CLARION UNIVERSITY OF PENNSYLVANIA
STATE SYSTEM OF HIGHER EDUCATION
CL787 MARWICK BOYD ROOF REPLACEMENT - ADDENDUM NO. 1

ISSUE DATE: September 30, 2016
PROJECT NO.: CL-787
PROJECT NAME: Marwick Boyd Roof Replacement
BIDS DUE: 2:00 p.m., October 18, 2016
ADDENDUM NO. 1
TO: Prospective Bidders

This addendum forms a part of the contract documents and modifies the original contract documents dated September 6, 2016.
Please acknowledge receipt of this Addendum in the space provided on the Bid Proposal Form.
This addendum consists of the following attachments. Attachments include; Pre-Bid Meeting Minutes & Attendance List consisting of 4 pages. The addendum also covers several clarifications as well as section 077100 of specifications (inadvertently left out of Project Manual) and 4 Project Drawings (G.1, A.0, A.1, and A.2).

DESMONE ARCHITECTS
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Meeting Notes

Subject: Clarion University Marwick Boyd Roof Replacement Pre-Bid Meeting

Date/Time: September 28, 2016 at 10:00am

Date Issued: September 29, 2016

Location: McEntire Building, Conference Room

Present:

Clarion University:
Eric Martin, Facilities
Ruth Wolfgong, Purchasing

Professional Design:
Rebecca Lowe, Desmone

Contractor Representatives:
See sign-in sheet

Cc: File

Through discussion the following points were noted:

- The project number for the Marwick Boyd Roof Replacement is CL-787.
- The estimated value of the project is $300,000 to $350,000.
- Bids are due October 18, 2016 at 2:00 pm at the McEntire Building. No late bids will be accepted. All overnight packages should indicate need to deliver to appropriate office by specified time on the outside of package. Package must be marked. Hand deliveries are acceptable as well.
- Small Diverse Business does not apply for this project.
- Bid Form is 5 pages. All addenda must be acknowledged on page 1 of the form.
- The project has a base bid and a base bid alternate.
- Bid Bond included in bid package CD is the only form accepted. The bid bond should be dated the same or later than the date on the signature of the bid form.
- Addendums will be posted on website and emailed.
- Bid Results will be posted on web and will not be given over the phone. Contractors are welcome to be present at time of bid opening.
- Ruth handed out Web Page Handout showing info contractor will see on website.
- Eric noted the Tippin Project timeline could affect the timeline of the Marwick Boyd Roof Replacement. Any implications will be noted in Addendum #1.
- Becky gave an overview of the scope of work for the project.
- Security Clearances will not be required for the project.
- All questions asked at pre-bid are noted in Addendum #1.

DESMONE ARCHITECTS

The above represents our understanding and summarizes the main points of the discussion. Any modifications or omissions should be noted and forwarded to this office within five (5) business days.

Please contact Rebecca Lowe at rlowe@desmone.com or at 412-683-3230 with any questions or comments that you may have.

Respectfully Submitted,

Rebecca Lowe

Rebecca Lowe, AIA
Desmone Architects

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ADDENDUM NO. 1 Date of Issue: September 29, 2016

Clarion University Marwick Boyd Roof Replacement
University Project No. CL-787
Desmone Project No. 4184

Eric Martin
814.393.2027

Contact: Desmone Architects
Rebecca Lowe
rlowe@desmone.com
412.683.3230

Bid Date: **Tuesday October 18, 2016**
Time: **2:00 pm EST**

The following Addenda issued prior to the execution of an agreement between the Owner and Contractor shall be incorporated into the Bid/Construction Procurement Documents. This information shall supersede and/or supplement all portions of the bidding documents with which it conflicts.

DOCUMENT CHANGES / CLARIFICATIONS

1.1 Pre-Bid Meeting Notes Attached.
1.2 Is a vapor barrier required?
- Yes, a vapor barrier is required per specifications

1.3 Is Vector Mapping for leak detection required?
- Eliminate Section 075423, 3.07 – "Field Quality Control" from specification.

1.4 What is the scope of the parapet cap joint replacement? Butt joints? Bed Joints?
- Only replace butt joints.

1.5 Is storage on the roof allowed?
- Storage is allowed as needed to support near-term needs. Contractor must take roof loading into consideration as identified in specification

1.6 Is there access in the ceilings to access the roof drains?
- All ceiling areas are accessible.

1.7 Does the GC have to provide their own toilet facilities?
- Contractor to supply for project as noted in Section 015000 B, 1.06 "Sanitary Facilities".

1.8 What is the schedule for the project?
- Roof above theatre stage and auditorium (section north of stage) to be completed prior to May 12 for graduation ceremonies. Remainder of roof to follow graduation weekend on May 12-14, if not completed prior.

1.9 Who is responsible for the permit?

- The University / Architect will submit for permit through L&I.

1.10 What is the existing insulation thickness?

- A cut will be performed by University and information will be supplied in future addendum.

1.11 Add Section 077100 – Roofing Specialties. This was unintentionally omitted from specification. (See attached)

3400 BUTLER STREET • PITTSBURGH, PA 15201 • T-412.683.3230

SECTION 077100 - ROOF SPECIALTIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Roof-edge flashings.
   2. Roof-edge drainage systems.
   3. Reglets and counterflashings.

1.2 PERFORMANCE REQUIREMENTS

A. FM Approvals' Listing: Manufacture and install roof-edge flashings that are listed in FM Approvals' "RoofNav" and approved for windstorm classification, Class 1-90. Identify materials with FM Approvals' markings.

B. SPRI Wind Design Standard: Manufacture and install roof-edge flashings tested according to SPRI ES-1 and capable of resisting the following design pressures:

   1. Design Pressure: 90psf

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: For roof specialties. Include plans, elevations, expansion-joint locations, keyed details, and attachments to other work. Distinguish between plant- and field-assembled work.

C. Samples: For each exposed product and for each color and texture specified.

1.4 INFORMATIONAL SUBMITTALS

A. Product test reports.

B. Warranty: Sample of special warranty.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.6 QUALITY ASSURANCE

A. Preinstallation Conference: Conduct conference at Project site

1.7 WARRANTY

A. Special Warranty on Painted Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace roof specialties that show evidence of deterioration of factory-applied finishes within 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 EXPOSED METALS

A. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy as standard with manufacturer for finish required, with temper to suit forming operations and performance required.

1. Surface: Smooth, flat finish.
2. Mill Finish: As manufactured.
3. Exposed Coil-Coated Finishes: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
   a. Three-Coat Fluoropolymer: AAMA 620. System consisting of primer, fluoropolymer color coat, and clear fluoropolymer topcoat, with both color coat and clear topcoat containing not less than 70 percent PVDF resin by weight.

