

AMENDMENT #2
INVITATION FOR BID # 2015-014 SKYLINE REGIONAL PARK PROJECT
CITY OF BUCKEYE
CONSTRUCTION & CONTRACTING DIVISION
623.349.6225

AMENDMENT #2

NOTE: Attach to Original IFB. However, if Proposal has already been returned, complete this amendment and return for attachment to your Bid by 4:00pm, March 26, 2015.

City of Buckeye
530 East Monroe Avenue
Buckeye, Arizona 85326
Attn: Christopher Williams

SOLICITATION: INVITATION FOR BID #2015-014- SKYLINE REGIONAL PARK PROJECT

NOTICE TO CONTRACTORS:

This Amendment forms a part of the Contract and clarifies, corrects, or modifies the original IFB #2015-014 for Bid documents prepared by the City of Buckeye.

Bid due Date and Time: **March 26, 2015 at 4:00 p.m. MST**

Last Day for Questions: **March 19, 2015 at 5:00 p.m. MST**

The due date for #2015-014- Skyline Regional Park Project has been extended and amended as follows:

Bid due Date and Time: April 02, 2015 at 4:00 p.m. MST

Last Day for Questions: March 25, 2015 at 5:00 p.m. MST

Schedule of Values Due Date: April 06 at 1:00 p.m. MST

The lump sum proposal sheet has been modified to include Alternate #1. The attached Lump Sum proposal sheet will replace the original sheet included in the IFB package.

The following questions have been presented and answered for IFB #2015-014 as follows:

QUESTION: On sheet P07, and P13 the fill slope at Skyline Rd (Approx. STA 9+00) show the slope terminating at elevation 1352'. This is creating a vertical wall in excess of 8-ft at the toe of the slope. Is it the intention to slope down to "daylight" at the current slope, or build a retaining wall at this location?

ANSWER: The intention is to slope down to "daylight" at the slope as shown in the profile on sheet P08. The idea is that this road will be extended further east in the future to provide connection with future park amenities.

QUESTION: On sheet L03 and L08 there appears to be riprap running in the channel to the North of the earthen path. I can't seem to find a detail, type or where in the bid schedule this would go. Can you please clarify if riprap is required?

ANSWER: The rip rap quantities for the swale along the earthen path are included on sheet G03 and included in the bid schedule (Grouted Rip Rap D50=9", No filter fabric, 64 CY). Bid Item 220.20000.

QUESTION: On sheet P11 the design contours are not present. Can this sheet be re-printed with the appropriate design contours as is the case with the remaining plan and profile sheets? This will allow for correct slope grading figures.

ANSWER: Attached you'll find sheet P11 with design contours displayed. It will also be added to the website as a pdf. Attachment named "Skyline P11 Wcontours".

QUESTION: Do Davis Bacon Requirements apply to this project?

ANSWER: No. The sample contract has been modified and the Davis Bacon Requirements removed.

QUESTION: We respectfully request answers to questions regarding the headwalls/wings located at the ends of the box culverts, on sheets D-11 and D-13. Profiles show top of headwall, at box ends, significantly higher in elevation than ADOT details provided on sheets SD07 thru SD10. Are these elevations to be used for construction, and if so, are the wing wall top elevations to match top of headwall, on top of box end? As shown in the details SD07-10, top of wing walls are at top of box culvert deck. If profile heights are to be used, will a revised detail be required for wings and headwall?

ANSWER: Revised specifications for metal roof and wall panel section from the Architect-Perlman are attached. Additionally, a pdf. File will be on the Website named "07 43 16 (07410) Metal Roof and Wall Panels.

The balance of the specifications and instructions remain the same. Offerors must acknowledge receipt and acceptance of this amendment by returning the entire amendment with the Invitation for Bid 2015-014.

PLEASE ACKNOWLEDGE YOUR FIRM'S RECEIPT OF THIS AMENDMENT BY SIGNING THE ATTACHED SOLICITATION AMENDMENT ACKNOWLEDGEMENT.

SOLICITATION AMENDMENT ACKNOWLEDGEMENT

INVITATION TO BID 2015-014

AMENDMENT NUMBER 2

AMENDMENT ISSUE DATE: March 23, 2015

Offeror certifies that Offeror has read, understands, and will fully and faithfully comply with this Delivery Order Request for Proposals, its attachments and any referenced documents. Offeror also certifies that this offer was independently developed without consultation with any of the other Offerors or potential Offerors.

