

## SECTION 00 91 01

**ADDENDUM NO. 1****SUMMARY**

This document includes requirements that clarify or supersede portions of the Request for Proposal. This Addendum is a Contract Document.

General

The following changes, additions and deletions shall be made to the following document(s); all other conditions shall remain the same.

**I. BID FORM**

Not used

**II. AGREEMENT**

Not used

**III. SPECIFICATIONS**

Item 1 Section 115313 – LABORATORY FUME HOODS

A. Section added in its entirety.

**IV. VOLUME ONE DRAWINGS****Architectural:**

Item 1 Drawing A2.01

A. Revised extents of demo, as indicated in attached drawing AD01 - A01.

Item 2 Drawing A3.01

A. Revised Keynote # 01, as indicated in attached drawing AD01 - A02.

Item 3 Drawing A12.01

A. Revised note in detail 7/-, as indicated in attached drawing AD01 - A03.

**Mechanical:**

Item 1 Drawing M0.1

A. Add General Note #12, as indicated in attached drawing AD01-M-01.

Item 2 Drawing M2.3D

A. Modify Demolition Note A, as indicated in attached drawing AD01-M-02.

Item 3 Drawing M2.3

A. Modify Sheet Note 2, as indicated in attached drawing AD01-M-03.

Item 4 Drawing M6.1

A. Modified Note 4 on Detail 4, as indicated in attached drawing AD01-M-04.

B. Modified Note on Detail 5, as indicated in attached drawing AD01-M-05.

**Plumbing:**

## Item 1 Drawing P2.3

- A. Add note to VAC and CA piping: Copper piping to match existing, as indicated in attached drawing AD01-P-01.
- B. Add General Note, as indicated in attached drawing AD01-P-01.

**V. CLARIFICATIONS****RESPONSE TO CONTRACTOR QUESTIONS**

## Item 1 Pre-Bid RFI:

Question: Services required for the fume hood (i.e. air, gas, cold water) if the services are compressed air and cold water, please note that a cup sink would be required to contain the cold water; which would require a new counter top.

Response: ***Provide VAC & condensed air only. No cup sink required, hence the new counter top is also not required.***

## Item 2 Pre-Bid RFI:

Question: It is suggested to provide a new counter top for the fume hood as fume hood tops are dished to contain any spills.

Response: ***Fume hood to be mounted on existing counter tops.***

## Item 3 Pre-Bid RFI:

Question: Please confirm that the manufacturers standard air flow alarm will be required.

Response: ***Yes.***

## Item 4 Pre-Bid RFI:

Question: Please provide sign in list for prebid conferences.

Response: ***See attached.***

## Item 5 Pre-Bid RFI:

Question: Please confirm that the attached highlighted fume hood will meet the specifications. This hood comes in PETAL WHITE. If another color is required, the lead time will be 14 weeks after receipt of order OR another manufacturer can be utilized which has an 8 week lead time.

Response: ***Contractor to submit full submittals for specification review.***

END OF ADDENDUM 1

**SECTION 115313 – LABORATORY FUME HOODS**

## PART 1 – GENERAL

## 1.01 SUMMARY

- A. Section Includes: Bench mounted Variable Air Volume Fume hood.

## 1.02 FUME HOOD GENERAL DESIGN REQUIREMENTS

- A. Fume hoods shall function as ventilated, enclosed workspaces, designed to capture, confine and exhaust fumes, vapors and particulate matter produced or generated within the enclosure.
- B. Design fume hoods for consistent and safe air flow through the hood face. Negative variations of face velocity shall not exceed 20% of the average face velocity at any designated measuring point as defined in this section.
- C. Average illumination of work area: Minimum 80 foot candles. Work area shall be defined as the area inside the superstructure from side-to-side and from face of baffle to the inside face of the sash, and from the working surface to a height of 28 inches.
- D. Fume hood shall be designed to minimize static pressure loss with adequate slot area and bell shaped exhaust collar configuration. Maximum average static pressure loss readings taken three diameters above the hood outlet from four points, 90 degrees apart shall not exceed the following maximums with sash in *full* open position:

Face Velocity    Measured S.P.L. (W.G.)

100 F.P.M.            .30 inches

- E. Fume hood shall maintain essentially constant exhaust volume at any baffle position for safety. Maximum variation in exhaust CFM, static pressure and average face velocity as a result of baffle adjustment shall not exceed 5% for any baffle position at the specified face velocity.
- F. Fume hoods shall be field convertible, from bypass style to auxiliary air by simple component replacement or addition. Change-over shall be accomplished without construction modifications and without special tools.
- G. Noise Criteria: Test data of octave band analysis verifying hood is capable of a 50 NC value when connected to a 50 NC HVAC source. Reading taken 3' in front of open sash at 100 fpm face velocity.
- H. Fume hood shall be provided with single point of connection power, Light, duplex, air outlet nozzle and valves.

## 1.04 SUBMITTALS

- A. Shop Drawings: Indicate equipment locations, large scale plans, elevations, cross sections, rough-in and anchor placement dimensions and tolerances and all required clearances.

- B. Product Data: Submit manufacturer's data for each component and item of equipment specified. Include component dimensions, configurations, construction details, joint details, and attachments, utility and service requirements and locations.
- C. Samples: Submit 3 x 6 inch samples of finish for fume hood, work surfaces and for other pre-finished equipment and accessories for selection by Architect.
- D. Test Reports: Submit test reports on each size and type of hood verifying conformance to test performances specified. Test report must accompany each hood as part of installation and usage package. Submit independent test reports as required by specification.
- E. Instructions: Submit for review and approval
  - 1. Instructions to be inscribed on instruction plate to be attached to hood, as specified in Part 2 of this Section.
  - 2. Written instructions in booklet form providing additional details on safe and proper operation and maintenance.
  - 3. Professional quality video—minimum 15 minutes in length on proper hood usage.

#### 1.05 QUALITY ASSURANCE

- A. Single source responsibility: Fume hood casework, work surfaces, and other equipment and accessories shall be manufactured or furnished by a single furniture company.
- B. Manufacturer's qualifications: Modern plant with proper tools, dies, fixtures and skilled employees to produce high quality casework and equipment, and shall meet the following minimum requirements:
  - 1. Five years or more experience in manufacture of casework and equipment of type specified.
  - 2. Ten installations of equal or larger size and requirements.
  - 3. UL 1805 Specification:  
Fume Hood must be Underwriters Laboratories subject 1805 classified. The 1805 standard covers electrical and mechanical hazards, investigates the flammability of materials and measures the effectiveness of airflow characteristics. Proper labeling must be affixed to the face of each fume hood indicating classification to the UL 1805 standard for Fume Hoods. UL listing covering electrical components only or other listings that do not encompass all issues covered in UL 1805 is insufficient. All factory testing shall be performed in a U.L. certified test facility.
  - 4. Fume hood compliance with NFPA requirements as it pertains to materials used and construction, as well as the National Electrical Code. UL 1805 signifies that any electrical & methods used comply with NEC (National Electrical Code) and all materials have a flame spread index of less than 25.
- C. Installer's qualifications: Factory certified by the manufacturer.

