt templates to the Site Contractor for installation by the Site Work Contractor. The Electrical Contractor shall furnish and install **ALL** site light fixtures, conduit wire and cable. The Electrical Contractor shall also furnish and Install all required grounding cable and grounding rods

8) Appliances:

The Residential Appliances shall be provided by the Owner as shown on the Contract Documents. The Owner shall bring and set the appliance to the required locations; the Plumbing, Mechanical, Electrical Contractors shall connect the appliance to their respective utilities.

9) Kitchen Equipment:

The Electrical Contractor shall be responsible for any and all final connections to food service equipment as noted on the Contract Documents.

The Plumbing and HVAC Contractor shall install faucets and sinks which are provided by the Food Service Equipment Contractor. The Electrical Contractor shall provide power to the hand sinks in the kitchen, including all final connections to the hard wired transformer.

Electrical Subcontractor to provide and install all fused disconnect switches where required for the refrigerators, freezers, and all other food service equipment.

10) Freezer/Cooler:

The Food Service Equipment Contractor shall coordinate with the Plumbing, Mechanical and Electrical Contractors for work that they are shown as being responsible for on the Kitchen Drawings with respect to the freezer / cooler.

11) Service Connections:

The Electrical Contractor shall be responsible for all final connections, including, disconnects and etc. for all Equipment, (furnished by others) as it relates to your scope of work, including but not limited to: Millwork and Casework Services, Fans, Pumps, Doors/hardware, Projection Screens Laboratory Equipment, Kitchen Equipment, Elevator and Wheelchair Lift, Owner Supplied Equipment, Boilers, Heating, Ventilating and Cooling Units, Overhead Door(s), Operable HVAC Controls, Operable Misc. Gym Equipment, Washers, Dryers and Dishwashers, etc.

This Contractor shall coordinate the location of connections for equipment; Failure to notify the Construction Manager of any discrepancies shall be construed as acceptance of the condition.

The Plumbing, Mechanical and Electrical Contractors shall each be responsible for final connections and control wiring to and for the food service equipment as noted on the Contract Documents.

The Food Service Equipment Contractor shall submit in writing, as a separate submission, that all electrical requirements for all food service equipment, i.e., quantity, location phase, voltage, etc., is correctly shown on the contract drawings. This separate submission shall be submitted to the Construction Manager and to the Electrical Trade Contractor.

The Plumbing Contractor shall install faucets and sinks which are provided by the Food Service Equipment Contractor. The Electrical Contractor shall provide power to the hand sinks in the kitchen, including all final connections to the hard wired transformer(s).

12) Equipment:

The Electrical Contractor shall provide line voltage to electrical equipment provided within this project for all trades unless specifically noted otherwise. Starters and disconnects shall be provided by the Contractor that is providing the motorized equipment unless specifically noted to be provided by the Electrical Contractor. In any case, the installation of starters and disconnects shall be by the Electrical Contractor.

The Plumbing and Mechanical Contractors will coordinate and shall furnish all starters disconnects switches for all Plumbing, HVAC, ATC equipment and as specified and noted on the Contract Documents. Installation of these devices shall be by the Electrical Contractor.

13) Fire Alarm Systems:

The Electrical Contractor shall provide any and all coordination that may be required with the Mechanical Contractor as it relative to the Fire Alarm System. This shall include

but not limited to Tie-ins, Equipment, Meetings, Drawings, Sketches, Schematics Tests and etc as indicated on the Contract Documents.

It is the intent of the Contract Documents that the Fire Alarm System be complete in all respects. Failure to notify the Construction Manager that discrepancies exist within the Contract Documents shall be construed as acceptance of the information provided.

It is critical that a fire alarm system be functioning properly in all completed and occupied areas of the project at all times and the existing system shall not be removed or disabled until the new system has been completed, tested, passed inspection and is fully functional. The new fire alarm system must be fully functional and operational in all spaces prior to the end of each phase.

In addition, add all required temporary devices, wiring, panels and other items required as a result of temporary doors, walls and conditions created by the phasing. Additional devices (smoke detectors, horns, strobes and pull stations as applicable) shall be temporarily added on each side of temporary doors, walls, and other separations as if these were permanent separations to meet code at **15 temporary separation locations**. Include all permanent and temporary programming to the existing and new fire alarm systems required for the phasing. Electrical Subcontractor to complete all work related to the new and existing Fire Alarm systems.

Provide and remove temporary electric lit **exit signs that are code compliant at 15 locations** as directed by the Construction Manager.

14) Pre-Engineered Kitchen Hood Extinguishing System:

The Pre-Engineered Kitchen Hood Extinguishing System for the Food Service Equipment shall be interlocked with the building fire alarm system. The Electrical Trade Contractor shall be responsible for all tie-ins to the building fire alarm system.

15) Equipment, Control Devices and Starters for Food Service Equipment:

Switches, fuses, terminal boxes, cords, flexible connectors, control devices, starters, disconnect, and plugs for food service equipment shall be furnished by the Food Service Equipment Contractor unless specifically noted otherwise.

The Electrical Contractor shall be responsible for line voltage connections and the Mechanical Contractor shall be responsible for Plumbing and Mechanical connections. **All interconnecting wiring shall be the responsibility of the Electrical Contractor.**

The Food Service Equipment Contractor shall coordinate the location of connections for equipment and shall notify the Construction Manager of any discrepancies. Failure to notify the Construction Manager shall be construed as acceptance of the condition.

The Food Service Equipment Contractor shall submit in writing, as a separate submission, that all electrical requirements for all food service equipment, i.e., quantity, location phase, voltage, etc., is correctly shown on the contract drawings. This separate submission shall be submitted to the Construction Manager and forwarded to the Electrical Trade Contractor.

The Electrical Contractor shall provide power to the hand sinks in the kitchen, including all final connections to the hard wired transformer(s).

16) Kitchen Equipment Exhaust Ventilator:

The Food Service Equipment shall provide (furnish and install) the Kitchen Equipment Exhaust Ventilator.

The Electrical Contractor shall make all final connections to the Exhaust Ventilator. The Electrical Contractor shall provide any and all accessories required, including but not limited to access doors, as noted on the Contract Documents or as required by the applicable inspector.

17) Elevator Recall System:

An Elevator recall System for all Elevators shall be installed in accordance with the Contract Documents. Coordination and final connections to the Elevator Control Panel shall be provided by the General Trades (for Elevator) Contractor

18) Elevator Telephone:

The Electrical Contractor shall be responsible for furnishing and installing any conduit necessary to bring the elevator phone line wire to the elevator controller. The Electrical Contractor shall leave the phone line wire coiled in the elevator machine room adjacent to the controller for final connection to the elevator controller by the General Trades (for Elevator) Contractor.

The General Trades (for Elevator) Contractor shall provide a functioning telephone within the elevator cab. Dial Tone for the telephone will be brought into the elevator machine room by The Electrical Contractor as described above. The General Trades (for Elevator) Contractor is responsible to land all wires on, to and from his or her equipment.

19) Conduit in Concrete Slabs:

The Electrical Contractor shall not place conduit in any concrete slab. All routing of conduit must be concealed and take place from ceiling space, cavity space and in walls.

20) Communication Service:

The Electrical Contractor shall provide **ALL** Communication service in accordance with that as indicated on drawing. All required Excavation, Bedding, Encasement and Backfill shall be provided by the Site Contractor.

21) Temporary Light and Power:

Installation:

Provide labor, material and equipment for the installation of interior temporary light as required by these specifications, unless specifically noted otherwise in the Contract Documents.

Furnish, install, and maintain and eventually remove all distribution of interior temporary light as required.

Temporary lighting shall be installed in such a manner as not to interfere with the permanent construction. If such interference does occur, it will be the responsibility of the Electric Contractor to make such changes as may be required to overcome the interference. The cost of these changes are included as part of the Contract price.

Temporary wiring is to be laid out, balanced and wire-sized so as to produce a voltage drop of not greater than five percent (5%) at the extreme end of the line when operating a full load.

Lighting Requirements:

The exterior of the building, and the Construction Manager Office Trailer and the Construction Parking / Material Storage Trailers Location area as shown on the Site Logistics Plan, shall have extreme Security Lighting at various locations as determined by the Construction Manager. This lighting shall be controlled by sensors w/ on/off switch overrides. Staging area and Trailer area and perimeter of the existing building (30 feet out) will require a minimum of 1/2 watt/SF.

All other temporary lighting shall be controlled by appropriate on/off equipment at a mutually agreed location.

The replacement of all bulbs and temporary wiring shall be included as part of these requirements and maintained by this Subcontractor. At least on a weekly basis, the entire job shall be checked and re-lamped as required. At no time shall more than 10 percent of the temporary lighting not be operational.

System is to be of a movable nature suspended from structure and is not to damage or dislodge any spray-on-fireproofing during the life of its installation. It shall also be installed, removed and/or reinstalled as work progresses. Temporary lighting shall utilize 100-watt bulbs with pigtails and protective shields. General Area lighting will require a minimum of 1/4 watt/SF.

All mechanical rooms/areas will require a minimum of 1/2 watt/SF.

All stairwells will require a light at each landing and intermediate landing.

All entrances and exits of the building will require a single string of lights with bulbs a minimum of 10 feet on center.

Power Requirements

This Contractor shall carry all cost and all materials and equipment as needed to step down to a 600 amp 480 volt 3 phase complete temporary power service inside the building, including but not limited to, conduit, wiring, CT and DT Cabinets, meter, panel-board, grounding, etc for complete system per the NEC and the local building code. This Subcontractor shall also provide all provisions required for weather tightness of the above system.

Provide **six (6) 200 amp 120/208 volt interior temporary panels** as directed by the Construction Manager. This Subcontractor shall also provide all provisions required for weather tightness of the above system.

Provide **two (2) 200 amp 120/208 volt exterior temporary panels** as directed by the Construction Manager. This Subcontractor shall also provide all provisions required for weather tightness of the above system.

For small tools, provide 20 amp @ 120 volt power outlets located throughout the project so that the floor area and exterior of the building can be covered with standard 50 foot extension cords.

Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for connection of power tools and equipment.

Provide 220 volt 40 amp receptacle for larger power equipment at each temporary panel.

When the permanent power service is activated, all temporary installation shall be transferred to that source, including required OSHA Ground Fault Protection. A competent qualified Electrician is required to test all GFI certificates at the outlet panel at a minimum on a monthly basis and each panel must include a dated sign off in plain view. Any costs related to these inspections shall be included in this Contractor's bid proposal. Each Trade Contractor is to include in his or her proposal electrical cords for their work.

Maintenance

This Contractor shall maintain the temporary lighting (interior and exterior) and power systems.

All work covered under this Contract is to be maintained in good and safe operating condition and in a timely manner so not to delay the project in whole or in part. This Contractor shall be responsible for installing and maintaining a reasonably balanced system and shall take current reading on the feeders at regular intervals.

All temporary facilities are to be maintained and kept in good operating conditions. Maintenance men necessary to perform this work shall be provided so that other trades are not delayed. Local power centers shall be constantly maintained to prevent the accumulation of "rat's-nest circuitry". All temporary wiring shall be suspended and maintained at least 8 feet above finished floors and pass through permanent walls above the permanent ceiling level. The patching of holes in partitions is to be done by the General Trades Contractor for drywall and the Masonry Contractor for masonry.

Removal

This Contractor shall eventually remove (at the direction of the Construction Manager) all temporary power and lighting equipment (interior and exterior).

22) Supplement Temporary Lighting:

General temporary lighting will be provided by the Electrical Trade Contractor after the steel is erected. It will be the responsibility of each Trade Contractor to provide supplement lighting and cords as needed or when finish work is being completed especially prior to the new permanent lighting is installed and lit.

23) Electric Door Hardware:

The Electrical Contractor shall provide final connections for all electrified door hardware (locks, hold-opens, strikes, hinges, etc.) shown on the Contract Documents. Electrified door hardware shall be furnished and installed by others with the exception of electromagnetic hold opens which shall be furnished and installed by the Electrical Contractor. The Electrical Contractor shall coordinate the location of the door magnets and conduits supplying power to the magnets. All wiring to the magnets shall be concealed within the walls. Include power for all electrified hardware. Verify through submittals and in the field that all electrified hardware is rated for the supplied voltage and power and then make all connections.

24) Heat Trace:

The Mechanical Contractor will furnish and install all electric heat trace cable indicated on the Contract Documents and the Electrical Contractor will provide all of the power wiring to these heating cables.

25) Mechanical Service Lighting:

The Electrical Contractor shall furnish and install any necessary wiring for internal lighting in or on mechanical units. This Contractor is expected to check mechanical specifications and drawings to be sure any lights associated with the mechanical units are wired and operational.

26) Fire Protection Devices:

The Fire Suppression Contractor shall provide all fire alarm devices related to the sprinkler system (flow and tamper switches). The Electrical Contractor is responsible to wire these devices to the Fire Alarm System. This Contractor will coordinate with the Electrical Contractor exact number and location of these devices.

27) Casework Lighting and Receptacles:

Wood Casework electrical receptacles/wiremold and task lighting shall be provided by the Electrical Contractor except if built into a finished product.

28) Pre-Manufactured Finished Raceway for Devices at Existing Walls

The Electrical Contractor shall provide pre-manufactured finished raceway as indicated on the Contract Documents.

29) Stage Lighting Support System:

The Electrical Contractor shall be responsible to provide any and all support system for stage lighting to be hung from the structure above or adjacent and as noted on the Contract Documents.

30) Minor Work/Provisions:

The Electrical Contractor shall carry in their base bid **240 hours of Electrician hours with small tools to perform additional minor work directed by the Construction Manager.**

31) Pricing of Additional Work

All additional work for change orders that are submitted by the Electrical Trade Contractor must be calculated on the basis of the latest version of NECA Category 1 costs further reduced by 25%.

32) Wiring of ALL Plumbing/HVAC Fixtures and Equipment

The Electrical Contractor shall furnish and install all wiring and transformers for Plumbing Fixtures and HVAC Equipment that may not be shown on the Electrical Drawings but is required by the Contract Documents. This Contractor is expected to check plumbing and mechanical specifications and drawings to be sure any power associated with Plumbing Fixtures and HVAC Equipment are wired and operational.

6) Underground Ducts and Utility Structures:

The Electrical Contractor shall provide all Conduits and other materials as required to complete the Underground Conduits, Cables, Ducts, Grounding systems and Utilities installation per the Electrical Divisions.

CLARIFICATIONS

a.) The Electrical Subcontractor shall include:

- 1) Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
- 2) Sheet C-19 - Include power supply and connection to irrigation controller and 3" conduit to 5 feet outside of the building terminating with a pull box. Also include power to booster pump.
- 3) Sheet D-101, 102, 103, 105, 106, and 107 Specific Demolition Notes – Include all work for Demolition Note A2 related to the electrical systems. Include reinstallation and all work needed to maintain systems during construction in all areas. Include attachment and support for all items. Safe-off all electrical connections required for demolition. Also, rewire outlets and provide new covers per Specific Demolition Note A13.
- 4) Sheet D-112 - Safe-off all electrical connections for the food service and kitchen equipment.
- 5) Sheet A-101.1 – Complete all electrical work described under Construction Note 12 relating to the elevator system.
- 6) Sheet EQ-101 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
 - a. Shop Equipment Schedule – Automotive Production Shop
 - i. Item 17 – Suspended Drop Lights
 - ii. Item 18 – Power Drops
 - iii. Item 30 – Emergency Shut-Off Switch
- 7) Sheet EQ-102 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
 - a. Shop Equipment Schedule – Electrical
 - i. Item 7 – Power Cord Reels
 - ii. Item 13 – Emergency Disconnect Switch

- iii. Item 16 – Master Electrical Panel
 - iv. Item 17 – Residential Electrical Panel
 - b. Shop Equipment Schedule – Carpentry
 - i. Item 28 – Emergency Shut-Off Switch
 - ii. Item 34 – Power Cord Reels
- 8) Sheet EQ-102 – Install all electrical related equipment and work indicated to be owner furnished and contractor installed. Install the following items:
- a. Shop Equipment Schedule – Electrical
 - i. Item 4 – Power Console
- 9) Sheet EQ-103 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
- a. Shop Equipment Schedule – Plumbing
 - i. Item 15 – Emergency Shut-Off Switches
 - ii. Item 21 – Electrical Panel W/ Breakers
 - iii. Item 31 – Power Cord Reels
 - b. Shop Equipment Schedule – Graphics
 - i. Item 17 – Emergency Power Shut-Off
- 10) Sheet EQ-106 – Furnish and install all electrical related equipment and work indicated to be contractor furnished and installed. Also, furnish and install all electrical for all equipment. Furnish and install the following items:
- a. Shop Equipment Schedule – Manufacturing
 - i. Item 18 – Emergency Shut-Off Switch
- 11) Sheet EQ-101, EQ-102, EQ-103 and EQ-106 - Furnish and install all Electrical and Power. Include all connections to equipment. – **ADD. NO. 1**
- 12) Sheet EV-101 - Provide power for the active soil depressurization radon systems.
- 13) Sheet E-001 – Include all work indicated on this sheet.
- a. General Note 4 – Provide a suitable junction box at each recessed fixture, whether specifically indicated or not.
 - b. General Note 13 and 14 - Provide all power wiring.
 - c. General Note 25 – Provide GFI type receptacles when receptacles shown on plans are within 6 feet of any water source whether depicted to be GFI on the plan sheet or not.
 - d. General Note 43 – Furnish and install wiring for automatic flush valves as indicated.
 - e. General Note 47 – Include hand dryer wiring as indicated.
 - f. General Note 58 – Provide and install supplemental steel for light fixture installation.
 - g. General Note 63 – Provide additional duplex receptacle systems as indicated.
 - h. General Note 64 – Provide additional home run circuits and breakers as indicated.
 - i. General Note 65 – Provide additional home run circuits and breakers as indicated.
 - j. General Note 77 – Provide additional GFI duplex receptacles as indicated.
 - k. General Note 63 – Provide additional home run circuits and breakers as indicated.

1. General Note 81 – Provide all power, wiring and other electrical work required for items indicated in the plumbing drawings for complete and functional fixtures.
- 14) Sheet ER-100, 101, 102, 103, 104, 105, 106 and 107 – Include all electrical removal and demolition work. Include completely removing unused electrical conductors, conduits, and other electrical items as indicated. Include furnishing and installing temporary lighting and temporary emergency lighting battery units as indicated. Include removals of work in trenches between buildings.
- 15) Sheet ER-100
 - a. Removal General Note 2 - Include the removal of TV brackets and television sets as indicated.
- 16) Sheet E-106.1 – Furnish and install galvanized unistrut and fittings as required to independently support disconnects and receptacles.
- 17) Sheet E-703 Detail 3 – Include all electrical work indicated in this detail. Include all work at floor box fire detail including box as indicated.
- 18) Provide temporary power.
- 19) Provide all penetrations and cores required to complete Subcontractor's Work. Include patching, fire caulking, acoustical caulking, and architectural caulking as required.
- 20) Include all temporary egress lighting required including what is shown in the demolition drawings.
- 21) Include all cord reels.
- 22) Include all disconnects for the project.
- 23) Maintain or provide lighting for all drop off, parking lot and pedestrian areas throughout the course of the project.
- 24) Include demolishing any existing electrical system items that are no longer to be used that were not specified to be demolished in the demolition drawings. Verify any and all demolition with the Construction Manager prior to completion.
- 25) Include the maintenance and repair of all new and existing electrical systems until the entire project is complete.
- 26) Include all electrical cutting, capping, and making safe as required.
- 27) Include all sleeves for electrical work including the locations shown in the structural drawings.
- 28) Include providing temporary electric power to the 2 teacher stations in the temporary science labs as indicated in the phasing documents and directed by the Construction Manager.
- 29) Include shop drawings and calculations prepared and stamped by a qualified professional engineer as specified for this scope of work. Include shop drawings and calculations for seismic restraints.
- 30) Include all electrical work for the food service equipment including all service rough-ins, junction boxes, conduit and wiring, support brackets, disconnects, and final connections. Include the installation of all Food Service Subcontractor provided items specified to be installed by the Electrical Subcontractor.
- 31) Provide all access doors and panels required for this scope of work to be installed by others.

- 32) Include power connections and switching for the overhead motorized service doors and motorized operable panel partitions. Provide all line voltage wiring and switching.
- 33) Include power for the display cases.
- 34) Include the installation for the switches and furnishing and installing wiring at the motorized projection screens. Switches to be furnished by the General Trades Subcontractor. Include all wiring, conduit, junction boxes and components.
- 35) Include the installation for the switches and furnishing and installing wiring at the motorized basketball goal systems. Switches to be furnished by the General Trades Subcontractor. Include all wiring, conduit, junction boxes and components.
- 36) Furnish and install all electrical for the gymnasium scoreboard systems including power conduit, cable, outlet boxes and all other related items. Include signal raceways, boxes, jacks, cover plates and all terminations.
- 37) Furnish and install all electrical work at the laboratory casework including service rough-ins, junction boxes, internal conduit and wiring, support brackets, final connections, disconnects, starters and all other electrical work.
- 38) Include power for dust collectors.
- 39) Furnish and install all GPS related equipment.
- 40) Include emergency generator system.
- 41) Include all conduit, cable trays, raceways, sleeves, fire sealing at sleeves, back boxes, boxes, pull cords, infrastructure, and power wiring for the security system shown on the SEC drawings. All work for the security system is to be reviewed and approved by the owner's security consultant and the Construction Manager prior to starting the work.
- 42) Video for Training, Maintenance & Operation - For equipment which requires training, maintenance and/or operation by operational personnel, provide a professionally developed video DVD with audio for the use of maintenance training for the facility as indicated in the specifications. Each video will be accompanied by a written index which can be utilized to find any specific item of information by time or place on the video. The recordings shall include the equipment being maintained by qualified personnel, the required maintenance tools, and a step by step technique, both verbally and visually demonstrating how to maintain each piece of equipment in a hands on application. Provide 5 copies of the video to the Construction Manager.
- 43) Include the demolition of all electrical items not indicated to remain as part of the permanent systems including items shown in the drawings and including items not shown in the drawings but existing on site. Include the demolition of all above ceiling and roof electrical not indicated to remain as part of the permanent system.
- 44) Furnish and install stage and theatrical light systems and all supports.
- 45) Review all specified equipment for the project and provide a letter to the Construction Manager indicating if all existing and new equipment will function properly with the electrical utilities specified in the construction documents 30 calendar days prior to completing related work.
- 46) Furnish all door hardware specified to be furnished by the electrical contractor in specification section 087100. Furnish and install all magnetic holders throughout the project.
- 47) Include cutting openings in metal deck for all work.

- 48) Include all shunt trips for the elevator shaft and other locations as indicated.
- 49) Equipment to be moved (By Bid Package 1.03) shall be disconnected by this Contractor and reconnected when delivered back to the building.
- 50) Obtain and pay for all permits including but not limited to certificate of compliance requirements for fire alarm inspection testing certification for all protective signaling systems.
- 51) Include electrical related work at the E House including conduit and wire for electrical service and installation of complete electrical service as indicated on the Contract Documents. – **ADD. NO. 2**

EXCLUSIONS

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1: NEW ELECTRICAL SERVICE \$10,000

-The Electrical Trade Contractor shall include in his/her base bid the allowance of **\$10,000** to cover fees and charges from Utility Company to install the new **permanent** electrical power service to the Building.

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR
ADDENDUM NO. 2

BID PACKAGE #26.01 ELECTRICAL
000930.26.01- 20

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #31.01
Site Work**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Site Work** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Site Work** as required, shown, described and specified under this Bid Package, and all related scope and services, required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **Bid Package 31.01 Site Work:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Site Work** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manual:

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1" prepared by Fusco Corporation dated June 18, 2012.

Entitled: "Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3" prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manual:

Include all work for all specifications sections specifically listed below or as applicable if indicated "(As Applicable)". In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

020100	Site Preparation
024113	Site Clearing, Site Demolition and Removals
024216	Building Demolition (As Applicable) – ADD. NO. 1
033001	Portland Cement Concrete – Site
040501	Mortar and Grout – Site
042113	Brick Masonry - Site
072100	Building Insulation (As Applicable)
079200	Joint Sealants (As Applicable)
101453	Site Signage
107500	Flagpole

111233	Vehicle Access Gate
129300	Site Furnishings
Division 22	Plumbing (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)
311400	Strip and Stockpile Existing Topsoil
312000	Building Earthwork
312213	Formation of Subgrade
312316	Earthwork
312317	Unclassified Excavation
212323	Borrow Soil Fill
312333	Trenching
312500	Erosion and Sediment Controls
316613	Helical Pile
321123	Processed Aggregate Base
321200	Bituminous Concrete Pavement and Markings
321213	Portland Cement Concrete Pavement and Curb
321244	Reinforced Turf
321413	Unit Pavers
321541	Stone Screenings
321726	Detactable / Tactile Warning Surfaces
323223	Modular Retaining Wall System
328000	Irrigation System (As Applicable)
329113	Topsoil
329200	Seed and Sod Lawn
Division 33	Utilities
481614	Geothermal Well Drilling

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract

drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Layout; Temporary Sidewalks and associated work; Sedimentation and Erosion Control; Cast in Place Concrete; Footings and Foundations for Site Walls; Utility Pads; Removal and Replacement of Unsuitable Material; Excavation and Backfilling; Demolition and Tree Removal; Rock Removal; Foundation Underpinning and Soil Retentions Systems; Trenching and installation both outside and inside the Buildings (including but not limited to Gas, Water, Electrical, Grounding, Telephone/Data/Cable TV, Storm, Sewer, Fire Protection; Ductwork, Heating and Cooling); Concrete Thrust Blocks for All Utilities/Systems; Sheeting and Shoring; Dewatering for all trades; Earthwork; Anti-Tracking Pads; Site Water Distribution & Drainage; Foundation Drainage; Processed Aggregate Base; Soil & Materials Management; Site Storm Sewer Systems, (including Storm Water Discharge Permit); Site Sanitary Sewer System; Gas Utility System; Water Systems (including Water Meter Pit & Vault); all other Site Utilities as noted; Bituminous Concrete Pavement; Portland Cement Concrete Pavement & Curbs; Stone Pavers; Granite Curbs; Temporary Protection and weatherproofing; Concrete Encasements; Concrete Formwork (For Site Concrete Work only); Concrete Reinforcement (For Site Concrete Work only); Structural Concrete (For Site Concrete Work only); Site/Traffic Control Signage; Flagpoles; Joint Sealers and Caulking (as it applies to your scope of work) and as described in the Specifications Divisions and Sections listed below.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

Site Preparation:

- a. This Subcontractor shall relocate as necessary and remove a minimum of **six (6) construction signs and bases** at surrounding City streets stating “Construction Equipment and Trucks Entering Road”. Additional signs may be required by the **Town of Hamden** and is included in the Subcontract price.
- b. This Subcontractor shall relocate as necessary and eventually remove a minimum of **ten (10) temporary wayfinding signs and bases** as directed by the Construction Manager.
- c. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to work areas. This Subcontractor shall be required to provide tree protection for existing trees to remain. All protection to be removed by this Subcontractor at the completion of the Work.
- d. This Subcontractor shall provide and maintain and eventually remove all erosion control measures as required including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking pads at the construction entrance and exit including all associated filter fabric and large stone, as detailed and approved in the aforementioned Logistics Plan. All truck tires are to be free of dirt, dry and clean before leaving the construction site.
- e. This Subcontractor shall provide dust control (watering trucks) as required by the Construction Manager and/or by any state or local agency.
- f. This Subcontractor shall protect all asphalt, concrete and existing site improvements. In the event asphalt, concrete or other site improvements intended to remain, this Subcontractor shall repair and restore the asphalt, concrete and site improvements to its original condition.
- g. This Subcontractor is responsible for maintenance and eventual removal of crushed stone temporary roads to adequately support loading and withstand exposure to heavy construction traffic. Obtain approval from the Construction Manager to locate temporary roads, storage and parking areas. Extend temporary roads in and around the construction area as necessary to accommodate delivery and storage of materials, equipment usage, administration and supervisory personnel during later phases.
- h. This Contractor shall be responsible for all costs to eventually remove the water line taps and any other work related to the new water services to the Office Trailers. The water authority will provide a list of qualified Contractors who can be used for the Taps, disconnects, and any other work that needs qualifications.
- i. This Subcontractor shall remove and restore the following areas depicted on the Site Logistics Plan:

- i. Construction Parking and Material Storage Location : Remove 6” of compacted processed stone at 30,000 square feet and install perimeter erosion control, all acceptable to the Construction Manager. Remove and restore per finish sitework plan.
- ii. Construction Manager’s Office Trailer: Remove and dispose of a pressured treated wood deck and shed roof (watertight) to connect the entrances between the Owner’s jobsite trailer and the Construction Manager’s jobsite trailer – approx. 40x12 in size deck with 2-48” wide stairs/rails built to all applicable codes and as directed by the CM.
- iii. Construction Manager’s Office Trailer & Owner Office Trailer: For each the Owner and Construction Manager’s Trailer – Remove and dispose of two base cabinets and two wall cabinets and countertop to fill twelve foot long space in two locations in both Construction Manager’s and Owner’s Office Trailers.

