Division of Finance and Business Operations

Procurement & Strategic Sourcing
5700 Cass Avenue, suite 4200
Detroit, Michigan 48202
(313) 577-3734
FAX (313) 577-3747

August 21, 2015

Addendum #2 To
Request for Proposal
For Student Center Fifth Floor and Seventh Floor Renovation: Project 034-266828 and 034-261806

Dated August 5, 2015

Points of Clarifications during the Pre-proposal Meeting August 12, 2015:

The Addendum must be acknowledged on your lump sum bid.

IMPORTANT – PLEASE NOTE: Effective December 1, 2007, bid notices will be sent only to those Vendors registered to receive them via our Bid Opportunities Listserve service. To register, to **http://www.forms.procurement.wayne.edu/Adv_bid/Adv_bid.html**, and click on the "Join our Listserve" link at the top of the page. Instructions are at the top of the page, and the Construction Listserv service is under "Construction Bid Opportunities".

NOTE: You must have attended a pre-bid conference in order to be eligible to bid on a particular project. Receipt of minutes or addenda without being at a pre-bid conference does not qualify your company to bid.

The bid due date has been revised to August 27, 2015 at 2:00 pm

Question:
Will there be a subcontractor walkthrough scheduled?

Answer:
This was in addendum #1 (The Minutes)

Question:
Can the bid be extended 1 week?

Answer:
Bid due date revised to August 27, 2015 at 2:00pm

Question:
Finish schedule 5th. Floor shows Cpt3 for offices 575.1-.5 and carpet 2 for hall 575. Finish plan shows carpets 3 & 4. Which is correct? If it is two colors, please explain how it is configured. 7th. Floor finish schedule shows VCT1 for rooms 780 & 780.1. Finish plan shows VCT6 for both.

Answer:
Refer to Neumann Smith addendum #2 drawing updates and text

Question:
The bid form has a break out cost for the 5th & 7th floor on both page 1 and 4. Is this to be the same item?

Answer:
No, they are separate. Note the different completion dates. The break out cost on page 4 is Alternate #6. Break out costs in all locations must be completed

Question:
The bid form lists alternates 1-6. Spec section 01 2300 only lists alternates 1-5. Is there an alternate 6?

Answer:
Yes, Alternate 6 is a cost alternate for the completion dates shown in the description for that alternate

Question:
Is the unit pricing for additional work only?

Answer:
Unit pricing applies to changes in original scope of work.

Question:
Are side and bottom channels required for the WT-2 shades? Side and bottom channels are listed in the roller shade spec section 122413 2.05 D. The WT-1 shades are 3% openness so I would assume no side and bottom channels for those. So do the channels go on the WT-2 shades? Or are they not required?

Answer:
Refer to Neumann Smith addendum #2 drawing updates and text

Question:
Where are the drawings for the 5th floor? I only see drawings for the 7th floor.

Answer:
The 5th floor and the 7th floor drawings should be in the same link. All the drawings are posted together.

Question:
Also, can you provide heights for the exterior windows?

Answer:
Refer to Neumann Smith addendum #2 drawing updates and text

Question:
Can we have an extension for the bid due date?

Answer:
Bid due date revised to August 27, 2015 at 2:00pm

Question:
Do we need to account for any shutdowns for exam times?

Answer:
Yes. There is a testing lab on the 6th floor. Contractor must plan, coordinate, and communicate in detail the timelines for any anticipated building service impact. This is done 7 days in advance and not prior to WSU Project Manager's approval.

Question:
Please clarify permits. Addendum #1 item #40 says permits by GC. At the pre-bid it was mentioned that permits are by WSU.

Answer:
Permits are the responsibility of the contractor.

Question:
Please clarify scope for digital directory alternates. Drawings show power and TV outlet at directory location as part of base bid. What additional electrical work does the alternate require.

Answer:
To be addressed in addendum #3, which is in the same pdf file as this addendum 2, scroll towards the end of the document.

Question:
Please clarify card access system scope. General note 7 on electrical new work sheet seems to indicate that the EC is to provide rough in for card access system installation by others. General contractor note 9 on A001 appears to place responsibility for card access system and associated door hardware with the GC. What scope is the EC responsible for? If EC responsibility extends beyond rough in work, further information will be required for bid. Equipment specs, specific requirements for access doors, controller locations etc.

Answer:
To be addressed in addendum #3, which is in the same pdf file as this addendum 2, scroll towards the end of the document.

Question:
Please clarify voice/data scope. Symbol list calls for a box with a 1” conduit to the accessible ceiling space. The General sheet notes and note 10 on A001 appear to require the EC to install a complete data system from main punch down panel to jacks at individual data outlet locations shown. If EC is to install complete system more information is required. How many cables per outlet location, how many jacks at each station, type of configuration of jacks if more than 1 per opening, main punch down location etc.

Answer:
To be addressed in addendum #3, which is in the same pdf file as this addendum 2, scroll towards the end of the document.

Question:
Mechanical drawings & notes and details indicate that mechanical contractor/temperature control contractor is responsible for design and installation of the temperature control system. Electrical general notes imply that the EC will do this work. Please clarify.

Answer:
To be addressed in addendum #3, which is in the same pdf file as this addendum 2, scroll towards the end of the document.

Question:
7th floor sheet A001 note 20 refers to panic buttons in the ombudsman offices. None are shown. Please advise.

Answer:
To be addressed in addendum #3, which is in the same pdf file as this addendum 2, scroll towards the end of the document.

Question:
Fire alarm notes call for tie in to existing system. Whose system is currently installed?

Answer:
To be addressed in addendum #3, which is in the same pdf file as this addendum 2, scroll towards the end of the document.

Question:

Can you give me a little bit more specification on what type of Floor tile it is and more specific Color names?

Answer:
Refer to the Bid Documents-The Finish Schedule particularly

There is a write up from the design consultant included this PDF file. It is titled Addendum #2, and another one titled Addendum 3.

A copy of this Addendum will be posted to the Purchasing web site at
http://www.forms.procurement.wayne.edu/Adv_bid/Adv_bid.html.

As a reminder, the bid due date has been revised to August 27, 2015 at 2:00 pm. If you have any further questions, please do not hesitate to email them to me at **rfpteam2@wayne.edu** and copy **leiann.day@wayne.edu@wayne.edu**.

Thank you,

Valerie Kreher,
Senior Buyer

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ADDENDUM #2

DATE	August 20, 2015
PROJECT NAME	Wayne State University Student Center 5th Floor Renovation Student Center 7th Floor Renovation
PROJECT NUMBER	2015025 WSU 5th Floor: 034-266828 WSU 7th Floor: 034-261806
DISTRIBUTION	WSU FP&M Bidders – Via WSU DSD

The following revisions and/or additions to the plans and specifications are issued before the award of the contract and are to be included in the original Bid Package Drawings and Specifications, dated 07.28.2015 and Addendum #1, dated 08.14.2015. This Addendum shall take precedence over anything contrary to the original drawings and specifications and shall be referred to hereinafter as part of the contract documents.

All revisions to the drawings have a cloud around the revision.

The following documents are being revised and / or reissued with this Addendum. All changes are indicated in the following written text.

5th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A805, A921
- Mechanical Drawings: M2, M3, M4 (None Reissued)
- Electrical Drawings: E1, E3

7th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A807, A921 (A207 Not Reissued)
- Mechanical Drawings: M3, M7 (M1, M2, M4, M8 Not Reissued)
- Electrical Drawings: E1, E3

5th & 7th Floor - Issued By WSU Under Separate Cover
- "Comprehensive Asbestos inspection and Testing of Building 034-Student Center Building" report
- Note: WSU did not issue an Abatement Specification in Addendum #1.

No other drawings, specifications or other documents are being revised. All Addendum revisions are indicated on the drawings, unless otherwise noted.

Include all costs in the bid proposal (base bid and alternate bids.)

All drawings are being reissued via WSU Purchasing Department.

5th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 000110

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP3
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A805

A. Flooring designations changed in 575 and 575.1 thru 575.5.
B. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 575 and 575.1 thru 575.5.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

7th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 00 01 10

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP4
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required.

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A807 (A207 Revised, Not Reissued)

A. Corridor 785 changed to Open Office 785 on A807 and A207.
B. Unnecessary "PX" removed from 785 open area on A807.
C. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 780 and 780.1
B. Corridor 785 changed to Open Office 785 on schedule.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

END OF ADDENDUM #2

DiClemente Siegel Design Inc.
28105 Greenfield Road Southfield, Michigan 48076
248.569.1430 FAX 248.569.0096
Engineering and Architecture

A D D E N D U M N O . 2

Wayne State University
Student Center 5th Floor Renovation
WSU No. 034-266828
DSD Project No. 15-4806.00 **08/20/15**

This instruction is issued prior to awarding the contract, to provide for certain changes, deletions and/or additions to the Plans and Specifications for the above named project as hereinafter specified.

Unless otherwise specified herein, the work covered under this instruction shall be in accordance with the basic contract documents. The work hereinafter specified shall be included in the contract.

Drawings M2, M3, M4, E1 and E3 are revised as a part of this Addendum.

D R A W I N G S

MECHANICAL

1. Refer to Drawing Sheet M2 (Not Issued):

   a. Added General Note 8: “At demoed thermostats install cover plate and paint to match existing wall.”

   b. Added demolition of existing elbow between 36”x12” return duct and shaft at Column 23-F.

   c. Added demolition of 36”x9” duct from 5’ north of column line 20 to the shaft north of Column line 21 between Column lines E and F.

2. Refer to Drawing Sheet M3 (Not Issued):

   a. Added a bell mouth duct opening at the end of the 36”x9” return air duct termination approximately 5’ north of Column line 20 between Column line E and F.

   b. Extended return air ductwork with a bell mouth opening from the existing 36”x10” return air main into the Office 575 corridor. Duct to be terminated 3’ north of column line 19. Shift return air grille indicated just north of Column line 19 to approximately 6’ north of Column line 19 in the Office 575 corridor.

   c. Added return air transfer grilles in the Office 575 area between the full height office walls and the office corridor. Included are Offices 575.1, 575.2, 575.3, 575.4 and 575.5.

   d. Added 6”x6” opening into existing 38”x12” return air duct above ceiling in Storage 586.

   e. Added 8”x8” duct with volume damper for balancing above ceiling from existing 36”x12” return air main through full height south wall and into the ceiling plenum of Staff Work Room 598. Also added 24”x12” return air grille in the lay-in ceiling of Staff Work Room 598.

   f. Added 18”x10” duct with volume damper and bell mouth opening off of the existing 38”x12” return air duct above the Student Stations 584 ceiling.

3. Refer to Drawing Sheet M4 (Not Issued):

    a. Added EF-K5 indicated in the M7 Fan Schedule to 'Enlarged Plan Mechanical/Electrical Room Mechanical - New Work'. 24"x12" Exhaust grille (EG-1) located in Kitchen 553 and Cabinet inline exhaust fan located in Mechanical Room between AHU-L5 and RAF-5. Exhaust duct routed to relief air shaft to the north of Column line 12 and terminated with an upturn vertical elbow in relief air plenum.

ELECTRICAL

1. Refer to Drawing Sheet E1 (Re-Issued):

    a. Updated alternate description 3A to indicate that power for AV devices/locations is Base Bid only and is not included in the Alternate 3A pricing.

    b. Updated the Panelboard Schedules with circuiting to correspond with the 5th Floor Plan - Power and Systems plan.

2. Refer to Drawing Sheet E3 (Re-Issued):

    a. Revised the communication drop in Shared Work Room 594 for the Copier from a single VoIP drop to include one (1) voice drop and one (1) data drop.

    b. Revised location of electrical receptacles in Office 595 and Office 597.

    c. Added an electrical receptacle in Office 595 on the east wall.

    d. Added an electrical receptacle and VoIP drop to the south wall of Student Stations 584.

    e. Eliminated power and communications for monitor in Shared Break Room 595.

    f. Eliminated electrical receptacle in Corridor 575.

    g. Added circuiting designation to electrical receptacle in Common Corridor 5100.

S P E C I F I C A T I O N S

None

End of Addendum No. 2

cc: Project File, Stick Set

SECTION 000110 - TABLE OF CONTENTS

Firm	Section		Revision	Bulletin
	Division 00 – Procurement and Contracting			
N/S	00 0101	Project Title Sheet		
N/S	00 0110	Table of Contents	**A2**	
N/S	00 3126	Existing Hazardous Material Information	**A2**	
	Division 01 – General Requirements			
N/S	01 1200	Multiple Contract Summary		
N/S	01 2300	Alternates		
N/S	01 2500	Substitution Procedures		
N/S	01 2500.13	Substitution Request Form		
N/S	01 2600	Contract Modification Procedures		
N/S	01 2613	Requests for Interpretation (RFI)		
N/S	01 2900	Payment Procedures		
N/S	01 3113	Project Coordination		
N/S	01 3119	Project Meetings		
N/S	01 3233	Photographic Documentation		
N/S	01 3323	Shop Drawings, Product Data and Samples		
N/S	01 3323.13	Authorization for Release of CAD Files		
N/S	01 4523	Quality Control Testing and Inspection Services		
N/S	01 6000	Common Product Requirements		
N/S	01 7423	Final Cleaning		
N/S	01 7700	Closeout Procedures		
N/S	01 7839	Project Record Documents		
	Division 02 – Existing Conditions			
N/S	02 4119	Selective Structure Demolition	**A2**	
	Divisions 03 - NOT USED			
	Division 04 - Masonry			
N/S	04 2000	Unit Masonry		
	Division 05 - Metals			
N/S	05 4100	Cold Formed Metal Stud Framing		
N/S	05 5000	Metal Fabrications		
	Division 06 – Wood, Plastics and Composites			
N/S	06 1000	Rough Carpentry		
N/S	06 4023	Interior Architectural Woodwork		
	Division 07 – Thermal and Moisture Protection			
N/S	07 2100	Thermal Insulation		
N/S	07 8400	Firestopping		
N/S	07 9200	Joint Sealants		
	Division 08 – Openings			
N/S	08 1113	Hollow Metal Door Frames		
N/S	08 1416	Flush Wood Doors		
N/S	08 7100	Door Hardware		
N/S	08 8000	Glazing		
	Division 09 – Finishes			
N/S	09 2116	Gypsum Board Assemblies		
N/S	09 2236.23	Metal Lath		
N/S	09 2300	Gypsum Plaster Patching and Repair		
N/S	09 2400	Portland Cement Plastering		
N/S	09 5113	Acoustical Panel Ceilings		
N/S	09 6513	Resilient Base and Accessories		
N/S	09 6519	Resilient Tile Flooring		

Firm	Section		Revision	Bulletin
N/S	09 6813	Tile Carpeting		
N/S	09 9100	Painting		
	Division 10 - Specialties			
N/S	10 1443	Interior Signage		
N/S	10 2601	Wall and Corner Guards		
	Division 11 – Equipment – NOT USED			
	Division 12 – Furnishings			
N/S	12 2413	Roller Window Shades		
	Divisions 13 through 20 – NOT USED			
	Division 21 – Fire Protection			
DSD	21 0500	Common Work Results for Fire Suppression		
DSD	21 0517	Sleeves & Sleeve Seals for Fire Suppression Piping		
DSD	21 0518	Escutcheons for Fire Suppression Piping		
DSD	21 0548	Vibration Controls for Fire Suppression Piping and Equipment		
DSD	21 1000	Water-Based Fire Suppression System		
DSD	21 1200	Fire Suppression Standpipes		
	Division 22 – Plumbing			
DSD	22 0500	Common Work Results for Plumbing		
DSD	22 0519	Meters and Gages for Plumbing Piping		
DSD	22 0523	General Duty Valves for Plumbing		
DSD	22 0529	Hangers and Supports for Plumbing, Piping and Equipment		
DSD	22 0553	Identification for Plumbing, Piping and Equipment		
DSD	22 0700	Plumbing Insulation		
DSD	22 1116	Domestic Water Piping		
DSD	22 1119	Domestic Water Piping Specialties		
DSD	22 1316	Sanitary Waste and Vent Piping		
DSD	22 1319	Sanitary Waste Piping Specialties		
DSD	22 4000	Plumbing Fixtures		
	Division 23 – Heating, Ventilating and Cooling			
DSD	23 0500	Common Work Results for HVAC		
DSD	23 0513	Common Motor Requirements for HVAC Equipment		
DSD	23 0519	Meters and Gages for HVAC Piping		
DSD	23 0523	General Duty Valves for HVAC Piping		
DSD	23 0529	Hangers and Supports for HVAC Piping and Equipment		
DSD	23 0553	Identification for HVAC Piping and Equipment		
DSD	23 0593	Testing, Adjusting and Balancing for HVAC		
DSD	23 0700	HVAC Insulation		
DSD	23 0913	Instrumentation and Control Devices for HVAC		
DSD	23 0923	Direct Digital Control System for HVAC		
DSD	23 2113	Hydronic Piping		
DSD	23 2123	Hydronic Pumps		
DSD	23 2213	Steam and Condensate Heating Piping		
DSD	23 3113	Metal Ducts		
DSD	23 3300	Air Duct Accessories		
DSD	23 3423	HVAC Power Ventilators		
DSD	23 3600	Air Terminal Units		
DSD	23 3713	Diffusers, Registers and Grilles		
DSD	23 4100	Particulate Air Filtration		
DSD	23 5700	Heat Exchangers for HVAC		
DSD	23 7313	Modular Indoor Central Station Air-Handling Units		
DSD	23 8216	Air Coils		
DSD	23 8316	Radiant-Heating Hydronic Panels	A1	

REFERENCE DOCUMENTS

STANDARDS FOR COMMUNICATIONS INFRASTRUCTURE (Revised 13 March 2015)

SECTION 00 3126 - EXISTING HAZARDOUS MATERIAL INFORMATION

PART 1 GENERAL

1.01 ASBESTOS REPORT

A. A Report on Asbestos and Lead-Based Paint Sampling and Analysis has been prepared for, this Project. This report is available from Wayne State University. It is issued by WSU as part of the Bid Package.
   1. This report identifies suspect asbestos containing materials **and other hazardous materials.**
   2. The Contractor is responsible for development of an abatement plan acceptable to Authorities Having Jurisdiction. Include abatement plan in Construction Plan referenced in Section 01 31 13 - Project Coordination.
   3. The Owner will not be responsible for interpretations or conclusions drawn from this by the Contractor.

B. Additional tests and other exploratory operations may be performed by the Contractor, at Contractor's option; however, at no additional cost to the Owner.

C. The report is as follows:
   1. Prepared by:
      a. Environmental Testing and Consulting, Inc.
      b. 38900 Huron River Drive.
      c. Romulus, Michigan 48174
   2. Report on:
      a. Multi-Building Comprehensive Asbestos Inspection and Testing Report
      b. WSU Project # 99-213662-3
      c. Comprehensive Asbestos Inspection and Testing of Building 034-Student Center Building
      d. Wayne State University
      e. Detroit, Michigan 48202
      f. ETC Project No.143912
      g. January 7, 2013
   3. Report on:
      a. Summary of Added Materials to Building 034-Student Center Building. ETC Project # 143912
      b. August 14, 2013

D. This report, by its nature, cannot reveal all conditions that exist on the project site. Should conditions be found to vary substantially from this report, changes in the scope of abatement will be made, with resulting credits or expenditures to the Contract Price accruing to Owner.