Name of Company: _____

Authorized Signature: _____

Print Name and Title: _____

Date: _____

Address: _____

City, State, Zip Code: _____

Telephone Number: _____

Email Address: _____

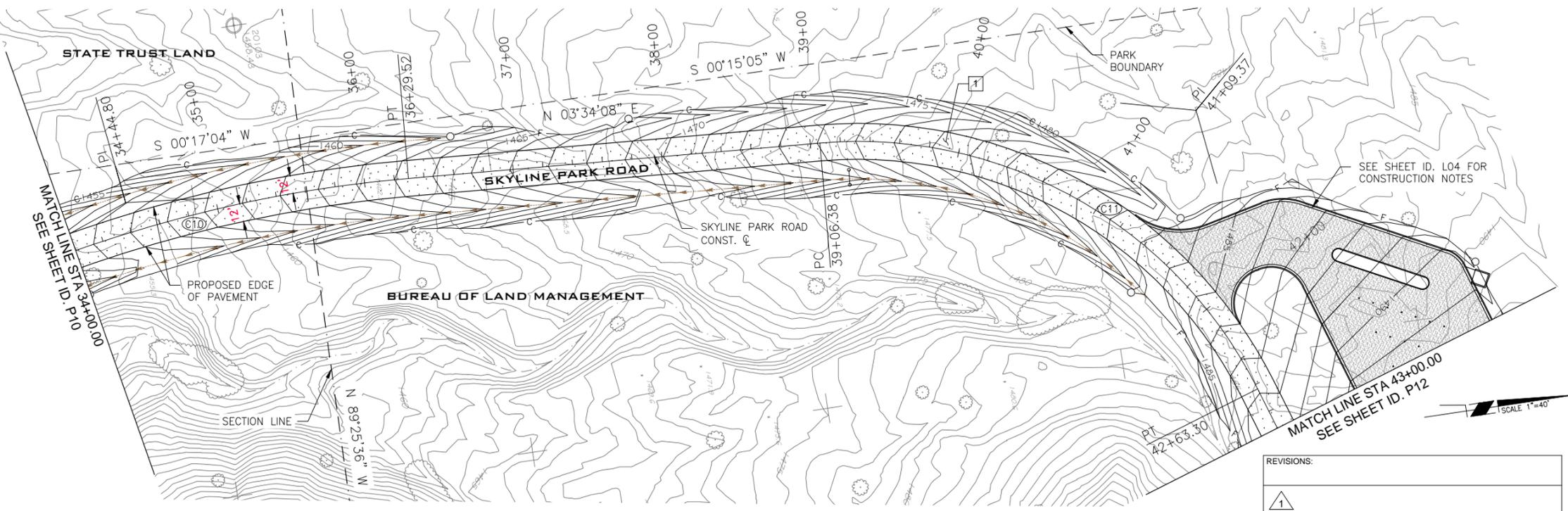
LUMP SUM PROPOSAL: The Lump sum bid will be included with the bid documents on April 02, 2015. The "Schedule of Values" is due on April 06, 2015 as indicated in Section 200.

Item #	Description	Lump Sum	# Days
0001	Skyline Regional Park Construction	\$	
0002	Contingency	\$300,000.00	
SUB-TOTAL Item # 0001 and 0002:		\$	
		ALTERNATE #1 PRICE	# Days
ALTERNATE #1: (WATSON RD - PAVEMENT STRUCTURAL SECTION (PSS) NO. 1 – 6" AC / 10" ABC; OTHER ROADS PSS REMAIN SAME.		\$	
TOTAL LUMP SUM/CONTINGENCY/ALTERNATE #1 EQUALS:		\$	# Total Days

CONSTRUCTION NOTES

DESCRIPTION	QUANTITY	
1 CONSTRUCT PAVEMENT PER STRUCTURAL SECTION NO. 1 WITH THICKENED EDGE PER MAG STD DET 201, TYPE A		
Subgrade Preparation	1,867	SY
Aggregate Base Course, 8"	500	CY
2.5" Thick, 1/2" Asphaltic Concrete, Marshall Mix, High Traffic	392	Ton