This Subcontractor shall remove within their Base Bid the following; two (2) large white mailbox installed on 4 x4 post for CM and Owner.

This Subcontractor shall provide a case (24) each of white, blue and yellow Marking spray paint, 10 rolls each of “Caution Tape” and “Danger”.

This Subcontractor shall include **five (5) round trips** from the Project Site to the Construction Managers warehouse/office in New Haven at the end of the project with a rack body truck (provided by this Contractor) to bring, furniture and incidentals from the site. Include **two (2) laborers** to move carry and distribute these incidentals.

- j. This Subcontractor shall remove conduit and wire for all Power and Telecom and Data for Construction Manager Trailer and Owner Trailer. Include removal of two (2) overhead poles and power backboard systems. Make final disconnections to trailers for power, telecom and data.
- k. This Subcontractor shall provide all Site Preparation, Sediment Erosion Control Protection, and Clearing and Grubbing to remove all Trees, Tree Roots, Stumps, Shrubs and other existing Plant materials with the exception of those specifically noted in the Contract Documents to remain.
- m. This Subcontractor shall provide, maintain and eventually remove all erosion control measures including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking pads [as depicted on the Site Phasing/Logistics Plan] all construction entrances and exits including all associated filter fabric and

large stone, as detailed and approved in the aforementioned Logistics Plans. All truck tires are to be free of dirt, dry and clean before leaving the construction site. (See Bid Package No. 1.01 (“Site Preparation”) for (3) Anti-Tracking Pad being provided by that Contractor).

5) Site Demolition:

This Subcontractor shall include Existing Site Improvement removals.

6) Temporary Roads, Paving, Access

This Contractor shall provide for installation of asphalt binder course immediately following underground utilities work in that area. This Contractor shall also provide asphalt patching, asphalt cleaning or sweeping and tack coat prior to installation of final paving, including final pavement marking and striping. Final paving shall be prepared to eliminate bird baths and minimize cold joints. It is understood that all final paving (top course/finish course) can take place up to several months after the binder course is installed and all associated cost shall be included in this Contractor’s bid proposal.

The Site Contractor shall construct and maintain temporary roads and paving that will adequately support loading and withstand exposure to traffic and equipment during the construction period. Locate temporary roads, storage, staging and parking areas where the same permanent facilities will be located whenever possible. Extend temporary roads in and around the construction area as necessary to accommodate concrete trucks, concrete pumps, structural steel deliveries, and all other deliveries, storage of materials, and access for equipment and for administration and supervisory personnel. This Contractor must maintain a compacted surface that slightly slopes away from building around the entire perimeter of the building at a minimum of 10 feet wide suitable for staging of the exterior of the building. Provide and maintain suitable pumps and drains to keep the excavated areas of the building free from water and sufficiently dry at all times. This Contractor shall provide **five (5) separate compacted (90% compaction) dry pads suitable for the crane that will be used in erecting the building structural steel from outside of building foot print as located and as prescribed by the CM. These five (5) separate compacted pads shall be a minimum of thirty-five feet by thirty five feet.**

This Contractor shall be responsible to professionally sweep clean public roads around the project site on a daily basis as result of construction traffic. Additionally, this Contractor shall professionally sweep all pavement, sidewalks, and entry steps as directed by the Construction Manager from the time this Contractor mobilizes until the issuance of the Certificate of occupancy.

7) Soil Erosion and Sediment Control

This Contractor is responsible for the furnishing, maintenance and removal of Erosion and Sedimentation Controls including anti-tracking pads as shown on the Contract Documents. This Contractor will also be responsible to maintain the anti tracking pads as shown on the Contract Documents. Please Note, anti tracking pads are shown for count only and it is possible that these pads could be located in others areas as directed by the Construction Manager.

This Contractor is responsible for cleaning and /or washing down the tires of his or her construction vehicles and equipment including but not limited to visitors and vendors exiting the site at the anti-tracking aprons located at each construction entrance to avoid tracking mud, dust, and etc. from the site and onto public streets.

Sedimentation and erosion control shall be properly installed and maintained. The silt fence specified utilizes an 8' post spacing. The posts are to be hardwood posts with the fabric prefabricated on the posts from the factory. The fabric specified does exceed the specifications of some other manufacturers in regards to strength. The control includes two rows of fabric as a means of a second defense mechanism.

A breach in the erosion control systems shall be deemed a lack of oversight from this Contractor to properly ensure the systems are installed correctly and are being inspected and maintained regularly. In the event of a breach, this Contractor shall immediately repair and replace the breach and repair and restore the neighboring property.

It is essential that the site work be performed in a staged progression to minimize the potential for soil loss through erosion as stated in the Contract Documents. The Contract Documents are not intended to show every erosion control measure necessary to coordinate with the Project Schedule (this is identified in the Erosion Control Narrative Specification). Erosion control logs shall be required by this Contractor that clearly and accurately identifies the status of the erosion control measures in place, this item shall be on the agenda of every construction meeting.

Furthermore, this Contractor will be required to submit on a weekly basis, formally sign and follow requirements of the Water Pollution Control Plan for the project.

8) Survey / Layout:

The Site Work Trade Contractor shall provide **40 control lines and 10 benchmark grades**. This information shall be provided by a Connecticut Licensed Land Surveyor who shall install permanent offset points and bench marks that will allow for the reproduction of lines and grades by other trades.

This Contractor shall provide all other layout required to perform and complete his or her Work. The cost to replace or repair lost or damage control points shall be the charged to the offending Contractor.

9) Temporary Works:

The Site Work Contractor shall provide:

- l. The Site Work Contractor shall provide the Temporary Bituminous Sidewalks and associated work.
- m. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to work areas. The Site Contractor shall be required to provide tree protection for existing trees to remain.
- n. This Subcontractor shall include protection of utilities to remain within the work areas as indicated in the Contract Documents.
- o. This Contractor shall also provide and maintain suitable pumps, drains, and etc. to keep the site and building excavations free from water and sufficiently dry at all times.
- p. This Subcontractor shall not stockpile materials on site without prior written approval from the Construction Manager.
- q. This Subcontractor shall remove all Temporary Works below grade, including but not limited to, temporary power conduits, temporary water piping, temporary gas piping and other temporary systems not indicated to remain.
- r. This Subcontractor shall provide any and all temporary ramps over foundations for access by any trade.

10) Under-slab Utilities within the Structure:

The Site Contractor shall include all trenching, bedding and backfilling within the building footprint for installation of any and all under-slab work depicted on the Contract Documents and Reference Documents. Soil compaction shall be restored and tested as noted on the Contract Documents.

11) Removal of Mock-Ups:

The Site Contractor shall remove and dispose in the General Trades dumpster all Mock-ups (any trade) constructed in and around the Site when directed by the Construction Manager.

12) Site Utilities:

Site Contractor shall provide all Site Utilities as shown on the Contract Documents, including but not limited to:

- a. Trenching, Bedding, Pipe, Fittings, Valves, Concrete Anchors, Thrust Blocks, Concrete Encasements, Backfilling, and etc. as required to complete all systems as noted such as, Gas, Storm, Sanitary, Water, Fire Protection, Under Drains, CATV, Fiber, Electrical, Telecom, Data and Pole Mounted Security Cameras. All Conduits for the electrical, CATV, Fiber, Telecom, Data and Site Lighting will be provided by the Electrical Contractor. – ADD. NO. 2
- b. Site Water Distribution & Drainage, Site Storm Sewer Systems (including Storm Water Discharge Permit), Site Sanitary Sewer System; Gas Utility System; Fire Protection Service; Water Systems (including Water Meter Pit); all other Site Utilities as noted;
- c. This Contractor shall provide the above services from the point of origin into the building and coordinate same with the appropriate utility.
- d. This Subcontractor shall provide and install all thrust concrete blocking associated with all systems including fire protection lines.
- e. This Contractor will be responsible for coordination with the appropriate utility and provide and pay for all Permit, Fees, etc. and the coordination of inspections within the Contractor's Scope of Work as required by the service provider and/or the authority having jurisdiction.
- f. It is the intent of this document that the Site Contractor shall provide all utilities noted as complete in all respects, including but not limited to, providing Utility Pads as shown or required.
- g. The Site Contractor shall include in the Scope of Work any costs associated with shut downs that may be required to complete the Work.
- h. The Site Contractor shall be responsible for cleaning, flushing and disinfecting all water service piping prior to any Plumber or Fire Protection Trade Contractor's attaching to the new services. The Site Contractor shall employ a licensed Plumbing Contractor for any water service piping that is required to have a licensed contractor to install this above mentioned work by code. Site Subcontractor shall ensure everyone on site has appropriate licenses in regards to this subcontract.

- i. The Site Work Contractor shall furnish, install and coordinate with the Construction Manager and authority having jurisdiction when performing Domestic and Fire Protection water systems. It shall be the responsibility of the Site Work Contractor to make certain that the Water Distribution Services (Fire and Domestic) is complete in all respects at no additional cost to the Project. This includes but not limited to all tapping fees.
- j. The Site Contractor shall be responsible for all costs and coordination of water line taps and any other work related to the new water services. The water authority will provide a list of qualified Contractors who can be used for the Taps, disconnects, and any other work that needs qualifications.
- k. The Site Contractor shall provide excavation, Bedding and backfill for the new gas service from the Street Line to the new gas meter.
- l. The Site Contractor shall be responsible for connections to each utility service including the Gas Service, and coordinate work with other trades. Excavation, Bedding and backfill for all other trades shall be the responsibility of this Site Contractor. Inserts, sleeve and the like required to pass through the foundation and/or slabs shall be provided by the Contractor requiring the opening.
- m. The Site Contractor shall include in the Scope of Work any costs associated with shut downs to complete his or her work for the entire length of the project.
- n. The Site Work Contractor is responsible for all excavation, bedding and backfill required within the new and existing buildings and on the entire site for, all Trade Contractors. Each Trade Contractors shall provide line and grade for Site Contractor. It will be the responsibility of the Site Contractor to obtain the proper depth and location required for each excavation. It is the responsibility of the Site Contractor to fully coordinate with the Electrical, Mechanical, Plumbing and all drawings to ascertain the trenching requirements within the new and existing buildings and on the entire site. – **ADD. NO. 2**
- o. This Contractor is to furnish all labor, materials, equipment and incidentals necessary for the demolition and disconnection and lawful disposal of existing underground and above ground utilities and appurtenances servicing structures to be demolished as indicated on drawings and as necessary to perform work in the Scope of Work, as specified, and as directed by Engineer. This Contractor is to contact and coordinate with all utilities prior to the start of Work. Subcontractor to verify all existing utilities that are to remain that are in Subcontractor's area of work. Subcontractor is required to employ, at their expense, professional underground utility locating services for their onsite work. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs passed on to Subcontractor. Stake, flag, and protect all existing utilities to remain.

13) Grease Interceptor:

The Site Contractor shall be responsible to furnish and install the Grease Interceptor as shown on the Contract Documents and shall include any necessary openings for, but not limited to, intake piping, exiting (downstream) piping, above access holes, etc. The Site Contractor shall be responsible for furnishing and installing all sanitary piping from the building into the grease interceptor. The Site Contractor shall install all sanitary piping from the downstream side of the Grease Interceptor and any manhole covers, manhole frames, manhole risers, vent lines, etc.

The Site Contractor shall verify operation of the grease interceptor and correct any malfunctions.

14) Bituminous Damp Proofing at Foundation and Site Walls:

- a. This Contractor shall be responsible for any and all damp-proofing, waterproofing, and insulation as it relates to Foundation Walls.
- b. This Contractor shall be responsible for all damp proofing, waterproofing and insulation at Site Walls.

15) Site Security:

The Site Contractor shall be responsible for security of the site with temporary gates, chains, locks, etc. Any associated cost shall be included in their base bid (distribution of keys free of charge as directed by the Construction Manager. Provide locks and chains on gates in fence as indicated on the Site Logistics Plan and as directed by the Construction Manager.

The Site Contractor shall be responsible on a *daily basis* to secure all access points to the site at the direction of the Construction Manager.

16) Office Trailer Locations:

This Subcontractor shall remove conduit and wire for all required Power and Telecom/Data for **All** Site Offices.

This Subcontractor shall remove wastewater sewer connection for **All** Site Offices.

This Subcontractor shall remove water service connection for **All** Site Offices.

17) Bid Package No. 1.01 (“Site Preparation”) Site Excavation and Stockpile:

Any excess soil that is stockpiled by the Bid Package No. 1.01 (“Site Preparation”) Contractor shall be removed by this Subcontractor. Stockpiles that have erosion control measures installed around it shall be maintained by this Subcontractor.

18) Construction Parking and Material Storage Location:

At the completion of the Project, or as directed by the Construction Manager, all services shall be removal and the area completed or restored in accordance with the Contract Documents. The Site Contractor shall cut, cap and remove all services to the Construction Parking and Material Storage Location. The Site Contractor shall remove or reuse all processed stone parking lot materials, erosion control and any other components of the Construction Parking and Material Storage Location area not indicated to remain as per the Contract Documents. The Construction Parking and Material Storage Location will be constructed in accordance with the Site Logistics Plan.

19) Building and Site Excavation, Bedding, Backfill:

The Site Contractor shall provide Excavation, Bedding, Backfill and etc. where indicated for all structures including: Retaining Walls, Structures, Site and Building Footings and Foundations, Utilities, Mud Slabs, Flag Poles, Miscellaneous Site Improvements, etc.

The Site Contractor shall provide Bases for all Site Lighting.

This Subcontractor shall be responsible for the Removal and Replacement of Unsuitable Material.

The Site Contractor shall provide the excavation and installation of Light Fixture bases.

Strip site and off haul soil spoils and/or stock pile for future use. Subcontractor is responsible for determining amount of soil needed for obtaining a balanced site (complete rough & finish grade and backfilling operations). Any excess soil is to be off-hauled by Subcontractor; if site is short, Subcontractor is responsible for importing. Stockpiles shall have erosion control measures installed around it and maintained. All spoils or any other soil being removed from the site must be tested and characterized prior to leaving the site and legally disposed of off site.

20) Underground Ducts and Utility Structures:

The Site Work Contractor shall provide Excavation, Dewatering, Bedding and Backfill, and installation of all Underground Ducts, Grounding System and all other Utilities.

Additionally the Site Contractor shall furnish and install Manholes, Handholds, Power Boxes Underground Structures and Pads, Transformer Vault/Pad, Concrete Anchors & Concrete Encasements, including Reinforcing Steel and Identification for same for all Underground Conduits, Ducts and all other Utilities. – **ADD. NO. 2**

The Electrical Contractor shall provide all Conduits, Ducts, Electrical Wire Accessories, connections and other materials as required to complete the Underground Conduits, Cables, Ducts, Grounding systems and Utilities installation per the Electrical Divisions.

The Site Contractor shall include in the Scope of Work any costs associated with any type of shut down to complete the work.

Additionally, the Site Contractor shall include all Trenching, Bedding and Backfilling within the building for installation of all under slab underground work performed by others (under new and existing slabs).

This Contractor shall be responsible for the removal of ALL existing underground utilities and structures as indicated on the Contract Documents.

This Contractor shall include all dewatering including all excavations, trenches, pits, open foundations, footings, etc., for the duration of the project.

21) Rigid Under Slab and Foundation Insulation:

All Extruded-Polystyrene Insulation inside and outside and underneath the Foundation walls and footings, where indicated on the Contract Documents, shall be furnished and installed by the Site Contractor.

22) Sheeting, Shoring, Underpinning and Open Hole Protection:

In addition to that required by the Contract Documents, the Site Contractor is responsible to provide all Sheeting, Shoring, Bracing, and Underpinning as required to complete his or her Scope of Work and the work of other Trades, whether shown or not on the Contract Documents.

- a. Also included shall be the restoration of all previously existing conditions disturbed as a result of the Site Contractor's work.
- b. Any street and parking area openings must be plated, barricaded with jersey barriers, barrels, signage, caution tape, and/or flashing caution lights at the end of each workday by this Subcontractor.
- c. Any and all work in or along edges of roadways will be coordinated and scheduled with the proper authorities two weeks prior to beginning work.

- d. Underpinning of existing foundation shall be the full responsibility of this Contractor to maintain the integrity of the foundation to the complete satisfaction of the Structural Engineer and Architect.
- e. Any compromise of the integrity of the existing foundation shall be the full responsibility of this Contractor to rebuild the existing foundation to the satisfaction of the Structural Engineer and Architect.

23) Site Concrete:

The Site Contractor shall provide all Concrete Formwork (for Site Concrete Work only), Concrete Reinforcement (for Site Concrete Work only) and Structural Concrete (for Site Concrete Work only) to complete all Site Concrete as indicated on the Contract Documents, including the Clarifications as listed below:

- a. The Site Contractor shall provide excavation and installation of Concrete Bases and footings for the Site Lighting Fixtures, including the setting of anchor bolts. The Site Contractor shall provide Concrete Grouting if required. Refer to the electrical drawings.
- b. The Site Contractor shall provide Excavation, Bedding, Backfill, Formwork, Drypack, Grout, Concrete , removals, etc., for all Site Concrete Work as indicated on the Contract Documents, including but not limited to Sidewalks, Bituminous Concrete Pavement, Portland Cement Concrete Pavement & Curbs, Stone Pavers, Detectable Warning Surfaces, Granite Curbs, Bollards, Light Pole Bases; Flag Pole and Base; Concrete Encasements; Concrete Formwork (For Site Concrete Work only); Concrete Reinforcement (For Site Concrete Work only); Structural Concrete (For Site Concrete Work only) and Retaining Walls.
- c. This Subcontractor shall provide all Utility Equipment Pads, Generator Pads, Slabs, All Exterior Mechanical Pads, and Transformer Vaults as indicated on the Contract Documents or required by Utility Companies or authorities;
- d. The Site Contractor shall provide all Site Signage, Traffic Signage, Parking Signage, and associated Posts and/or Concrete Bases (VLOCs) as noted in the Contract Documents. Include all site utility signage specified and required by all applicable codes and agencies.
- e. The Site Contractor shall install all inserts, anchors, as provided by others, to allow for the installation of pipe and tube railings provided by others.
- f. The Site Contractor shall provide all Site Concrete typical and as noted on the Civil, Architectural and Structural Drawings.

- g. The Site Contractor shall provide ALL Concrete and Reinforcing in its entirety from the outside face of the existing or new exterior concrete foundations walls.

24) Site Signage:

The Site Contractor shall provide all Site Signage, Traffic Signage, Parking Signage, and associated Posts and/or Concrete Bases (VLOCs) as noted in the Contract Documents.

- a. The Site Contractor shall provide the excavation, foundation and backfill at the school sign typical and as noted on Detail 5/C10.
- b. The Signage Contractor shall provide the Cast Metal Letters at school sign typical and as noted on Detail 5/C10.
- c. The Masonry Contractor shall provide the masonry and precast at the school sign typical and as noted on Detail 5/C10.

25) Grounding:

The Site Contractor shall provide Trenching, Bedding and Backfilling for the installation of the Grounding system as indicated in the drawings. – **ADD. NO. 2**

26) Winter Protection, Dewatering and Runoff Control:

- a. The Site Contractor shall provide removal of snow, ice and mud from Construction Roads (including the Athletic Field Project Site Roads), Permanent Driveways & Roads, City Sidewalks, Construction Trailer Office Locations, Office Trailer stairs and access and Construction Parking and Material Storage Areas as may be required for accessibility, safety, protection and prosecution of all trade work. These operations shall be performed for the duration of the Project. In addition to removing the snow, this Contractor shall spread ice melt as needed or at the Construction Manager's discretion. This Contractor will be responsible to sweep up all sand used in the above process. Site Subcontractor also to provide all removal of snow, ice and mud to complete its own work.
- b. This Subcontractor shall include and maintain all rainwater runoff control and shall sign and agree to the Storm Water Pollution Control Plan.
- c. This Subcontractor shall include ALL dewatering and surface water control for all open excavations, foundations, footings, access and haul roads, and staging areas as required for the duration of the Project. All erosion controls shall be inspected weekly and before every anticipated rain event and after every rain event.
- d. This Subcontractor shall provide and maintain all winter protection up to the point where the area is taken over by the Concrete Foundation Subcontractor. This Subcontractor shall include preparation, protecting and/or pre-heating/thawing

(including but not limited to blankets, ground heaters, etc.) required to complete its Work and will provide the Concrete Subcontractor's with "non-frozen" conditions. The Concrete Foundation Subcontractor will be responsible for dewatering its Work. Once forms are stripped, this Subcontractor shall resume responsibility and backfill promptly.

27) Dust Control:

The Site Contractor shall provide all Dust Control for the duration of the Project. This Contractor will provide dust control (watering trucks) as required or as requested by the Construction Manager and/or by any state or local agency.

28) Permanent Roads and Pavement:

This Contractor shall provide for installation of asphalt binder course for each designated paved area. This Contractor shall also provide asphalt patching, asphalt cleaning or sweeping and tack coat prior to installation of final paving, plus final pavement marking and striping. Final Paving shall be prepared to eliminate birdbaths and minimize cold joints.

Additionally, this Contractor shall professionally sweep all pavement, sidewalk, and entry steps just prior to occupancy as directed by the Construction Manager.

This Contractor is responsible for all pavement and field markings/painting, curb and wheel stops, speed bumps, undulations, and sealers. Include the complete removal of existing striping in lieu of just painting over existing with black paint.

29) Neighboring Property Owners:

This Contractor shall provide any and all coordination (through the Construction Manager) with neighboring property owners while conducting Work in the vicinity of the property line, including but not limited to rock removal, excavation, site demolition and brush and tree removals.

30) Storm Water Systems – ADD. NO. 2

This Contractor shall be required to construct the Storm Water Systems upon mobilization to the Project.

This Contractor shall be required maintain the Storm Water Systems for the duration of the Project. – **ADD. NO 2**

This Contractor shall be required to permit reasonable access to all Contractors over the Storm Water Systems and provide temporary protection over the units to allow for such

reasonable access (manlifts, lulls, highlifts and other construction equipment) to the building. – **ADD. NO. 2**

This Contractor shall be required to restore and completely clean to the satisfaction of the **Town of Hamden**, Architect, Construction Manager and any other entity having authority over the Storm Water Systems. – **ADD. NO. 2**

This Contractor shall prepare and submit for approval a Work Plan specifically identifying the work activities in sequence for the construction of Storm Water Systems. This Contractor shall meet with the Construction Manager, Site Engineer and appropriate representatives of the **Town of Hamden** and likely the State of Connecticut to review the Work Plan which shall include at a minimum: (1) schedule of operations, (2) installation sequence, (3) sedimentation and erosion control measures, (4) shop drawings, (5) removal of construction sedimentation prior to closeout and any other information required by the **Town of Hamden**, Architect and Engineer. – **ADD. NO. 2**

31) Dumpsters, Clean-up, Wash-Out & Waste Removal:

- a. The Site Work Contractor shall be responsible to compact down ALL TRADES dumpsters w/ a machine equivalent to or greater than a John Deere 410 on an as needed basis per the Construction Manager.
- b. The Site Work Contractor shall be responsible for washing out concrete trucks, pumping trucks, pipe lines, etc., off-site (take back to plant) or at a designated place on site which can be cleaned and disposed of at his or her expense. Additionally, the cost of cleaning of all concrete, mortar, and grout splatter from all surfaces immediately after placement of these materials, and repairing any resulting damage to the satisfaction of the Construction Manager shall be included in this Contractor's bid proposal. Also include a location for the Concrete Subcontractor to wash out its trucks on the project site. NO WASHING OF TOOLS, EQUIPMENT, ETC. OR ANY MATERIALS INTO STORM OR SANITARY SYSTEMS WILL BE PERMITTED.
- c. This Contractor will provide, maintain, and remove at project completion a washout area for his or hers and the Concrete/Mason Contractor's concrete trucks, pump trucks, pipe lines, etc., delivering to the site. Including periodically relocating the washout area as dictated by the Construction Manager and/or Engineer.

32) Sub-grade Preparation:

This Contractor is responsible for providing Sub-grade to tolerances indicated in the Contract Documents for all elevations noted on the Contract Documents.

33) Radon Pit Removal System:

The Site Contractor shall be responsible for Excavation, Bedding, Backfill, Concrete Block, Plywood or Metal Decking as indicated in the details, of Radon Collection Systems and all accessories for the Radon Removal Systems as detailed on the Contract Documents.

The Mechanical Contractor shall confirm the operation of the Radon Removal Systems after installation as noted on the Contract Documents. The Mechanical Contractor shall be responsible for providing a licensed certified radon testing company to certify all Radon Removal Systems as noted on the Contract Documents.

Include all under slab radon trenching, installation, and connections and stub up from the slab on grade.

34) Flagpole

This Contractor shall provide the Flagpole and flags and related components as noted on the Contract Documents, including demolition and removal and proper disposal of the existing pole/base.

35) Traffic Control Signage

This Contractor shall provide the Traffic Control Signage and related components as noted on the Contract Documents, including demolition and removal and proper disposal of the existing pole/base.

35) Final Cleaning of Asphalt and Site Concrete:

The Sitework Contractor shall professionally sweep clean the roads and pressure wash all sidewalks.