1.02 AIR MONITORING AND TESTING

A. Air Monitoring and Testing will be provided by a separate agency contracted by Wayne State University.
   1. Contractor to coordinate with WSU Project Manager and WSU's testing agency.

1.03 ACM DUMPSTERS

A. Wayne State University will be providing ACM dumpsters.
   1. Manifests are required prior to hauling and disposal to be coordinated with Wayne State University Safety Department.

1.04 ABATEMENT PLAN

A. The Contractor is fully responsible for development and implementation of a complete abatement plan coordinated with the demolition requirements. The abatement plan shall be in accordance with the referenced abatement report.

B. Submit abatement plan to WSU for review, coordination and approval prior to commencement of work.

C. The abatement plan shall include, but not necessarily limited to, the following work scope and other requirements. The full scope and requirements are solely the responsibility of the Contractor to determine based on the referenced abatement report and all applicable codes, laws and regulations, and industry standard practice.

1. **It is understood that the Contract Documents, as they relate to the "Work" are not complete and detailed in all respects. However, the Work of this Agreement includes all work indicated, detailed, implied, inferable and necessary for complete, fully-functioning system, product or installation in accordance with all applicable codes, standards, authorities having jurisdiction ("AHJ"), and the Contract Documents.**
2. **Subcontractor represents that they have expertise in projects of this nature and their staff has the experience and training necessary to fulfill the requirements of this Agreement. Additionally, Subcontractor represents that it has reviewed the Contract Documents, fully understands the intent, and has included all necessary work items not specifically indicated, detailed or specified.**
3. **Provide proof of asbestos training for all personnel to WSU. If unable to provide proof, arrangements must be made to obtain the training. If additional training is required, no additional costs will be accepted by Turner Construction Company or Owner.**
4. **DEMOLITION AND ABATEMENT CONTRACTOR is solely responsible for their own measurements and quantities of the identified materials and is not to be used for bidding purposes.**
5. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for to provide dumpsters for their work. Location, mobilization and change out needs to be coordinate with WSU.**
6. **Site specific safety and Logistics program which includes phasing, sequencing and coordination with other trades is required to maintain work flow.**
7. **Provide full time site project management that will be available to attend regular project meetings.**
8. **Provide all necessary enclosures, temporary ventilation systems, decontamination zones, clean showers, and all containment partitions, etc. complete as required to perform full scope of work. Include removal upon completion of scope of work.**
9. **Provide removal of all Hazardous Materials and is to be properly handled and disposed of in accordance with Wayne State University's Occupation Health and Safety Standard as well as their Construction and Design Standards.**
10. **Coordination with Wayne State University's testing agent and WSU Staff for Lock Out / Tag Out procedures for work requiring shut down AHU's**
11. **Provide all work necessary to achieve "Clean Letters" as necessary from Wayne State University's Environmental Hygienist to ensure school activities are not interrupted.**
12. **Provide and maintain all project reports and documents so that they are available to Wayne State at all time for review.**
13. **Comply with all applicable Wayne State University (WSU), City, State, and Federal laws, rules, regulations, and standards associated with this work.**
14. **Provide Personal Air Monitoring for all abatement work activities. Costs for personal air monitoring is to be included within you scope. Personal air monitoring results are to be turned over to WSU within 72 hours of work being performed.**
15. **The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove the asbestos spray on fireproofing within masonry columns to remain. The removal is limited the material within an "arms" reach down into the column from the top without any damage to the columns to remain (See Plans prints and specs.). Complete encapsulation will be required where asbestos fire proofing material remains in the lower portions of the columns that cannot be removed completely. Once sealed and all areas abated, fire rated polyethylene sheeting to seal the upper column cavity opening at the top of column enclosure where spray on will remain**

within the lower portion of the column or use of a fire rated spray foam preapproved by the Architect of record with proper installation requirements. Areas where columns finishes are to be demolished, must be performed within the negative pressure enclosure as spray on may exist within the lower column areas at the floor area.

16. **Where ceiling systems are required for demolition, they are to be removed as part of the abatement scope of work and all supporting wires and black iron will require removal. The DEMOLITION AND ABATEMENT CONTRACTOR must decontaminate all surfaces from within the regulated area.**
17. **Provide removal of all friable spray on fireproofing insulation including removal of the drywall, plaster board/plaster material over entry doors, walls, etc. for complete removal of material. Areas where spray on fireproofing overspray may have fell behind wall cavities that require demolition will be required to be removed by the Asbestos abatement contractor to clean and decontaminate all surfaces. All spray-on fireproofing over spray will be required to be removed from all adjacent materials, including but not limited to, roof decking, piping, HVAC VAV Boxes, ceiling systems/support wire, electrical components, wires, cables, conduit, cable trays, wall components, wall studs, window systems, door frames, I beams, duct work, flex duct, etc. This material appears to be adhered to Metal wire mesh and wired to the black iron material.**
18. **Provide removal of all pipe joint insulation as identified on the demolition section of the plans prints and specs as outlined in the ETC asbestos survey report. Other building materials may require removal to remove the required asbestos pipe joint material, i.e. drywall, plaster board/plaster material, ceiling panels, HVAC duct work, etc. for complete removal of material.**
19. **Provide removal of all grey Duct insulation as asbestos within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. All duct insulation and areas where ducts will be removed according to the provided architectural plans, prints and specs, must be removed completely by the abatement contractor upon completion of a successful asbestos air clearance and after identification by the Mechanical, Electrical Plumbing (MEP) Contractor.**
20. **All Mechanical, Electrical and Plumbing supports and systems must be decontaminated to remain in place. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, ceiling systems, etc. Any contaminated porous items must be disposed of as asbestos waste.**
21. **Provide removal of all Black floor mastic material under 12" x12" Grey and Pink Floor tile using grinding machines within a full negative pressure enclosure system. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, carpet, etc. as outlined in the ETC asbestos survey report.**
22. **Provide removal of all 12" x12" Beige Floor tile and prep the using grinding machines within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, walls, carpet, etc.**
23. **Provide removal all carpet and asbestos carpet adhesive as outlined in the ETC asbestos survey report. All adhesive removal must be performed by mechanical means to provide a clean floor finish upon completion.**
24. **Provide removal of UL Listed Tagged Fire Doors and Fire Rated Door Frames as indicated on the documents are to be considered as ACM. All door frames will be required to be removed within a negative pressure mini enclosure. Contractor is required to verify the demo plans and prints prior to door and door frame removal.**

25. **Provide a full negative pressure enclosure for the project areas that will be divided by a drywall fire rated separation. The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove all interior items stated to be demolished according to the plans, prints and specs. Additional interior demolition will be required to remove the stated asbestos spray on material and fire stop material from within each project area. The work area shall be prepped with a minimum of 2 layers of 6mil polyethylene walls and properly secured to sustain the weight and integrity of the enclosure overtime due to negative pressure. Additional materials to secure the poly walls adequately to the upper wall sections to the roof deck. The roof deck will be required to be HEPA vacuumed and cleaned to remove the spray on insulation overspray material adhered to the roof deck.**
26. **Provide critical barriers over all ducts, vents, doors and windows leading to non-project areas. Turner will shut down all HVAC systems feeding into the work space. It is the responsibility of The DEMOLITION AND ABATEMENT CONTRACTOR to ensure isolation and capping of all HVAC systems within the work zone where diffusers or openings are located. All other openings leading to non-project areas must be sealed with polyethylene and duct tape. During set up, The DEMOLITION AND ABATEMENT CONTRACTOR must have critical barriers, poly walls, negative pressure established and all workers in appropriate PPE.**
27. **The locations of air filtration devices will be determined on-site bye the industrial hygienist and Contractor's competent person. All air filtration devices must be ducted outside of the building. Only commercial pre-fabricated duct will be allowed. All doors and windows opened for purposes of ducting the air filtration devices must be properly secured to protect the building security and to prevent unauthorized personnel during off hours. Provide a minimum negative pressure of 0.020 inches of water equivalent during all stages of asbestos abatement. The Abatement Trade Contractor will continuously monitor the negative pressure with a contractor-supplied manometer.**
28. **Provide an electrical panel system for all electrical systems to be used for the abatement processes.**
29. **Provide a three stage decontamination chamber at the entrance of each project area equipped with a shower and warm water.**
30. **Provide remove all observed mudded pipe joints located above the ceiling within each Phased regulated area.**
31. **Provide decontamination of all ceiling tile grid and black iron by HEPA vacuuming and wet wiping all surfaces. It is understood that all ceiling tiles shall be disposed of as asbestos waste. Full negative pressure and Enclosure Set up must be completed before any Ceiling tile material is removed or lowered from its existing position. No ceiling material shall be removed until the on-site industrial hygienist approves negative pressure, decontaminate the ceiling grid work or dispose of the materials as asbestos-containing materials. All ceiling materials shall immediately be bagged when lowered. No unbagged ceiling panel or spray on materials will be stored on any floor overnight, all materials must be single bagged at a minimum and left inside the enclosure if not completely bagged out to the dumpster at the end of the work shift or cube van, etc.**
32. **A separate two stage bag-out chamber may be built wherever feasible but must be approved by the onsite industrial hygienist.**
33. **Provide removal of all of the fluorescent light tubes and dispose of all ballasts. Ballasts are to be disposed of into WSU provided containers.**
34. **Provide removal of all drywall, smooth plaster materials as asbestos containing waste areas where spray on and grey fire stop material is scheduled to be removed.**
35. **Fiber drums will not be allowed inside the enclosure unless sufficiently covered with a single disposal bag to be properly decontaminated when exiting the containment. The DEMOLITION AND ABATEMENT CONTRACTOR may place the**

single bags inside lined fiber drums during the "double bagging" portion of the project.

36. **During the final cleaning of the project area, The DEMOLITION AND ABATEMENT CONTRACTOR will thoroughly clean all surfaces inside the enclosure visually.**
37. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for any and all debris generated from the selective demolition removal operations including but not limited to insulation, duct, wall systems, wall studs, framing, flooring, carpet, and general dirt and debris. All associated metal ceiling grid or spline grid shall be disposed of or recycled after proper decontamination is approved by the on-site industrial hygienist. All suspended ceiling systems including but not limited to, wires, grid, and black iron will be required to be removed to properly abate all spray on insulation.**
38. **The building will remain occupied at times during construction. All electrical, IT, communication, plumbing systems, must not be damaged or removed within the work area unless verified by the MEP. Provide protection of any and all systems to remain and not be demolished, including but not limited to, fire suppression, phone lines, audio visual equipment, cable, IT, etc. above the ceiling systems. The DEMOLITION AND ABATEMENT CONTRACTOR will be held responsible for any damages to these items located in the work area. Any lights, speakers etc. must be decontaminated and wrapped with 6 mil poly, temporarily suspended from the roof deck as to not damage the lights for the duration of the abatement process for that phase if present.**
39. **The DEMOLITION AND ABATEMENT CONTRACTOR may be required to pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by The DEMOLITION AND ABATEMENT CONTRACTOR as deemed necessary by the Owner or the Owner's Consultant. The extent of the pre-cleaning will be determined by, but not limited to the following factors: the particular application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied.**
40. **Where doors or other such building fixtures are removed by The DEMOLITION AND ABATEMENT CONTRACTOR prior to abatement activities, The DEMOLITION AND ABATEMENT CONTRACTOR is responsible for replacing doors and/or fixtures upon completion of abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by The DEMOLITION AND ABATEMENT CONTRACTOR to insure replacement in the proper location.**
41. **The DEMOLITION AND ABATEMENT CONTRACTOR shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at minimum, 4-mil polyethylene sheeting.**
42. **Walls will be covered with at least one layer of 4-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and The DEMOLITION AND ABATEMENT CONTRACTOR shall comply with the method chosen.**
43. **Floors shall be covered with at least three layers of 6-mil polyethylene sheeting.**
44. **Non-waterproof tape may not be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used.**
45. **The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that The DEMOLITION AND ABATEMENT CONTRACTOR will use for the movement of supplies and personnel.**
46. **No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.**

47. Provide decontamination facilities in a predestinated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered with an entrance airlock with shower facilities in its central chamber. The dimensions of these chambers will be adequate for the number of men needed for the project. At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers. The walls, floor, and ceiling covering of the airlock construction will be seamed to each other in a fashion making them air and water tight. One end of this construction will exit to the clean area outside the containment barrier walls. The other end of this construction will exit inside or at the containment barrier walls. Except for these doors, all three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the work area. Both layers will be attached to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. It air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure. The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers. A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste. Black polyethylene sheeting may be used for privacy on the decontamination facility.

48. The DEMOLITION AND ABATEMENT CONTRACTOR may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit. The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility. As each bag is filled, it will be set into the first room for temporary storage. Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on the transport vehicle (airlocks must exist between each room, as in the main decontamination facility). If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process. If a separate decontamination facility is constructed it shall be sealed while not in use.

49. All workers, without exception, will change street clothes in designated areas (clean room) prior to the start of each day's work. Lockers or acceptable substitutes will be provided by The DEMOLITION AND ABATEMENT CONTRACTOR for street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.

50. At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos

waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. Hot water, towels, soap and hygienic conditions shall be provided by The DEMOLITION AND ABATEMENT CONTRACTOR.

51. **The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.**
52. **If any large components are removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.**
53. **When removal of building materials (electrical, light, duct work, etc.) is necessary, The DEMOLITION AND ABATEMENT CONTRACTOR shall develop drawings indicating existing materials and their exact locations.**
54. **All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metal lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.**
55. **The DEMOLITION AND ABATEMENT CONTRACTOR will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.**
56. **Sufficient negative pressure will be used in the enclosure to evacuate the air once every 15 minutes (minimum).**
57. **Only vacuums and air filtration devices with "HEPA" filters will be allowed. No "shop-vacs," homemade hybrid vacuums or air filtration devices will be allowed on site.**
58. **Following the cleanup of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until final air checks are completed.**
59. **A complete visual inspection to insure dust free conditions. The DEMOLITION AND ABATEMENT CONTRACTOR shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany The DEMOLITION AND ABATEMENT CONTRACTOR during the inspection and determine if additional cleaning is necessary.**
60. **Copies of Disposal receipts of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation are to be submitted to WSU for record.**
61. **Coordination with all other trade subcontractors.**
62. **Temporary protection to all adjacent areas, materials, and third parties.**
63. **Continuous clean-up of own work to project dumpsters per Turner's "Nothing Hits the Ground" policy.**
64. **Provide all permits, fees, testing, and inspections for this work.**

65. All Subcontractors are to provide field staff have received and are current with Lead, Asbestos, and Cadmium Awareness Training.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 02 4119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Division 00 - Procurement and Contracting Requirements, and Division 01 - General Requirements, are hereby made part of this Section.

1.02 SECTION INCLUDES

A. Selective structure demolition work includes, but is not limited to, the following:
   1. Demolition and removal of selected portions of the existing building.
   2. Patching and repairs.
   3. Existing Hazardous Material Information.

1.03 RELATED SECTIONS

A. Section 00 3126 - Existing Hazardous Material Information; for hazardous material report.

1.04 SUBMITTALS

A. Schedule: Submit schedule indicating proposed methods and sequence of operations for selective structure demolition work to Owner's Representative for review prior to commencement of work.
   1. Provide detailed sequence of demolition and removal work to ensure uninterrupted occupancy of building.
   2. Include coordination for shut-off of utilities, if required.
   3. Proposed dust-control and noise-control measures.

B. Inventory of items to be removed and salvaged.

C. Inventory of items to be removed by Owner.

D. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating all refrigerant that was present was recovered and recovery was performed according to EPA regulations.
   1. Include name and address of technician and date refrigerant was recovered.

E. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction that might be misconstrued as damage caused by selective structure demolition operations.

F. Landfill records indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous waste.

1.05 QUALITY ASSURANCE

A. Contractor Qualifications: Engage only subcontractors who can demonstrate not less than five years successful experience in work of similar character.

B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

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

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

1.06 PROJECT CONDITIONS

A. Occupancy: The Owner will be continuously occupying spaces immediately adjacent to areas of selective structure demolition. Conduct selective structure demolition work in such manner that will minimize need for disruption of normal operations.

B. Condition of Structures: Owner assumes no responsibility for actual condition of items to be demolished.

C. Asbestos: Asbestos is present and will be encountered in the Work. A report on the presence of asbestos is ~~on file for review and use~~ **being issued by Wayne State University as a part of**

this Bid Package. Examine the report to become aware of locations where asbestos is present.

1. The ~~Owner~~ **Contractor** is responsible for asbestos abatement **and abatement of any other hazardous materials indicated in the report.**
2. ~~Do not disturb asbestos or any material suspected of containing asbestos.~~
3. **Remove asbestos and other hazardous materials in accordance with the Contractor's abatement plan noted in Specifications Section 00 3126.**

D. Partial Demolition: Items indicated to be removed, but of salvable value shall be turned over to the Owner.

E. Storage or sale of removed items or materials on-site is prohibited.

F. Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective structure demolition work.
1. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from the building.
2. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
3. Protect floors with suitable coverings when necessary.
4. Construct temporary insulated solid dustproof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks if required.
   a. Temporary dustproof partitions shall be fire-rated where indicated or required by authorities having jurisdiction.
5. Remove protections at completion of work.

G. Damages: Promptly repair damages caused to adjacent facilities by structure demolition work at no cost to Owner.

1.07 SCHEDULING

A. Arrange selective structure demolition operations so as not to interfere with Owner's existing on-site operations.

PART 2 PRODUCTS

2.01 MATERIALS

A. General: Except as otherwise indicated or approved by Architect, provide materials for selective demolition which will result in equal-or-better work than the work being cut-and-patched in terms of performance characteristics, including visual effect where applicable. Comply with the requirements, and use materials identical to original materials where feasible and where recognized that satisfactory results can be produced thereby.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to commencement of selective structure demolition work, inspect areas in which work will be performed.

B. When unanticipated mechanical, electrical, and structural elements are encountered, and conflict with intended design, investigate and measure the nature and extent of conflict. Promptly submit a report in writing to Architect.

C. Survey condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective structure demolition operations.

3.02 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect against damage during selective structure demolition operations.
1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by the Owner or authorities having jurisdiction.

3.03 PREPARATION

A. Conduct structure demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective structure demolition area.
   1. Cover and protect equipment and fixtures from soiling or damage when demolition work is performed in rooms or areas from which such items have not been removed.

B. Erect and maintain dustproof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
   1. Where selective demolition occurs, construct dustproof partitions of minimum 4" studs, 5/8" drywall (joints taped) on occupied side, 1/2" fire-retardant plywood on demolition side, and fill partitions cavity with sound-deadening insulation.

C. Provide and maintain shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

D. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior construction and new construction, to ensure no water leakage or damage occurs to structure or interior areas.

3.04 DEMOLITION

A. Demolish and remove existing construction only to extent required by new construction and indicated.

B. Perform selective structure demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

C. Employ only skilled tradesmen to perform selective structure demolition.

D. Cut work by methods least likely to damage work to be retained and work adjoining. Neatly cut openings and holes square, plumb, and true to size required.

