

ADDENDUM NO. 1

DATE: April 1, 2021

BID NO. 2849

RELOCATABLE CLASSROOMS AT CLOVIS EAST HIGH SCHOOL & SITE IMPROVEMENTS

CLOVIS UNIFIED SCHOOL DISTRICT CLOVIS, CALIFORNIA

G.A. PROJECT NO. 2003A

NOTICE TO ALL CONTRACTORS SUBMITTING BIDS FOR THIS WORK AND TO ALL PLAN HOLDERS:

You are hereby notified of the following changes, clarifications or modifications to the original Contract Documents, Project Manual, Drawings, Specifications and subsequent Addenda. This Addendum shall supersede the original Contact Documents, and previous Addenda wherein it contradicts the same and shall take precedence over anything to the contrary therein. All other conditions remain unchanged.

INDEX OF ADDENDA TRANSMITTED HEREWITH

Addendum Item AD1-A01 thru AD1-A12

AD1-A01: BID DATE REVISION:

Refer to Notice to Contractors in Spec Manual.

Revised Bid Date from April 6, 2021 to on or before 2:00 p.m May 4, 2021.

AD1-A02: RELOCATABLE BUILDING INTERIOR IMPROVEMENTS:

REFER TO SHEET A-2; BLDGS. A, B &C.

In each Relocatable Building the interior improvements consist of the following in addition to work shown on plans:

- 1. Remove and replace (4) VCTB Panels (4'x10' Vinyl Covered Tack Bd. Panels), match existing. Location to be determined.
- 2. Remove and replace 20 acoustical 2'x4' ceiling panels per portable with Fissured Minaboard by Armstrong.
- 3. Remove and replace carpet and rubber base in Portables Bldgs. 'A' & 'C', Carpet in Bldg. 'B" to remain.

Note: Carpet is provided by Owner and installed by Contractor.

Remove and replace Flooring Underlayment over existing plywood subfloor as recommended by Carpet Manufacturer and Resilient Sheet Flooring Manufacturer.

- 4. Interior Painting of Portables:
 - A. Paint all new and existing VCTB Panels; used paint; Type EW-2.
 - B. Paint all interior metal elements, wall covering and wood on wall and ceiling; Type EM-2; including T-Bar grid.
 - 5. Remove and replace 4'x8' Liquid Marker Board with Marker Tray in Bldg. 'A'.
 - Contactor to remove existing tall storage cabinet near door entrance; North Wall in Bldg. 'A'

AD1-A03: DOOR ABRASIVE WALK-OFF CARPET:

The Contractor shall install Door Abrasive Walk-off Carpet on the interior of all exterior doors in lieu of carpet in Bldgs. A & C. Door Abrasive Walk-off Carpet is Owner provided and Contractor installed; approximate size is 3'x4'.

AD1-A04: CONCRETE PAD:

Refer to Sheet A-2; Key Note #3

Remove Concrete Pad from Scope of Work Detail 7/C-2; work was performed by others.

AD1-A05: MOVING OF PORTABLES:

Refer to Sheet C-3; Portables being relocated by others.

The Contractor under this Contract will not pick up the portables from Source Site (Dry Creek Elem.) and set them in their permanent new campus location. The portables are being delivered and set under separate contract; by others. The portables will be set after the drains are installed under this contract; See Sheet A-2, Key Note #19.

AD1-A06: POLYURETHANE & ELASTOMETRIC ROOFING REPLACEMENT

Incorporate into the project attached Spec. Section 07-550 Polyurethane & Elastometric Roofing System.

 Refer to Sheet A-2, Enlarged Site Plan at Clovis East High School: Portable Bldgs. A, B and C have existing Polyurethane roofing. Contractor to remove existing roofing and replace roofing per Spec. Section.

AD1-A07: <u>IRRIGATION CLARIFICATION:</u>

Refer to Sheet A-2

- 1. Refer to Keynote #8, 8.1 & 14. Existing irrigation line per keynote #8 does not exist; delete all work related to keynote #8.1 &14.
- 2. Refer to Keynote #9, 9.1 & 9.2. Existing irrigation line per keynote #9, 9.1 & 9.2.; Delete all work shown.

Note: An irrigation valve box exist just between raised walk and existing walk east of Bldg. 'C'; Contractor to raise valve box and set flush with new paving per Detail 12/C-1 similar. Contractor to raise 2 additional irrigation valve boxes to new grade just north of Bldg. A.