2.2 CONCEALED METALS

A. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy and temper recommended by manufacturer for type of use and structural performance indicated, mill finished.

B. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), alloy and temper recommended by manufacturer for type of use and structural performance indicated, mill finished.

2.3 UNDERLAYMENT MATERIALS

A. Felt: ASTM D 226, Type II (No. 30), asphalt-saturated organic felt, nonperforated.

B. Self-Adhering, High-Temperature Sheet: Minimum 30 to 40 mils (0.76 to 1.0 mm) thick, consisting of slip-resisting polyethylene-film top surface laminated to layer of butyl or SBS-modified asphalt adhesive, with release-paper backing; cold applied. Provide primer when recommended by underlayment manufacturer.

1. Thermal Stability: ASTM D 1970; stable after testing at 240 deg F (116 deg C).
2. Low-Temperature Flexibility: ASTM D 1970; passes after testing at minus 20 deg F (29 deg C).

2.4 MISCELLANEOUS MATERIALS

A. General: Provide materials and types of fasteners, protective coatings, sealants, and other miscellaneous items required by manufacturer for a complete installation.

B. Fasteners: Manufacturer's recommended fasteners, suitable for application and designed to meet performance requirements. Furnish the following unless otherwise indicated:

1. Exposed Penetrating Fasteners: Gasketed screws with hex washer heads matching color of sheet metal.
2. Fasteners for Copper Sheet: Copper, hardware bronze, or passivated Series 300 stainless steel.
3. Fasteners for Aluminum: Aluminum or Series 300 stainless steel.
4. Fasteners for Stainless-Steel Sheet: Series 300 stainless steel.
5. Fasteners for Zinc-Coated (Galvanized) Steel Sheet: Series 300 stainless steel or hot-dip zinc-coated steel according to ASTM A 153/A 153M or ASTM F 2329.

C. Elastomeric Sealant: ASTM C 920, elastomeric polymer sealant of type, grade, class, and use classifications required by roofing-specialty manufacturer for each application.

D. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.

E. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D 1187.

F. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

G. Solder for Copper: ASTM B 32, lead-free solder.

2.5 ROOF-EDGE FLASHINGS

A. Roof-Edge Fascia and Gravel Stop: Manufactured, two-piece, roof-edge fascia consisting of snap-on metal fascia cover in section lengths not exceeding 12 feet and a continuous formed galvanized-steel sheet cant, 0.028 inch (0.71 mm) thick, minimum, with extended vertical leg terminating in a drip-edge cleat. Provide matching corner units.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

   a. Architectural Products Company.
   b. ATAS International, Inc.
   c. Castle Metal Products.
   d. Cheney Flashing Company.
   e. Hickman Company, W. P.
   f. Johns Manville.
   g. Merchant & Evans, Inc.
   h. Metal-Era, Inc.
   i. Metal-Fab Manufacturing, LLC.
   j. MM Systems Corporation.
   k. National Sheet Metal Systems, Inc.
   l. Petersen Aluminum Corporation.

2. Fascia Cover: Fabricated from the following exposed metal:

   a. Formed Aluminum: Thickness as required to meet performance requirements

3. Corners: Factory mitered and continuously welded
4. Splice Plates: Concealed of same material, finish, and shape as fascia cover.
5. Fascia Accessories: Overflow scuppers, Downspout scuppers with integral conductor head and downspout adapters

B. Roof-Edge Fascia: Manufactured, two-piece, roof-edge fascia consisting of snap-on metal fascia cover in section lengths not exceeding 12 feet and a continuous formed- or extruded-aluminum anchor bar with integral drip-edge cleat to engage fascia cover. Provide matching corner units.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following]:

a. Hickman Company, W. P.
b. Johns Manville.
c. Metal-Era, Inc.
d. Metal-Fab Manufacturing, LLC.
e. National Sheet Metal Systems, Inc.
f. Perimeter Systems; a division of Southern Aluminum Finishing Company, Inc.

2. Fascia Cover: Fabricated from the following exposed metal:

a. Formed Aluminum: Thickness as required to meet performance requirements

3. Corners: Factory mitered and soldered
4. Splice Plates: Concealed of same material, finish, and shape as fascia cover.

C. Aluminum Finish: Three-coat fluoropolymer

1. Color: As selected by Architect from manufacturer's full range

2.6 ROOF-EDGE DRAINAGE SYSTEMS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Andreas Renner KG.
2. Architectural Products Company.
3. ATAS International, Inc.
4. Berger Building Products, Inc.
5. Castle Metal Products.
6. Cheney Flashing Company.
7. CopperCraft by FABRAL; a Euramax company.
8. Hickman Company, W. P.
9. Klauer Manufacturing Company.
10. Merchant & Evans, Inc.
11. Metal-Era, Inc.
12. Metal-Fab Manufacturing, LLC.
13. MM Systems Corporation.
14. National Sheet Metal Systems, Inc.
15. Perimeter Systems; a division of Southern Aluminum Finishing Company, Inc.

B. Parapet Scuppers: Manufactured with closure flange trim to exterior, 4-inch- (100-mm-) wide wall flanges to interior, and base extending 4 inches (100 mm) beyond cant or tapered strip into field of roof.[Fasten gravel guard angles to base of scuppers.]

1. Fabricate from the following exposed metal:
a. Zinc-Coated Steel: Nominal 0.028-inch thickness.

2.7 REGLETS AND COUNTERFLASHINGS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Castle Metal Products.
2. Cheney Flashing Company.
3. Fry Reglet Corporation.
4. Heckmann Building Products Inc.
5. Hickman Company, W. P.
6. Keystone Flashing Company, Inc.
7. Metal-Era, Inc.
8. Metal-Fab Manufacturing, LLC.
9. MM Systems Corporation.
10. National Sheet Metal Systems, Inc.

B. Reglets: Manufactured units formed to provide secure interlocking of separate reglet and counterflashing pieces, from the following exposed metal:
1. Formed Aluminum: 0.050 inch thick.
2. Surface-Mounted Type: Provide reglets with slotted holes for fastening to substrate, with neoprene or other suitable weatherproofing washers, and with channel for sealant at top edge.
3. Masonry Type, Embedded: Provide reglets with offset top flange for embedment in masonry mortar joint.

C. Counterflashings: Manufactured units of heights to overlap top edges of base flashings by 4 inches (100 mm) and in lengths not exceeding 12 feet designed to snap into reglets or through-wall-flashing receiver and compress against base flashings with joints lapped, from the following exposed metal:
1. Formed Aluminum: 0.032 inch thick.