E. In general, where physical cutting action is required, cut work with sawing and grinding tools, not with hammering and chopping tools.

F. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden spaces before starting flame-cutting operations.
   1. Maintain portable fire-suppression devices during flame-cutting operations.

G. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

H. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power driven masonry saw or hand tools; do not use power driven impact tools.

I. Removal of flooring materials shall include all adhesives, setting beds, underlayments, and other materials detrimental to new finished flooring materials.

3.05 PATCHING AND REPAIRS

A. Promptly patch and repair damaged surfaces caused to adjacent construction by selective structure demolition operations.

B. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

C. Restore exposed finishes of patched area; and where necessary, extend finish restoration onto retained work adjoining, in manner to eliminate evidence of patching.

D. Closely match finish and texture of existing adjacent surfaces.

E. Where selective structure demolition terminates at a surface, finish, or substrate to remain, completely remove all traces of material selectively demolished, including mortar beds. Provide smooth, even substrate transition.

F. Where patching smooth painted surfaces, extend final coat of paint over entire unbroken surface, after patched and repaired area has received primer and second coat.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Do not allow demolished materials to accumulate on-site. Transport and dispose of materials off-site in legal manner in an EPA-approved landfill.

~~1. Hazardous materials will be encountered during demolition operations. Stop work in the area affected and report the condition to the Owner and Architect in writing. If Owner determines the hazardous materials are asbestos or PCB's, do no further work in the area until the materials are either removed or rendered harmless, and the area has been certified safe by appropriate authorities~~.

2. Hazardous materials will be encountered during demolition operations. Remove hazardous materials, asbestos and PCB's and certify by appropriate authorities that the area is safe.

~~2~~**3**. Burning of removed materials is not permitted on project site.

3.07 CLEAN-UP AND REPAIR

A. Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.

B. Repair demolition performed in excess of that required. Return surfaces to remain to condition existing prior to commencement of selective structure demolition work. Repair adjacent construction or surfaces soiled or damaged by selective structure demolition work.

C. Clean adjacent portion of the structure and improvements of dust, dirt and debris caused by demolition operations, as directed by the Architect and Owner, or governing authorities. Return adjacent areas to conditions existing prior to start of work.

END OF SECTION

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ADDENDUM #2

DATE	August 20, 2015
PROJECT NAME	Wayne State University Student Center 5th Floor Renovation Student Center 7th Floor Renovation
PROJECT NUMBER	2015025 WSU 5th Floor: 034-266828 WSU 7th Floor: 034-261806
DISTRIBUTION	WSU FP&M Bidders – Via WSU DSD

The following revisions and/or additions to the plans and specifications are issued before the award of the contract and are to be included in the original Bid Package Drawings and Specifications, dated 07.28.2015 and Addendum #1, dated 08.14.2015. This Addendum shall take precedence over anything contrary to the original drawings and specifications and shall be referred to hereinafter as part of the contract documents.

All revisions to the drawings have a cloud around the revision.

The following documents are being revised and / or reissued with this Addendum. All changes are indicated in the following written text.

5th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A805, A921
- Mechanical Drawings: M2, M3, M4 (None Reissued)
- Electrical Drawings: E1, E3

7th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A807, A921 (A207 Not Reissued)
- Mechanical Drawings: M3, M7 (M1, M2, M4, M8 Not Reissued)
- Electrical Drawings: E1, E3

5th & 7th Floor - Issued By WSU Under Separate Cover
- "Comprehensive Asbestos inspection and Testing of Building 034-Student Center Building" report
- Note: WSU did not issue an Abatement Specification in Addendum #1.

No other drawings, specifications or other documents are being revised. All Addendum revisions are indicated on the drawings, unless otherwise noted.

Include all costs in the bid proposal (base bid and alternate bids.)

All drawings are being reissued via WSU Purchasing Department.

5th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 000110

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP3
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A805

A. Flooring designations changed in 575 and 575.1 thru 575.5.
B. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 575 and 575.1 thru 575.5.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

7th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 00 01 10

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP4
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required.

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A807 (A207 Revised, Not Reissued)

A. Corridor 785 changed to Open Office 785 on A807 and A207.
B. Unnecessary "PX" removed from 785 open area on A807.
C. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 780 and 780.1
B. Corridor 785 changed to Open Office 785 on schedule.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

END OF ADDENDUM #2

DiClemente Siegel Design Inc.
28105 Greenfield Road Southfield, Michigan 48076
248.569.1430 FAX 248.569.0096
Engineering and Architecture

A D D E N D U M N O . 2

Wayne State University
Student Center 7th Floor Renovation
WSU No. 034-261806
DSD Project No. 14-4804.00 **08/20/15**

This instruction is issued prior to awarding the contract, to provide for certain changes, deletions and/or additions to the Plans and Specifications for the above named project as hereinafter specified.

Unless otherwise specified herein, the work covered under this instruction shall be in accordance with the basic contract documents. The work hereinafter specified shall be included in the contract.

Drawings M1, M2, M3, M4, M7, M8, E1 and E3 are revised as a part of this Addendum.

D R A W I N G S

MECHANICAL

1. Refer to Drawing Sheet M1 (Not Issued):
   a. Architectural- Mechanical – Electrical Coordination Schedule.
      1. Removed the (Alt.3) entry under EWC-1 from the schedule.
2. Refer to Drawing Sheet M2 (Not Issued):
   a. Seventh Floor Plan – HVAC Sheet Metal Demolition.
      1. Removed plumbing demolition work shown on this plan only.
      2. Added Key Note: “At demoed thermostats install cover plate and paint to match existing wall.”
3. Refer to Drawing Sheet M3 (Re-Issued):
   a. Seventh Floor Plan – HVAC Piping and Plumbing New Work
      1. Removed thermostats indicated from this plan only.
      2. Modified hydronic piping associated with relocated VAVR’s 706 and 707.
      3. Added hydronic piping for VAVR-705.
   b. Seventh Floor Plan – HVAC Sheet Metal New Work.
      1. Added Transfer air openings above ceilings where required.
      2. Removed ductwork and grilles serving Storage 783.
      3. Revised CFM for VAVR-713 to 370 CFM
      4. Relocated VAVR’s 706 and 707.
      5. Modified duct layout in room 790, 790.1, 790.2 and 790.3

4. Refer to Drawing Sheet M4 (Not Issued):

    a. Added general kitchen exhaust EF-K7 indicated in the M7 Fan Schedule to 'Enlarged Plan Mechanical/Electrical Room Mechanical - New Work'. 24"x12" Exhaust grille (EG-1) located in Kitchen 753 and Cabinet inline exhaust fan located in Mechanical Room between AHU-L7 and RAF-7. Exhaust duct routed to relief air shaft to the north of Column line 12 and terminated with an upturn vertical elbow in relief air plenum.

5. Refer to Drawing Sheet M7 (Re-Issued):

    a. Variable Air Volume (VAVR) Box Schedule – Hot Water Heating

        a. Revised information for boxes VAVR-706, VAVR-707 and VAVR-713.

FIRE PROTECTION

1. Refer to Drawing Sheet M8 (Not-Issued):

    a. Added New Work Key Note: "Provide flush mounted sprinkler head with cap in Restroom 749."

ELECTRICAL

1. Refer to Drawing Sheet E1 (Re-Issued):

    a. Updated alternate description 3B to indicate that power for AV devices/locations is Base Bid only and is not included in the Alternate 3B pricing.

    b. Updated the Panelboard Schedules with circuiting to correspond with the 7th Floor Plan - Power and Systems plan.

2. Refer to Drawing Sheet E3 (Re-Issued):

    a. Revised the communication drops in four (4) locations (Reception 755, Reception/Corridor 790, Breakroom & Workroom 752.3 and Work Room Break Room 789) for the copiers (multi-function devices with fax capability) from a single VoIP drop to include one (1) voice drop and one (1) data drop at each location.

    b. Added an additional electrical receptacle and VoIP drop in Shared Conference Room for a monitor on the south wall. The previously indicated power and VoIP drop on the same wall is below the monitor location.

    c. Added an additional electrical receptacles in the following rooms: Office 1 – 795, Office 2 – 793, Reception/Waiting 799, Office 4 – 787, Baptist Student Union 780, Reception 752.

    d. Relocated electrical receptacles in Reception 752.

    e. Eliminated electrical receptacle in Storage 751

f. Added circuiting designations to two (2) electrical receptacles in corridor/lobby outside of the north elevator and revised the circuiting designation for an electrical receptacle in the Common Corridor on the east side of the 7th floor.

g. Added New Work Key Note 26 description to the drawing sheet and indicated Key Note 26 on the 7th Floor Power and Systems plan at two (2) monitors on the west side of Chapel 775.

h. Added New Work Key Note 27 description to the drawing sheet and indicated Key Note 27 on the 7th Floor Power and Systems plan at the sound system cabinet in Chapel 775.

i. Added New Work Key Note 28 description to the drawing sheet and indicated Key Note 28 on the 7th Floor Power and Systems plan in the Ombudsperson 790.3 office.

j. Added power for Fridge in File/Break Room 790.1 and indicated mounting heights for two (2) other electrical receptacles within this same room.

k. Added conduit routing and backbox placement for the Ceiling Mounted Projector in Lounge/Study Area 757.

S P E C I F I C A T I O N S

None

End of Addendum No. 2

cc: Project File, Stick Set

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REFERENCE DOCUMENTS

STANDARDS FOR COMMUNICATIONS INFRASTRUCTURE (Revised 13 March 2015)

SECTION 00 3126 - EXISTING HAZARDOUS MATERIAL INFORMATION

PART 1 GENERAL

1.01 ASBESTOS REPORT

A. A Report on Asbestos and Lead-Based Paint Sampling and Analysis has been prepared for, this Project. This report is available from Wayne State University. It is issued by WSU as part of the Bid Package.
   1. This report identifies suspect asbestos containing materials **and other hazardous materials.**
   2. The Contractor is responsible for development of an abatement plan acceptable to Authorities Having Jurisdiction. Include abatement plan in Construction Plan referenced in Section 01 31 13 - Project Coordination.
   3. The Owner will not be responsible for interpretations or conclusions drawn from this by the Contractor.

B. Additional tests and other exploratory operations may be performed by the Contractor, at Contractor's option; however, at no additional cost to the Owner.

C. The report is as follows:
   1. Prepared by:
      a. Environmental Testing and Consulting, Inc.
      b. 38900 Huron River Drive.
      c. Romulus, Michigan 48174
   2. Report on:
      a. Multi-Building Comprehensive Asbestos Inspection and Testing Report
      b. WSU Project # 99-213662-3
      c. Comprehensive Asbestos Inspection and Testing of Building 034-Student Center Building
      d. Wayne State University
      e. Detroit, Michigan 48202
      f. ETC Project No.143912
      g. January 7, 2013
   3. Report on:
      a. Summary of Added Materials to Building 034-Student Center Building. ETC Project # 143912
      b. August 14, 2013

D. This report, by its nature, cannot reveal all conditions that exist on the project site. Should conditions be found to vary substantially from this report, changes in the scope of abatement will be made, with resulting credits or expenditures to the Contract Price accruing to Owner.

1.02 AIR MONITORING AND TESTING

A. Air Monitoring and Testing will be provided by a separate agency contracted by Wayne State University.
   1. Contractor to coordinate with WSU Project Manager and WSU's testing agency.

1.03 ACM DUMPSTERS

A. Wayne State University will be providing ACM dumpsters.
   1. Manifests are required prior to hauling and disposal to be coordinated with Wayne State University Safety Department.

1.04 ABATEMENT PLAN

A. The Contractor is fully responsible for development and implementation of a complete abatement plan coordinated with the demolition requirements. The abatement plan shall be in accordance with the referenced abatement report.

B. Submit abatement plan to WSU for review, coordination and approval prior to commencement of work.

C. The abatement plan shall include, but not necessarily limited to, the following work scope and other requirements. The full scope and requirements are solely the responsibility of the Contractor to determine based on the referenced abatement report and all applicable codes, laws and regulations, and industry standard practice.

1. **It is understood that the Contract Documents, as they relate to the "Work" are not complete and detailed in all respects. However, the Work of this Agreement includes all work indicated, detailed, implied, inferable and necessary for complete, fully-functioning system, product or installation in accordance with all applicable codes, standards, authorities having jurisdiction ("AHJ"), and the Contract Documents.**
2. **Subcontractor represents that they have expertise in projects of this nature and their staff has the experience and training necessary to fulfill the requirements of this Agreement. Additionally, Subcontractor represents that it has reviewed the Contract Documents, fully understands the intent, and has included all necessary work items not specifically indicated, detailed or specified.**
3. **Provide proof of asbestos training for all personnel to WSU. If unable to provide proof, arrangements must be made to obtain the training. If additional training is required, no additional costs will be accepted by Turner Construction Company or Owner.**
4. **DEMOLITION AND ABATEMENT CONTRACTOR is solely responsible for their own measurements and quantities of the identified materials and is not to be used for bidding purposes.**
5. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for to provide dumpsters for their work. Location, mobilization and change out needs to be coordinate with WSU.**
6. **Site specific safety and Logistics program which includes phasing, sequencing and coordination with other trades is required to maintain work flow.**
7. **Provide full time site project management that will be available to attend regular project meetings.**
8. **Provide all necessary enclosures, temporary ventilation systems, decontamination zones, clean showers, and all containment partitions, etc. complete as required to perform full scope of work. Include removal upon completion of scope of work.**
9. **Provide removal of all Hazardous Materials and is to be properly handled and disposed of in accordance with Wayne State University's Occupation Health and Safety Standard as well as their Construction and Design Standards.**
10. **Coordination with Wayne State University's testing agent and WSU Staff for Lock Out / Tag Out procedures for work requiring shut down AHU's**
11. **Provide all work necessary to achieve "Clean Letters" as necessary from Wayne State University's Environmental Hygienist to ensure school activities are not interrupted.**
12. **Provide and maintain all project reports and documents so that they are available to Wayne State at all time for review.**
13. **Comply with all applicable Wayne State University (WSU), City, State, and Federal laws, rules, regulations, and standards associated with this work.**
14. **Provide Personal Air Monitoring for all abatement work activities. Costs for personal air monitoring is to be included within you scope. Personal air monitoring results are to be turned over to WSU within 72 hours of work being performed.**
15. **The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove the asbestos spray on fireproofing within masonry columns to remain. The removal is limited the material within an "arms" reach down into the column from the top without any damage to the columns to remain (See Plans prints and specs.). Complete encapsulation will be required where asbestos fire proofing material remains in the lower portions of the columns that cannot be removed completely. Once sealed and all areas abated, fire rated polyethylene sheeting to seal the upper column cavity opening at the top of column enclosure where spray on will remain**

within the lower portion of the column or use of a fire rated spray foam preapproved by the Architect of record with proper installation requirements. Areas where columns finishes are to be demolished, must be performed within the negative pressure enclosure as spray on may exist within the lower column areas at the floor area.

16. **Where ceiling systems are required for demolition, they are to be removed as part of the abatement scope of work and all supporting wires and black iron will require removal. The DEMOLITION AND ABATEMENT CONTRACTOR must decontaminate all surfaces from within the regulated area.**
17. **Provide removal of all friable spray on fireproofing insulation including removal of the drywall, plaster board/plaster material over entry doors, walls, etc. for complete removal of material. Areas where spray on fireproofing overspray may have fell behind wall cavities that require demolition will be required to be removed by the Asbestos abatement contractor to clean and decontaminate all surfaces. All spray-on fireproofing over spray will be required to be removed from all adjacent materials, including but not limited to, roof decking, piping, HVAC VAV Boxes, ceiling systems/support wire, electrical components, wires, cables, conduit, cable trays, wall components, wall studs, window systems, door frames, I beams, duct work, flex duct, etc. This material appears to be adhered to Metal wire mesh and wired to the black iron material.**
18. **Provide removal of all pipe joint insulation as identified on the demolition section of the plans prints and specs as outlined in the ETC asbestos survey report. Other building materials may require removal to remove the required asbestos pipe joint material, i.e. drywall, plaster board/plaster material, ceiling panels, HVAC duct work, etc. for complete removal of material.**
19. **Provide removal of all grey Duct insulation as asbestos within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. All duct insulation and areas where ducts will be removed according to the provided architectural plans, prints and specs, must be removed completely by the abatement contractor upon completion of a successful asbestos air clearance and after identification by the Mechanical, Electrical Plumbing (MEP) Contractor.**
20. **All Mechanical, Electrical and Plumbing supports and systems must be decontaminated to remain in place. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, ceiling systems, etc. Any contaminated porous items must be disposed of as asbestos waste.**
21. **Provide removal of all Black floor mastic material under 12" x12" Grey and Pink Floor tile using grinding machines within a full negative pressure enclosure system. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, carpet, etc. as outlined in the ETC asbestos survey report.**
22. **Provide removal of all 12" x12" Beige Floor tile and prep the using grinding machines within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, walls, carpet, etc.**
23. **Provide removal all carpet and asbestos carpet adhesive as outlined in the ETC asbestos survey report. All adhesive removal must be performed by mechanical means to provide a clean floor finish upon completion.**
24. **Provide removal of UL Listed Tagged Fire Doors and Fire Rated Door Frames as indicated on the documents are to be considered as ACM. All door frames will be required to be removed within a negative pressure mini enclosure. Contractor is required to verify the demo plans and prints prior to door and door frame removal.**

25. Provide a full negative pressure enclosure for the project areas that will be divided by a drywall fire rated separation. The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove all interior items stated to be demolished according to the plans, prints and specs. Additional interior demolition will be required to remove the stated asbestos spray on material and fire stop material from within each project area. The work area shall be prepped with a minimum of 2 layers of 6mil polyethylene walls and properly secured to sustain the weight and integrity of the enclosure overtime due to negative pressure. Additional materials to secure the poly walls adequately to the upper wall sections to the roof deck. The roof deck will be required to be HEPA vacuumed and cleaned to remove the spray on insulation overspray material adhered to the roof deck.

26. Provide critical barriers over all ducts, vents, doors and windows leading to non-project areas. Turner will shut down all HVAC systems feeding into the work space. It is the responsibility of The DEMOLITION AND ABATEMENT CONTRACTOR to ensure isolation and capping of all HVAC systems within the work zone where diffusers or openings are located. All other openings leading to non-project areas must be sealed with polyethylene and duct tape. During set up, The DEMOLITION AND ABATEMENT CONTRACTOR must have critical barriers, poly walls, negative pressure established and all workers in appropriate PPE.

27. The locations of air filtration devices will be determined on-site bye the industrial hygienist and Contractor's competent person. All air filtration devices must be ducted outside of the building. Only commercial pre-fabricated duct will be allowed. All doors and windows opened for purposes of ducting the air filtration devices must be properly secured to protect the building security and to prevent unauthorized personnel during off hours. Provide a minimum negative pressure of 0.020 inches of water equivalent during all stages of asbestos abatement. The Abatement Trade Contractor will continuously monitor the negative pressure with a contractor-supplied manometer.

28. Provide an electrical panel system for all electrical systems to be used for the abatement processes.

29. Provide a three stage decontamination chamber at the entrance of each project area equipped with a shower and warm water.