36) Topsoil and Lawn Seeding

This Subcontractor shall provide all approved topsoil and seeding as indicated on the Contract Documents. This Contractor shall be responsible for watering, cutting and maintaining all grasses until Project is complete and as specified. **Only complete Work to the Project North of the Athletic Fields & Courts Demarcation Line (See Contract Documents). All work to the project south of the Athletic Fields & Courts Demarcation Line will be completed by the BP#31.04 Athletic Fields Subcontractor.**

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
HAMDEN, CONNECTICUT
PROJECT NO.: BI-RT-837-CMR

BID PACKAGE #31.01 SITEWORK
000930.31.01- 20

CLARIFICATIONS

- a.) Subcontractor shall **only complete Work to the Project North of the Athletic Fields & Courts Demarcation Line (See Contract Documents). All work to the project south of the Athletic Fields & Courts Demarcation Line will be completed by the BP#31.04 Athletic Fields Subcontractor.** Include all sleeves for plumbing, electrical, storm water drainage and irrigation work located to the project north of the Athletic Fields & Courts Demarcation Line that are required for work to the project south of the Athletic Fields & Courts Demarcation Line. Utilities crossing the Athletic Fields & Courts Demarcation Line shall be terminated at the line by this Subcontractor with a pull box or manhole unless otherwise noted.
1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
 2. The Fire Suppression Contractor shall coordinate closely with the work of the Site Contractor to complete the water service(s) connection in a timely manner, as directed by the Construction Manager in its sole discretion, as not to delay the backfilling of the new water service(s). In the event the Fire Suppression Contractor is not acting timely, in the Construction Manager's sole discretion, the Construction Manager shall direct the Sitework Contractor to complete the installation into the building with cost backcharged to the Fire Suppression Contractor.
 3. The Sitework Trade Contractor shall provide fire protection service and domestic water line to within 5'0" of exterior face of exterior foundation wall with a flanged end or a bell end of the ductile iron pipe or similar condition for the other Trade Contractors to connect to. The Plumbing and Mechanical Trade Contractor and the Fire Protection Contractors shall be responsible for making the connections and running the piping into the building from that point.
 4. Complete work using the phasing described in Fusco Corporation's Phasing Documents. Provide excavation, bedding and backfill for temporary exterior lighting conduits as required. – **ADD. NO. 2**
 5. Sheet C-1 - Include all work indicated on this sheet.
 6. Sheet C-2 - Include all work indicated on this sheet except for the demolition of "D" Wing and the garage. The demolition of "D" Wing (listed as "D" Wing and "G" Wing on some sheets) and demolition of the garage will be completed by the Demolition and Abatement Subcontractor. Site Work Subcontractor to include demolition of oil separator tank and all exterior steps, stairs, ramps, walks, hand rails, and guard rails.
 7. Sheet C-3 - Include all site footings except for footings at fencing. Include reinforcing at footings where specified. Include footings for gates, hand rails, guard rails, other railings, bollards, removable bollards and vehicle access gates and coordinate with other trade contractors. Infill bollards with concrete and form top. Include all exterior and site concrete, concrete paving, sidewalks, ramps, steps and stairs, aprons, curbs, asphaltic concrete paving, traffic signage and striping, all exterior signage not attached to buildings, stop bars, crosswalks, stone screenings,

- parking stalls, loading zones, flagpoles, retaining walls, utility pads, bike racks, trash receptacles, and benches. Include all grass, lawn and reinforced turf located north of the Athletic Fields & Courts Demarcation Line.
8. Sheet - C-4 - Include all work indicated on this sheet. Include all utility connections, permits and fees. For site materials and methods use CTDOT Form 816 and/or the specifications, whichever is more stringent.
 9. Sheet C-5 – Include all grass, sod and lawn on the Project North side of the Athletic Fields & Courts Demarcation Line.
 10. Sheet C-6 - Include all work indicated on this sheet. Include the installation, maintenance, and removal of **three (3) Anti-Tracking pads** to be located as directed by the Construction Manager based on revised phasing. Maintenance of the anti-tracking pads includes the periodic removal of materials and addition of new rock as directed by the Construction Manager. In addition, include sedimentation and erosion control systems along the Athletic Fields & Courts Demarcation Line which is not shown in the drawings and all required erosion control whether shown on the drawings or not. Also include the maintenance and removal of three (3) separate Anti-Tracking pads provided through Bid Package No. 1.01 (“Site Preparation”).
 11. Sheet C-7 - Include all work indicated on this sheet.
 12. Sheet C-8 Include all work indicated on this sheet.
 13. Sheet C-9 - Include all work indicated on this sheet.
 14. Sheet C-10 Detail 5 - Include all work indicated in this detail below the top of the footing and include the reinforcing coming out of the top of the footing. Provide a shop drawing for this footing and coordinate with Masonry Subcontractor.
 15. Sheet C-10 Detail 6 - Include all work indicated in the detail listed.
 16. Sheet C-10 Detail 7 – Include all work indicated in this detail.
 17. Sheet C-11 Detail 1, 2, 3, 4, 5, 6, 7, 8, and 9 - Include all work indicated in the details listed.
 18. Sheet C-13 Detail 7 - Include all work indicated in the details listed.(See Drawing C-3 for location adjacent to Building E typical).
 19. Sheet C-15 Detail 4 – Include all concrete and concrete expansion joints, tooled joints, pre-molded joints, sealants and any other concrete joints.
 20. Sheet C-16 Detail 2, 3, 4 & 5 - Include all footing and concrete and other work indicated in the details listed except for furnishing the railings and gates. Miscellaneous Metals Subcontractor to furnish and install railings and gates in these details. Infill bollards with concrete and form top.
 21. Sheet C-17 - Include all work indicated in this sheet. Include furnishing and installing the entire sand pit system.
 22. Sheet C-18 Detail 1 - Include all work indicated in the details listed. Include benches, concrete pavers, trash receptacles, bike racks and flag pole.
 23. Sheet C-18 Detail 2 – Include all work indicated in this detail except for the tree, mulch, precast cap and brick veneer. Include the plaques and skate stops in this scope. Provide shop drawings for the seat wall system and plaques and coordinate with Masonry Subcontractor and Landscaping Subcontractor. Include sand-blasting at concrete.

24. Sheet EV-101 - Sitework Subcontractor shall be responsible for Excavation, Bedding, Backfill, ¾" Pressure Treated Plywood and/or metal deck as indicated in the drawings, Crushed Stone, Concrete Block and accessories for the Radon Removal Systems as detailed on the Contract Documents. Include piping under the slab and stub up above the slab. Coordinate with Mechanical Subcontractor and Concrete Subcontractor.
25. Structural ("S") Drawings – Include all work in the Structural drawings as it relates to this scope of work. Include the excavation for all building footings and slabs and include all subgrade, base, crushed stone, fill and backfill. This includes excavation work and bedding and backfill work at slab removal and infill locations.
26. Sheet S-100 Foundation Note 1 – Include all work described in Foundation Note #1 including 12" of compacted granular fill under all footings and foundations and all work relating to helical piles and the surveying for those piles.
27. Sheet S-106 – Include site work as applicable to this scope of work as indicated on this sheet for the E House.
28. Sheet S-202 Detail 7 - Include all crushed stone at building slabs and at infill areas. Include infill areas that are shown throughout the contract documents and infill areas required but not shown in the drawings.
29. Sheet S-222 Detail 21, 22 and 23- Include ALL helical piles typical and as noted throughout the Contract Documents.
30. Sheet EQ-101 – Furnish and install all site and plumbing related equipment and work indicated to be contractor furnished and installed outside of the buildings. Furnish and install the following items:
 - a. Shop Equipment Schedule – Automotive Production Shop
 - i. Item 12 – Waste Oil Containment System – Include entire tank and system and bring piping within 5' of the building.
31. Sheet EQ-103 – Furnish and install all site and plumbing related equipment and work indicated to be contractor furnished and installed outside of the buildings. Furnish and install the following items:
 - a. Shop Equipment Schedule – Plumbing
 - i. Item 3 – Oil Tank – Include entire tank and system and bring piping within 5' of the building.
32. Sheet PR-102 – Demolish and remove existing gas piping system from 5' outside of the exterior of building to main line in Jones Road. Cap in the street at the main. Coordinate and comply with local utility. Coordinate and comply with Town of Hamden requirements for street work.
33. Sheet P-104.2 - Furnish and install the oil separator systems outside of the buildings.
34. Sheet M102.2 Detail 1 – Provide 12" Sonotube Foundations for Dust Collector angle frame. Coordinate location with Plumbing and HVAC Contractor.
35. Sheet ES-101 Detail 6 & 6a – Include all transformer utility pads. Include a pad for the generator.
36. Sheet ES-101 Detail 0, 1, 2, 3, and 4 – Include all site electrical infrastructure including ductbanks.

37. Sheet F-002 Detail 1 and 2 – Include the demolition of the existing site fire protection piping and construction of the new site fire protection line system to within 5’ of where the line is shown to enter the building.
38. Sheet F-003 Detail 1 – Include installation of the fire sprinkler site piping system from point of connection shown to within 5’ of where the line is shown to enter the building. Include control valve and box.
39. Include hydro flushing and cleaning of all existing and new storm drainage piping, catch basins, and manholes that are to be reused in the final plan at the end of the construction project. Also, hydro flush and clean all existing storm drainage piping, catch basins, and manholes at the beginning of the project and periodically during the project to endure a clean and properly functioning system as directed by the Construction Manager. All hydro flushing and cleaning to be done to the point of connection in the street.
40. Include all temporary pavement markings as indicated or required and their removal.
41. Saw cut and remove asphalt, sidewalk, curb, and site concrete as required for new sidewalk, curb, site concrete and drive and/or ramp entrance requirements. Saw cuts to be laid out prior to cutting and lay-out MUST be approved by Construction Manager’s Superintendent (correct layout is the responsibility of Subcontractor; Construction Manager's Superintendent to verify neatness and constructability only). All cuts to be neat and all overcuts to be kept to an absolute minimum.
42. Include all sawcutting for utility demolition and for new utilities throughout the project outside of the buildings.
43. Subcontractor shall provide all suitable soil and topsoil for the entire site including all lawn, landscaping and planting areas. Subcontractor shall furnish and install all soil amendments, conditioners, compost, manure, and fertilizers and shall complete all soil preparation. Include rototilling. Include topsoil testing and report costs as specified and include all amendments and work indicated in the report.
44. Include back fill at perimeters of building structures after completion of concrete.
45. Include the off-haul of spoils from all work including any work by other trades.
46. Hand dig around tree drip lines and near existing utilities.
47. Include shop drawings prepared and stamped by a Professional Engineer licensed in the State Of Connecticut for the vehicle access gates as indicated in specification section 111233 and for precast structural concrete units as indicated in specification section 033000 and for soil shoring as indicated in specification section 312317 and helical piles as indicated in specification section 316613 and the modular retaining walls as indicated in specification section 323223 provide shop drawings stamped by a Professional Engineer for all other applicable items in this scope. Helical pile work shall be completed after school hours or on weekends or holidays.
48. Site Subcontractor responsible to install, maintain, and relocate fencing and surfaces for egress paths out of school as they change with the construction phasing. All pedestrian walkways shall be asphaltic (not crushed stone or processed).
49. Include a new driveway apron and asphaltic concrete paved driveway over baserock matching the permanent construction details as a temporary driveway and road for school access from Jones Road just west of Pease Street to the existing parking lot.

- See Fusco Site Phasing Plan and CP-1.2 for reference and demolish this temporary driveway and road as directed by the Construction Manager when it is no longer needed.
50. The Sitework Subcontractor shall provide Excavation, Bedding, Backfill for the Concrete Subcontractor for all structures including: Structures Footings and Foundations. Excavation and backfill of sumps and pits will be by the Sitework Subcontractor.
 51. Provide all concrete joints and include shop drawings indicating the layout of joints.
 52. The demolition of all concrete shall extend to the nearest control joint, expansion joint or tooled edge.
 53. Include relocating 2 existing and 3 new Conex type storage containers on site which are approximately 20' long 4 times each as directed by the Construction Manager.
 54. Include concrete patching at all city sidewalks and concrete repair at city sidewalks near construction entrances.
 55. Include all underground location services as required and coordinate with all agencies to avoid underground utility damage. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs back-charged to the Subcontractor.
 56. Provide all temporary egress protective pathways required to obtain Certificate of Occupancies and Temporary Certificate of Occupancies and as indicated in the Contract Documents.
 57. Include pumping out and disposing of all materials in existing site fuel and waste oil containers as directed by the Construction Manager
 58. Include all exterior sand-blasting.
 59. Furnish and install all skate stops.
 60. Create as-built drawings for all underground utilities prior to covering them.
 61. Include all vaults, manholes and box covers and lids. Provide and install traffic rated Christy boxes or manhole covers at roadways, sidewalks, and all other areas where vehicular traffic is likely.
 62. Subcontractor is responsible for potholing and locating all existing underground utilities for the entire project.
 - i. Include potholing to determine existing conditions and utility locations. Verify the locations & invert elevations of all shown utilities. Include locating, cutting, capping, relocation, and connection to all existing utilities.
 - ii. Verification of underground utilities prior to sawcutting is the responsibility of the Subcontractor. All information contained in the contract drawings must be verified prior to sawcutting. Include all sawcutting for this scope of work.
 - iii. If the field conditions are inconsistent with the drawings, notify the General Contractor's Superintendent immediately. Provide detailed & complete information that can be sent to the Engineer for direction.
 - iv. Subcontractor is required to employ, at their expense, professional underground utility locating services for their onsite excavations and trenching. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs passed on to Subcontractor.
 - v. Subcontractor to safe-off utilities as required.

63. Subcontractor will be responsible for any line and it's functionality that Subcontractor connects to (including but not limited to, drainlines). Subcontractor to clean lines and ensure that lines are clear and are functioning/flowing as intended.
64. Provide patching for all finished surfaces.
65. Adjust the elevations of all new and existing utility boxes to finish grade. Include new covers, boxes, and risers as needed.
66. Complete all onsite and offsite utility connections.
67. Include the sanitation and flushing of all systems as indicated.
68. Furnish and install all lateral lines, inlets, catch basins, area drains clean-outs & manholes. Include required grates and fasteners. All grates shall meet ADA accessibility requirements.
69. Include all required adjustments of new and existing manholes, valve boxes, vaults, grates, catch basins, inlets, etcetera, to finish grade.
70. Include all off-site work for utility connections. Include layout, sawcutting, demolition and off-haul, trenching, pipe systems, back-fill, connections, compaction and patching.
71. Demolish and remove all existing site items not indicated to remain as directed by the Construction Manager.
72. Subcontractor shall furnish and install all indicated header boards adjacent to their work.
73. Include all utility connections. Include all coordination, permits, and fees for utility connections. Include all fees associated with cable TV, electric, gas, sewer, telephone and water. Include all permits and fees for the construction storm water and erosion control management including the fees and submission for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities for the entire project site (both sides of the demarcation line).
74. Include all site and utility related work at the E House including excavation for electrical service and installation of water line. Include the drilling of the geothermal well system. – **ADD. NO. 2**
75. Specification 024216.2.3.E.2 – After Building Demolition Bid Package 2.01 Demolition and Abatement Contractor shall leave all remaining excavation (hole slopes) OSHA safe. Backfill shall be by the Bid Package 31.01 Sitework Contractor. – **ADD. NO. 1**
76. Sheet C2 – Include demolition of underground utility tunnel between Wing B & Wing C typical and as noted on Sheet C2. – **ADD. NO. 1**
77. Sheet C4 / Specification 220000 – Provide new: oil tank; grease trap with backwater; oil/water separator and waste oil tank typical and as noted on Sheet C4. Provide piping as specified to all units and within 5ft of the building. – **ADD. NO. 2**

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

ALLOWANCE NO. 1: REGIONAL WATER AUTHORITY FEE - \$30,000

The Site Work Contractor shall include in the base bid the allowance of **\$30,000** for the Regional Water Authority Fee. All other related Work remains the same and shall be included in the Base Bid.

**EXHIBIT “B”
SCOPE OF WORK**

**Bid Package #31.04
Athletic Fields & Courts**

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

THE FOLLOWING WORK IS INCLUDED IN THE SUBCONTRACT:

The Scope of Work shall include but not be limited to labor, materials, equipment and all incidental work associated with **Athletic Fields** as described in the Contract Documents and as outlined below. It is the intent of this Subcontractor to provide for the complete coordination, furnishing and installation of all **Athletic Fields** as required, shown, described and specified under this Bid Package, and all related scope and services, required to complete the Project.

This Subcontractor shall be responsible to perform all Work not expressly specified or indicated by the Contract Documents but as required for a thorough and complete execution of the Work of this Bid Package/Subcontract in every respect. Note that the word “provide” if, and when used herein shall mean furnish and install completely, including all costs for labor, materials, and equipment. It is further understood that the Project Drawings, Specifications and other Documents listed in Exhibit B, may not be fully developed, and that the total Subcontract Agreement Price will include whatever is required beyond same to provide a complete and functional installation to the satisfaction of the Owner and Construction Manager. Should a conflict occur within the Contract Documents, the most restrictive, greatest quantity and highest quality shall prevail.

SCOPE OF WORK

- 1) **Bid Package 31.04 – Athletic Fields:** This Subcontractor is responsible to provide all coordination, manufacturing, fabrication, labor, materials, tools, equipment and appurtenances of every kind for the complete execution to furnish and install the **Athletic Fields** and related work as described in the Specifications, Drawings, Site Logistics Plans and herein. The Scope of Work shall include, but not be limited to, the General Conditions, all Division One Specification Sections and all of the Work of this Bid Package in the following Specification Section(s) and those related Specification Sections, as shown and indicated on the Contract Documents, as shown and as further described herein:

Project Manual:

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1” prepared by Fusco Corporation dated June 18, 2012.

Entitled: “Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR Volume 1-3” prepared by Antinozzi Associates dated June 18, 2012.

Specification Sections of the Project Manual:

Include all work for all specifications sections specifically listed below or as applicable if indicated “(As Applicable)”. In addition, complete work in other specification sections not listed as applicable to this scope of work and as described in the Scope of Work and Contract Documents.

003155	Geotechnical Sinkhole Report and Remediation
020100	Site Preparation (As Applicable)
024113	Site Clearing, Site Demolition and Removals (As Applicable)
033001	Portland Cement Concrete – Site (As Applicable)
040501	Mortar and Grout – Site (As Applicable)
042113	Brick Masonry – Site (As Applicable)
079200	Joint Sealants (As Applicable)
101453	Site Signage (As Applicable)

116823.35	Net Posts and Foundations
116833	Athletic/Recreational Equipment
116843	Scoreboards
129300	Site Furnishings (As Applicable)
133416	Portable Bleachers
Division 22	Plumbing (As Applicable)
Division 26	Electrical (As Applicable)
Division 27	Communications (As Applicable)
Division 28	Electronic Safety and Security (As Applicable)
311400	Strip and Stockpile Existing Topsoil (As Applicable)
311405	Strip Existing Clay Infield Material
312000	Building Earthwork (As Applicable)
312213	Formation of Subgrade (As Applicable)
312316	Earthwork (As Applicable)
312317	Unclassified Excavation (As Applicable)
212323	Borrow Soil Fill (As Applicable)
312333	Trenching (As Applicable)
312500	Erosion and Sediment Controls (As Applicable)
321123	Processed Aggregate Base (As Applicable)
321200	Bituminous Concrete Pavement and Markings (As Applicable)
321213	Portland Cement Concrete Pavement and Curb (As Applicable)
321244	Reinforced Turf (As Applicable)
321413	Unit Pavers (As Applicable)
321541	Stone Screenings
321823	Color Seal Coat System and Court Lines – Site
321823.15	Clay Infield Surface
323113	Chain Link Fence and Gates (As Applicable)
323113.33	Backstop
323223	Modular Retaining Wall System
328000	Irrigation System
329113	Topsoil (As Applicable)
329200	Seed and Sod Lawn (As Applicable)
329300	Landscape Planting (As Applicable)
Division 33	Utilities (As Applicable)

Schedule of Drawings:

Eli Whitney, Connecticut Technical High School, Hamden, Connecticut, Project No.: BI-RT-837-CMR prepared by Antinozzi Associates dated June 18, 2012.

2) Description of Work:

- a. The following requirements are in addition to those contained within the contract drawings, specifications, and bidding instructions and shall serve to amend, clarify, or supplement the requirements of those sections:

Layout; Temporary Sidewalks and associated work; Sedimentation and Erosion Control; Cast in Place Concrete; Footings and Foundations for Site Walls; Utility Pads; Removal and Replacement of Unsuitable Material; Excavation and Backfilling; Demolition and Tree Removal; Rock Removal; Foundation Underpinning and Soil Retentions Systems; Trenching and installation both outside and inside the Buildings (including but not limited to Gas, Water, Electrical, Grounding, Telephone/Data/Cable TV, Storm, Sewer, Fire Protection; Ductwork, Heating and Cooling); Concrete Thrust Blocks for All Utilities/Systems; Sheeting and Shoring; Dewatering for all trades; Earthwork; Anti-Tracking Pads; Site Water Distribution & Drainage; Foundation Drainage; Processed Aggregate Base; Soil & Materials Management; Site Storm Sewer Systems, (including Storm Water Discharge Permit); Site Sanitary Sewer System; Gas Utility System; Water Systems (including Water Meter Pit & Vault); all other Site Utilities as noted; Bituminous Concrete Pavement; Portland Cement Concrete Pavement & Curbs; Stone Pavers; Granite Curbs; Temporary Protection and weatherproofing; Concrete Encasements; Concrete Formwork (For Site Concrete Work only); Concrete Reinforcement (For Site Concrete Work only); Structural Concrete (For Site Concrete Work only); Traffic Control Signage; Flagpoles; Joint Sealers and Caulking (as it applies to your scope of work) and as described in the Specifications Divisions and Sections listed below.

3) Phasing:

This Project is divided into multiple construction phases which shall be in accordance with the Phasing Plan (Document 000926).

This Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such. If this Scope of Work identifies a quantity of scope to be provided, that total quantity shall apply to the Project as a whole, and therefore to all phases whereby that quantity shall be divided under the acceptance of the Subcontractor's schedule of values. Shop Drawings will only be reviewed by phase. Material submittals will be reviewed for the entire Project after award. Only material produced and purchased specifically for incorporation into the phase of the Project being constructed will be considered for payment. The Construction Manager will not under

any circumstances consider or approve payment for material produced or purchased specifically for incorporation into a future phase.

4) Site Preparation:

- a. This Subcontractor shall relocate as necessary and remove a minimum of **six (6) construction signs and bases** at surrounding City streets stating “Construction Equipment and Trucks Entering Road”. Additional signs may be required by the **Town of Hamden** and is included in the Subcontract price.
- b. This Subcontractor shall relocate as necessary and eventually remove a minimum of **ten (10) temporary wayfinding signs and bases** as directed by the Construction Manager.
- c. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to work areas. This Subcontractor shall be required to provide tree protection for existing trees to remain. All protection to be removed by this Subcontractor at the completion of the Work.
- d. This Subcontractor shall provide and maintain and eventually remove **all erosion control measures as required** including, but not limited to, inlet protection at manholes, silt fence, hay bales, anti-tracking pads at the construction entrance and exit including all associated filter fabric and large stone, as detailed and approved in the aforementioned Logistics Plan. All truck tires are to be free of dirt, dry and clean before leaving the construction site.
- e. This Subcontractor shall provide dust control (watering trucks) as required by the Construction Manager and/or by any state or local agency.
- f. This Subcontractor shall protect all asphalt, concrete and existing site improvements. In the event asphalt, concrete or other site improvements intended to remain, this Subcontractor shall repair and restore the asphalt, concrete and site improvements to its original condition.
- g. This Subcontractor shall provide all Site Preparation, Sediment Erosion Control Protection, and Clearing and Grubbing to remove all Trees, Tree Roots, Stumps, Shrubs and other existing Plant materials with the exception of those specifically noted in the Contract Documents to remain.
- h. This Subcontractor shall provide, maintain and eventually remove all erosion control measures including, but not limited to, inlet protection at manholes, silt fence, hay bales, **one (1) anti-tracking pad** [as depicted on the Site Phasing/Logistics Plan] all construction entrances and exits including all associated filter fabric and large stone, as detailed and approved in the

aforementioned Logistics Plans. All truck tires are to be free of dirt, dry and clean before leaving the construction site.

5) Site Demolition:

This Subcontractor shall include Existing Site Improvement removals.

6) Soil Erosion and Sediment Control

This Contractor is responsible for the furnishing, maintenance and removal of Erosion and Sedimentation Controls including anti-tracking pads as shown on the Contract Documents. This Contractor will also be responsible to maintain the anti tracking pads as shown on the Contract Documents. Please Note, anti tracking pads are shown for count only and it is possible that these pads could be located in others areas as directed by the Construction Manager.

This Contractor is responsible for cleaning and /or washing down the tires of his or her construction vehicles and equipment including but not limited to visitors and vendors exiting the site at the anti-tracking aprons located at each construction entrance to avoid tracking mud, dust, and etc. from the site and onto public streets.

Sedimentation and erosion control shall be properly installed and maintained. The silt fence specified utilizes an 8' post spacing. The posts are to be hardwood posts with the fabric prefabricated on the posts from the factory. The fabric specified does exceed the specifications of some other manufacturers in regards to strength. The control includes two rows of fabric as a means of a second defense mechanism.

A breach in the erosion control systems shall be deemed a lack of oversight from this Contractor to properly ensure the systems are installed correctly and are being inspected and maintained regularly. In the event of a breach, this Contractor shall immediately repair and replace the breach and repair and restore the neighboring property.

It is essential that the site work be performed in a staged progression to minimize the potential for soil loss through erosion as stated in the Contract Documents. The Contract Documents are not intended to show every erosion control measure necessary to coordinate with the Project Schedule (this is identified in the Erosion Control Narrative Specification). Erosion control logs shall be required by this Contractor that clearly and accurately identifies the status of the erosion control measures in place, this item shall be on the agenda of every construction meeting.

Furthermore, this Contractor will be required to submit on a weekly basis, formally sign and follow requirements of the Water Pollution Control Plan for the project.

7) Survey / Layout:

This Contractor shall provide all other layout required to perform and complete his or her Work. The cost to replace or repair lost or damage control points shall be the charged to the offending Contractor.

8) Temporary Works:

The Subcontractor shall provide:

- a. This Subcontractor shall include protection of site appurtenances, lawns and plantings adjacent to work areas. The Subcontractor shall be required to provide tree protection for existing trees to remain.
- b. This Subcontractor shall include protection of utilities to remain within the work areas as indicated in the Contract Documents.

9) Site Utilities:

Subcontractor shall provide all Site Utilities as shown on the Contract Documents, including but not limited to:

- a. Trenching, bedding and backfill for Storm, Water, Irrigation and Power.
- b. It is the intent of this document that the Subcontractor shall provide all utilities noted as complete in all respects.
- c. This Contractor shall be responsible for cleaning, flushing and disinfecting all water service piping. The Site Contractor shall employ a licensed Plumbing Contractor for any water service piping that is required to have a licensed contractor to install this above mentioned work by code.

10) Site Security:

The Site Contractor shall be responsible for security of the site with temporary gates, chains, locks, etc. Any associated cost shall be included in their base bid (distribution of keys free of charge as directed by the Construction Manager). Provide gates in fence as indicated on the Site Logistics Plan and as directed by the Construction Manager. All temporary doors shall have closers on them.

The Site Contractor shall be responsible on a *daily basis* to secure all access points to the site at the direction of the Construction Manager.

11) Site Concrete:

The Subcontractor shall provide all Concrete Formwork (for Site Concrete Work only), Concrete Reinforcement (for Site Concrete Work only) and Structural Concrete (for Site Concrete Work only) to complete all Site Concrete as indicated on the Contract Documents, including the Clarifications as listed below:

- a. The Subcontractor shall provide excavation and installation of Concrete for the Flatwork, Scoreboards, Site Benches, Backstop Fencing, Fencing and as noted on the Contract Documents.
- b. The Subcontractor shall provide all Site Concrete typical and as noted on the Civil Drawings for the Athletic Fields.

12) Dust Control:

The Subcontractor shall provide all Dust Control for the duration of the Project. This Contractor will provide dust control (watering trucks) as required or as requested by the Construction Manager and/or by any state or local agency.

13) Neighboring Property Owners:

This Contractor shall provide any and all coordination (through the Construction Manager) with neighboring property owners while conducting Work in the vicinity of the property line, including but not limited to rock removal, excavation, site demolition and brush and tree removals.

14) Dumpsters, Clean-up, Wash-Out & Waste Removal:

- a. Subcontractor shall be responsible for washing out concrete trucks, pumping trucks, pipe lines, etc., off-site (take back to plant) or at a designated place on site which can be cleaned and disposed of at his or her expense. Additionally, the cost of cleaning of all concrete, mortar, and grout splatter from all surfaces immediately after placement of these materials, and repairing any resulting damage to the satisfaction of the Construction Manager shall be included in this Contractor's bid proposal. NO WASHING OF TOOLS, EQUIPMENT, ETC. OR ANY MATERIALS INTO STORM OR SANITARY SYSTEMS WILL BE PERMITTED.
- b. This Subcontractor shall provide, maintain, and remove at project completion a washout area for his or hers and the Concrete/Mason Contractor's concrete trucks, pump trucks, pipe lines, etc., delivering to the site. Including periodically relocating the washout area as dictated by the Construction Manager and/or Engineer.

15) Fences & Gates:

- a.** This Subcontractor shall provide all site fencing including but not limited to chain link fencing and gates, ornamental steel fence and gates and guiderails as noted on the Contract Documents.
- b.** Subcontractor shall be responsible for providing all labor, equipment, tools, services and materials to furnish and install all chain link, ornamental steel and guiderail fences and gate systems including layout, excavation, off-haul of spoils, reinforcing, concrete, grout, posts, chain link, brackets, angles, PVC coating, post caps, gates, hinges, hold-open and stop assemblies, panels, and hardware for a complete installation. Include all gate closers and locking hardware and keying as specified.
- c.** Subcontractor to field measure items prior to fabrication to ensure proper fit and compliance with accessibility guidelines.
- d.** Include welding as required to complete your work. Subcontractor is responsible for furnishing power required to complete Subcontractor's scope of work. Generators shall have noise abatement features.
- e.** Subcontractor is to be welded in accordance with the specifications and all current codes and requirements.
- f.** Include all samples and mock-ups as required
- g.** Include core drilling for posts where applicable.
- h.** Hand dig around tree drip lines and near existing utilities.
- i.** Provide shop drawings.