D. Accessories:

1. Flexible-Flashing Retainer: Provide resilient plastic or rubber accessory to secure flexible flashing in reglet where clearance does not permit use of standard metal counterflashing or where reglet is provided separate from metal counterflashing.
2. Counterflashing Wind-Restraint Clips: Provide clips to be installed before counterflashing to prevent wind uplift of counterflashing lower edge.

E. Aluminum Finish: Three-coat fluoropolymer

1. Color: As selected by Architect from manufacturer's full range

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. General: Install roof specialties according to manufacturer's written instructions. Anchor roof specialties securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete roof-specialty systems.

1. Install roof specialties level, plumb, true to line and elevation; with limited oil-canning and without warping, jogs in alignment, buckling, or tool marks.

2. Provide uniform, neat seams with minimum exposure of solder and sealant.
3. Install roof specialties to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before manufacture.
4. Torch cutting of roof specialties is not permitted.
5. Install underlayment with adhesive for temporary anchorage. Apply in shingle fashion to shed water, with lapped joints of not less than 2 inches (50 mm).

B. Metal Protection: Protect metals against galvanic action by separating dissimilar metals from contact with each other or with corrosive substrates by painting contact surfaces with bituminous coating or by other permanent separation as recommended by manufacturer.

1. Coat concealed side of uncoated aluminum roof specialties with bituminous coating where in contact with wood, ferrous metal, or cementitious construction.

C. Expansion Provisions: Allow for thermal expansion of exposed roof specialties.

1. Space movement joints at a maximum of 12 feet with no joints within 18 inches of corners or intersections unless otherwise shown on Drawings.
2. When ambient temperature at time of installation is between 40 and 70 deg F (4 and 21 deg C), set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures.

D. Fastener Sizes: Use fasteners of sizes that will penetrate [wood blocking or sheathing not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws Seal joints with sealant as required by roofing-specialty manufacturer.

E. Seal joints as required for watertight construction. Place sealant to be completely concealed in joint. Do not install sealants at temperatures below 40 deg F (4 deg C).

F. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches (38 mm) except reduce pre-tinning where pre-tinned surface would show in completed Work. Tin edges of uncoated copper sheets using solder for copper. Do not use torches for soldering. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.

3.2 ROOF-EDGE FLASHING INSTALLATION

A. Install cleats, cants, and other anchoring and attachment accessories and devices with concealed fasteners.

B. Anchor roof edgings with manufacturer's required devices, fasteners, and fastener spacing to meet performance requirements.

3.3 ROOF-EDGE DRAINAGE-SYSTEM INSTALLATION

A. General: Install components to produce a complete roof-edge drainage system according to manufacturer's written instructions.

B. Parapet Scuppers: Install scuppers where indicated through parapet. Continuously support scupper, set to correct elevation, and seal flanges to interior wall face, over cants or tapered edge strips, and under roofing membrane.

3.4 REGLET AND COUNTERFLASHING INSTALLATION

A. Surface-Mounted Reglets: Install reglets to receive flashings where flashing without embedded reglets is indicated on Drawings. Install at height so that inserted counterflashings overlap 4 inches (100 mm) over top edge of base flashings.

B. Counterflashings: Insert counterflashings into reglets or other indicated receivers; ensure that counterflashings overlap 4 inches (100 mm) over top edge of base flashings. Lap counterflashing joints a minimum of 4 inches (100 mm) and bed with sealant. Fit counterflashings tightly to base flashings.

3.5 CLEANING AND PROTECTION

A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.

B. Clean and neutralize flux materials. Clean off excess solder and sealants.

C. Remove temporary protective coverings and strippable films as roof specialties are installed.

END OF SECTION 077100

PROJECT:

MARWICK BOYD FINE ARTS CENTER ROOF REPLACEMENT

CLARION UNIVERSITY
CLARION, PENNSYLVANIA

PROJECT NO. SSHE CL-787

ARCHITECT:

DESMONE ARCHITECTS

ONE DOUGHBOY SQUARE, 3400 BUTLER STREET
PITTSBURGH, PA 15201-1313
(412) 683-3230

SYMBOLS LEGEND

- 1 — WALL TYPES- REFER TO DETAILS (G.2)
- 0 / A-000 — BUILDING SECTION OR WALL SECTION — NO. / SHEET NO.
- 1 / A-1 — ELEVATION OR DETAIL — NO. / SHEET NO.
- 0 / A-000 — DETAIL OR ENLARGED PLAN REFRENCE — NO. / SHEET NO.
- 1 2 3 4 / A-000 — INTERIOR ELEVATIONS
- ROOM / 000 — ROOM NAME AND NUMBER
- A — DOOR NUMBER (UNDESIGNATED DOORS ARE NUMBERED TO MATCH ROOM NUMBERS)
- 1 — WINDOW NUMBER
- FLOOR ELEVATION WORK POINT
- DENOTES ABOVE, BELOW, OR BEHIND
- METAL STUD AND GWB PARTITION
- 4" UNO — DOOR AND FRAME
- CONCRETE
- BRICK
- CONCRETE BLOCK
- FIBERGLASS BATT INSULATION
- RIGID BOARD INSULATION
- NEW CONCRETE OR GROUT (DRAWN IN SECTION)
- NEW CONCRETE PAVING (DRAWN IN PLAN)

INDEX

PROJECT NOTES

Standards and Regulations:

1) Contractor shall perform all work in conformance with applicable building codes, regulations, ordinances, utility provider requirements, and similar standards.

2) Contractor shall obtain all required permits and similar releases required for construction and occupancy. Contractor shall furnish copies of all such items to Owner and Architect within ten days of receipt. If permits are issued subject to certain conditions or revisions in the work, or if permits are delayed for any reason, Contractor shall notify the Architect immediately.

3) Contractor shall obtain all required inspections of the work. Contractor shall regularly update Owner and Architect regarding the status of inspections.

4) Contractor shall coordinate work with applicable utility providers.

5) Contractor shall be familiar with requirements and construction shall be in compliance with referenced fire-rated assembly tests and standards.

6) If unanticipated hazardous materials are encountered, Contractor shall cease work in the area and contact the Architect and Owner immediately.

7) Contractor shall visit the site prior to submission of bids to review and become familiar with existing conditions. Notify Architect of any discrepancies between bid documents and site conditions prior to bidding. No considerations will be given to Contractors for not becoming familiar with site conditions.

Administration of the Work:

1) Contractor shall be solely responsible for the means, methods, and sequences of construction.

2) Contractor shall be solely responsible for the safety of all construction personnel and authorized visitors at the site.