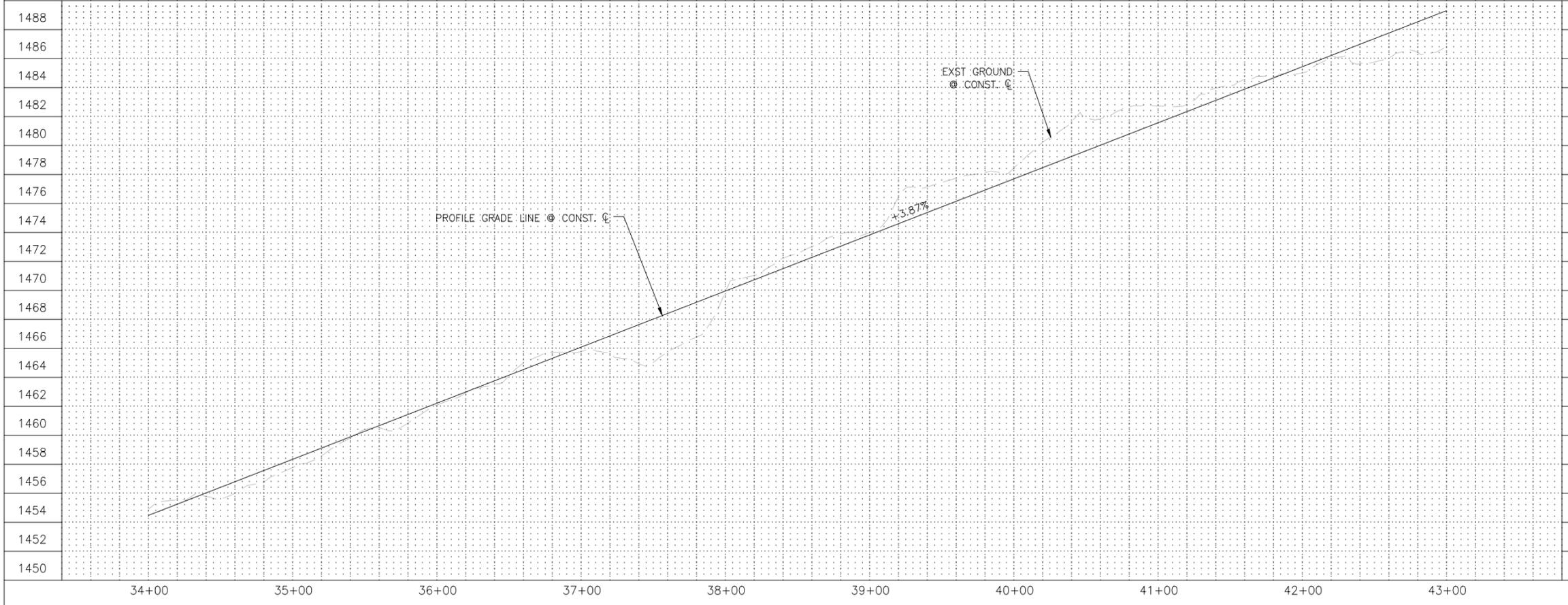
SEE SHEET ID. L04 FOR CONSTRUCTION NOTES



CURVE TABLE							PI COORDINATES		
CURVE	RADIUS	LENGTH	CHORD	DELTA	D.O.C.	TANGENT	EXTERNAL	NORTHING	EASTING
C10	900.00	374.94	372.24	23°52'10"RT	6'21'58"	190.23	19.88	902554.6140	503595.1724
C11	300.00	356.92	336.24	68°10'01"RT	19°05'55"	202.99	62.22	903223.3996	503636.8851

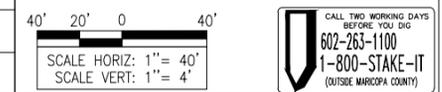
REVISIONS:

1	
2	
3	



GENERAL NOTES

- DIMENSIONS AND OFFSETS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- SEE DRAINAGE DETAIL SHEETS FOR CULVERT CONSTRUCTION. CULVERT ID NUMBER NOTED BY #
- SEE LANDSCAPE SHEETS L19-L32 FOR PROTECT IN PLACE OF NATIVE PLANTS.



