ADDENDUM NO. 1

MUB Retail Dining Renovations
Michigan Technological University
Michigan Technological University Project #34-15-01
UPEA Project No.: M40-15463

This Addendum, issued this 3rd day of February 2016, is to clarify, modify and/or change the original bidding document and forms as part of the contract documents.

Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the bidder to disqualification.

GENERAL INFORMATION

1. Ansul system for all hoods in project shall be provided by FSEC. Reference FSEC drawings FSM-1 and FSM-2 item #15, #32, and #44.

2. Viega Pro-press fittings shall be acceptable for domestic water piping systems. Shark-bite and other push-to-connect fittings are not acceptable.

3. Please see attached Specification Section 23 34 00, HVAC Fans.

4. Approved fire rated duct wrap shall be an acceptable alternative to drywall grease duct enclosure. Duct shall be fire wrapped from hood connection to exhaust fan connection at roof.

5. Contractor shall provide interlock between exhaust fan, associated hood, and MUA with local control panel adjacent to hood in servery area. VFD shall be used for balancing exhaust system and providing additional capacity for future installation. Fan and associated MUA shall run at full capacity at all times hood is in use. No connection to building automation system is required.

6. Fire dampers shall be required on all ductwork at each floor penetration and roof penetration. Fire dampers shall not be installed in grease duct serving Type-1 hoods.
7. Electrical Clarification: For the re-installation of existing Panel KPP-D, Contractor shall re-use and relocate the existing feeder.

8. Drawing A100 General Note 1 – change note to read, “Salvage only the lock core from door to be removed and turn over to Owner.”

9. Drawing A601, Door Schedule, change Door No. 104 to 103.

10. Lead Paint Clarification: The construction area has not been tested for lead paint, but the area of construction was an addition to the building completed in 1988, 10 years after lead in paint was outlawed by the Federal Government.

11. The proposed gas service upgrade to building exterior shall be provided by utility supplier (Contact David McCowen at Semco Energy). Contractor shall be responsible for all gas piping from meter and within the building including refeeding existing gas main to an above grade entrance to building.

12. Drawing A301, Detail D2 applies to both soffit and wainscot. Detail D4 applies to wainscot, it is not required at soffit installation.

13. Attached plan diagrams indicate Contractor parking areas, building access, and required public egress to the elevator that must be maintained.

14. Attached floor diagram indicates relationship of basement to the first floor plan for location of items through the floor, and basement rooms B003 and B004.

15. Attached are the Sign in Sheets from Mandatory Walk-thru.

16. Drawing A402:
   b. Detail A2: Replace detail with attached SK-3.
   c. Detail A4: See SK-1 for additional framing @ Gate Stacking Pocket.

END OF ADDENDUM NO. 1
SECTION 23 34 00
HVAC FANS

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Upblast centrifugal roof fans.

B. Related Sections:
   1. Section 23 31 00 - HVAC Ducts and Casings: Product requirements for hangers for placement by this section.
   2. Section 23 33 00 - Air Duct Accessories: Product requirements for duct accessories for placement by this section.

1.2 REFERENCES

A. Air Movement and Control Association International, Inc.:
   2. AMCA 204 - Balance Quality and Vibration Levels for Fans.

B. National Electrical Manufacturers Association:
   1. NEMA MG 1 - Motors and Generators.
   2. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).

C. Underwriters Laboratories Inc.:
   1. UL 705 - Power Ventilators.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Shop Drawings: Indicate size and configuration of fan assembly, mountings, weights, ductwork and accessory connections.

C. Product Data: Submit data on each type of fan and include accessories, fan curves with specified operating point plotted, power, RPM, sound power levels for both fan inlet and outlet at rated capacity, electrical characteristics and connection requirements.

D. Manufacturer's Installation Instructions: Submit fan manufacturers instructions.

E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.4 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Closeout procedures.
B. Operation and Maintenance Data: Submit instructions for lubrication, motor and drive replacement, spare parts list, and wiring diagrams.