3) Contractor shall become fully acquainted with conditions related to the work. Any known discrepancies between the documents and the actual conditions shall be reported to the Architect for resolution prior to proceeding with work related to the discrepancy.

4) Contractor shall take precautions to maintain and protect existing systems and finishes which are to remain. Any damages to such systems and finishes shall be immediately repaired in a manner acceptable to the Architect. If satisfactory repairs cannot be made, Contractor shall replace systems and finishes with new construction acceptable to the Architect. All repairs and replacement costs shall be the responsibility of the Contractor.

5) Contractor shall remove and properly dispose of all construction and demolition debris. Contractor shall obtain approval of owner for details relating to the removal of trash, including such issues as path of travel, use of stairs and elevators, removal of windows, location of chutes and dumpsters, etc., prior to removal of debris. Contractor shall clean and repair any damages to existing items soiled or damaged by the debris removal process. If cleaning and/or repair does not return items to original condition Contractor shall install new items.

6) Any damage to site and/or building caused as a result of the construction process shall be repaired and/or made new by the Contractor causing the damage. If the source of the damage cannot be established, then the case of repair will be equally divided among all Contractors.

7) Contractor shall become familiar with and comply with Owner's procedures for maintaining a secure site and building.

8) Each installer shall examine all substrate conditions and/or site conditions which affect the quality of each product to be installed. If any conditions exist which will have a detrimental effect on the quality of the installation, the installer shall immediately notify the Contractor. Installation shall not proceed until the unsatisfactory conditions are corrected. Installation shall signify acceptance of the conditions.

9) Contractor shall maintain record drawings on the site at all times.

10) Contractor shall be responsible for ensuring coordination efforts of all subcontractors.

11) Contractor shall lay out all work as soon as possible. Any discrepancies shall be reported to the Architect for resolution prior to proceeding with the work in question.

12) Any labor and material required in order to make a system operable and/or required for proper installation shall be made at no additional cost regardless if specified or not.

Use of Construction Documents:

1) Contractor shall not scale drawings. Only written dimensions or keyed notes shall be used. Contact Architect if clarification or additional information is required.

2) Information regarding existing systems, finishes and conditions shown on these drawings is based on information furnished to the Architect by the Owner and/or the perceived condition in the field. The information is not intended to guarantee exact conditions before the work is started. Notify the Architect if any discrepancies are found.

3) The drawings are schematic in nature. Modifications in ducts, piping, conduit and wiring may be required to accommodate actual field conditions.

4) Drawings shall not be reproduced for submittals.

5) Dimensions are as follows unless noted otherwise:
   - A) To finished faces of existing work.
   - B) To face of gypsum wallboard in new work.
   - C) To centerline of columns.
   - D) To top of floor slab.
   - E) To bottom of finished ceiling.

6) Contractor(s) are to verify depth/height of any items installed and make appropriate adjustments for a clean installation.

7) If discrepancies occur between drawings and/or project specifications and no addenda are issued to clarify the discrepancies, the more expensive option(s) shall be included in the bid.

Definitions:

1) "Align" as used in these documents shall mean to accurately locate finish faces in the same plane and/or to install new construction adjacent to existing construction without any visible joints or surface irregularities.

2) "Clear" as used in these documents shall mean that the condition is not adjustable without approval of the Architect. Clear dimensions are typically to finish face.

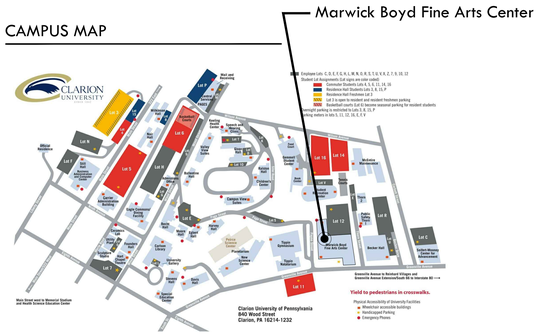
3) "Maximum" or "Max" as used in these documents shall mean that the condition is slightly adjustable but may not vary to a dimension or quantity greater than that shown without approval of the Architect.

4) "Minimum" or "Min" as used in these documents shall mean that the condition is slightly adjustable but may not vary to a dimension or quantity less than that shown without approval of the Architect.

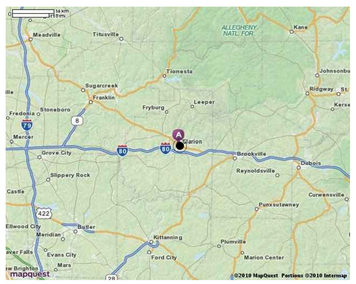
5) "Typical" as used in these documents shall mean that the condition or dimension is the same or representative for similar conditions throughout.

6) "±" as used in these documents shall mean that the dimension or quality is slightly adjustable to accommodate actual conditions.

CAMPUS MAP



VICINITY MAP



100% Construction Documents

DATE	DESCRIPTION	DATE	DESCRIPTION

AS BUILT REVISIONS

SUBMITTED: PROFESSIONAL

SUBMITTED: CONSULTANT

APPROVED: CONSTRUCTION MANAGER

APPROVED: SYSTEM REPRESENTATIVE

PROFESSIONAL SEAL

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA — DESMONE, INC.

STATE SYSTEM OF HIGHER EDUCATION
CLARION UNIVERSITY

PROJECT NO. CL-787

MARWICK BOYD FINE ARTS CENTER
ROOF REPLACEMENT
CLARION UNIVERSITY
CLARION, CLARION COUNTY, PENNSYLVANIA

DESMONE ARCHITECTS
ONE DOUGHBOY SQUARE
3400 BUTLER STREET
PITTSBURGH, PA 15201

COVER SHEET

DRAWN BY:	DATE: 07.18.2016	DRAWING No.: G.1
CHECKED BY:	SCALE: AS SHOWN	

2016.07.18 P:\p1509\Ut 84 Clarion MB Roof Replacement A Documents\1 Drawings\G CAD\Sheets\G.1 Coversheet.dwg

1 Roof Plan - Demolition
Scale: 3/32"=1'-0"

Plan North

General Roofing Notes

1.) Slope of existing building roof is to be re-created with new roof insulation. Provide tapered insulation to create roofing crickets as required at existing equipment / smoke vent and duct penetration curbs. Minimum slope is to be 1/4" per 12" minimum.

2.) All existing roof drains are to be replace with new roof drain assemblies. See specifications.

3.) Roofing and Flashing details at equipment curbs, penetrations, roof drains and tapered insulation shall be detailed per the roofing system manufacturer's recommendations and as detailed on approved shop drawings.