PLAN NAME
**SKYLINE PARK ROAD
PLAN & PROFILE
STA 34+00.00 TO STA 43+00.00**

ENGINEER INFORMATION
KIMLEY-HORN AND ASSOCIATES
7740 N 16TH ST, STE 300, PHOENIX, AZ 85020
PHONE: (602) 944-8500, FAX: (602) 944-7423

COB PERMITTING APPROVED SEAL	COB ENGINEERING APPROVED SEAL	SUBMITTAL
AS-BUILT SEAL	DESIGN SEAL	
		COB PLAN TRACKING # ENG-13-00317
ORIGINAL PLAN DATE	LATEST REVISION DATE	

PROJECT No. SHEET ID. SHEET No.
P11 21 OF 125

SECTION 07 43 13

METAL ROOF AND WALL PANELS

PART 1 GENERAL

1.01 SUMMARY

- A. Section includes metal roof and wall panels of the following types, including associated roof underlayment, flashings, clips, trims, closures and related accessories.
 - 1. Standing seam metal roof panels installed over roof underlayment over plywood sheathing over steel roof deck.
 - 2. Standing seam metal wall panels installed over smooth face CMU wall construction.
 - 3. Structural standing seam panels installed in steel tube framed gates specified in Section 05 50 00.
- B. Related Sections:
 - 1. Division 04 masonry sections for CMU wall construction supporting standing seam metal wall panels.
 - 2. Section 06 10 00 – Rough Carpentry, for plywood roof sheathing underlayment.
 - 3. Division 26 and Electrical Drawings for photovoltaic panels installed on standing seam metal roofing.

1.02 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide metal roof and wall panel assemblies that comply with performance requirements specified as determined by testing manufacturers' standard assemblies similar to those indicated for this Project, by a qualified testing and inspecting agency.
 - 1. Wind Uplift: Meet or exceed 36.5 psf at 5'-0" span in accordance with ASTM E1592 for panels 18 inches wide x 22-gauge steel.
 - 2. Wind Uplift: UL 580 test, Class 90 rating.
 - 3. Air Infiltration: Panel shall have an air infiltration value of .007 cfm/ft² at a pressure differential of 6.24psf when tested in accordance with ASTM E283.
 - 5. Water Penetration: Panel shall have no leakage at a pressure differential of 6.24 psf when tested in accordance with ASTM E331.
- B. Standing seam metal roof panels shall be designed and installed to accommodate attachment, loads and other accessories of photovoltaic solar panels installed on standing seam metal roof system.

1.03 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles including attachment clips, and finishes for each type of metal roof and wall panel and accessory, including type of underlayment product indicated.
- B. Shop Drawings: Show layouts of sheet metal roof and wall panels, including plans and elevations. Show clip arrangement, spacing and fastening to meet the specified wind speed requirements.
 - 1. Include details for forming, joining, termination points, roof penetrations, edge conditions, special conditions, connections to adjoining work, and accessory items.

- C. Samples: For each exposed finish for verification purposes.

1.04 QUALITY ASSURANCE

- A. Installer Qualifications: Installer must be approved by the Panel Manufacturer in writing prior to work commencing. Installer shall meet the following:
 - 1. Successfully applied a minimum of five metal roof and wall panel projects of comparable size and complexity which reflects a quality weather tight installation.
 - 2. Have been in business for a minimum period of two years in the region where the work will be performed.
- B. Manufacturer Qualifications: Manufacturer shall have a minimum of 10 years experience supplying metal roof and wall panels similar to type specified herein.
- C. Source Limitations: Obtain metal roof and wall panel through one source from a single manufacturer.
- C. Sheet Metal Roofing Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" and NRCA Waterproofing Manual and manufacturer's installation guidelines.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Packing and Shipping: Deliver materials to site in Manufacturer's original unopened packaging with labels intact.
- B. Storage: Adequately protect against damage while stored at the site.
- C. Handling: Comply with Manufacturer's instructions.

1.06 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal roof and wall panel in accordance to manufacturers' written instructions and warranty requirements.

1.07 WARRANTY

- A. Special Weathertightness Warranty: Furnish written warranty for period of 20 years from substantial completion of the Work, on manufacturer's standard form in which manufacturer agrees to repair or replace sheet metal roofing as necessary to maintain roofing Work in watertight condition during the warranty period. Warranty to cover workmanship, materials and repair or replacement of same, at no cost to Owner.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Furnish products of one of the following Manufacturers, except as approved by the Architect, subject to compliance with Specification requirements:
 - 1. AEP-SPAN, Fontana, CA www.aep-span.com
 - 2. ATAS Aluminum Corp., Allentown, PA. www.atas.com
 - 3. Berridge Manufacturing Co., Houston, TX www.berridge.com
 - 4. Metal Sales Manufacturing Company www.mtlsales.com
 - 5. Rollfab Metal Building Products www.rollfabmetal.com
 - 6. Western States Metal Roofing www.paintedtrustedroofing.com

- B. Basis of Design: Products as manufactured by Western States Metal Roofing Products as indicated on Drawings and as specified.

