



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



A
REQUEST FOR PROPOSALS
FOR
PVC MEMBRANE REPLACEMENT AND METAL DECK REPAIRS

AMERICAN FAMILY FIELD
1 BREWERS WAY
MILWAUKEE, WISCONSIN 53214

ISSUED BY:
WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT
(“DISTRICT”)

June 3, 2025



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



INTRODUCTION

The Wisconsin Professional Baseball Park District (“District” or “Owner”) is a special district that is a local unit of government, a body corporate and politic that is separate, distinct and independent from the state. The District is charged with the oversight and monitoring of planning, financing, designing, constructing, commissioning, operating and maintaining a major league baseball facility, American Family Field, that is the home of the Milwaukee Brewers (“Team”), in Milwaukee, Wisconsin.

The District is seeking bids from qualified contractors (“Contractor”) for selective remediation of metal deck corrosion, followed by the installation of new coverboard and membrane over existing membrane on the 4L and 4R panels and infield gutters as described within at American Family Field. The total area is approximately 85,000 square feet. All quantities and measurements are to be field verified.

Work shall be in full accordance with the documents within this RFP, including any addenda and written response to questions issued and in full accordance with manufacturer’s instructions. Please see **Appendix A** for detailed scope of work, including drawings and specifications.

OVERVIEW

Bids should be submitted using the Bid Forms included in this RFP. Bidding Contractors are required to visit the site and observe and measure all areas as part of this bid. The Sigma Group will serve as Project Administrator on this project. Access to the site can be obtained through:

Drew Falkenburg, Project Administrator
414-659-0942
dfalkenburg@thesigmagroup.com

Bids should be written to the attention of:
Wisconsin Professional Baseball Park District
Attn: Drew Falkenburg
American Family Field
1 Brewers Way
Milwaukee, WI 53214

Bids can be emailed to: dfalkenburg@thesigmagroup.com

Contractors will receive an email confirming receipt of the bid. Bids are due by **5:00 PM (CT) on July 1, 2025.**

This RFP may be amended by the District in response to need for further clarification, specifications and/or requirement changes, new opening date, etc. Amendments will be posted on the District’s website at www.wibaseballdistrict.com. It is the responsibility of the bidding Contractors to check this website for any future amendments, questions, revisions, etc., prior to the opening date and return with the response. Failure to do so may result in your bid being rejected. The District reserves the right to (i) reject any and all bids for any reason or no reason at all; (ii) disregard all non-conforming, non-responsive or conditional bids; or (iii) waive any and



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



all bid irregularities or informalities and make an award as if the irregularities or informalities did not exist. Contractors will not be compensated for any costs or expenses incurred in the preparation of their bid.

Any and all questions related to this RFP must be submitted in writing no later than 5:00 pm (CT) on June 24, 2025, to the Project Administrator, Drew Falkenburg, at dfalkenburg@thesigmagroup.com.

Responses to questions will be posted on the District's website (www.wibaseballdistrict.com) no later than 5:00 pm (CT) on June 26, 2025. **Please check the website periodically since a preliminary response to questions may be posted sooner than June 26, 2025.**

A copy of the Wisconsin Professional Baseball Park District standard General Conditions to Construction Services Contract is included in **Appendix B**. A contract with these terms and conditions will be presented to the selected Contractor for signature. Bidding Contractors are required to return any exceptions to these standard Terms and Conditions with their bid.

PREBID SITE VISIT

While the District has provided certain drawings as part of this RFP, they should not be relied upon for completeness. Bidding Contractors may visit the site and observe and measure all areas as part of this bid. Email the Project Administrator to schedule site access.

Drew Falkenburg, Project Administrator
414-659-0942
dfalkenburg@thesigmagroup.com

SCOPE OF WORK

See **Appendix A** for drawings, and specifications. All work and materials shall conform in every detail to the scope, drawings and specifications. If there is a conflict within or between the any of the RFP documents involving an obligation, a duty, or the quality or quantity of Work required, then the document imposing the most stringent obligation or duty and the highest quality or greatest quantity shall control. All quantities are to be field measured and verified by the bidding Contractor.

SCHEDULE

Milestone	Date
Pre-bid site visit	Schedule with Sigma
RFP questions due	June 24, 2025
RFP response to questions posted	June 26, 2025
RFP bids due	July 1, 2025
Contract awarded to selected Contractor *	Week of July 7, 2025
Substantial completion **	May 31, 2026



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



* A copy of the Wisconsin Professional Baseball Park District standard General Conditions to Construction Services Contract is included in **Appendix B**.

** Work must be coordinated around events at the ballpark and site. The 2025 Milwaukee Brewers Baseball Schedule is included in **Appendix C**.

ACCURACY

This RFP may include errors, omissions, or deficiencies, and the accuracy and completeness of this document and related documents are not guaranteed. In the event such errors, omissions, or deficiencies are discovered by the Contractor, the Contractor shall promptly notify the District in writing within seventy-two (72) hours of discovery. The Contractor shall abide by and comply with the true intent and meaning of the requirements as stated herein and shall not avail itself of any apparent error or omission, should any exist. Further, by submitting a Bid, Contractor warrants that all items to be supplied under any resultant contract shall, unless otherwise agreed by the Owner, meet the performance requirements set forth in this RFP.

PERMITS AND REGULATIONS

Bidder shall include in their bid all costs necessary to comply with all applicable laws, ordinances, rules and regulations. All work for the project must be performed in accordance with all federal, state, and local laws, ordinances, and rules and regulations relating to the work. Where the bid documents exceed these requirements, the bid documents shall govern. In no case shall work be installed contrary to or below the minimum legal standards.

BIDDING CONTRACTOR'S REPRESENTATION

By submitting a bid, each Contractor certifies that it has examined and fully comprehends the requirements and intent of this RFP. By submitting a bid, each Contractor further certifies that, prior to submitting its bid, it has visited the site and examined all conditions affecting the Work and proposes to furnish all labor, materials, equipment and supplies necessary for, or incidental to, the proper execution of the Work.

CONDITIONS OF WORK

Access to American Family Field will be subject to standard building access regulations in place at that time. The selected Contractor will be provided with parking at American Family Field.

PROTECTION OF WORK AND PROPERTY

Contractor shall continuously maintain adequate protection of all work from damage and shall protect Owner from injury or loss arising in connection with the Contract. Contractor shall make good any such damage, injury, or loss and shall adequately protect adjacent property.

Contractor shall take all necessary precautions for the safety of employees on the project, and shall comply with all applicable provisions of federal, state, and local safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the work is being performed. Contractor shall erect, and properly maintain at all times as required by the conditions and progress of the work, all necessary safeguards for the protection of workers and the public and shall post danger signs warning against, without limitation, hazards created by such features of construction as protruding nails, hoists, scaffolding, and falling materials. Contractor shall provide



and maintain flags, danger signs, barricades, rails, etc., as required to for safety. Job site safety is the sole responsibility of the Contractor.

DIVERSE FIRM PARTICIPATION

The District has a goal to achieve 15% participation by Diverse Firms as outlined in the 06/09/2020 Diversity Contracting Program. A copy can be found in **Appendix D** and on the Project Participation Committee tab on the Wisconsin Professional Baseball Park District website (www.wibaseballdistrict.com). Bidders must review and complete the form(s) as appropriate and submit with their bid documents. Failure to do so may result in your response being rejected.

WARRANTY

Sika Corporation Warranty

Upon successful completion of the work to Sika Corporation's satisfaction and receipt of final payment, the Sika Corporation Warranty shall be issued.

- System Warranty
- Wind Speed: 60 mph

Applicator/Roofing Contractor Warranty

Contractor shall supply the Owner and Sika Corporation with a separate workmanship warranty. In the event any work related to roofing, flashing, or metal is found to be within the Applicator warranty term, defective or otherwise not in accordance with Contract Documents, the Applicator shall repair that defect at no cost to the Owner and Sika Corporation. Applicator's warranty obligation shall run directly to Owner and Sika Corporation. A copy shall be sent to Owner and Sika Corporation. **A version of this Applicator / Roofing Contractor Warranty shall be provided to the Owner and Sika Corporation as part of this bid process.**

Owner Responsibility

Owner shall notify both Sika Corporation and the Contractor of any leaks as they occur during the time period when both warranties are in effect.

Warranty Durations

- Sika Corporation's warranty shall be in effect for a twenty (20) year duration.
- Applicator's/Roofing Contractor's Warranty shall be in effect for a (5) year duration.

TAXES

This project is Sales & Use Tax Exempt (CES Number 008-0000051268-04). A Wisconsin Sales and Use Tax Exemption Certificate will be provided to the selected Contractor.

CLOSEOUT REQUIREMENTS

The selected Contractor shall submit the following to the Project Administrator as part of project closeout, in addition to completing the closeout items as listed in the specifications. The Project Administrator must approve these items prior to recommending final payment to the District.

1. Final conditional lien waiver



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



2. Contractor's labor warranty
3. Manufacturer's warranty
4. Completion of all punch-list items

APPENDICES

- A. Scope of Work
- B. Wisconsin Professional Baseball Park District standard General Conditions to Construction Services Contract
- C. Current 2025 Milwaukee Brewers game schedule
- D. Diversity Contracting Program



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



This bid form must be signed by a person authorized to legally bind the Contractor. By submitting this bid, the Contractor agrees that the fixed price contained herein shall remain firm for a period of 30 days from the due date of this RFP.

BID FORMS

NAME OF COMPANY _____ (Affix Corporate
Seal if Applicable)

STREET ADDRESS _____

CITY STATE ZIP CODE _____

TELEPHONE NUMBER _____

E-MAIL ADDRESS _____

SIGNATURE _____

TYPE NAME AND TITLE _____

DATE _____

I. LUMP SUM BASE BID 1 – REPLACEMENT OF MEMBRANE ON 4L PANEL FROM C-3 TO C-10 AND C-22 TO C-29

In accordance with all Bidding Documents, Conditions, General Requirements, and Addenda, provide all necessary labor, materials, tools, equipment, supplies, and supervision necessary to perform all Work required to install the previously mentioned scope for the mechanically attached system from truss C-3 to C-10 and C-22 to C-29 on the panel 4L, including all metal deck remediation work and for the adhered system in the infield and outfield gutters with the infield gutter getting a new bottom as depicted in Appendix A at American Family Field.

Lump Sum

\$ Amount	_____ Dollars \$
(Words) U.S. Funds	(Figures) U.S. Funds



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



II. **LUMP SUM BASE BID 2** – REPLACEMENT OF MEMBRANE ON 4R PANEL FROM C-3 TO C-8 AND C-22 TO C-29

In accordance with all Bidding Documents, Conditions, General Requirements, and Addenda, provide all necessary labor, materials, tools, equipment, supplies, and supervision necessary to perform all Work required to install the previously mentioned scope for the mechanically attached system from truss C-3 to C-8 and C-22 to C-29 on the panel 4R, including all metal deck remediation work and for the adhered system in the infield and outfield gutters with the infield gutter getting a new bottom as depicted in Appendix A at American Family Field.

Lump Sum

\$ Amount

Dollars \$

(Words) U.S. Funds

(Figures) U.S. Funds

III. **LUMP SUM BASE BID 3** – REPLACEMENT OF MEMBRANE ON 3L, 3R, 2L, AND 2R PANEL INFIELD GUTTERS

In accordance with all Bidding Documents, Conditions, General Requirements, and Addenda, provide all necessary labor, materials, tools, equipment, supplies, and supervision necessary to perform all Work required to install the previously mentioned scope on the 3L, 3R, 2L, and 2R panel infield gutters at American Family Field.

Lump Sum

\$ Amount

Dollars \$

(Words) U.S. Funds

(Figures) U.S. Funds

IV. **UNIT COST/SF** – DENS DECK REPLACEMENT

Provide a per square foot unit cost for deteriorated 1/2" DensDeck replacement. Contractor will be required to verify all DensDeck replacement.

Unit Cost

\$ Amount

Dollars \$

(Words) U.S. Funds

(Figures) U.S. Funds

V. **UNIT COST** – LABOR RATE AND MATERIAL / EQUIPMENT MARK-UP

Provide labor rates for any additional work requested and % of mark-up above cost on any additional materials or equipment requested.

Regular Labor Rate

\$ Per Hour:

Dollars \$

(Words) U.S. Funds

(Figures) U.S. Funds



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



Overtime Labor Rate

\$ Per Hour:

Dollars \$

(Words) U.S. Funds

(Figures) U.S. Funds

Material Mark-Up

% Above Cost:

%

(Words)

(Figures)

VI. DIVERSE FIRM PARTICIPATION

Attach a completed “Diverse Firm Utilization Plan” or, if necessary, the “Exemption Certification” and “Certification of Good Faith Effort” to this bid form. Forms can be found in **Appendix D**.

Signature

Title

VII. ADDENDUM(S) RECEIVED

Acknowledge receipt of each Addendum issued for this RFP.

Addendum(s) Received (insert #s)

Signature

Title

VIII. GENERAL CONDITIONS TO CONSTRUCTION SERVICES CONTRACT RECEIVED

Acknowledge receipt AND acceptance of the General Conditions to Construction Services Contract issued with this RFP OR exceptions attached hereto. Any exceptions to contract terms will be taken into consideration when bids are reviewed.

Signature

Title



APPENDIX A

Scope of Work

STATEMENT OF WORK

The Replacement of the PVC Membrane is separated into three (3) base bids.

Base Bid 1 is for the replacement of the Sika Sarnafil S 327 60 MIL – Custom Color panel roof membrane and deck board on the **4L panel** from truss C-3 to C-10 AND C-22 to C-29 as well as the walls of the outfield gutter and the entirety of the infield gutter. This area is estimated to be approximately 41,000 SF. The membrane must be installed and tied into adjacent roof membrane per the manufacturer's installation instructions. Installation is to include the specified fasteners and new edge trim. Further details and specifications can be found within Appendix A.

Base Bid 2 is for the replacement of the Sika Sarnafil S 327 60 MIL – Custom Color panel roof membrane and deck board on the **4R panel** from truss C-3 to C-8 AND C-22 to C-29 as well as the walls of the outfield gutter and the entirety of the infield gutter. This area is estimated to be approximately 37,000 SF. The membrane must be installed and tied into adjacent roof membrane per the manufacturer's installation instructions. Installation is to include the specified fasteners and new edge trim. Further details and specifications can be found within Appendix A.

The 4R panel includes some deck remediation. The locations that require remediation are provided within Appendix A. The process for remediation is also included in Appendix A.

Base Bid 3 is for the replacement of the Sika Sarnafil S 327 60 MIL – Custom Color panel roof membrane and deck board in the infield gutters (pivot side) on the **3L, 3R, 2L, and 2R roof panels**. Roof deck board on the horizontal bottom of each gutter is to be replaced with plywood and covered with Sarnaclad per the attached detail included within Appendix A. Each gutter has heat trace in conduits installed above the membrane at the bottom of the gutter. This heat trace will be removed and reinstalled by others. The membrane must be installed and tied into adjacent roof membrane per the manufacturer's installation instructions. Installation is to include the specified fasteners and new edge trim. Further details and specifications can be found within Appendix A.

OWNER-SUPPLIED ITEMS

All owner-supplied items will need to be hoisted into place by the selected Contractor. All excess owner-supplied materials are to be left with the District at project completion.

Membrane

Sika Sarnafil S327-15 PVC Membrane (6.56 FT x 65.6 FT rolls) Custom Color = Aged Patina



Southeast Wisconsin Professional Baseball Park District
West Allis, WI 53214
414.607.4045
Milwaukee Brewers Baseball Club
Milwaukee, WI 53214
414.933.4144

Architects:
HKS Inc.
Dallas, TX 75201-7485
312.640.5590
NBBJ Sports and Entertainment
Los Angeles, CA 90014
213.243.1160
Epstein Uhlen Architects
Milwaukee, WI 53201-0728
414.271.5350

Structural Engineers:
Ove Arup & Partners
Los Angeles, CA 90064
310.312.5040
310.312.5040
Frad Structural Engineers
Madison, WI 53711
608.238.2661

Roof Consultant:
Mitsubishi Heavy Industries, LTD.
Chicago, IL 60611
312.640.5643

Traffic Engineers:
HNTB
Milwaukee, WI 53224
414.359.2300

Mechanical/Electrical/Plumbing/
Fire Protection
Ove Arup & Partners
Los Angeles, CA 90064
310.312.5040

PSJ Engineering, Inc.
Milwaukee, WI 53217
414.352.2211
The Wilson Firm
Milwaukee, WI 53213
414.771.6222

Audio-Visual/Electronics/Acoustical
Pelton, Marsh, Kinsella
Dallas, TX 75247-4951
800.229.7444

Food Service:
William Caruso & Associates
Englewood, CO 80112
303.649.1600

Sports Lighting:
Flack + Kurtz
New York, NY 10017
212.532.9600

Security:
HMA, Inc.
Arlington, TX 76017
817.572.2300

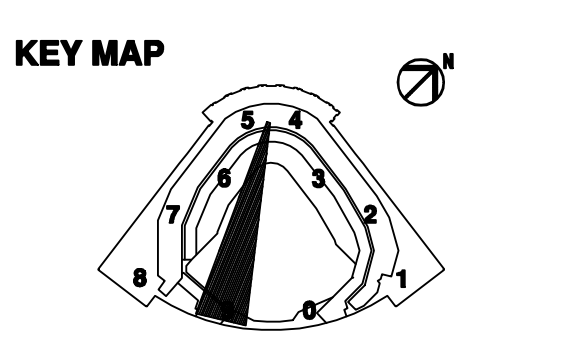
Telecommunications:
Lewis & Associates
Milwaukee, WI 53212
414.952.7270

Connections Inc.
Brookfield, WI 53005
414.789.8300

Landscape Architecture:
Plant Associates
New Berlin, WI 53151
414.679.1881

Civil Engineering:
Barrientos & Associates
Milwaukee, WI 53225
414.527.2773

Graphics Designer:
Sussman Prejza
Culver City, CA 90232
310.836.3939



PER RECORD SET

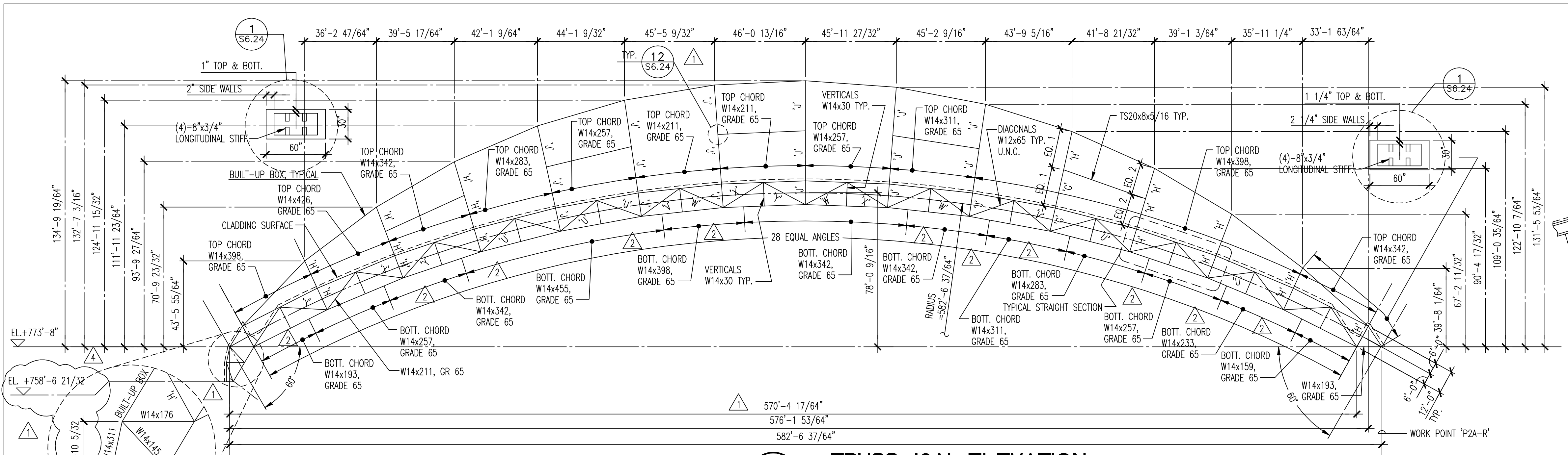
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B.P. 'L' ADDENDUM #11 11-11-97
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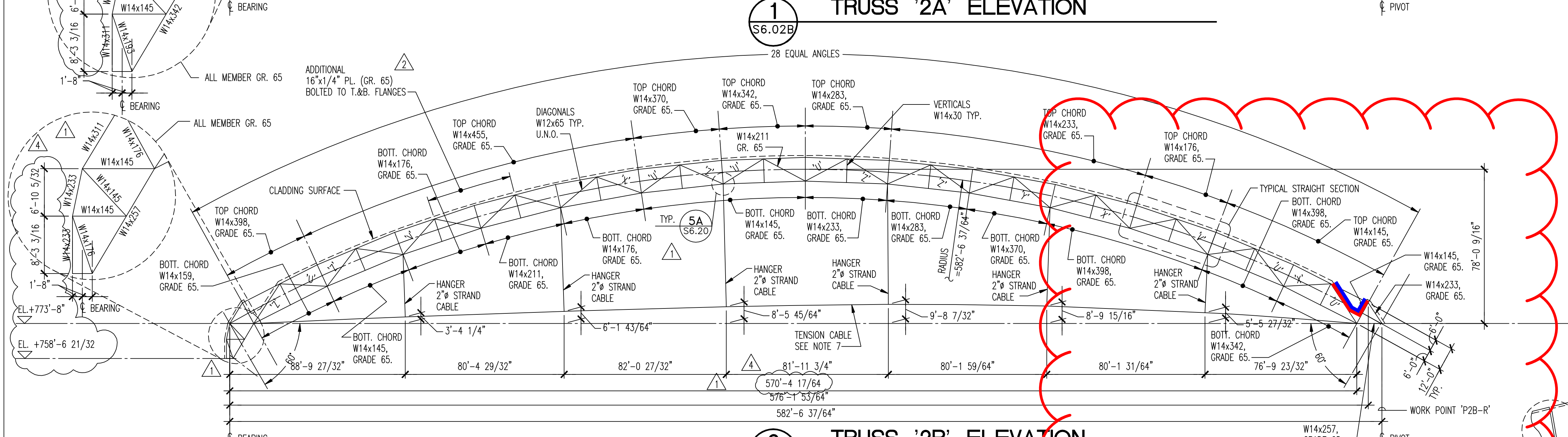
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ROOF PANEL DETAILS
PANEL TYPE '2' (RF)

Sheet No:
S6.02B

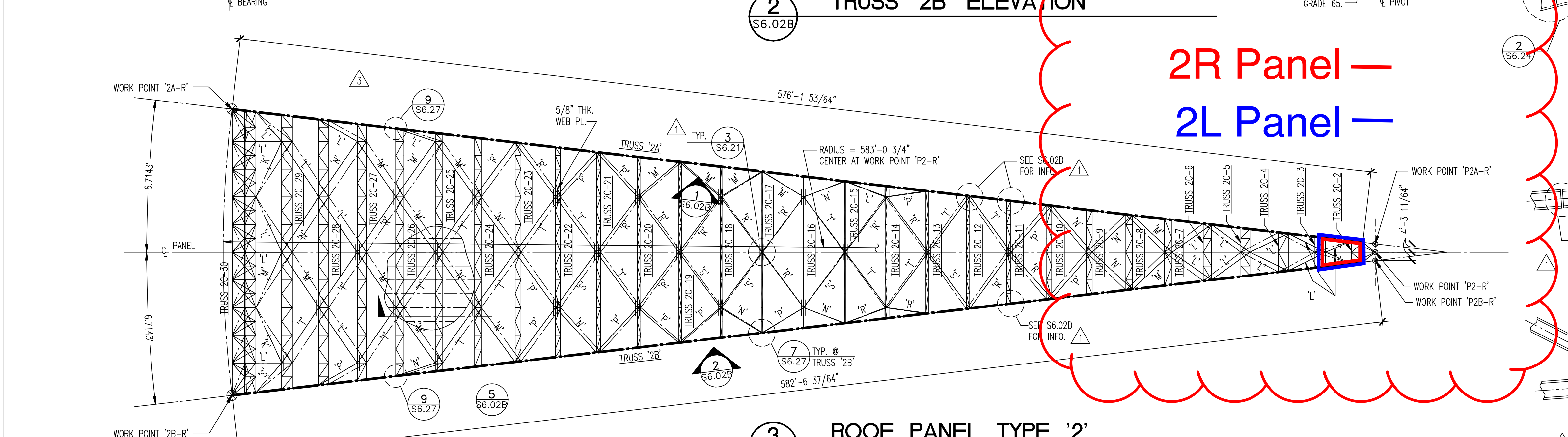
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HKS Inc.