4.) Metal Gravel stops, flashing / counterflashing, and coping systems shall be installed per SMACNA Recommendations - Submit detailed shop drawings for approval before installation.

5.) Flash around all roofing vent pipe, exhaust outlet, and equipment curbs as required.

6.) New insulation system average R-Value shall be R-21 Minimum. Submit shop of proposed insulation system layout for approval.

7.) Scale of drawing has been taken from the facilities existing drawing archives and all dimensions/ measurements are to be considered approximate. Do NOT scale drawings. Contractor is to field measure existing conditions for exact sizes and dimensions for area take-offs. All vents/equipment may not be indicated. Contractor to verify all vent stacks and equipment and shall be included within the scope of work.

8.) Provide tapered insulation roof crickets at all equipment curbs as required to provide positive drainage to roof drain assemblies.

9.) Existing roof support steel is set level. All positive drainage slope must be obtained by the use of tapered insulation. Slope must equal 1/4" per 12" minimum.

Demolition / Construction Notes

0.01 Existing Roof Top Exhaust / Ventilator
0.02 Existing Smoke Vent Assembly
0.03 Existing Vent Pipe
0.04 Existing Roof Top relief vent hood / ventilator
0.05 Existing Elevator Roof Projection
0.06 Existing TPO Roofing to Remain
1.01 Remove and dispose of existing Roofing Membrane, Coverboard, Insulation, Fasteners and all other materials as required to expose existing roof deck entirely.
1.02 Remove and dispose of existing metal gravel stop and metal flashing systems entirely.
1.03 Remove and Dispose of existing metal flashing systems entirely.
1.04 Remove and dispose of existing roofing membrane and adhesives from existing equipment curb. Remove and reinstall existing roof top equipment as required for installation of new roofing and flashing system.
1.05 Remove and Dispose of existing roof drain and strainer assembly entirely.
1.06 Remove and dispose of existing rubber walk-way pads.
1.07 Remove and Dispose of Existing roof expansion assembly.
1.08 Remove and dispose of existing sealant, backer rod, and counter flashing at precast parapet coping
1.09 Clean / Prep existing access ladder as required for re-painting. (Add Alternate #1 - See Specification.)
1.10 Remove and Dispose of existing scupper and downspout.
1.11 Remove and Dispose of existing roof hatch. Prepare roof curbs/opening for new roof hatch.
4.01 Clean existing pre-cast coping. See Masonry Cleaning specification
6.01 Provide and install new wood blocking as required to install thickness of insulation required to provide and average value of R-21 (See detail 2/A.2)
7.01 Provide and install new single-ply TPO roofing system on $\frac{1}{2}$" fiberboard on tapered poly-isocanurate insulation board (R-21 Average) over existing steel deck. Provide tapered insulation to create slopes as shown on drawing.
7.02 Provide and install new sealant and backer rod at all coping joints. (See detail 8/A.2)
7.03 Provide and install new counter flashing at equipment curb.
7.04 Provide and install new counter flashing over new termination strip. (See detail 4/A.2)
7.05 Provide and install new counter flashing at coping termination (See detail 8/A.2)
7.06 Provide and install new steel scupper - Paint Scupper After Installation (See detail 1/A.2)
7.07 Provide and install pipe flashing around existing vent stack
7.08 Provide and Install new TPO expansion assembly at existing expansion Joint (See detail 6 & 7/A.2)
7.09 Provide and install new 30"x48" walk-way pads - see detail 5/A.2
7.10 Provide and install new scupper and rain conductor with downspout. Downspout to extend to lower roof to splash block.
07.11 Provide and install new roof hatch. Size to match existing. (See detail 9/A.2)
07.12 Provide and install roof anchors. Attach to existing roof structure as per manufacturer's recommendations.
9.01 Paint existing steel ladder. (Add Alternate #1 - See Specification.)
10.01 Provide and install new Gravel Stop at roof edge termination (See detail 2/A.2)
16.01 Provide Flashing Around Existing AHU Curb as required.
16.02 Provide and Install New roof drain assembly (See detail 3/A.2)