1.5 QUALITY ASSURANCE

A. Performance Ratings: Conform to AMCA 210 and bear AMCA Certified Rating Seal.
B. Sound Ratings: AMCA 301, tested to AMCA 300, and bear AMCA Certified Sound Rating Seal.
C. UL Compliance: UL listed and labeled, designed, manufactured, and tested in accordance with UL 705.
D. Balance Quality: Conform to AMCA 204.
E. Maintain one copy of each document on site.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.
B. Installer: Company specializing in performing Work of this section with minimum three years experience.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
B. Protect motors, shafts, and bearings from weather and construction dust.

1.8 FIELD MEASUREMENTS

A. Verify field measurements prior to fabrication.

1.9 WARRANTY

A. Section 01 70 00 - Execution and Closeout Requirements: Product warranties and product bonds.
B. Furnish five year manufacturer’s warranty for fans.

1.10 MAINTENANCE SERVICE

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for maintenance service.
B. Furnish service and maintenance of fans for one year from Date of Substantial Completion.
C. Include systematic examination, adjustment, and lubrication of fans, and controls checkout and adjustments. Repair or replace parts in accordance with manufacturer's operating and maintenance data. Use parts produced by manufacturer of original equipment.
D. Perform work without removing fans from service during building normal occupied hours.

E. Perform maintenance work using competent and qualified personnel under supervision and in direct employ of manufacturer or original installer.

1.11 EXTRA MATERIALS

A. Section 01 70 00 - Execution and Closeout Requirements: Spare parts and maintenance products.

B. Furnish two sets of belts for each fan.

PART 2 PRODUCTS

2.1 UPBLAST CENTRIFUGAL ROOF FANS

A. Manufacturers:
   1. Greenheck Fan Corporation
   2. Fantech
   3. Substitutions: Section 01 60 00 - Product Requirements.

B. Fan Unit: Upblast type. V-belt drive, spun aluminum housing with grease tray; resilient mounted motor; aluminum wire bird screen; square base to suit roof curb with continuous curb gaskets.

C. Sheaves: Cast iron or steel, dynamically balanced, bored to fit shafts and keyed; variable and adjustable pitch motor sheave selected so required rpm is obtained with sheaves set at mid-position; fan shaft with self-aligning pre-lubricated ball bearings.

D. Motor: Totally enclosed fan cooled.

E. Roof Curb: 14 inch high self-flashing of galvanized steel construction with continuously welded seams, 1 inch insulation and curb bottom, hinged curb adapter, and factory installed nailer strip.

F. Disconnect Switch: Factory wired, non-fusible, in housing for thermal overload protected motor NEMA 250 Type 3R enclosure.

G. Accessories:
   1. Backdraft Damper: Gravity actuated, aluminum multiple blade construction, felt edged with offset hinge pin, nylon bearings, blades linked and line voltage motor drive, power open, spring return.

H. Performance:
   1. See Schedule on drawings

I. Electrical Characteristics and Components:
   1. See Schedule on drawings
PART 3 EXECUTION

3.1 EXAMINATION
A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
B. Verify roof curbs are installed and dimensions are as shown on shop drawings.

3.2 INSTALLATION
A. Secure roof fans with cadmium plated steel lag screws to roof curb.
B. Install backdraft dampers on inlet to roof exhaust fans.
C. Install safety screen where inlet or outlet is exposed.
D. Install backdraft dampers on discharge of exhaust fans
E. Provide sheaves required for final air balance.

3.3 MANUFACTURER'S FIELD SERVICES
A. Section 01 40 00 - Quality Requirements: Requirements for manufacturer’s field services.

3.4 CLEANING
A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for cleaning.
B. Vacuum clean coils and inside of fan cabinet.

3.5 DEMONSTRATION
A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for demonstration and training.
B. Demonstrate fan operation and maintenance procedures.

3.6 PROTECTION OF FINISHED WORK
A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for protecting finished Work.
B. Do not operate fans for until ductwork is clean, filters in place, bearings lubricated, and fan has been test run under observation.