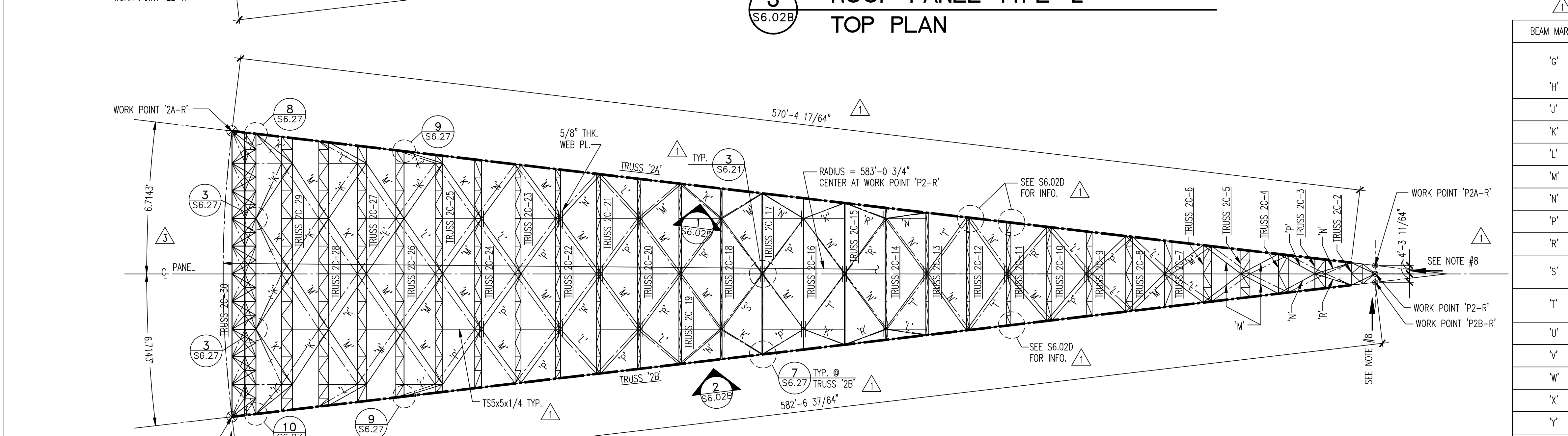
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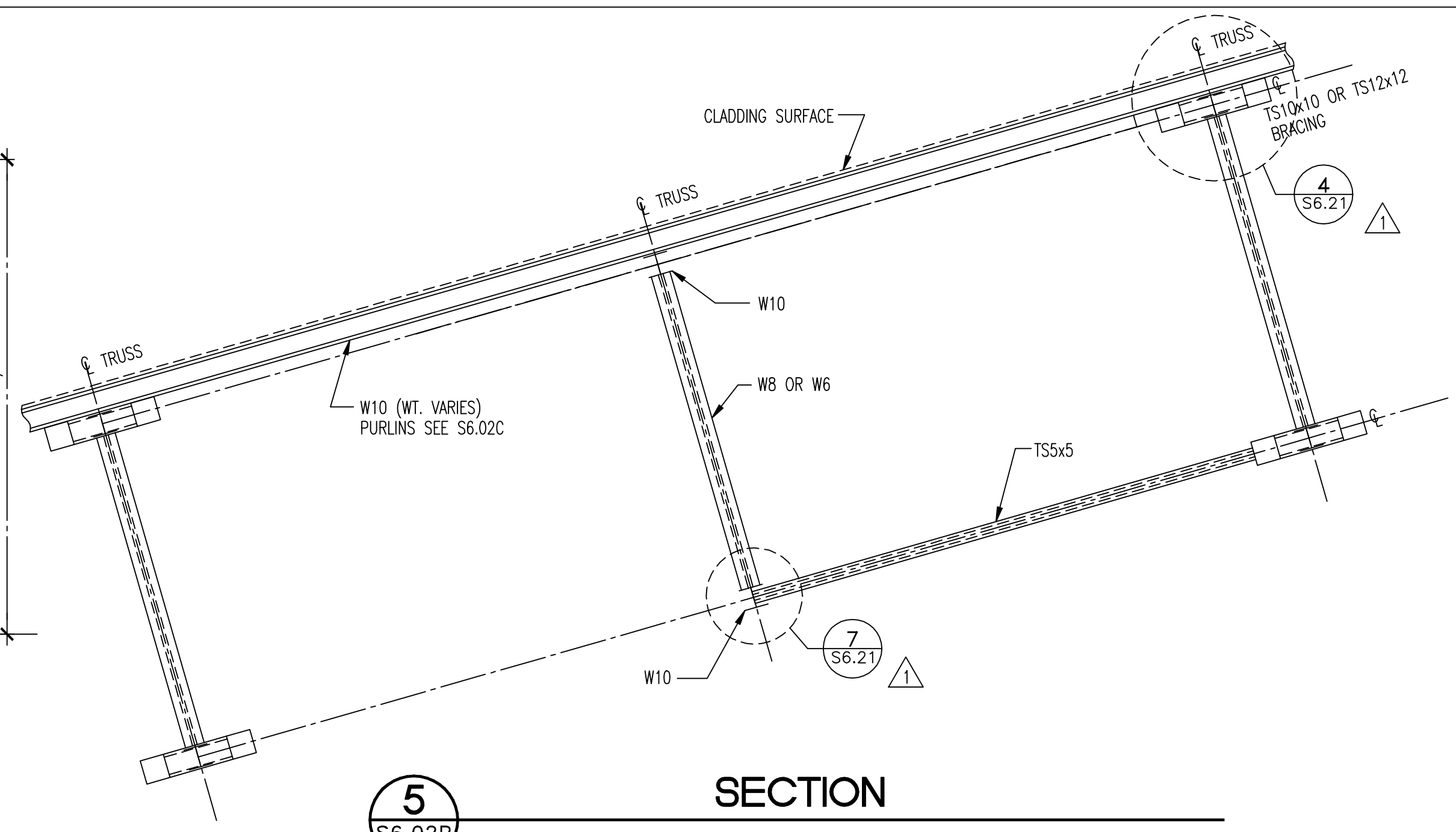
2 TRUSS '2B' ELEVATION



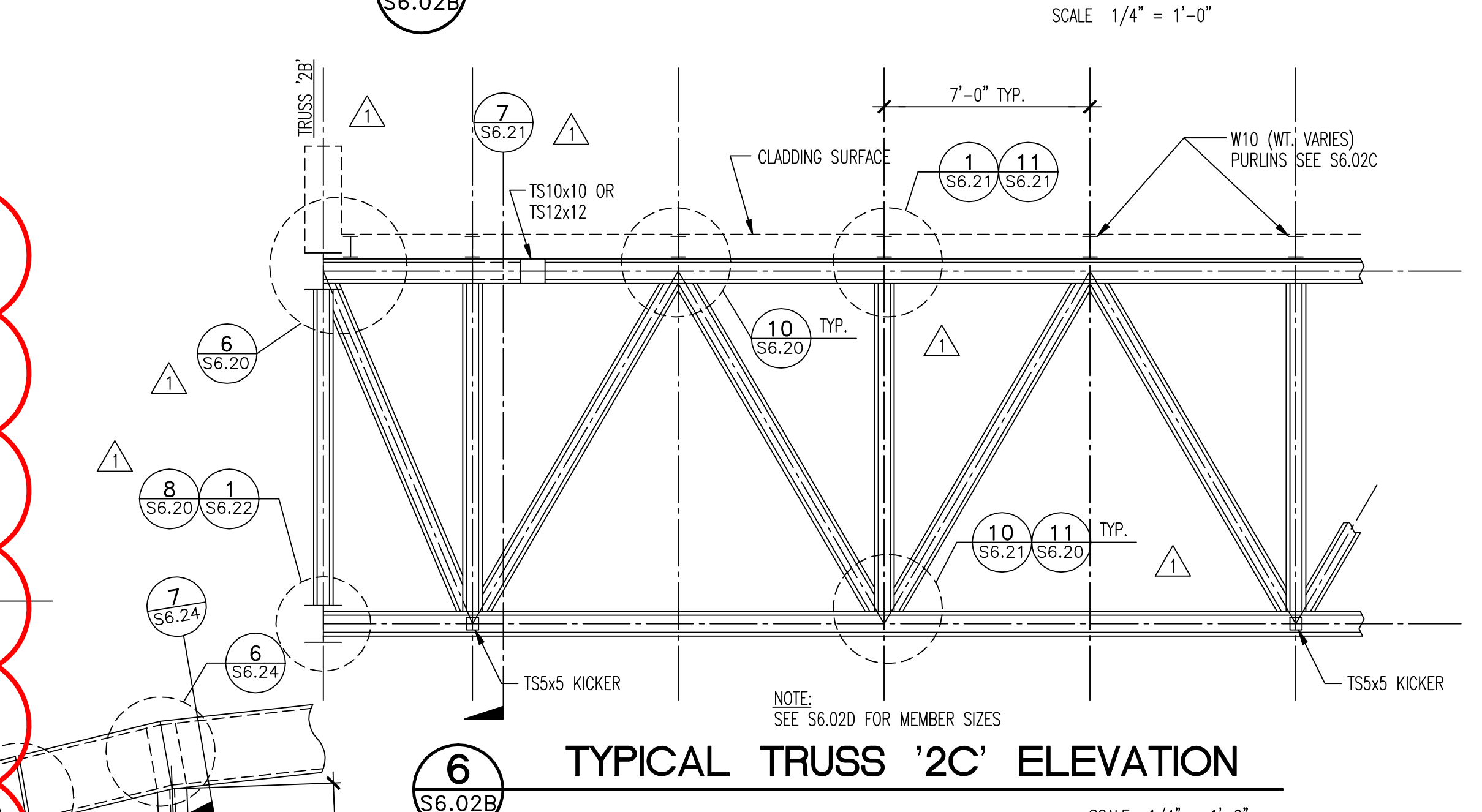
3 ROOF PANEL TYPE '2' TOP PLAN



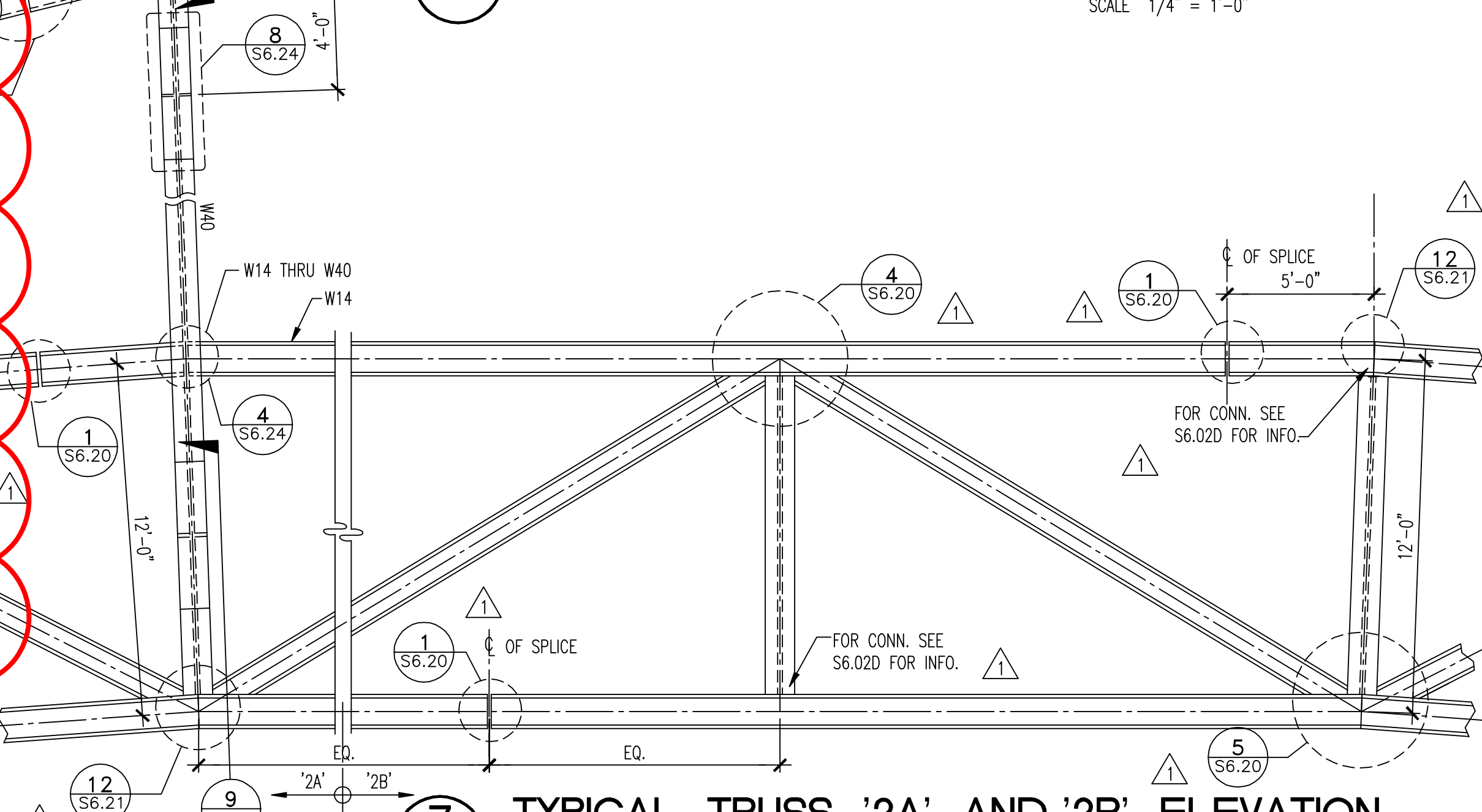
4 ROOF PANEL TYPE '2' BOTTOM PLAN



SECTION



6 TYPICAL TRUSS '2C' ELEVATION



7 TYPICAL TRUSS '2A' AND '2B' ELEVATION

BEAM MARKS	MEMBER SIZES
'C'	W40x235 (GR. 65, W/ 1/2" WEB PL. @ EX. SIDE GR. 50)
'H'	W40x235 (GR. 65)
'J'	W44x290 (GR. 65)
'K'	TS10x10x1/4
'L'	TS10x10x5/16
'M'	TS12x12x5/16
'N'	TS12x12x3/8
'P'	TS12x12x1/2
'R'	TS12x12x5/8
'S'	TS10x10x5/8 WITH (2)-16"x3/8" THK. PL.
'T'	TS10x10x5/8 WITH (2)-16"x3/4" THK. PL.
'U'	W12x79
'V'	W12x96
'W'	W12x106
'X'	W12x120
'Y'	W12x136
'Z'	W12x170

- NOTES:
- PANEL TYPE 2(RF) AS SHOWN, PANEL TYPE 2(LF) SIMILAR HANDED.
 - SEE SHEET S2.07 AND ARCHITECTURAL DRAWINGS FOR OVERALL SETTING OUT.
 - SEE SHEETS S6.02A - 3D VIEWS
S6.02C - PURLIN LAYOUT
S6.02D - SECONDARY TRUSSES
S6.02E - MEMBER SIZE SCHEDULE (TRUSS 2C)
 - ALL STEEL ASTM A572 GRADE 50 UNLESS NOTED OTHERWISE.
 - STEEL TUBES ASTM A500 GRADE B.
 - TRUSS CHORD ASTM A913 GRADE 65 WHERE SHOWN.
 - TENSION CABLE:
MIN. BREAKING LOAD: = 8,600 K
MIN. STIFFNESS: $E_{XA} = 770,000 (K/in^2 \times in^2)$
 - INDICATES DIRECTION OF LATERAL RESTRAINT.

File: S6.02.DWG
Date: MAR 28, 1997
Time: 1:45 PM



Southeast Wisconsin Professional Baseball Park District
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414.607.4045

Milwaukee Brewers Baseball Club
Milwaukee, WI 53214
414.933.4144

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213.243.1160

Epstein Uhlen Architects
Milwaukee, WI 53201-0728
414.271.5350

Structural Engineers:
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Los Angeles, CA 90064
310.312.5040

Flad Structural Engineers
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608.238.2661

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Chicago, IL 60611
312.640.5643

Traffic Engineers:
HNTE
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Food Service:
William Caruso & Associates
Englewood, CO 80112
303.649.1600

Sports Lighting:
Flack + Kurtz
New York, NY 10017
212.532.9800

Security:
HMA, Inc.
Arlington, TX 76017
817.372.2300

Telecommunications:
Lewis & Associates
Milwaukee, WI 53212
414.952.7270

Connections Inc.
Brookfield, WI 53005
414.769.8300

Landscape Architecture:
Plant Associates
New Berlin, WI 53151
414.679.1881

Civil Engineering:
Barrientos & Associates
Milwaukee, WI 53225
414.527.2773

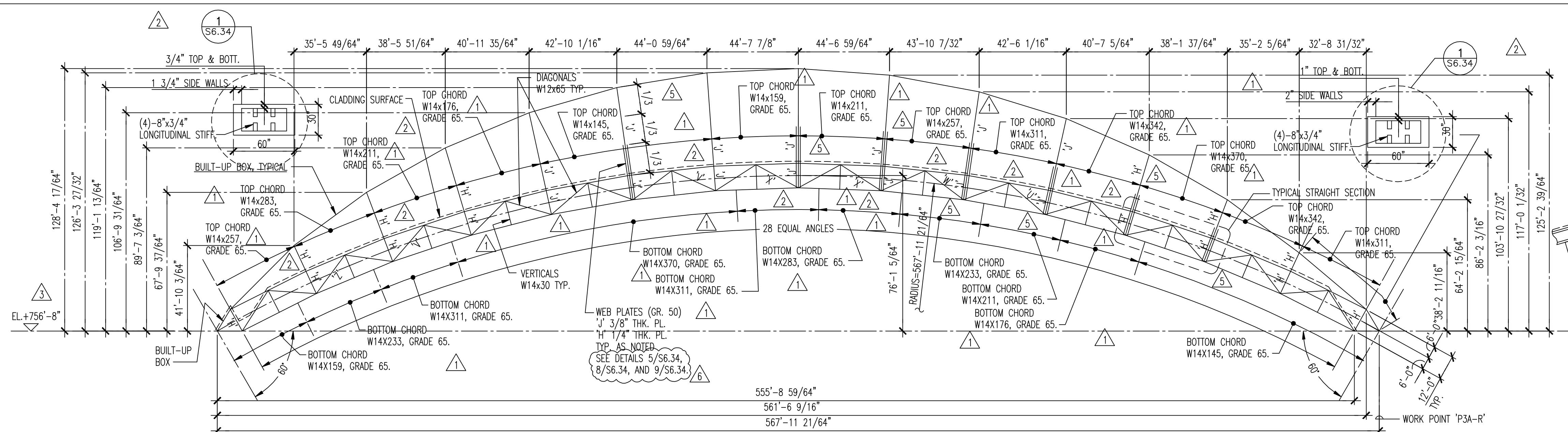
Graphics Designer:
Sussman Prejza
Culver City, CA 90232
310.836.3939