30. Provide remove all observed mudded pipe joints located above the ceiling within each Phased regulated area.

31. Provide decontamination of all ceiling tile grid and black iron by HEPA vacuuming and wet wiping all surfaces. It is understood that all ceiling tiles shall be disposed of as asbestos waste. Full negative pressure and Enclosure Set up must be completed before any Ceiling tile material is removed or lowered from its existing position. No ceiling material shall be removed until the on-site industrial hygienist approves negative pressure, decontaminate the ceiling grid work or dispose of the materials as asbestos-containing materials. All ceiling materials shall immediately be bagged when lowered. No unbagged ceiling panel or spray on materials will be stored on any floor overnight, all materials must be single bagged at a minimum and left inside the enclosure if not completely bagged out to the dumpster at the end of the work shift or cube van, etc.

32. A separate two stage bag-out chamber may be built wherever feasible but must be approved by the onsite industrial hygienist.

33. Provide removal of all of the fluorescent light tubes and dispose of all ballasts. Ballasts are to be disposed of into WSU provided containers.

34. Provide removal of all drywall, smooth plaster materials as asbestos containing waste areas where spray on and grey fire stop material is scheduled to be removed.

35. Fiber drums will not be allowed inside the enclosure unless sufficiently covered with a single disposal bag to be properly decontaminated when exiting the containment. The DEMOLITION AND ABATEMENT CONTRACTOR may place the

single bags inside lined fiber drums during the "double bagging" portion of the project.

36. **During the final cleaning of the project area, The DEMOLITION AND ABATEMENT CONTRACTOR will thoroughly clean all surfaces inside the enclosure visually.**
37. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for any and all debris generated from the selective demolition removal operations including but not limited to insulation, duct, wall systems, wall studs, framing, flooring, carpet, and general dirt and debris. All associated metal ceiling grid or spline grid shall be disposed of or recycled after proper decontamination is approved by the on-site industrial hygienist. All suspended ceiling systems including but not limited to, wires, grid, and black iron will be required to be removed to properly abate all spray on insulation.**
38. **The building will remain occupied at times during construction. All electrical, IT, communication, plumbing systems, must not be damaged or removed within the work area unless verified by the MEP. Provide protection of any and all systems to remain and not be demolished, including but not limited to, fire suppression, phone lines, audio visual equipment, cable, IT, etc. above the ceiling systems. The DEMOLITION AND ABATEMENT CONTRACTOR will be held responsible for any damages to these items located in the work area. Any lights, speakers etc. must be decontaminated and wrapped with 6 mil poly, temporarily suspended from the roof deck as to not damage the lights for the duration of the abatement process for that phase if present.**
39. **The DEMOLITION AND ABATEMENT CONTRACTOR may be required to pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by The DEMOLITION AND ABATEMENT CONTRACTOR as deemed necessary by the Owner or the Owner's Consultant. The extent of the pre-cleaning will be determined by, but not limited to the following factors: the particular application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied.**
40. **Where doors or other such building fixtures are removed by The DEMOLITION AND ABATEMENT CONTRACTOR prior to abatement activities, The DEMOLITION AND ABATEMENT CONTRACTOR is responsible for replacing doors and/or fixtures upon completion of abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by The DEMOLITION AND ABATEMENT CONTRACTOR to insure replacement in the proper location.**
41. **The DEMOLITION AND ABATEMENT CONTRACTOR shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at minimum, 4-mil polyethylene sheeting.**
42. **Walls will be covered with at least one layer of 4-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and The DEMOLITION AND ABATEMENT CONTRACTOR shall comply with the method chosen.**
43. **Floors shall be covered with at least three layers of 6-mil polyethylene sheeting.**
44. **Non-waterproof tape may not be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used.**
45. **The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that The DEMOLITION AND ABATEMENT CONTRACTOR will use for the movement of supplies and personnel.**
46. **No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.**

47. Provide decontamination facilities in a predestinated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered with an entrance airlock with shower facilities in its central chamber. The dimensions of these chambers will be adequate for the number of men needed for the project. At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers. The walls, floor, and ceiling covering of the airlock construction will be seamed to each other in a fashion making them air and water tight. One end of this construction will exit to the clean area outside the containment barrier walls. The other end of this construction will exit inside or at the containment barrier walls. Except for these doors, all three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the work area. Both layers will be attached to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. It air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure. The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers. A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste. Black polyethylene sheeting may be used for privacy on the decontamination facility.

48. The DEMOLITION AND ABATEMENT CONTRACTOR may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit. The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility. As each bag is filled, it will be set into the first room for temporary storage. Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on the transport vehicle (airlocks must exist between each room, as in the main decontamination facility). If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process. If a separate decontamination facility is constructed it shall be sealed while not in use.

49. All workers, without exception, will change street clothes in designated areas (clean room) prior to the start of each day's work. Lockers or acceptable substitutes will be provided by The DEMOLITION AND ABATEMENT CONTRACTOR for street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.

50. At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos

waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. Hot water, towels, soap and hygienic conditions shall be provided by The DEMOLITION AND ABATEMENT CONTRACTOR.

51. **The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.**
52. **If any large components are removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.**
53. **When removal of building materials (electrical, light, duct work, etc.) is necessary, The DEMOLITION AND ABATEMENT CONTRACTOR shall develop drawings indicating existing materials and their exact locations.**
54. **All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metal lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.**
55. **The DEMOLITION AND ABATEMENT CONTRACTOR will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.**
56. **Sufficient negative pressure will be used in the enclosure to evacuate the air once every 15 minutes (minimum).**
57. **Only vacuums and air filtration devices with "HEPA" filters will be allowed. No "shop-vacs," homemade hybrid vacuums or air filtration devices will be allowed on site.**
58. **Following the cleanup of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until final air checks are completed.**
59. **A complete visual inspection to insure dust free conditions. The DEMOLITION AND ABATEMENT CONTRACTOR shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany The DEMOLITION AND ABATEMENT CONTRACTOR during the inspection and determine if additional cleaning is necessary.**
60. **Copies of Disposal receipts of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation are to be submitted to WSU for record.**
61. **Coordination with all other trade subcontractors.**
62. **Temporary protection to all adjacent areas, materials, and third parties.**
63. **Continuous clean-up of own work to project dumpsters per Turner's "Nothing Hits the Ground" policy.**
64. **Provide all permits, fees, testing, and inspections for this work.**

65. All Subcontractors are to provide field staff have received and are current with Lead, Asbestos, and Cadmium Awareness Training.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 02 4119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Division 00 - Procurement and Contracting Requirements, and Division 01 - General Requirements, are hereby made part of this Section.

1.02 SECTION INCLUDES

A. Selective structure demolition work includes, but is not limited to, the following:
   1. Demolition and removal of selected portions of the existing building.
   2. Patching and repairs.
   3. Existing Hazardous Material Information.

1.03 RELATED SECTIONS

A. Section 00 3126 - Existing Hazardous Material Information; for hazardous material report.

1.04 SUBMITTALS

A. Schedule: Submit schedule indicating proposed methods and sequence of operations for selective structure demolition work to Owner's Representative for review prior to commencement of work.
   1. Provide detailed sequence of demolition and removal work to ensure uninterrupted occupancy of building.
   2. Include coordination for shut-off of utilities, if required.
   3. Proposed dust-control and noise-control measures.

B. Inventory of items to be removed and salvaged.

C. Inventory of items to be removed by Owner.

D. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating all refrigerant that was present was recovered and recovery was performed according to EPA regulations.
   1. Include name and address of technician and date refrigerant was recovered.

E. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction that might be misconstrued as damage caused by selective structure demolition operations.

F. Landfill records indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous waste.

1.05 QUALITY ASSURANCE

A. Contractor Qualifications: Engage only subcontractors who can demonstrate not less than five years successful experience in work of similar character.

B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

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

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

1.06 PROJECT CONDITIONS

A. Occupancy: The Owner will be continuously occupying spaces immediately adjacent to areas of selective structure demolition. Conduct selective structure demolition work in such manner that will minimize need for disruption of normal operations.

B. Condition of Structures: Owner assumes no responsibility for actual condition of items to be demolished.

C. Asbestos: Asbestos is present and will be encountered in the Work. A report on the presence of asbestos is ~~on file for review and use~~ **being issued by Wayne State University as part of**

this Bid Package. Examine the report to become aware of locations where asbestos is present.

1. The ~~Owner~~ **Contractor** is responsible for asbestos abatement **and abatement of any other hazardous materials indicated in the report.**
2. ~~Do not disturb asbestos or any material suspected of containing asbestos.~~
3. **Remove asbestos and other hazardous materials in accordance with the Contractor's abatement plan noted in Specifications Section 00 3126.**

D. Partial Demolition: Items indicated to be removed, but of salvable value shall be turned over to the Owner.

E. Storage or sale of removed items or materials on-site is prohibited.

F. Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective structure demolition work.
1. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from the building.
2. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
3. Protect floors with suitable coverings when necessary.
4. Construct temporary insulated solid dustproof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks if required.
   a. Temporary dustproof partitions shall be fire-rated where indicated or required by authorities having jurisdiction.
5. Remove protections at completion of work.

G. Damages: Promptly repair damages caused to adjacent facilities by structure demolition work at no cost to Owner.

1.07 SCHEDULING

A. Arrange selective structure demolition operations so as not to interfere with Owner's existing on-site operations.

PART 2 PRODUCTS

2.01 MATERIALS

A. General: Except as otherwise indicated or approved by Architect, provide materials for selective demolition which will result in equal-or-better work than the work being cut-and-patched in terms of performance characteristics, including visual effect where applicable. Comply with the requirements, and use materials identical to original materials where feasible and where recognized that satisfactory results can be produced thereby.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to commencement of selective structure demolition work, inspect areas in which work will be performed.

B. When unanticipated mechanical, electrical, and structural elements are encountered, and conflict with intended design, investigate and measure the nature and extent of conflict. Promptly submit a report in writing to Architect.

C. Survey condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective structure demolition operations.

3.02 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect against damage during selective structure demolition operations.
1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by the Owner or authorities having jurisdiction.

3.03 PREPARATION

A. Conduct structure demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective structure demolition area.
   1. Cover and protect equipment and fixtures from soiling or damage when demolition work is performed in rooms or areas from which such items have not been removed.

B. Erect and maintain dustproof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
   1. Where selective demolition occurs, construct dustproof partitions of minimum 4" studs, 5/8" drywall (joints taped) on occupied side, 1/2" fire-retardant plywood on demolition side, and fill partitions cavity with sound-deadening insulation.

C. Provide and maintain shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

D. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior construction and new construction, to ensure no water leakage or damage occurs to structure or interior areas.

3.04 DEMOLITION

A. Demolish and remove existing construction only to extent required by new construction and indicated.

B. Perform selective structure demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

C. Employ only skilled tradesmen to perform selective structure demolition.

D. Cut work by methods least likely to damage work to be retained and work adjoining. Neatly cut openings and holes square, plumb, and true to size required.

E. In general, where physical cutting action is required, cut work with sawing and grinding tools, not with hammering and chopping tools.

F. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden spaces before starting flame-cutting operations.
   1. Maintain portable fire-suppression devices during flame-cutting operations.

G. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

H. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power driven masonry saw or hand tools; do not use power driven impact tools.

I. Removal of flooring materials shall include all adhesives, setting beds, underlayments, and other materials detrimental to new finished flooring materials.

3.05 PATCHING AND REPAIRS

A. Promptly patch and repair damaged surfaces caused to adjacent construction by selective structure demolition operations.

B. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

C. Restore exposed finishes of patched area; and where necessary, extend finish restoration onto retained work adjoining, in manner to eliminate evidence of patching.

D. Closely match finish and texture of existing adjacent surfaces.

E. Where selective structure demolition terminates at a surface, finish, or substrate to remain, completely remove all traces of material selectively demolished, including mortar beds. Provide smooth, even substrate transition.

F. Where patching smooth painted surfaces, extend final coat of paint over entire unbroken surface, after patched and repaired area has received primer and second coat.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Do not allow demolished materials to accumulate on-site. Transport and dispose of materials off-site in legal manner in an EPA-approved landfill.

~~1. Hazardous materials will be encountered during demolition operations. Stop work in the area affected and report the condition to the Owner and Architect in writing. If Owner determines the hazardous materials are asbestos or PCB's, do no further work in the area until the materials are either removed or rendered harmless, and the area has been certified safe by appropriate authorities.~~

2. Hazardous materials will be encountered during demolition operations. Remove hazardous materials, asbestos and PCB's and certify by appropriate authorities that the area is safe.

~~2~~**3**. Burning of removed materials is not permitted on project site.

3.07 CLEAN-UP AND REPAIR

A. Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.

B. Repair demolition performed in excess of that required. Return surfaces to remain to condition existing prior to commencement of selective structure demolition work. Repair adjacent construction or surfaces soiled or damaged by selective structure demolition work.

C. Clean adjacent portion of the structure and improvements of dust, dirt and debris caused by demolition operations, as directed by the Architect and Owner, or governing authorities. Return adjacent areas to conditions existing prior to start of work.

END OF SECTION

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ADDENDUM #2

DATE	August 20, 2015
PROJECT NAME	Wayne State University Student Center 5th Floor Renovation Student Center 7th Floor Renovation
PROJECT NUMBER	2015025 WSU 5th Floor: 034-266828 WSU 7th Floor: 034-261806
DISTRIBUTION	WSU FP&M Bidders – Via WSU DSD

The following revisions and/or additions to the plans and specifications are issued before the award of the contract and are to be included in the original Bid Package Drawings and Specifications, dated 07.28.2015 and Addendum #1, dated 08.14.2015. This Addendum shall take precedence over anything contrary to the original drawings and specifications and shall be referred to hereinafter as part of the contract documents.

All revisions to the drawings have a cloud around the revision.

The following documents are being revised and / or reissued with this Addendum. All changes are indicated in the following written text.

5th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A805, A921
- Mechanical Drawings: M2, M3, M4 (None Reissued)
- Electrical Drawings: E1, E3

7th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A807, A921 (A207 Not Reissued)
- Mechanical Drawings: M3, M7 (M1, M2, M4, M8 Not Reissued)
- Electrical Drawings: E1, E3

5th & 7th Floor - Issued By WSU Under Separate Cover
- "Comprehensive Asbestos inspection and Testing of Building 034-Student Center Building" report
- Note: WSU did not issue an Abatement Specification in Addendum #1.

No other drawings, specifications or other documents are being revised. All Addendum revisions are indicated on the drawings, unless otherwise noted.

Include all costs in the bid proposal (base bid and alternate bids.)

All drawings are being reissued via WSU Purchasing Department.

5th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 000110

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP3
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A805

A. Flooring designations changed in 575 and 575.1 thru 575.5.
B. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 575 and 575.1 thru 575.5.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

7th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 00 01 10

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP4
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required.

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A807 (A207 Revised, Not Reissued)

A. Corridor 785 changed to Open Office 785 on A807 and A207.
B. Unnecessary "PX" removed from 785 open area on A807.
C. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 780 and 780.1
B. Corridor 785 changed to Open Office 785 on schedule.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

END OF ADDENDUM #2

DiClemente Siegel Design Inc.
28105 Greenfield Road Southfield, Michigan 48076
248.569.1430 FAX 248.569.0096
Engineering and Architecture

A D D E N D U M N O . 2

Wayne State University
Student Center 5th Floor Renovation
WSU No. 034-266828
DSD Project No. 15-4806.00 **08/20/15**

This instruction is issued prior to awarding the contract, to provide for certain changes, deletions and/or additions to the Plans and Specifications for the above named project as hereinafter specified.

Unless otherwise specified herein, the work covered under this instruction shall be in accordance with the basic contract documents. The work hereinafter specified shall be included in the contract.

Drawings M2, M3, M4, E1 and E3 are revised as a part of this Addendum.

D R A W I N G S

MECHANICAL

1. Refer to Drawing Sheet M2 (Not Issued):

   a. Added General Note 8: “At demoed thermostats install cover plate and paint to match existing wall.”

   b. Added demolition of existing elbow between 36”x12” return duct and shaft at Column 23-F.

   c. Added demolition of 36”x9” duct from 5’ north of column line 20 to the shaft north of Column line 21 between Column lines E and F.

2. Refer to Drawing Sheet M3 (Not Issued):

   a. Added a bell mouth duct opening at the end of the 36”x9” return air duct termination approximately 5’ north of Column line 20 between Column line E and F.

   b. Extended return air ductwork with a bell mouth opening from the existing 36”x10” return air main into the Office 575 corridor. Duct to be terminated 3’ north of column line 19. Shift return air grille indicated just north of Column line 19 to approximately 6’ north of Column line 19 in the Office 575 corridor.

   c. Added return air transfer grilles in the Office 575 area between the full height office walls and the office corridor. Included are Offices 575.1, 575.2, 575.3, 575.4 and 575.5.

   d. Added 6”x6” opening into existing 38”x12” return air duct above ceiling in Storage 586.

   e. Added 8”x8” duct with volume damper for balancing above ceiling from existing 36”x12” return air main through full height south wall and into the ceiling plenum of Staff Work Room 598. Also added 24”x12” return air grille in the lay-in ceiling of Staff Work Room 598.

   f. Added 18”x10” duct with volume damper and bell mouth opening off of the existing 38”x12” return air duct above the Student Stations 584 ceiling.

3. Refer to Drawing Sheet M4 (Not Issued):

    a. Added EF-K5 indicated in the M7 Fan Schedule to 'Enlarged Plan Mechanical/Electrical Room Mechanical - New Work'. 24"x12" Exhaust grille (EG-1) located in Kitchen 553 and Cabinet inline exhaust fan located in Mechanical Room between AHU-L5 and RAF-5. Exhaust duct routed to relief air shaft to the north of Column line 12 and terminated with an upturn vertical elbow in relief air plenum.

ELECTRICAL

1. Refer to Drawing Sheet E1 (Re-Issued):

    a. Updated alternate description 3A to indicate that power for AV devices/locations is Base Bid only and is not included in the Alternate 3A pricing.

    b. Updated the Panelboard Schedules with circuiting to correspond with the 5th Floor Plan - Power and Systems plan.

2. Refer to Drawing Sheet E3 (Re-Issued):

    a. Revised the communication drop in Shared Work Room 594 for the Copier from a single VoIP drop to include one (1) voice drop and one (1) data drop.

    b. Revised location of electrical receptacles in Office 595 and Office 597.

    c. Added an electrical receptacle in Office 595 on the east wall.

    d. Added an electrical receptacle and VoIP drop to the south wall of Student Stations 584.

    e. Eliminated power and communications for monitor in Shared Break Room 595.

    f. Eliminated electrical receptacle in Corridor 575.

    g. Added circuiting designation to electrical receptacle in Common Corridor 5100.