END OF SECTION
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<thead>
<tr>
<th>NAME</th>
<th>COMPANY</th>
<th>PHONE NUMBER</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Todd Anderson</td>
<td>ERICO</td>
<td>906-483-4906</td>
<td><a href="mailto:nick@ericoelectric.com">nick@ericoelectric.com</a></td>
</tr>
<tr>
<td>Chao Hammershan</td>
<td>Northern Heating &amp; Cooling</td>
<td>906-482-7580</td>
<td><a href="mailto:Chao.Hammershan@comcast.com">Chao.Hammershan@comcast.com</a></td>
</tr>
<tr>
<td>George Simonsen</td>
<td>MSU</td>
<td>906-482-2965</td>
<td><a href="mailto:george.simonsen@msu.edu">george.simonsen@msu.edu</a></td>
</tr>
<tr>
<td>Andrew Lanti</td>
<td>Lanti Contracting</td>
<td>906-370-3546</td>
<td><a href="mailto:andrew.lati@hot.com">andrew.lati@hot.com</a></td>
</tr>
<tr>
<td>Anthony Lamping</td>
<td>Ktripet</td>
<td>281-476-5874</td>
<td><a href="mailto:a.lamping@skcglobal.com">a.lamping@skcglobal.com</a></td>
</tr>
<tr>
<td>Rick Richards</td>
<td>Berger &amp; King</td>
<td>796-1798</td>
<td></td>
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<tr>
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</tr>
<tr>
<td>Wendy Anderson</td>
<td>CM Morris Group</td>
<td>906-482-5426</td>
<td><a href="mailto:wenderson@cmorrisgroup.com">wenderson@cmorrisgroup.com</a></td>
</tr>
<tr>
<td>Bob Baskett</td>
<td>Robert Johnstone</td>
<td>828-437-570</td>
<td></td>
</tr>
<tr>
<td>Byron Ruonenga</td>
<td>Byron Heating/Al.</td>
<td>906-492-6911</td>
<td><a href="mailto:byron@byronheating.com">byron@byronheating.com</a></td>
</tr>
<tr>
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</tr>
<tr>
<td>Jake Vorden</td>
<td>L&amp;L Const.</td>
<td>313-709-0881</td>
<td><a href="mailto:jake@worldwide.com">jake@worldwide.com</a></td>
</tr>
<tr>
<td>Linda Vorden</td>
<td>Union of Wood</td>
<td>323-784-3203</td>
<td><a href="mailto:linda@worldwide.com">linda@worldwide.com</a></td>
</tr>
</tbody>
</table>

MICHIGAN TECHNOLOGICAL UNIVERSITY
PRE-BID WALK-THRU SIGN-IN SHEET
January 28, 2015
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<thead>
<tr>
<th>NAME</th>
<th>COMPANY</th>
<th>PHONE NUMBER</th>
<th>E-MAIL ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>L. C. DeFerje</td>
<td>B &amp; B Electric</td>
<td>906-396-0940</td>
<td><a href="mailto:leake@bbelectricinc.com">leake@bbelectricinc.com</a></td>
</tr>
<tr>
<td>Don Leake</td>
<td>B &amp; B Electric</td>
<td>906-396-7754</td>
<td><a href="mailto:leake@bbelectricinc.com">leake@bbelectricinc.com</a></td>
</tr>
<tr>
<td>Tim Seppanen</td>
<td>F&amp;F Construction</td>
<td>201-3470</td>
<td><a href="mailto:leake@bbelectricinc.com">leake@bbelectricinc.com</a></td>
</tr>
<tr>
<td>Marty Bambergstrom</td>
<td>K.P.</td>
<td>906-390-8020</td>
<td><a href="mailto:leake@bbelectricinc.com">leake@bbelectricinc.com</a></td>
</tr>
</tbody>
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DETAIL @ GATE POCKET

1" = 1'-0"

REPLACE DETAIL ON DWG. A1/A402 WITH A1/SK2
DETAIL @ GATE POCKET @ RECESS FOR MENU BOARDS

A2

1" = 1'-0"

ADDENDUM NO 1
MUB RETAIL DINING RENOVATION
HOUGHTON, MICHIGAN

DRAWN: ML DATE: 2/2/2016 JOB No: M40-15463 DRAWING: SK3
BEAR ON (3) STUDS IN STUD NEW WALL

(3) #14 2" x 12" METAL JOISTS

BEAR ON TOP OF MASONRY 1-SIDE

HEADER @ GATE STACKING POCKET

1/4" = 1'-0"

T.O.M. 9'-4" V.F.

PLYWD. / SHIMS

5/8" G.W.B.

SECTION - HEADER @ GATE STACKING POCKET

1" = 1'-0"