CLARIFICATIONS

- a. Subcontractor shall complete **all work to the project south of the Athletic Fields & Courts Demarcation Line** which is the area labeled “SCOPE OF WORK SHOWN WITHIN THIS LINE SHALL BE BID AS PART OF A SEPARATE BID PACKAGE/CONTRACT” on sheet C-3. In addition, complete the entire landscape irrigation system including the irrigation controllers and all work from 5’ outside of the building. Also include all electrical work and make terminations all the way back at the appropriate panels or as indicated.
1. Sheet PH-101 – Include all work indicated on this sheet as it applies to this scope of work.
 2. Sheet C-1 - Include all work indicated on this sheet project south of the Athletic Fields & Courts Demarcation Line.
 3. Sheet C-2 - Include all work indicated on this sheet located project south of the Athletic Fields & Courts Demarcation Line. Remove all utilities shown to be demolished and include infill and all patching at all removed utilities.
 4. Sheet C-3 - Include all work indicated on this sheet. Include all fencing, gates, site concrete, concrete paving, sidewalks, aprons, curbs, sink hole repair, foul poles, warning track, trash receptacles, backstops, retaining walls, tennis courts, footings, scoreboards, electrical, plumbing, lawn, clay infields, track, landscaping, irrigation, corner monuments and field striping.
 5. Sheet C-4 - Include all work indicated on this sheet. Include all utility connections, permits and fees. For site materials and methods use CTDOT Form 816 and/or the specifications, whichever is more stringent. Include all grading, drainage and utilities.
 6. Sheet C-5 – Include all work indicated on this sheet.
 7. Sheet C-6 - Include all work indicated on this sheet. Include the installation, maintenance, and removal of **one (1) Anti-Tracking pad** to be located as directed by the Construction Manager based on revised phasing. Maintenance of the anti-tracking pads includes the periodic removal of materials and addition of new rock as directed by the Construction Manager. In addition, include sedimentation and erosion control systems along the Athletic Fields & Courts Demarcation Line which is not shown in the drawings and all required erosion control whether shown on the drawings or not.
 8. Sheet C-7 - Include all work indicated on this sheet.
 9. Sheet C-8 - Include all work indicated on this sheet.
 10. Sheet C-9 - Include all work indicated on this sheet.
 11. Sheet C-10 Detail 1, 2, 3, 4, 6 and 7 - Include all work indicated in the details listed.
 12. Sheet C-11 Detail 2, 7, 13 and 14 - Include all work indicated in the details listed.
 13. Sheet C-12 – Include all work indicated on this sheet
 14. Sheet C-13 – Include all work indicated on this sheet.
 15. Sheet C-14 – Include all work indicated on this sheet.
 16. Sheet C-15 – Include all work indicated on this sheet. Include all electrical work needed to bring power and data to the scoreboard systems on both sides of the

- demarcation line including the circuit breaker and enclosure, ground rod and bushing, disconnect, wiring and cabling and final connections. Include training for the scoreboard systems on two separate days as directed by the Construction Manager.
17. Include hydro flushing and cleaning of new storm drainage piping, catch basins, and manholes that are to be reused in the final plan at the end of the construction project.
 18. Sheet C-19 – Include all work indicated on this sheet for the entire site on both sides of the demarcation line. Complete the entire landscape irrigation system including the irrigation controllers and all work from 5' outside of the building. Provide fall winterizations and spring start-ups for the duration of the project. Provide training for the owner as directed by the Construction Manager on two separate occasions on how to operate and maintain the irrigation system and demonstrate to the owner that the system has been adjusted to minimize over-spray and make all adjustments to minimize over-spray as required.
 19. Sheet ES-101 – Include all electrical work south of the Athletic Fields & Courts Demarcation Line. In addition, bring all circuits to panels north of the Demarcation Line and land as appropriate.
 20. Saw cut and remove asphalt, sidewalk, curb, and site concrete as required for new sidewalk, curb, site concrete and drive and/or ramp entrance requirements. Saw cuts to be laid out prior to cutting and lay-out MUST be approved by Construction Manager's Superintendent (correct layout is the responsibility of Subcontractor; Construction Manager's Superintendent to verify neatness and constructability only). All cuts to be neat and all overcuts to be kept to an absolute minimum.
 21. Hand dig around tree drip lines and near existing utilities.
 22. Include all touch up painting required for fences, gates and other items in this scope.
 23. Furnish and install all tennis net post and foundation systems and tennis wind screen systems.
 24. Furnish and install all athletic/recreational equipment including home plates, pitcher's plates, 1st, 2nd, and 3rd bases, permanent foul poles, soccer/football goal sets, team benches, corner and midpoint field monuments, and fence top protection.
 25. Include training on how to operate and maintain the scoreboard system on two separate occasions as directed by the Construction Manager.
 26. Provide all concrete joints and include shop drawings indicating the layout of joints.
 27. Include calculations and shop drawings completed by a qualified professional engineer for all required items under this scope including for the scoreboard support structures and the modular retaining wall system described in specification section 323223.
 28. Include all topsoil, seeded grass and sodded grass establishment and maintenance. The establishment and maintenance period shall be at least 9 months for each area or longer if indicated in the schedule, phasing plans, or specifications.
 29. Demolish and remove all existing site items not indicated to remain as directed by the Construction Manager.
 30. Create as-built drawings for all underground utilities prior to covering them.

31. If the field conditions are inconsistent with the drawings, notify the General Contractor's Superintendent immediately. Provide detailed & complete information that can be sent to the Engineer for direction.
32. Subcontractor is required to employ, at their expense, professional underground utility locating services for their onsite excavations and trenching. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs passed on to Subcontractor.
33. Subcontractor to safe-off utilities as required.
34. Subcontractor will be responsible for any line and it's functionality that Subcontractor connects to (including but not limited to, drainlines). Subcontractor to clean lines and ensure that lines are clear and are functioning/flowing as intended.
35. Provide patching for all finished surfaces.
36. Adjust the elevations of all new and existing utility boxes to finish grade. Include new covers, boxes, and risers as needed.
37. Complete all onsite and offsite utility connections.
38. Include the sanitation and flushing of all systems as indicated.
39. Furnish and install all lateral lines, inlets, catch basins, area drains clean-outs & manholes. Include required grates and fasteners. All grates shall meet ADA accessibility requirements.
40. Include all required adjustments of new and existing structures to finish grade.
41. Demolish and remove all existing site items not indicated to remain as directed by the Construction Manager.
42. Include all underground location services as required and coordinate with all agencies to avoid underground utility damage. Any utility damaged due to Subcontractor's negligence will be fixed appropriately and costs back-charged to the Subcontractor.
43. Include all permits and fees for the construction storm water and erosion control management.
44. Create as-built drawings for all underground utilities prior to covering them.
45. Include all work at sink hole areas including dynamic compaction work as recommended in specification section 003155. This work shall be completed when school is not in session.
46. ALL DUMPSTERS are to be provided by the General Trades Contractor except for:
 - i. BP#1.01 Site Preparation*;
 - ii. BP#2.01 Demolition & Abatement*
 - iii. BP#7.01 Roofing* – **ADD. NO. 2**
 - iv. BP#31.04 Athletic Fields*

*These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.

EXCLUSIONS:

- 1) Sale and Use Taxes.

ALTERNATE BIDS

Provide Alternate Bids as requested on Bid Form.

UNIT PRICES

Provide Unit Prices as requested on Bid Form.

ALLOWANCES

This Contractor shall include within the Subcontract Price, the allowances as listed below per Specifications Section 012100. Allowances as listed below shall include all necessary material, cost for delivery, installation, machinery, insurance, applicable taxes.

Allowances shall appear as a line item on the Contractor's Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

SUPPLEMENTAL SCOPE OF WORK

- 1) **General:** Requirements set forth herein are in addition to and shall be considered as complementary to the Conditions of the Contract and the Division 1 Specifications and supplemental to each Bid Package Scope of Work. All Contractors, Subcontractors, Sub-Tier Contractors, Vendors and the like shall be required to familiarize themselves with and shall be responsible for said provisions.

- 2) **Subcontract IT Costs** – Include a fixed amount of \$40.00 per month from August 1st 2012 through June 30th 2016 for IT costs and project management software which will be paid by Fusco Corporation and then reimbursed by Subcontractor at this fixed rate through deductive change order. A specific line item titled “Subcontract IT Costs” shall be included in Subcontractor’s schedule of values and is to be billed at the rate of \$40.00 per month as directed by the Construction Manager. This cost will be deducted from the Subcontractor’s applications for payment. This cost is for Fusco’s cost to set-up, maintain, and license software, storage, and other services related to the Subcontractor and not for the Subcontractor’s own costs for additional IT Costs. Subcontractor is responsible for including all of its additional IT costs separately from this item. Provide required information and documents through the project management software such as applications for payment, change order proposals, requests for information, submittals, daily reports etcetera as directed by the Construction Manager.

- 3) **Phasing:** This Project is divided into construction phases and each Bid Package Scope of Work shall apply equally, similarly and likewise to all phases of the Project whether or not indicated as such.

- 4) **Schedule:** It is understood that TIME IS OF THE ESSENCE and as such the Schedule, included with the Bid Documents along with the Construction Phasing must be maintained. The objective of this project is to complete the construction as defined in these Contract Documents, within the project schedule. To meet this objective, the Contractor shall plan the work, obtain materials, and execute the construction in the most expeditious manner possible in accordance with the requirements listed below.
 - a. The Subcontractor understands that the Work of this trade may not be continuous and that the Subcontractor may be required to work out of sequence and/or leave a

portion of the Work out due to coordination at the direction of the **Construction Manager**. There shall be no charges for “comeback time” or out of sequence Work.

- b. The Subcontractor has included any and all costs and all overtime necessary to meet the Project Schedule dates and allow enough time for follow up work by others to be completed with the scheduled dates for the follow up trades. By executing the Contract, the Subcontractor acknowledges and agrees that the scheduled durations of Subcontractor’s work as set forth on the Project Schedule are reasonable periods of time for achieving completion of Subcontractor’s work and will include sufficient manpower, resources, and overtime to complete as scheduled. The durations outlined in the Project schedule are minimum expectations. Weekend work can only be completed as directed by the Construction Manager in writing and Subcontractor is responsible for supervision costs outside of normal work hours.
- c. Immediately upon receipt of a contract, the Contractor shall organize the work, provide all required submittals, order all materials subject to approval, and expedite long lead items. If requested by the **Construction Manager**, the Contractor shall provide proof of orders and delivery dates. Each Contractor shall provide their own schedule to the **Construction Manager** incorporating all requirements set forth in the **Construction Manager**’s Project Schedule. The Contractor’s schedule shall be a detailed accounting of the dates and durations of all construction activities including approvals, permits, submittal reviews, material deliveries, and inspections for work required under their contract. See Contract Documents for further Schedule requirements. If the Contractor fails to staff the job adequately to meet the completion date, the Owner reserves the right to assume possession of the material and complete installation with the Owner's forces or other Contractors or to require the Contractor to work second shift and/or weekends.
- d. If, in the opinion of the **Construction Manager**, any construction activity, completion dates, milestone and/or substantial completion dates are in jeopardy of being met as a result of this Trade Contractor’s performance, then upon two days written notice from the **Construction Manager**, this Trade Contractor agrees to work overtime, add manpower, and do whatever is necessary to meet said construction activity, milestone and/or substantial completion dates. If, in the opinion of the **Construction Manager**, this Trade Contractor, after having received two

days notice, has failed to take sufficient action to meet the referenced dates, the **Construction Manager** may take whatever action it deems necessary to attempt to meet the construction activity, milestone and/or substantial completion dates. Also, if any activity of the Subcontractor falls more than 2 days behind the Master Schedule, upon direction of the Construction Manager, Subcontractor shall prepare and submit a recovery plan within 2 days, setting forth in detail how Subcontractor intends to make up the lost time in order to comply with the schedule. The cost of such action shall be the responsibility of this Trade Contractor and be deducted from this contract. If insufficient monies exist within this contract to fund such an action, then this Trade Contractor agrees to fund the balance of such action from other sources. The **Construction Manager**, by taking action under this paragraph, shall not assume the responsibility for meeting the referenced dates, nor responsibility for the work and such responsibilities shall remain with this Trade Contractor and the Trade Contractor's Bonding Company. The costs referenced in this paragraph are not in substitution of or in lieu of liquidated damages which may be assessed pursuant to other provisions of this contract.

- e. Each Contractor has confirmed prior to bid and carrying in their bid the proper trade classification for all work required by this bid package including composite crews of different trade classifications if needed, as required by the project and the State of Connecticut Department of Labor. No added monies will be entertained after subcontract award.
- f. Each Contractor shall have figured in their bid price multiple crews to perform the work of their bid package but not limited to; work both interior and exterior simultaneously in addition to separate crews for other work necessary to meet and maintain project schedule and milestone dates. This includes working in every available area simultaneously and must be properly supervised, regardless of your individual plan and as directed by the **Construction Manager**.
- g. The Mechanical, Fire Sprinkler and Electrical Subcontractor Superintendent and Foreman are to attend weekly meetings (individually and at a time determined by the CM) with the **Construction Manager** to review day to day schedule progress.
- h. Schedule Certification - Each subcontractor and major supplier shall submit in writing a statement certifying that the subcontractor or major supplier has concurred with the Construction Manager's Preliminary Schedule, and the logic, duration of activities, and crew allocations are reasonable.

- 5) **Liquidated Damages:** Subcontractor acknowledges that the Owner and the **Construction Manager** will incur substantial damages if Substantial Completion of the Project is not achieved by the Substantial Completion Date and that such damages are and will be difficult to calculate with reasonable certainty. Accordingly, if the Subcontractor causes delays to the Substantial Completion by said Substantial Completion Date, the Subcontractor shall pay the **Construction Manager**, as liquidated damages and not as a penalty, the amount of **Six Thousand Five Hundred (\$6,500.00) Dollars per day for each calendar day beyond the established Substantial Completion Date** that the Subcontractor fails to achieve Substantial Completion and **Three Thousand Seven Hundred (\$3,700.00) Dollars per day for each calendar day beyond the Ninety (90) calendar days of the established Substantial Completion Date** that the Subcontractor fails to achieve Acceptance by the Owner. Such amounts are deductible from any amounts due to Subcontractor pursuant to the terms of this Subcontract. At the election of the **Construction Manager**, the Subcontractor shall pay liquidated damages amounts payable to the **Construction Manager** hereunder within fifteen (15) days after written notice from the **Construction Manager**. If Subcontractor is only partially at fault for any delay, then Subcontractor shall be responsible for its proportional share. The Subcontractor shall also pay any and all other additional expenses incurred by the Owner or **Construction Manager** due to delays caused by the Subcontractor.
- 6) **Requirements For Working In An Occupied School** – Work will be completed at an occupied school and special considerations and associated costs shall be accounted for including but not limited to as indicated below.
- a. Maintain access at all times to the school fuel tanks, school loading docks, school dumpsters and any school operations.
 - b. Provide all overtime, off-hours premium time and sufficient crew sizes to accomplish demolition work and all other disruptive work required as part of this scope so as not to disturb ongoing school operations and standardized testing.
 - c. Provide all required life safety systems (temporary and new) for the duration of the Project related to this scope of work so they are complete and functioning throughout the building; including areas to be occupied, vacant areas, and (when feasible) areas still under construction.

- d. Provide all required occupancy requirements (temporary and new) for the duration of the Project related to this scope of work so new buildings may be issued a Certificate of Occupancy (CO) or Temporary Certificate of Occupancy (TCO) before they may be occupied as required by the Project Schedule and as required by the Phasing Plans. Provide all temporary egress protective pathways required to obtain TCO and as per the Contract Documents.
- 7) **Warranties** – Warranties for all work, equipment and materials shall be for 18 months from the date of substantial completion as approved by the owner for each phase or longer where longer durations are specified with the exception of central plant fire protection, central plant plumbing, central plant HVAC and central plant electrical items which will be warranted for 18 months from the date of substantial completion for the entire project. Central plant items include all components that are required for the proper permanent function of multiple project phases. All warranties shall start on the date of substantial completion as approved by the Owner for each phase.
- 8) **Stored Materials:** Payments for stored materials must be approved in writing and may be accepted or rejected at the sole discretion of the Construction Manager. Payments for Stored Material will only be considered for Non-perishable materials which meet specifications requirements, specifically produced or purchased for incorporation into the current Phase of the Project, and delivered at the site or at such location as the **Construction Manager** may approve, but not incorporated in the work, may be included in an application for payment, as the **Construction Manager** may consider to represent a fair value for the material when such materials have been paid for by the Subcontractor as shown by receipted bills, or in lieu of such receipted bill or bills, a duly executed Certification of Title executed by the Subcontractor and the Vendor in the form approved by the **Construction Manager**. When partial payment is made for stored materials, such materials shall become the property of the Owner; but such payment shall in no way release the Subcontractor from its responsibility for the condition, protection and, in case of loss, replacement of such materials, or from any liability resulting in any manner from the presence of such materials wherever they may be stored or kept. All materials shall be stored in a way that ensures that their quality and fitness for the Project will be preserved, and that the **Construction Manager** will have easy and prompt access to them for inspection purposes. Materials shall be kept on wooden platforms or

on other hard, clean surfaces and not on the ground. When so directed by the **Construction Manager**, the Subcontractor shall store materials in a weatherproof building. The Subcontractor shall not store materials in any way that would lead to a violation of any applicable environmental law. Stored materials, even if they have been approved by the **Construction Manager** prior to their storage, must be inspected by the **Construction Manager** and meet all pertinent Contract Document requirements immediately prior to use of those materials for the Project.

1. Except for Bid Package No. 11.01 Food Service Equipment:

- a. **ONLY MATERIAL PRODUCED OR PURCHASED SPECIFICALLY FOR INCORPORATION INTO THE PHASE OF THE PROJECT BEING CONSTRUCTED WILL BE CONSIDERED FOR PAYMENT AS STORED MATERIAL. THE CONSTRUCTION MANAGER WILL NOT UNDER ANY CIRCUMSTANCES CONSIDER OR APPROVE PAYMENT FOR STORED MATERIALS PRODUCED OR PURCHASED SPECIFICALLY FOR INCORPORATION INTO A FUTURE PHASE. – ADD. NO. 2**
2. Contractors shall include in their bid financing costs, if any, if the Contractor wishes to pre-purchase materials on their own for future phases. – **ADD. NO. 2**
3. Material test approval shall be required prior to payment for the materials;
4. Offsite storage may be approved by the **Construction Manager** provided the materials proposed are segregated from other materials, clearly labeled as being owned by the Owner for use on the identified Project, insured/bonded to the satisfaction of the Construction Manager and are in accordance with the manufacturer's recommendations. Photos of the materials must be sent to the Construction Manager as well as Bills of Sale or similar documents transferring ownership as directed by the Construction Manager.
5. All materials must be readily available for inventory and inspection by the **Construction Manager**.
6. Storage outside of the State of Connecticut will NOT be considered.
7. Generic materials having a use on many projects will NOT be considered for payment.
8. Stock and Raw materials will NOT be considered for payment.

9. In no case shall material payments exceed the approved scheduled value.
10. The Construction Manager reserves the right to reject any payment for stored materials for any reason whatsoever in its sole discretion.

9) Builders Risk Coverage: The Construction Manager shall provide coverage for the entire Work in an amount equal to the total contract amount and any additional modifications. Insurance shall be maintained until certification by the Owner that all work has been completed and accepted by the Owner in accordance with the Contract Documents. Deductible in the amount of \$25,000 shall be paid by the Subcontractor or pro-rated amongst Subcontractors making claim against Builders Risk Policy.

10) Bond: It is understood that the Contract Price includes the cost to provide a 100% Payment and Performance Bond. Payment & Performance Bonds are to be on AIA Form A312. No other form is acceptable.

- a. Please note that the State of Connecticut does not accept the cost for additional bond premiums rolled into each change order. Since the State is partially reimbursing the Owner for this project, this requirement must be met. Therefore, do not include increased bond cost in your quotation for changes. Rather, at the end of the project a change order will be generated to cover any additional bond cost based on billings from your bonding company.

11) Non-Resident Contractor: Any Subcontractor that does not maintain permanent business offices in Connecticut shall provide the Construction Manager confirmation of registration with Connecticut Department of Revenue Services (“DRS”) and is qualified as a “verified nonresident contractor” under the DRS rules (C.G.S. §12-430(7), as amended). If the Construction Manager enters into a contract with an “unverified” non-resident contractor, the Construction Manager shall withhold **five percent (5%) of the contract price** until it receives a certificate of compliance from DRS authorizing release of all or part of the withheld amount.

12) Department of Administrative Services (DAS): This Subcontractor and all of its subcontractors with contract amounts of more than \$500,000 must be DAS Certified.

The DAS Contractor Prequalification Program (C.G.S §4a-100, as amended) requires all contractors to pre-qualify before they can bid on a contract or perform work pursuant to a contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or any other public work by the state or a municipality, estimated to cost more than \$500,000 and which is funded in whole or in part with state funds, except a public highway or bridge project or any other construction project administered by the Department of Transportation.

This Subcontractor agrees that for the duration of the above project, shall make certain that its CT DAS Supplier Diversity Certificate shall not lapse for any time period of this contract. This Subcontractor further pledges that it will re-apply to the CT DAS Supplier Diversity Program not less than ninety (90) days prior to the expiration date as listed on the attached CT DAS Supplier Diversity Program certificate.

13) Minority and Small Contractor's Set-Aside Program: This Subcontractor agrees that it will comply with the (C.G.S. 32-9e, as amended) and utilize state certified S/M/W/DisBE contractors to fulfill its commitment of 30% SBE participation, which includes 6.25%MBE participation.

This Subcontractor shall maintain its Department of Administrative Services ("DAS") as a Small / Minority / Woman / Disabled Owned Business ("S/M/W/DisBE") for the term of the Subcontract, comply with all rules, regulations and workforce requirements of the Connecticut Human Rights and Opportunities Commission ("CHRO") and undertake good faith efforts, as deemed appropriate by the State of Connecticut and Fusco, to employ or sub-subcontract with other S/M/W/DisBE's to perform portions of the work under this Subcontract. Subcontractor shall adequately document its good faith efforts in this regard, and it shall produce such documentation to Fusco upon demand. Any failure by the Subcontractor to carry out these requirements is a material breach of the Subcontract, which shall entitle Fusco to withhold any and all progress or final payments to Subcontractor until such time that Subcontractor corrects its non-compliance. Fusco shall be entitled to withhold such payments regardless of whether Fusco has received payment from the State for Subcontractor's work. The Subcontractor's failure to comply with the requirements of this paragraph may also result in the default termination of the Subcontract or such other remedy as Fusco deems appropriate.

Fusco Corporation requires that more than customary “good faith efforts” must be utilized to achieve an equitable participation of S/M/W/DisBE contractors in all work awarded on the project and that it will include a fair and equitable representation of S/M/W/DisBEs in bid all solicitations. All project contractors will utilize the DAS Supplier Diversity website to identify and meet their obligations to utilize DAS certified S/M/W/DisBE subcontractors on this project.

Subcontractor further maintains that documentation of such Good Faith Efforts to achieve the above will be maintained. This Subcontractor will be required to sign a form acknowledging that they understand and agree with all monitoring and reporting procedures as may be required by the State of Connecticut Commission on Human Rights & Opportunities and/or the Department of Public Works.

14) Workforce Requirements – Subcontractors shall provide more than customary “good faith efforts” to achieve the following workforce participation:

Minority	17.9%
Female	3.1%

15) State of Connecticut Education Fund Fee (PERMITS) – The Electrical Contractor, Mechanical Contractor and Fire Sprinkler Contractor shall be responsible to pay for the State of Connecticut Education Fund Fee when applying for applicable permits.

16) Existing Conditions: Existing grades and other existing conditions are shown on the drawings to the best knowledge of the Architect.

- i. It shall be the responsibility of each Contractor to visit the site and verify all existing conditions. The Site Preparation, Sitework, and Athletic Fields Subcontractor, must review the site prior to submitting his or her proposal. The site contractor by submitting a proposal is also submitting and agreeing to the fact that he or she has walked the site and adjacent areas and has carried all costs in his or her

proposal to deal with any and all existing conditions that includes, but not limited to: any existing encumbrances, any existing conditions, adjacent property owners, existing streets and walks.

- j. The Project Site conditions are as of the day the Contractor begins work. All work to be performed will be based on the conditions found at that time. It is the obligation of the Contractor to inform the **Construction Manager** of any substantial changes in the site conditions that have occurred between the time the bid is opened and the notice to begin work. No claims or extras will be allowed for any changes in site conditions due to the Contractor's discovery after the commencement of work, unless there is an approved change order.
- k. The **Construction Manager** assumes that the Contractor, during the process of developing his bid, has thoroughly examined the site or project area and has disclosed any obvious defects in the plans and specifications prior to bid and has entered into this agreement to complete all work required in the contract at the bid price(s) submitted and accepted. Conflicts found in the plans and specifications by the Contractor at a later date after the bidding period shall not be the basis of additional cost claims by the Contractor.
- l. Boring and survey data made available to the Trade Contractor is for information only, and the Contractor shall use his own judgment as to the actual conditions. He is warned that reliance on the information presented is at his own risk, and neither the Owner nor the Architect and his consultants will be liable for errors relating to such data.
- m. The Contractor may make borings or drive test pits he requires to verify the conditions at the site at his own expense. The location and size of such exploratory holes will be subject to approval by the Architect.

17) Rigging/Hoisting/Distribution: This Subcontractor shall include all hoisting, rigging, distribution, erection and scaffolding as may be required for the installation of his work. Subcontractor shall be responsible for unloading, rigging and hoisting all of its equipment and material required to complete the Work of this Subcontract Agreement. This includes furnishing and erecting all planking, scaffolding, and temporary hoist beams as necessary. All hoisting equipment, machinery, and operation shall comply in all respects to all applicable Federal (including OSHA), State, and local laws, rules, regulations codes and ordinances. Contractors shall be responsible for hauling, hoisting and

rigging their own materials and equipment. This Contractor shall not hoist or lift any material over any occupied areas such as buildings, roads, parking lots or any public space at any time. Subcontractor shall completely remove all temporary erection devices, miscellaneous supports, connection devices, which interfere with subsequent work, are trip hazards, or are aesthetically unacceptable. Contractor may not use the existing or newly installed elevators for loading materials onto upper floors at any time. All Contractors shall include in their Bid Proposal any and all cost required to load materials to all floors and to any roof elevations.

18) Familiarity with Project Logistics: This Subcontractor is solely responsible to have inspected the site and to have familiarized himself with the Site Logistics that will be in place during the period of time that he will be installing his work.

19) Drinking Water: This Subcontractor shall provide drinking water for his personnel at the project site, including the furnishing of paper cups and waste receptacles.

20) Temporary Sanitary Facilities: At the outset of the project, the Sitework Subcontractor shall provide portable toilets for all personnel working at the site, including a separate, lockable portable toilet for female workers.

21) Job Site Fire Extinguishers: The **Construction Manager** shall provide, maintain and eventually remove portable twenty pound ABC fire extinguishers with the appropriate temporary signage throughout the buildings. These extinguishers will be utilized for temporary fire protection during construction. Locations will be determined by the Construction Manager.

22) Mobilization/De-mobilization: Subcontractor shall provide complete mobilizations to site and complete demobilizations offsite, as required per the schedule of the Project. Each Contractor is responsible for all work necessary for the movement of personnel, equipment, storage facilities, materials, and field offices to, from, and around the project site as required by any construction operations. No additional payment shall be made for this work.

23) Weather: Subcontractor understands and has made provisions for continuing installa-

tion during typical Connecticut weather conditions and has included these costs in this Subcontract.

24) General Cleaning of Work: Subcontractor is responsible for general cleaning of all materials and systems. This will include, but not be limited to, the removal of tabs, stickers, markers, grease marks, piece markings, labels, smears, handprints, etc.