Job No: 5128
Revision:
B.P. 'L' ADDENDUM #2 8-20-97
B.P. 'L' ADDENDUM #3 9-17-97
B.P. 'L' ADDENDUM #8 10-23-97
B.P. 'L' ADDENDUM #11 11-10-97
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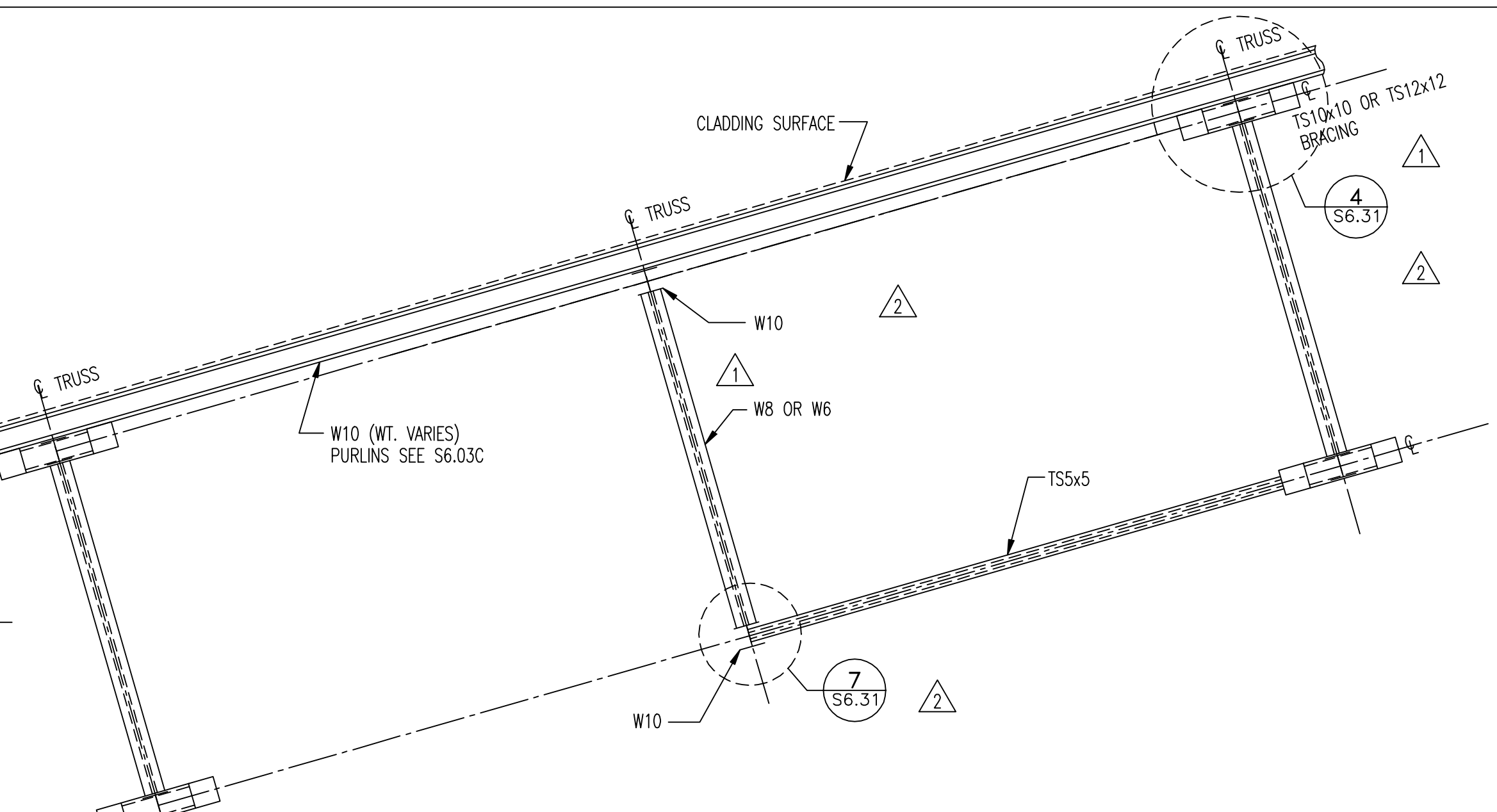
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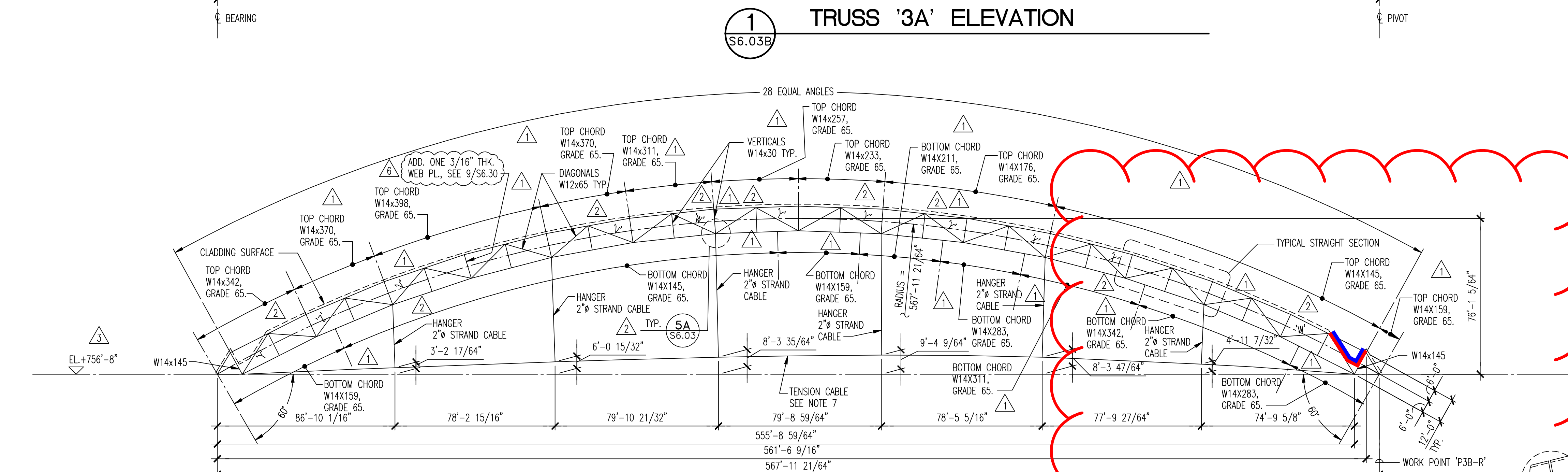
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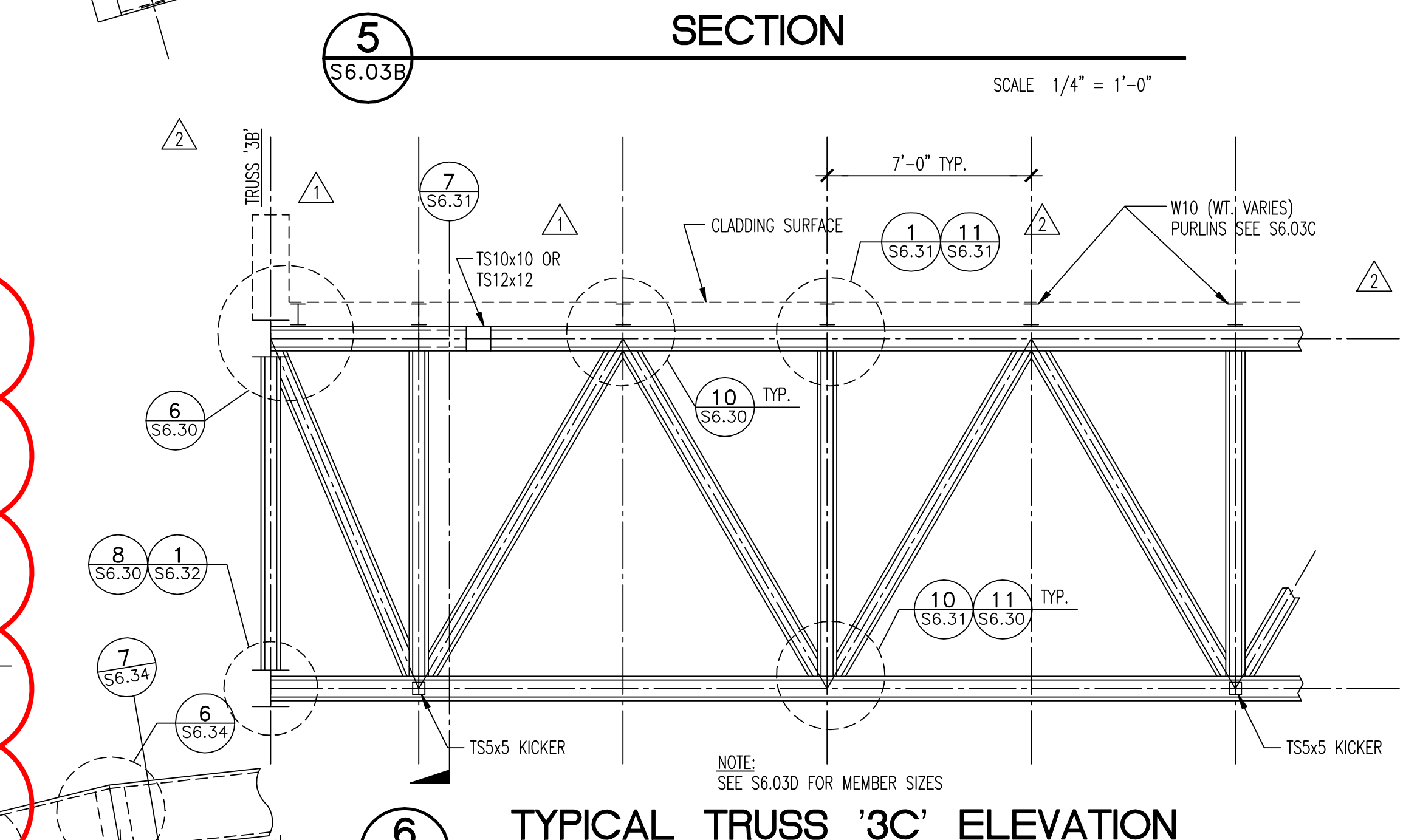
1 TRUSS '3A' ELEVATION



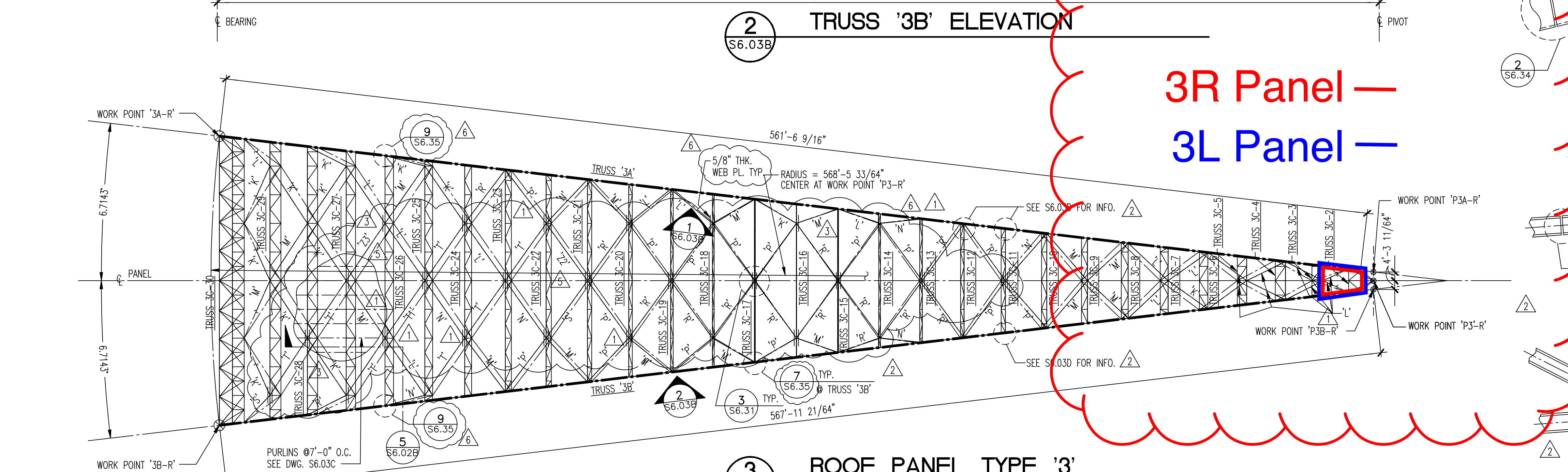
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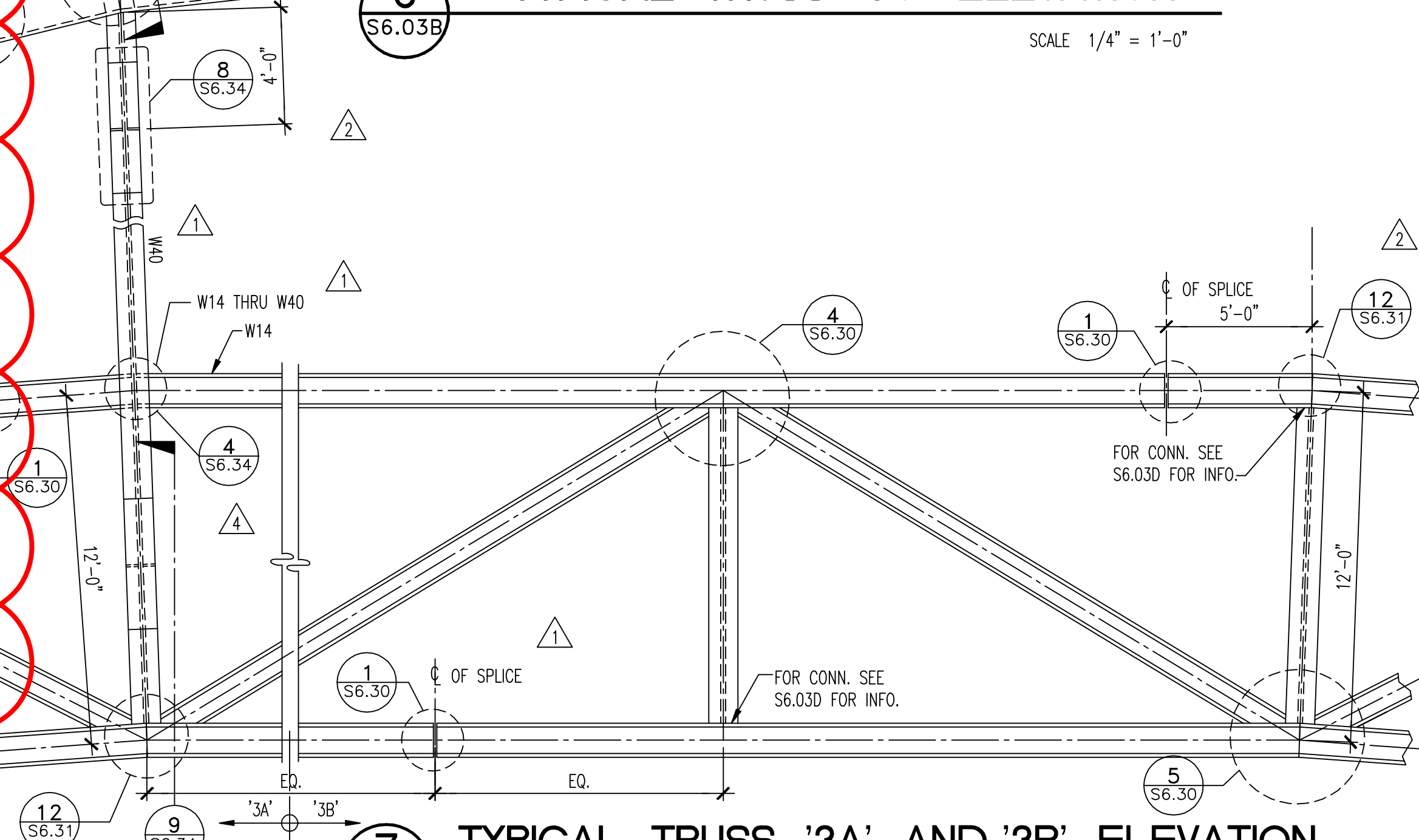
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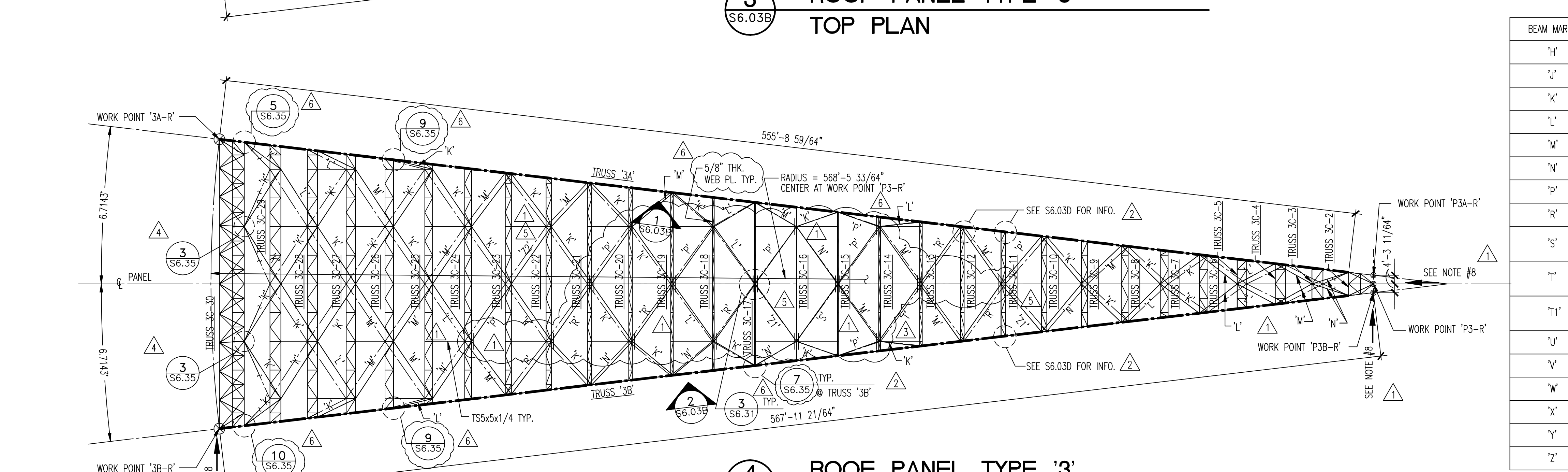
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3 ROOF PANEL TYPE '3' TOP PLAN



7 TYPICAL TRUSS '3A' AND '3B' ELEVATION



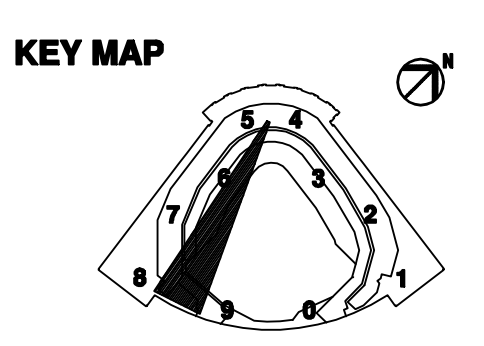
4 ROOF PANEL TYPE '3' BOTTOM PLAN

3R Panel —
3L Panel —

BEAM MARKS	MEMBER SIZES
'H'	W40x235
'J'	W40x249
'K'	TS10x10x1/4
'L'	TS10x10x5/16
'M'	TS12x12x5/16
'N'	TS12x12x3/8
'P'	TS12x12x1/2
'R'	TS12x12x5/8
'S'	TS10x10x5/8 WITH (2)-16x3/8" THK. PL.
'T'	TS10x10x5/8 WITH (2)-17x1" THK. PL.
'U'	W12x79
'V'	W12x87
'W'	W12x96
'X'	W12x106
'Y'	W12x120
'Z'	W12x136

BEAM MARKS	MEMBER SIZES
'Z1'	TS10x10x5/16 WITH (2)-8 1/2x1/4" THK. PL.
'Z2'	TS12x12x3/8 WITH (2)-10 1/2x1/4" THK. PL.
'Z3'	TS12x12x1/2 WITH (2)-10x1/4" THK. PL.

- NOTES:
- PANEL TYPE 3(RF) AS SHOWN, PANEL TYPE 3(LF) SIMILAR HANDED.
 - SEE SHEET S2.07 AND ARCHITECTURAL DRAWINGS FOR OVERALL SETTING OUT.
 - SEE SHEETS S6.03A - 3D VIEWS
S6.03C - PURLIN LAYOUT
S6.03D - SECONDARY TRUSSES
S6.03E - MEMBER SIZE SCHEDULE (TRUSS 3C)
 - ALL STEEL ASTM A572 GRADE 50 UNLESS NOTED OTHERWISE.
 - STEEL TUBES ASTM A500 GRADE B.
 - TRUSS CHORD ASTM A913 GRADE 65 WHERE SHOWN.
 - TENSION CABLE:
MIN. BREAKING LOAD: = 6,400 K
MIN. STIFFNESS: ExA = 770,000 (K/in² x in²)
 - INDICATES DIRECTION OF LATERAL RESTRAINT.