2.02 SHEET MATERIALS

- A. Prefinished Metal: Prefinished Metal shall be Hot-Dipped Galvanized - ASTM A446-85 Grade C G90 Coating A525-86 24 Gauge core steel or prefinished Galvalume - ASTM A792-86 AZ-55.
 - 1. Manufacturer's proprietary fluoropolymer coating system that uses cool pigment technology to produce weathered rusted metal appearance. Paint shall be applied by the manufacturer on a continuous coil coating line, with a top side dry film thickness of 0.70 to 0.90 mil over 0.25 to 0.35 mil prime coat, to provide a total dry film thickness of 0.95 to 1.25 mil.
 - 2. Weathered Metal Paint Finish Supplier: Precoat Metals www.precoatmetals.com
 - 3. Bottom side shall be coated with primer with a dry film thickness of 0.25 mil.
 - 4. Finish shall conform to all tests for adhesion, flexibility, and longevity as specified by the proprietary fluoropolymer coating finish supplier.
 - 5. Color: Fresh Rust; Western States Metal Roofing.
- B. Unfinished Metal (supporting clips, etc., concealed in the finished work): ASTM A653 Structural Quality, Grade 40, G90 Coating, hot dipped galvanized or ASTM A792 Galvalume.
- C. Strippable film: Liquid applied to top side of painted coil to protect finish during fabrication, shipping and field handling.

2.03 UNDERLAYMENT, FASTENERS AND ACCESSORIES

- A. Underlayment: (1) Layer of ASTM D226, No. 30 unperforated asphalt saturated felt.
 - 1. Underlayment Fasteners: Standard galvanized roofing nails with plastic or felt caps, or as approved by the sheet metal roofing manufacturer. Do not use one-piece nail caps.
- B. Butyl Sealant Tape: Pressure-sensitive, polyisobutylene compound sealing tape with release paper backing as recommended by manufacturer.
- C. Sealant: As specified in Section 07 92 00.
- D. Fasteners: Stainless steel or corrosion resistant coated screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads. Manufacturer shall provide or authorize all fasteners utilized with the sheet metal roofing system.
 - 1. Exposed Fasteners: Heads matching color of sheet metal roofing by means of factory-applied coating.
 - 2. Fasteners for Flashing and Trim: Blind fasteners or screws spaced to resist wind uplift loads.
- E. Accessories: Provide components required for complete metal roof and wall assemblies of type indicated including installation clips and fasteners, flashings, trims, ridge closures, sealants, gaskets, fillers, and similar items. Match material and finish of sheet metal roof and wall panels where exposed to view. All trim and flashing components shall be supplied in longest lengths practical but not less than 12'-0", and shall conform to manufacturer's standard part dimensions and details.
 - 1. Fastening clips and anchorage shall be same type and design used in testing of panels.

2. Flashing and Trim: Formed from matching materials as sheet metal roof and wall panel in gauges noted. Provide flashing and trim in heavier gauge materials as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bottom wall drip edge, edge trims, roof eaves, rakes, corners, bases, framed openings, ridges, fasciae, fillers, and other items as required.