#### 1.06 DELIVERY, STORAGE AND HANDLING

- A. Schedule delivery of equipment so that spaces are sufficiently complete that equipment can be installed immediately following delivery.
- B. Protect finished surfaces from soiling or damage during handling and installation. Keep covered with polyethylene film or other protective coating.

- C. Protect all work surfaces throughout construction period with 1/4" corrugated cardboard completely covering the top and securely taped to edges. Mark cardboard in large lettering "No Standing".

#### 1.07 PROJECT CONDITIONS

- A. Do not deliver or install equipment until the following conditions have been met:
  - 1. Windows and doors are installed and the building is secure and weather tight.
  - 2. Ceiling, overhead ductwork and lighting are installed.
  - 3. All painting is completed and floor tile located below casework is installed.

### PART 2 – PRODUCTS

#### 2.01 MANUFACTURER

Casework and equipment manufacturer: Hamilton Laboratory Solutions, 825 East Albert Drive, Manitowoc, WI 54220.

- A. Basis of Design: SafeAire II Restricted Bypass Superstructure.
- B. Or equal.

#### 2.02 FUME HOOD MATERIALS

- A. Steel: High quality, cold rolled, mild steel meeting requirements of ASTM A366; gauges U.S. Standard and galvanized.
- B. Stainless steel: Type 304; gauges U.S. Standard.
- C. Ceiling closure panels: Minimum 18 gauge; finish to match hood exterior.
- D. Bypass grilles: Low resistant type, 18 gauge steel, upward directional louvers.
- E. Safety glass: 7/32" thick laminated safety glass.
- F. Sash cables: Stainless steel, uncoated, 1/8" diameter military spec. quality. (MIL-W-83420D-3)
- G. Sash guides: Corrosion resistant poly-vinyl chloride.
- H. Pulley assembly for sash cable: 2" diameter, zinc dichromate finish, ball bearing type, with cable retaining device. (Nylon tired—not acceptable.)
- I. Sash pull: Full width corrosion resistant plastic, stainless steel or steel with chemical resistant powder coating.
- J. Gaskets: 70 durometer PVC for interior access panels. Gasket interior access panels to eliminate air leakage and to retain liquids inside hood.
- K. Fastenings:
  - 1. Exterior structural members attachments: Sheet metal screws, zinc plated.

2. Interior fastening devices concealed. Exposed screws not acceptable. (Screw head "caps" not acceptable.)
  3. Exterior panel member fastening devices to be corrosion resistant, non-metallic material. Exposed screws not acceptable.
- L. Instruction plate: Corrosion resistant or plastic plate attached to the fume hood exterior with condensed information covering recommended locations for apparatus and accessories, baffle settings and use of sash.

## 2.03 FUME HOOD CONSTRUCTION

- A. Superstructure: Rigid, self-supporting assembly of double wall construction, maximum 4-7/8" thick.
1. Wall consists of a sheet steel outer shell and a corrosion resistant inner liner, and houses and conceals steel framing members, attaching brackets and remote operating service fixture mechanisms and services. Panels must be attached to a full frame construction, minimum 14 gauge galvanized members. Panels and brackets attached to eliminate screw heads and metallic bracketry from hood interior.
  2. Access to fixture valves concealed in wall provided by exterior removable access panels, gasketed access panels on the inside liner walls, or through removable front posts.
- B. Exhaust outlet: Rectangular with ends radiused, shaped and flanged, 18 gauge [steel finished with Chameleon powder coating] [stainless steel exhaust collars welded in place].

|   |
|---|
| Provide stainless steel outlet with stainless steel liners. |
|---|

- C. Access opening perimeter: Air foil or streamlined shape with all right angle corners radiused or angled. Bottom horizontal foil shall provide nominal one inch bypass when sash is in the closed position and relatively flush with the top of the work surface. Bottom foil shall be removable without use of special tools. Bottom foil shall provide access areas for electrical cords. Bottom foil: Steel with urethane powder coating to increase acid and abrasion resistance.
- D. Fume hood sash: Full view style with clear, unobstructed, side-to-side view of fume hood interior and service fixture connections.
1. Bottom sash rail: 2" maximum, 18 gauge steel with urethane powder coat finish. Provide integral formed, flush pull the full width of bottom rail.
  2. Set safety glass into rails in deep form, extruded poly-vinyl chloride glazing channels.
  3. Counter balance system: Single weight, pulley, cable, counter balance system which prevents sash tilting and permits one finger operation at any point along full width pull. Maximum 7 pounds pull required to raise or lower sash throughout its full length of travel. Design system to hold sash at any position without creep and to prevent sash drop in the event of cable failure. Life cycle test 100 pound sash and weight to 100,000 cycles without sign of failure. Provide independent test data.
  4. Open and close sash against rubber bumper stops.
- E. Fume hood liner: Polyresin (product number denoted by the suffix "P"): Reinforced polyester panel; smooth finish and white color in final appearance. Flexural strength: 14,000 psi. Flame spread: 25 or less per U.L. 723 and ASTM E84-80.