PER RECORD SET

File: S6.03B.DWG
Date: AUG 18, 1997
Time: 12:56 PM



Southeast Wisconsin Professional Baseball Park District
West Allis, WI 53214
414.607.4045
Milwaukee Brewers Baseball Club
Milwaukee, WI 53214
414.933.4144

Architects:
HKS Inc.
Dallas, TX 75201-7485
214.969.5590

NBBJ Sports and Entertainment
Los Angeles, CA 90014
213.243.1160

Epstein Uhlen Architects
Milwaukee, WI 53201-0728
414.271.5350

Structural Engineers:
Ove Arup & Partners
Los Angeles, CA 90064
310.312.5040

Fiad Structural Engineers
Madison, WI 53711
608.238.2661

Roof Consultant:
Mitsubishi Heavy Industries, LTD.
Chicago, IL 60611
312.640.5643

Traffic Engineers:
HNTB
Milwaukee, WI 53224
414.359.2300

Mechanical/Electrical/Plumbing/
Fire Protection

Ove Arup & Partners
Dallas, TX 75247-4951
310.312.5040

PSJ Engineering, Inc.
Milwaukee, WI 53217
414.352.2211

The Wilson Firm
Milwaukee, WI 53213
414.771.6222

Audio-Visual/Electronics/Acoustical

Pelton, Marsh, Kinella
Englewood, CO 80112
800.229.7444

Food Service:
William Caruso & Associates
New York, NY 10017
212.539.9800

Sports Lighting:
Flack + Kurtz
New York, NY 10017
212.539.9800

Security:
HMA, Inc.
Arlington, TX 76017
817.372.2300

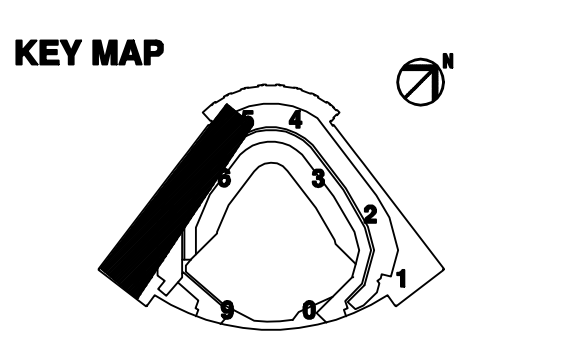
Telecommunications:
Lewis & Associates
Milwaukee, WI 53212
414.969.7270

Connections Inc.
Brookfield, WI 53005
414.769.8300

Landscape Architecture:
Plant Associates
New Berlin, WI 53151
414.679.1881

Civil Engineering:
Barrientos & Associates
Milwaukee, WI 53225
414.527.2773

Graphics Designer:
Susman Prejza
Culver City, CA 90232
310.836.3939



PER RECORD SET

Job No: 5128

Revision:

1	B.P. 'L' ADDENDUM #1	7-15-97
2	B.P. 'L' ADDENDUM #4	10-1-97
3	B.P. 'L' ADDENDUM #13	11-17-97
4	B.P. 'L' ADDENDUM #14	12-5-97
5	B.P. 'L' ADDENDUM #17	12-19-97
6	B.P. 'L' ADDENDUM #18	1-9-98
7	B.P. 'L' ADDENDUM #19	1-16-98

Date: JULY 15, 1997

Scale: 1/32" = 1'-0"

Sheet Title:

STRUCTURAL

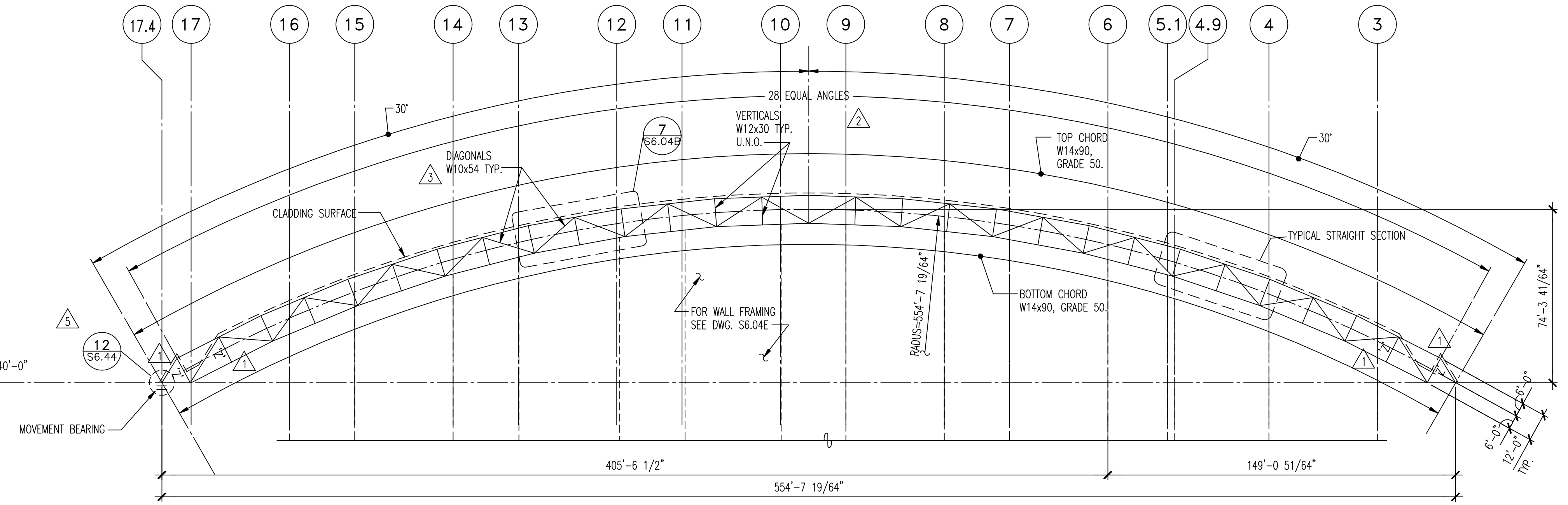
ROOF PANEL DETAILS

PANEL TYPE '4' (RF)

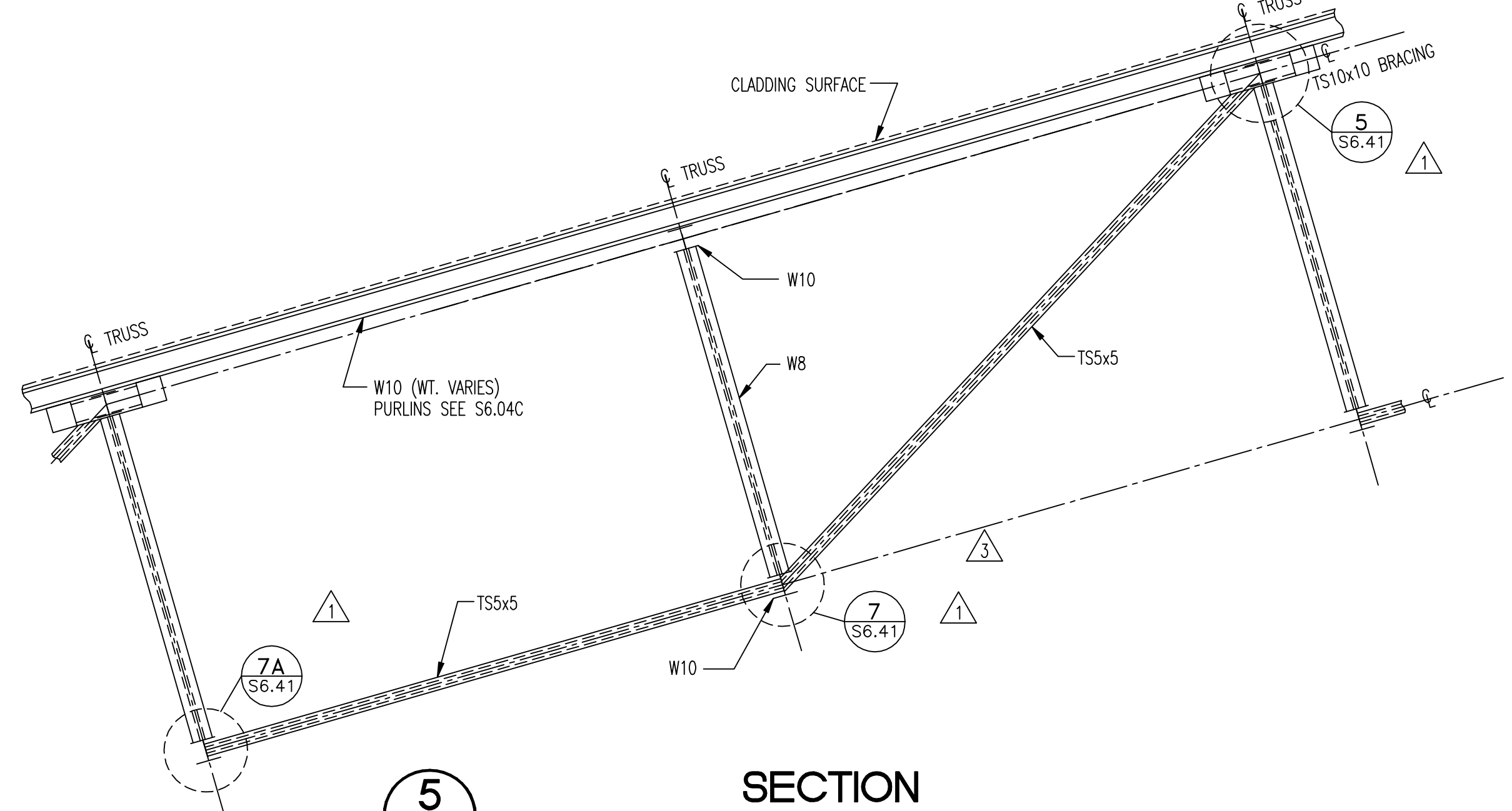
Sheet No:

S6.04B

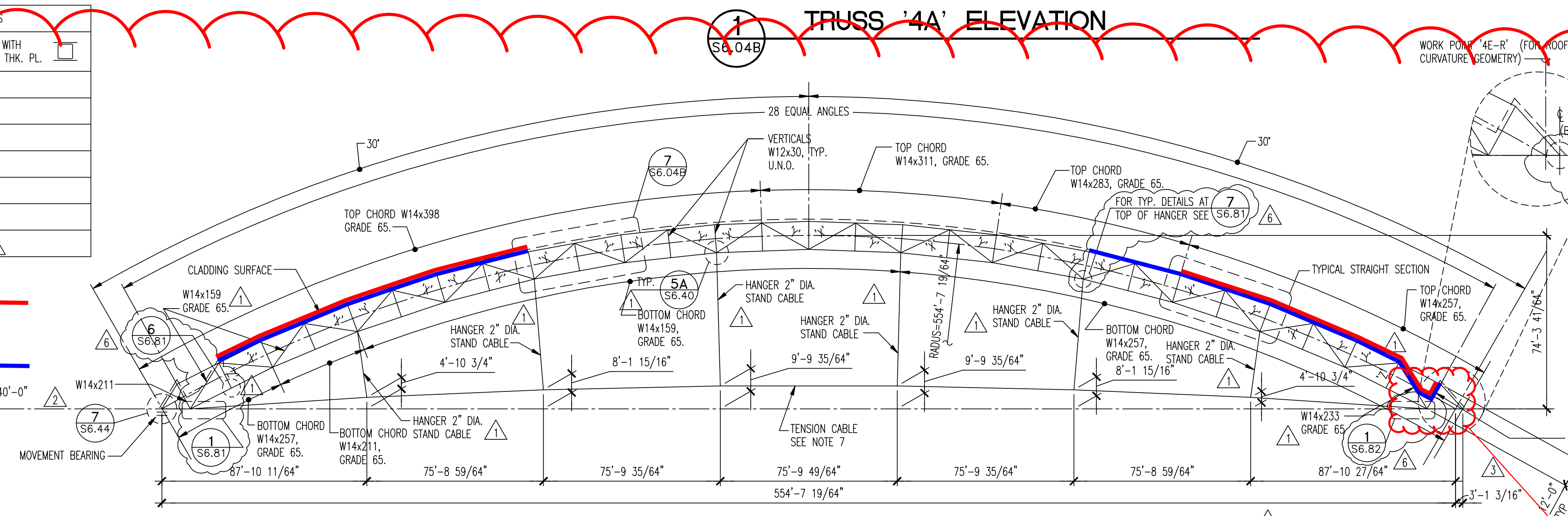
©1998 HKS Inc.