S P E C I F I C A T I O N S

None

End of Addendum No. 2

cc: Project File, Stick Set

SECTION 000110 - TABLE OF CONTENTS

Firm	Section		Revision	Bulletin
	Division 00 – Procurement and Contracting			
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N/S	00 0110	Table of Contents	**A2**	
N/S	00 3126	Existing Hazardous Material Information	**A2**	
	Division 01 – General Requirements			
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N/S	01 2300	Alternates		
N/S	01 2500	Substitution Procedures		
N/S	01 2500.13	Substitution Request Form		
N/S	01 2600	Contract Modification Procedures		
N/S	01 2613	Requests for Interpretation (RFI)		
N/S	01 2900	Payment Procedures		
N/S	01 3113	Project Coordination		
N/S	01 3119	Project Meetings		
N/S	01 3233	Photographic Documentation		
N/S	01 3323	Shop Drawings, Product Data and Samples		
N/S	01 3323.13	Authorization for Release of CAD Files		
N/S	01 4523	Quality Control Testing and Inspection Services		
N/S	01 6000	Common Product Requirements		
N/S	01 7423	Final Cleaning		
N/S	01 7700	Closeout Procedures		
N/S	01 7839	Project Record Documents		
	Division 02 – Existing Conditions			
N/S	02 4119	Selective Structure Demolition	**A2**	
	Divisions 03 - NOT USED			
	Division 04 - Masonry			
N/S	04 2000	Unit Masonry		
	Division 05 - Metals			
N/S	05 4100	Cold Formed Metal Stud Framing		
N/S	05 5000	Metal Fabrications		
	Division 06 – Wood, Plastics and Composites			
N/S	06 1000	Rough Carpentry		
N/S	06 4023	Interior Architectural Woodwork		
	Division 07 – Thermal and Moisture Protection			
N/S	07 2100	Thermal Insulation		
N/S	07 8400	Firestopping		
N/S	07 9200	Joint Sealants		
	Division 08 – Openings			
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N/S	08 1416	Flush Wood Doors		
N/S	08 7100	Door Hardware		
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	Division 09 – Finishes			
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N/S	09 2300	Gypsum Plaster Patching and Repair		
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N/S	09 6519	Resilient Tile Flooring		

Firm	Section		Revision	Bulletin
N/S	09 6813	Tile Carpeting		
N/S	09 9100	Painting		
	Division 10 - Specialties			
N/S	10 1443	Interior Signage		
N/S	10 2601	Wall and Corner Guards		
	Division 11 – Equipment – NOT USED			
	Division 12 – Furnishings			
N/S	12 2413	Roller Window Shades		
	Divisions 13 through 20 – NOT USED			
	Division 21 – Fire Protection			
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DSD	21 0517	Sleeves & Sleeve Seals for Fire Suppression Piping		
DSD	21 0518	Escutcheons for Fire Suppression Piping		
DSD	21 0548	Vibration Controls for Fire Suppression Piping and Equipment		
DSD	21 1000	Water-Based Fire Suppression System		
DSD	21 1200	Fire Suppression Standpipes		
	Division 22 – Plumbing			
DSD	22 0500	Common Work Results for Plumbing		
DSD	22 0519	Meters and Gages for Plumbing Piping		
DSD	22 0523	General Duty Valves for Plumbing		
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DSD	22 0553	Identification for Plumbing, Piping and Equipment		
DSD	22 0700	Plumbing Insulation		
DSD	22 1116	Domestic Water Piping		
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DSD	23 3423	HVAC Power Ventilators		
DSD	23 3600	Air Terminal Units		
DSD	23 3713	Diffusers, Registers and Grilles		
DSD	23 4100	Particulate Air Filtration		
DSD	23 5700	Heat Exchangers for HVAC		
DSD	23 7313	Modular Indoor Central Station Air-Handling Units		
DSD	23 8216	Air Coils		
DSD	23 8316	Radiant-Heating Hydronic Panels	A1	

REFERENCE DOCUMENTS

STANDARDS FOR COMMUNICATIONS INFRASTRUCTURE (Revised 13 March 2015)

SECTION 00 3126 - EXISTING HAZARDOUS MATERIAL INFORMATION

PART 1 GENERAL

1.01 ASBESTOS REPORT

A. A Report on Asbestos and Lead-Based Paint Sampling and Analysis has been prepared for, this Project. This report is available from Wayne State University. It is issued by WSU as part of the Bid Package.
   1. This report identifies suspect asbestos containing materials **and other hazardous materials.**
   2. The Contractor is responsible for development of an abatement plan acceptable to Authorities Having Jurisdiction. Include abatement plan in Construction Plan referenced in Section 01 31 13 - Project Coordination.
   3. The Owner will not be responsible for interpretations or conclusions drawn from this by the Contractor.

B. Additional tests and other exploratory operations may be performed by the Contractor, at Contractor's option; however, at no additional cost to the Owner.

C. The report is as follows:
   1. Prepared by:
      a. Environmental Testing and Consulting, Inc.
      b. 38900 Huron River Drive.
      c. Romulus, Michigan 48174
   2. Report on:
      a. Multi-Building Comprehensive Asbestos Inspection and Testing Report
      b. WSU Project # 99-213662-3
      c. Comprehensive Asbestos Inspection and Testing of Building 034-Student Center Building
      d. Wayne State University
      e. Detroit, Michigan 48202
      f. ETC Project No.143912
      g. January 7, 2013
   3. Report on:
      a. Summary of Added Materials to Building 034-Student Center Building. ETC Project # 143912
      b. August 14, 2013

D. This report, by its nature, cannot reveal all conditions that exist on the project site. Should conditions be found to vary substantially from this report, changes in the scope of abatement will be made, with resulting credits or expenditures to the Contract Price accruing to Owner.

1.02 AIR MONITORING AND TESTING

A. Air Monitoring and Testing will be provided by a separate agency contracted by Wayne State University.
   1. Contractor to coordinate with WSU Project Manager and WSU's testing agency.

1.03 ACM DUMPSTERS

A. Wayne State University will be providing ACM dumpsters.
   1. Manifests are required prior to hauling and disposal to be coordinated with Wayne State University Safety Department.

1.04 ABATEMENT PLAN

A. The Contractor is fully responsible for development and implementation of a complete abatement plan coordinated with the demolition requirements. The abatement plan shall be in accordance with the referenced abatement report.

B. Submit abatement plan to WSU for review, coordination and approval prior to commencement of work.

C. The abatement plan shall include, but not necessarily limited to, the following work scope and other requirements. The full scope and requirements are solely the responsibility of the Contractor to determine based on the referenced abatement report and all applicable codes, laws and regulations, and industry standard practice.

1. **It is understood that the Contract Documents, as they relate to the "Work" are not complete and detailed in all respects. However, the Work of this Agreement includes all work indicated, detailed, implied, inferable and necessary for complete, fully-functioning system, product or installation in accordance with all applicable codes, standards, authorities having jurisdiction ("AHJ"), and the Contract Documents.**
2. **Subcontractor represents that they have expertise in projects of this nature and their staff has the experience and training necessary to fulfill the requirements of this Agreement. Additionally, Subcontractor represents that it has reviewed the Contract Documents, fully understands the intent, and has included all necessary work items not specifically indicated, detailed or specified.**
3. **Provide proof of asbestos training for all personnel to WSU. If unable to provide proof, arrangements must be made to obtain the training. If additional training is required, no additional costs will be accepted by Turner Construction Company or Owner.**
4. **DEMOLITION AND ABATEMENT CONTRACTOR is solely responsible for their own measurements and quantities of the identified materials and is not to be used for bidding purposes.**
5. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for to provide dumpsters for their work. Location, mobilization and change out needs to be coordinate with WSU.**
6. **Site specific safety and Logistics program which includes phasing, sequencing and coordination with other trades is required to maintain work flow.**
7. **Provide full time site project management that will be available to attend regular project meetings.**
8. **Provide all necessary enclosures, temporary ventilation systems, decontamination zones, clean showers, and all containment partitions, etc. complete as required to perform full scope of work. Include removal upon completion of scope of work.**
9. **Provide removal of all Hazardous Materials and is to be properly handled and disposed of in accordance with Wayne State University's Occupation Health and Safety Standard as well as their Construction and Design Standards.**
10. **Coordination with Wayne State University's testing agent and WSU Staff for Lock Out / Tag Out procedures for work requiring shut down AHU's**
11. **Provide all work necessary to achieve "Clean Letters" as necessary from Wayne State University's Environmental Hygienist to ensure school activities are not interrupted.**
12. **Provide and maintain all project reports and documents so that they are available to Wayne State at all time for review.**
13. **Comply with all applicable Wayne State University (WSU), City, State, and Federal laws, rules, regulations, and standards associated with this work.**
14. **Provide Personal Air Monitoring for all abatement work activities. Costs for personal air monitoring is to be included within you scope. Personal air monitoring results are to be turned over to WSU within 72 hours of work being performed.**
15. **The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove the asbestos spray on fireproofing within masonry columns to remain. The removal is limited the material within an "arms" reach down into the column from the top without any damage to the columns to remain (See Plans prints and specs.). Complete encapsulation will be required where asbestos fire proofing material remains in the lower portions of the columns that cannot be removed completely. Once sealed and all areas abated, fire rated polyethylene sheeting to seal the upper column cavity opening at the top of column enclosure where spray on will remain**

within the lower portion of the column or use of a fire rated spray foam preapproved by the Architect of record with proper installation requirements. Areas where columns finishes are to be demolished, must be performed within the negative pressure enclosure as spray on may exist within the lower column areas at the floor area.

16. **Where ceiling systems are required for demolition, they are to be removed as part of the abatement scope of work and all supporting wires and black iron will require removal. The DEMOLITION AND ABATEMENT CONTRACTOR must decontaminate all surfaces from within the regulated area.**
17. **Provide removal of all friable spray on fireproofing insulation including removal of the drywall, plaster board/plaster material over entry doors, walls, etc. for complete removal of material. Areas where spray on fireproofing overspray may have fell behind wall cavities that require demolition will be required to be removed by the Asbestos abatement contractor to clean and decontaminate all surfaces. All spray-on fireproofing over spray will be required to be removed from all adjacent materials, including but not limited to, roof decking, piping, HVAC VAV Boxes, ceiling systems/support wire, electrical components, wires, cables, conduit, cable trays, wall components, wall studs, window systems, door frames, I beams, duct work, flex duct, etc. This material appears to be adhered to Metal wire mesh and wired to the black iron material.**
18. **Provide removal of all pipe joint insulation as identified on the demolition section of the plans prints and specs as outlined in the ETC asbestos survey report. Other building materials may require removal to remove the required asbestos pipe joint material, i.e. drywall, plaster board/plaster material, ceiling panels, HVAC duct work, etc. for complete removal of material.**
19. **Provide removal of all grey Duct insulation as asbestos within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. All duct insulation and areas where ducts will be removed according to the provided architectural plans, prints and specs, must be removed completely by the abatement contractor upon completion of a successful asbestos air clearance and after identification by the Mechanical, Electrical Plumbing (MEP) Contractor.**
20. **All Mechanical, Electrical and Plumbing supports and systems must be decontaminated to remain in place. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, ceiling systems, etc. Any contaminated porous items must be disposed of as asbestos waste.**
21. **Provide removal of all Black floor mastic material under 12" x12" Grey and Pink Floor tile using grinding machines within a full negative pressure enclosure system. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, carpet, etc. as outlined in the ETC asbestos survey report.**
22. **Provide removal of all 12" x12" Beige Floor tile and prep the using grinding machines within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, walls, carpet, etc.**
23. **Provide removal all carpet and asbestos carpet adhesive as outlined in the ETC asbestos survey report. All adhesive removal must be performed by mechanical means to provide a clean floor finish upon completion.**
24. **Provide removal of UL Listed Tagged Fire Doors and Fire Rated Door Frames as indicated on the documents are to be considered as ACM. All door frames will be required to be removed within a negative pressure mini enclosure. Contractor is required to verify the demo plans and prints prior to door and door frame removal.**

25. **Provide a full negative pressure enclosure for the project areas that will be divided by a drywall fire rated separation. The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove all interior items stated to be demolished according to the plans, prints and specs. Additional interior demolition will be required to remove the stated asbestos spray on material and fire stop material from within each project area. The work area shall be prepped with a minimum of 2 layers of 6mil polyethylene walls and properly secured to sustain the weight and integrity of the enclosure overtime due to negative pressure. Additional materials to secure the poly walls adequately to the upper wall sections to the roof deck. The roof deck will be required to be HEPA vacuumed and cleaned to remove the spray on insulation overspray material adhered to the roof deck.**
26. **Provide critical barriers over all ducts, vents, doors and windows leading to non-project areas. Turner will shut down all HVAC systems feeding into the work space. It is the responsibility of The DEMOLITION AND ABATEMENT CONTRACTOR to ensure isolation and capping of all HVAC systems within the work zone where diffusers or openings are located. All other openings leading to non-project areas must be sealed with polyethylene and duct tape. During set up, The DEMOLITION AND ABATEMENT CONTRACTOR must have critical barriers, poly walls, negative pressure established and all workers in appropriate PPE.**
27. **The locations of air filtration devices will be determined on-site bye the industrial hygienist and Contractor's competent person. All air filtration devices must be ducted outside of the building. Only commercial pre-fabricated duct will be allowed. All doors and windows opened for purposes of ducting the air filtration devices must be properly secured to protect the building security and to prevent unauthorized personnel during off hours. Provide a minimum negative pressure of 0.020 inches of water equivalent during all stages of asbestos abatement. The Abatement Trade Contractor will continuously monitor the negative pressure with a contractor-supplied manometer.**
28. **Provide an electrical panel system for all electrical systems to be used for the abatement processes.**
29. **Provide a three stage decontamination chamber at the entrance of each project area equipped with a shower and warm water.**
30. **Provide remove all observed mudded pipe joints located above the ceiling within each Phased regulated area.**
31. **Provide decontamination of all ceiling tile grid and black iron by HEPA vacuuming and wet wiping all surfaces. It is understood that all ceiling tiles shall be disposed of as asbestos waste. Full negative pressure and Enclosure Set up must be completed before any Ceiling tile material is removed or lowered from its existing position. No ceiling material shall be removed until the on-site industrial hygienist approves negative pressure, decontaminate the ceiling grid work or dispose of the materials as asbestos-containing materials. All ceiling materials shall immediately be bagged when lowered. No unbagged ceiling panel or spray on materials will be stored on any floor overnight, all materials must be single bagged at a minimum and left inside the enclosure if not completely bagged out to the dumpster at the end of the work shift or cube van, etc.**
32. **A separate two stage bag-out chamber may be built wherever feasible but must be approved by the onsite industrial hygienist.**
33. **Provide removal of all of the fluorescent light tubes and dispose of all ballasts. Ballasts are to be disposed of into WSU provided containers.**
34. **Provide removal of all drywall, smooth plaster materials as asbestos containing waste areas where spray on and grey fire stop material is scheduled to be removed.**
35. **Fiber drums will not be allowed inside the enclosure unless sufficiently covered with a single disposal bag to be properly decontaminated when exiting the containment. The DEMOLITION AND ABATEMENT CONTRACTOR may place the**

single bags inside lined fiber drums during the "double bagging" portion of the project.

36. **During the final cleaning of the project area, The DEMOLITION AND ABATEMENT CONTRACTOR will thoroughly clean all surfaces inside the enclosure visually.**
37. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for any and all debris generated from the selective demolition removal operations including but not limited to insulation, duct, wall systems, wall studs, framing, flooring, carpet, and general dirt and debris. All associated metal ceiling grid or spline grid shall be disposed of or recycled after proper decontamination is approved by the on-site industrial hygienist. All suspended ceiling systems including but not limited to, wires, grid, and black iron will be required to be removed to properly abate all spray on insulation.**
38. **The building will remain occupied at times during construction. All electrical, IT, communication, plumbing systems, must not be damaged or removed within the work area unless verified by the MEP. Provide protection of any and all systems to remain and not be demolished, including but not limited to, fire suppression, phone lines, audio visual equipment, cable, IT, etc. above the ceiling systems. The DEMOLITION AND ABATEMENT CONTRACTOR will be held responsible for any damages to these items located in the work area. Any lights, speakers etc. must be decontaminated and wrapped with 6 mil poly, temporarily suspended from the roof deck as to not damage the lights for the duration of the abatement process for that phase if present.**
39. **The DEMOLITION AND ABATEMENT CONTRACTOR may be required to pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by The DEMOLITION AND ABATEMENT CONTRACTOR as deemed necessary by the Owner or the Owner's Consultant. The extent of the pre-cleaning will be determined by, but not limited to the following factors: the particular application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied.**
40. **Where doors or other such building fixtures are removed by The DEMOLITION AND ABATEMENT CONTRACTOR prior to abatement activities, The DEMOLITION AND ABATEMENT CONTRACTOR is responsible for replacing doors and/or fixtures upon completion of abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by The DEMOLITION AND ABATEMENT CONTRACTOR to insure replacement in the proper location.**
41. **The DEMOLITION AND ABATEMENT CONTRACTOR shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at minimum, 4-mil polyethylene sheeting.**
42. **Walls will be covered with at least one layer of 4-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and The DEMOLITION AND ABATEMENT CONTRACTOR shall comply with the method chosen.**
43. **Floors shall be covered with at least three layers of 6-mil polyethylene sheeting.**
44. **Non-waterproof tape may not be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used.**
45. **The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that The DEMOLITION AND ABATEMENT CONTRACTOR will use for the movement of supplies and personnel.**
46. **No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.**

47. Provide decontamination facilities in a predestinated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered with an entrance airlock with shower facilities in its central chamber. The dimensions of these chambers will be adequate for the number of men needed for the project. At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers. The walls, floor, and ceiling covering of the airlock construction will be seamed to each other in a fashion making them air and water tight. One end of this construction will exit to the clean area outside the containment barrier walls. The other end of this construction will exit inside or at the containment barrier walls. Except for these doors, all three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the work area. Both layers will be attached to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. It air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure. The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers. A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste. Black polyethylene sheeting may be used for privacy on the decontamination facility.

48. The DEMOLITION AND ABATEMENT CONTRACTOR may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit. The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility. As each bag is filled, it will be set into the first room for temporary storage. Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on the transport vehicle (airlocks must exist between each room, as in the main decontamination facility). If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process. If a separate decontamination facility is constructed it shall be sealed while not in use.

49. All workers, without exception, will change street clothes in designated areas (clean room) prior to the start of each day's work. Lockers or acceptable substitutes will be provided by The DEMOLITION AND ABATEMENT CONTRACTOR for street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.

50. At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos

waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. Hot water, towels, soap and hygienic conditions shall be provided by The DEMOLITION AND ABATEMENT CONTRACTOR.