- F. Baffles: Baffles providing controlled air vectors into and through the fume hood must be fabricated of the same material as the liner. Provide exhaust slots full height on vertical sides of the baffle with upper slots adjustable. All baffle supports/brackets to be non-metallic.
- G. Remote baffle adjustment: Toggle style, one handed, single point control, accomplished while hood is in use, without disturbing apparatus, from outside right hand corner post of fume hood with sash in either the open or closed position, and permitting setting for (1) high thermal loading and (2) normal or average operation.
1. Remote adjuster: Toggle style control handle and an acid resistant label indicating proper control handle location for baffle function.
  2. Rigidly correlate control handles to baffle positioner; cable-type adjustments are not acceptable
  3. Design baffle adjuster to engage and disengage from the adjustable baffle without the use of tools.
  4. Must comply with OSHA Lab Standard Guidelines. (Easily reached/adjusted with only arm in hood.)
  5. Baffles providing no adjustment or requiring internal manipulations are not acceptable.
  6. Non-metallic supports and fasteners required inside of hood.
- H. Service fixtures and fittings:
1. Service treatment: Fittings are to be coated with a chemically resistant polyester powder lacquer electrostatically applied and backed on for a uniform finish.
  2. Handle and outlet nozzle will be color coded to the media, with the same polyester powder lacquer finish. Handles shall be metal with media identification text. Outlet nozzles shall be made of the same high quality brass as the valve bodies. Other materials may be in contact with media where appropriate.
  3. Provide piping for all service fixtures from valve to outlet: copper for compressed air and vacuum.
  4. Fixture fittings shall incorporate quick-connect compression fittings on the valve body (for the media inlet and media outlet) as well as the fume hood outlet nozzle. With this system, *no soldering or brazing should be required to complete mechanical connections.*
  5. Fixtures exposed to fume hood interior. Brass with chemically resistant polyester powder lacquer color coded to the media.
  6. Fixtures are to be provided with easy-to-mount attachment device for secure mounting in deck or wall mounted applications. System to be installed with simple hand tools.
  7. Fittings are to be constructed to operate with the following *maximum working pressure* without leak or failure.
    - Compressed Air: 145 PSI
  8. Provide compressed air and vacuum with shut off value for the hood. Provide compressed air and vacuum with shut off value for the hood.
  9. All outlets shall have detachable serrated nozzles.
  10. All valves shall be front-loaded for ease of access and maintenance at point of use.
- I. Hood light fixture: Two lamp/T8, rapid start, UL listed fluorescent light fixture with sound rated ballast installed on exterior of roof. Provide safety glass panel cemented and sealed to the hood roof.
1. Interior of fixture: White, high reflecting plastic enamel.
  2. Size of fixture: Largest possible up to 48" for hoods with superstructures up to six feet.

- Provide two 36" fixtures for hoods with eight foot superstructures.
3. Include lamps with fixtures.
  4. Illumination: Per performance values, Part 1 of this Section.

J. Electrical services: Hardwire connection 120 V.A.C. at 20 amperes..

- K. Work surfaces: [Specified Option] 1-1/4" thick surface, dished a nominal one-half inch to contain spills.
1. Reinforced stainless steel work surfaces, either integral or attached, for hoods with stainless steel interiors.
  2. Molded resin work surfaces for hoods with cement-based board or polyresin liners.

L. Safety Monitor/Alarm System: [Specified Option]

Where shown or specified provide Safety Monitor/Alarm System which monitors face velocity and provides audible and visual alarm if face velocity drops below safe levels. The technology used in the 54LAF500 and the 54LAF1000 will be based on thermally compensated thermistor based in the alarm module. As the internal fume hood pressure changes as the sash opening is closed and opened, the flow passing over the thermistor is calibrated to a face velocity which is displayed on the front of the monitor.

1. Safety monitor: UL listed, tamper proof, with all alarm circuits, electric components, external tubing, and manifolds furnished complete and factory installed. The monitor shall have light emitting diode display which provides clear indication of airflow conditions.
2. *Calibration is the responsibility of the owner* and is required once the hood is stationed and the hood exhaust and room supply systems are balanced. A secondary calibration has been factory set into the alarm's memory only to determine that the alarm is functional and ready for shipment. *The primary calibration must be completed in the field.*
3. Airflow sensor: Thermally compensated glass-beaded thermistor, factory connected to a sidewall port on the interior of the fume hood.
4. Alarm Signal: Audible signal and a visual, red large light emitting diode:
  - a. Silence push button, which disables the audible alarm, shall be accessible on the front of the safety monitor.
  - b. Provide alternate mode in which audible alarm is silenced indefinitely but visual alarm remains activated until the alarm condition is corrected.
  - c. When alarm condition is corrected and face velocity and volume return to specified levels, the safety monitor will automatically reset and begin routine monitoring.
5. Provide test circuit to verify proper safety monitor operation.
6. Electrical rating: Maximum 12 VDC, and maximum current rating of 200MA.

#### 2.04 RESTRICTED BYPASS FUME HOODS

- A. Bypass shall be sufficient in size to allow 25% flow with sash closed. Bypass must be achieved through grill or louver on face of front lintel panel.
- B. Sash: Standard vertical-rising With VAV applications.
- C. Width: 96".

#### 2.07 METAL FINISH

- A. Preparation: Spray clean metal with a heated cleaner/phosphate solution, pretreat with iron



phosphate spray, water rinse, and neutral final seal. Immediately dry in heated ovens, gradually cooled, prior to application of finish.

- B. Application: Electrostatically apply urethane powder coat of selected color and bake in controlled high temperature oven to assure a smooth, hard satin finish. Surfaces shall have a chemical resistant, high grade furniture quality finish of the following thicknesses:
  - 1. Exterior and interior surfaces exposed to view: 1.5 mil average and 1.2 mil minimum.
  - 2. Backs of cabinets and other surfaces not exposed to view: 1.0 mil average.

## PART 3 – EXECUTION

### 3.01 INSTALLATION

- A. Installation:
  - 1. Install fume hoods and equipment in accordance with manufacturer's instructions.
  - 2. Install equipment plumb, square, and straight with no distortion and securely anchored as required.
  - 3. Secure work surfaces to casework and equipment components with material and procedures recommended by the manufacturer.
- B. Accessory installation: Install accessories and fittings in accordance with manufacturer's recommendations.
- C. Touch up minor damaged surfaces caused by installation. Replace damaged components as directed by Architect.
- D. Test hood performance for exhaust capacity and air flow visualization.
  - a. Reverse Airflows and Containment - When tested as manufactured, the hood shall provide containment less than or equal to 0.05 ppm when tested per ASHRAE Standard 110-95

### 3.03 ADJUSTING

- A. Repair or remove and replace defective work, as directed by [Architect] [Owner] upon completion of installation.
- B. Adjust sash, fixtures, accessories and other moving or operating parts to function smoothly.

### 3.04 CLEANING

- A. Clean equipment, touch up as required.