AD1-A08: WOOD SIDING REPAIR:

Bldg. 'A': 1. Remove & replace all wood siding & wood trims at South Elevation.

2. Remove & replace wood siding & wood trims of East Wall of window module.

Building 'B' & 'C': Exterior: Remove & replace all wood trims at all elevations.

Note: Match existing wood siding and wood trim components.

AD1-A09: SITE UTLITY CHAIN LINK FENCE ENCLOSURES:

Incorporate attached Sheet X1 into the project.

Install Chain Link Fencing with Slats & Concrete Mowstrips to enclose existing site utility equipment.

D1-A10: CONSTRUCTWARE

Contractor shall also comply with the Districts CONSTRUCTWARE Construction documentation processing program.

AD1-A011: EXISTING CATCH BASIN & CURB:

Refer to Sheet A-2; Key Note 7

- Raise existing catch basin by extending concrete basin; set top at 301.60.
 Provide earth fill and feather to existing paving & feather toward west at least 25 feet.
 Returf & modify irrigation system of area disturbed per General Notes #7 & #8 on Sheet C-2.
- 2. Refer to 6" raised curb notation adjacent to existing catch basin noted above. Delete the 6" raised curb at this landing.

AD1-A12: <u>EARTHWORK & DECOMPOSED GRANITE</u>:

Refer to Sheet A-2; Key Note 13

1. Refer to the enclosed area behind the portables and existing fence/mowstrip serving pool complex.

Perform earthwork to accomplish swayle as shown and provide 2" decomposed granite surfacing. Set top of surfacing 2" below existing mowstrip top and top of new concrete curb along portable back wall.

Perform earthwork southwest of Bldg. 'C' to featherout grade 20 feet beyond corner and returf, modify irrigation system per Sheet C-2 General Note #7 & 8.

END OF ADDENDUM

CLOVIS UNIFIED SCHOOL DISTRICT

POLYURETHANE FOAM & GRANULATED ELASTOMERIC ACRYLIC

ROOFING SYSTEM OVER METAL PAN DECKING

FOR PORTABLE CLASSROOMS

PART 1 - GENERAL

1.01 SCOPE OF WORK:

- A. Provide labor, materials, equipment and supervision necessary to install OSB waferboard, plus minimum 1" cap of spray-applied polyurethane foam and spray-applied 32 mil elastomeric acrylic coating system over metal roofs of portable classroom buildings as outlined in these specifications.
- B. The low slope metal roof systems consist of 16" wide sections of pan decking with 3" vertical ribs.
- C. The 1" foam system is designed to prevent condensation of water on the underside of the metal roofs during the winter months and will also provide an insulation value of R-7 or greater above the OSB board.
- D. The manufacturer's application instructions for each product used are to be considered part of these specifications, and followed at all time.

1.02 QUALITY ASSURANCE:

A. Supplier Qualifications:

- 1. The Foam and Coating supplier must demonstrate by independent third party test reports that product(s) meet the performance requirements as outlined in these specifications.
- 2. Be nationally recognized in roofing and waterproofing industry for at least ten (10) years.
- 3. Provide employee as Field Representative to inspect the project at each phase of the installation. A written report of each visit will be made and a copy given to the District within five (5) days of the visit. The report will include comments on quality of work, problems noted, overall job progress, etc. Representative will be authorized to make decisions on behalf of material manufacturer.

- 4. Provide list of at least ten (10) projects available for inspection employing same roofing system within 100-mile radius and same climate zone of project building.
- 5. Be approved by District /Architect.
- 6. Provide District proof/copy of material product liability insurance for minimum five million dollars (\$5,000,000.00) covering all major roofing components listed in Part 2, Products.
- 7. The presence and activity of the manufacturer's representative and/or District representative shall in no way relieve the Contractor of his contractual responsibilities.

B. Contractor Qualifications:

- 1. Manufacturer's written verification of the Contractor's approval to apply the system is required.
- 2. The Contractor shall have a valid C-39 roofing and other licenses or subcontractors, as applicable for the work herein (i.e., painting, sheet metal, etc.). Sheet metal work must be installed by a qualified person, according to SMACNA standards.
- 3. The Contractor should have a proven history of applying foam and coating systems on similar structures for a minimum of five (5) years.
- 4. The Contractor shall be engaged in The Society of Plastics Industry/-Polyurethane Foam Contractors' Accreditation program. Completion of Course 101, "The Fundamentals of Spray Polyurethane Foam and Coating Systems", is the minimum acceptable status in the accreditation program by the District, supervisor and spray mechanic.
- 5. The Contractor must be able to provide references to demonstrate completed roof systems that have leak-free performance for a proven service period of five (5) years minimum, as well as a high degree of customer satisfaction.
- 6. Failure to meet any part of all of these requirements may result in the rejection of the bidder's proposal.