51. **The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.**
52. **If any large components are removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.**
53. **When removal of building materials (electrical, light, duct work, etc.) is necessary, The DEMOLITION AND ABATEMENT CONTRACTOR shall develop drawings indicating existing materials and their exact locations.**
54. **All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metal lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.**
55. **The DEMOLITION AND ABATEMENT CONTRACTOR will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.**
56. **Sufficient negative pressure will be used in the enclosure to evacuate the air once every 15 minutes (minimum).**
57. **Only vacuums and air filtration devices with "HEPA" filters will be allowed. No "shop-vacs," homemade hybrid vacuums or air filtration devices will be allowed on site.**
58. **Following the cleanup of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until final air checks are completed.**
59. **A complete visual inspection to insure dust free conditions. The DEMOLITION AND ABATEMENT CONTRACTOR shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany The DEMOLITION AND ABATEMENT CONTRACTOR during the inspection and determine if additional cleaning is necessary.**
60. **Copies of Disposal receipts of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation are to be submitted to WSU for record.**
61. **Coordination with all other trade subcontractors.**
62. **Temporary protection to all adjacent areas, materials, and third parties.**
63. **Continuous clean-up of own work to project dumpsters per Turner's "Nothing Hits the Ground" policy.**
64. **Provide all permits, fees, testing, and inspections for this work.**

65. All Subcontractors are to provide field staff have received and are current with Lead, Asbestos, and Cadmium Awareness Training.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 02 4119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Division 00 - Procurement and Contracting Requirements, and Division 01 - General Requirements, are hereby made part of this Section.

1.02 SECTION INCLUDES

A. Selective structure demolition work includes, but is not limited to, the following:
   1. Demolition and removal of selected portions of the existing building.
   2. Patching and repairs.
   3. Existing Hazardous Material Information.

1.03 RELATED SECTIONS

A. Section 00 3126 - Existing Hazardous Material Information; for hazardous material report.

1.04 SUBMITTALS

A. Schedule: Submit schedule indicating proposed methods and sequence of operations for selective structure demolition work to Owner's Representative for review prior to commencement of work.
   1. Provide detailed sequence of demolition and removal work to ensure uninterrupted occupancy of building.
   2. Include coordination for shut-off of utilities, if required.
   3. Proposed dust-control and noise-control measures.

B. Inventory of items to be removed and salvaged.

C. Inventory of items to be removed by Owner.

D. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating all refrigerant that was present was recovered and recovery was performed according to EPA regulations.
   1. Include name and address of technician and date refrigerant was recovered.

E. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction that might be misconstrued as damage caused by selective structure demolition operations.

F. Landfill records indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous waste.

1.05 QUALITY ASSURANCE

A. Contractor Qualifications: Engage only subcontractors who can demonstrate not less than five years successful experience in work of similar character.

B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

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

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

1.06 PROJECT CONDITIONS

A. Occupancy: The Owner will be continuously occupying spaces immediately adjacent to areas of selective structure demolition. Conduct selective structure demolition work in such manner that will minimize need for disruption of normal operations.

B. Condition of Structures: Owner assumes no responsibility for actual condition of items to be demolished.

C. Asbestos: Asbestos is present and will be encountered in the Work. A report on the presence of asbestos is ~~on file for review and use~~ **being issued by Wayne State University as a part of**

this Bid Package. Examine the report to become aware of locations where asbestos is present.

1. The ~~Owner~~ **Contractor** is responsible for asbestos abatement **and abatement of any other hazardous materials indicated in the report.**
2. ~~Do not disturb asbestos or any material suspected of containing asbestos.~~
3. **Remove asbestos and other hazardous materials in accordance with the Contractor's abatement plan noted in Specifications Section 00 3126.**

D. Partial Demolition: Items indicated to be removed, but of salvable value shall be turned over to the Owner.

E. Storage or sale of removed items or materials on-site is prohibited.

F. Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective structure demolition work.
1. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from the building.
2. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
3. Protect floors with suitable coverings when necessary.
4. Construct temporary insulated solid dustproof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks if required.
   a. Temporary dustproof partitions shall be fire-rated where indicated or required by authorities having jurisdiction.
5. Remove protections at completion of work.

G. Damages: Promptly repair damages caused to adjacent facilities by structure demolition work at no cost to Owner.

1.07 SCHEDULING

A. Arrange selective structure demolition operations so as not to interfere with Owner's existing on-site operations.

PART 2 PRODUCTS

2.01 MATERIALS

A. General: Except as otherwise indicated or approved by Architect, provide materials for selective demolition which will result in equal-or-better work than the work being cut-and-patched in terms of performance characteristics, including visual effect where applicable. Comply with the requirements, and use materials identical to original materials where feasible and where recognized that satisfactory results can be produced thereby.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to commencement of selective structure demolition work, inspect areas in which work will be performed.

B. When unanticipated mechanical, electrical, and structural elements are encountered, and conflict with intended design, investigate and measure the nature and extent of conflict. Promptly submit a report in writing to Architect.

C. Survey condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective structure demolition operations.

3.02 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect against damage during selective structure demolition operations.
1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by the Owner or authorities having jurisdiction.

3.03 PREPARATION

A. Conduct structure demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective structure demolition area.
   1. Cover and protect equipment and fixtures from soiling or damage when demolition work is performed in rooms or areas from which such items have not been removed.

B. Erect and maintain dustproof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
   1. Where selective demolition occurs, construct dustproof partitions of minimum 4" studs, 5/8" drywall (joints taped) on occupied side, 1/2" fire-retardant plywood on demolition side, and fill partitions cavity with sound-deadening insulation.

C. Provide and maintain shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

D. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior construction and new construction, to ensure no water leakage or damage occurs to structure or interior areas.

3.04 DEMOLITION

A. Demolish and remove existing construction only to extent required by new construction and indicated.

B. Perform selective structure demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

C. Employ only skilled tradesmen to perform selective structure demolition.

D. Cut work by methods least likely to damage work to be retained and work adjoining. Neatly cut openings and holes square, plumb, and true to size required.

E. In general, where physical cutting action is required, cut work with sawing and grinding tools, not with hammering and chopping tools.

F. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden spaces before starting flame-cutting operations.
   1. Maintain portable fire-suppression devices during flame-cutting operations.

G. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

H. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power driven masonry saw or hand tools; do not use power driven impact tools.

I. Removal of flooring materials shall include all adhesives, setting beds, underlayments, and other materials detrimental to new finished flooring materials.

3.05 PATCHING AND REPAIRS

A. Promptly patch and repair damaged surfaces caused to adjacent construction by selective structure demolition operations.

B. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

C. Restore exposed finishes of patched area; and where necessary, extend finish restoration onto retained work adjoining, in manner to eliminate evidence of patching.

D. Closely match finish and texture of existing adjacent surfaces.

E. Where selective structure demolition terminates at a surface, finish, or substrate to remain, completely remove all traces of material selectively demolished, including mortar beds. Provide smooth, even substrate transition.

F. Where patching smooth painted surfaces, extend final coat of paint over entire unbroken surface, after patched and repaired area has received primer and second coat.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Do not allow demolished materials to accumulate on-site. Transport and dispose of materials off-site in legal manner in an EPA-approved landfill.

~~1. Hazardous materials will be encountered during demolition operations. Stop work in the area affected and report the condition to the Owner and Architect in writing. If Owner determines the hazardous materials are asbestos or PCB's, do no further work in the area until the materials are either removed or rendered harmless, and the area has been certified safe by appropriate authorities~~.

2. Hazardous materials will be encountered during demolition operations. Remove hazardous materials, asbestos and PCB's and certify by appropriate authorities that the area is safe.

~~2~~**3**. Burning of removed materials is not permitted on project site.

3.07 CLEAN-UP AND REPAIR

A. Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.

B. Repair demolition performed in excess of that required. Return surfaces to remain to condition existing prior to commencement of selective structure demolition work. Repair adjacent construction or surfaces soiled or damaged by selective structure demolition work.

C. Clean adjacent portion of the structure and improvements of dust, dirt and debris caused by demolition operations, as directed by the Architect and Owner, or governing authorities. Return adjacent areas to conditions existing prior to start of work.

END OF SECTION

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ADDENDUM #2

DATE	August 20, 2015
PROJECT NAME	Wayne State University Student Center 5th Floor Renovation Student Center 7th Floor Renovation
PROJECT NUMBER	2015025 WSU 5th Floor: 034-266828 WSU 7th Floor: 034-261806
DISTRIBUTION	WSU FP&M Bidders – Via WSU DSD

The following revisions and/or additions to the plans and specifications are issued before the award of the contract and are to be included in the original Bid Package Drawings and Specifications, dated 07.28.2015 and Addendum #1, dated 08.14.2015. This Addendum shall take precedence over anything contrary to the original drawings and specifications and shall be referred to hereinafter as part of the contract documents.

All revisions to the drawings have a cloud around the revision.

The following documents are being revised and / or reissued with this Addendum. All changes are indicated in the following written text.

5th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A805, A921
- Mechanical Drawings: M2, M3, M4 (None Reissued)
- Electrical Drawings: E1, E3

7th Floor:
- Specifications: 000110, 003126, 024119 (101443 and 122413 Not Reissued)
- Architectural Drawings: A001, A807, A921 (A207 Not Reissued)
- Mechanical Drawings: M3, M7 (M1, M2, M4, M8 Not Reissued)
- Electrical Drawings: E1, E3

5th & 7th Floor - Issued By WSU Under Separate Cover
- "Comprehensive Asbestos inspection and Testing of Building 034-Student Center Building" report
- Note: WSU did not issue an Abatement Specification in Addendum #1.

No other drawings, specifications or other documents are being revised. All Addendum revisions are indicated on the drawings, unless otherwise noted.

Include all costs in the bid proposal (base bid and alternate bids.)

All drawings are being reissued via WSU Purchasing Department.

5th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 000110

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP3
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A805

A. Flooring designations changed in 575 and 575.1 thru 575.5.
B. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 575 and 575.1 thru 575.5.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

7th FLOOR REVISIONS

SPECIFICATIONS

Item No. SP1
Refer to Section 00 01 10

A. Revise the Table of Contents to reflect the new mechanical specification issued with this addendum.

Item No. SP2
Refer to Sections 003126 and 024119

A. Revise the referenced sections to clarify that asbestos and hazardous material abatement is by the Contractor.
B. Clarify that air monitoring and testing is by WSU's separate contractor.
C. Clarify that ACM bins will be provided by WSU.
D. Clarify requirements for Contractor's abatement plan.

Item No. SP3
Refer to Section 101443 (Not Reissued)

A. 2.01 Manufacturers: Add Universal Sign, Inc to list of acceptable manufacturers.

Item No. SP4
Refer to Section 122413 (Not Reissued)

A. Omit paragraph 2.05 D, referencing "blackout side and bottom channels." These are not required.

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A807 (A207 Revised, Not Reissued)

A. Corridor 785 changed to Open Office 785 on A807 and A207.
B. Unnecessary "PX" removed from 785 open area on A807.
C. Exterior window heights provided for window shade reference.

Item No. A3
Refer to Sheet A921

A. Flooring entries changed on schedule for 780 and 780.1
B. Corridor 785 changed to Open Office 785 on schedule.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

END OF ADDENDUM #2

DiClemente Siegel Design Inc.
28105 Greenfield Road Southfield, Michigan 48076
248.569.1430 FAX 248.569.0096
Engineering and Architecture

A D D E N D U M N O . 2

Wayne State University
Student Center 7th Floor Renovation
WSU No. 034-261806
DSD Project No. 14-4804.00 **08/20/15**

This instruction is issued prior to awarding the contract, to provide for certain changes, deletions and/or additions to the Plans and Specifications for the above named project as hereinafter specified.

Unless otherwise specified herein, the work covered under this instruction shall be in accordance with the basic contract documents. The work hereinafter specified shall be included in the contract.

Drawings M1, M2, M3, M4, M7, M8, E1 and E3 are revised as a part of this Addendum.

D R A W I N G S

MECHANICAL

1. Refer to Drawing Sheet M1 (Not Issued):
   a. Architectural- Mechanical – Electrical Coordination Schedule.
      1. Removed the (Alt.3) entry under EWC-1 from the schedule.
2. Refer to Drawing Sheet M2 (Not Issued):
   a. Seventh Floor Plan – HVAC Sheet Metal Demolition.
      1. Removed plumbing demolition work shown on this plan only.
      2. Added Key Note: “At demoed thermostats install cover plate and paint to match existing wall.”
3. Refer to Drawing Sheet M3 (Re-Issued):
   a. Seventh Floor Plan – HVAC Piping and Plumbing New Work
      1. Removed thermostats indicated from this plan only.
      2. Modified hydronic piping associated with relocated VAVR’s 706 and 707.
      3. Added hydronic piping for VAVR-705.
   b. Seventh Floor Plan – HVAC Sheet Metal New Work.
      1. Added Transfer air openings above ceilings where required.
      2. Removed ductwork and grilles serving Storage 783.
      3. Revised CFM for VAVR-713 to 370 CFM
      4. Relocated VAVR’s 706 and 707.
      5. Modified duct layout in room 790, 790.1, 790.2 and 790.3

4. Refer to Drawing Sheet M4 (Not Issued):

    a. Added general kitchen exhaust EF-K7 indicated in the M7 Fan Schedule to 'Enlarged Plan Mechanical/Electrical Room Mechanical - New Work'. 24"x12" Exhaust grille (EG-1) located in Kitchen 753 and Cabinet inline exhaust fan located in Mechanical Room between AHU-L7 and RAF-7. Exhaust duct routed to relief air shaft to the north of Column line 12 and terminated with an upturn vertical elbow in relief air plenum.

5. Refer to Drawing Sheet M7 (Re-Issued):

    a. Variable Air Volume (VAVR) Box Schedule – Hot Water Heating

        a. Revised information for boxes VAVR-706, VAVR-707 and VAVR-713.

FIRE PROTECTION

1. Refer to Drawing Sheet M8 (Not-Issued):

    a. Added New Work Key Note: "Provide flush mounted sprinkler head with cap in Restroom 749."

ELECTRICAL

1. Refer to Drawing Sheet E1 (Re-Issued):

    a. Updated alternate description 3B to indicate that power for AV devices/locations is Base Bid only and is not included in the Alternate 3B pricing.

    b. Updated the Panelboard Schedules with circuiting to correspond with the 7th Floor Plan - Power and Systems plan.

2. Refer to Drawing Sheet E3 (Re-Issued):

    a. Revised the communication drops in four (4) locations (Reception 755, Reception/Corridor 790, Breakroom & Workroom 752.3 and Work Room Break Room 789) for the copiers (multi-function devices with fax capability) from a single VoIP drop to include one (1) voice drop and one (1) data drop at each location.

    b. Added an additional electrical receptacle and VoIP drop in Shared Conference Room for a monitor on the south wall. The previously indicated power and VoIP drop on the same wall is below the monitor location.

    c. Added an additional electrical receptacles in the following rooms: Office 1 – 795, Office 2 – 793, Reception/Waiting 799, Office 4 – 787, Baptist Student Union 780, Reception 752.

    d. Relocated electrical receptacles in Reception 752.

    e. Eliminated electrical receptacle in Storage 751

f. Added circuiting designations to two (2) electrical receptacles in corridor/lobby outside of the north elevator and revised the circuiting designation for an electrical receptacle in the Common Corridor on the east side of the 7th floor.

g. Added New Work Key Note 26 description to the drawing sheet and indicated Key Note 26 on the 7th Floor Power and Systems plan at two (2) monitors on the west side of Chapel 775.

h. Added New Work Key Note 27 description to the drawing sheet and indicated Key Note 27 on the 7th Floor Power and Systems plan at the sound system cabinet in Chapel 775.

i. Added New Work Key Note 28 description to the drawing sheet and indicated Key Note 28 on the 7th Floor Power and Systems plan in the Ombudsperson 790.3 office.

j. Added power for Fridge in File/Break Room 790.1 and indicated mounting heights for two (2) other electrical receptacles within this same room.

k. Added conduit routing and backbox placement for the Ceiling Mounted Projector in Lounge/Study Area 757.

S P E C I F I C A T I O N S

None

End of Addendum No. 2

cc: Project File, Stick Set

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N/S	01 2300	Alternates		
N/S	01 2500	Substitution Procedures		
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N/S	01 2600	Contract Modification Procedures		
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N/S	01 3323	Shop Drawings, Product Data and Samples		
N/S	01 3323.13	Authorization for Release of CAD Files		
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	Division 06 – Wood, Plastics and Composites			
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Firm	Section		Revision	Bulletin
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N/S	09 6513	Resilient Base and Accessories		
N/S	09 6519	Resilient Tile Flooring		
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DSD	21 0517	Sleeves & Sleeve Seals for Fire Suppression Piping		
DSD	21 0518	Escutcheons for Fire Suppression Piping		
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DSD	22 0529	Hangers and Supports for Plumbing, Piping and Equipment		
DSD	22 0553	Identification for Plumbing, Piping and Equipment		
DSD	22 0700	Plumbing Insulation		
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Firm	Section		Revision	Bulletin
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REFERENCE DOCUMENTS

STANDARDS FOR COMMUNICATIONS INFRASTRUCTURE (Revised 13 March 2015)

SECTION 00 3126 - EXISTING HAZARDOUS MATERIAL INFORMATION

PART 1 GENERAL

1.01 ASBESTOS REPORT

A. A Report on Asbestos and Lead-Based Paint Sampling and Analysis has been prepared for, this Project. This report is available from Wayne State University. It is issued by WSU as part of the Bid Package.
   1. This report identifies suspect asbestos containing materials **and other hazardous materials.**
   2. The Contractor is responsible for development of an abatement plan acceptable to Authorities Having Jurisdiction. Include abatement plan in Construction Plan referenced in Section 01 31 13 - Project Coordination.
   3. The Owner will not be responsible for interpretations or conclusions drawn from this by the Contractor.

B. Additional tests and other exploratory operations may be performed by the Contractor, at Contractor's option; however, at no additional cost to the Owner.

C. The report is as follows:
   1. Prepared by:
      a. Environmental Testing and Consulting, Inc.
      b. 38900 Huron River Drive.
      c. Romulus, Michigan 48174
   2. Report on:
      a. Multi-Building Comprehensive Asbestos Inspection and Testing Report
      b. WSU Project # 99-213662-3
      c. Comprehensive Asbestos Inspection and Testing of Building 034-Student Center Building
      d. Wayne State University
      e. Detroit, Michigan 48202
      f. ETC Project No.143912
      g. January 7, 2013
   3. Report on:
      a. Summary of Added Materials to Building 034-Student Center Building. ETC Project # 143912
      b. August 14, 2013

D. This report, by its nature, cannot reveal all conditions that exist on the project site. Should conditions be found to vary substantially from this report, changes in the scope of abatement will be made, with resulting credits or expenditures to the Contract Price accruing to Owner.

1.02 AIR MONITORING AND TESTING

A. Air Monitoring and Testing will be provided by a separate agency contracted by Wayne State University.
   1. Contractor to coordinate with WSU Project Manager and WSU's testing agency.

1.03 ACM DUMPSTERS

A. Wayne State University will be providing ACM dumpsters.
   1. Manifests are required prior to hauling and disposal to be coordinated with Wayne State University Safety Department.

1.04 ABATEMENT PLAN

A. The Contractor is fully responsible for development and implementation of a complete abatement plan coordinated with the demolition requirements. The abatement plan shall be in accordance with the referenced abatement report.

B. Submit abatement plan to WSU for review, coordination and approval prior to commencement of work.

C. The abatement plan shall include, but not necessarily limited to, the following work scope and other requirements. The full scope and requirements are solely the responsibility of the Contractor to determine based on the referenced abatement report and all applicable codes, laws and regulations, and industry standard practice.