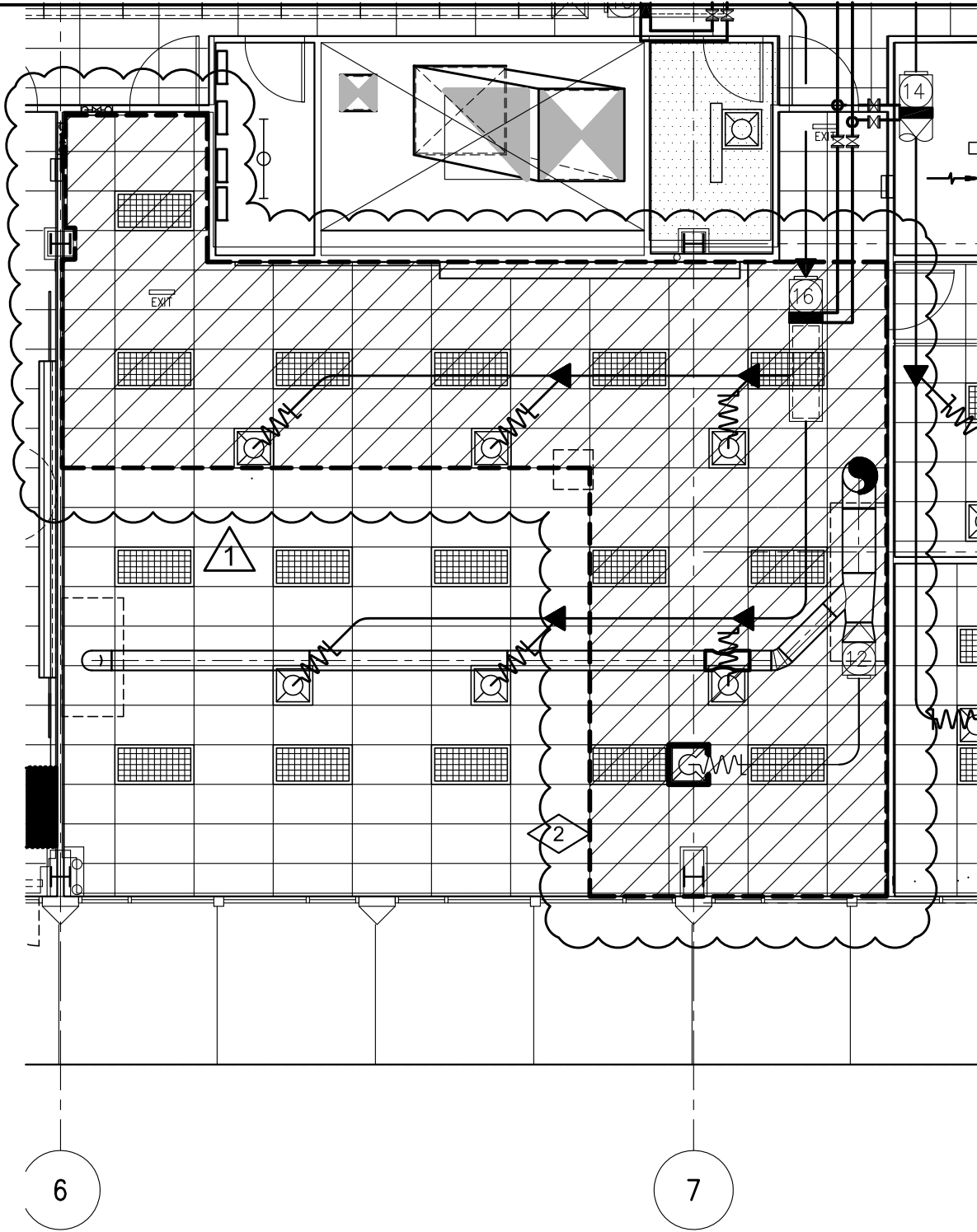
### 3.05 PROTECTION OF FINISHED WORK

- A. Provide all necessary protective measures to prevent exposure of equipment from exposure to other construction activity.
- B. Advise contractor of procedures and precautions for protection of material and installed fume hoods from damage by work of other trades.

3.06 DEMONSTRATION

- A. Provide systems demonstration and demonstrate all equipment operations and functions.

END OF SECTION



2

PARTIAL DEMO CEILING PLAN



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DEMO FLOOR PLAN

ADDENDUM  
CSM - BUILDING 36  
SCIENCE BUILDING

SMCCCD

|                                |                          |
|--------------------------------|--------------------------|
| SCALE<br>1/8" = 1'-0"          | ADDENDUM. No.<br>1       |
| PROJECT NO.<br>116045          | REFERENCE SHEET<br>A2.01 |
| DATE<br>02/23/16               | DSA #<br>-               |
| SHEET NO.<br><b>AD01 - A01</b> |                          |

## KEYNOTES

01

8'-0" WIDE SAFEAIRE II FUME HOOD WITH 8" VERTICAL SLASH AND 1081 CFM MOUNTED OVER EXISTING EPOXY COUNTER TOP. REFER TO ELECTRICAL & MECHANICAL DRAWINGS FOR DETAILS. REFER TO DETAILS 2, 3/A12.01 FOR ANCHORAGE DETAILS.

COLOR TO BE SELECTED FROM MANUFACTURER'S FULL RANGE.



EPOXY COUNTERTOP BEVELED LIP MAY NEED TO BE MODIFIED/CUT TO ACCOMMODATE THE FUME HOOD.



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ADDENDUM  
CSM - BUILDING 36  
SCIENCE BUILDING  
SMCCCD

SCALE  
1" = 1'-0"