1.03 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. Containers and Packaging: Deliver materials in original sealed containers, clearly marked with manufacturer's logo, brand name, and type of material.

- B. Storage: Store materials in accordance with all manufacturer's recommendations. Provide lockable storage container(s) for all foam and coating products stored on school site(s).
- C. Protection: Protect all materials from damage during transit, handling, storage and installation. Contractor shall be responsible for protection of materials and the work site during term of contract.
- D. Verify the dates of product manufacture and that material is within current shelf life.

1.04 JOB CONDITIONS:

A. Environmental Conditions:

- 1. For application details of polyurethane foam, consult the manufacturer for recommendations on the proper system to use on project substrate and at expected substrate and ambient temperatures. Under no conditions shall the foam be applied when the substrate temperature is below 50 degrees F. Do not apply polyurethane foam when wind velocity is above 15 mph, unless other provisions are made such as a wind screen.
- 2. Do not proceed with application of coating materials when surface or ambient temperature is less than 50 degrees F.
- Do not apply materials, unless surface to receive urethane foam and/or acrylic coating is clean and dry and is in compliance with all manufacturer's recommendations.
- 4. Install all materials in strict accordance with all published safety, weather, and other applicable regulations of the manufacturer, as well as local, state and federal regulatory agencies.

PART 2 - PRODUCTS

2.01 OSB WAFERBOARD: 7/16" X 48" X 96"

2.02 PRIMERS:

- A. Wood surface: Primer shall be single-component neoprene primer; black in color, Use only primer recommended by the foam manufacturer.
- B. Galvanized surface: Galvaprep 5 (by International Protective Coatings) or Rustshield A120 (National Coatings) or approved equal.

2.03 POLYURETHANE FOAM:

- A. The foam shall be of premium quality, approved for use by the coating manufacturer. Recommended products are: PSI SH200-30 (Polythane Systems), HPS-5100-3.0 (Hess Polyurethanes, Inc.), Ultra-thane 230 (General Coatings, Inc.).
- B. Physical Properties of Cured Foam:
 - 1. Minimum in-place density: Minimum 3.0 pcf. (ASTM D-1622)
 - 2. Closed cell content: Minimum 90% (ASTM D-1940)
 - 3. Compressive Strength, parallel to rise: Minimum 45 psi. (ASTM D-1621)
 - 4. Flame Spread: 75% max. (ASTM E-84)
 - 5. Dimensional Stability: Not to exceed 7% (ASTM D-2126)
 - 6. Shear Strength: 30-50 psi. (ASTM D-273)

2.04 SPRAY-APPLIED ELASTOMERIC ACRYLIC COATING SYSTEM:

- A. The coating shall be 100% acrylic high tensile elastomeric coating system. Products approved for use on this project:
 - 1. "A-550" made by National Coatings.
 - "Diathon HT" made by United Coatings.
 - 3. "Ultra-flex 1000 HT" made by General Coatings.
- B. The following materials will not be acceptable for use on this project as part of or in lieu of the coating system: Urethane, butyl, synthetic rubber, neoprene, silicone, EPDM, polyvinyl chloride, stone aggregate, asphalt emulsion, bitumen modified urethane, rubberized asphalt, chloro-sulfonated polyethylene, or any other sheet goods membrane.
- C. Physical Properties of Cured Coating System: The testing of the coating shall be done under ASTM-D6083, a Standard Specification for Liquid Applied Acrylic Coating Used in Roofing@, unless otherwise specified.

Property	ASTM Method	Results
Volume Solids %	D6083	>51
Tensile Strength, PSI	D6083/D2370	>400
(Max @ 75 Degrees F)		
% Elongation @ Break >400	D6083/D2370	
(75 Degrees F)		
Flexibility, 1/8@ Mandrel	D522	Pass B10 F
Permeance, perms	D6083/D1653A	3.0
Adhesion to Specified Subst	rate D6083/C794/D903	>2.0
(PLI, Wet)		

2.05 CAULKING AND SEALANTS:

- A. Vulkem 116 (Mameco International).
- B. Sikaflex 1A (Sonneborn Bldg. Products).