25) Just-In-Time Deliveries: This Subcontractor shall anticipate limited storage space for stockpiling materials, equipment and storage.

- a. This Subcontractor shall sequence deliveries to the jobsite in parallel with sequence of Project Construction Schedule and progress of activities.
- b. All deliveries are to be made just prior to installation.
- c. Location of materials is to be agreed upon by **Construction Manager** prior to material arrival.
- d. **Construction Manager** will not be responsible for the theft of any items from this site.
- e. On-site storage will NOT be permitted without prior approval by the **Construction Manager**. Note at any time this Contractor shall relocate materials or equipment upon request if deemed necessary by the **Construction Manager's** Superintendent.
- f. Each Contractor must have representatives on site to accept deliveries and unload materials and equipment from delivery trucks. **Construction Manager** will not accept any deliveries of materials. If Contractor is not on site, materials must be delivered to their own home office facilities.

26) Access to Site: At all times, the Work of this Subcontractor will be coordinated to ensure unobstructed access to the Site or to locations of Work being performed by other Subcontractors on the Site.

- a. Subcontractor will gain access and egress to the project site by using the already established site and building entrance procedure.
- b. Workers to be identified by project badges and tools to be subject to inspection.

- c. This Subcontractor shall coordinate all Work with **Construction Manager** in order to maintain site access for all trades. This includes the entrance referenced above, as well as the access roads and laydown areas identified by **Construction Manager**. Due to the limitation of available space within the project site, office and material trailers will need to be coordinated with **Construction Manager**. Each Contractor shall move or relocate storage boxes, gang boxes, trailers at the direction of the **Construction Manager** at any given time and as required. There shall be no storage of materials in the building.
- d. Subcontractor may only have a trailer or storage container on site if approved by the Construction Manager in writing. Location, sizes, quantities, etc., must be submitted to and approved by the **Construction Manager**.
- e. The location of any trailers, equipment or stored material must be submitted to, and approved by the **Construction Manager** Superintendent prior to delivery. All trailers must be in a condition that is acceptable to **Construction Manager** and Owner. **Construction Manager** reserves the right not to allow trailers onto the Project site if the delivered material is improperly scheduled with no cost impact to this Subcontract.
- f. All material and equipment deliveries shall be coordinated through **Construction Manager**'s Superintendent a minimum of 48 hours prior to arrival.
- g. This Subcontractor shall provide all necessary labor, equipment, dunnage, or material necessary for unloading and staging of deliveries.
- h. Storage of material and equipment at the job site will be permitted only to the extent approved in advance by the **Construction Manager**'s Superintendent.
- i. Each Contractor shall make any and all provisions to store all units offsite until they are ready to be installed or set in their final resting place.
- j. If anything so stored obstructs the progress of any portion of Work, it shall be promptly removed or relocated by this Subcontractor without reimbursement.
- k. Facilities for storage at the site will be limited and it shall be this Subcontractor's responsibility to make whatever arrangements may be necessary to insure proper material availability to maintain job progress.
- l. Furthermore, any material temporarily stored inside the Building's footprint, shall be placed on moveable dollies/carts with lockable wheels.
- m. Storage of materials is limited to the discretion of the **Construction Manager**'s Superintendent.

- n. This Contractor shall not hoist or lift any material over any occupied areas such as buildings, roads, parking lots or any public space at any time.
- o. By submitting a bid proposal, this Contractor agrees that he or she will never have a wide open area to work, since other trade work will be in progress concurrently with this work.

27) Winter Conditions: Each Contractor shall provide removal of snow and ice from his or her staging and work areas for his or her work. This operation shall be performed for the duration of the Project.

- a. The **Roofing Contractor** shall be responsible for all snow, ice, water removal from the roof and roof deck before, during and after the installation of the roof in order to meet the construction schedule. This includes any snow, ice removal that is related to the roof.
- b. The **General Trades Contractor** is responsible to remove snow, ice, water and other weather conditions from the interior of buildings in order to complete the steel work and any other work until building is weather tight.
- c. The **Site Contractor** shall provide removal of snow, ice and mud from Construction Roads, Permanent Driveways and Roads in construction areas, City Sidewalks, **Construction Manager's** Office Trailer stairs and access and Construction Parking and Material Storage Areas as may be required for accessibility, safety, protection and execution of all trade work. These operations shall be performed for the duration of the Project. In addition to removing the snow, this Contractor shall spread ice melt as needed or at **the Construction Manager's** discretion. This Contractor will be responsible to sweep up all sand used in the above process.

28) Traffic/ Safety: This Subcontractor is responsible to include for all required permits, traffic plans, flaggers, signs and barricades associated with its Work.

- a. The Contractor shall maintain access to all driveways.
- b. No Steel Road Plates shall be used during winter do to interference with snow plowing.
- c. The Contractor shall provide and install all new pavement markings damaged or re-

- moved during construction.
- d. Alternating one way traffic operations will be allowed only with specific prior written approval from the Department of Traffic and Parking.
 - e. Prior to the commencement of any activity which could interfere in or impede the normal movement of traffic, the Contractor shall notify the **Town of Hamden** and request an off duty police officer to act as a traffic-man. The Contractor shall include all costs for the Police Traffic Man in the Lump Sum Bid Price. Should the Department of Police Services fail to provide an officer, the Contractor shall provide flagmen to direct traffic in the areas of construction. The Contractor shall include all costs for the Flagmen in the Lump Sum Bid Price.
 - f. No Street shall be completely closed to traffic at any time, unless specifically approved by the Department of Traffic and Parking and/or by the Owner.
 - g. The Contract and/or Cost to provide for traffic maintenance and protection shall include all costs for labor, equipment, and services involved in the erection, maintenance, moving, adjusting, relocating, and storing of all traffic control devices such as signs, barricades, cones, drums, and markings shall be carried by any Contractor or Sub-contractor (all tiers) in his or her lump Sum Bid Proposal. Trenches must be back-filled or covered with Steel Road Plates (except as noted above) at the end of each day at no additional cost to the **Construction Manager**.
 - h. All public streets, sidewalks and school driveways/parking areas shall be kept open and maintained free of debris and construction dirt throughout the entire project. This includes any necessary temporary protection.

29) Theft Vandalism Prevention: Each Contractor is responsible for protecting all materials, tools or equipment from theft vandalism and/or damage at the end of each workday. Replacement costs for theft, vandalism and/or damage of materials, tools or equipment shall be the responsibility of each Contractor.

30) Temporary Works: Any and all temporary Work, required to support this Subcontractor's means and methods, will be provided by this Subcontractor.

- a. Subcontractor shall provide traffic control, flagmen, dust control, noise control and temporary enclosures for its Work. Sequencing and barricading of Work shall provide for the complete safety of the public and all construction

- personnel and shall create a minimum of interference with the normal flow of pedestrians and autos.
- b. All work shall be in strict compliance with the Occupational Safety and Health Act (OSHA).
- c. The **General Trades Contractor** shall provide, install, maintain and expand if required OSHA protection (and eventually remove), including protection furnished and installed by others, including but not limited to the following:
- i. **Floor /Roof Openings**: – The **General Trades Contractor** shall provide protection as required and removed upon closing of openings.
 - ii. **Exterior Perimeter Protection**: **General Trades Contractor** shall maintain perimeter protection provided by the Structural **Steel Contractor** and add rails and toe boards – as required prior to installation of exterior wall systems. After elevated slabs have been poured, it shall be the responsibility of the **General Trades Contractor** to install and maintain a toe board around all openings and perimeter of the building. These toe-boards shall be removed by the **General Trades Contractor/Mason Contractor** as necessary to install their work.
 - iii. **Window Openings**: The **General Trades Contractor** shall provide and maintain rails at window opening prior to installation of the permanent window systems.
 - iv. **Temporary Stair Rails**: The **General Trades Contractor** shall provide temporary stair rails until permanent rails are in place.
 - vi. **Elevator Shaft Barrier**: The **General Trades Contractor** shall provide temporary protection for all Elevator shafts. The Elevator protection shall be removable and replaceable so as to allow access by the **Elevator Sub-contractor** during construction on the Elevators.
- d. The **Concrete Subcontractor** is responsible for providing, installing, removing and disposing of temporary wood slip resistant stair treads in all stairs/landings and cleaning (include vacuuming to a spotless condition) of pans prior to placement of concrete. The temporary treads shall be installed

immediately after steel stair erection and will remain in place until concrete fill is ready to be placed.

- e. For all elevated floor slabs, elevator shafts, and stairways, and roof deck, the **Structural Steel Contractor** shall furnish and install guardrails at the perimeter that meet or exceed OSHA requirements. These said guardrails shall be maintained by the **Structural Steel Contractor** until he or she has completed his or her work on the project or until the **General Trades Contractor** and the **Mason Trade Contractor** starts their work on the project site, whichever date is later.
- f. When the Structural Steel Contractor is ready to turn over the guardrails to the **General Trades Contractor** and the **Mason Contractor**, the guardrails shall be inspected by the **Structural Steel Contractor**, **General Trades Contractor**, **Mason Contractor** to confirm that they meet OSHA requirements. Once the **Structural Steel Trade Contractor** has turned over the guardrails to **General Trades Contractor**, and the **Mason Contractor**, it shall be the responsibility of **General Trades Contractor**, and the **Mason Contractor** to maintain the guardrails and remove them at the appropriate time when they are no longer required. The back-up material to the exterior wall, albeit metal stud and sheathing or concrete masonry units, is the determining factor as to who removes the respective guardrail system.
- g. The **General Trades Contractor** shall be responsible to cover/protect, and maintain (eventually remove + dispose) any holes through slabs, walls (that are fall hazards); roofs that are not protected by guardrails with an OSHA approved covering. Additionally, the **General Trades Contractor** shall provide all temporary guardrails and handrails on all stairs, including landings, platforms and bridges.
- h. The **Window, Glazing and Storefront Contractor** shall protect his work for the duration of the project. The Window, Glazing and Storefront Contractor shall provide, maintain and eventually remove plywood to protect their work a minimum of four feet above finish floor.

31) Testing: Coordination with the Owner's on-site Third Party Independent Testing Agency, the following provisions are also this Subcontractor's responsibilities:

- a. It is this Subcontractor's responsibility to initiate and coordinate all required tests and inspections, including conformance with requirements of all applicable public agencies and authorities. Inspection of the Work shall not relieve this Subcontractor from an obligation to fulfill the Work of this Subcontract.
- b. Subcontractor will cooperate with Testing Agency personnel, and provide access, and support labor necessary for duties to be performed at the site by Testing Agency.
- c. Furnish tools, ladders, hoist, lighting, water supply and like materials and equipment as required.
- d. Subcontractor shall repair or replace any components and correct all deficiencies observed as a result of these tests and demonstrations, and retest as required by **Construction Manager** and/or the Owner.
- e. This Contractor is to coordinate all requirements for testing and inspection in accordance with the specifications. The Testing and Inspection Company shall be contracted by the Owner, but it is this Contractors responsibility to coordinate, schedule, provide access (including but not limited to aerial lifts and operator) to accommodate all testing and inspections as required for their work.
- f. This Contractor shall provide a minimum 48 hrs notice to the **Construction Manager** prior to the required inspection.
- g. Subcontractor is responsible for all costs associated with re-testing and re-inspection after failures, and for premium costs for testing outside of normal work hours when completed outside of normal work hours for the convenience of the Subcontractor. Subcontractor will be back-charged for these costs through a deductive change order.

32) Preliminary Conference: Subcontractor will conduct a preliminary conference and pre-installation conference at the Project Site to review methods and procedures related to the Work as required by the Contract Documents.

- a. It shall be the responsibility of the Contractor to make timely requests of the **Construction Manager** for any additional information not already in its pos-

session, which should be furnished by the Owner under the terms of this Contract, and which the Contractor will require in the planning and execution of the work. Such request may be submitted from time to time as the need is approached, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first shall be submitted within two weeks after Contract awarded and shall be complete as possible at the time. The Contractor, shall, if requested, furnish promptly any assistance and information the Architect and/or Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in the work or to others arising from its failure to comply fully with the provisions of this section.

Within seven working days of award, submit a detailed list of proposed Contractors, vendors and suppliers to the **Construction Manager**. The Bid Proposal Form requires this bidder to list and name their Subcontractors, address and trade.

33) Contract Documents and Drawings Provided: The Contractor shall purchase all Contract Documents, including Technical Specifications and Drawings and Addenda. The Contractor shall, at all times, keep at the site of work one (1) complete set of the Contract Drawings and Specifications for its own use and that of the Engineer, Owner, or the **Construction Manager**. Each Contractor shall be issued only one copy of any documents issued after contract start date including: bulletins, Architect's Supplemental Instructions, Proposal Requests, etc. Contractors are responsible for providing their own subcontractors with all documents, drawings, and specifications required to perform their work. Additional sets of contract drawings or specifications are available for purchase at the cost of reproduction.

34) Fall Protection: Subcontractor shall provide 100% tie off of personnel working more than six (6) feet above the level below and as required by OSHA and other applicable regulations. Furthermore, this Subcontractor shall provide any and all leading edge protection.

35) Access Doors and Frames: The **Plumbing, Mechanical, Fire Protection and Electrical Contractors** shall supply access doors and frames (consistent with the surrounding assembly) as may be required to the appropriate Contractor to incorporate into his or her work for access to mechanical, plumbing, electrical, sprinkler, etc., equipment.

- a. Additionally, the **General Trade Contractor** shall furnish all access doors that are shown on the Contract Drawings to be installed by the **Mason Contractor** in his or her partitions/work and the **General Trades/Acoustical Contractor** in his or her partitions, drywall ceilings, acoustical ceilings/work. Any access doors (consistent with the surrounding assembly) that are not shown on the Contract Drawings, but required by the **Plumbing, Mechanical, Fire Protection or Electrical Contractors**, shall be provided by the Contractor who requires the access doors. The access doors shall be furnished to the **Mason Contractor** for installation in his or her work and the **General Trades Contractor** into his or her partitions, drywall ceilings or acoustical ceilings.
- b. ALL ACCESS DOORS SHALL BE BY THE SAME MANUFACTURER AND KEYED ALIKE.

36) Through-Penetration Firestop Systems/Sleeves:

- a. The **General Trade Contractor** shall install Sleeves and/or Inserts furnished by others to accommodate Through-Penetration Firestop and Smoke Stopping/Sealing Systems as indicated on the Contract Documents where penetrating the General Trade Contractor's work.
- b. The **Masonry Contractor** shall install Sleeves and/or Inserts furnished by others to accommodate Through-Penetration Firestop and Smoke Stopping/Sealing Systems as indicated on the Contract Documents where penetrating the Masonry Contractor's work.
- c. The **Mechanical, Plumbing, Electrical Contractors** shall locate and Furnish all required wall sleeves to either the **General Trades or Masonry Contractor** who shall install the sleeves in their respective Work (walls-floors-slabs, etc.).
- d. The **General Trade Contractor** shall provide "Top of Wall" Fire Safing and adjacent surfaces with Firestopping, Smoke Sealing, and Acoustical Sealants

in accordance with the type of drywall partition noted on the Contract Documents for all new Non - Masonry Partitions.

- e. Where either a drywall, concrete or masonry partition stops at the underside of a structural steel member or a concrete beam member, the Trade Contractor whose partition stops at the underside of the member shall also be responsible for the required fire sealing/stopping or smoke seal/stopping above the structural steel/concrete member, between the steel/concrete member and the deck/structure above.
- f. Each (**General, Plumbing, Fire Protection, Mechanical, Electrical Contractors or any other Contractors**) Trade Contractor shall each be responsible for any fire stopping or smoke stopping that is required as a result of penetrations in, but not limited to, walls, floors, slabs, or ceilings by their conduit, piping or any other penetrating items that they provide as part of their contract or means and methods of work.
- g. Submit UL details and illustration number to the Architect/Engineer/CM for all floor and wall penetrations. Details to include sleeves, caulk, etc. to be approved by the Architect/Engineer, the local Fire Official and the local Building Official prior to the start of work.
- h. Detailed Shop drawings indicating location of all required sleeves / penetrations must be submitted 4 weeks after award. Approved shop drawings for distribution must be submitted to CM and accompany the delivered embeds.
- i. The **Masonry Contractor** shall provide "Top of Wall" Fire Safing and adjacent surfaces with Firestopping, Smoke Sealing, and Acoustical Sealants in accordance with the type of masonry partition noted on the Contract Documents for all Masonry Partitions.

37) Sealants and Caulking:

The **General Trade Contractor** shall furnish and install all sealants and caulking as required to complete its scope of work. This shall also include Safing, Smoke and or Acoustical Sealant at the top, bottom and sides of Drywall Partitions if so noted in the Contract Documents.

Joint sealants shall be as follows:

- a. The **Painting Contractor** shall caulk and fill at transitions between walls and frames, standing and running trim, millwork and painted surfaces. Also the **Paint-**

ing Trade Contractor shall fill all nail holes and etc. in surfaces to be prepared and finished painting as part of the Scope of Work.

- b. The **Roofing Contractor** shall furnish and install all sealants and caulking as required to complete his or her scope of work required within the roofing system, including sealing and caulking of all roof penetrations such as but limited to stacks, rails, ductwork, pipes, conduits and etc.
- c. The **Glass & Glazing Subcontractor** is responsible for all sealants, both interior and exterior, that abut any aluminum entrance and storefront, windows, and curtain wall to other material(s) provided by another Contractor.
- d. The **Masonry Contractor** shall provide Joint Sealers and Sealants at Expansion & Control Joints, interior and exterior, including all joint sealants that are to be incorporated into masonry work and as indicated on the Contract Documents.
- e. The **General Trades Contractor** shall furnish and install **ALL** other joint sealants, unless specifically noted otherwise.

38) Parking: Subcontractor is hereby advised that there is limited on-site parking for storage and trailers. All staging will be done per the **Construction Manager's** direction and coordination. Any car, truck, or other vehicle parked in areas restricted or outside of any designated areas will be towed at the expense of the employer. The **Construction Manager** and/or the Owner are not responsible for any damage to vehicles parked on or off-site, or for any fines incurred through the receipt of parking violation tickets issued by the municipality.

39) Meetings: Subcontractor shall attend all regularly scheduled design and job meetings and shall maintain a full-time competent on-site staff at all times during the Project.

- a. A representative of this Subcontractor shall be required to attend Project Managers' meetings, Safety meetings, Superintendents' meetings, Coordination meetings and all other meetings, which **Construction Manager** may require.
- b. This Contractor's Superintendent/Foreman and Project Manager shall attend weekly job meetings; and additional scope coordination meetings as required at the **Construction Manager's** field office on site scheduled by **Construction Manager's** Project Manager/Superintendent. This Contractor will properly coordinate their work with other trades and will resolve coordination issues as required to ensure the completion of work in accordance with the project schedule. The work of the Contractor shall be performed in a manner that does not impede or delay another Contractor in the performance of their work. This Contractor should include the cost of rerouting their work, etc.,

due to coordination procedures as part of their contract price.

- c. Each Contractor shall conduct weekly toolbox talk. This Contractor's safety representative shall chair each meeting. The CM shall receive copies of all weekly toolbox meeting minutes weekly. (No later than Thursday afternoon) An agenda and its heading contents/outline shall be submitted to the CM for review and approval prior to the first toolbox safety meeting.
- d. This Contractor shall submit a detailed list of all key personnel with cell, emergency and home numbers and a very detailed list of Contractors, Subcontractors, Suppliers and Vendors within seven days of award of Contract. Any and all changes must be re-submitted to the CM immediately.
- e. Job meetings will be held at the jobsite on a weekly basis unless otherwise designated by the **Construction Manager**, Owner or by the Architect. Any Contractor missing any project job meeting shall be subject to a \$250 dollar fine.

40) Temporary Lifting Devices: Each Contractor shall furnish, install, operate, and maintain in safe condition all hoisting equipment and machinery required to properly carry out and complete his/her Work.

41) Manpower Schedule: Subcontractor and all of its lower tier Subcontractors shall provide to **Construction Manager** a manpower schedule by week for the Project, or at times as agreed to by **Construction Manager**, and shall report to **Construction Manager** actual hours worked per week. Furthermore, this Subcontractor shall complete and submit **Construction Manager's** Material and Equipment Status Report on a weekly basis.

42) Manpower: Subcontractor shall provide at all times sufficient manpower to maintain the progress of the Work to the satisfaction of **Construction Manager** and/or Owner.

- a. All Work shall be performed by skilled labor experienced in their respective trade, who shall comply with all Project, site safety and security requirements.
- b. All employees of this Contractor are to carry themselves in a proper professional manner. There will be zero tolerance for unacceptable conduct. This is

not limited to drug and/or alcohol use, foul language, attire, and gestures, etc. Any employee or associated personnel found not conducting themselves of said conduct will be immediately dismissed from site/project.

- c. This Subcontractor shall remove from the Project any employee deemed by **Construction Manager** and/or Owner to be in violation of any Project safety or security requirements.
- d. Subcontractor is required to submit Daily Work Reports to **Construction Manager's** Field Superintendent on an appropriate form, which will be provided by **Construction Manager**. This Contractor shall provide Daily Construction Reports to the **Construction Manager's** field office by 9:30 a.m. the following workday. Manpower counts shall be included for all Contractor forces including Sub-Contractors and identify trade, classification, gender, race, etc.
- e. Manpower counts shall be included for all Contractor forces including Sub-Contractors and identify trade and classification (i.e. Foreman, Journeyman, Apprentice, etc.).
- f. This Subcontractor's Foremen will be required to provide the required information detailing manpower levels, Work activities and locations for same within the building, building area and building level, and major issues impacting this Subcontractor's Scope of Work.
- g. These reports are to be kept current and are to be submitted to **Construction Manager's** Field Superintendent.
- h. There shall be a strict 'No Smoking Policy' and 'No Radio/Stereo/MP3/iPod/Music Policy' for the interior, exterior, the roof, or anywhere on the project property at all times. Workers who violate this policy shall be given one verbal warning. Subsequent offenses shall result in \$250 fines back charged to the appropriate contractor. Contractors are responsible for the adherence to this policy by their subcontractors, and will be liable for all fines incurred by their subcontractors.
- i. There shall be a strict 'Lunch/Coffee Break Location Policy' for all areas of the Project Site. The **Construction Manager** shall designate two areas of the site only where all workers shall take their lunch, other meal and coffee breaks. Workers who violate this policy shall be given one verbal warning. Subsequent offenses shall result in \$250 fines back charged to the appropriate

contractor. Contractors are responsible for the adherence to this policy by their subcontractors, and will be liable for all fines that may be incurred by their subcontractors.

- j. Contractor may not engage in noisy or disruptive operations during hours restricted or prohibited by the Owner.
- k. Any work after occupancy which might be disruptive to the school operations and/or during standardized testing (As determined by Owner or the **Construction Manager**) will be performed after school hours, which are 7:30 a.m. through 3:30 p.m. Permission will have to be granted for any work outside of these work hours. Scheduling of these activities must be done at least 48 hours in advance. All costs for this work, including premium time, will be funded by this Contractor, including the cost for CM's Supervision.

43) Supervisory Personnel: Subcontractor shall provide competent supervisory personnel who shall be authorized to act on behalf of this Subcontractor. The appointed supervisor shall be present on site at any time Work is being performed either by this Subcontractor or any sub-tier contractor or vendor working under this Subcontractor's agreement to complete the Scope of Work contained herein. The supervisory personnel assigned to the Project shall not be transferred from the Project without the prior written consent of **Construction Manager**. This Subcontractor shall remove from the Project any supervisory personnel deemed to be incompetent or unacceptable by **Construction Manager** and/or Owner. The Superintendent's resume shall be submitted for the CM's review and approval. The Superintendent, Project Manager, and other critical individuals can't be changed without approval in writing from the Construction Manager. This Superintendent shall furthermore be equipped with a cellular phone for communication with the **Construction Manager** and other trades in lieu of walkie-talkies. When a Contractor has any of their subcontractors or vendors of any tier working on site or in the street, supervision from the Primary Contractor must be present at all times.

44) Coordination: Subcontractor shall perform all Work in full cooperation with other trades and coordinate the schedule and sequence of all Work with other trades under the direction of **Construction Manager**.

- a. When so directed, this Subcontractor shall temporarily omit, or perform cer-

tain portions of the Work out of normal sequence, in order to accommodate coordination requirements.

- b. The Work of this Subcontractor shall not be installed if it prevents another Subcontractor from being able to perform its Work. **Construction Manager** shall be immediately notified of problem areas, and this Subcontractor shall perform Work in another area until the issue is resolved.
- c. The Owner, its authorized representatives and agents shall, at all times, have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however, that all instructions and approval with respect to the work will be given to the Contractor only by the Owner through its authorized representatives or agents.
- d. In case of conflict between Contractors, Fusco will determine the sequence and location where work shall commence. Such determination shall have no effect on the Contract costs and will not be considered as the basis for a claim for additional compensation. The work under this Contract shall be coordinated with any other work which may be under construction or contemplated in the same general area. In order that the work under this Contract may conform to the conditions under which it has been undertaken, Fusco will determine the sequence and location where the work will commence. Such determination shall have no effect on the Contract cost and will not be considered as the basis for a claim for additional compensation. No Contractor shall receive extra payment to make multiple return visits to the Project site or a specific work area for any reason. The **Construction Manager** makes no guarantee that any Contractor will be able to commence and complete their contract work without multiple interruptions.
- e. The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all subcontractors, trades, or material men engaged upon this Contract. Contractor shall be prepared to guarantee to each subcontractor the locations and measurements which they may require for the fitting of their work to all surrounding work.
- f. The Contractor shall also be responsible to carry all monies in his or her lump sum proposal to carry out any work that is considered industry standard. Addi-

tionally, include all costs for any and all cutting/patching that may be required to complete or conduct your work. The Contractor shall provide all necessary attachments (clips, angle, reinforcement, etc.) as required, whether or not shown on Contract Documents, to properly erect and install his or her work.

- g. All Trades shall coordinate their installation of finish items with the Painting Trade Contractor to minimize the removals of switch plates, receptacles, switches, light fixtures and/or trims, hardware, escutcheons, plates, etc., prior to painting. If any such items are in place prior to painting of adjacent surfaces, they shall be removed and replaced by the applicable Contractor.
- h. All bid package Prime Contractors and lower Tier Sub Contractors are responsible to coordinate construction operations and activities with the work of the other bid package subcontractors directly.

45) MEP Coordination Drawings:

The **Mechanical/HVAC Contractor** shall be the responsible party in the development of the Coordination Drawings and shall cooperate with the **Construction Manager** and all associated Trade Contractors. The approved HVAC Shop Drawings shall be the baseline document for Coordination. All associated Trades Contractors shall input their information onto the Coordination Drawing in accordance with the Contract Documents. The **Construction Manager** shall determine the sequence by which each Contractor shall over-lay their information. The Coordination Drawings shall be prepared via the "AutoCAD 2010" format, in a scale in accordance with the documents or as approved by the authority having jurisdiction.

Upon Award of Contract, The **Mechanical/HVAC Contractor** shall obtain the necessary digital background files from the Architect/Engineers to prepare and submit for approval, detailed coordination shop drawings. Any Contractor utilizing these digital backgrounds must complete and submit a Request for Electronic Files and an Agreement for Electronic Transfer to Contractor forms. Any cost of such transfers (if any) will be listed in the Contract Documents. The **Mechanical/HVAC Contractor** shall use these digital files to prepare a base line of all floors and all areas at a scale of 1/4" equals one foot and 1/2" equals one foot for all congested areas such as mechanical rooms, stage/platform, and other areas. All base lines shall show but not limited to, all interior walls, reflective ceiling grids, light fixtures, ceiling heights, electrical panels, etc. Mylar's and digital files shall be submitted to the CM who shall transmit and forward them to the **Plumbing, Fire Protection and Electrical Contractors**. The Mylar's and digital files shall be base line drawings from which the **Mechanical/HVAC Contractor** shall prepare both the sheet metal shop drawings and coordination shop drawings.

The respective Trade Contractors shall furnish the following information to the Mechanical/HVAC Contractor through AutoCAD 2010 format digital files and Mylar prints:

Plumbing Contractor – exact proposed routing and sizes (in plan view) of the roof leaders, waste piping and water lines over 1” in diameter.