ADDENDUM. No.  
1

PROJECT NO.  
116045

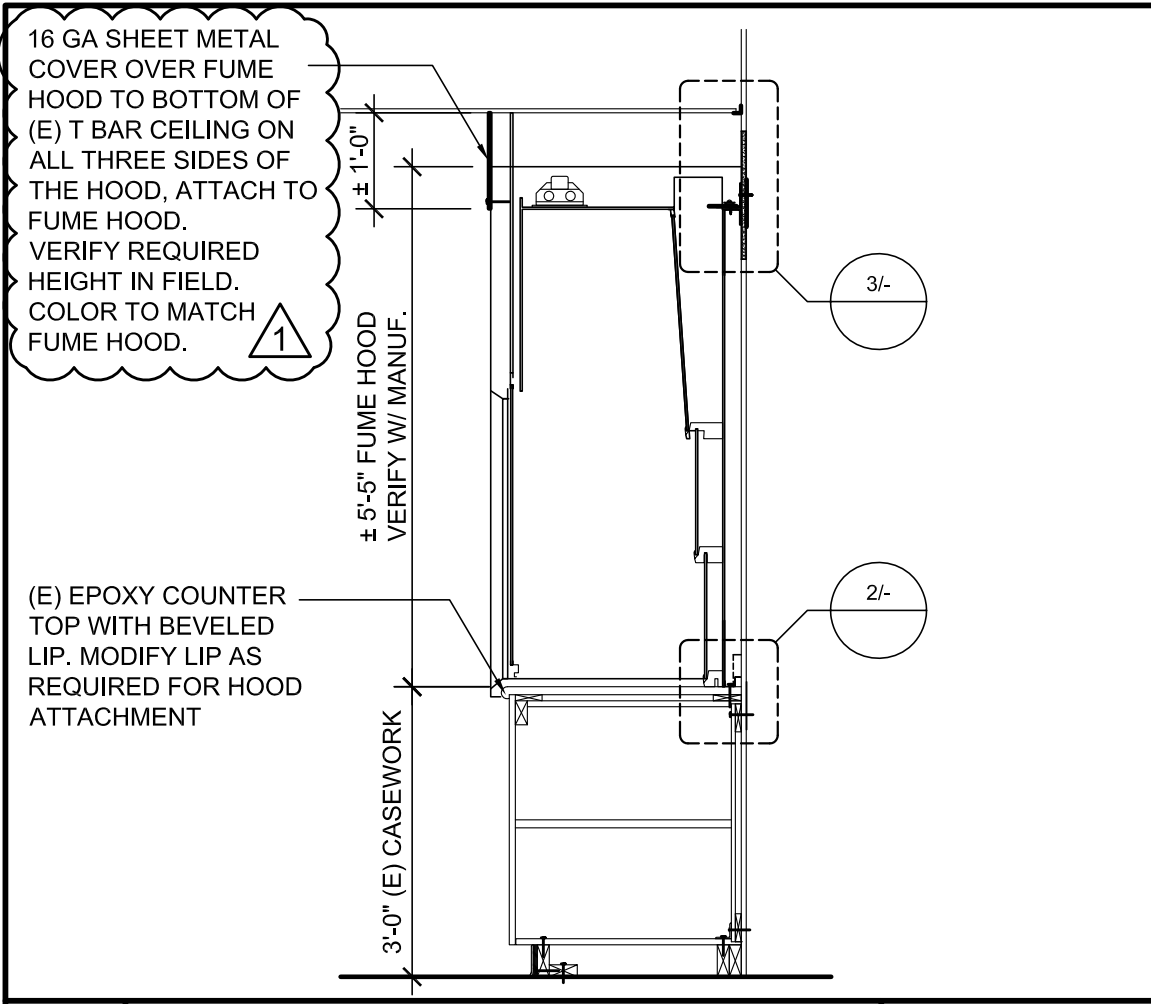
REFERENCE SHEET  
A3.01

DATE  
02/23/16

DSA #  
-

SHEET NO.

AD01 - A02



|          |                |              |
|----------|----------------|--------------|
| <b>7</b> | <b>SECTION</b> | 1/2" = 1'-0" |
|----------|----------------|--------------|



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ADDENDUM

CSM - BUILDING 36  
 SCIENCE BUILDING

SMCCCD

|             |          |                 |        |
|-------------|----------|-----------------|--------|
| SCALE       | -        | ADDENDUM. No.   | 1      |
| PROJECT NO. | 116045   | REFERENCE SHEET | A12.01 |
| DATE        | 02/23/16 | DSA #           | -      |
| SHEET NO.   |          | AD01 - A03      |        |

GENERAL NOTES

1

12. PRIOR TO REMOVAL OF ANY VAV BOXES AND DIFFUSERS, PRE-READ THE AIRFLOW QUANTITY AND RECORDED. FINAL AIR BALANCING SHALL BE PER DRAWING M2.3.



Date Signed \_\_\_\_\_

SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DRAWING INDEX

ADDENDUM NO. 1 DSA PROJECT NO. -

SCALE NTS DATE 02/28/14

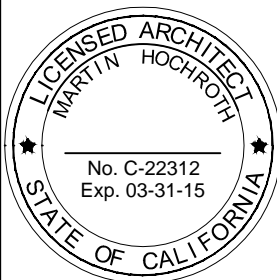
PROJECT NO. 116045 REF. SHEET NO. M0.1

ADDENDUM DRAWING SHEET NO.

AD01 - M-01

**ADDENDUM DRAWING**  
**COLLEGE OF SAN MATEO**  
**SCIENCE BLDG # 36**  
**FUME HOOD INSTALLATION**

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DEMOLITION NOTES:

A COMPLETELY REMOVE EXISTING HVAC ASSOCIATED DUCTWORK UP TO POINT OF DISCONNECT. EXTEND THE POWER TO NEW TRIATEK EXV/322 AND EXV/323.
 1



Date Signed \_\_\_\_\_


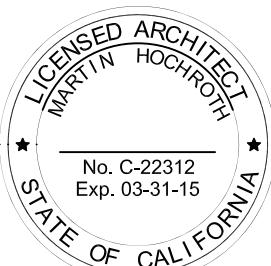
|  |   |  |  |                         |
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|  <p>394-A Umbarger Rd<br/>San Jose, CA 95111<br/>Phone 408.224.9890<br/>Fax 408.224.9891<br/>www.ArtikA3.com</p> |  | MECHANICAL THIRD FLOOR DEMOLITION PLAN   | ADDENDUM NO.<br>1                                | DSA PROJECT NO.<br>-    |
|  |   | <b>ADDENDUM DRAWING</b><br>COLLEGE OF SAN MATEO<br>SCIENCE BLDG # 36<br>FUME HOOD INSTALLATION | SCALE<br>NTS                                     | DATE<br>02/28/14        |
|  |   |  | PROJECT NO.<br>116045                            | REF. SHEET NO.<br>M2.3D |
|  |   |  | ADDENDUM DRAWING SHEET NO.<br><b>AD01 - M-02</b> |                         |

SHEET NOTES:

- 1 CONNECT TO 6"x30" FUMEHOOD COLLAR. BALANCE THE FUMEHOOD TO 1080 CFM MAX.
- 2 DISCONNECT VAV ELECTRICAL AND RECONNECT TO ELECTRICAL TO EXV. SEE DEMO NOTE A ON M2.3D. HOOD TO BE INTERLOCK WITH TRITECK VALVE AND (E) BOXES AND CONTROL. THE CONTROLS ARE PROVIDED BY SCHNEIDER ELECTRIC. COORDINATE WITH STEVE FORGY AT SCHNEIDER ELECTRIC.