100% Construction Documents

DATE	DESCRIPTION	DATE	DESCRIPTION

AS BUILT REVISIONS

SUBMITTED:
PROFESSIONAL

SUBMITTED:
CONSULTANT

APPROVED:
CONSTRUCTION MANAGER

APPROVED:
SYSTEM REPRESENTATIVE

PROFESSIONAL SEAL

REGISTERED ARCHITECT PENNSYLVANIA DESMONE, PA 15201

STATE SYSTEM OF HIGHER EDUCATION
CLARION UNIVERSITY

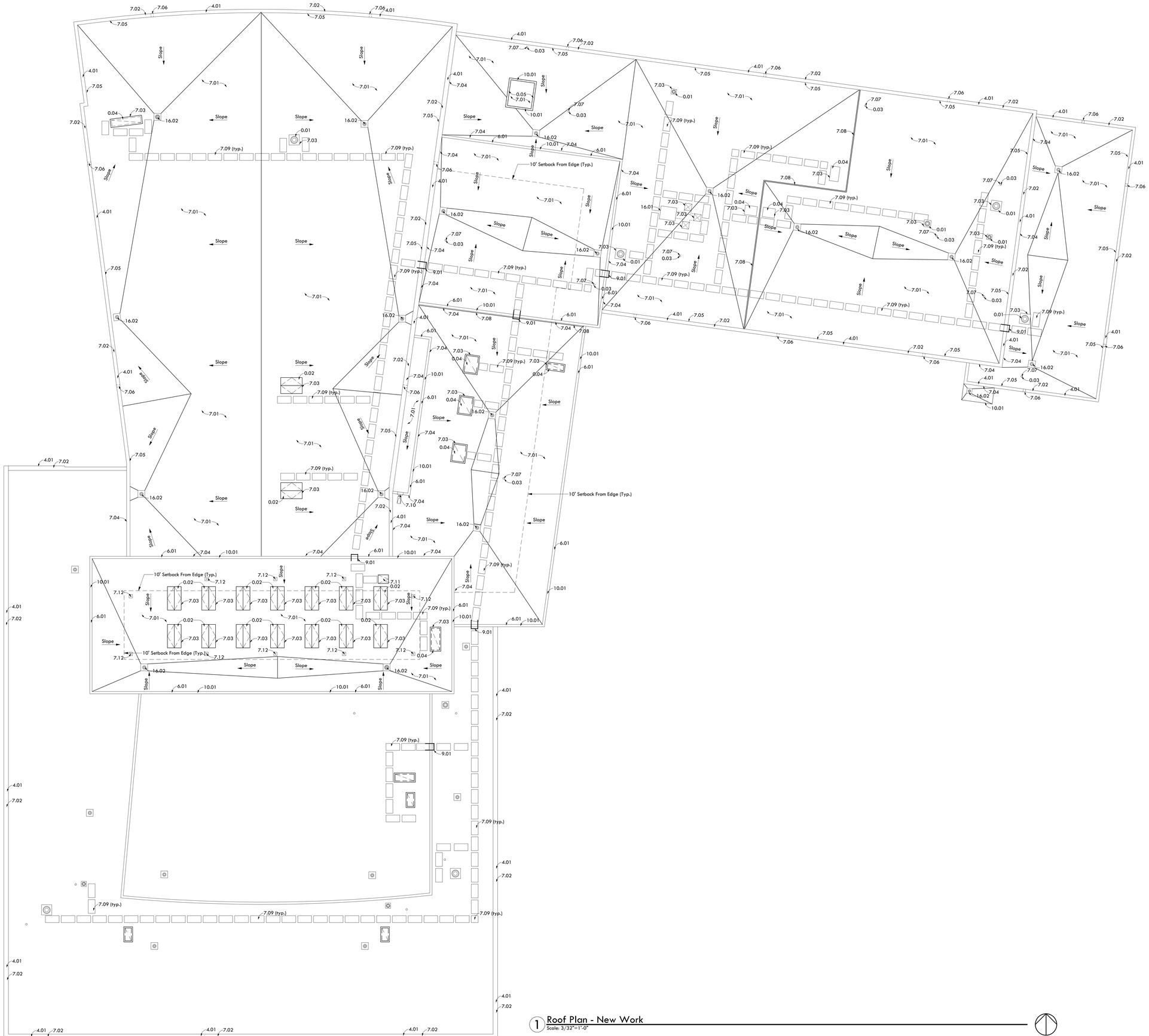
PROJECT NO. CL-787

MARWICK BOYD FINE ARTS CENTER
ROOF REPLACEMENT
CLARION UNIVERSITY
CLARION, CLARION COUNTY, PENNSYLVANIA

DESMONE ARCHITECTS
ONE DOUGHBOY SQUARE
3400 BUTLER STREET
PITTSBURGH, PA 15201

ROOF PLAN -DEMOLITION

DRAWN BY:	DATE: 07.18.16	DRAWING No.:
CHECKED BY:	SCALE: AS SHOWN	A.0



1 Roof Plan - New Work
Scale: 3/32"=1'-0"

Plan North

General Roofing Notes

1.) Slope of existing building roof is to be re-created with new roof insulation. Provide tapered insulation to create roofing crickets as required at existing equipment / smoke vent and duct penetration curbs. Minimum slope is to be 1/4" per 12" minimum.

2.) All existing roof drains are to be replace with new roof drain assemblies. See specifications.

3.) Roofing and Flashing details at equipment curbs, penetrations, roof drains and tapered insulation shall be detailed per the roofing system manufacturer's recommendations and as detailed on approved shop drawings.

4.) Metal Gravel stops, flashing / counterflashing, and coping systems shall be installed per SMACNA Recommendations - Submit detailed shop drawings for approval before installation.

5.) Flash around all roofing vent pipe, exhaust outlet, and equipment curbs as required.

6.) New insulation system average R-Value shall be R-21 Minimum. Submit shop of proposed insulation system layout for approval.

7.) Scale of drawing has been taken from the facilities existing drawing archives and all dimensions/ measurements are to be considered approximate. Do NOT scale drawings. Contractor is to field measure existing conditions for exact sizes and dimensions for area take-offs. All vents/equipment may not be indicated. Contractor to verify all vent stacks and equipment and shall be included within the scope of work.

8.) Provide tapered insulation roof crickets at all equipment curbs as required to provide positive drainage to roof drain assemblies.

9.) Existing roof support steel is set level. All positive drainage slope must be obtained by the use of tapered insulation. Slope must equal 1/4" per 12" minimum.

Demolition / Construction Notes

0.01 Existing Roof Top Exhaust / Ventilator
0.02 Existing Smoke Vent Assembly
0.03 Existing Vent Pipe
0.04 Existing Roof Top relief vent hood / ventilator
0.05 Existing Elevator Roof Projection
0.06 Existing TPO Roofing to Remain
1.01 Remove and dispose of existing Roofing Membrane, Coverboard, Insulation, Fasteners and all other materials as required to expose existing roof deck entirely.
1.02 Remove and dispose of existing metal gravel stop and metal flashing systems entirely.
1.03 Remove and Dispose of existing metal flashing systems entirely.
1.04 Remove and dispose of existing roofing membrane and adhesives from existing equipment curb. Remove and reinstall existing roof top equipment as required for installation of new roofing and flashing system.
1.05 Remove and Dispose of existing roof drain and strainer assembly entirely.
1.06 Remove and dispose of existing rubber walk-way pads.
1.07 Remove and Dispose of Existing roof expansion assembly.
1.08 Remove and dispose of existing sealant, backer rod, and counter flashing at precast parapet coping
1.09 Clean / Prep existing access ladder as required for re-painting. (Add Alternate #1 - See Specification.)
1.10 Remove and Dispose of existing scupper and downspout.
1.11 Remove and Dispose of existing roof hatch. Prepare roof curbs/opening for new roof hatch.
4.01 Clean existing pre-cast coping. See Masonry Cleaning specification
6.01 Provide and install new wood blocking as required to install thickness of insulation required to provide and average value of R-21 (See detail 2/A.2)
7.01 Provide and install new single-ply TPO roofing system on $\frac{1}{2}$" fiberboard on tapered poly-isocanurate insulation board (R-21 Average) over existing steel deck. Provide tapered insulation to create slopes as shown on drawing.
7.02 Provide and install new sealant and backer rod at all coping joints. (See detail 8/A.2)
7.03 Provide and install new counter flashing at equipment curb.
7.04 Provide and install new counter flashing over new termination strip. (See detail 4/A.2)
7.05 Provide and install new counter flashing at coping termination (See detail 8/A.2)
7.06 Provide and install new steel scupper - Paint Scupper After Installation (See detail 1/A.2)
7.07 Provide and install pipe flashing around existing vent stack
7.08 Provide and Install new TPO expansion assembly at existing expansion Joint (See detail 6 & 7/A.2)
7.09 Provide and install new 30"x48" walkway pads - see detail 5/A.2
7.10 Provide and install new scupper and rain conductor with downspout. Downspout to extend to lower roof to splash block.
07.11 Provide and install new roof hatch. Size to match existing. (See detail 9/A.2)
07.12 Provide and install roof anchors. Attach to existing roof structure as per manufacturer's recommendations.
9.01 Paint existing steel ladder. (Add Alternate #1 - See Specification.)
10.01 Provide and Install new Gravel Stop at roof edge termination (See detail 2/A.2)
16.01 Provide Flashing Around Existing AHU Curb as required.
16.02 Provide and Install New roof drain assembly (See detail 3/A.2)