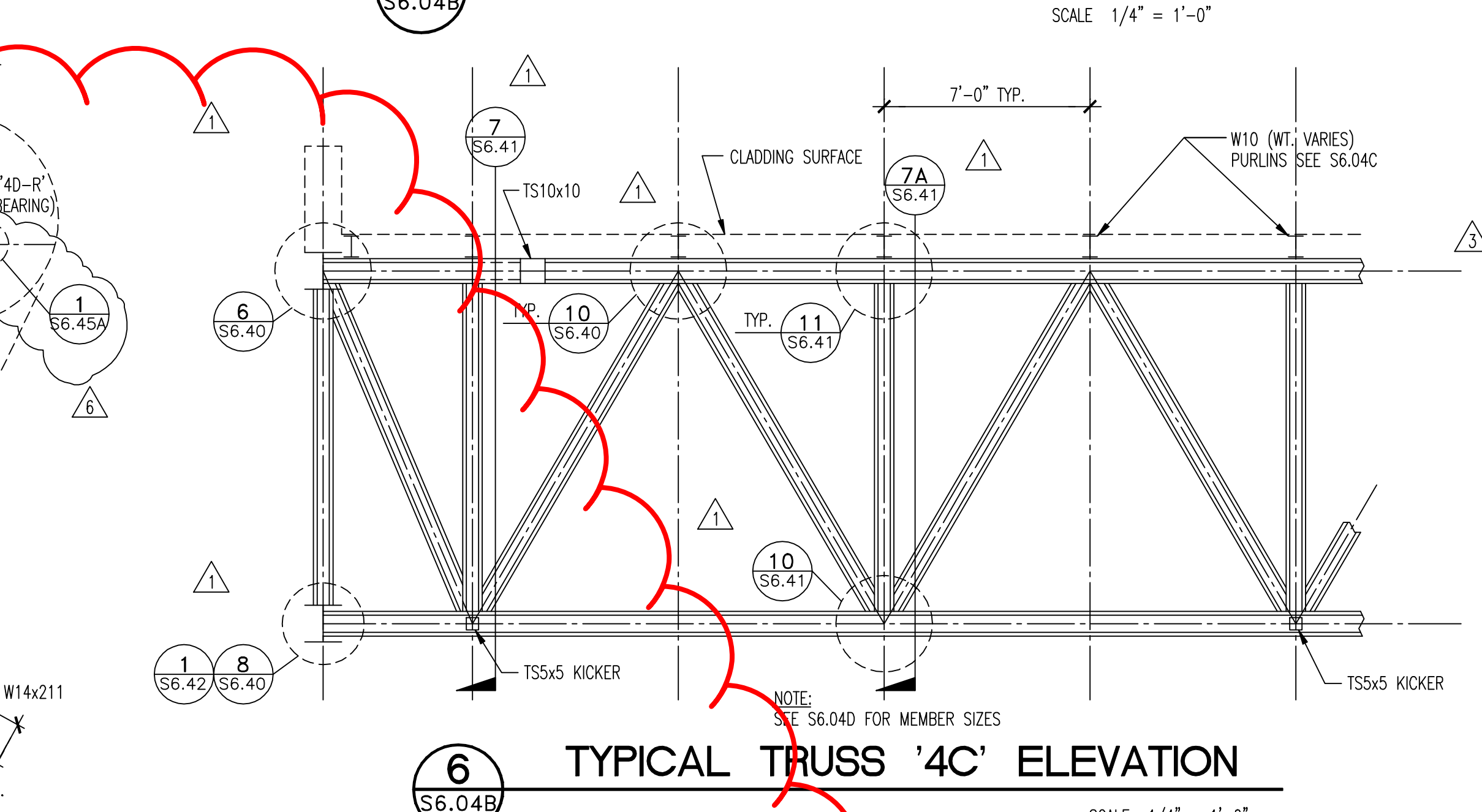
1 TRUSS '4A' ELEVATION



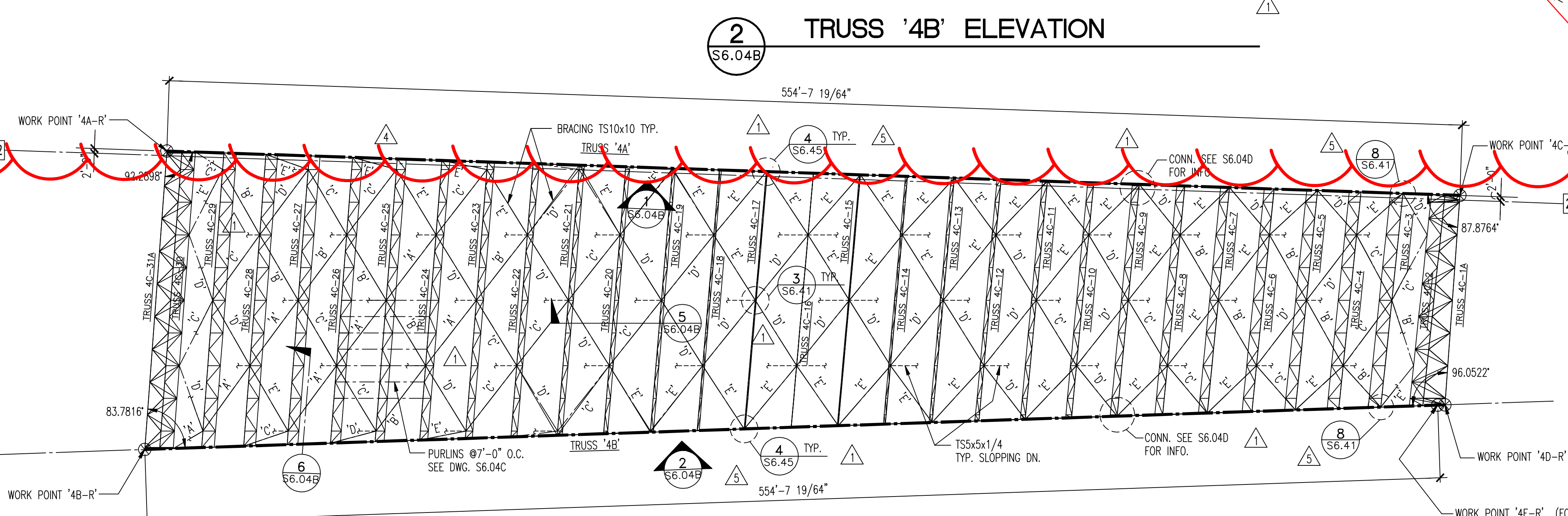
5 SECTION



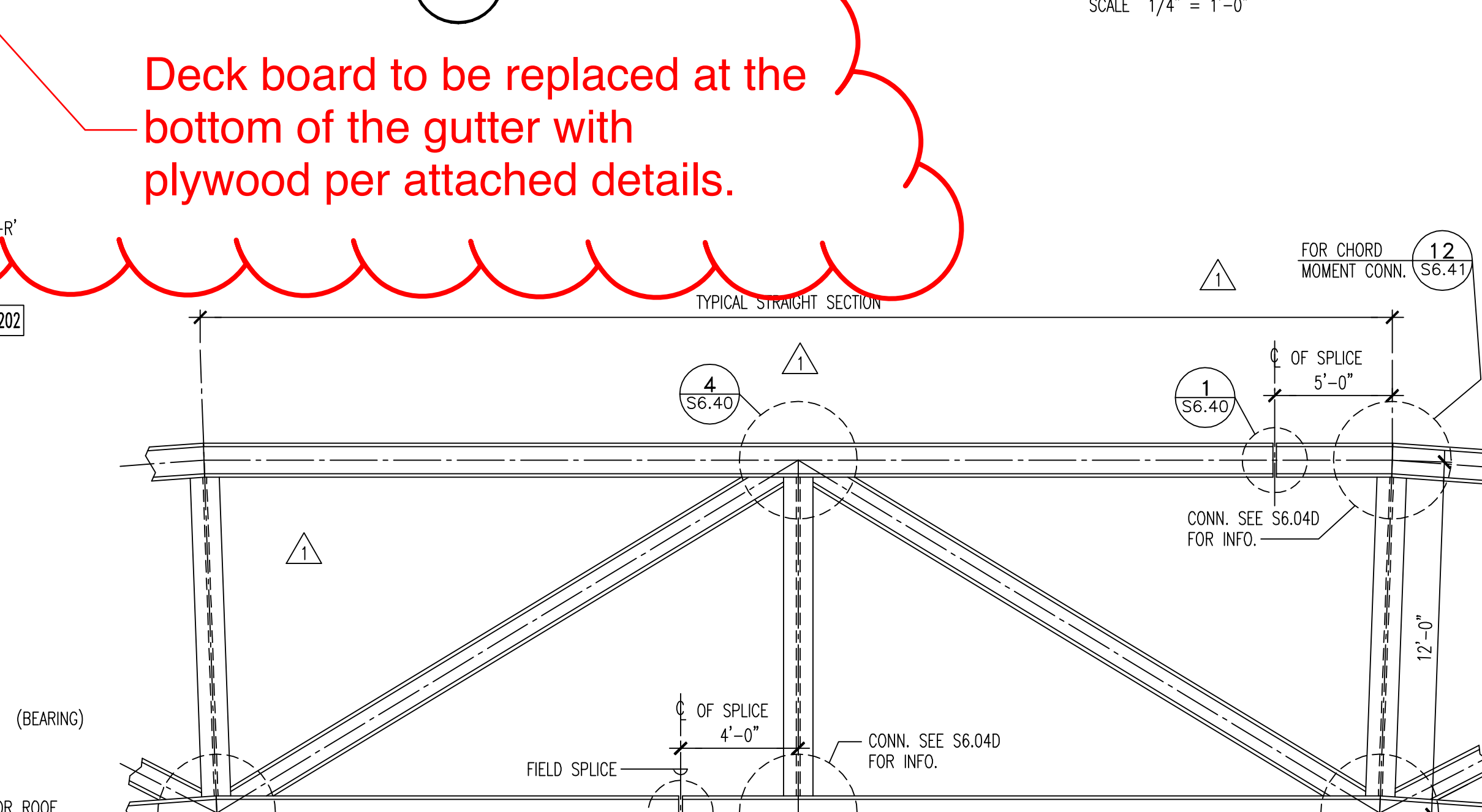
2 TRUSS '4B' ELEVATION



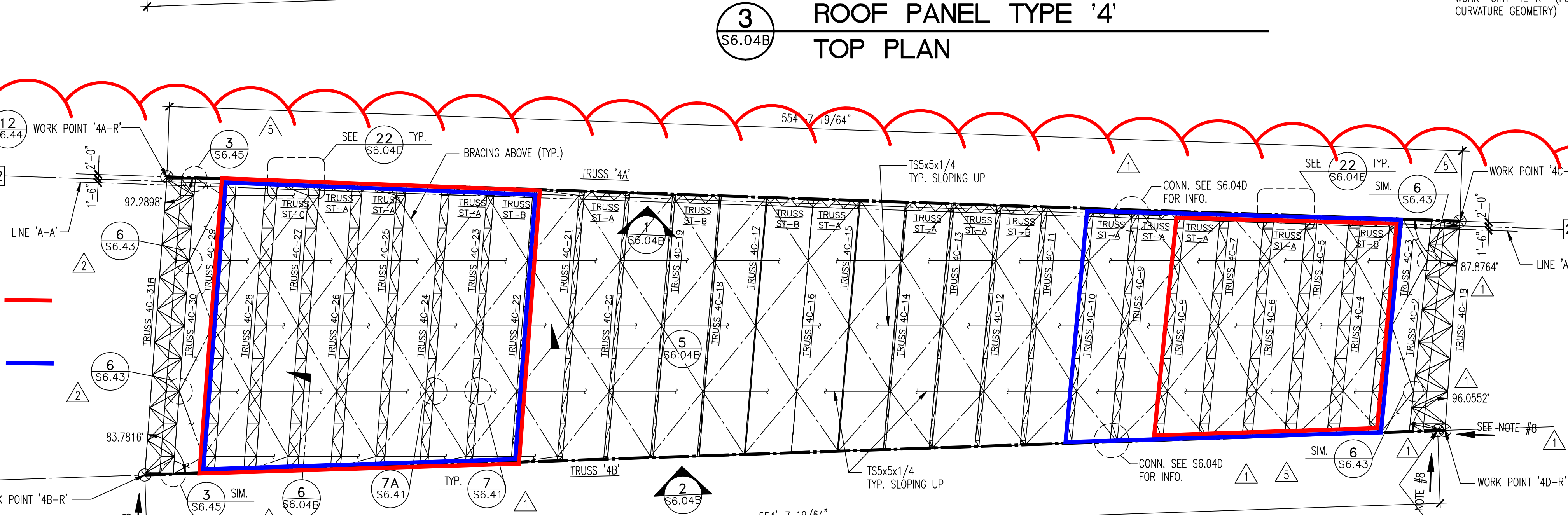
6 TYPICAL TRUSS '4C' ELEVATION



3 ROOF PANEL TYPE '4' TOP PLAN



7 TYPICAL TRUSS '4A' AND '4B' ELEVATION



4 ROOF PANEL TYPE '4' BOTTOM PLAN

- NOTES:
- PANEL TYPE 4(RF) AS SHOWN, PANEL TYPE 4(LF) SIMILAR HANDED.
 - SEE SHEET S2.07 AND ARCHITECTURAL DRAWINGS FOR OVERALL SETTING OUT.
 - SEE SHEETS S6.04A - 3D VIEWS
S6.04C - PURLIN LAYOUT
S6.04D - SECONDARY TRUSSES
S6.04E - WALL FRAMING
 - ALL STEEL ASTM A572 GRADE 50 UNLESS NOTED OTHERWISE.
 - STEEL TUBES ASTM A500 GRADE B.
 - TRUSS CHORD ASTM A913 GRADE 65 WHERE SHOWN.
 - TENSION CABLE:
MIN. BREAKING LOAD: = 7,000 K
MIN. STIFFNESS: ExA = 770,000 (K/in² x in²)
 - INDICATES DIRECTION OF LATERAL RESTRAINT.

4R Panel —
4L Panel —

4R Panel —
4L Panel —

Scope of Work

A point of contact for the Wisconsin Professional Baseball Park District (Stadium District) and the Milwaukee Brewers Baseball Club (MBBC) will be provided to the contractor.

1. General Conditions (A):

- A. All site staging areas must be coordinated with MBBC and the Stadium District in approved locations.
- B. Loading/staging areas are to be completely flagged off in approved areas only.
- C. All hoisting/rigging must be completed during times approved by the MBBC and Stadium District.
- D. Contractors shall notify MBBC and the Stadium District of all material deliveries a minimum of 48 hours prior to their scheduled arrival.
- E. All personnel on site will need a photo ID and will need to register with the building visitor management system in order to get access to the facility.
- F. All roof access is to be arranged by the Stadium District and the MBBC.
- G. Contractors are to provide portable toilets and service in a contained area throughout project duration.
- H. Smoking is prohibited in the building or outside of designated smoking areas. No smoking is permitted in this facility.
- I. MBBC and the Stadium District are a Factory Mutual insured property and all FM guidelines must be followed.
- J. Roofing Contractor shall take the necessary precautionary measures to provide adequate interior and exterior safety monitoring and protection of the internal and external contents during the removal and replacement of the existing roof system. It will be the roofing contractor's responsibility to coordinate with MBBC and the Stadium District.
 - a. The roofing contractor shall mark on a roof plan of all areas requiring original DensDeck replacement. The Roofing Contractor shall coordinate all demolition with MBBC and the Stadium District.
 - b. Contractor shall demarcate the entire daily work areas with yellow caution safety tape to ensure unauthorized personnel cannot enter the designated work areas.
 - c. At the end of the daily demolition period, and workday, the contractor shall remove all temporary interior protection coverings and demarcations and clean-up the areas. Contractor to ensure the space is returned to its previous condition upon the completion of the daily interior protection removal and clean-up.
- K. The Roofing Contractor, with assistance from the MBBC and the Stadium District, will locate electrical wiring within the parameters of the work area. The Roofing Contractor, prior to the fastening the new roof system, must mark out suspect electrical or other wiring systems locations and transpose onto the roof to avoid fastening through the electrical lines. Fasteners must be installed into the upper rib of the metal decking with proper 1" embedment.

2. Sika Sarnafil Scope of Work:

Sika Sarnafil 20-Year with 60MPH Windspeed Warranty

- A. Reference FM Global Approval Letter for assembly.
- B. This project will remediate corroding metal deck as identified in **Appendix A** (approximately 50 SF) or as discovered as an existing condition during the course of the project, replace wet or damaged DensDeck cover board as discovered, slice and leave the existing membrane in place and install a ½" DensDeck layer over the existing PVC and a new layer of Sika Sarnafil 60-mil PVC membrane over the new ½" DensDeck. The FM Global Plan Review for this project is attached in **Appendix A**. Please refer to the RoofNav Assembly Number of 371714-0-0 for this project application. The width of the rolls referenced in that assembly number is referred to as 5 feet but will actually be 6.56 feet in width. The owner will supply new metal decking, and the custom color 60-mil PVC membrane for this project (roll size is 6.56 feet by 65.6 feet), and fasteners and plates as identified in the RFP. Per the manufacturer recommendation, a 20% waste allowance will also be provided. Please see **Appendix A** for Sika installation details and specifications.

The following is a summary of the work requested for this proposal. The bidding contractor is responsible for reviewing and adhering to the Scope of Work and details attached in **Appendix A**.

1. Cover seating area below construction limits.
2. Where extensive corrosion has been identified (see Appendix A), remove existing roofing materials and insulation down to the structural metal deck-only in the amount that can be remediated and reroofed in each day, with the resulting debris to be removed from the building and premises.
3. Verify with the District representative the remediation needed: painting or removing and replacing the decking. This will be determined by the delamination and/or loss of cross section on the decking.
4. Remediate or replace the deck based on the above determination. This phase requires interior protection, particularly in areas without dropped ceilings, and extreme caution should be exercised because the deck condition may be weak in certain areas.
5. Remediate: Furnish all labor and material to wire brush the metal deck to remove all corrosion. Furnish and install a 24-gauge prefinished flat metal rust preventative coated sleeve, inlaid into the bottom of the web of the existing deck. Fasten in place with ¼" by ½" long Tek screws. Use Interstate Products, Inc. Rust Converter-One Step Rust Killer as the rust inhibitor over entire area.
6. Replace: Furnish all labor and material (Epic metal deck to be owner supplied) to perform metal deck replacement as detailed in Appendix A.
7. For any work outside of Base Bid, thoroughly document the condition of the deck and exact work done for remediation or replacement. Prior approval is needed for any additional remediation or replacement work and contractor will need to submit detailed photos showing the exact amount of each type of work (number of square feet remediated or replaced).

8. Use fastener tools with a depth locator and torque-limiting attachment as recommended or supplied by fastener manufacturer to ensure proper installation.
9. The surface of the substrate shall be inspected prior to installation of the Sarnafil roof membrane. The substrate shall be clean, dry, and free from debris and smooth with no surface roughness or contamination. Broken, delaminated, wet or damaged cover board shall be removed and replaced.
10. In areas where no corrosion has been identified or found to need remediation, slice existing membrane down to original DensDeck cover board.
11. Leave the existing membrane and insulation fasteners in place.
12. Inspect the existing DensDeck on the deck surface for wet or damaged insulation. Include in the base bid 20% new DensDeck replacement. Any amount of replacement not used to be credited back to owner. Add/Deduct unit cost for DensDeck replacement to be indicated on bid sheet.
13. Daily verification by a District representative and daily photo verification is required.
14. Replace any existing wet or damaged DensDeck with matching thickness DensDeck. Fasten replacement infill properly.
15. Once each days section of existing DensDeck board has been inspected and/or replaced, furnish and install one (1) layer of ½" DensDeck mechanically attached through the existing roof, fastener must be installed through the top of the rib of the existing structural metal deck and must not penetrate below the bottom web of the existing structural metal deck. See Appendix A for existing deck details.
16. Contractor to use Sarnafasteners #12 with 3" Sarnaplates at a rate of 12 per 4' x 8' board, 12 per board in the perimeter and 12 per board in the corners. Mechanically fasten to the structural deck following the manufacturers most recent specifications. See Appendix A for fastening detail.
17. Furnish all labor and material to install mechanically fastened (owner supplied) 60-mil PVC membrane. Use only Sarnadisc Maxload Plates and Sarnafil Maxload Fastener for S327 membrane attachment. The fastening pattern on this building shall be 6 inches on center at all locations. Install five (5) half sheets of Sarnafil S327 membrane fastened 6 inches on center around the perimeter of the panel. The interior sheets are to run perpendicular to the deck. All connections to be hot air welded following the manufacturers most recent specifications.
18. Furnish and install new wood blocking on top of the parapet wall on the exterior perimeter of the panel utilizing FM required fasteners guidelines to provide proper inside slope below the new membrane and metal edge. See Appendix A for edge flashing detail.
19. Instead of DensDeck, install 1/2" CDX plywood at where the ship ladder to panel 3L is located.
20. Provide a manufacturer's 20-year NDL warranty.

3. Details, Drains, Flashings, and Accessories:

- A. Contractor shall include the temporary removal of all stairways, gas lines, water line

- security cameras and/or conduits to allow for the installation of the new flashings and/or edge metal. Contractor to properly reinstall and flash per Sarnafil's minimum standards for warranty. The temporary removal of all items shall be closely coordinated with MBBC and the Stadium District and their preferred vendors.
- B. Drains – MBBC and the Stadium District will provide free and clear drains; drains must be returned free and clear at end of job. Contractors are to refurbish existing drains (wire brushing, painting and tapping), replace any missing or plastic strainers with cast iron components and replace any missing or broken clamping rings, as necessary. If the existing drains cannot be reworked, the Contractor shall replace the roof drains, strainers, leaders and all necessary piping to existing plumbing as per Sarnafil standard details.
 - C. At all rooftop pipe penetrations, remove all existing flashings and properly dispose of all materials legally off-site. Provide and install new Sika Sarnafil 60 mil membrane flashings to an acceptable substrate using an approved separator as per Sika Sarnafil standard details. All flashings shall be field wrapped directly to the substrate. The use of wedding cake or conical flashings are not accepted on this project.
 - D. At all adjoining interior parapet walls, ensure all perimeter edge nailers are secured properly per FM 1-49 including correct fastener & spacing or local code requirements, whichever is more stringent. Encapsulate the wall by fully adhering Sika Sarnafil membrane with 2170 Sarnacol Adhesive up and over the parapet wall. It will be required to remove the existing edge metal system, add a new wood nailer where required and replace with new sheet metal coping to match the existing and or approved by FM Global. Please provide, at all parapet wall sheet metal coping splices, exterior cover plates, shingle fashion properly set in specified caulking.

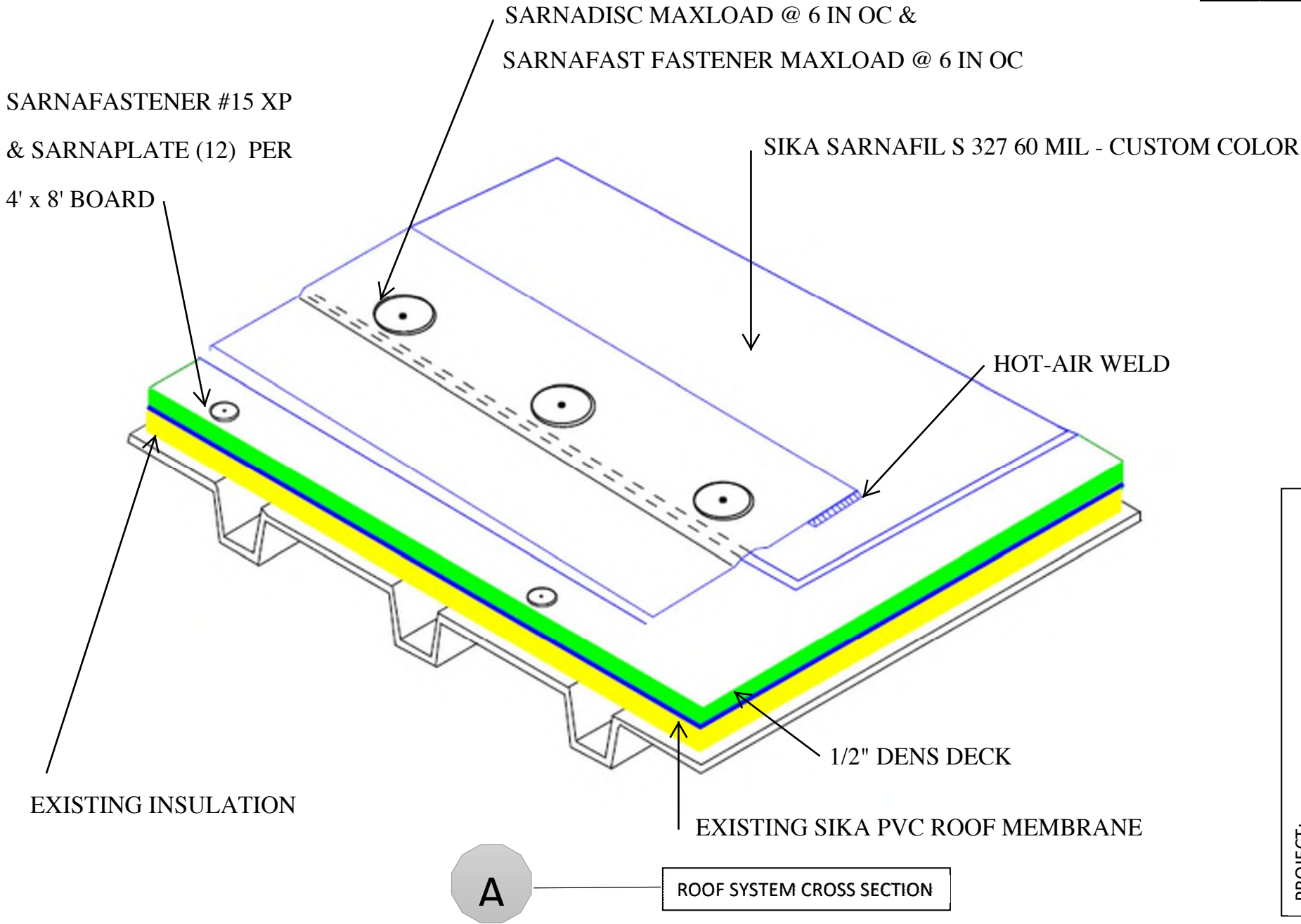
4. General Conditions (B):

- A. Provide a 20-Year Sikaplan System Warranty with 60MPH Wind Speed.
- B. No debris is to be stored on the roof; clean up and take away all debris on a daily basis.
- C. All contractors must be licensed to perform the work, per the bid documents, and comply with all applicable local building codes. Provide all permits and licenses to complete the work. Bids are to include all required permit fees, applicable taxes and engineering.
- D. Roofing contractor must use their own work force for labor. No subcontracting is permitted.
- E. Roofing contractor is responsible for providing adequate power supply to operate required power equipment.
- F. Roofing contractor shall submit a Certificate of Insurance to meet MBBC and Stadium District requirements.
- G. Contractor to provide Overhead and Profit on every change order to the Stadium District.
- H. Carry out all roof construction as per Sika Sarnafil, MBBC and Stadium District specifications & follow all OSHA safety requirements: The roofing contractor shall be responsible for all means and methods as they relate to safety and shall comply with all applicable building owner, local, state and federal requirements that are safety related. Safety shall be the responsibility of the roofing contractor. All related personnel shall be instructed daily to be mindful of the full time requirement to maintain a safe environment for the facility's occupants including staff, visitors, customers as well as themselves and the occurrence of the general public on or near the site.

- I. The planned construction project shall not interrupt building operations. Adhere to all local jurisdictions for noise/work hour restrictions.
- J. A bar graph schedule shall be provided by the Contractor prior to commencement of the project and on a weekly basis once the project has started. Contractor agrees to provide additional updated schedules as requested by Sika Sarnafil, MBBC, and the Stadium District.
- K. A daily work sheet shall be completed by the Contractor showing daily progress. This report will be due by 10:00 AM the following business day. A template will be provided by Sika Sarnafil.
- L. A roof plan showing work completed will be required daily to illustrate the work documented on the daily work sheets.
- M. Roof plans and drawings are provided for informational purposes only; contractor shall verify all field conditions prior to bid submission.
- N. Throughout the project, the roofing contractor shall complete all details concurrent with the installation of the field membrane. All roofing is to be watertight at end of day.

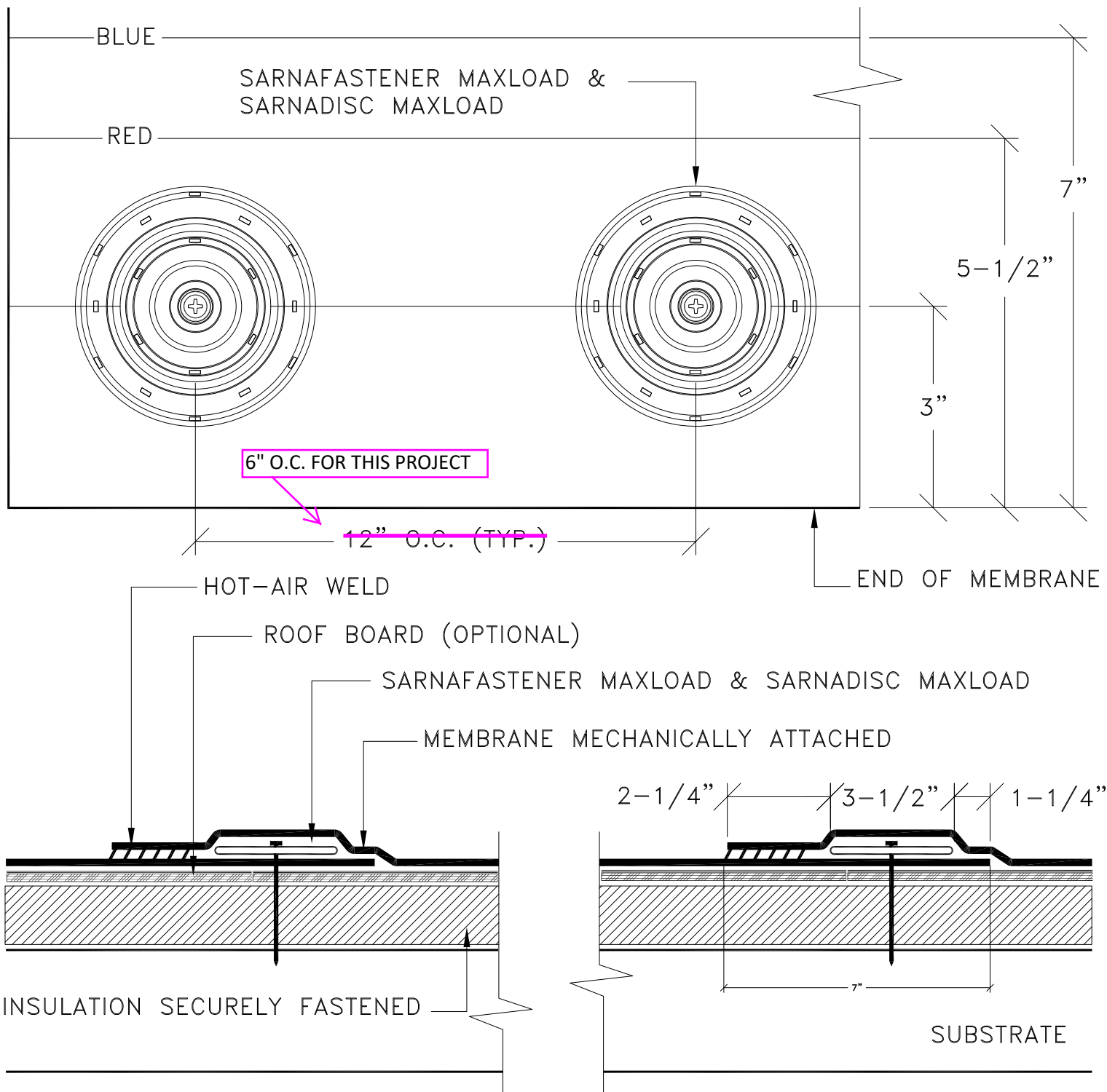
END SCOPE OF WORK

REV. NO.	DESCRIPTION	DATE	BY
NA	BID SET	05/19/20	PKJ



CLIENT:
MILWAUKEE BREWERS

PROJECT:
MILWAUKEE BREWERS
1 Brewers Way, Milwaukee, WI 53214



3-1/2" MAXLOAD DISC PLACEMENT PLAN

BUILDING TRUST

781-828-5400



usa.sarnafil.sika.com

JOB NAME:

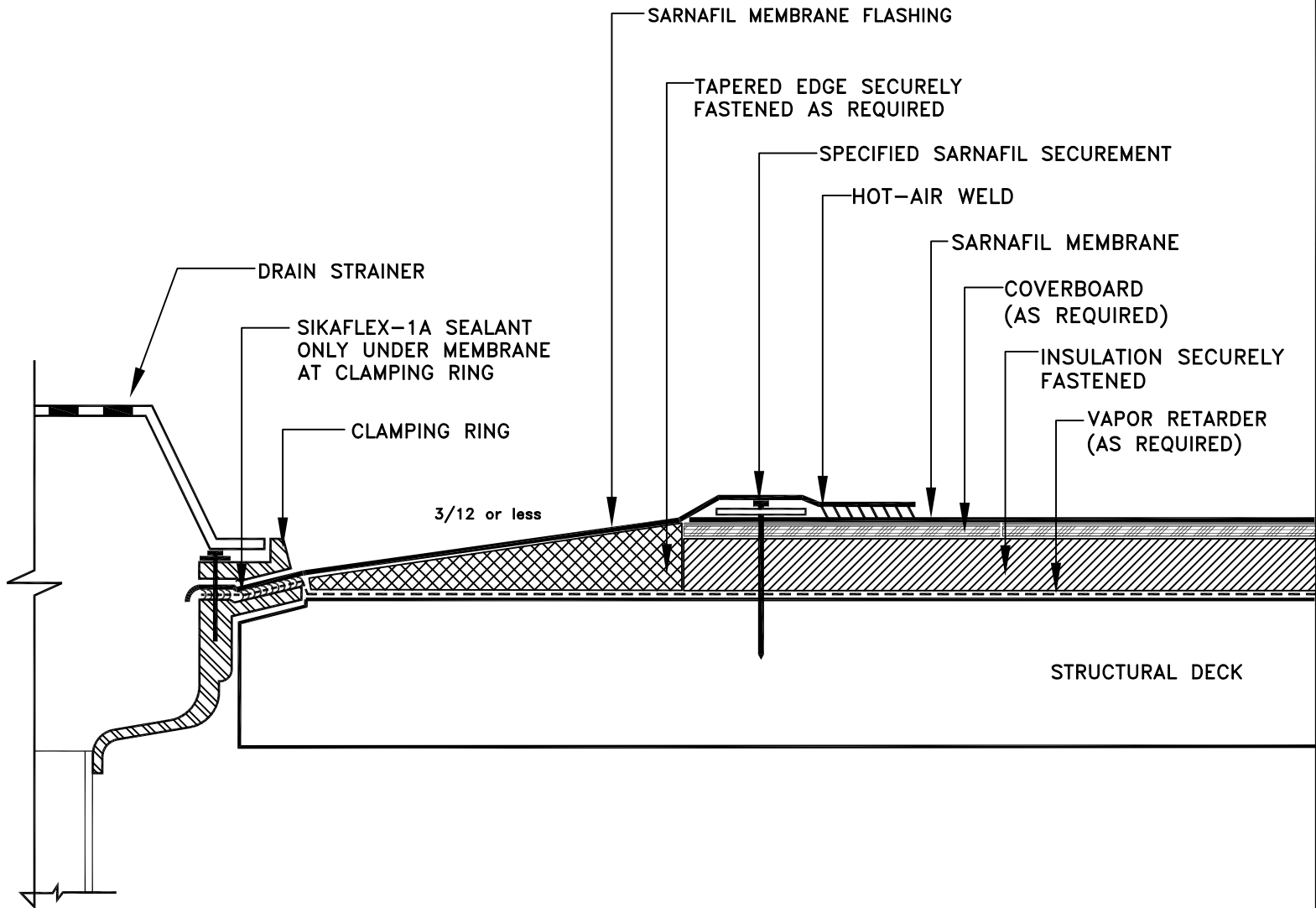
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DATE: 6/15

FILE NO.: MA-1P

DRW. NO.: XXX

AS A MEMBRANE MANUFACTURER, SIKA CORPORATION ("SIKA") REVIEWS DETAILS PREPARED BY THE CONSULTANT, ARCHITECT AND/OR ENGINEER FOR A PROJECT SOLELY FOR THE PURPOSE OF DETERMINING IF A SIKA WARRANTY MAY ISSUE FOR THE PROJECT. THIS REVIEW IS NOT TO BE CONSTRUED AS APPROVAL OF DETAILS BY SIKA AND IS NOT BEING CONDUCTED IN LIEU OF SOUND ENGINEERING AND ARCHITECTURAL PRACTICES AND JUDGMENT AND SHOULD NOT BE RELIED UPON FOR THAT PURPOSE. SIKA CORPORATION ASSUMES NO LIABILITY WITH RESPECT TO THE DESIGN OF THE ROOFING OR WATERPROOFING SYSTEM, THE ARCHITECT, CONSULTANT AND/OR ENGINEER OR DESIGN PROFESSIONAL FOR A PARTICULAR PROJECT BEARS THE SOLE RESPONSIBILITY FOR THE DESIGN OF THE ROOFING OR WATERPROOFING SYSTEM, FOR THE PREPARATION AND APPROVAL OF THE DETAILS AND SHOP DRAWINGS, AND FOR DETERMINING THEIR SUITABILITY FOR A PARTICULAR PROJECT OR APPLICATION, WHILE SIKA PROVIDES GENERAL INSTRUCTIONS FOR THE INSTALLATION OF ITS MEMBRANE AS WELL AS TRAINING FOR SIKA AUTHORIZED APPLICATORS, THE MEANS AND METHODS USED BY THE CONTRACTOR FOR SURFACE PREPARATION AS WELL AS THE MEANS AND METHODS EMPLOYED BY THE CONTRACTOR IN THE INSTALLATION OF THE SIKA MEMBRANE ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL SALE OF SIKA PRODUCTS AND SERVICES ARE SUBJECT TO SIKA' TERMS AND CONDITIONS OF SALE AVAILABLE AT USA.SARNAFIL.SIKA.COM.



NOTES:

- 1) EXISTING DRAIN BOWL, CLAMPING RING AND DRAIN ACCESSORIES ARE TO BE CLEANED FREE OF ALL CONTAMINATES.
- 2) SARNAFIL G459 MEMBRANE MUST BE USED IN AREAS OF ASPHALT CONTAMINATION.
- 3) VAPOR RETARDER SHALL BE SEALED AT EDGES.
- 4) FOR SUMPS GREATER THAN 3/12 REFER TO STEEP SUMP TECH BULLETINS

CLAMPING RING DRAIN

BUILDING TRUST

781-828-5400



usa.sarnafil.sika.com

JOB NAME:

SCALE: N.T.S.

DATE: 10/18

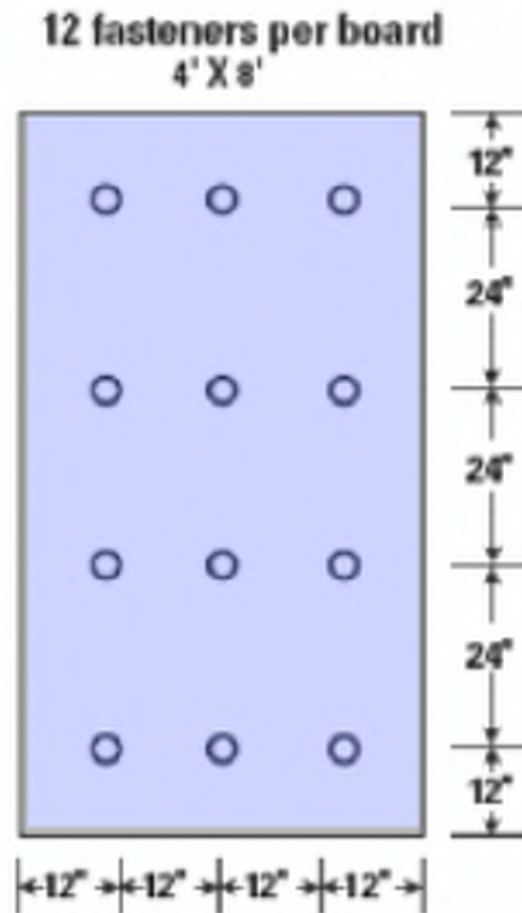
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DRW. NO.: XXX

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Sika Sarnafil

World Class Roofing and Waterproofing



FASTENING PATTERN FOR THE DENS DECK 4' x 8' BOARD



Sika Sarnafil, A Division of Sika Corporation, 16614 W. 159th Street, Suite 303, Lockport, IL 60441
Tel.: 800-532-5123, Office: 815-838-3838, Fax: 815-838-1722, www.sikacorp.com

Sarnafil®

THIS IS THE FASTENER TO SECURE THE SIKA PVC MEMBRANE
@ 6 INCHES OC THROUGHOUT

BUILDING TRUST



PRODUCT DATA SHEET

Sarnafast® Fastener MAXLoad

SARNAFASTENER #21 MAXLOAD IS A THREADED DRILL POINT FASTENER

PRODUCT DESCRIPTION

Sarnafastener #21 MAXLoad is a threaded drill point fastener used within Sarnafil® roof systems to attach Sarnafil® S 327 Membrane into steel decking (22 – 24 gauge) or 1/2 – 5/8" (12.7 – 15.9 mm) wood decks.

USES

Used in conjunction with Sarnadisc MAXLoad or Sarnarail for attachment direct to the roof deck.

Areas of Application

- New Roof Applications
- Reroof Applications
- Recover Applications

CHARACTERISTICS / ADVANTAGES

- Oversized roofing fastener with mini-drill point.
- Extra sharp spade point for quick installation in new or reroof applications.
- Pronounced buttress thread which increases both surface area and friction against the deck for excellent backout and pull out resistance.

APPROVALS / STANDARDS

- Factory Mutual 4470
- ICC Code Compliance – ESR 1157
- Miami-Dade County

PRODUCT INFORMATION

Chemical Base	Made from carbon steel, treated with a corrosion-resistant coating to meet the criteria for corrosion resistance.			
Packaging	Length	Thread	Packaging	Weight
	2" (51 mm)	Full	1000 / Pail	18 lb (8.2 kg)
	3" (76 mm)	Full	1000 / Pail	24 lb (10.9 kg)
	4" (102 mm)	3" (76 mm)	500 / Pail	28 lb (12.7 kg)
	5" (127 mm)	4" (102 mm)	500 / Pail	35 lb (15.9 kg)
	6" (152 mm)	4" (102 mm)	500 / Pail	42 lb (19.1 kg)
	7" (178 mm)	4" (102 mm)	250 / Pail	26 lb (11.8 kg)
	8" (203 mm)	4" (102 mm)	250 / Pail	29 lb (13.2 kg)
	10" (254 mm)	4" (102 mm)	250 / Box	35 lb (15.9 kg)
	12" (305 mm)	4" (102 mm)	250 / Box	42 lb (19.1 kg)
* One #3 Phillips drive bit is included in each box.				
Appearance / Color	Blue			
Shelf Life	N/A			
Storage Conditions	N/A			
Dimensions	<ul style="list-style-type: none">▪ Thread Diameter: 0.33" (8.4 mm)▪ Shank Diameter: 0.26" (6.6 mm)▪ Head Diameter: 0.66" (16.8 mm)▪ Head Style: #3 Phillips			

APPLICATION INSTRUCTIONS

APPLICATION

The Sarnafast® Fastener MAXLoad is fastened straight into the roof deck with a extra heavy-duty (6 amp minimum), variable speed (2000 rpm maximum), reversible screwgun with a clutch release and a #3 Phillips drive bit. Sarnafast® Fastener MAXLoad must penetrate steel roof decks by 1" (25mm) and the underside of wood sheathing roof decks by a 1/2" (13mm). Care must be taken to not damage the roof deck. Choose the correct fastener length and do not overdrive or underdrive the fastener. Pullout tests are required prior to job start when used with existing wood sheathing roof decks for technical evaluation.

MAINTENANCE

Standard maintenance of roofs should include regular inspection of flashings, drains and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

Warranty

Upon successful completion of the installed roof by the

Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

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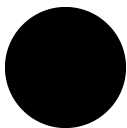
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Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil
100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet
Sarnafast® Fastener MAXLoad
September 2019, Version 03.01
020945051100001015

SarnafastFastenerMAXLoad-en-US-(09-2019)-3-1.pdf



THIS IS THE PLATE TO SECURE THE SIKA PVC MEMBRANE @ 6 INCHES OC THROUGHOUT; THE SARNAFAST FASTENER MAXLOAD WILL BE USED TO SECURE THIS PLATE

BUILDING TRUST



PRODUCT DATA SHEET

SARNADISC MAXLOAD

The Sarnadisc MAXLoad is a large diameter high strength round plate used with the Sarnafastener #21 MAXLoad to in-seam attach Sarnafil® S327 roof membrane directly to steel decking (22-24 gauge) and wood sheathing (>15/32”).

PRODUCT INFORMATION

USES

Used with the Sarnafastener #21 MAXLoad when attaching Sarnafil S327 membrane to the roof deck.

AREAS OF APPLICATION

- New Roof Applications
- Reroof Applications

FEATURES / BENEFITS

- Barbed plate design grips membrane securely.
- High ribs and an extruded center hole provide increased strength.
- Round design provides an even distribution of loads and eliminates sharp corners that can damage the insulation or membrane.

TESTS

STANDARDS / APPROVALS

- Factory Mutual 4470
- ICC Code Compliance – ESR 1157
- Miami-Dade County

PRODUCT DATA

FORM

COMPOSITION

Round steel plate made from 20 gauge (0.9 mm) Galvalume® coated steel, with three concentric rings of 6 eyehooks (18 total).

COLOR

Gray

DIMENSIONS

Diameter: 3.5 in (88 mm)

PACKAGING

500 per pail, 52 lbs (23.5 kg) per pail

SYSTEM INFORMATION

INSTALLATION	The Sarnadisc MAXLoad is positioned on the surface of the Sarnafil S327 membrane and a Sarnafastener #21 MAXLoad is placed through the center of it. The Sarnafastener #21 MAXLoad is then set into the roof deck, clamping the Sarnafil S327 membrane in place.	
AVAILABILITY	From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.	
MAINTENANCE	Standard maintenance of Sarnafil or Sikaplan systems should include regular inspections of flashing, drains, and termination sealants at least twice a year and after each storm.	
WARRANTY	As a Sika supplied accessory, Sarnadisc MAXLoad is covered under Sika Corporation warranties.	
LEGAL NOTES	<p>All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.</p> <p>Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at usa.sarnafil.sika.com or by calling Sika's Technical Service Department at 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.</p> <p>Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.</p> <p>NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.</p>	
SIKA CORPORATION – ROOFING	UNITED STATES 100 Dan Road Canton, MA 02021 800-451-2504 (p) 781-828-5365 (f) usa.sarnafil.sika.com webmaster.sarnafil@us.sika.com	SIKA CANADA INC. 6915 Davand Drive Mississauga, ON L5T 1L5 905-795-3177 (p) 905-795-3192 (f) can.sika.com marketing.construction@ca.sika.com

THIS IS THE CUSTOM COLOR SIKA PVC TO BE USED AS THE ROOF COVERING FOR THE ENTIRE PROJECT; THIS MATERIAL WILL ALSO BE USED FOR THE FLASHING MEMBRANE AT ALL DETAILS

BUILDING TRUST



PRODUCT DATA SHEET

SINCE THIS IS A CUSTOM COLOR IT IS NOT CONSIDERED "ENERGYSMART"

Sarnafil® S 327-60 EnergySmart

SARNAFIL S 327 ROOF MEMBRANE IS A PVC THERMOPLASTIC MEMBRANE

PRODUCT DESCRIPTION

Sarnafil® S 327-60 EnergySmart Roof Membrane is a PVC thermoplastic membrane produced with an integral polyester reinforcement for high strength, is highly reflective, guaranteed for thickness, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up.

USES

Sarnafil S 327 is used in mechanically attached applications with various fastening methods, over various substrates.

Areas of Application

- New Roofs
- Reroofs
- Recovers

CHARACTERISTICS / ADVANTAGES



- Highly reflective
- Excellent tear strength resistance
- Factory applied lacquer coated to reduce dirt pick up
- Hot-air welded seams for long-term performance
- Proven membrane performance
- Guaranteed thickness
- Superior fire resistance

APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- ICC Code Compliance – ESR 1157
- Miami-Dade County
- Florida Building Code
- NSF/ANSI 347: Platinum Certified
- ENERGY STAR®
- California Title 24
- LEED / Green Globes

PRODUCT INFORMATION

Chemical Base	High-quality, PVC membrane containing ultraviolet light stabilizers, flame retardant and polyester scrim reinforcement with a unique lacquer coating on the top surface.	
Recycled Content	9 % Pre-consumer, 1 % Post-consumer	
Reinforcing Material	Polyester	
Packaging	60 mil (1.5 mm) Membrane Bareback: 10 ft x 100 ft (3 m x 30 m) roll, 389 lbs (177 kg) per roll 8 rolls per pallet 5 ft x 100 ft (1.5 m x 30 m) roll, 195 lbs (89 kg) per roll 12 rolls per pallet Coverstrip: 8" x 100 ft (20 cm x 30 m) roll, 25 lbs (12 kg) per roll 25 per pallet	
Appearance / Color	▪ Top: White, Tan, and Reflective Gray ▪ Bottom: Gray	
Shelf Life	N/A	
Storage Conditions	Store rolls on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect the ease of membrane weldability.	
Overall Thickness	60 mil 45 mil	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Thickness Above Scrim	27 mil 16 mil	(-) (ASTM Type III D-4434 Spec. Requirement)

TECHNICAL INFORMATION

Resistance to Static Puncture	Pass 33 lbf (15 kg)	(ASTM D-5602) (ASTM Type III D-4434 Spec. Requirement)
Resistance to Dynamic Puncture	Pass 14.7 ft-lbf (20 J)	(ASTM D-5635) (ASTM Type III D-4434 Spec. Requirement)
Tensile Strength	305 lbf (1356 N) 200 lbf (890 N)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Elongation at Break	28.5 & 29.5 % MD & CMD ¹ 15 & 15 % MD & CMD ¹	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
¹ MD = Machine Direction, CMD = Cross Machine Direction.		
Linear Dimensional Change	-0.12 % 0.5 %	(ASTM D-1204) (ASTM Type III D-4434 Spec. Requirement)
Tear Strength	48 lbf (213 N) 45 lbf (200 N)	(ASTM D-1004) (ASTM Type III D-4434 Spec. Requirement)
Seam Strength	Pass 75 % of original ²	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
² Failure occurs through membrane rupture not seam failure.		
Low Temperature Bend	Pass Pass -40°F (-40°C)	(ASTM D-2136) (ASTM Type III D-4434 Spec. Requirement)

Retention of Properties after Heat Aging	Tensile Strength, % of original: Pass (ASTM D-3045)		
	Elongation, % of original: Pass (ASTM D-751)		
	Tensile Strength, % of original: 90 (ASTM Type III D-4434 Spec. Requirement)		
	Elongation, % of original: 90		
UV Exposure	10,000 hours (ASTM G-154)		
	5,000 hours (ASTM Type III D-4434 Spec. Requirement)		
	Cracking (7x magnification)	None	
	Discoloration (by observation)	Negligible	
	Crazing (7x magnification)	None	
Weight Change after Immersion in Water	2.0 % (ASTM D-570)		
	± 3.0 % (ASTM Type III D-4434 Spec. Requirement)		
Solar Reflectance	EnergySmart Colors	Initial Solar Reflectance ¹	3-Year Solar Reflectance ¹
	EnergySmart White ²	0.84	0.76
	EnergySmart Tan ²	0.73	0.65
	EnergySmart Reflective Gray ²	0.73	0.66
¹ Solar Reflectance testing according to ASTM C1549.			
² Meets ENERGY STAR®, LEED, Green Globes, and California's Title 24 criteria for Low and Steep Slope applications.			
Thermal Emittance	EnergySmart Colors	Initial Thermal Emittance ¹	3-Year Thermal Emittance ¹
	EnergySmart White ²	0.86	0.85
	EnergySmart Tan ²	0.85	0.86
	EnergySmart Reflective Gray ²	0.89	0.88
¹ Thermal Emittance testing according to ASTM C1371, Slide Method.			
² Meets ENERGY STAR®, LEED, Green Globes, and California's Title 24 criteria for Low and Steep Slope applications.			
Solar Reflectance Index	EnergySmart Colors	Initial Solar Reflectance Index	3-Year Solar Reflectance Index
	EnergySmart White ¹	105	93
	EnergySmart Tan ¹	89	78
	EnergySmart Reflective Gray ¹	90	80
¹ Meets ENERGY STAR®, LEED, Green Globes, and California's Title 24 criteria for Low and Steep Slope applications.			

APPLICATION INSTRUCTIONS

APPLICATION

Sarnafil S 327 is rolled out after proper preparation of the approved substrate and fastened to the roof deck with appropriate mechanically attached system with Sarnafasteners in accordance with Sika's technical

requirements. Sarnafil S 327 seams are heat-welded together by trained operators using hot-air welding equipment. Different mechanically attached systems require different application methods. Please consult Sika's Specifications or Applicator Handbook for detailed installation procedures.