2.06 GRANULES:

Lucas roof granules, #11, bright white, dust-free.

2.07 PAINT FOR METAL FLASHINGS:

- A. Primer: Sinclair #14 Corro-Prime or approved equal.
- B. Enamel: Sinclair exterior sash and trim or approved equal.

2.08 EDGE METAL:

- A. Portables: 4" flange with 1" foam stop at 60 degrees and 5" face. Fabricate from 24 gage g.i. Refer to Detail A-1.
- B. Low Rise: 4" flange with 1/2" foam stop at 45 degrees. Fabricate from 24 gage g.i. Face dimension to fit field conditions.

2.09 GUTTER:

6" square-type. 24 gage galvanized. Fabricate with soldered joints.

2.10 GUTTER STRAPS:

20 gage galvanized iron.

PART 3 - EXECUTION

3.01 PRE-APPLICATION INSPECTION:

- A. Verify that all critical areas around the immediate vicinity of the spray area are suitably protected from over-spray.
- B. Verify that all roof penetrations and other on-roof items are in place and secure.

3.02 APPLICATION:

A. OSB Waferboard:

- 1. Attach to top of pan decking ribs using #8 flat or hex-head sheet metal screws spaced 12" o.c. (28 screws per 4' x 8' sheet).
- 2. Apply black primer to deck at the rate of two gallons per square.

B. Edge Metal:

- 1. Overlap at least 3" and cut to form interlocking joints.
- 2. Apply double bead of Vulkem 116 caulk to deck flange joint.
- 3. Install pop rivets; one per joint at foam stop.
- 4. Fasten edge metal using sheet metal screws staggered at six inches o.c.
- 5. Remove excess caulk. Paint to match building trim.
 - 6. Cut ends of existing gutter(s) if necessary so edge metal fits snug against the building. Re-install end caps. (See Detail A-4)

- C. Gutters (check special conditions for each building):
 - 1. Gutter (unused):
 - a. If new gutter is not needed (refer to section 3.01), install new edge metal over existing gutter.
 - b. Do not demo existing gutter.
 - c. Refer to Detail A-2
 - 2. Gutters (re-used):
 - a. Install OSB board to existing gutter.
 - b. Refer to detail A-3
 - 3. Gutters (new):
 - a. Installation: Fasten to face of old gutter using #8 sheet metal screws @ 12" o.c. Tie into existing downspout.
 - b. Paint (interior): Prepare (etch) galvanized metal per manufacturer's recommendations. Apply ICI Corro-prime and finish coat of Industrial Enamel such as DeVoe 4348 or approved equal.
 - c. Paint (exterior): Paint exterior to match building trim.
 - d. Refer to Detail A-3
- D. Metal Etching and Priming: Galvanized metal must be etched and primed, according to the foam manufacturer's recommendations.
- E. Wood priming: OSB Waferboard must be primed, according to the foam manufacturer's recommendations.
- F. Polyurethane Foam Cap: Spray-foam shall be applied in accordance with all manufacturer's recommendations.
 - 1. Provide cap of 1" thickness of 3.0 pcf. density sprayed polyurethane foam. Fill low areas to prevent ponding. Apply the finish coat in a single pass of at least 1" with a tolerance of +1/4"- 0". Flash passes of less than 2" are not acceptable in top finished layer.

- 2. Extend foam around pipes, and other projections through the roof a minimum of 4" to form cants. In any case, the top edge of the foam should be above the potential water line. Copper vent sleeves must be cut above roof line and removed.
- 3. Apply foam so that the finished surface is smooth and free of voids, pinholes and crevices with a maximum allowable roughness defined as "coarse orange peel." "Treebark" or "popcorn" surfaces are not acceptable, unless provision is made to add additional coating to achieve the specified minimum coating thickness.
- 4. Workmen installing the sprayed-in-place polyurethane foam must carry a depth gauge and check the foam thickness during each pass or approximately 100 square feet.
- 5. District Inspector shall verify foam depth measurements prior to application of the coating system.
- G. Elastomeric Acrylic Coating System: Coating system shall be applied in accordance with all manufacturer's recommendations.
 - 1. The first coat should be applied the same day the surface is foamed.
 - 2. The coating system shall be sprayed or roller-applied in a cross-hatch technique without causing runs or puddles.
 - 3. The coating system shall be evenly applied in at least three separate coats of contrasting colors, to achieve a nominal dry film thickness of 32 mils, unless otherwise specified under special conditions.
 - 4. Slit samples will be taken before application of final coating and granules to ensure a dry film thickness of 20 mils.
 - 5. Apply roofing granules in the finish coat at the rate of 40 pounds per square, using a low-pressure sandblaster to firmly embed the granules in the wet finish coat.
 - 6. Coating shall terminate at least 2" above or beyond the edge of applied foam in a neat and uniform manner.
 - 7. No coating shall be applied if weather will not allow it to dry prior to exposure to precipitation or freezing.
 - 8. Perimeter: Use a combination of cutting board and roller or brush application techniques to insure that no over-spray, runs or drips go over the edge.