1. **It is understood that the Contract Documents, as they relate to the "Work" are not complete and detailed in all respects. However, the Work of this Agreement includes all work indicated, detailed, implied, inferable and necessary for complete, fully-functioning system, product or installation in accordance with all applicable codes, standards, authorities having jurisdiction ("AHJ"), and the Contract Documents.**
2. **Subcontractor represents that they have expertise in projects of this nature and their staff has the experience and training necessary to fulfill the requirements of this Agreement. Additionally, Subcontractor represents that it has reviewed the Contract Documents, fully understands the intent, and has included all necessary work items not specifically indicated, detailed or specified.**
3. **Provide proof of asbestos training for all personnel to WSU. If unable to provide proof, arrangements must be made to obtain the training. If additional training is required, no additional costs will be accepted by Turner Construction Company or Owner.**
4. **DEMOLITION AND ABATEMENT CONTRACTOR is solely responsible for their own measurements and quantities of the identified materials and is not to be used for bidding purposes.**
5. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for to provide dumpsters for their work. Location, mobilization and change out needs to be coordinate with WSU.**
6. **Site specific safety and Logistics program which includes phasing, sequencing and coordination with other trades is required to maintain work flow.**
7. **Provide full time site project management that will be available to attend regular project meetings.**
8. **Provide all necessary enclosures, temporary ventilation systems, decontamination zones, clean showers, and all containment partitions, etc. complete as required to perform full scope of work. Include removal upon completion of scope of work.**
9. **Provide removal of all Hazardous Materials and is to be properly handled and disposed of in accordance with Wayne State University's Occupation Health and Safety Standard as well as their Construction and Design Standards.**
10. **Coordination with Wayne State University's testing agent and WSU Staff for Lock Out / Tag Out procedures for work requiring shut down AHU's**
11. **Provide all work necessary to achieve "Clean Letters" as necessary from Wayne State University's Environmental Hygienist to ensure school activities are not interrupted.**
12. **Provide and maintain all project reports and documents so that they are available to Wayne State at all time for review.**
13. **Comply with all applicable Wayne State University (WSU), City, State, and Federal laws, rules, regulations, and standards associated with this work.**
14. **Provide Personal Air Monitoring for all abatement work activities. Costs for personal air monitoring is to be included within you scope. Personal air monitoring results are to be turned over to WSU within 72 hours of work being performed.**
15. **The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove the asbestos spray on fireproofing within masonry columns to remain. The removal is limited the material within an "arms" reach down into the column from the top without any damage to the columns to remain (See Plans prints and specs.). Complete encapsulation will be required where asbestos fire proofing material remains in the lower portions of the columns that cannot be removed completely. Once sealed and all areas abated, fire rated polyethylene sheeting to seal the upper column cavity opening at the top of column enclosure where spray on will remain**

within the lower portion of the column or use of a fire rated spray foam preapproved by the Architect of record with proper installation requirements. Areas where columns finishes are to be demolished, must be performed within the negative pressure enclosure as spray on may exist within the lower column areas at the floor area.

16. **Where ceiling systems are required for demolition, they are to be removed as part of the abatement scope of work and all supporting wires and black iron will require removal. The DEMOLITION AND ABATEMENT CONTRACTOR must decontaminate all surfaces from within the regulated area.**
17. **Provide removal of all friable spray on fireproofing insulation including removal of the drywall, plaster board/plaster material over entry doors, walls, etc. for complete removal of material. Areas where spray on fireproofing overspray may have fell behind wall cavities that require demolition will be required to be removed by the Asbestos abatement contractor to clean and decontaminate all surfaces. All spray-on fireproofing over spray will be required to be removed from all adjacent materials, including but not limited to, roof decking, piping, HVAC VAV Boxes, ceiling systems/support wire, electrical components, wires, cables, conduit, cable trays, wall components, wall studs, window systems, door frames, I beams, duct work, flex duct, etc. This material appears to be adhered to Metal wire mesh and wired to the black iron material.**
18. **Provide removal of all pipe joint insulation as identified on the demolition section of the plans prints and specs as outlined in the ETC asbestos survey report. Other building materials may require removal to remove the required asbestos pipe joint material, i.e. drywall, plaster board/plaster material, ceiling panels, HVAC duct work, etc. for complete removal of material.**
19. **Provide removal of all grey Duct insulation as asbestos within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. All duct insulation and areas where ducts will be removed according to the provided architectural plans, prints and specs, must be removed completely by the abatement contractor upon completion of a successful asbestos air clearance and after identification by the Mechanical, Electrical Plumbing (MEP) Contractor.**
20. **All Mechanical, Electrical and Plumbing supports and systems must be decontaminated to remain in place. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, ceiling systems, etc. Any contaminated porous items must be disposed of as asbestos waste.**
21. **Provide removal of all Black floor mastic material under 12" x12" Grey and Pink Floor tile using grinding machines within a full negative pressure enclosure system. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, cabinets, walls, carpet, etc. as outlined in the ETC asbestos survey report.**
22. **Provide removal of all 12" x12" Beige Floor tile and prep the using grinding machines within a full negative pressure enclosure system as outlined in the ETC asbestos survey report. No chemical adhesive removal will be allowed for this project. Other building materials may require removal to remove the required asbestos material if slated for demolition, i.e. doors, walls, carpet, etc.**
23. **Provide removal all carpet and asbestos carpet adhesive as outlined in the ETC asbestos survey report. All adhesive removal must be performed by mechanical means to provide a clean floor finish upon completion.**
24. **Provide removal of UL Listed Tagged Fire Doors and Fire Rated Door Frames as indicated on the documents are to be considered as ACM. All door frames will be required to be removed within a negative pressure mini enclosure. Contractor is required to verify the demo plans and prints prior to door and door frame removal.**

25. Provide a full negative pressure enclosure for the project areas that will be divided by a drywall fire rated separation. The DEMOLITION AND ABATEMENT CONTRACTOR will be required to remove all interior items stated to be demolished according to the plans, prints and specs. Additional interior demolition will be required to remove the stated asbestos spray on material and fire stop material from within each project area. The work area shall be prepped with a minimum of 2 layers of 6mil polyethylene walls and properly secured to sustain the weight and integrity of the enclosure overtime due to negative pressure. Additional materials to secure the poly walls adequately to the upper wall sections to the roof deck. The roof deck will be required to be HEPA vacuumed and cleaned to remove the spray on insulation overspray material adhered to the roof deck.

26. Provide critical barriers over all ducts, vents, doors and windows leading to non-project areas. Turner will shut down all HVAC systems feeding into the work space. It is the responsibility of The DEMOLITION AND ABATEMENT CONTRACTOR to ensure isolation and capping of all HVAC systems within the work zone where diffusers or openings are located. All other openings leading to non-project areas must be sealed with polyethylene and duct tape. During set up, The DEMOLITION AND ABATEMENT CONTRACTOR must have critical barriers, poly walls, negative pressure established and all workers in appropriate PPE.

27. The locations of air filtration devices will be determined on-site bye the industrial hygienist and Contractor's competent person. All air filtration devices must be ducted outside of the building. Only commercial pre-fabricated duct will be allowed. All doors and windows opened for purposes of ducting the air filtration devices must be properly secured to protect the building security and to prevent unauthorized personnel during off hours. Provide a minimum negative pressure of 0.020 inches of water equivalent during all stages of asbestos abatement. The Abatement Trade Contractor will continuously monitor the negative pressure with a contractor-supplied manometer.

28. Provide an electrical panel system for all electrical systems to be used for the abatement processes.

29. Provide a three stage decontamination chamber at the entrance of each project area equipped with a shower and warm water.

30. Provide remove all observed mudded pipe joints located above the ceiling within each Phased regulated area.

31. Provide decontamination of all ceiling tile grid and black iron by HEPA vacuuming and wet wiping all surfaces. It is understood that all ceiling tiles shall be disposed of as asbestos waste. Full negative pressure and Enclosure Set up must be completed before any Ceiling tile material is removed or lowered from its existing position. No ceiling material shall be removed until the on-site industrial hygienist approves negative pressure, decontaminate the ceiling grid work or dispose of the materials as asbestos-containing materials. All ceiling materials shall immediately be bagged when lowered. No unbagged ceiling panel or spray on materials will be stored on any floor overnight, all materials must be single bagged at a minimum and left inside the enclosure if not completely bagged out to the dumpster at the end of the work shift or cube van, etc.

32. A separate two stage bag-out chamber may be built wherever feasible but must be approved by the onsite industrial hygienist.

33. Provide removal of all of the fluorescent light tubes and dispose of all ballasts. Ballasts are to be disposed of into WSU provided containers.

34. Provide removal of all drywall, smooth plaster materials as asbestos containing waste areas where spray on and grey fire stop material is scheduled to be removed.

35. Fiber drums will not be allowed inside the enclosure unless sufficiently covered with a single disposal bag to be properly decontaminated when exiting the containment. The DEMOLITION AND ABATEMENT CONTRACTOR may place the

single bags inside lined fiber drums during the "double bagging" portion of the project.

36. **During the final cleaning of the project area, The DEMOLITION AND ABATEMENT CONTRACTOR will thoroughly clean all surfaces inside the enclosure visually.**
37. **The DEMOLITION AND ABATEMENT CONTRACTOR will be responsible for any and all debris generated from the selective demolition removal operations including but not limited to insulation, duct, wall systems, wall studs, framing, flooring, carpet, and general dirt and debris. All associated metal ceiling grid or spline grid shall be disposed of or recycled after proper decontamination is approved by the on-site industrial hygienist. All suspended ceiling systems including but not limited to, wires, grid, and black iron will be required to be removed to properly abate all spray on insulation.**
38. **The building will remain occupied at times during construction. All electrical, IT, communication, plumbing systems, must not be damaged or removed within the work area unless verified by the MEP. Provide protection of any and all systems to remain and not be demolished, including but not limited to, fire suppression, phone lines, audio visual equipment, cable, IT, etc. above the ceiling systems. The DEMOLITION AND ABATEMENT CONTRACTOR will be held responsible for any damages to these items located in the work area. Any lights, speakers etc. must be decontaminated and wrapped with 6 mil poly, temporarily suspended from the roof deck as to not damage the lights for the duration of the abatement process for that phase if present.**
39. **The DEMOLITION AND ABATEMENT CONTRACTOR may be required to pre-clean all fixed objects in the work area using HEPA filtered vacuums and/or wet-cleaning methods. Pre-cleaning will be conducted by The DEMOLITION AND ABATEMENT CONTRACTOR as deemed necessary by the Owner or the Owner's Consultant. The extent of the pre-cleaning will be determined by, but not limited to the following factors: the particular application of the asbestos-containing material, its present condition, friability, asbestos content, visible debris and the type of surface to which the material is applied.**
40. **Where doors or other such building fixtures are removed by The DEMOLITION AND ABATEMENT CONTRACTOR prior to abatement activities, The DEMOLITION AND ABATEMENT CONTRACTOR is responsible for replacing doors and/or fixtures upon completion of abatement. Each door and/or fixture shall be sufficiently marked or otherwise identified by The DEMOLITION AND ABATEMENT CONTRACTOR to insure replacement in the proper location.**
41. **The DEMOLITION AND ABATEMENT CONTRACTOR shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and all other openings between the work area and the areas outside the work area with, at minimum, 4-mil polyethylene sheeting.**
42. **Walls will be covered with at least one layer of 4-mil polyethylene sheeting. Walls that are non-porous and will not be damaged by water, surfactant, or encapsulation do not necessarily need protection. They can be decontaminated using HEPA vacuums and wet cleaning techniques. The Owner or the Owner's Consultant will advise the method deemed most appropriate and The DEMOLITION AND ABATEMENT CONTRACTOR shall comply with the method chosen.**
43. **Floors shall be covered with at least three layers of 6-mil polyethylene sheeting.**
44. **Non-waterproof tape may not be used for attaching polyethylene sheeting or for sealing polyethylene leaks. High quality duct tape or its equivalent shall be used.**
45. **The Owner or the Owner's Consultant must approve the decontamination chamber location, Contractor parking, dumpster location and entrances that The DEMOLITION AND ABATEMENT CONTRACTOR will use for the movement of supplies and personnel.**
46. **No asbestos abatement shall begin until the Owner's Consultant has inspected and approved the enclosure built around the work area.**

47. Provide decontamination facilities in a predestinated area which will house the clean room, shower room, dirty room, and, when feasible, an equipment room. This facility will be, at minimum, a three-chambered with an entrance airlock with shower facilities in its central chamber. The dimensions of these chambers will be adequate for the number of men needed for the project. At least two layers of 6-mil polyethylene will be placed on the floor of the entire decontamination chamber, to prevent leakage of water from the showers. The walls, floor, and ceiling covering of the airlock construction will be seamed to each other in a fashion making them air and water tight. One end of this construction will exit to the clean area outside the containment barrier walls. The other end of this construction will exit inside or at the containment barrier walls. Except for these doors, all three chambers will be partitioned from each other with air and water tight flaps made of 6-mil polyethylene. Four (4) flapped doors will be constructed with two (2) layers of 6-mil polyethylene. One door will be at the entrance of the clean room, one door at the entrance to the shower, one door at the entrance to the dirty room, and the last door at the entrance to the work area. Both layers will be attached to the side of the door which faces toward the work area. The first layer of polyethylene will be attached at the top, bottom, and sides of the door opening. It will be slit down the middle. The second layer of polyethylene will be attached only at the top of the door on the dirty side of the door opening. It will be wider than the slit made in the first layer and will hang like a flap. When air is drawn from the clean side of the airlock into the work area it will cause the door flaps to lift. It air attempts to move from the work area end of the airlock toward the clean end or outside of the enclosure, it will force the flaps shut, closing the slit in the first polyethylene layer and thus stopping the air flow. All four (4) door openings or flaps will be constructed to allow clean air into the enclosure, but stopping air from exiting the enclosure. The central chamber will contain shower(s). Each shower stall will sit in a pan with at least six-inch sides. Suitable hoses will be used to supply hot and cold water to the showers. A sump pump or other suitable and safe device will be used to filter and dispose of the shower waste water through a special HEPA filter. No water may leave the work area without undergoing HEPA filtration or being treated as asbestos waste. Black polyethylene sheeting may be used for privacy on the decontamination facility.

48. The DEMOLITION AND ABATEMENT CONTRACTOR may construct a two-chambered decontamination airlock to serve as a debris port. All asbestos waste will be moved out through this port or through the decontamination unit. The chamber will be constructed in the same manner as the main decontamination airlock, but excluding the shower facility. As each bag is filled, it will be set into the first room for temporary storage. Three workers will be needed to complete the waste decontamination process. A worker in the first room will wash and hand the bag to a worker in the second room where he/she will then double-bag the material. The second worker will then hand the double-bagged material to a third worker who loads the material on the transport vehicle (airlocks must exist between each room, as in the main decontamination facility). If a debris port is not possible, all precautions should be taken when hauling waste through the main decontamination facility, where all bags will go through the decontamination process. If a separate decontamination facility is constructed it shall be sealed while not in use.

49. All workers, without exception, will change street clothes in designated areas (clean room) prior to the start of each day's work. Lockers or acceptable substitutes will be provided by The DEMOLITION AND ABATEMENT CONTRACTOR for street and work clothes. After workers are properly dressed in protective gear, they will walk through the shower and dirty room into the work area.

50. At the end of the work shift, and anytime the worker leaves the work area, he/she will decontaminate by removing all contaminated work clothes in the dirty room, but leaving his/her respirator on. He/she will then proceed to the showers and properly wash. Respirators will be worn while showering and remain on until the respirator is clean of asbestos. The cartridges will then be removed and disposed of as asbestos

waste and the respirator stored in the clean room. Workers will shower before breaks, lunch and at the end of each day's work. Hot water, towels, soap and hygienic conditions shall be provided by The DEMOLITION AND ABATEMENT CONTRACTOR.

51. **The waste material will be packed in labeled 6-mil polyethylene bags (held within 55 gallon drums with the required EPA & OSHA labels where appropriate) prior to starting the next section to prevent the material from drying. Double bagging will always be used. Bags shall not be over-filled and will be securely taped or sealed at the top to prevent accidental opening or leakage during removal, storage and transport. All bags and/or drums shall have all appropriate warnings and labels attached to them.**
52. **If any large components are removed intact will be wrapped in two layers of 6-mil polyethylene sheeting secured with tape properly labeled for transport to the landfill. Such packaging shall have all appropriate warnings and labels attached to them.**
53. **When removal of building materials (electrical, light, duct work, etc.) is necessary, The DEMOLITION AND ABATEMENT CONTRACTOR shall develop drawings indicating existing materials and their exact locations.**
54. **All ceiling demolition, including but not limited to wires, hangers, steel bands, nails, screws, metal lath, tin sheeting, and other objects may be required to be treated as asbestos waste. These materials have sharp edged components that will tear the polyethylene bags and sheeting, thus, this waste must be placed into fiberglass or fiberboard drums for disposal and labeled appropriately.**
55. **The DEMOLITION AND ABATEMENT CONTRACTOR will provide and maintain a pressure differential strip gauge. It will be activated prior to removal of any building material and continue operating until the final clearance results have been determined. Placement of the differential strip gauge is subject to the approval of the Owner's Consultant. The Owner's Consultant may, at their discretion, utilize additional pressure differential strip gauges or other devices to measure the pressure differential.**
56. **Sufficient negative pressure will be used in the enclosure to evacuate the air once every 15 minutes (minimum).**
57. **Only vacuums and air filtration devices with "HEPA" filters will be allowed. No "shop-vacs," homemade hybrid vacuums or air filtration devices will be allowed on site.**
58. **Following the cleanup of visible accumulations, the polyethylene sheeting will be removed from the walls and ceiling, and the interior layer will be removed from floors. At this point any asbestos that has fallen behind the polyethylene will be cleaned up. However, all barriers to doors, windows, and other critical barriers to clean areas will be left in place until final air checks are completed.**
59. **A complete visual inspection to insure dust free conditions. The DEMOLITION AND ABATEMENT CONTRACTOR shall tour and inspect the entire work area, including but not limited to: ventilation openings, doorways, windows, and other openings; he/she shall look for debris from any sources, residue on surfaces, or any other matter. If any debris or residue is found, repeat the final cleaning until visual inspection is passed. It shall be the right of the Owner's Consultant(s) to accompany The DEMOLITION AND ABATEMENT CONTRACTOR during the inspection and determine if additional cleaning is necessary.**
60. **Copies of Disposal receipts of all asbestos contaminated material, plus copies of all transport manifests, trip tickets, or other disposal documentation are to be submitted to WSU for record.**
61. **Coordination with all other trade subcontractors.**
62. **Temporary protection to all adjacent areas, materials, and third parties.**
63. **Continuous clean-up of own work to project dumpsters per Turner's "Nothing Hits the Ground" policy.**
64. **Provide all permits, fees, testing, and inspections for this work.**

65. All Subcontractors are to provide field staff have received and are current with Lead, Asbestos, and Cadmium Awareness Training.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 02 4119 - SELECTIVE STRUCTURE DEMOLITION

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Division 00 - Procurement and Contracting Requirements, and Division 01 - General Requirements, are hereby made part of this Section.