MAINTENANCE

Standard maintenance of Sarnafil systems should include inspections of flashings, drains, and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

Warranty

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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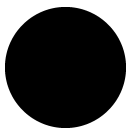
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil

100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet
Sarnafil® S 327-60 EnergySmart
September 2019, Version 04.01
020905012060153002

SarnafilS327-60EnergySmart-en-US-(09-2019)-4-1.pdf

BUILDING TRUST



THIS IS THE FASTENER TO BE USED FOR THE 1/2 INCH DENSDECK
PRIME - THIS SHALL BE INSTALLED (12) PER 4'x8' BOARD

BUILDING TRUST



PRODUCT DATA SHEET

Sarnafast® Fastener XP

SARNAFASTENER #15 XP IS A THREADED DRILL POINT FASTENER

PRODUCT DESCRIPTION

Sarnafastener #15 XP is a threaded drill point fastener used within Sarnafil® roof systems to attach Sarnafil® S 327 Membrane, Sikaplan Fastened Membrane or Sarnatherm® insulation, Sarnatherm® roof boards, gypsum roof boards, or other Sika approved boards into steel decking (18 – 24 gauge), wood plank (min. 1–1/2”), or wood sheathing (> 15/32”).

USES

Used in conjunction with Sarnadiscs, Sarnarail, Sarnabars, or Sarnaplates for attachment direct to the roof deck.

Areas of Application

- New Roof Applications
- Reroof Applications
- Recover Applications

CHARACTERISTICS / ADVANTAGES

- Oversized heavy shank and thread diameters.
- Deep buttress threads for high pullout resistance.
- Miniature drill point penetrates decks quickly and contributes to exceptional resistance to back out.

APPROVALS / STANDARDS

- Factory Mutual 4470
- ICC Code Compliance – ESR 1157
- Miami-Dade County

PRODUCT INFORMATION

Chemical Base	Made from carbon steel, treated with a corrosion-resistant coating to meet the criteria for corrosion resistance.
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Packaging	Length	Thread	Packaging	Weight
	1–1/4" (32 mm)	Full	1000 / Pail	12 lb (5.4 kg)
	2" (51 mm)	Full	1000 / Pail	20 lb (9.1 kg)
	3" (76 mm)	Full	1000 / Pail	29 lb (13.2 kg)
	4" (102 mm)	3" (76 mm)	1000 / Pail	38 lb (17.2 kg)
	5" (127 mm)	4" (102 mm)	500 / Pail	24 lb (10.9 kg)
	6" (152 mm)	4" (102 mm)	500 / Pail	28 lb (12.7 kg)
	7" (178 mm)	4" (102 mm)	500 / Pail	34 lb (15.4 kg)
	8" (203 mm)	4" (102 mm)	500 / Pail	38 lb (17.2 kg)
	9" (229 mm)	4" (102 mm)	500 / Pail	42 lb (19.1 kg)
	10" (254 mm)	4" (102 mm)	500 / Pail	47 lb (21.3 kg)
	12" (305 mm)	4" (102 mm)	500 / Pail	56 lb (25.4 kg)
	14" (356 mm)	4" (102 mm)	250 / Box	32 lb (14.5 kg)
	16" (406 mm)	4" (102 mm)	250 / Box	38 lb (17.2 kg)
	18" (457 mm)	4" (102 mm)	250 / Box	41 lb (18.6 kg)
	20" (508 mm)	4" (102 mm)	250 / Box	44 lb (20 kg)

#3 Phillips bit included in each bucket/carton

Appearance / Color	Blue
Shelf Life	N/A
Storage Conditions	N/A
Dimensions	<ul style="list-style-type: none">▪ Thread Diameter: 0.265" (6.7 mm)▪ Shank Diameter: 0.202" (5.1 mm)▪ Head Diameter: 0.435" (11 mm)▪ Head Style: #3 Phillips

APPLICATION INSTRUCTIONS

APPLICATION

*Pre-drill a 3/16" (4.8 mm) pilot hole at least 1/2" (13 mm) deeper than fastener embedment.

The Sarnafastener #15 XP is fastened straight into the roof deck with a heavy-duty (4 amp minimum), variable speed (0 – 2500 rpm), reversible screwgun with a clutch release and a #3 Phillips drive bit.

Sarnafastener #15 XP must penetrate steel and wood plank roof decks by 1" (25 mm) and the underside of wood sheathing roof decks by a 1/2" (13 mm).

Care must be taken to not damage the roof deck. Choose the correct fastener length and do not overdrive or underdrive the fastener. Pullout tests are required prior to job start when used with existing wood sheathing roof decks for technical evaluation.

MAINTENANCE

Standard maintenance of roofs should include regular inspection of flashings, drains and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

Warranty

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

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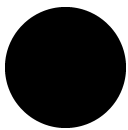
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Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil
100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

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Product Data Sheet
Sarnafast® Fastener XP
September 2019, Version 03.01
020945051100001009

SarnafastFastenerXP-en-US-(09-2019)-3-1.pdf

BUILDING TRUST



THIS IS THE PLATE TO BE USED FOR THE 1/2 INCH DENSDECK
PRIME - THIS SHALL BE INSTALLED (12) PER 4'x8' BOARD

BUILDING TRUST



PRODUCT DATA SHEET

Sarnaplate

SARNAPLATE IS A STRESS PLATE

PRODUCT DESCRIPTION

Sarnaplate is a specially-designed stress plate used with #12, #14, and #15 Sarnafasteners to attach Sarnatherm® insulation, Sarnatherm® roof boards, gypsum roof boards, or other Sika approved boards directly to the roof deck prior to the installation of the Sarnafil® mechanically-attached or adhered roof membrane.

USES

Used with Sarnafasteners to attach insulation or roof boards direct to the roof deck.

Areas of Application

- New Roof Applications
- Reroof Applications
- Recover Applications

CHARACTERISTICS / ADVANTAGES

- Designed to provide protection to the membrane underside from abrasion by the fastener head.
- Superior resistance to bending.

APPROVALS / STANDARDS

- Factory Mutual 4470
- ICC Code Compliance – ESR 1157
- Miami-Dade County

PRODUCT INFORMATION

Chemical Base	26 gauge (0.46 mm) stamping of SAE 1010 steel with a Galvalume® coating
Packaging	1000 per pail, 45 lbs (20.4 kg) per pail
Appearance / Color	Gray
Shelf Life	N/A
Storage Conditions	N/A
Dimensions	Square: 3" (75 mm) x 3" (75 mm) Round: 3" (75 mm) Diameter

APPLICATION INSTRUCTIONS

APPLICATION

Sarnaplate is positioned on the surface of the insulation board. A Sarnafastener is set through the center of it and set into the roof deck. The Sarnaplate clamps the insulation board in place.

MAINTENANCE

Standard maintenance of Sarnafil® or Sikaplan® systems should include inspections of flashings, drains, and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

Warranty

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator

BASIS OF PRODUCT DATA

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OTHER RESTRICTIONS

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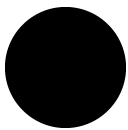
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Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil
100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet
Sarnaplate
September 2019, Version 03.01
020945051100002006

Sarnaplate-en-US-(09-2019)-3-1.pdf

BUILDING TRUST





PRODUCT DATA SHEET

Sarnaclad

SARNACLAD IS A PVC-COATED, HEAT-WELDABLE SHEET METAL

PRODUCT DESCRIPTION

Sarnaclad is a PVC-coated, heat-weldable sheet metal capable of being formed into a variety of shapes and profiles.

USES

Perimeter edge, wall, or curb flashings.

Areas of Application

- New Roofs
- Recover Roofs

CHARACTERISTICS / ADVANTAGES

- Allows direct heat welding of membrane to form monolithic system.
- Resists staining from airborne dirt and pollutants.

PRODUCT INFORMATION

Chemical Base	Meets ASTM A-653 for 24 gauge, G90 galvanized metal sheet with a 20 mil (0.5 mm) unsupported membrane comprised of the same time tested Sarnafil® formula laminated on one side.
Recycled Content	Recycled Content (metal): 25 % Post Consumer, 6 % Pre Consumer Recycled Content (membrane): 0 %
Packaging	4 ft x 8 ft sheet: <ul style="list-style-type: none">▪ 25 sheets per pallet, 35 lbs (16 kg) per sheet, 905 lbs (410.5 kg) per pallet 4 ft x 10 ft sheet: <ul style="list-style-type: none">▪ 25 sheets per pallet, 44 lbs (20 kg) per sheet, 1,130 lbs (512.6 kg) per pallet
Appearance / Color	White, Tan, Reflective Gray, Patina Green, Lead Grey, Copper Brown, Evergreen, or Bronze
Shelf Life	N/A
Storage Conditions	N/A
Dimensions	Two sizes: <ul style="list-style-type: none">▪ 4 ft x 8 ft (1.2 m x 2.4 m)▪ 4 ft x 10 ft (1.2 m x 3.0 m) (White only)

APPLICATION INSTRUCTIONS

APPLICATION

Sarnaclad is cut and formed to shape on standard sheet metal equipment. Sarnaclad is fastened in position in accordance with Sika-Roofing technical requirements. The Sarnaclad joints are covered by 2" (50 mm) wide aluminum foil tape and then made watertight by heat-welding a 4" (100 mm) wide membrane strips over the tape. Membrane is then heat-welded to the Sarnaclad.

MAINTENANCE

Standard maintenance of Sarnafil® or Sikaplan® systems should include inspections of flashings, drains, and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

Warranty

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

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Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com



Product Data Sheet
Sarnaclad
February 2020, Version 03.01
020945012000000005

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THIS IS THE ADHESIVE TO BE USED AT ALL VERTICAL WALL FLASHINGS ON THE PROJECT AND PER ANY SIKA SARNAFIL DETAIL THAT WILL HAVE ADHESIVE USED FOR FLASHING MATERIALS

BUILDING TRUST



PRODUCT DATA SHEET

Sarnacol®-2170 (US)

SARNACOL 2170 MEMBRANE ADHESIVE IS A SOLVENT-BASED REACTIVATING ADHESIVE

PRODUCT DESCRIPTION

Sarnacol®-2170 (US) is a solvent-based reactivating adhesive used for Sarnafil® or Sikaplan® Adhered roofing systems. It is also used within any Sika approved roofing or waterproofing system for adhering flashings. Sarnacol 2170 is formulated for adhering membranes in a two-step process to clean, dry, surfaces with no slope restrictions.

USES

Sarnacol 2170 is uniquely formulated to be compatible with Sarnafil® and Sikaplan® membranes.

Areas of Application

Bareback Membrane Substrates

- Isocyanurate Organic Facer
- Isocyanurate Glass Facer
- Smooth Plywood
- Metal
- Concrete Wall
- Glass Faced Gypsum
- Prime Glass Faced Gypsum
- Securock® Gypsum-Fiber

Feltback Membrane Substrates

- Isocyanurate Organic Face
- Isocyanurate Glass Facer
- Smooth Plywood
- Metal
- Concrete Deck
- Concrete Wall
- Masonry Wall
- Cellular Concrete
- Glass Faced Gypsum
- Prime Glass Faced Gypsum

- Securock® Gypsum-Fiber

CHARACTERISTICS / ADVANTAGES

Low temperature applications

APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Miami-Dade
- Florida Building Code
- ICC Code Compliant – ESR 1157

PRODUCT INFORMATION

Packaging	5 gal (18.9 L) pails, 37 lb (16.8 kg) per pail, 48 pails per pallet
Appearance / Color	Dark Yellow
Shelf Life	12 months if stored properly in original unopened, sealed and undamaged packaging
Storage Conditions	Store in tightly closed containers in temperatures between -4°F (-20°C) and 86°F (30°C)
Volatile organic compound (VOC) content	694.2 g/L

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All work surfaces should be clean, dry, free of dirt, dust, debris, oils and other contaminants.

MIXING

Mix well before use.

APPLICATION

General Application:

Apply Sarnacol 2170 using solvent-resistant ¾" (19 mm) nap paint rollers in a smooth, even coating with no gaps, globs, puddles or similar inconsistencies. Clean any wet adhesive from the seams before welding.

Bareback Membrane Application:

Apply Sarnacol 2170 to the substrate at a rate of 80 - 100 ft²/gal (2 - 2.5 m²/L) and allow to dry. After the substrate adhesive has dried completely, apply Sarnacol 2170 to the back side of the membrane at a rate of 200 ft²/gal (4.9 m²/L) and allow to become tacky (producing strings) when touched with a dry finger. Do not allow the adhesive on the back of the membrane to dry. Roll the tacky coated membrane onto the previously coated dry substrate being careful to avoid wrinkles. Press the bonded sheet firmly in place with a minimum 100 lb (45 kg) steel roller by rolling in two directions. Use a hand roller on vertical flashings.

Feltback Membrane Application:

Apply Sarnacol 2170 to the substrate at a rate of 80 - 100 ft²/gal (2 - 2.5 m²/L) and allow to dry. Apply a second coat of adhesive at a rate of 100 ft²/gal (2.5 m²/L) to the previously coated dried substrate. Do not allow the second coat of adhesive to dry. Unroll the membrane immediately into the second layer of wet adhesive. Press the bonded sheet firmly in place with a minimum 100 lb (45 kg) steel roller by rolling in two directions. Use a hand roller on vertical flashings.

COVERAGE

The coverage rate may vary depending on substrate porosity, ambient temperature, and experience. The

typical coverage rate for the following applications are:

- Bareback membrane: 57 - 67 ft²/gal. (5.3 - 6.2 m²/L)
- Feltback membrane: 44 - 50 ft²/gal. (4.1 - 4.6 m²/L)

MAINTENANCE

Standard maintenance of roofs, green roofs and plaza decks should include regular inspection of flashings, drains and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

Warranty

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator

LIMITATIONS

Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents or other means of ingress for odors and/or vapors into the building/structure during product application and cure.

- Do not apply in wet weather or to a wet surface.
- Do not install when air temperature is within 5°F (3°C) of dew point.
- Open time varies depending on weather and temperature conditions.
- Eliminate uneven surfaces to ensure positive contact between the membrane and the substrate.
- Unused adhesive can be saved for use at a later date by resealing the pail cover.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

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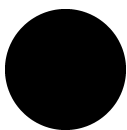
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Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil
100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537

SIKA CORPORATION – ROOFING
100 Dan Road
Canton, MA 02021
Phone: +1-800-451-2504
Fax: +1-781-828-5365



Product Data Sheet
Sarnacol®-2170 (US)
September 2019, Version 03.01
020945072000000037

Sarnacol-2170US-en-US-(09-2019)-3-1.pdf

BUILDING TRUST





PRODUCT DATA SHEET

Sarnastop

SARNASTOP IS AN ALUMINUM ALLOY BAR

PRODUCT DESCRIPTION

Sarnastop is an aluminum alloy bar used with approved fasteners to clamp Sarnafil® or Sikaplan® membrane to the roof deck, walls, curbs and other details.

USES

Sarnastop distributes the loads uniformly across a series of fastening points, maximizing fastener pullout and backout resistance.

Areas of Application

- Base of walls
- Curbs
- Transitions

CHARACTERISTICS / ADVANTAGES

- Easy to install

PRODUCT INFORMATION

Chemical Base	Produced from 6063 T6 extruded aluminum alloy with a mill finish. Sarnastop is provided with predrilled holes at 6" (152 mm) o.c.
Packaging	25 pieces per box, 1.5 lbs (680 g) per piece
Appearance / Color	Gray
Shelf Life	N/A
Storage Conditions	N/A
Dimensions	Width: 1" (25.4 mm) Length: 10 ft (3 m) Thickness: 0.13" (3 mm)

APPLICATION INSTRUCTIONS

APPLICATION

Sarnastop is positioned over the top of the membrane and fastened to the substrate with approved fasteners. Fastener spacing is determined by Sika technical

requirements. The fasteners are set to a depth to clamp the membrane in place without damaging the substrate. Depending on the specific detail, a membrane coverstrip is welded over the Sarnastop for watertightness.

MAINTENANCE

Standard maintenance of Sarnafil® or Sikaplan® systems should include regular inspection of flashings, drains and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

Availability

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan syste

Warranty

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BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

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ENVIRONMENTAL, HEALTH AND SAFETY

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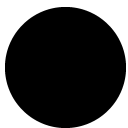
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Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil
100 Dan Road
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Phone: 52 442 2385800
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Product Data Sheet
Sarnastop
September 2019, Version 02.01
020945051100000017

Sarnastop-en-US-(09-2019)-2-1.pdf

BUILDING TRUST





PRODUCT DATA SHEET

Sikaflex®-1A

ELASTOMERIC JOINT SEALANT / ADHESIVE

PRODUCT DESCRIPTION

Sikaflex®-1A is a premium-grade, high-performance, moisture-cured, 1-component, polyurethane-based, non-sag elastomeric sealant. Sikaflex-1a can be used in green and damp concrete applications. Meets Federal Specification TT-S-00230C, Type II, Class A. Meets ASTM C-920, Type S, Grade NS, Class 35, use T, NT, O, M, G, I, A. Canadian standard CAN/CGSB 19.13-M87.

USES

- Designed for all types of joints where maximum depth of sealant will not exceed 1/2 in.
- Excellent for small joints and fillets, windows, door frames, reglets, flashing, common roofing detail applications, and many construction adhesive applications.
- Suitable for vertical and horizontal joints; readily placeable at 40°F
- Has many applications as an elastic adhesive between materials with dissimilar coefficients of expansion.
- Submerged conditions, such as canal and reservoir joints.

CHARACTERISTICS / ADVANTAGES

- Eliminates time, effort, and equipment for mixing, filling cartridges, pre-heating or thawing, and cleaning of equipment.
- Fast tack-free and final cure times.
- High elasticity - cures to a tough, durable, flexible consistency with exceptional cut and tear -resistance.
- Stress relaxation.
- Excellent adhesion - bonds to most construction materials without a primer.
- Excellent resistance to aging, weathering.

- Proven in tough climates around the world.
- Can be applied to green concrete 24 hours after pour
- Can be applied to damp concrete 1 hour after getting wet
- Odorless, non-staining.
- Jet fuel resistant.
- Certified to the NSF/ANSI Standard 61 for potable water.
- Urethane-based; suggested by EPA for radon reduction.
- Paintable with water-, oil- and rubber-based paints.
- Capable of $\pm 35\%$ joint movement.

APPROVALS / STANDARDS

- ASTM C 920, Type S, Grade NS, Class 35, use NT, A, M
- Federal specification TT-S-00230 C Type II, Class A
- Canadian Standard CAN/CGSB 19.13-M87
- Certified to NSF/ANSI standard 61 for portable water

PRODUCT INFORMATION

Packaging	10.1 fl. oz. (300 mL) Cartridge, 20 fl. oz. uni-pac Sausages, 4.5 gal (17 L) in a 5 gal pail, 52 gal (197 L) in a 55 gal drum
Color	White, colonial white, aluminum gray, limestone, black, dark bronze, capitol tan, stone and medium bronze. Special architectural colors on request.
Shelf Life	Cartridge and Sausage: 12 months in original, unopened packaging. Pail and Drum: 6 months in original, unopened packaging.
Storage Conditions	Store at 40°-95°F (4°-35°C).

TECHNICAL INFORMATION

Shore A Hardness	(21 day) 45±5			(ASTM C 661)
Tensile Stress at Specified Elongation	21 day Tensile Stress	175 psi (1.21 MPa)		(ASTM D 412)
	Stress @ 100%	85 psi (0,59 N/mm²)		
Elongation at Break	550 %			(ASTM D-412)
Adhesion in Peel	Substrate	Peel Strength	Adhesion loss	(ASTM C-794)
	Concrete	20 lbs	0 %	(TT-S-00230C)
	Aluminium	20 lbs	0 %	
	Glass	20 lbs	0 %	
Tear Strength	55 lb./in.			(ASTM D-624)
Movement Capability	±35 %			(ASTM C-719)
Chemical Resistance	Good resistance to water, diluted acids, and diluted alkalines. Consult Technical Service for specific data.			
Resistance to Weathering	Excellent			
Service Temperature	-40 °F to +170 °F			

APPLICATION INFORMATION

Coverage**10.1 oz Cartridge: Yield in Linear Feet**

Width/Depth	1/4"	3/8"	1/2"
1/4"	24.3		
3/8"	16.2	10.8	
1/2"	12.1	8.1	6.1
3/4"	8.1	5.4	4.0
1"			3.0
1.25"			2.4
1.5"			2.0

20 oz Sausage: Yield in Linear Feet

Width/Depth	1/4"	3/8"	1/2"
1/4"	48.1		
3/8"	32.1	21.4	
1/2"	24.1	16.0	12.0
3/4"	16.0	10.7	8.0
1"			6.0
1.25"			4.8
1.5"			4.0

1 gallon: Yield in Linear Feet

Width/Depth	1/4"	3/8"	1/2"
1/4"	307.9		
3/8"	205.3	136.8	
1/2"	153.9	102.6	77.0
3/4"	102.6	68.4	51.3
1"			38.5
1.25"			30.8
1.5"			25.7

Cure Time

Final cure: 4 to 7 days

Curing RateTack-free time 3 to 6 hours
Tack-free to touch 3 hours**APPLICATION INSTRUCTIONS****SUBSTRATE PREPARATION**

Product Conditioning: Condition material to 65°-75°F before using.

Clean all surfaces. Joint walls must be sound, clean, frost-free, and free of oil and grease. Curing compound residues and any other foreign matter must be thoroughly removed. A roughened surface will also enhance bond. Install bond breaker tape or backer rod to prevent bond at base of joint. Priming is not usually necessary. Most substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure.

For green concrete applications control joints must be cut 8 hours prior to sealant installation and in expansion joint forms must be removed 4 hours prior to sealant installation. For wet concrete applications all excess or standing water must be displaced and concrete must

then dry for a minimum of 60 min prior to sealant installation. Consult Sikaflex Primer Technical Data Sheet or Technical Service for additional information on priming.