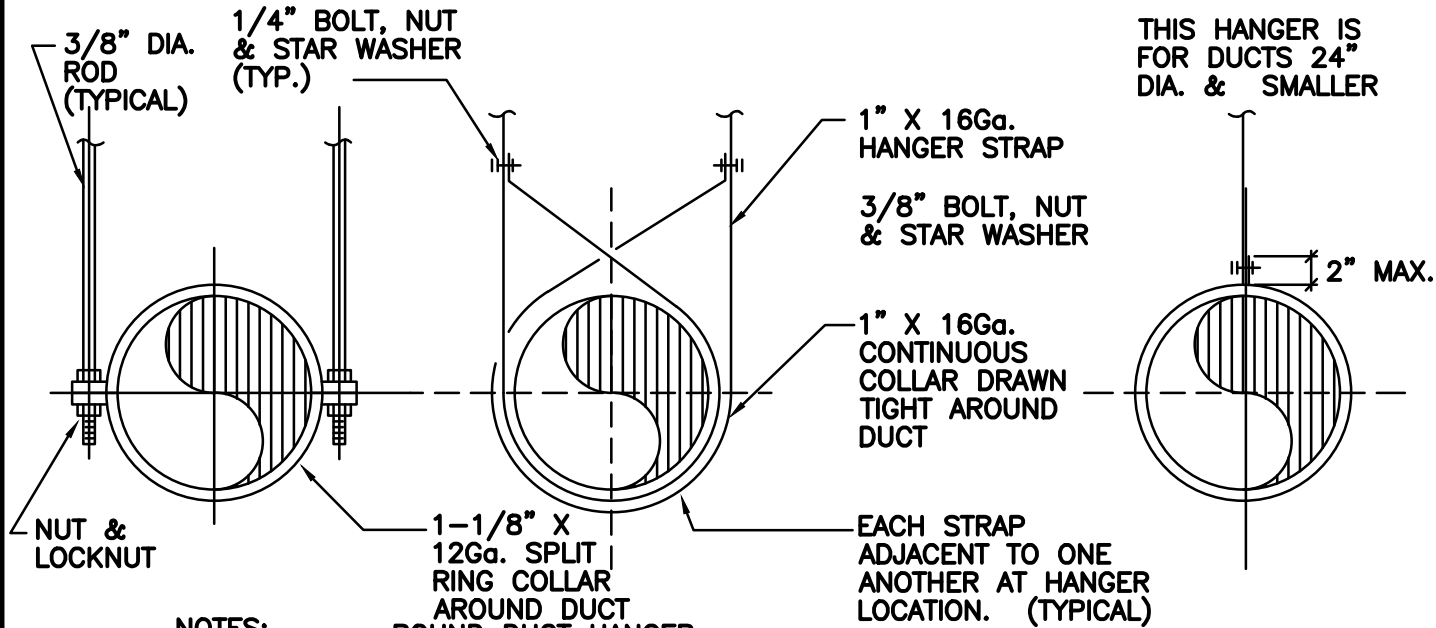


Date Signed \_\_\_\_\_

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|  |   | <b>ADDENDUM DRAWING</b><br><b>COLLEGE OF SAN MATEO</b><br><b>SCIENCE BLDG # 36</b><br><b>FUME HOOD INSTALLATION</b> | SCALE<br>NTS                                     | DATE<br>02/28/14       |
|  |   |   | PROJECT NO.<br>116045                            | REF. SHEET NO.<br>M2.3 |
|  |   |   | ADDENDUM DRAWING SHEET NO.<br><b>AD01 - M-03</b> |                        |



THESE TWO HANGERS ARE TO BE USED ON DUCTS  
25" & LARGER ( MAY BE USED ON SMALLER  
DUCTS).



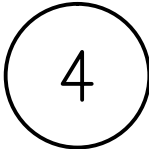
**NOTES:**

**ROUND DUCT HANGER**

1. REFER TO SMACNA GUIDELINES FOR HANGER SPACINGS.
2. PROVIDE SWAY & SEISMIC BRACING PER SMACNA SEISMIC GUIDELINES.
3. HANGER MATERIAL SUPPORTING FLEXIBLE DUCT SHALL IN NO CASE BE LESS THAN 1 1/2 INCHES WIDE. FLEXIBLE DUCT SHALL BE SUPPORTED PER MANUFACTURER'S RECOMMENDED MATERIALS, BUT AT NO GREATER DISTANCE THAN 4 FEET MAX. PERMISSIBLE SAG IS MAX. 1/2 INCHES PER FOOT OF SPACING BETWEEN SUPPORTS. <sup>1</sup>
4. ATTACHMENTS TO OVERHEAD STRUCTURE SHALL BE MADE IN ACCORDANCE WITH DETAIL 5/M6.1.