Electrical Contractor – exact proposed routing and sizes (in plan view) of all feeder conduits, pull boxes, panels, cable trays and the required clearances of all light fixtures especially recess fixtures.

Fire Protection Contractor – exact proposed routing and sizes (in plan view) of sprinkler mains.

Once the **Mechanical/HVAC Contractor** receives the above information from each Trade Contractor he or she shall superimpose the preliminary layout of all roof leaders, waste piping, sprinkler piping, feeder conduits, panels, and any other encumbrances, which shall include sizes, dimensions off of column lines, elevations and any other important dimensions or information. The bottom of all structural beams, girders, bar joists, shall also be shown as they relate to all pipe, conduit, etc.

After review of all information received from the Trade Contractors, the **Mechanical/HVAC Contractor** shall prepare and submit to the Engineers/CM a list of any conflicts that cannot be resolved between the sheet metal, roof leaders, waste piping, sprinkler mains, feeder conduits, light fixtures and such other encumbrances.

After resolution through the Engineer/CM of any such conflicts, and incorporations of such changes required, all piping and conduit locations shall be confirmed with the **Plumbing, Fire Sprinkler, and Electrical Contractors** and the final coordination drawings showing all items listed above and the locations of diffusers, sprinkler heads, speakers, smoke detectors, shall be produced by the **Mechanical/HVAC Contractor** for each Trade Contractor’s acceptance. Such acceptance shall be indicated by each Trade Contractor involved in the coordination signing each of the coordination drawing in a title box produced by the **Mechanical/HVAC Contractor**.

All firewalls and Smoke partitions must be highlighted on the HVAC drawings for appropriate coordination. The exact size and location of all ductwork penetrations (both floors and walls) shall also be shown on the sheet HVAC.

When all corrections and work have been shown and signed off by all Trade Contractors, the **Mechanical/HVAC Contractor** shall forward each transparency to his or her printer for printing and distribution to the Engineer, Architect, CM and all Trades. (a minimum of twelve copies of each) All cost associated with printing and distribution shall be included in **Mechanical/HVAC Contractor’s** bid proposal.

Two signed copies and two digital AutoCAD CD's of the coordination drawings shall be kept at the **Construction Managers** office for future reference.

46) Openings, Penetration, Equip, Curbs, Supports, Coordination Drawings:

The **Plumbing and HVAC Contractor** shall coordinate and provide a drawing indicating the size and location of all Openings, Dunnage Steel and the like for his or her equipment, including Curbs, Mechanical Chases Rooftop mechanical units, etc. in a timely fashion and to assist in the Structural Steel Drawing submission. The **Plumbing and HVAC Contractor** shall cut, remove and dispose of steel deck after concrete slab has been placed and cured (where applicable) for openings in his or her Scope of Work. Framing and Dunnage Steel shall be provided by the **Structural Steel/Misc. Metals Contractor**. Additionally, the **Plumbing and HVAC Contractor** shall furnish and install Duct/Pipe Support Steel and frames required for their equipment unless specifically noted to be provided by others.

The **Plumbing and HVAC Contractor** shall notify the **Construction Manager** of any discrepancies prior to installation. Failure to notify the **Construction Manager** shall be construed as acceptance of the condition.

The **Plumbing and HVAC Contractor** shall provide a watertight metal cap supported and fastened down over each roof curb, which must be maintained until permanent equipment is installed. Any counter flashing to be installed over the curb shall be furnished and installed by this Contractor. Installation of wood blocking will be by the **General Trades Contractor**. Provide complete coordination of openings with the **Structural Steel, General Trades and Roofing Contractors**. All seismic connections from the roof curb to the structural steel and to the equipment is the responsibility of this Contractor.

The **Plumbing and HVAC Contractor** shall furnish and install prefabricated insulated curbs for all roof top equipment units and for the roof top fans. The **Roofing Contractor** shall furnish and install all required flashings as it pertains to the installation of the roof system and roof curbs. All Contractors should note that a majority of the roof slopes and must include any provisions or cost to match these varying slopes. This includes the roof curbs for the radon piping cap systems.

47) Variable Frequency Drives (VFD's): The **Plumbing and HVAC Contractor** shall furnish variable frequency drives, to the extent noted on the Contract Documents, to be installed by the **Electrical Contractor**.

48) Cutting and Patching: Each Contractor shall be responsible for cutting and patching for all work to be installed under their Bid Package, with the following EXCEPTIONS:

- a. **Existing Masonry Walls** – Cutting (and removal) and patching of existing masonry walls shall be performed by the **Masonry Contractor** in accordance the Contract Documents. The **Masonry Contractor** shall cut and patch existing masonry walls where required. The **Masonry Contractor** shall patch existing masonry walls where any existing item has been removed by others and fastener holes, indentations and other irregularities in the existing masonry walls require patching/restoration.
- b. **Existing Concrete Floors** – Cutting (and removal) of concrete floors and surfaces shall be performed by the **Demolition and Abatement Contractor** and patching of concrete floors shall be performed by the **Concrete Contractor** in accordance with the Contract Documents.
- c. **Existing Roof** – Cutting (and removal) of the existing roof for Plumbing and HVAC Equipment shall be performed by the **Plumbing and HVAC Contractor**. Cutting of the existing roof for Electrical Equipment shall be performed by the **Electrical Contractor**. Temporary roofing at roof openings shall be performed by the **Roofing Contractor**. Patching of roof openings shall be performed by the **Roofing Contractor**.

Cutting where patching is to be performed by others shall be performed using cutting and sawing tools to limit the size of the opening and collateral damage. Each Contractor is to fill all void/spaces around pipes penetrating the exterior foundation walls with elastomeric waterproof caulk, rubber link seals or other methods as may be specified for his scope of work and as required by the Contract Documents.

49) Hangers and Supports and Dunnage: Each Contractor shall be responsible for providing any and all hangers, supports or dunnage required to complete their Scope of Work whether or not shown on the Contract Documents.

- a. Any support Steel not shown on the Contract Drawings that is required for the installation of pipe/conduit/duct hangers and/or for equipment support shall be primed and painted. The Contractor supplying the pipe/conduit/duct hangers and/or equipment is responsible for furnishing and installing the support steel including prime painting.
- b. The **Structural Steel Contractor** shall furnish and install all supporting steel work shown on the contract documents for support of rooftop equipment and rooftop units.
- c. The **Mechanical/HVAC/Plumbing Contractor/Fire Protection Contractors** shall each be responsible for providing any loose dunnage required for proper installation of any rooftop equipment and rooftop mechanical units.
- d. Each Contractor shall provide all vibration and seismic constraints as required by code and the contract documents for its Scope of Work. Each Contractor shall provide any and all flexible joint assemblies associated with any mechanical restraint collars as required by Code or indicated in the Contract Documents.

50) Identification and Labeling: Each Contractor shall provide and complete all identification, labeling, tagging and banding prior to the installation of the ceiling grid and tile and/or the closing of walls so as to allow for inspection as to the completeness of these items.

51) Property of the Owner: The owner reserves the right to take ownership of items that were provided to the project. Including any item that states shall be eventually removed.

52) Housekeeping/Equipment Pads and Concrete Curbs: The **Concrete Contractor** shall provide all housekeeping/equipment pads and Concrete Curbs **SHOWN** on the Contract Documents.

- a. Any Contractor requiring a Housekeeping/Equipment Pad or Concrete Curb shall be responsible to provide the required Housekeeping/Equipment Pad or Concrete Curb **NOT SHOWN** on the Contract Documents.

- b. Each Contractor shall coordinate the size and location of housekeeping/equipment pads within its scope of work.
- c. Housekeeping/Equipment Pad design, location and elevation shall be the responsibility of the Contractor whose equipment is placed on the pad in accordance with the Contract Documents.
- d. All anchor bolts, expansion bolts, dowels, etc. necessary to anchor the pads to the concrete floor slab will be provided by the Contractor who requires the seismically designed or required pad.

53) Damaged Work: Subcontractor shall protect the Work and equipment of others while performing its Work. Include all costs to protect all of your materials furnished and/or installed by this Contractor from the elements, damage, rust, dust, non-use, etc. until acceptable in writing by the Owner.

- a. Any Work performed by others that is damaged by this Subcontractor or its employees or agents shall be the responsibility of this Subcontractor to replace at no additional cost. This Contractor is responsible to complete his or her work in a manner so as to not cause damage to the site, existing buildings and those items noted to remain. Should damage occur as a result of this Contractor's actions any costs associated with the repair and/or replacement of the damage shall be the responsibility of this Contractor. The Contractor is responsible to protect his or her work during and after installation for the duration of the project and until turn over process is completed. This includes but not limited to: Coverings, barriers, shrink wrapping, masonite/homosote coverings, plywood covering, etc., whatever necessary means are needed to protect your work for the duration of the project. Please note a majority of the existing sidewalks along the perimeter of the site remain and must be protected and delivered back to the City as they existed at the start of construction.
- b. All Contractors working inside the building are to take extreme care not to disturb the existing or newly installed spray-on fireproofing located throughout the structure of the building. Any Contractor observed disregarding this policy shall be back charged for all costs associated with repair of the spray on fireproofing. All Contractors are responsible for covering portions of their installed work to prevent being soiled with spray-on fireproofing. Any Contractor who does not protect their work after receiving notification from the **Construction Manager** of fireproofing activities shall be solely responsible for cleaning all fireproofing over-spray from their work. Each Contractor shall be responsible to patch and or repair

Spray-On Fireproofing that has been damaged as a result of the installation of his or her Scope of Work. All Contractors are encouraged to pre-install all hangers, threaded rods, uni-strut, support steel and acoustical wires, etc. in advance of the spray-on fireproofing commencing in order minimize the potentiality of damage to this material.

54) OSHA: Subcontractor includes all safety that is part of this Work, including but not limited to personal protection, safety access ladders, Subcontractor safety, and protection of all of it employees and agents per OSHA.

- a. A fall protection system in full compliance with OSHA is to be provided and maintained by this Subcontractor. Details of the fall protection program must be included in the Project Specific Safety Plan submitted for approval. Full body harnesses must be worn as part of the fall protection system. Safety belts are not acceptable. Note, this also includes six foot (6'-0") fall protection requirements. This Subcontractor is responsible for providing acceptable safety protection devices and/or precautions for all related Work, and for full compliance with all safety programs instituted by **Construction Manager** and/or OSHA. At all times this Subcontractor's employees must wear hardhats, eye protection, gloves and a Class 2 lime green traffic vest. This Subcontractor is responsible to provide employees with all safety equipment including, but not limited to, hardhats, eye protection, gloves and vests. All injuries, regardless of severity, must be reported to **Construction Manager's** Superintendent and an accident report must be completed within 24 hours. Anyone creating an unsafe condition must erect the necessary barricades, covers and warning apparatus. Subcontractor shall submit a listing of emergency telephone numbers for key personnel involved with this project before any Work starts. All scaffolding must be constructed in accordance with OSHA Regulations. Riding on rolling scaffolding is strictly prohibited. Guardrails must be installed at floors, platforms, or other surfaces six feet (6'-0") or higher and as required by OSHA. No power tool is to be operated without the proper guards and/or safeties in place.
- b. All personnel on the jobsite are required to wear hard hats and safety glasses at all times and any other specific personnel protection equipment. Failure to do so will result in a fine charged to the Prime Contractor employing the offending person. Metal Hard Hats are not permitted. "See Table of Fines" for additional information.
- c. This Contractor shall include in his or her schedule of values a specific line item

with mutually agreeable value for safety and protection that are included in the contract value.

- d. There shall be a strict PPE Policy' for all areas of the Project Site. Workers shall conform to the requirements OSHA for PPE. Workers who violate this policy shall be given one verbal warning. Subsequent offenses shall result in fines back charged to the appropriate contractor. Contractors are responsible for the adherence to this policy by their subcontractors, and will be liable for all fines that may be incurred by their subcontractors. "See Table of Fines" for additional information.
- e. All contractors and personnel are required to attend Fusco's Safety Orientation prior to entering and performing any work on this project.
- f. All Contractors are required to supply first aid kits that are adequate to the size of their crew. The **Construction Manager** office trailer is not a first aid resource.
- g. All contractors are to hold at least one weekly toolbox talk safety meetings with their entire crew and provide Fusco with a formal copy of the Agenda and attendance sheet.
- h. Any flammable liquids and gasses are to be stored and secured properly.
- i. This Contractor is responsible for providing and maintaining at all times OSHA recommended safety requirements including but not limited to rebar protection such as Flat Headed Rebar Caps, (Mushroom type caps shall not be allowed).
- j. The **General Trades Contractor** is to maintain during concrete operations the fall protection for the perimeter and all interior shaft and floor openings once concrete operations begin. Include all planking, guardrails, and toe-kicks and necessary to meet OSHA requirements.
- k. The **Structural Steel Trade Contractor** shall provide around the perimeter of all elevated floor slabs and roof decks, the **General Trades Contractor** shall provide all other necessary safety rails for the elevated floor slabs and all safety rails must meet or exceed OSHA requirements. The **General Trades Contractor** will provide ladders to be used by all Trade Contractors (except for the Structural Steel and Miscellaneous Metals Contractor - he or she will provide their own ladders for their work only) the permanent stair system has been installed and accepted for construction traffic. Additionally, Any Trade Contractor causing a hazard shall be responsible to fix the hazard regarding safety, OSHA, etc.
- l. This Contractor shall schedule with the **Construction Manager** a Safety pre-planning prior to the start of new work activities/operations. This meeting will be

held to coordinate a specific safety plan for this Contractor's Scope of Work. Additional planning meetings will be scheduled as required, for new work activities/operations during the course of the project. Trade Contractors must submit two job specific safety programs which shall include MSDS Sheets in a bound book with the Companies name and the job name, one for the **Construction Manager's** trailer and one for the Trade Contractor's gang box.

- m. This Contractor shall be required to notify the **Construction Manager** if it is identified as a "SEVERE VIOLATOR" by OSHA in accordance with OSHA directives. This Contractor shall be required to notify the **Construction Manager** prior to executing any subcontract and prior to conducting any Work. If this Contractor is cited by OSHA after executing the subcontract and while working on the Project or on any other project as being a "SEVERE VIOLATOR", notification to the **Construction Manager** must be made immediately in writing.
- n. The following form shall be filled out by all Contractors for their respective employees prior to starting work:

Safety Orientation Fusco Corporation Eli Whitney Technical High School

Violation of the attached rules will result in disciplinary actions that are as follows:

1. **First Violation:** Verbal Warning
2. **Second Violation:** Employer fined and Employee removed from site for the remainder of the day.
3. **Third Violation:** Employer fined and employee permanently prohibited from working on site.

Fines are back charged to the appropriate contractor (fines will be deducted from their contract value). Contractors are responsible for the adherence to these site rules by their subcontractors, vendors, visitors, delivery personnel, etc. and will be liable for all fines that may be incurred by their subcontractors. Refer to attached Table of Fines.

By signing below I signify that I have read the above and both pages of the attached list of rules and that I understand them and agree to comply with them.

Date; _____

Contractor You Work For; _____

Hard Hat Sticker # _____

Name, Print; _____

Signature; _____

Telephone Number, Home; _____

Cell; _____

Emergency Contact, Name; _____

Emergency Contact Phone Number; _____

Vehicle, Make; _____

Color; _____ Plate; _____

1. There shall be a strict 'Hard Hat and Eye Protection Policy' for all areas of the Project Site. Hard Hats and Safety Eye Protection shall be worn at all times while on site. This policy includes operators out of machines (or in machines without Roll Over Protection Systems), for all workers, foreman, supervisors, vendors, visitors, etc.
2. High visibility clothing, such as safety vests is required for all individuals entering the work site.
3. Steel erectors, Scaffold erectors and Roofers are required to adhere to OSHA fall protection requirements for their particular operations. For all other operations fall protection means 100% tie off when six feet or more above floor or safe working platform
4. Eating will be allowed in designated area's only.
5. Radios, IPods, Bluetooth or Equivalent or MP3 or other music devices are not allowed to be used on the job site.
6. A safe work environment must be maintained and compliance with OSHA regulations and site safety plan(s) is required. In the event of accidents, major or minor, all are to be reported to the Construction Manager immediately. All associated paper (accident investigation, First Report of Injury, etc.) work must be submitted to Fusco within 24 hours.
7. Harassments of any kind are to be reported to the Construction Manager immediately. This includes any offensive statements, actions, graffiti, writing, drawing or posting anywhere on site.
8. Use of alcohol or any illegal drugs prior to or during the work day is prohibited as is the possession of such on the job site. If at any time the Construction Manager or any Supervisor suspects that someone has been using alcohol or drugs, this person will be directed to immediately leave the construction site for the remainder of the day. This can result in permanent suspension from the job site.
9. An Emergency Action Plan has been developed for the site (which also includes emergency phone numbers). Each contractor is responsible for retaining a copy of this plan from Fusco, informing their employees of the requirements contained in the plan and of any changes. Each employee is responsible for following the plan.
10. Parking is allowed only in designated areas. Vehicles parking in undesignated areas will be towed at the owner's expense.
11. Visitors entering the facility must sign the appropriate register at the Fusco Field office
12. Possession of firearms (or any other types of weapons) on the premises is prohibited.
13. All tool boxes, lunch containers and packages are subject to inspection while in the facility and at all times when exiting.
14. Thefts or mis-appropriation of funds, property or other's personal property from the facility will be referred to the appropriate legal authorities for prosecution.

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ADDENDUM NO. 2**

15. All contractors must maintain copies of MSDSs on site for all materials brought onto the site for which an MSDS is required (such as chemicals). Copies must also be provided to Fusco.
16. Contractors shall coordinate any excavation work with Fusco and provide at least 24 hour notice to Fusco prior to conducting any excavation.
17. Contractors shall coordinate any crane use with Fusco Corporation and provide substantial notice (based upon the planned use of the crane) of a crane coming onto the site and the notice shall not be less than 48 hours in advance. Any Crane to be used on site shall have all (up to date) certifying documents including insurance, annual inspection and State of Connecticut Registration. A lift plan will also be required to be submitted well in advance. If Fusco deems that either the documentation, notice, or lift plan are insufficient, work will not be allowed to proceed. In no way will Fusco be liable for any incurred costs because of work not proceeding due to the contractor not meeting the requirements of providing: substantial notice, proper documentation or a sufficient lift plan. This in no way relieves contractor of the crane from being ultimately responsible for safe operation of the crane or determining the lift plan is safe and both are in compliance with all State and Federal regulations.
18. Any individual operating a crane must have in their possession a license recognized by the State of Connecticut. Individuals using or operating equipment such as forklifts, man lifts (both scissors and aerial boom lifts) or operating equipment that meets the State of Connecticut Hoisting License requirements, must provide proof of training prior to operating such equipment to the Construction Manager for copying and filing.

Table of Fines

Violation	First Offense Fine	Subsequent Per Violation
Assured Grounding Program Violation	\$200	\$400
Lack of Ground Fault Protection	\$200	\$400
Lockout/Tagout violation	\$200	\$400
Defective electrical cord	\$50	\$100
Electrical cords not protected	\$50	\$100
Confined space violation	\$300	\$600/Removal
Clothing not adequate	\$50	\$100
Foot wear not adequate	\$50	\$100
Eye protection missing/inadequate	\$100	\$200
Hard hat missing	\$100	\$200
Hearing protection missing	\$100	\$200
Fire extinguisher missing/needs charging	\$100	\$200
Fire watch missing	\$100	\$200
Hot work permit missing	\$100	\$200
Gas cylinders stored incorrectly/not identified	\$50	\$100
Failure to protect public	\$50	\$200
Fall Protection not present	\$200	\$400
Guardrail removal	\$200	\$400
Defective ladder	\$200	\$400
Standing on top of ladder	\$200	\$400
Ladder not secured	\$100	\$200
Unprotected floor penetration/hole	\$50-\$200	\$100-\$400
Scaffold violation	\$50-\$200	\$100-\$400
Lacking competent person on site	\$200	\$400
Trenching/excavation violation	\$200	\$400
Power tool defective	\$50	\$100
Equipment defective	\$50-\$100	\$100-\$200
Uncertified lifting device	\$100	\$200
Poor housekeeping	\$50	\$100
Improper material storage	\$50	\$100
Food consumption non-designated area	\$50	\$100
Smoking in non-designated area	\$100	\$200
Urinating/defecating in building	\$400/removal	N/A
Orientation not attended	\$50	\$100
Tool box meeting not held	\$100	\$200
Written Haz Com missing	\$100	\$200
Missing MSDS	\$100	\$200

Example of Non-Compliance Notification Form

Notice of Non-Compliance with Site Safety Rules

Date: _____ Project Name/Number: _____

(Hard Hat Identification Number)/Individuals in Non-Compliance:
() _____

Subcontractor: _____

Foreman of Subcontractor: _____

Person Observing the Violation: _____

Comments/Noncompliance Description:

Example for lack of Eye Protection

This employee was observed lacking eye protection, This employee of XXXXXXXXXXXXXXX has received a verbal warning in the past for non compliance with the eye protection requirement. Eye protection is required 100% of the time while on this project and that fines and suspensions can result for non-compliance. All individuals are informed of this during site orientation. A verbal warnings had been given and non-compliance has remained an issue. The above referenced employee was observed not wearing eye protection and this is to inform you that a fine of \$100.00 has been issued to your company. All fines will be deducted from your contract value. In addition, as stated in the orientation, the employee in violation was removed from the site for the remainder of the work day. Any further non-compliance issue by this employee will result in the above referenced employee being permanently barred from the site.

Fusco Corporation Superintendent: _____

- 55) Standby Trades:** Subcontractor will be responsible for all costs of standby trades.
- 56) Tolerances:** Each Contractor shall install his or her work within specified tolerances. Any corrective work necessary to obtain the acceptance of this work shall be performed in a timely manner so as not to impact the project schedule or sequence.
- 57) Substrates:** Each Contractor shall prepare substrates so that they meet or exceed the requirements of the specification for the final finishes. The Substrate shall meet or exceed flatness, Levelness and/or surface texture required.
- 58) Permits:** The basic building permit shall be provided by others. Each Contractor shall be responsible to obtain and include all costs for any Permits, Approvals, Inspections, Filings, Fees, Certificates, License as required by Federal, State and Local Authorities having jurisdiction, including but not limited to all applications, acceptance fees and any other necessary documentation for Subcontractor's scope of work.
- 59) Utility Company Fees and Costs:** Each Contractor is to include all Utility Company fees and costs for providing any and all required equipment by that Utility Company.
- 60) Non-Conformance Notices: Construction Manager** reserves the right to issue Non-Conformance Notices for defective Work, schedule delays; safety related items, etc. The Non-Conformance Notice will describe the deviation to be corrected and the monetary value, which will be withheld from progress payments until remediation, is complete. If remediation is not complete by the designated completion date, **Construction Manager**, at its sole discretion may elect to have the Work performed by others and charge this Subcontractor for the cost of the Work performed. In the event any scope items of this Subcontract are improperly located, this Subcontractor will be responsible for all cutting and patching associated with installing these items correctly. Each worker on this site is responsible for both safety and quality control. The installations on this site are to be of the highest possible quality. Inferior quality Work will be repaired or replaced at this Subcontractor's cost.
- 61) Emergency Evacuations:** In the event of any emergency evacuation drills, any lost time will not be reimbursable.

62) Fire Alarms: Unscheduled fire alarm \$500 fine and reimburse Owner for costs.

63) Blasting and Explosives: **No blasting or explosives are allowed.**

64) Welding: Each contractor shall control the safe handling and storage of all welding materials, acetylene and oxygen tanks, and other equipment required for welding and cutting work at the job site. All welding is to be done by certified welders. Copies of certification documents are to be supplied to the **Construction Manager**. All welding materials and equipment shall be removed promptly from the premises upon completion of the welding and cutting work. No tanks shall be stored in the Owner buildings. A fire watch shall be provided if required by local fire authorities. The cost for such fire watch shall be borne by the contractor performing welding. Prior to any hot work, the contractor must notify the **Construction Manager** and receive permission to carry out such work. The contractor will then notify the **Construction Manager** when the work is completed. The use of any propane on site requires a permit and approval from the Fire Marshall. All Trade Contractor's shall review with the Fire Marshall all conditions and requirements for storing materials on-site and must strictly comply.

65) Break Areas: Subcontractor employees will eat lunch break meals at a designated area. This area will be determined by **Construction Manager's** Superintendent and may change from time to time. Employees are to leave the area free of debris after each meal. Subcontractors will also be responsible for keeping the parking areas free of trash and debris.

66) As-Built Drawings: As-built drawings must be maintained on-site at all times. Periodic inspections of ongoing as- built documentation will be performed by **Construction Manager**, the Engineer(s) and the Owner's personnel.

- a. Failure to maintain as-built drawings is cause for withholding of progress payments until the condition is resolved.

67) Closeout Documents: Before the date of Substantial Completion for the Project, this Subcontractor will submit final as-built documentation, guarantees, attic stock, extra stock, additional lubricants, warranties, and all other closeout documents required by

the Contract Documents.

68) Professional Engineering: Where structural calculations, design and/or shop drawings are required to be signed, stamped and sealed by a Professional Engineer, said Engineer shall be licensed in the State of Connecticut and the costs for same are included in this Subcontract Price.

69) Tools and Equipment: This Subcontractor must secure its own tools and equipment and carry appropriate insurance coverage for these occurrences.

- a. This Subcontractor will be required to mark all lifts with their company name and provide **Construction Manager** with a key.
- b. All personnel will be trained on the use of the lift.
- c. Any lifts used to perform the subject Work in areas which are not open to the exterior must be electric type, and any power required/ associated hook-up costs are the responsibility of this Subcontractor.

70) Environmental Controls: Environmental control and monitoring shall be the responsibility of each Subcontractor for their own Work areas.

- a. Any Work that generates fumes and/or dust will require ventilation/exhausting from the Building(s) and/or off peak/2nd shift installation requirements.
- b. If **Construction Manager** determines that additional ventilation and/or off peak/2nd shift installation periods are required, there will be no reimbursement to this Subcontractor.
- c. Any items that may be affected by this Subcontractor's scope of Work [smoke detectors, etc.] must be protected prior to Work being performed.
- d. This Subcontractor shall also provide "smoke eaters" to remove any smoke/dust/etc. generated by the Work of this Subcontractor.
- e. This Subcontractor is aware of the materials it is working with and the potential side effects and shall include all costs associated with same.
- f. No washing of tools, equipment or any materials into storm or sanitary systems.

71) Temporary Electricity: The **Electrical Contractor** shall be responsible to provide multiple 200Amp temporary electrical services that shall provide all contractors with

access to 110 Volt 20Amp power with Ground-Fault circuit interrupters with reset buttons and pilot lights, for connection of power tools and equipment in a location as directed by the **Construction Manager**. Special outlets or “pigtail” connections to the temporary power panel will be the responsibility of each contractor. Power that may be required for welding shall be the responsibility of the Contractor that requires welding to complete his or her Scope of Work and shall not be available from the above-mentioned temporary power panels. Each Trade Contractor is to include in his or her proposal electrical cords and any necessary accessories for their work. Each Contractor shall also pay for all expenses (includes monthly usage bills) to extend the service to his or her own trailer or temporary facilities.

72) Temporary Water: The **Site Contractor** shall also provide a frost/freeze free water service for use by the **Construction Manager** and other trades as directed by the Construction Manager.

73) Clean-up: In addition to the cleaning requirements stipulated in the Contract Documents, the Contractor shall furnish continuous cleanup and rubbish removal for your Scope of Work for the duration of the project. This includes sending a laborer around the site on a daily basis to cleanup all papers, litter, garbage and rubbish generated by your Scope of Work. All crates, packing materials, large scraps, paper, etc., will be cleaned out of the work area and disposed of as delivered and/or as installation of the work is completed (but not less than on a daily basis).

- a. Subcontractor is to maintain a clean and safe work area. Housekeeping is a daily priority. All trades are responsible for daily clean up of their Work and debris. If a Subcontractor fails to clean up, all material and debris will be cleaned up by others and all costs associated will be charged to the responsible Subcontractor. In the event this Subcontractor encounters labor jurisdictional issues over this Work, this Subcontractor agrees to make whatever arrangements or provisions required to complete same and has included all associated costs.
- b. Any trucks leaving site with loads must be covered by this Subcontractor.