2.04 FABRICATION

- A. Standing Seam Metal Roof and Wall Panels – Basis of Design: Western Lock Standing Seam as manufactured by Western States Metal Roofing or equivalent from one of the specified manufacturers as approved by the Architect.
 1. Gauge: 24 gauge. Provide heavier gauge or additional reinforcements as may be necessary where installed as the facing for steel tube framed gates.
 2. Rib Height: 1-3/4 inches.
 3. Coverage: 17-1/2 inches with smooth pan surface.
 4. Single piece UL-90 rated clip for thermal expansion and contraction.
- B. Unless otherwise shown on drawings or specified herein, fabricate panels in continuous one-piece lengths and fabricate flashings and accessories in longest practical lengths.
- C. Where required to comply with performance requirements, fabricate seams with factory installed sealant.
- D. Flashing and Trim Accessories: Fabricate steel trim accessories to comply with manufacturer's recommendations, SMACNA's "Architectural Sheet Metal Manual", and details on Drawings. Hem all exposed edges.
- E. Coordinate and fabricate panels to accommodate support and attachment of photovoltaic solar panels installed on standing seam metal roof panel system. Provide necessary reinforcements and additional clips and attachments as may be required to support photovoltaic solar panel system and roof supported accessories.
- F. Fabrication Tolerances: Flat metal surfaces will display waviness commonly referred to as "oil canning". This is caused by steel mill tolerances and is a characteristic, not a defect, of panels manufactured from light gauge metal. Panels are factory correctively-leveled to minimize the occurrence of "oil canning". As such, "oil canning" will not be accepted as cause for rejection.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions: Examine subsurfaces to receive Work and report detrimental conditions in writing to Architect. Commencement of Work will be construed as acceptance of subsurfaces.
 1. Examine metal deck and plywood sheathing underlayment to ensure proper attachment to framing.
 2. Inspect installed plywood sheathing underlayment to verify deck is clean and smooth, free of depressions, waves or projections, properly sloped to valleys and eaves.
 3. Verify roof openings, curbs, pipes, sleeves, ducts or vents through roof are solidly set, cant strips and reglets in place, and nailing strips located.
 4. Verify deck is dry and free of snow or ice. Joints in wood deck to be solidly supported and nailed.

5. Ensure that all fastener heads are totally flush with the substrate.
 6. Field verify measurements prior to fabrication.
- B. Coordination: Coordinate with other Work which affects, connects with, or will be concealed by this Work, including photovoltaic solar panels installed on standing seam metal roof panel system.

3.02 UNDERLAYMENT INSTALLATION

- A. Underlayment Installation:
1. Install (1) layer asphalt felt underlayment over entire area to be roofed.
 2. Continue installation from eave to ridge in shingle fashion free of wrinkles.
 3. Install horizontally, with 6 inch minimum weather overlaps and minimum 36 inch end laps.
 4. Stagger end laps of each consecutive layer a minimum of 24 inches.
 5. Use adhesive for temporary anchorage, where possible, to minimize use of mechanical fasteners under sheet metal roofing.
 6. Ensure that all nail heads are totally flush with the substrate.
- B. Ensure installed underlayment is installed horizontally, flat, smooth and free from punctures and tears.
- C. Install sheet metal roofing immediately after installation of underlayment to avoid over exposure from elements and drying of the roof underlayment.
- D. Dry, brittle or wrinkled underlayment shall be removed and new underlayment installed prior to installation of metal roofing.

3.03 INSTALLATION

- A. Comply with manufacturers standard instructions and conform to standards set forth in the Architectural Sheet Metal Manual published by SMACNA, in order to achieve a watertight installation.
- B. Panels:
1. Follow roof panel manufacturer's directions.
 2. Locate and place attachment clips and fasten to supporting construction to comply with manufacturer's written instructions and performance requirements
 3. Place starter trims, tracks and other perimeter flashing with concealed fasteners, plumb, level and in correct alignment with adjoining construction.
 4. Install panel seams vertically.
 5. Do not stretch or compress panel side-lap.
 6. Secure panels without warp or deflection.
 7. Fully engage interlocking seams.
 8. Remove strippable protective film, if any, immediately preceding panel installation.
- C. Allowable Erection Tolerances:
1. Maximum Alignment Variation: 1/4 inch in 40 feet
- D. Flashing:
1. Follow Manufacturer's directions and Architect approved Shop Drawings.
 2. Install flashings to allow for thermal movement
 3. Remove strippable protective film, if any, immediately preceding flashing installation.

- E. Cutting and Fitting:
 - 1. Neat, square and true. Torch cutting is prohibited.
 - 2. Openings 6 inches and larger in any direction: Shop fabricates and reinforces to maintain original load capacity.
 - 3. Deburr cut edge where necessary

3.04 CLEANING

- A. On completion of sheet metal roof and wall panel installation, clean finished surfaces, including removing unused fasteners, accessories, pieces of flashing, etc. Maintain in a clean condition during construction.
- B. Do not allow traffic on completed roof. If required, provide cushioned walk boards.
- C. Protect installed roof and wall panels and trim from damage caused by adjacent construction until completion of installation.
- D. Remove and replace panels, flashing and other components that have severe surface damages or blemishes and/or substrate damage or are otherwise damaged beyond successful repair.
- E. During the course of the Work and on completion, remove and dispose of excess materials, equipment and debris away from premises. Leave Work in clean condition.
- F. Clean grease, finger marks or stains from the panels per Manufacturer's recommendations.

END OF SECTION