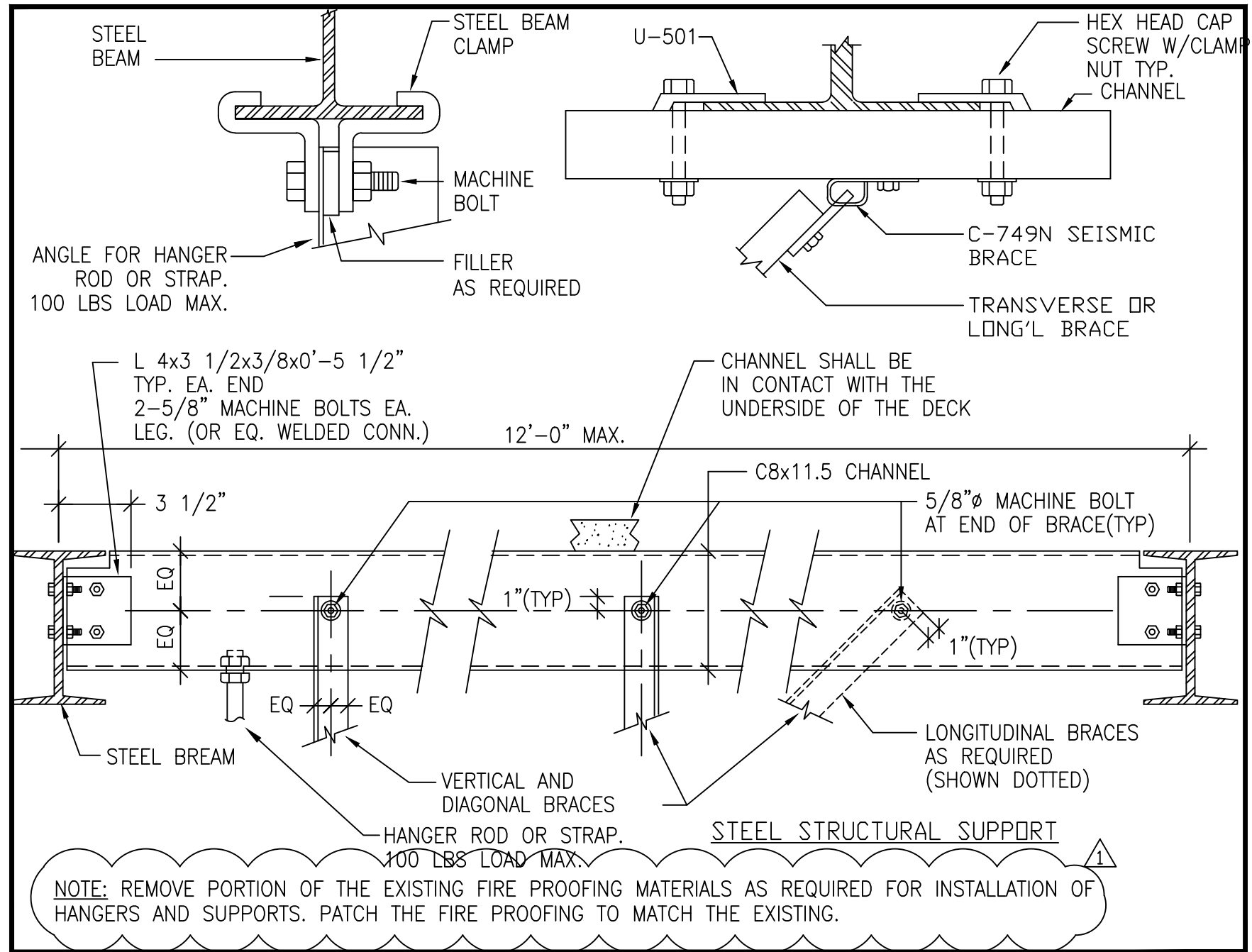
DUCT HANGERS DETAIL

NOT TO SCALE



Date Signed \_\_\_\_\_

|   |  |   |  |                       |                        |
|---|--|---|--|-----------------------|------------------------|
| <p>394-A Umbarger Rd<br/>San Jose, CA 95111<br/>Phone 408.224.9890<br/>Fax 408.224.9891<br/>www.ArtikA3.com</p> |  | MECHANICAL DETAILS  |  | ADDENDUM. NO.<br>1    | DSA PROJECT. NO.<br>-  |
|   |  | <b>ADDENDUM DRAWING</b><br><b>COLLEGE OF SAN MATEO</b><br><b>SCIENCE BLDG # 36</b><br><b>FUME HOOD INSTALLATION</b> |  | SCALE<br>NTS          | DATE<br>02/28/14       |
|   |  |   |  | PROJECT NO.<br>116045 | REF. SHEET NO.<br>M6.1 |
|   |  | ADDENDUM DRAWING SHEET NO.<br><b>AD01 - M-04</b>  |  |                       |                        |

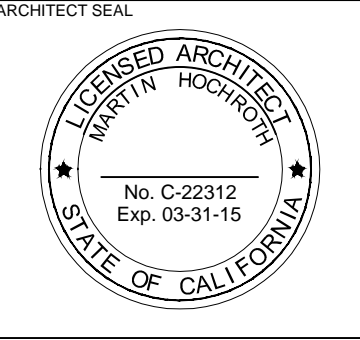


NOTE: REMOVE PORTION OF THE EXISTING FIRE PROOFING MATERIALS AS REQUIRED FOR INSTALLATION OF HANGERS AND SUPPORTS. PATCH THE FIRE PROOFING TO MATCH THE EXISTING.

**ATTACHMENT TO OVERHEAD STRUCTURE DETAIL**  
NOT TO SCALE

5

**ARTiK**  
ART & ARCHITECTURE  
394-A Umbarger Rd  
San Jose, CA 95111  
Phone 408.224.9890  
Fax 408.224.9891  
www.ArtikA3.com



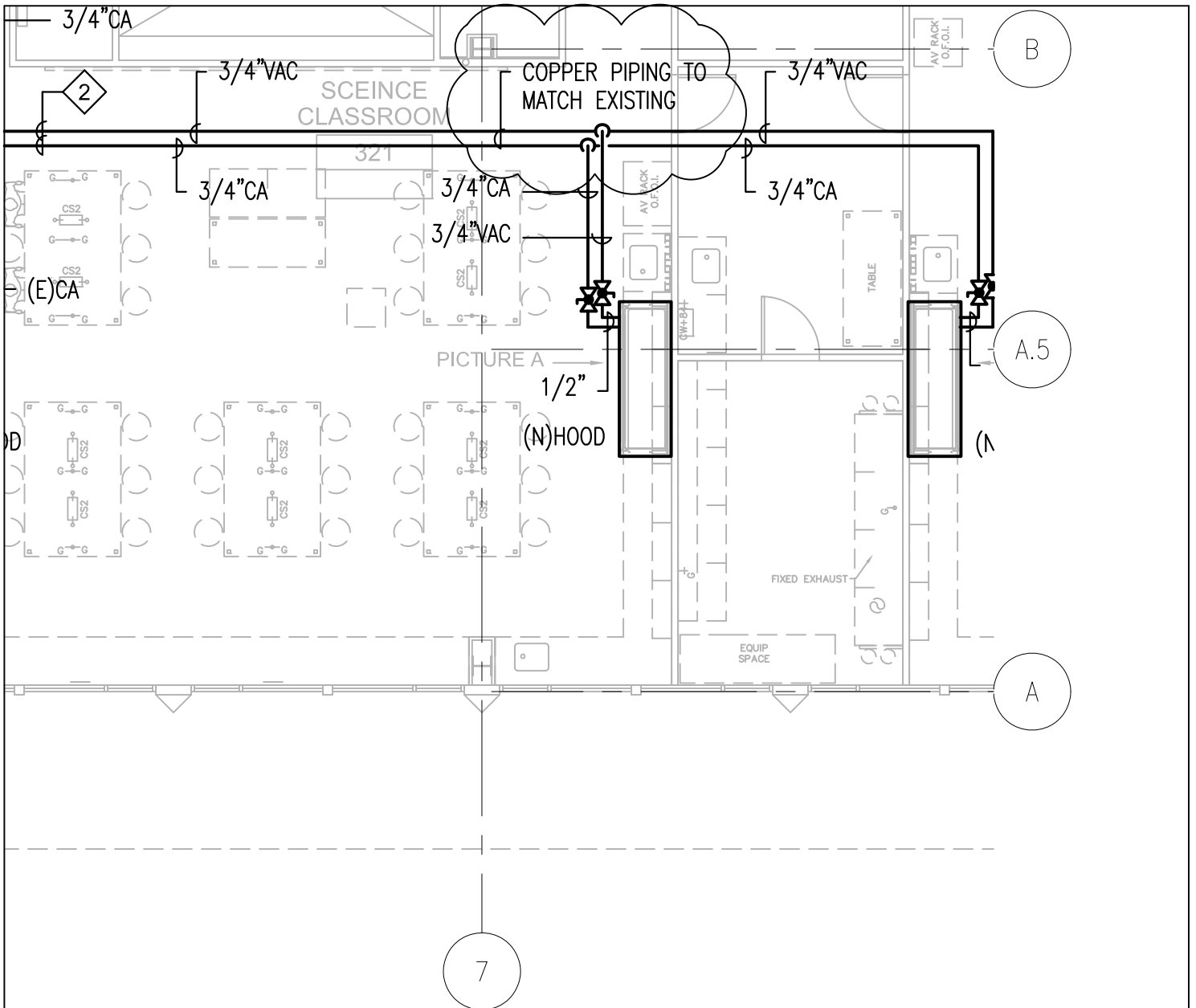
PROJECT TITLE  
**COLLEGE OF SAN MATEO SCIENCE**  
BLDG # 36  
FUME HOOD INSTALLATION  
SAN MATEO, CA  
**SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT**