- c. In addition to that which is required in the Contract Documents, the **General Trades Contractor** shall furnish all necessary continuous daily cleanup and rubbish removal associated for the duration of the project.
- d. **Cleaning Requirements:** The following are mandatory requirements for all trade contractors under this project:
1. All trade contractors are responsible for and required to participate in routine daily cleaning. Construction debris generated by each trade contractor is to be deposited, on a daily basis, in a designated area on each floor where the General Trades Contractor will take debris to a dumpster supplied by General Trades Contractor. **ALL DUMPSTERS are to be provided by the General Trades Contractor except for:**

BP#1.01 Site Preparation*;

BP#2.01 Demolition & Abatement*;

BP#7.01 Roofing; - ADD. NO. 2

BP#31.04 Athletic Fields*;

***These excepted Trade Contractors shall deposit debris generated by their Scope of Work into their own furnished and supplied dumpsters.**

2. Each trade contractor is responsible for providing his own tools and equipment for cleaning. Tools and equipment shall include, but not necessarily be limited to, shovels, pails, brooms, sweeping compound, wheelbarrows, hand trucks, etc. Use of any sweeping compound or cleaning agent must first be approved by the **Construction Manager** to insure its compatibility with flooring materials.
3. Once a week, for the duration of the project, the **Construction Manager** will designate a day where each Trade Contractor will participate jointly in the cleaning of the entire project. Manpower provided by each Trade

Contractor will be selected by the **Construction Manager** and be proportionate to the total man-hours worked by that Trade Contractor during the previous week. Each Trade Contractors' personnel will report to the **Construction Manager's** trailer on the date and time so designated for a brief meeting to discuss general items, problem areas and identify the non-participants.

4. The **Sitework Contractor** shall be responsible for cleaning and disposal of any and all publicly generated trash and debris for the entire site include public sidewalks and up to and including the street gutter located outside of the perimeter site fencing.
5. The **General Trades Contractor** shall provide at every floor in every wing level heavy duty 55 gallon capacity barrels (Rubbermaid or equivalent with Lids) marked "trash" for every 3,000 square feet of floor space and contractors' staging and parking areas. Barrels are to be used for paper and plastic rubbish only and are not to be used as receptacles for construction waste and debris. The **General Trades Contractor** shall empty each barrel as necessary so that at no time the barrels become overfilled. Improper use of trash barrels will result in fines as stipulated in this specification.
6. The **General Trades Contractor** will also furnish and install four (4) submitted and approved trash chutes from the roof level at Areas as directed and located by the CM for the duration of the project. All Trash Chutes must have acceptable doors (plywood partitions and 2 x 4 wood framing enclosing opening and door and signage) that swing and are lockable when not in use. (Total of (4) trash chutes).
7. The **General Trades Contractor** will also furnish and install (3) LARGE Heavy Duty Rubbermaid trash carts on wheels per level and per wing (including the roof).

8. The General Trades Contractor shall provide, DURING FINAL CLEANING and DURING OWNER FF&E DELIVERY

- i. Carpet - Vacuum carpet where installation has been completed. Furnish and install in the traveled areas of the vacuumed carpet, self-adhering carpet masking film, 3.5 mil by 48" wide. Follow manufacturer's recommendation for duration of application. Remove film prior to the expiration of the application's installation and replace as necessary until final acceptance. Continue to vacuum carpets weekly in non-masked areas until final acceptance.
- ii. VCT/Sheet Flooring/Wood/Tile/Stone Products - Fine broom sweep where installation has been completed. Furnish and install in the traveled areas of the floor, self-adhering floor masking film, 3 mils by 48" wide. Follow manufacturer's recommendation for duration of application. Remove film prior to the expiration of the application's installation and replace as necessary until final acceptance. Continue to broom sweep in accordance with Note #3 above until final acceptance.
- iii. Every trade contractor shall include in his Schedule of Values a single line item for routine and joint weekly cleaning. The minimal value of that cleaning line item should not be less than:

<u>Contracts Valued At</u>	<u>Cleaning Line Item Minimum Value</u>
Less than \$100,000	3% of total contract value
\$100,000.00 to \$500,000.00	2% of total contract value
Greater than \$500,000.00	1.5% of total contract value

Each trade contractor is reminded to increase this value if the minimal value is insufficient to accomplish the work as herein stated.

9. **Non-Performance:** Failure to comply with any portion of this cleaning specification will subject the offending trade contractor to a \$500.00 fine

per day and the withholding of monies against the cleaning line item as established in Item 5 above.

Should the **Construction Manager**, at its sole discretion, find it necessary to act on behalf of the offending Trade Contractor in carrying out that Trade Contractor's cleaning obligations under this specification, it may do so after notifying the offending trade contractor, within 24-hours of the non-compliance. The cost of such action, plus a change order processing fee of \$500.00, will be assessed against the offending trade contractor's contract. Notification will be deemed to be sufficient when sent, in writing, via fax, or by e-mail.

74) Temporary Lighting: General *Interior* temporary lighting shall be provided by the **Electrical Contractor** inside the building footprint. General *Exterior* temporary lighting shall be provided by the **Electrical Contractor** outside the building footprint. It will be the responsibility of each Trade Contractor to provide supplement lighting as required and cords as needed or when finish work requiring intense lighting is being completed especially prior to the new permanent lighting is installed and lit.

75) Submittals and Requests For Substitutions/Equals: Within seven working days of award, submit a detailed schedule of submittals to the **Construction Manager** for review and approval. This schedule shall include a complete listing of all shop drawings, samples, manufacturer's data, certifications, warranties/guarantees, O & M Manuals, etc., required by the specifications to be submitted for review. Each Contractor's shall also include target submission dates for each item listed including fabrication and delivery durations consistent with the Project Schedule Milestones. Failure to provide this and any other required paperwork shall result in all requisitions and or pending payments being placed in suspension until submissions are satisfactorily submitted, reviewed and approved.

- a. All submittals shall be submitted 40 calendar days from the date of notice to award, with the exception of site work, concrete work, masonry reinforcing, structural steel anchor bolt work, structural steel shop

drawings, roof drains, any roof opening shop drawing, mechanical roof top openings, skylight shop drawings, and all other crucial materials/equipment crucial to delivery and the schedule, which shall be submitted within 15 calendar days or earlier from the Notice of Award or Notice to Proceed. All resubmittals are due within 10 calendar days. **A \$500/day fine will be charged for every business day submittals and resubmittals are late.**

- b. When all corrections, resubmissions and approvals are sent back to the submitting Contractor, he or she shall make distribution copies (six copies) for Engineers, Architect, CM and all trades. This Contractor shall submit five copies going in and shall make seven copies of the returned documents for distribution. If submission was revise and re-submit the above process shall be repeated. If approved as noted, this Contractor shall correct and resubmit to the CM six record and distribution copies. All cost associated with printing and distribution shall be included in the submitting Contractor's bid proposal. All submittal quantities should be as described above minimum and shall be larger quantities if larger quantities are indicated in the project manual or other locations in the contract documents.
- c. All paper document and shop drawing submittals shall also be issued in digital PDF format as directed by the Construction Manager. Electronic files shall be uploaded to the construction management software or an FTP site as directed by the Construction Manager.
- d. Requests for Substitutions or Equals must be requested in writing and approved prior to the time of bid or they will not be accepted unless the product is not available. All requests for substitutions and equals shall follow the directions provided in the Project Manual using the form provided for requests before and after bid. No substitutions or equals that are not approved through this process are allowed. The Construction Manager, Architect, and Owner may approve or rejected substitution and or equal requests at its discretion.

- e. All Submittals including shop drawings must be organized by building, floor, and phase as directed by the Construction Manager. All submittals shall reference the applicable specification section and specific sub-sections and items, be neatly organized with a table of contents, contain page numbers and the number of pages for each section in the table of contents, and be complete. A single and complete submittal shall be issued for each specification section.

76) Record Drawings: This Contractor shall furnish and continuously record the progress of their work on a record set of drawings to be maintained at the jobsite. The Architect, Engineer, and the **Construction Manager** will review these documents on a monthly basis in conjunction with the monthly payment application review and shall be a condition of approval of each progress payment. NOTE: A preliminary copy of the “As-Built” drawings and O&M manuals to be submitted for review ninety days prior to substantial completion.

77) Schedule of Values: Within seven working days of award, submit a detailed schedule of values to the **Construction Manager** for review and approval in accordance with the General Conditions. This schedule of values shall be broken down with individual line items for labor and material for each component of the work, including but not limited to values for project manager, Superintendent, bonds, insurance, submittals, schedule, mobilization, demobilization, daily cleaning, final cleaning, safety, protection, Start-up, testing, commission, training, Operation and Maintenance Manuals, As-builts, punch list, attic stock, warranties and guarantees, very detailed general conditions, etc., that are included in the contract value. All Contractors must show evidence to verify bonds, insurance and any other line item in the schedule of values is a requirement. All items in the schedule of values must also be broken out by building wing, floor, and site.

78) Proposed Subcontractors and Vendors (any tier): Within seven working days of award, submit a detailed list of proposed Contractors, vendors and suppliers to the **Construction Manager**. The Bid Proposal Form requires this bidder to list and name their Subcontractors, address and trade.

79) Small Tools: All Trade Contractors submitting time and material change orders should note that all cost for small tools are included in the overhead and profit. Small tool allowance is not to be added as a separate percentage. Any specific equipment rented for time and material work can only be billed based on actual invoices for the rental of the equipment.

80) Quality Control and Quality Assurance: This Contractor understands that Quality Control and Quality Assurance is a specific commitment and attitude, which is required during the implementation of the work. The focus required to establish a quality level, by developing in place mock-ups, by providing skilled supervision and by monitoring daily production quality are all expected to be carried out during the execution of this contract. Extensive mock-ups will be utilized as required by the Architect to establish the level of quality prior to the start of finish work.

81) Commissioning: Each Contractor shall be responsible to provide all costs associated with testing, documentation, and assisting the Commissioning Agent during the Commissioning Phase of the Project as required by the Contract Documents and to the extent applicable to the Scope of Work.

82) Beyond Normal Working Hours: Each Contractor shall be responsible to pay directly to any other bid package contractors and **Construction Manager** costs that occur because Subcontractor works outside of the normal working hours.

83) Contract Closeout: The Following close-out procedures shall be adhered to as follows:

- f. The Schedule of Values on the Contractor's application for payment shall include line items and values for all close-out documents and activities, such as Start-up, testing, commission, training, O&M manuals, As-builts, punch list, attic stock, etc.
- g. Operation and Maintenance Manuals are due 90 calendar days prior to the scheduled substantial completion of each phase of the Project.

- h. Warranties and Guarantees are due 90 calendar days prior to the scheduled substantial completion of each phase of the Project.
- i. A schedule of all Equipment requiring commissioning and Owner Training shall be submitted 60 calendar days following contract award.
- j. As-built drawings, attic stock, and special tools shall be submitted prior to the scheduled substantial completion of each phase of the Project.
- k. All Punch-List work must be completed per the **Construction Managers** and/or the Architect/Engineers' punch list completion schedule (and prior to turnover to the Owner/user).
- l. Each Trade Contractor shall remedy all punch list items within 15 calendar days of issuance of the list. If a Trade Contractor is unable to remedy any item due to occupancy by the Owner, then those items will be remedied during the first vacation period subsequent to the occupancy. If the punch list items are not remedied in accordance with the above provisions, the **Construction Manager** will have the items remedied at the expense of the Trade Contractor.
- m. Failure to comply with the above requirements will result in a \$2,000.00 deduct change order per item and will result in delays in progress and final payment(s) in addition to any liquidated damages.

84) Accessories: This Contractor shall provide and include all necessary attachments including but not limited to clips, accessory materials, trim pieces, transition pieces, angles, reinforcement, shims, misc. metal shapes, fasteners, anchors or anything that is industry standard to this work as required, whether or not shown on Contract Documents, to properly erect and install this Work.

85) Field Measurements: Each respective Contractor and Subcontractors (at every tier) shall take all necessary field measurements prior to fabrication and installation of work and shall assume complete responsibility for accuracy of same.

86) Time and Material: All Time and Material tickets for extra work will indicate the name of each individual performing the work and his pay-rate, foreman, journeyman, apprentice. Certified payroll reports must support the time and material tickets. Extra work tickets must be signed by Fusco on the day the work was completed. For any

work that a contractor disputes as being part of his contract and is directed to perform, the **Construction Manager** shall sign daily tickets for work verification of the disputed work only. No consideration will be given or change order issued for any claim of extra work that is not brought to the attention of the **Construction Manager** before the time the alleged extra work is performed.

87) Above-Ceiling Corrective Work: Each Contractor shall include and be responsible for all reopening or closing of ceilings in connection with any tie-in, corrective, or adjustment work above existing and completed ceilings.

88) Start-up Costs: Each Contractor shall include and be responsible for any costs related to allow startup of equipments. This includes fuel, water, etc, to allow startup and running/filling/draining flushing of systems as many times as needed or until the systems is accepted by the Engineers/Owner.

89) Man Lifts: Each Contractor shall allow use of man lifts by the **Construction Manager** or other for inspection purposes and or as directed by the **Construction Manager**. Provide training and any necessary safety equipment.

90) Beneficial Occupancy: The Owner reserves the right to occupy any portion of the building and/or site which is ready for occupancy as mutually agreed to by Owner, Architect and **Construction Manager** prior to the completion and acceptance of the Project. It shall be mutually understood and agreed that such occupancy does not relieve any Contractor from completing the work within the time period specified. Further, such occupancy alone shall not determine when substantial completion and performance has been reached. Prior to such occupancy, however, the Architect and the **Construction Manager** will inspect the portions of the building to be occupied and will prepare a complete punch list or omissions of materials, faulty workmanship or any items to be repaired or replaced. The Owner will assume responsibility for damage to any items not on this punch list when such damage is due to greater than normal wear and tear, but does not assume responsibility for improper or defective workmanship or materials.

91) Separate Contracts: All Trade Contractors shall cooperate with the Contractors for

any separate Contracts that the Owner and **Construction Manager** may award.

92) Notations to “Construction Manager” and/or “General Contractor”: Any notations to the term “General Contractor” shall be interpreted strictly, in the sole discretion of the **Construction Manager**, to be provided by the Bid Package Subcontractor for which that Contract Drawing, that Detail, that Specification, that Scope of Work, that Item of Work or that Contract Document is hereby assigned.

93) Allowances within Trade Contractor’s Scope of Work: If a Prime Trade Contractor for a given Bid Package elects **not** to use his/her own forces to perform the scope of work that is identified within an Allowance but rather decides to sub contract that work, they must provide the **Construction Manager** with three (3) formal written quotations. The only exceptions are: utility company usage charges, pre-established utility company connection fees, and where a proprietary product or manufacturer is specified. The Prime Trade Contractor must provide the **Construction Manager** a detailed cost breakdown for work that they do intend to perform utilizing their own forces for work identified within the Allowances unless it is agreed in advance that the work will be executed on a time and material basis.

94) Non-Compensable Overhead: Contractors will not be compensated for any home office overhead in excess of that provided in Subcontract Agreement part 6(f).

95) Pricing of Additional MEP Work

Notwithstanding Change Order requirements of the Contract Documents, pricing of additional MEP Work shall be computed based upon the following:

i. Electrical: All additional work requests for change orders that are submitted by the **Electrical Trade Contractor** must be calculated on the basis of the latest version of NECA Category 1 costs further reduced by 25%.

ii. Plumbing/Mechanical: All additional work requests for change order that are submitted by the **Plumbing and HVAC Contractor** must be cal-

culated on the basis of the latest version of SMACNA.

96) Video For Training, Maintenance & Operation - For equipment which requires training, maintenance and/or operation by operational personnel, provide a professionally developed video DVD with audio for the use of maintenance training for the facility as indicated in the specifications. Each video will be accompanied by a written index which can be utilized to find any specific item of information by time or place on the video. The recordings shall include the equipment being maintained by qualified personnel, the required maintenance tools, and a step by step technique, both verbally and visually demonstrating how to maintain each piece of equipment in a hands on application. Provide 5 copies of the video to the Construction Manager.

97) Subcontract Administration: Submit all documents listed below to the Construction Manager within 10 calendar days of Notice of Award. Construction Manager may choose to subcontract with a different bidder if the documents listed below are not provided within 10 calendar days of Notice of Award.

1. Executed Subcontract Agreement – 2 wet-signed hard copies
2. Certificates Of Insurance
3. Payment & Performance Bonds
4. Proposed Submittal Schedule
5. Proposed Schedule Of Values

98) Rules of Interpretation

- i. In the event of discrepancies among the Contract Documents, interpretations will be based on the following priorities. In the event that the requirements of this document conflicts with any other contract documents, bidder will be bound by the more stringent of the requirements.
 1. Subcontract Agreement.
 2. Scope of Work
 3. Supplemental Scope of Work
 4. Drawings and Technical Specifications.
- ii. Any work called for in the Drawings and not mentioned in the Specifications, or vice versa, shall be performed as though fully set forth in both.

Bid Form "A"
Proposal Form

**ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR**

Bid Package No. _____

Bid Submitted by:

Company Name

Street Address

City, State & Zip Code

Contact

(_____) . (_____) (_____) . (_____)
Telephone No *Fax No.*

The undersigned, having familiarized themselves with the existing conditions of the project area affecting the cost of the work, and with the Contract Documents (which includes Invitation to Bid, Bid Form, Bid Bond, Instructions to Bidders, Non-Collusion Affidavit, Addenda, General Conditions, Project Conditions, Technical Specifications, Drawings as listed in the Schedule of Drawings, and form of Surety Bond) hereby proposes to furnish all machinery, tools, appurtenances, equipment, and services, including utility and transportation services required to construct and complete the work, all in accordance with the above listed Documents, and submits herewith in conformity with the project manual and subsequent addenda, the following bid:

The total amount of the Bid as computed by the undersigned Bidder is (in words):

Dollars and Cents

(and figures) \$ _____

The Fusco Corporation reserves the right to make the award on the basis of the above Base Bid.

In submitting this Bid, the Bidder understands that the Fusco Corporation reserves the right to reject any and all bids, or to waive any informality in submitted bid documents. The Bidder also understands that the Fusco Corporation reserves the right to accept any, all, or none of the Alternates, which may be listed above, and may accept Alternates in any order at Fusco Corporation's sole discretion subject to a thorough review of the stated value and approval of such value by the Owner. The Bidder agrees to perform the work of each accepted Alternate for the sum quoted above for each, and to include such accepted Alternates in the Contract for Construction.

If written notice of the acceptance of this Bid and any or all of the Alternates is mailed, telegraphed, or otherwise delivered to the undersigned within ninety (90) days after the opening of the Bid, or at any time thereafter before the Bid is withdrawn, the undersigned prescribed form, and to furnish the required bonds within ten (10) days after the Contract is presented to them for signature.

Bid Bond:

The undersigned herewith submits security equal to ten percent (10%) of the Base Bid, the sum of: _____ dollars and no cents

\$ _____

This security shall be the sole and exclusive property of the Fusco Corporation as liquidated damages to the Owner, if the undersigned fails to execute a Contract in conformity with the accompanying forms, after due date notification therefore in the Contract Documents.

Bidders shall furnish with their bids (in triplicate) the following: - ADD. NO. 2

1. Document 000950: Bid Forms A through F
2. Document 000310: Bid Bond and Form of Surety
3. Document 000315: Form of Surety Guarantee
4. Document 000320: Non-Collusion Affidavit of Prime Bidder
5. Document 000350-2: Contractor's Minority Business Enterprises - CHRO
6. Document 000350-3: Notification to Bidders – CHRO
7. Document 000360: Certification of Bidder Regarding Equal Employment Opportunity
8. Document 000370: Certificate as to Corporate Principal
9. Document 000412A: Department of Administrative Services (DAS) "Contractor Prequalification Certificate and **Update Statement**
10. Document 000412B: Statement of Bidders Qualifications
11. Document 000847: Contractors Wage Certification Form
12. S/M/W/DisBE Certificate from the State of Connecticut for Set-Aside Bid Packages.

Addenda:

The Bidder hereby acknowledges receipt of the following Addenda:

Addendum Number	Date received	Signature

Bidder's Official Name and Address:

Company Name

Street Address

City, State & Zip Code

Contact Name:

Signature

Title

Date

Bid Form "B" Labor Rates

ELI WHITNEY CONNECTICUT TECHNICAL HIGH SCHOOL Hamden, Connecticut Project No. BI-RT-837-CMR

Labor Rates

The following Labor Rates shall apply when Changes in your Scope Work are requested by the Owner/Construction Manager per the General Conditions of the Contract for Construction, where Unit Prices are not applicable and a Lump Sum Cost proposal cannot be agreed upon. The labor rate shall only include those categories as listed below plus the allowable percentage for Overhead and Profit (10%). Trade-related equipment, hand tools and power tools, normally supplied with the labor, shall not be included in the Labor Rate. The 10% Overhead and Profit is defined as all other incidental costs, Main Office Expenses, Main/Field Office Staffing, Project Management, Supervision, Insurances, Travel Expenses, etc.

Item	Other	Laborer	Oper. Engineer	Carp.	Mason	Iron Worker	Plumb.	Elect.
Base Rate								
Benefits								
F.I.C.A.								
St. Umemp.								
Fed. Umemp.								
Gen. Liab.								
Wrkrs.Comp.								
Subtotal								
10% OH&P								

Bid Form “C”
Alternates

ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR

All Bidders shall include within his or her Bid any additional costs associated with the Alternates as listed below and in the Specifications. Should an Alternate not apply to your Scope of Work, indicate so on the Bid Form provided. The Alternate Bid prices shall be listed on Bid Form “C” and shall include all necessary labor, materials; equipment, installation; cost for delivery; machinery; insurance; applicable taxes; supervision, overhead; and profit. Should an Alternate be accepted, the cost or credit as noted on the above form shall be added or deducted from the Contract Value via Change Order. –

Bid Form “D”
Allowances

ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR

All Bidders shall include within the bid price the applicable Bid Allowances listed below. Should an Allowance not apply to your Scope of Work, indicate so on the Bid Form provided.

Allowances shall appear as a line item on the Contractor’s Schedule of Values. The allowance amount covers the cost of the Contractor's labor/material/equipment delivered to the project plus all taxes less any trade discounts to which the contractor may be entitled with respect to the item of work. The Contractor's costs for supervision, overhead, profit and other administrative expenses with respect to the allowance item are included in the base contract amount - not in the allowance amount.

All increases to an Allowance shall be by Change Order. Any unused portion of an allowance shall be returned to the Owner by deduct Change Order.

SEE SPECIFICATIONS AND SCOPES OF WORK FOR ALLOWANCES

Bid Form “E”
 Proposed Subcontractor Listing

ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR

This form shall be filled out by each bidder in accordance with amended Paragraph 5.2.1 through 5.2.4 of AIA Document A201 General Conditions 1997 Edition and as required by Article 21 of the Instructions to Bidders. Attach additional sheets if necessary.

Subcontractor Name And Address	Trade	Contract Amount	Certificate Type <i>(SBE, MBE, WBE)</i>	CHRO SetAside	
				<i>SBE (30%)</i>	<i>M/WBE (6.25%)</i>

Bid Form “F” Unit Prices

ELI WHITNEY CONNECTICUT TECHNICAL HIGH SCHOOL Hamden, Connecticut Project No. BI-RT-837-CMR

The Contractor shall include within his or her Bid the Unit Prices as listed in the Specifications. Should a Unit Price not apply to your Scope of Work, indicate so on the Bid Form provided.

The undersigned further proposes and agrees that should the amount of work required be increased or decreased, as directed by the Architect/CM, the following supplemental Unit Prices will be the basic price in place for computing extra cost. The stated costs are to be for “Additions” or “Deletions” of work to the Trade Contractor’s Contract. All Unit Prices shall include all cost of work to the representative contractor, including all charges for materials, labor, plant, equipment, overhead, profit, additional insurance, taxes and all charges of whatever kind.

Acceptance of a unit price amount, if any, is subject to review by the Architect and Construction Manager and final approval of the Owner.

Any and all adjustments to the Contract shall be made via Change Order. No adjustments for Overhead; Profit; Supervision and the like will be allowed.