1.02 SECTION INCLUDES

A. Selective structure demolition work includes, but is not limited to, the following:
   1. Demolition and removal of selected portions of the existing building.
   2. Patching and repairs.
   3. Existing Hazardous Material Information.

1.03 RELATED SECTIONS

A. Section 00 3126 - Existing Hazardous Material Information; for hazardous material report.

1.04 SUBMITTALS

A. Schedule: Submit schedule indicating proposed methods and sequence of operations for selective structure demolition work to Owner's Representative for review prior to commencement of work.
   1. Provide detailed sequence of demolition and removal work to ensure uninterrupted occupancy of building.
   2. Include coordination for shut-off of utilities, if required.
   3. Proposed dust-control and noise-control measures.

B. Inventory of items to be removed and salvaged.

C. Inventory of items to be removed by Owner.

D. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating all refrigerant that was present was recovered and recovery was performed according to EPA regulations.
   1. Include name and address of technician and date refrigerant was recovered.

E. Photographs or videotape, sufficiently detailed, of existing conditions of adjoining construction that might be misconstrued as damage caused by selective structure demolition operations.

F. Landfill records indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous waste.

1.05 QUALITY ASSURANCE

A. Contractor Qualifications: Engage only subcontractors who can demonstrate not less than five years successful experience in work of similar character.

B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

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

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

1.06 PROJECT CONDITIONS

A. Occupancy: The Owner will be continuously occupying spaces immediately adjacent to areas of selective structure demolition. Conduct selective structure demolition work in such manner that will minimize need for disruption of normal operations.

B. Condition of Structures: Owner assumes no responsibility for actual condition of items to be demolished.

C. Asbestos: Asbestos is present and will be encountered in the Work. A report on the presence of asbestos is ~~on file for review and use~~ **being issued by Wayne State University as part of**

this Bid Package. Examine the report to become aware of locations where asbestos is present.

1. The ~~Owner~~ **Contractor** is responsible for asbestos abatement **and abatement of any other hazardous materials indicated in the report.**
2. ~~Do not disturb asbestos or any material suspected of containing asbestos.~~
3. **Remove asbestos and other hazardous materials in accordance with the Contractor's abatement plan noted in Specifications Section 00 3126.**

D. Partial Demolition: Items indicated to be removed, but of salvable value shall be turned over to the Owner.

E. Storage or sale of removed items or materials on-site is prohibited.

F. Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective structure demolition work.
1. Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from the building.
2. Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.
3. Protect floors with suitable coverings when necessary.
4. Construct temporary insulated solid dustproof partitions where required to separate areas where noisy or extensive dirt or dust operations are performed. Equip partitions with dustproof doors and security locks if required.
   a. Temporary dustproof partitions shall be fire-rated where indicated or required by authorities having jurisdiction.
5. Remove protections at completion of work.

G. Damages: Promptly repair damages caused to adjacent facilities by structure demolition work at no cost to Owner.

1.07 SCHEDULING

A. Arrange selective structure demolition operations so as not to interfere with Owner's existing on-site operations.

PART 2 PRODUCTS

2.01 MATERIALS

A. General: Except as otherwise indicated or approved by Architect, provide materials for selective demolition which will result in equal-or-better work than the work being cut-and-patched in terms of performance characteristics, including visual effect where applicable. Comply with the requirements, and use materials identical to original materials where feasible and where recognized that satisfactory results can be produced thereby.

PART 3 EXECUTION

3.01 EXAMINATION

A. Prior to commencement of selective structure demolition work, inspect areas in which work will be performed.

B. When unanticipated mechanical, electrical, and structural elements are encountered, and conflict with intended design, investigate and measure the nature and extent of conflict. Promptly submit a report in writing to Architect.

C. Survey condition of the building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during selective structure demolition operations.

3.02 UTILITY SERVICES

A. Maintain existing utilities indicated to remain in service and protect against damage during selective structure demolition operations.
1. Do not interrupt existing utilities serving occupied or operating facilities, except when authorized in writing by the Owner or authorities having jurisdiction.

3.03 PREPARATION

A. Conduct structure demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around selective structure demolition area.
   1. Cover and protect equipment and fixtures from soiling or damage when demolition work is performed in rooms or areas from which such items have not been removed.

B. Erect and maintain dustproof partitions and closures as required to prevent spread of dust or fumes to occupied portions of the building.
   1. Where selective demolition occurs, construct dustproof partitions of minimum 4" studs, 5/8" drywall (joints taped) on occupied side, 1/2" fire-retardant plywood on demolition side, and fill partitions cavity with sound-deadening insulation.

C. Provide and maintain shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of building to be selectively demolished.

D. Provide temporary weather protection, during interval between demolition and removal of existing construction, on exterior construction and new construction, to ensure no water leakage or damage occurs to structure or interior areas.

3.04 DEMOLITION

A. Demolish and remove existing construction only to extent required by new construction and indicated.

B. Perform selective structure demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

C. Employ only skilled tradesmen to perform selective structure demolition.

D. Cut work by methods least likely to damage work to be retained and work adjoining. Neatly cut openings and holes square, plumb, and true to size required.

E. In general, where physical cutting action is required, cut work with sawing and grinding tools, not with hammering and chopping tools.

F. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden spaces before starting flame-cutting operations.
   1. Maintain portable fire-suppression devices during flame-cutting operations.

G. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.

H. Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain, using power driven masonry saw or hand tools; do not use power driven impact tools.

I. Removal of flooring materials shall include all adhesives, setting beds, underlayments, and other materials detrimental to new finished flooring materials.

3.05 PATCHING AND REPAIRS

A. Promptly patch and repair damaged surfaces caused to adjacent construction by selective structure demolition operations.

B. Patch with seams which are durable and as invisible as possible. Comply with specified tolerances for the work.

C. Restore exposed finishes of patched area; and where necessary, extend finish restoration onto retained work adjoining, in manner to eliminate evidence of patching.

D. Closely match finish and texture of existing adjacent surfaces.

E. Where selective structure demolition terminates at a surface, finish, or substrate to remain, completely remove all traces of material selectively demolished, including mortar beds. Provide smooth, even substrate transition.

F. Where patching smooth painted surfaces, extend final coat of paint over entire unbroken surface, after patched and repaired area has received primer and second coat.

3.06 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Do not allow demolished materials to accumulate on-site. Transport and dispose of materials off-site in legal manner in an EPA-approved landfill.

~~1. Hazardous materials will be encountered during demolition operations. Stop work in the area affected and report the condition to the Owner and Architect in writing. If Owner determines the hazardous materials are asbestos or PCB's, do no further work in the area until the materials are either removed or rendered harmless, and the area has been certified safe by appropriate authorities.~~

2. Hazardous materials will be encountered during demolition operations. Remove hazardous materials, asbestos and PCB's and certify by appropriate authorities that the area is safe.

~~2~~**3**. Burning of removed materials is not permitted on project site.

3.07 CLEAN-UP AND REPAIR

A. Upon completion of demolition work, remove tools, equipment, and demolished materials from site. Remove protections and leave interior areas broom clean.

B. Repair demolition performed in excess of that required. Return surfaces to remain to condition existing prior to commencement of selective structure demolition work. Repair adjacent construction or surfaces soiled or damaged by selective structure demolition work.

C. Clean adjacent portion of the structure and improvements of dust, dirt and debris caused by demolition operations, as directed by the Architect and Owner, or governing authorities. Return adjacent areas to conditions existing prior to start of work.

END OF SECTION

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ADDENDUM #3

DATE	August 21, 2015
PROJECT NAME	Wayne State University Student Center 5th Floor Renovation Student Center 7th Floor Renovation
PROJECT NUMBER	2015025 WSU 5th Floor: 034-266828 WSU 7th Floor: 034-261806
DISTRIBUTION	WSU FP&M Bidders – Via WSU DSD

The following revisions and/or additions to the plans and specifications are issued before the award of the contract and are to be included in the original Bid Package Drawings and Specifications, dated 07.28.2015 and Addendum #1, dated 08.14.2015 and Addendum 2, dated 08.20.2015. This Addendum shall take precedence over anything contrary to the original drawings and specifications and shall be referred to hereinafter as part of the contract documents.

All revisions to the drawings have a cloud around the revision.

The following documents are being revised and / or reissued with this Addendum. All changes are indicated in the following written text.

5th Floor:
- None

7th Floor:
- Architectural Drawings: (A001, A401 Not Reissued)
- Architectural Sketch: SK-A3.1
- Electrical Drawings: (E3 Not Reissued)

Other Documents for Both Floors
- Responsibility Matrix (Siemens, Mechanical Contractor, Electrical Contractor, Others)

No other drawings, specifications or other documents are being revised. All Addendum revisions are indicated on the drawings, unless otherwise noted.

Include all costs in the bid proposal (base bid and alternate bids.)

All drawings are being reissued via WSU Purchasing Department.

5th FLOOR REVISIONS

GENERAL CLARIFICATIONS

Item GC.1 – Permit Clarification

A. No permits are required. This project is not under the jurisdiction of the City of Detroit, Wayne County or the State of Michigan. WSU Office of Risk Management will review fire suppression, fire alarm and other life safety related submittals. WSU ORM will also provide inspections and approval of the work. WSU will also undertake, or contract out, mechanical and electrical inspections.
    1. Refer to specification 011100, Summary of Work, section 1.07 Permits and Inspections.

Item GC.2 – Construction Schedule Coordination with WSU Testing Department

A. The WSU Testing Department is located on the 6th Floor. They administer various exams for students. Construction activities will need to be coordinated with them to avoid disrupting testing.

Item GC.3 – Responsibility Matrix

A. DSD has issued a Responsibility Matrix that outlines the controls requirements for Siemens (under contract with WSU), the mechanical contractor, the electrical contractor and others.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #3 text, dated August 21, 2015, prepared by DiClemente Siegel Design

7th FLOOR REVISIONS

GENERAL CLARIFICATIONS

Item GC.1 – Permit Clarification

A. No permits are required. This project is not under the jurisdiction of the City of Detroit, Wayne County or the State of Michigan. WSU Office of Risk Management will review fire suppression, fire alarm and other life safety related submittals. WSU ORM will also provide inspections and approval of the work. WSU will also undertake, or contract out, mechanical and electrical inspections.
    1. Refer to specification 011100, Summary of Work, section 1.07 Permits and Inspections.

Item GC.2 – Construction Schedule Coordination with WSU Testing Department

A. The WSU Testing Department is located on the 6th Floor. They administer various exams for students. Construction activities will need to be coordinated with them to avoid disrupting testing.

Item GC.3 – Responsibility Matrix

A. DSD has issued a Responsibility Matrix that outlines the controls requirements for Siemens (under contract with WSU), the mechanical contractor, the electrical contractor and others.

ARCHITECTURAL DRAWINGS

Item No. A1
Refer to Sheet A001 (Not Reissued)

A. Revise Index of Drawings to reflect the drawings being reissued with this addendum.

Item No. A2
Refer to Sheet A401 (Not Reissued) and Sketch SK-A3.1

A. Revise Detail 2 to clarify the structural steel required to frame the louver opening for Alternate 1A.

MECHANICAL AND ELECTRICAL DRAWINGS

Refer to attached Addendum #2 text, dated August 20, 2015, prepared by DiClemente Siegel Design

END OF ADDENDUM #3

DiClemente Siegel Design Inc.
28105 Greenfield Road Southfield, Michigan 48076
248.569.1430 FAX 248.569.0096
Engineering and Architecture

ADDENDUM NO. 3

Wayne State University
Student Center 7th Floor Renovation
WSU No. 034-261806
DSD Project No. 14-4804.00 **08/21/15**

This instruction is issued prior to awarding the contract, to provide for certain changes, deletions and/or additions to the Plans and Specifications for the above named project as hereinafter specified.

Unless otherwise specified herein, the work covered under this instruction shall be in accordance with the basic contract documents. The work hereinafter specified shall be included in the contract.

Drawing E3 are revised as a part of this Addendum.

DRAWINGS

ELECTRICAL

1. Refer to Drawing Sheet E3 (Not Re-Issued):

    a. Added to end of New Work Key Note 28 to read: The EC is responsible to provide the complete system, including all associated connections back to the IT rack in the Mechanical Room on the 7th floor. There is already a tie-in there back to Public Safety. Provide pathway, wiring, devices and all other related equipment, installation, final terminations and testing for a complete operable system.

2. Siemens Responsibility Matrix has been issued with this Addendum and is attached herewith.

SPECIFICATIONS

None

End of Addendum No. 3

cc: Project File, Stick Set

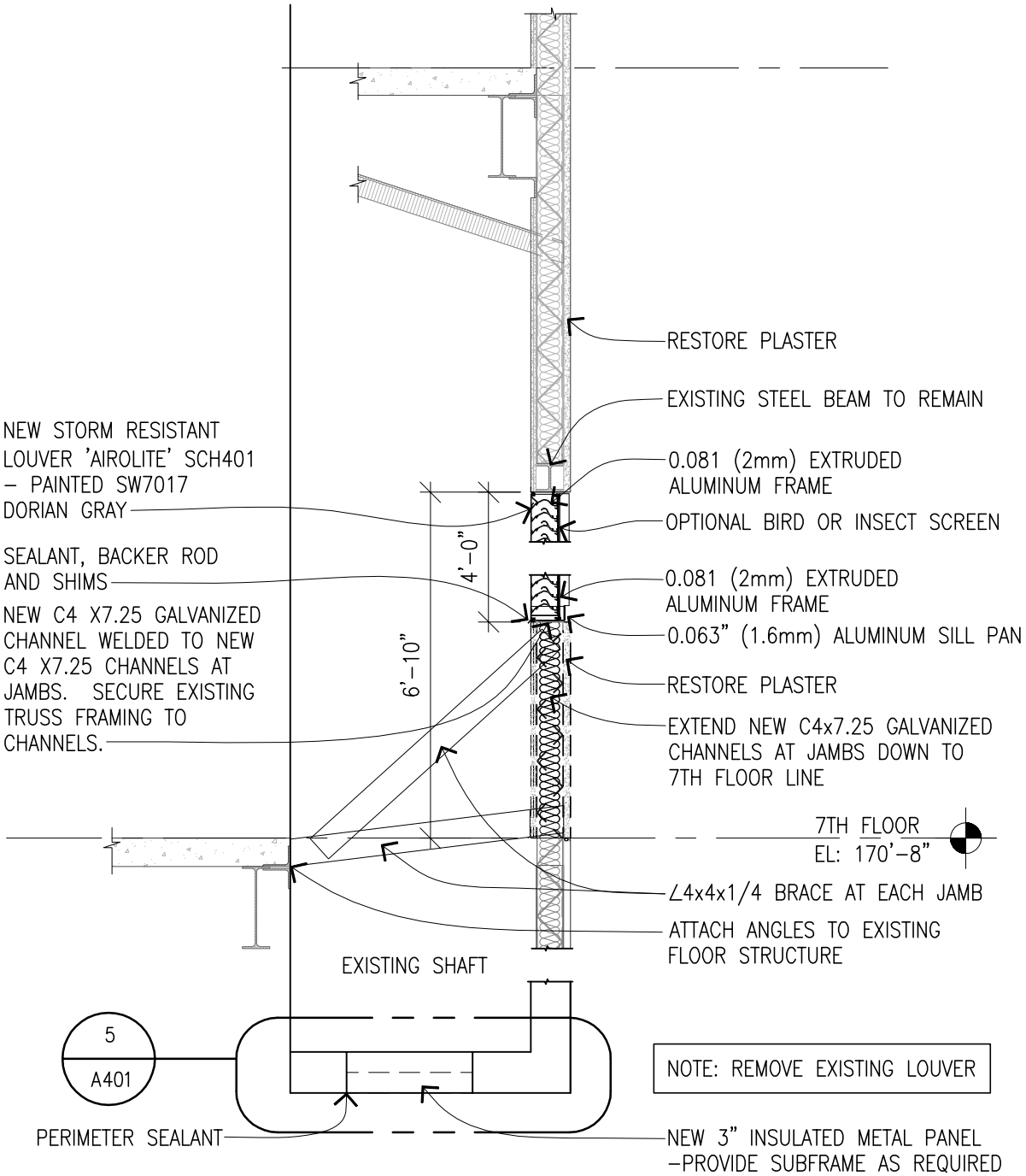
SIEMENS

August 20, 2015

Wayne State University Student Center Renovation
5th Floor Renovation - WSU Project No. 034-266828
7th Floor Renovation – WSU Project No. 034-261806

FURNISH MATERIALS = **F** INSTALL MATERIALS = **I** WIRE MATERIALS = **W**	SIEMENS	DIVISION 23 MECHANICAL	DIVISION 26 ELECTRICAL 'EC' (CONTROLS)	OTHERS 'EP'(POWER) OR 'MC'(MECH)
Conduit			**F I W**	
Cable (#20TP, #24 TSP, #20 3-cond)			**F I W**	
Wire (#14THHN)			**F I W**	
Hangars, junction boxes, etc.			**F I W**	
Minimum 4"x4" trough				**F I W (EP)**
ALL other control devices	**F**		**I W**	
Temperature control valves (pneumatic-AHU's)	**F**	**I**		
Pipe taps & wells		**F I**		
Six-conductor pre-terminated cables	**F**		**I W**	
Pneumatic temperature control air tubing (copper & poly)	**F I**			
Air dryer/PRV station for pneumatic air	**F I**			**W**
Other non-control pneumatic tubing		**F I**		
Control panels (DDC & auxiliary)	**F & Build**		**I W**	
120VAC power to DDC panels				**F I W (EP)**
Hard-wired safety interlocks			**F I W**	
24 volt power as required			**F I W**	
120VAC or 24 volt power to electronic valve/damper actuators (other misc.)			**F I W**	
*VAV box controls (TEC/actuator/relay/DAT sensor)	**F**	**I** **Wire @factory**	**I W** **Or in field**	
Temperature sensors	**F**		**I W**	
Pressure sensors	**F I**		**W**	
Flow transmitter for AFMS	**F**		**I W**	
Static pressure transmitters	**F**		**I W**	
Meters (Dom HW, CW, Electric and Gas)		**F I**	**W**	
Humidity sensors	**F**		**I W**	
VFD's				**F I W (EP & MC)**
Current switches	**F**		**I W**	
Air flow switches	**F**		**I W**	
Relays	**F**		**I W**	
EP/PE switches	**F I**		**W**	
Pneumatic actuators	**F I**			
Electric/electronic actuators	**F**		**I W**	
Smoke detectors				**F I W (EP)**
Liquid flow sensors	**F**	**I**	**W**	
Liquid flow switches	**F**	**I**	**W**	
Air flow measuring stations	**F**	**I**	**W**	
CO2 sensors	**F**		**I W**	

* Siemens and WSU preference is to have VAV box controls factory installed. If factory install does not appear feasible with the project schedule, the GC should review and confirm other options with WSU and Siemens.



2 / A401 WALL SECTION

1/2" = 1'–0"

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Title

Student Center 7th Floor Renovation
WSU No. 034-261806
08.21.2015 Addendum 3

☐ Preliminary
■ Construction
☐ Record

Do not scale
Use figured dimensions only

Drawn: **PMH**
Date: **08.21.2015**
Job Number: **2015025.7**
Sheet: **SK-A3.1**