DRAWING TITLE  
**MECHANICAL DETAILS**

|              |                     |
|--------------|---------------------|
| DSA FILE NO. | DSA APPLICATION NO. |
| -            | -                   |
| PROJECT NO.  | ADDENDUM NO.        |
| 116045       | 1                   |
| DATE         | SCALE               |
| 02/28/14     | NTS                 |

REFERENCE SHEET NO.  
M6.1

SHEET NO.  
**AD01 - M-05**



# PLUMBING THIRD FLOOR PLAN

SCALE 1/8" = 1'-0"

## GENERAL NOTES:

EXISTING CORRIDOR WALLS ARE 1 HOUR RATED CONSTRUCTION. ALL PATCHING AND SEALING OF PIPE PENETRATIONS IN EXISTING CORRIDOR WALL TO MATCH ONE HOUR RATED CONSTRUCTION.



Date Signed \_\_\_\_\_

|   |  |   |                        |
|---|--|---|------------------------|
| <p>394-A Umbarger Rd<br/>San Jose, CA 95111<br/>Phone 408.224.9890<br/>Fax 408.224.9891<br/>www.ArtikA3.com</p> |  | PLUMBING THIRD FLOOR PLAN   |                        |
|   |  | <b>ADDENDUM DRAWING</b><br><b>COLLEGE OF SAN MATEO</b><br><b>SCIENCE BLDG # 36</b><br><b>FUME HOOD INSTALLATION</b> |                        |
|   |  | ADDENDUM NO.<br>1   | DSA PROJECT NO.<br>-   |
|   |  | SCALE<br>1/8"=1'-0"   | DATE<br>02/28/14       |
|   |  | PROJECT NO.<br>116045   | REF. SHEET NO.<br>P2.3 |
|   |  | ADDENDUM DRAWING SHEET NO.<br><b>AD01 - P-01</b>  |                        |



SAN MATEO COUNTY  
COMMUNITY COLLEGE DISTRICT

FACILITIES PLANNING,  
MAINTENANCE & OPERATIONS

"Facilities Excellence"

## Mandatory Pre-Bid Conference Sign-In

College of San Mateo Building 36 Chemistry Ventilation Project

College of San Mateo, B36, room 321

Thursday, February 11, 2016

9:30 am

| COMPANY             | CONFERENCE ATTENDEE | EMAIL                        | PHONE        |
|---------------------|---------------------|------------------------------|--------------|
| GORDON PRICE        | TOM MCCOY           | T.MCCOY@GORDONPRICE.COM      | 785-712-7264 |
| Gordon Price        | Randy Lewis         | RLewis@gordonprice.com       | 408-583-6259 |
| WESTERN ALLIED MECH | CHRIS KRUKEWITZ     | CKRUKWITZ@WESTERNALLIED.COM  | 650 326 0750 |
| WESTERN ALLIED MECH | JAMES KASELIC       | jkaselic@westernallied.com   | 656-326-0750 |
| Western Allied Mech | Kyle Nakagaki       | knaakagaki@westernallied.com | 650-543-7922 |
| Bay Area Builders   | Beth Rhodes         | brhodes@ba-builders.com      | 408-504-1075 |



SAN MATEO COUNTY  
COMMUNITY COLLEGE DISTRICT

FACILITIES PLANNING,  
MAINTENANCE & OPERATIONS

"Facilities Excellence"

## Mandatory Pre-Bid Conference Sign-In

College of San Mateo Building 36 Chemistry Ventilation Project

College of San Mateo, B36, room 321

Tuesday, February 16, 2016

9:30 am

| COMPANY      | CONFERENCE ATTENDEE | EMAIL                             | PHONE        |
|--------------|---------------------|-----------------------------------|--------------|
| GORDON PRILL | TOM MCCOY           | tmccoy@gordonprill.com            | 785-712-7264 |
| Tom Boyle    | Tom Boyle           |                                   | 650-964-8229 |
| CIS          | KURT DODGE          | dodgek@cisbuildinginspections.com | 650-208-0524 |
|              |                     |                                   |              |
|              |                     |                                   |              |
|              |                     |                                   |              |



SAN MATEO COUNTY  
COMMUNITY COLLEGE DISTRICT

FACILITIES PLANNING,  
MAINTENANCE & OPERATIONS

"Facilities Excellence"

## Mandatory Pre-Bid Conference Sign-In

College of San Mateo Building 36 Chemistry Ventilation Project

College of San Mateo, B36, room 321

Thursday, February 11, 2016

9:30 am

| COMPANY                        | CONFERENCE ATTENDEE | EMAIL                                | PHONE        |
|--------------------------------|---------------------|--------------------------------------|--------------|
| ETERNAL<br>CONSTRUCTION, INC   | RICK NG             | riling@eternal<br>const.com          | 650-692-6638 |
| ETC Building & Design          | Kirk Collins        | Kcollins@ETCUSA.org                  | 925-577-4094 |
| SERVICE UNLIMITED              | DENNIS IMPELD       | DENNIS. I O<br>SERVICE-UNLIMITED.COM | 415-559-3114 |
| ATLAS / PELLIZZARI<br>ELECTRIC | Glenn F. Arun       | glenn a @ atlas-<br>pellizzari.com   | 650-364-1204 |
| BAY AREA BUILDERS              | Roberto Ahumada     | RAHUMADA @ BA-BUILDERS<br>.COM       | 408-966-6763 |
|                                |                     |                                      |              |