	<u>DESCRIPTION</u>	UNIT PRICES
	<u>SITEWORK (BP#31.01)</u>	
1.	Petroleum contaminated soil removal, legal disposal & backfill with on site clean material	\$ _____ TN
	<u>MASONRY (BP#4.01)</u>	
2	Additional masonry re-pointing (minimum area of 100 sf).	\$ _____ SF
	<u>FLOORING (BP#9.02)</u>	
3.	<u>Surface Applied Moisture Barrier</u> – Provide a unit price for a suitable surface applied moisture barrier compatible with each flooring system for use if actual flooring conditions exceed manufacturers’ requirements.	\$ _____ SF



PRE-BID CONFERENCE & SITE WALK SIGN IN SHEET

STATE OF CONNECTICUT

ADDITIONS AND RENOVATIONS TO

ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL

PROJECT NO. BI-RT-837-CMR

JULY 12TH 2012

	Company Name	Contact Name	Phone	Email	Bid Packages
1	WILLOW PAINT	ROBY FEDEGATO	203 865-8000	—	PAINTING
2	Sweet's Moving	Debrack Butler	860 259 0230	DButler@Sweet'sMoving.com	Moving
3	BRIAN DUBE	UNITED STEEL INC	860 610 4095	B.DUBE@UNITEDSTEEL.COM	STEEL
4	MICHAEL DAY	ELI NY DESIGN	718-948-9002	MICHAEL@ELI.COM	MILLWORK
5	M J DALY	PATRICK JASUNAS	203 228 8968	PJASUNAS@MJDALY.COM	FIRE PROTECTION PLUMBING HVAC
6	MAKRI ROOFING	DAVID GORDON	803-235-9830	DAVID@MAKRI-ROOFING.COM	ROOFING
7	Allen Construction	JEFF PICTAGGLO	203-455-4599	Allen Construction, LLC	hotmail.com
8	Pal Fenwick Co	JAY HOHAY	203-375-9780	JAY@PALFENWICK.COM	COMPANY.COM FEASE
9	Tim Roberto				
10	BG Mechanical	Tim Roberto	413 297 5015	TRoberto@BG-Mechanical.com	HVAC/Plum
11	VASE Construction	Vincencia Adusei	103-520-1544	VASEConstruction.com	BASE CONSTRUCTION.COM
12	ATLS	Joe Villano	403-932-8792	JAV@ATLS.COM	ATLS.COM
13					
14					

	Company Name	Contact Name	Phone	Email	Bid Packages
15	William B Meyer	Mike Pirkwicz	203-526-9015	mpirkwicz@williambmeyer.com	Moving
16	National Security Group	Kent Ziegler	860-580-9674	kent.ziegler@nsg.kentconest.net	Security 1.05
17	Attemped Co	Steve Schlichter	860-632-2227	steves@attemped.com	Roofing
18	Johns Manville	Jeff Hunt	413-478-6876	jeff.hunt@jmanv.com	Roofing
19	DAVID E. KING				
20	STC BUILDING	DAVID E. KING	203-923-6893	DAVID@STCBUILDING.COM	05-09
21	ENFIELD BUILDERS	RICH WATSH	860-627-6870	rwatsh@enfieldbuilders.com	G. TRADES
22	FERGUSON MBR	FRANK GRANITZ	860-517-3227	frank@fergusonmb.com	INACT PL 22 P13
23	FERGUSON ELECTRIC	ED DEGUAS	860-517-3221	ed@ferguson-e.com	ELECTRICAL #26
24	Paragon Construction	Tim McDowell	203-624-0009	paragon@jamesjordan.com	Gen/eq Trades
25	Peter McLann	DCS	860-713-5642	vincent@ldmech.com	MECHANICAL
26	VINCENY DIMELCA	LTD INSULATION	860-245-5093	peter@ldmech.com	MECHANICAL
27	PETER DIMELCA	LTD INSULATION	860-245-5093	vincent@ldmech.com	MECHANICAL
28	Jarlen Niedreich	Stanhard	516-406-1100	wimiedrich@stanhard.com	Flooring - Pls
29	BARRETT KUMBE				
30	BARRETT KUMBE	BILL MURPHY	860-242-5200	bill@barrett-k.com	Floors
31	Gems Carpentry	Magda Ferrer	203-235-4867	magda@ferre.com	06 + ?
32	Gems Carpentry LLC	Gerald F Buttner	203-238-4367	gerald@ferre.com	06-08-10-12
33	Dedicated Industries	Zach Esterson	203-777-2244	zach@dedicated.com	Scarfolding Shoring Trash chutes, enclosures
34	Running Brook	Scott KaposHA	860-391-5449	scott@kposha.com	PAHO.COM
35	AMPE	Ted Schmidt	203-773-9024	ted@ampe.com	Ceramic Tiles
36	UASC	UTE	203-520-1640		
37	CathElectric	John Economich	203-751-3231	john@cathelectric.com	Electric

38. ORISSA, LLC. TEGAL VALLAM 860-983-6999 tvaliam@gmail.com Final Cleaning

	Company Name	Contact Name	Phone	Email	Bid Packages
38	THP	Rich Jagoe	203-372-3683	richjagoe@thp-gc.com	General
39	THP	Mark Reale	203 372 3583	MReale@THP-GC.com	GT
40	Sqn Peo	Scott Ahern	860-229-1812	SCOTT@sqnpeo-usa.com	GT
41	SilkTown Roofing	Steve Pumphrey	203-735-0552	Steve@SilkTownRoofing.com	7
42	Quality Improvements LLC	Sared Palmer	866 713-2824	sared@roofwithquality.com	7 - roofing
43	AT R ELECTRIC, INC.	Americo Golic	203-368-3912	argolic@ar3led.com	26.1
44	AT R ELECTRIC, INC.	Allan Peck	203-368-3912	11	26.1
45	Semac Electric	Chris Scanlon	860 209 0800 317	CScanlon@semacelectric.com	26.1
46	BANTON CONSTRUCTION	PATRICK REARDON	203-234-2353	PREARDON@BANTONCONSTRUCTION.COM	26.1
47	ALEX'S EXCAVATION	AN LEWELYN	203-997-3247	alan.llewellyn@alexexcavation.com	1.01
48	Elevator Service Co, Inc	Robert Goodwin	203-757-5000	robert.goodwin@delmar-servicaco.com	14
49	P.J.'S Constr. Co. Inc	PABLO L. JIMENEZ	203-782-0722	pj@pjsconstruct.com	
50	Central Ct Accounts	Gerry St-Hilaire	203-269-1421	gsthilaire@centralconaccounting.com	GT
51	DUAL ELECTRIC CONSTRUCTION	TOM MARTIN	860-489-9267	tmartin@dualelectric.com	26.1
52	SKANSKA	Kevin Kane	✓	✓	
53	Scaffway Scaffold	John Farron	203-507-3638	John.Farron@scaffway.com	Scaffold
54	Dani Mahoney	CONTRACTOR		dmahoney@contractor.com	
55					
56					
57					
58					
59					
60					

	Company Name	Contact Name	Phone	Email	Bid Packages
61	ALLIED RESTORATION CON	GOPIE GEBHART	861 209 82633	GOPIE@ALLIEDRESTORATION.COM	ROOFING
62	I D & C	T. STEWART	203 909 6559	TSTEWART@IPANDNET	MASONRY
63	A. Secondis & Son	Matt Keough	203-481-3476	MKeough@asecondisandson.com	General Trade work
64	Greenwood Ind.	SCOT ROBERT	508-865-4040	SROBERT@GREENWOOD-INDUSTRIES.COM	Roofing
65	Joe Grossi Mason	Cam D'Amico	600-658-4111	cd@joegrossimason.com	Masonry
66	Bestech	Bob Sullivan	860-896-1000	Bsullivan@BestechT.com	Aluminum/Door
67	KITTY MAMA	NER	860-601-1413	KMAMA@KITTYMAMA.COM	MASONRY
68	Enterprise P+H	Anthony Mesucci	203-787-4311	anthonym@epth.com	Mech / P/SLB
69	Shepard Steel	Maria Stango	860-692-7040	mstango@shepardsteel.com	Struc. Steel
70	Constal Insulation	Scott McKean	860-998-0131	smckean@constalinsulation.com	Insulation
71	STANDARO DEMO SVCS	STAN SHEPPARD	203-380-8800	SSHEPPARD@STANDARODEMO.COM	Demolition
72	Subtract - Char	Alyin Bingham	860-541-4709	alyin.bingham@subtract.com	Painting
73	Valspar	Tony Kubbiz	(203) 332-7502	CRSLTD@VALSPAR.COM	Sheetmetal
74	Antinuzzi Assoc.	DAVID FERRELLI	860-377-1300		
75	Antinuzzi Assoc.	JOEL SMITH	(203) 377-1300		
76	Cleaning Service CT	Nikita Alexofsky	203 685 8585	esct@optonline.net	Final Cleanup
77	Horizon Services	Dave Hynd	860-291-9111	DHYND@HORIZONVCS.COM	Final Cleanup
78	***End of List***				
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PRE-BID CONFERENCE & SITE WALK SIGN IN SHEET

STATE OF CONNECTICUT
 ADDITIONS AND RENOVATIONS TO
 ELI WHITNEY, CONNECTICUT TECHNICAL HIGH SCHOOL
 PROJECT NO. BI-RT-837-CMR
 JULY 13TH 2012

	Company Name	Contact Name	Phone	Email	Bid Packages
1	HHS Mech	Debbie	860-643-3939	debbie@hhs-mech.com	21.01 + 23.01
2	American Vets Abatement Experts	Cesar S.	860-944 6596	Cesar@american-vets.com	Abatement 31.01
3	Crawford Door	Lenore Esposito	203-378-4805	Crawforddoorct@aol.com	08300
4	Connecticut Tank Removal	Stephen Saslafs	203-384-6020	SSASIAFSKY@ATTANK.COM	
5	Laydon Industries	Ed Hellauer	203 562 7283	ehellauer@laydonindustries.com	site prep sitework WBE
6	Querrera Construction	Deb Solomon	203-888-5069	dobs@querreraconstruction.com	Site
7	Barrett Inc.	Kurt Kaschora	203-744-2780	Mhindak@barrettroofing.com	roofing, sheet metal, metal panels
8	Colossale Construction	Peter Griswold	860-223-3179	Pgriswold@snet.net	Site Prep sitework
9	J. Ispaluccio Inc	Douglas Burdick	203-775-1437	doug@jispaluccio.com	31.01
10	Standard Demolition Services	Strati Patrakis	203-3808300	S.Patrakis@DemolitionServices.com	Dem. sitework
11	B+W Paving and Landscaping	Brian Hedden	860 572 9942	brian@bandw-paving.com	Site landscaping
12	Advance Resources	Brian Hedden	860 967 3862	brian@bandw-paving.com	
13	Nagy Bros Const Co Inc	Norman Nagy	267-268 0454	NAGBROCAD.COM	Site
14	ALLEN'S EXCAVATION	ALAN LLEWELYN	203-997-3247	alan.llewelyn@allensexavation.com	1.01; 31.01-09
15	MANAFORT BROTHERS	SAM ABEL	860-229-4853	Sabel@manafort.com	31.01

	Company Name	Contact Name	Phone	Email	Bid Packages
16	GREENWOOD INDUSTRIES	Dan Maniugh	508-723-4553	dmanugh@greenwood-industries.com	701
17	P&C FENCE CO.	JAY HOH17	203-375-9780	JAY@PANDCFENCECOMPANY.COM	FENCING
18	Bestech, Inc	Bob Sullivan	860-896-1000	bsullivan@bestechct.com	201 DTA
19	JR Vinagra Demo	JEFF BUCKLEY	978-697-6991	jeffbuck@comcast.net	Demol & Abatement
20	SMI	Bill Finn	781-769-9310	bfinn@smi-environmental.com	2-01
21	Atlantic Design	Deborah	203-223-5731	JJoy@atlanticdesign.com	Design
22	Running Brook Farms	Jackie Danc	860-663-5521 x303		site, Landscaping
23	*** End of List ***				
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July 24th, 2012

ELI WHITNEY
CONNECTICUT TECHNICAL HIGH SCHOOL
Hamden, Connecticut
Project No. BI-RT-837-CMR

Responses to Pre-Bid RFI's #11 - #80

Q11: Bid Package #9.03 Part #2 Description of Work call for acoustical wall panel system. This material is in spec section 098413. This section is listed in the General Trades Bid Package #6.01. Which bid package is responsible for this?

A11: Acoustical Wall Panels per Spec. Section 098413 is by Bid Package 6.01 General Trades.

Q12a: Scope item No. 2 under "Clarifications" of the roofing scope references "Roof Demolition Notes" 21 instructing the roofing contractor to remove the existing Gypsum roof deck. Is this correct? This normally would be performed by the demolition contractor.

A12a: Demolition Note 21 is correct.

Q12b: The phasing plans or schedule doesn't mention any of the roofing phases, can this be clarified to show roofing phases?

A12b: See Document 000925 Project Schedule and Document 000926 Phase Plan.

Q13: Is there an on-site facility to store the re-usable foodservice equipment listed in D-112? How long of a period are these items to be stored?

A13: See Bid Package 11.01 Clarification A2 and Document 000925 Project Schedule and Document 000926 Phasing Plan.

Q14a: Are we to assume the roofers are to carry all expansion joints on the roofs? Many roofing suppliers will not warrantee the roof if the roofer does not install the expansion joints in their systems.

A14b: See Bid Package 7.01 Item 12. The roofing subcontractor is responsible for providing and installing all expansion joints on the roof.

Q15: Please confirm that all sub-girts and supports for the metal panels by the metal panel contractor.

A8: BP # 8.01 Windows, Glazing, and Storefronts provides the metal panels. In the metal panel portion of this package, the subcontractor does need to provide sub girts and supports. This is said in Part 3, C3.1, of Spec. Section 07 42 13. Specifically, it says that the metal panel portion of the job includes installing, “subgirts... and other miscellaneous wall panel support members and anchorages...”

Q16: The phasing schedule shows two temporary classrooms being constructed in the existing D building (p16 of phasing schedule). Who owns this work? Are there more details showing this construction?

A16: Temporary Construction of the two temporary classrooms to be performed on a Time & Material Basis by the various trades. Note that the Demolition of the temporary classrooms is included in the base bid of Bid Package No. 2 Scope of Work per Item 6v and Clarification 55.

Q17: Who owns the wood framed structure in Room B114 and as shown on A514?

A17: See Bid Package 6.01 – General Trades Clarification 61.

Q14: In some wall sections, the metal studs are called out to be by the panel contractor. Are we to assume to provide the metal stud everywhere behind the panel system?

A14: The General Trades Subcontractor, BP #6.01, is responsible to “furnish and install all metal stud framing work in the structural drawings and throughout the rest of the drawings.” For example, the General Trades Subcontractor needs to “furnish and install the exterior wall framing & sheathing systems including metal studs”. Please refer to Item 4 in **000930.6.01- 15**, and Paragraph 7 of Subsection 9 in the Scope of Work for BP# 6.01 to see these instructions.

Q15: Who owns roof removal/abatement where buildings are being demolished?

A15: See Bid Package No. 2.01 Demolition & Abatement Clarification 25.

Q16: Is it the intent for the roofer to remove the existing parapet framing?

A16: See Bid Package No. 7.01 Roofing Clarification 2. Note 5 under Roof Demolition Notes on Sheet A-110.0 dictates that the roofer is responsible to “remove the existing expansion joint cover, framing, and associated construction”.

Q17: Please confirm that all lead paint abatement and disposal will not be a part of the structural steel scope of work in lieu of Scope of Work item #28.

A17: See Bid Package No. 5.01 Clarification #28.

Q18: Bid Form “A” and Exhibit “F” list documents to be submitted with the bid. There are additional contract documents that say, “(To be included with bid)” i.e. Sec. 00330 Notification to bidders, 00340 Contract Compliance Form, 00350 Contractor’s Minority Enterprise Utilization Forms, etc... Are these documents to be submitted also? Please clarify.

A18: See Document 000950 Bid Forms A, B, C, D, E & F included with this Addendum No. 2.

Q19: Who owns the metal reveal in the Dining C151 wood ceilings?

A19: See Bid Package 9.03 Clarification 3.

Q20: Please confirm who provides the 4" steel channel and hanger rods at the media center ceiling.

A20: See Bid Package No. 9.03 Clarification 4.

Q21: Is there a prevailing wage rate required for security guards in this project?

A21: No, security guards/watchmen are not covered under the prevailing wage law.

Q22: BP #5.01 Structural Steel, Line 17 (shoring). Do we have to supply shoring in all our interior work or does demolition crews?

A22: See Bid Package No. 5.01 Item 17. See Bid Package No. 2.01 Item 7.

Q23: Are welding hoods to be fabricated by sheet metal contractor?

A23: See Bid Package No. 23.01 Clarification 41.

Q24: The structural steel scope of work lists items that are normally listed under the misc. metals scope. Please confirm that these items are structural steel for this project.

A24: Confirmed. See Bid Package No. 5.01.

Q25: Scope Clarification a. 15-16 describes Tectum and formed in place Gypsum roof decks. The plan (A110) shows all existing Tectum and Gypsum deck to remain per Note 14. There is also a Note on A110 to include 15% of replacement. Are we to figure an additional 15% Gypsum and Tectum replacement or a total of 15% replacement including the areas identified?

A25: See Bid Package No. 6.01 Clarification 15-16.

Q26: Bid Package No. 10.03 - Section 2 of the Scope of Work states to furnish & install all the low voltage wiring. The low voltage conduits, boxes & wiring are normally done by the electrical package.

a. Is the operable wall supplier to supply the voltage and to what extent? Please note this also pertains to infra-red detector system.

A26: See Bid Package No. 10.03 Item 2.a.1.

Q27: Who is responsible to furnish all light pole bases in this project?

A33: See Bid Package No. 31.01 Item 19 & 23b.

Q28: Can Stored Materials be approved if all conditions noted in Off-site Storage Authorization Procedures & Form are met?

A28: See Supplemental Scope of Work Item 8.

Q29: For BP #1.03, will the movers be involved with moving any other class rooms as listed during the duration of the move-project period?

A29: See Bid Package No. 1.03.

Q30: Will short-term storage be required for any equipment on-site?

A30: See Bid Package No. 1.03.

Q31: Are there any classrooms or tech rooms that need to move to other schools during the construction period?

A31: See Bid Package No. 1.03.

Q32: BP #1.03 specifies 1 item in auto shop, 1 item in carpentry, and multiple items in manufacturing and graphics that are to be stored and reinstalled. a) Who own handles the disconnection and reconnection of utilities? b) Will there also be any tooling, small fixtures, or supplies that need to be moved in addition?

A32a: See Bid Package No. 26.01 Clarification 48.

A32b: See Bid Package No. 1.03.

Q33: In 1/A-501, with regards to BP #4.01, who is responsible to furnish and install the tile veneer per detail 1/A501 and 4/A302?

A33: See Bid Package No. 6.01 Clarification 60.

Q34: For BP #4.01, a) who will be responsible for access to existing dividing facades? b) Will multi-trade scaffold be required of the mason?

A34a: See Bid Package No. 4.01 Item 8.

A34b: See Bid Package No. 4.01 Item 8.

Q35: For BP #8.01, Item 2 of the Scope of Work states greenhouse structure in the Description of Work. We don't see a spec. for this. Is it in BP #8.01?

A35: No Greenhouse Structure. See Bid Package No. 8.01.

Q36: We do not see a Roof Plan or Roof Insulation Plan for the D3 Wing.

A36: See Contract Documents including Dwgs. A-110.2 & A-110.4.

Q37: In Table 5, Materials to be Abated, IC4 indicates that we are to remove 5971f of caulk, the window frame, sill and one course of CMU below the sill. On drawing PCB-6 note 7 IC4 indicates that we are to remove the caulk, window and four courses of CMU below the sill.

A37: Contractor is required to remove 4 courses of CMU below the sill associated with IC4 per Don LePage at TRC. See Bid Package 2.01 Clarification 71.

Q38a: Please clarify all wood blocking/nailers/ supports/ sheathing/plywood/knee walls & plywood, etc., are included in BP # 6.01, General Trades, with the exception of plywood on decking or over roof insulation.

A38a: See Bid Package 6.01 Item 9. See also Bid Package 7.01 Item 5.

Q38b. Ref. Det. 31 & 32/ 110.7, please clarify who is responsible for batt insulation?

Q38b: See Bid Package 6.01 Clarification 62.

Q38c: Is BP# 6.01 responsible for providing Dumpsters for BP # 7.01? Ref- BP # 6.01, Clarifications, Item # 55.

A38c: See Bid Package 6.01 Clarification 55. See Bid Package 7.01 Clarification 10. See Supplemental Scope of Work Item 73.

Q39: Please clarify what Cosmetology Equipment is to be provided per BP-6.02. Page 5 of Scope of Work states to “furnish and install all general related equipments indicated to be contractor furnished and contractor installed for the Cosmetology Program.” It goes on to list items 1 & 2.

A39: See Bid Package 6.02 Clarification 4.

Q40: Under Bid Package No. 2.01 Demolition and Abatement scope of work, will all hazardous materials be removed by this contractor?

A40: See Contract Documents including, but not limited to, Bid Package No. 2.01, Bid Package 7.01 Clarification 8, Bid Package 5.01 Clarification 28.

Q41: During the pre-bid conference, I saw workmen taking down asbestos. Will they be done before the demolition starts?

A41: Scheduled to be completed before the start of the school session.

Q42: Who owns the lintels above the windows in Detail 9/S401?

A42: See Bid Package 5.01 Clarification 2 & 29. See Bid Package 4.01 Item 11 & Clarification 35.

Q43: For BP 23.01, SOW #18 FS Contractor to furnish the gas valve to the plumbing contractor; on drawing P-201 there are 3 EGSOV's. Are they supplying all?

A43: See Bid Package 23.01 Item 18. See Bid Package 11.01 Item 10 & Clarification 7.

Q45: Drawing P-104.2 275 gallon waste oil tank and the 1000 gallon oil int. Who provides these units?

A45: See Bid Package 31.01 Clarification 77.

Q46: In SOW #33 for BP 23.01, there are a grease tank and oil tanks. Are these bulk tanks? There is no mentioning of these on EQ-101.

A46: See Dwg. P-104.2.

Q47a: For BP #5, Clarification Note A2, does the Masonry Subcontractor install any of the lintels? The requirement for Structural Steel Subcontractors to install all lintels is not typical.

A47a: See Bid Package 5.01 Clarification 2 & 29. See Bid Package 4.01 Item 11 & Clarification 35.

Q47b: Will there be a shoring contractor to support the existing structures during remodeling for all the subcontractors? Again, shoring is listed in Note #2 as the Steel Subcontractor's responsibility.

A47b: See Bid Package No. 5.01 Item 17. See Bid Package No. 2.01 Item 7.

Q48: Who is required to remove the paint on the floors prior to the installation of new flooring?

A48: See Bid Package 9.01 Item 5. See Bid Package 9.02 Item 5.

Q49: BP #31.01 Site Work, does Site Work also install conduits and hand holes to athletic fields on drawing ES-01?

A49: See Bid Package 31.01 Clarification a.

Q50: Drawing D101 through D107 has Note #A2 which specifically calls for all safety systems to be reinstalled. The Fusco Scope of Work calls for this (Item 17 through Item 23) to be performed by this BP #2.01. Please confirm if we are to be removing and reinstalling all life safety pads.

A50: See Supplemental Scope of Work Item 6. See Bid Package 23.01 Clarification 30. See Bid Package 26.01 Clarification 3. See Bid Package 21.01 Clarification 6.

Q51: The Scope of Work calls for the MEP Subcontractors to cut, cap & drop their respective trade items. Please confirm that all items cut, capped & dropped in the pipe tunnels are in manageable pieces to ease of removal in this BP #2.01.

A51: See Bid Package 23.01 Item 4.b.i. See Bid Package 26.01 Item 4.b.i. See Bid Package 21.01 Item 4.b.i.

Q52: Page 13 of BP #2.01 – allowances. This line item references specification section 01 21 00 Allowances. However, this is not provided in the spec book. Please provide.

A52: Refer to Specification Section 012000 Contract Considerations – CMR.

Q53: Who is responsible for any temporary weather protection at the exterior walls, where windows, doors, etc. are being removed?

A53: See Bid Package 6.01 Item 27.

Q54: In the Scope of Work for BP #2.01, Item 6.b.1 – snaking and video of underground pipe. This item calls for the Demolition Subcontractor to provide snaking and video of existing underground piping to City Structures. Can a more defined scope be provided, since the existing conditions on Plan C-1 show an extremely large amounts of piping, many in areas not being affected by demolition.

A54: See Bid Package 2.01 Item 6.b.1.

Q55: Who is responsible for filling (w/concrete) the bollards supplied by Bid Package 5.02?

A55: See Bid Package 31.01 Clarification 7.

Q56: In the Scope of Work for BP #5.01, Clarification Note #24 requires all submittals for “E”, “B”, and “C” Wings to be submitted within 20 calendar days of

receiving the notice to proceed. This doesn't appear to be sufficient time to detail a new addition for Area E and new renovations/additions for Areas "B" and "C". Please allow more time.

A56: See Bid Package 5.01 Clarification 24.

Q57: Who is responsible to install temporary rails at the stairs?

A57: See Supplemental Scope of Work Item 30.c.iv.

Q58: On drawing PH-101, General Phasing Note #4 refers to the Phasing Narrative as per Spec. Section 01010. This section doesn't appear in the Table of Contents and is not included in Division 1 documents. Please provide Section 01010.

A58: Specification Section (as referenced) is replaced by Document 000926.

Q59: On drawing S-100, General Note #4 discusses shoring. Please confirm that the Steel Subcontractor is only responsible for minor shoring in the existing building where our work requires us to directly attach to existing structural steel.

A59: See Bid Package 5.01 Item 17.

Q60: Who is responsible to remove the existing balusters at the stair guardrails?

A60: See Bid Package 5.02 Item 5 and Clarification 17.

Q61: For Division 5, Metals, referring to Detail A/A549, please confirm that the steel/ metals package will furnish the 1/2" metal plates and bolts for the General Trades package to install.

A61: See Bid Package 5.01 Clarification 30. See Bid Package 6.01 Clarification 63.

Q62a: Referring to Detail 2/A549, please clarify which bid package is responsible to provide all materials and labor to conceal the six-8" round recessed lights and wiring in the glulam members. In addition, please provide details on how the lights and wiring should be concealed for the glulam manufacturer to design into the glulam's. Will any surface mounted conduit be acceptable?

A62a: See Bid Package 6.01 Clarification 17.

Q62b: General Trades package says all plywood provided by the general trades. Please confirm the millwork package is providing all the cabinet grade plywood for casework and wall paneling.

A62b: See Bid Package 6.01 Item 1 for Specification 061053. See Bid Package 6.02 Item 1 for Specification 123553 & 123400.

Q62c: Considering moving the roof blocking responsibility to the roofing package:

- To maintain the warranty of the entire roofing system, including the wood. Why broach the potential of a failure where 2 parties installed the wood and the roof insulation/membrane separately?
- Roof details are driven by the roof membrane manufacturer, not architectural details on the drawings, which will differ. The roofer knows these manufacturing details, the General Trades does not.

A62c: See Bid Package 6.01 Item 9.

Q63: For Division 9, Finishes: Referring to Drawings A203.3 and A2.4.1, please confirm the 1x6 cedar ceiling is provided by the Acoustic ceiling package.

A63: See Bid Package 6.01 Clarification 64.

Q64: For Division 11, Equipment - Referring to CM Clarification a34 (page 17), we do not find new volleyball floor sleeves, posts, nets, and antenna required in the plans and specs. The drawings only describe new volleyball sleeve covers for the 3 existing volleyball courts. Please clarify scope. If the intent is for the General Trades to provide new volleyball floor sleeves, posts, nets, and antenna, please provide spec and confirm that the intent is, in fact, to install new sleeves in an existing floor, including all associated demolition and floor patching.

A64: See Bid Package 6.01 Clarification a, 34.

Q65: For BP #9.01, under Spec. Section 09 30 13, Item 6 in Subsection 1.2 and Item A in Subsection 2.2 list cementitious backer units as part of the tile work. Please confirm that these are excluded from BP #9.01 and done by the drywall subcontractor.

A65: See Bid Package 6.01 General Trades Item 9.

Q66: For BP #23.01 and #26.01, referring to Section 00412 C – Statement of Bidder’s Qualifications: Page 1: annual construction for the last four years: 2008, 2007, 2006, and 2005. Page 2: list firm’s insurance EMR for the three most recent years: 2008, 2007, and 2006. Present or Past City of Bridgeport Projects?

A66: See Section 000412B – Statement of Bidder’s Qualifications included with Addendum No. 2.

Q67: Please clarify “Architectural Louvers” versus “Mechanical Louvers”.

A67: See Bid Package 6.01 Item 20. See Bid Package 23.01 Item 25.

Q68: For BP #23.01, with reference to Drawing M102.2, is dust collection provided by Division 23?

A68: See Bid Package 23.01 Clarification 14, 58 & Item 1 for inclusion of Specification 23 20 20 Part 2.10 for Dust Collection System (“complete”) to be provided by the Plumbing & HVAC Contractor.

Q69: Is the Site Work Subcontractor responsible for any as-builts other than as-builts for underground sanitary sewer and water piping?

A69: See Site Work Scope of Work BP #31.01 clarification a, 60. Refer to Contract Documents.

Q70: What is the height of the wire mesh partitions?

A70: See Bid Package 6.01 Clarification 65.

Q71: Please verify per Spec. Section 000930.31.01 – 12a (site work bid package) that all site conduits (electrical, can, fiber, telecom, data, and sight lighting) will be provided by the Site Subcontractor. Electrical Drawing ES-101 does not mention that.

A71: See Bid Package 31.01 Item 12a.

Q72: BP #31.01, Item 74 under Clarifications references the Site Work Subcontractor to install all conduits to the “E House”. These are shown on the electrical drawing to be installed by BP #26.01. There is some confusion between Site and Electrical BPs installing site conduits.

Please clarify.

A72: See Bid Package 31.01 Clarification 74. See Bid Package 26.01 Clarification 51.

Q73: In BP #31.01, Subsection 25 in the Scope of Work states that Site Subcontractor to trench for ground loop and lighting protection system. Grounding Spec. Section only states to ground perimeter columns and mentions nothing about ground loop. There is no Spec. for lighting protection or is not shown on electrical drawings. Please clarify.

A73: See Bid Package 31.01 Item 25.

Q74: Under BP #31.01, Clarifications Note #4 states to provide and maintain “site lighting”. Is this correct – do they really furnish?

A74: See Bid Package 31.01 Clarification 4.

Q75: On drawing S-103.1 are the site walls off the loading area by a bid package other than BP 3.01?

A75: See Bid Package 3.01 Scope of Work, Clarification 42.

Q76: In regards to scope item #16 for BP#3.01 Concrete, does the mason drill the dowels for details 16-17/S-221?

A76: See Bid Package 4.01 Items 15. See Bid Package 3.01 Item 16.

Q77: The Structural Steel Scope of Work lists items that are often under a Miscellaneous Metals Scope of Work including stairs, seismic clips, and not slip nosings. Please confirm that these items are in the Structural Steel Scope of Work for this Project.

A77: See Bid Package 5.01.

Q78: Please confirm that this project has been divided into 7 phases based on the color coding of the phasing plan in section 00096.

A78: See Document 000926 Phasing Package in the Fusco Project Manual.

Q79: At locations where trenching inside the existing building is required, the Demolition Subcontractor is responsible for saw cutting and removal of the concrete slab. Who is responsible for the excavation of the soil at trenching inside existing buildings?

A79: See Bid Package 31.01 Item 12n.

Q80: On drawing D-105, the structure to the east of the Cafeteria is being removed including its foundation. Does the Demolition Subcontractor need to backfill the hole and provide a rough grade before handing the area over to the Site Subcontractor?

A80: See Bid Package 2.01 Item 6h and Clarification 4.