9. Protect all property from over-spray or other damage

H. Heavy Granulation

1. Perimeter: Apply double granulation 12 inches wide around the perimeter of the building as follows: Apply an additional application of top coat at a rate of two gallons per square and broadcast granules into the wet coating at the rate of 30 lbs. per square using a low-pressure sandblaster.

3.04 CLEANING:

Surfaces not intended to receive foam insulation and/or elastomeric coating materials shall be protected by Contractor during the application of the system. Should this protection not be effective, or not be provided, the respective surfaces shall be restored by the Contractor, to their proper conditions by cleaning, repairing or replacing, as determined by District. All debris resulting from work shall be completely removed from the project site by Contractor.

3.05 INSPECTIONS:

- A. Deck: Inspect for proper application of OSB waferboard, foam stop and gutter.
- B. Foam application:
 - 1. Up to t 10 depth readings may be taken for every 100 squares of roof area.
 - 2. District and/or manufacturer's representative must approve quality of foam application and foam depth before Contractor can proceed with the coating process.

C. Acrylic Elastomeric Coating

- 1. Slit samples will be taken after application of first two (2) coats of contrasting colors and examined with Finescale Comparator to verify coating thickness of 20-mil minimum. Slit samples to be one-half inch wide, three-quarters inch deep, and two inches long. Up to 10 slit samples may be taken for every 100 squares of roof area.
- 2. Slit samples may be taken after application of coating and granules to verify coating thickness of 32 mils
- 3. No uncoated foam shall be allowed at any location of the finished roof system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the Contractor's expense. If finished installation is found to be specifically deficient, Contractor shall bring installation into compliance before notice of substantial completion is issued by the District.

D. District may, at their discretion, choose to simulate the Factory Mutual #4470 Severe Hail Test on finished roof system. In case of system failure, the Contractor must bring roof system into compliance at no cost to the District.

3.06 TEN-YEAR JOINT 7 SEVERAL FULL-SYSTEM NON-DEPRECIATING WARRANTY:

- A. The contractor and manufacturer shall furnish a 10-year full-system, full-value, non-depreciating warranty, which states that both the Contractor and the manufacturer are responsible for workmanship and materials of the entire waterproofing system, including the existing system if not removed. Warranty shall provide specific protection against problems resulting from improper installation and defects in material. Contractor shall include, as part of the Bid Documents, a specimen of the proposed warranty (renewable after the 10-year period) with their bid. Wording of warranty must be similar to attached sample warranty certificate.
- B. After the 10-year period, the District may request an evaluation of the roof system by the Contractor and the manufacturer. An inspection report will be generated by the manufacturer stating the requirements to extend the warranty.



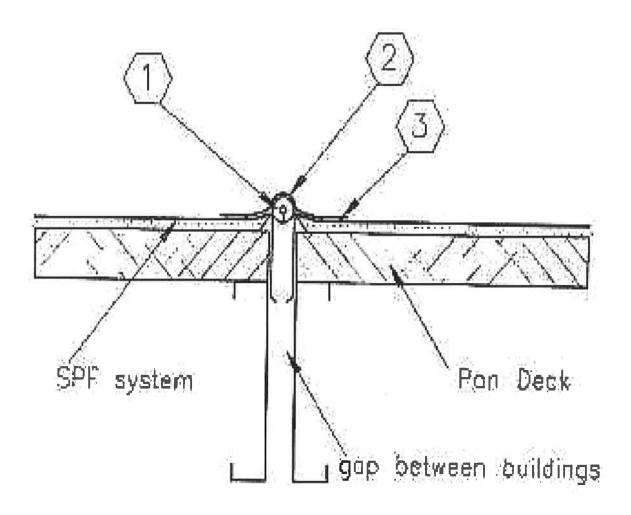
ROOFING SYSTEM:

SPF OVER METAL PAN DECK

DETAIL:

PCR_03

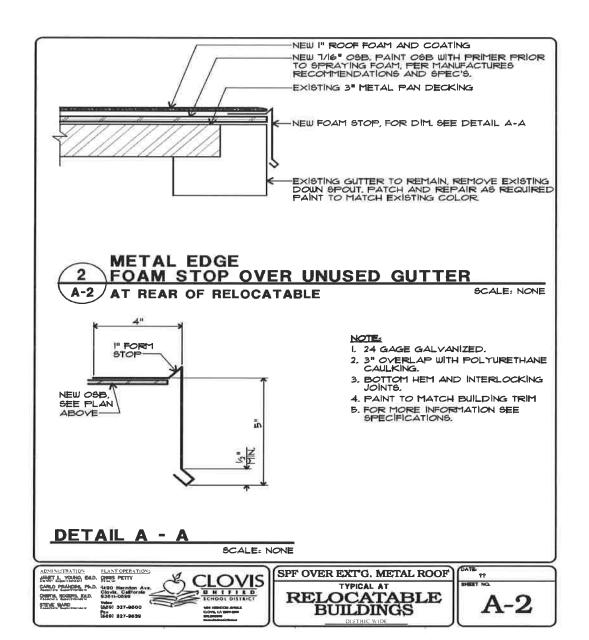
"EXPANSION JOINT"

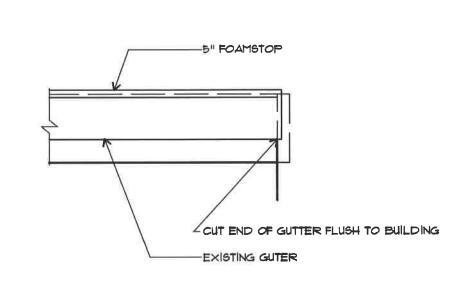


NOTES

- 1. Lay pipe insulation filter between buildings to create a raised ridge line
- 2. Install Hypalon over completed SPF system extending 3 to 4 inches onto roof surface
- 3. Apply 2 rows of elastomeric caulk to each side

Not to scale





NOTE:

- L RE-INSTALL END CAP
- 2. INSTALL FOAM STOP TO FIT SNUG AGAINST BUILDING
- 1 SHORTEN EXISTING GUTTERS

 SCALE: NONE

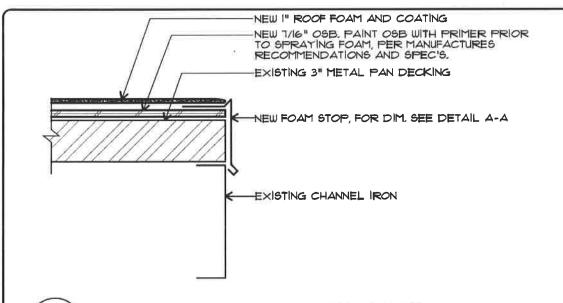
ADMINISTRATION

AMET L. YOUNG, EAD.

GRIEG PETTY

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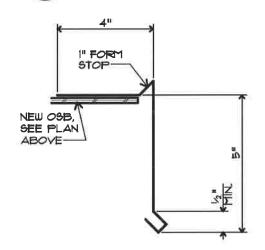
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1 NEW METAL EDGE FOAM STOP

A-1 AT SIDE WALL

SCALE: NONE



NOTE:

- I. 24 GAGE GALVANIZED.
- 2. 3" OVERLAP WITH POLYURETHANE CAULKING,
- 3. BOTTOM HEM AND INTERLOCKING JOINTS.
- 4. PAINT TO MATCH BUILDING TRIM
- 5. ADD POP-RIVET TO JOINTS
- 6. FOR MORE INFORMATION SEE SPECIFICATIONS.

DETAIL A - A

SCALE: NONE

ADMINISTRATION

JAMET L TOUNG, E4D. ORBIS PETTY

CARLD PRANCHIS, E4D. 1490 Heardon Ave.
CHERTA ROCERS, E4D.

SPF OVER EXT'G. METAL ROOF

TYPICAL AT

RELOCATABLE

BUILDINGS

DATE: PP SHEET NO.

A-1