100% Construction Documents

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SUBMITTED:
PROFESSIONAL

SUBMITTED:
CONSULTANT

APPROVED:
CONSTRUCTION MANAGER

APPROVED:
SYSTEM REPRESENTATIVE

PROFESSIONAL SEAL

REGISTERED ARCHITECT
COMMONWEALTH OF PENNSYLVANIA
DESMONE + BAUM

STATE SYSTEM OF HIGHER EDUCATION
CLARION UNIVERSITY

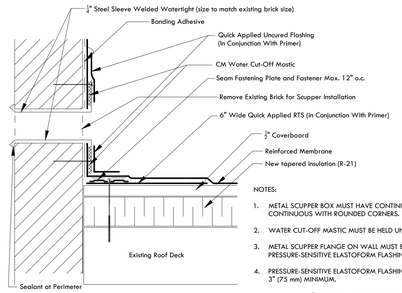
PROJECT NO. CL-787

MARWICK BOYD FINE ARTS CENTER
ROOF REPLACEMENT
CLARION UNIVERSITY
CLARION, CLARION COUNTY, PENNSYLVANIA

DESMONE ARCHITECTS
ONE DOUGHBOY SQUARE
3400 BUTLER STREET
PITTSBURGH, PA 15201

ROOF PLAN - NEW WORK

DRAWN BY:	DATE: 07.18.16	DRAWING No.:
CHECKED BY:	SCALE: AS SHOWN	A.1

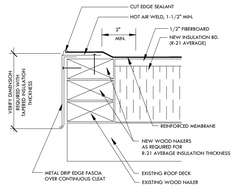


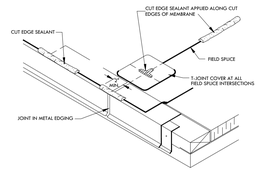
**SCUPPER ELEVATION IS TO BE AT TEH TOP OF THE INSULATION UNLESS A CONDITION IS PROVIDED THAT THE NEAREST ROOF DRAIN IS LESS THAN 2' FROM THE SCUPPER LOCATION. IF THIS CONDITION EXISTS, THE SCUPPER SHALL BE ELEVATED ON THE WALL TO A HEIGHT WHERE THE SCUPPER AND ROOF DRAIN ARE SEPARATED BY A 2' HEIGHT.

NOTES:

1. METAL SCUPPER BOX MUST HAVE CONTINUOUS SIDES; METAL FLANGE MUST BE CONTINUOUS WITH ROUNDED CORNERS.
2. WATER CUT-OFF MASTIC MUST BE HELD UNDER CONSTANT COMPRESSION.
3. METAL SCUPPER FLANGE ON WALL MUST BE TOTALLY COVERED BY PRESSURE-SENSITIVE ELASTOFORM FLASHING.
4. PRESSURE-SENSITIVE ELASTOFORM FLASHING MUST OVERLAP WALL FLASHING 3" (75 mm) MINIMUM.
5. A MINIMUM 2" (50 mm) LAP SPLICE IS REQUIRED PAST THE NAIL HEAD ON THE METAL FLANGE OF THE SCUPPER.

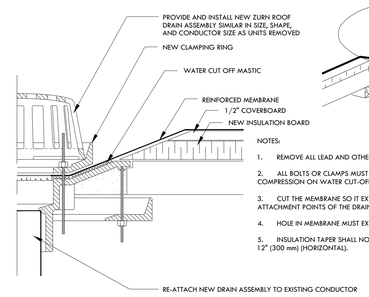
1 NEW SCUPPER DETAIL
Scale: NTS

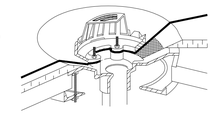




2 BUILT-UP GRAVEL STOP DETAIL
Scale: NTS

FIELD SPLICES MUST BE LOCATED AT LEAST 6 INCHES OUTSIDE THE DRAIN SUMP

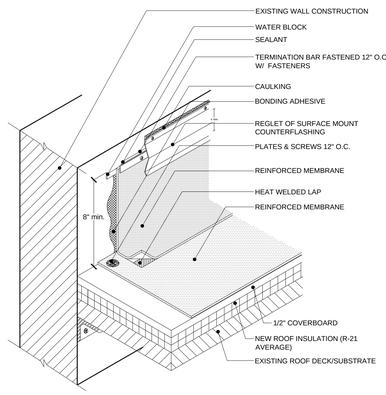




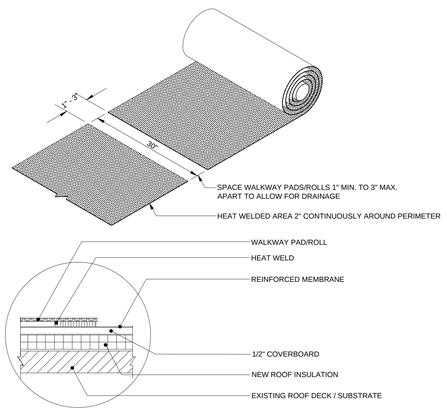
NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING.
2. ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
3. CUT THE MEMBRANE SO IT EXTENDS A MINIMUM OF 1/2" (13 mm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
4. HOLE IN MEMBRANE MUST EXCEED SIZE OF DRAIN PIPE.
5. INSULATION TAPER SHALL NOT BE STEEPER THAN 6" (150 mm) (VERTICAL) IN 12" (300 mm) (HORIZONTAL).

3 ROOF DRAIN REPLACEMENT DETAIL
Scale: NTS



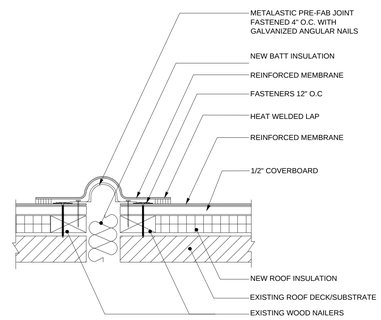
4 WALL COUNTER FLASHING DETAIL
Scale: NTS



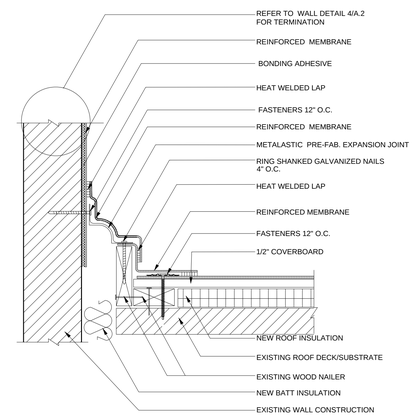
NOTE:

1. DO NOT CROSS SEAMS WITH WALKWAY PADS/ROLLS.
2. HEAT WELD EDGE OF WALKWAY PADS/ROLLS CONTINUOUSLY

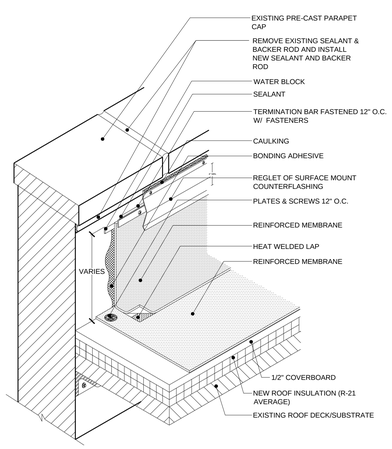
5 WALKWAY PAD DETAIL
Scale: NTS



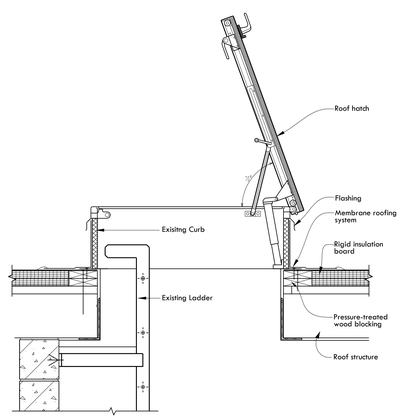
6 EXPANSION JOINT DETAIL
Scale: NTS



7 EXPANSION JOINT DETAIL
Scale: NTS



8 PARAPET COUNTER FLASHING DETAIL
Scale: NTS



9 ROOF HATCH DETAIL
Scale: NTS

General Roofing Notes

1.) Slope of existing building roof is to be re-created with new roof insulation. Provide tapered insulation to create roofing crickets as required at existing equipment / smoke vent and duct penetration curbs. Minimum slope is to be 1/4" per 12" minimum.

2.) All existing roof drains are to be replace with new roof drain assemblies. See specifications.

3.) Roofing and Flashing details at equipment curbs, penetrations, roof drains and tapered insulation shall be detailed per the roofing system manufacturer's recommendations and as detailed on approved shop drawings.

4.) Metal Gravel stops, flashing / counterflashing, and coping systems shall be installed per SMACNA Recommendations - Submit detailed shop drawings for approval before installation.

5.) Flash around all roofing vent pipe, exhaust outlet, and equipment curbs as required.

6.) New insulation system average R-Value shall be R-21 Minimum. Submit shop of proposed insulation system layout for approval.

7.) Scale of drawing has been taken from the facilities existing drawing archives and all dimensions/ measurements are to be considered approximate. Do NOT scale drawings. Contractor is to field measure existing conditions for exact sizes and dimensions for area take-offs. All vents/equipment may not be indicated. Contractor to verify all vent stacks and equipment and shall be included within the scope of work.

8.) Provide tapered insulation roof crickets at all equipment curbs as required to provide positive drainage to roof drain assemblies.

9.) Existing roof support steel is set level. All positive drainage slope must be obtained by the use of tapered insulation. Slope must equal 1/4" per 12" minimum.

Demolition / Construction Notes

0.01 Existing Roof Top Exhaust / Ventilator
0.02 Existing Smoke Vent Assembly
0.03 Existing Vent Pipe
0.04 Existing Roof Top relief vent hood / ventilator
0.05 Existing Elevator Roof Projection
0.06 Existing TPO Roofing to Remain
1.01 Remove and dispose of existing Roofing Membrane, Coverboard, Insulation, Fasteners and all other materials as required to expose existing roof deck entirely.
1.02 Remove and dispose of existing metal gravel stop and metal flashing systems entirely.
1.03 Remove and Dispose of existing metal flashing systems entirely.
1.04 Remove and dispose of existing roofing membrane and adhesives from existing equipment curb. Remove and reinstall existing roof top equipment as required for installation of new roofing and flashing system.
1.05 Remove and Dispose of existing roof drain and strainer assembly entirely.
1.06 Remove and dispose of existing rubber walk-way pads.
1.07 Remove and Dispose of Existing roof expansion assembly.
1.08 Remove and dispose of existing sealant, backer rod, and counter flashing at precast parapet coping
1.09 Clean / Prep existing access ladder as required for re-painting. (Add Alternate #1 - See Specification.)
1.10 Remove and Dispose of existing scupper and downspout.
1.11 Remove and Dispose of existing roof hatch. Prepare roof curbs/opening for new roof hatch.
4.01 Clean existing pre-cast coping. See Masonry Cleaning specification
6.01 Provide and install new wood blocking as required to install thickness of insulation required to provide and average value of R-21 (See detail 2/A.2)
7.01 Provide and install new single-ply TPO roofing system on ½" fiberboard on tapered poly-isocanurate insulation board (R-21 Average) over existing steel deck. Provide tapered insulation to create slopes as shown on drawing.
7.02 Provide and install new sealant and backer rod at all coping joints. (See detail 8/A.2)
7.03 Provide and install new counter flashing at equipment curb.
7.04 Provide and install new counter flashing over new termination strip. (See detail 4/A.2)
7.05 Provide and install new counter flashing at coping termination (See detail 8/A.2)
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7.08 Provide and Install new TPO expansion assembly at existing expansion Joint (See detail 6 & 7/A.2)
7.09 Provide and install new 30"x48" walkway pads - see detail 5/A.2
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07.12 Provide and install roof anchors. Attach to existing roof structure as per manufacturer's recommendations.
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16.01 Provide Flashing Around Existing AHU Curb as required.
16.02 Provide and Install New roof drain assembly (See detail 3/A.2)

100% Construction Documents

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SUBMITTED: PROFESSIONAL

SUBMITTED: CONSULTANT

APPROVED: CONSTRUCTION MANAGER

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CLARION, CLARION COUNTY, PENNSYLVANIA

DESMONE ARCHITECTS
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3400 BUTLER STREET
PITTSBURGH, PA 15201

ROOF DETAILS

DRAWN BY:	DATE: 07.18.2016	DRAWING No.:
CHECKED BY:	SCALE: AS SHOWN	A.2