APPLICATION METHOD / TOOLS

Recommended application temperatures: 40°-100°F. For cold weather application, condition units at approximately 70°F; remove prior to using. For best performance, Sikaflex-1a should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction. Place nozzle of gun into bottom of the joint and fill entire joint. Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air.

Sikaflex-1a can be applied on green concrete after the concrete has cured for a minimum of 24 hours at 75°F. Control joints must be cut and open for min of 8 hours prior to application. Expansion joints must have

forms removed a minimum of 4 hours prior to application. For damp concrete applications Sikaflex-1a can be applied 60 minutes after any and all water has been displaced.

Tooling & Finishing

Tool sealant to ensure full contact with joint walls and remove air entrapment. Joint dimension should allow for 1/4 inch minimum and 1/2 inch maximum thickness for sealant. Proper design is 2:1 width to depth ratio. For use in horizontal joints in traffic areas, the absolute minimum depth of the sealant is 1/2 in. and closed cell backer rod is recommended.

Removal

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, remove spilled or excess product and placed in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

Over Painting

Allow 1-week cure at standard conditions when using Sikaflex-1a in total water immersion situations and prior to painting.

CLEANING OF TOOLS

Clean all tools and application equipment with Sika® Remover-208 immediately after use. Hardened material can only be removed mechanically. For cleaning skin use Sika® Cleaning Wipes-100.

AVAILABILITY/WARRANTY

- Pre-treatment Sealing and Bonding Chart
- Method Statement: Joint Sealing
- Method Statement: Joint Maintenance, Cleaning and Renovation
- Technical Manual: Facade Sealing

LIMITATIONS

- Allow 1 week cure at standard conditions when using Sikaflex-1a in total water immersion situations.
- When overcoating with water, oil and rubber based paints, compatibility and adhesion testing is essential.
- Sealant should be allowed to cure for 7 days prior to overcoating
- Avoid exposure to high levels of chlorine. (Maximum continuous level is 5 ppm of chlorine.)
- Maximum depth of sealant must not exceed 1/2 in.; minimum depth is 1/4 in.
- Maximum expansion and contraction should not exceed 35% of average joint width.
- Do not cure in the presence of curing silicone sealants.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Do not apply when moisture-vapor-transmission condition exists from the substrate as this can cause

bubbling within the sealant.

- Use opened cartridges and uni-pac sausages the same day.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- Light colors can yellow if exposed to direct gas fired heating element.
- The ultimate performance of Sikaflex-1a depends on good joint design and proper application with joint surfaces properly prepared.
- The depth of sealant in horizontal joints subject to traffic is 1/2 in.
- Do not tool with detergent or soap solutions.
- Do not use in contact with bituminous/asphaltic materials.
- In green concrete applications sealing joints in poor or low strength concrete 24 hours after pour may impact ability of sealant to gain proper adhesion.
- In damp concrete applications all standing water and excess water must be eliminated prior to the 60 minute waiting time.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at

usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

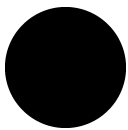
SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet
Sikaflex®-1A
August 2019, Version 01.01
020511010000000008

Sikaflex-1A-en-US-(08-2019)-1-1.pdf

BUILDING TRUST



PLAN REVIEW



Major League Baseball
"American Family Field"
1 Brewers Way
Milwaukee, WI 53214-3651

Index-Rec No: 000204.34-03
Account No: 01-52503
Date of Review: July 26, 2021
Review No: 339638

Plans Submitted By: Kristi Kreklow, SE WI Professional Baseball Park Dist, kkreklow@wibaseballdistrict.com

Subject: Reroofing Bid Specifications – Milwaukee Brewers Stadium Section 4R

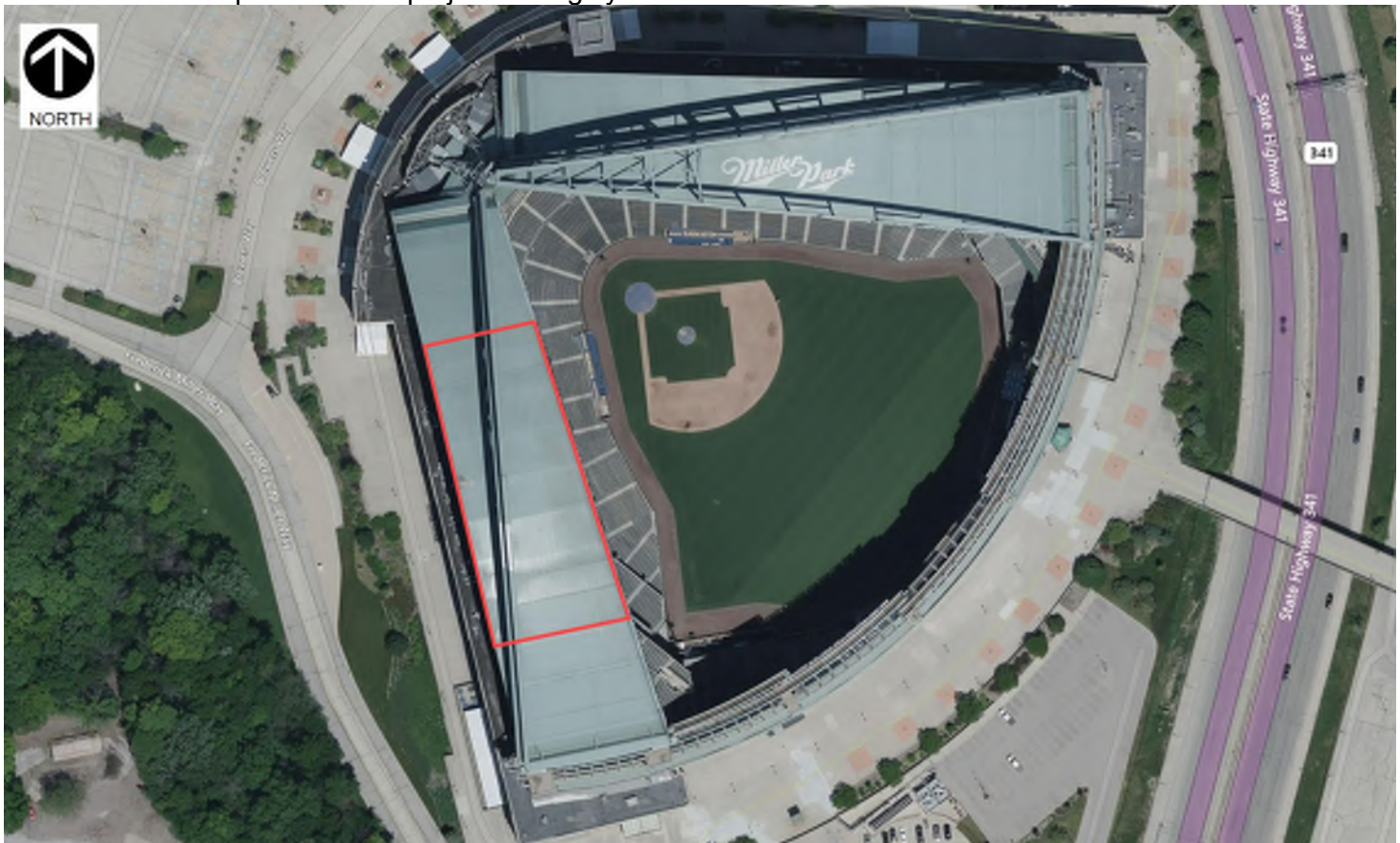
Executive Summary:

This letter will document our review of reroofing bid specifications for a 29,636-sq. ft. section of Roof 4R.

This submittal is acceptable subject to the comments below, **especially Comment Nos. 1, 2, and 3**. Final acceptance of this installation will be after field examination by a representative of FM Global.

Scope of Review:

This confirms the receipt and review of RFP 4R PVC Membrane Replacement dated July 23, 2021, supporting drawings, and a copy of FM Global's May 5, 2020 (Review No. 313868) Plan Review Letter for the larger project. The location of this portion of the project is roughly outlined below in red.



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PLAN REVIEW

The stadium is 330 ft. at its highest point and its sections are 600 ft. by 175 ft. wide. The five center sections of the roof are fan shaped and retractable around a pivot point behind home plate. The current roof covering consists of 6.56 ft. by x 65.6 ft. Sika Sarnafil S327 PVC Membrane sections mechanically attached over mechanically attached DensDeck over polyisocyanurate insulation on steel deck.

The roof involved with this portion of the project is Roof Section 4R is the southern fixed segment of the upper roof. The specific segment is the ~277 ft. by ~110 ft. center crown (C8 to C22). The height of the 4R panel above Field Concourse/plaza is 196.3 ft. at center of the arch and 122 ft. at bearing points.

This project will replace identified corroding metal deck, replace wet or damaged DensDeck cover board, slice and leave the existing membrane in place. It will then involve installing a new 0.5-in. DensDeck layer over the existing roofing with a new Sika Sarnafil 60-mil PVC membrane. The new DensDeck and PVC membrane will follow RoofNav Assembly Number of 371714-0-0 as detailed in FM Global's May 5, 2020 (Review No. 313868) Plan Review Letter.

The new roof edge flashing will be FM Approved Metal-Era One Edge fascia.

The new steel deck will be Epic Metals Corporation metal deck which is supplied by owner. The new deck and adjacent existing deck will be fastened with a 24/5 pattern with #12-24 x 1 1/4" TEKS 5 screws or approved equivalent.

Any hot work required for the project will be supervised by the FM Global Hot Work Permit.

A Base Bid Add-On is to replace the 3R Outfield Gutter as detailed in FM Global's May 5, 2020 (Review No. 313868) Plan Review Letter.

Review Comments:

1. The increased roof perimeter fastening (Zone 2n) should be increased to 27 ft. wide (from 15 ft.) in accordance with FM Global Property Loss Prevention Data Sheet 1-28, *Wind Design*.
2. The #12-24 x 1 1/4" TEKS 5 screws deck fasteners should be FM Approved.
3. The Epic Metals Corporation metal deck should be one of their FM Approved steel decks.
4. FM Approved materials should be provided where applicable and details of the installations should conform to FM Global Property Loss Prevention Data Sheets 1-29, *Roof Deck Securement and Above-Deck Roof Components* and 1-49, *Perimeter Flashing*.

Recommendations to Reduce Hazards during Installation:

- Require contractors to strictly adhere to facility safety practices and closely monitor/manage contractor activity throughout the course of the project. Reference FM Global Property Loss Prevention Data Sheets 1-0, *Safeguards During Construction* and 10-4, *Contractor Management*. Facility personnel should closely supervise any hot work required for this project. All basic precautions on the FM Global Hot Work Permit should be completed before hot work can begin.

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PLAN REVIEW

This review is for property insurance purposes only in accordance with FM Global standards and guidelines. Nothing should be inferred from this review regarding compliance with any rules, regulations or requirements of government agencies, state or local codes or any other jurisdictional authority. We are retaining the copy of your submitted plans for our files.

Sincerely,

Kevin Maag, P.E.
Senior Engineering Specialist
kevin.maag@fmglobal.com
+1 847 430 7707

Loss Prevention Resources:

[FM Global Property Loss Prevention Data Sheets](#)

[FM Global Loss Prevention Training](#)

[Approval Guide](#)

[RoofNav](#)

Distribution:

Eamonn Higgins, Major League Baseball, eamonn.higgins@mlb.com
Anthony Avitabile, Major League Baseball, anthony.avitabile@mlb.com
Dan Fumai, Milwaukee Brewers, dan.fumai@brewers.com
Darius Anderson, Milwaukee Brewers, darius.anderson@brewers.com
Jamie Norton II, Milwaukee Brewers, jamie.norton@brewers.com
Michael Fisher, Major League Baseball, michael.fisher@mlb.com
Mike Brockman, Milwaukee Brewers, mike.brockman@brewers.com
Steve Ethier, Milwaukee Brewers, steve.ethier@brewers.com
Kathleen Torres, Major League Baseball, kathleen.torres@mlb.com
Paul Hanlon, Major League Baseball, paul.hanlon@mlb.com
Thomas Downey, Marsh USA Inc. (Norwalk), thomas.downey@marsh.com
John Bouck, FM Global Account Engineer II, john.bouck@fmglobal.com
David E Christensen, FM Global Senior Engineering Specialist I, david.christensen@fmglobal.com
John Warnet, FM Global Senior Account Manager, john.warnet@fmglobal.com
Melissa Pierre, FM Global Account Manager II, melissa.pierre@fmglobal.com
Frank Morelli, FM Global, Chicago Ops GMFE, frank.morelli@fmglobal.com

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Plan Review

Major League Baseball
"Miller Park"
1 Brewers Way
Milwaukee, WI 53214-3651

Index-Rec No: 000204.34-03
Account No: 01-52503
Date of Review: May 5, 2020
Review No: 313868

Plans Submitted By: Patrick Johnson, Sika, johnson.patrick@us.sika.com

Subject: Reroofing Bid Specifications – Milwaukee Brewers Stadium

Executive Summary:

This letter will document our review of bid specifications for the recover of the upper roofs at Milwaukee Brewers Stadium.

This bid submittal is acceptable subject to the comments below, *especially Comment Nos. 1 and 2*. We look forward to reviewing the full details of the roof edge flashing when available. Final acceptance of this installation will be after field examination by a representative of FM Global.

Scope of Review:

This confirms the receipt and review of Sarnafil/Sika letter dated April 30, 2020.

The stadium is 330 ft. at its highest point and its sections are 600 ft. by 175 ft. wide. The five center sections of the roof are fan shaped and retractable around a pivot point behind home plate. The current roof covering consists of 6.56 ft. by x 65.6 ft. Sika Sarnafil S327 PVC Membrane sections mechanically attached over mechanically attached DensDeck over polyisocyanurate insulation on steel deck.

The proposal is to recover the existing roof with a new roof covering that aligns with FM Global RoofNav Assembly No. 371714-0-0, which is a single-ply system that is for an existing steel deck. It is rated for 210-psf uplift resistance, severe hail resistance and has a 1A fire rating for roofs with slope of 2 in 12 or less. The other details of the proposed roof are as follows:

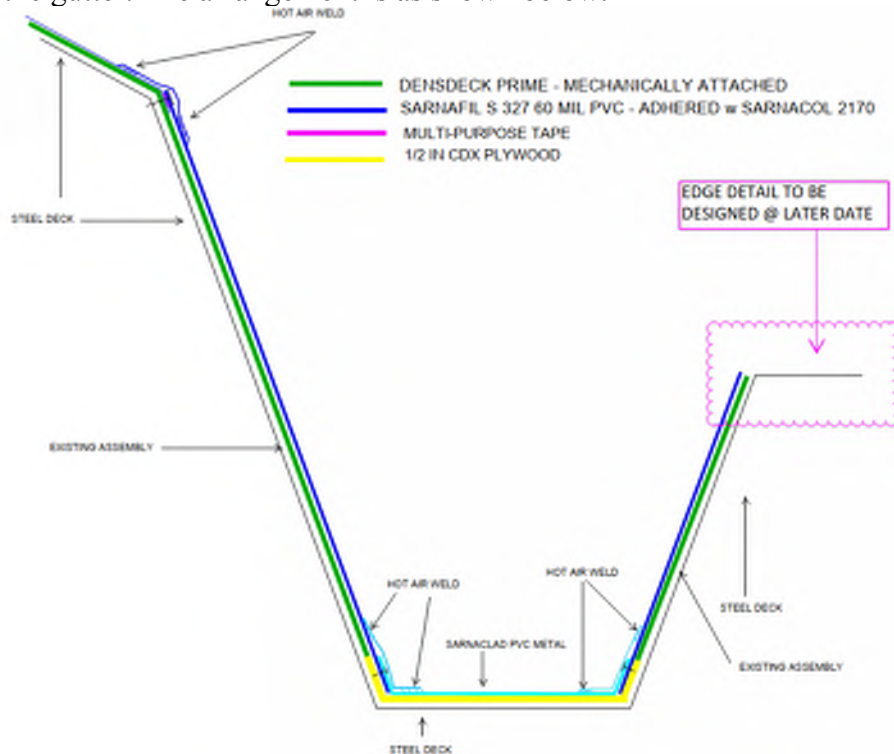
1. Cover (Single-ply)		
Sika Sarnafil Inc	S327(10)	View
Securement (Sheet Lap)		
Generic	weld, hot air	View
2. Securement (Cover) from 1. Cover (Single-ply) to 7. Existing Roof		Comments
6.5 in (165 mm) wide side laps.		
SSSP15403		View
Sika Sarnafil Inc	Sarnadisc MAXLoad	
Sika Sarnafil Inc	Sarnafastener MAXLoad	

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3. Insulation (Board Stock)		
Georgia-Pacific Gypsum LLC	DensDeck	View
4. Securement (Board Stock) from 3. Insulation (Board Stock) to 7. Existing Roof		
SSSP15260		View
See Separate Stress Plate or Fastener Manufacturer Listing	presecurement plate (any Approved stress plate)	
See Separate Stress Plate or Fastener Manufacturer Listing	presecurement fastener (any fastener Approved for use with the stress plate & deck)	
5. Vapor Retarder		optional
6. Thermal Barrier		optional
7. Existing Roof		View

The Sarnafil S 327 seams are heat-welded together and fastened at 6 in. o. c. with Sarnadisc MAX Load Plates and Sarnafil Maxload Fasteners. The sheets will be 6.56 ft. wide (versus the approved 5 ft. width) except at all perimeters where half sheets will be used. The 0.50 in. thick DensDeck will be presecured with No. 12 Sarnafasteners and 3-in. Sarnaplates at a rate of 12 per 4 ft. by 8-ft. board.

Due to damage experienced from sliding snow and ice in the bottom of the gutters, plywood will be applied over the steel deck. The Sika Sarnafil S327 PVC Membrane will be adhered with Sarnacol 2170 to DensDeck Prime over related areas of the gutter. The arrangement is as shown below.



The existing single-ply roof membrane will be sliced into 10 ft. by 10 ft. squares. All wet, damaged, and deteriorated components of the existing roof assembly will be removed and replaced in kind.

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A structural analysis was completed that ensures that adequate snow load capacity will be maintained with the additional roof covering.

Review Comments:

1. All new perimeter flashing should be prefabricated FM Approved for at least 135 psf field roof and installed in accordance with FM Global Property Loss Prevention Data Sheet 1-49, *Perimeter Flashing*, manufacturer's guidelines and the current FM Global RoofNav approval listing. The details of the FM Approved flashing and/or coping including manufacturer and type as well as the installation plans should be submitted to FM Global to confirm that FM Approved flashing/coping is being used. If the details of the roof edge is not compatible with an FM Approved flashing/coping (e.g. membrane is being secured via a termination bar on a parapet wall), these details should be provided for review comment.
2. The Sarnacol 2170 Adhesive should be applied on the DensDeck Prime at 0.75 gal/sq. and to the underside of the membrane at 0.50 gal/sq.
3. If the awarded contractor deviates from the bid specifications detailed above, the revised details should be provided to FM Global for review.
4. Be aware that the "A" external fire rating will not be valid for areas of the roof with pitches of over 5 in 12 (per FM Global RoofNav Assembly No. 392009-0-0).
5. FM Approved materials should be provided where applicable and details of the installations should conform to FM Global Property Loss Prevention Data Sheets 1-29, *Roof Deck Securement and Above-Deck Roof Components*.

Recommendations to Reduce Hazards during Installation:

6. Facility personnel should closely supervise any hot work required for this project. All basic precautions on the FM Global Hot Work Permit should be completed before hot work is allowed to begin. This should include, but not be limited to, any torch-applied roofing materials, any asphalt heating units and grinding of decking or flashing.
7. Install only as much roof insulation as can be covered with a roof covering in a single working day, or prior to the expected start of inclement weather. Seal loose roof cover edges at the end of each day to minimize potential moisture damage. Proprietary sealers are available for single-ply roof covers. Do not allow water to run in the deck ribs under completed roof sections. Follow the manufacturer's recommendations and safety regulations highlighted in the associated Roofing Specifications.
8. The following precautions should be taken: an ample supply of fire extinguishers should be maintained on the roof at all times during the roofing project; any flammable adhesives should be limited to a maximum of one day's use on the roof; and care should be taken to ensure that the storage on the roof is limited so as not to exceed the design strength of the roof structure.

This review is for property insurance purposes only in accordance with FM Global standards and guidelines. Nothing should be inferred from this review regarding compliance with any rules, regulations or requirements of government agencies, state or local codes or any other jurisdictional authority. We are retaining the copy of your submitted plans for our files.

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Sincerely,

Kevin Maag, P.E.
AVP/Senior Engineering Specialist
kevin.maag@fmglobal.com
847 430 7707

Loss Prevention Resources:

FM Global Property Loss Prevention Data Sheets (<http://www.fmglobaldatasheets.com>)

FM Global Online Training (<http://training.fmglobal.com/>)

Approval Guide (<http://www.approvalguide.com>)

RoofNav (<http://roofnav.fmglobal.com>)

Distribution:

Kristi Kreklow, Associate Director- SE WI Prof. Baseball Park Dist., kkreklow@millerparkdistrict.com

Mike Brockman, Milwaukee Brewers, mike.brockman@brewers.com

Steve Ethier, Milwaukee Brewers, steve.ethier@brewers.com

Blake Lovvorn, Milwaukee Brewers, blake.lovvorn@brewers.com

Shannon Schwingle, The Sigma Group, Inc., sschwingle@thesigmagroup.com

Anthony Avitabile, Major League Baseball, anthony.avitabile@mlb.com

Jamie Norton II, Milwaukee Brewers, jamie.norton@brewers.com

Michael Fisher, Major League Baseball, michael.fisher@mlb.com

Kathleen Torres, Major League Baseball, kathleen.torres@mlb.com

Paul Hanlon, Major League Baseball, paul.hanlon@mlb.com

Thomas Downey, Marsh USA Inc. (Norwalk), thomas.downey@marsh.com

John Bouck, FM Global Account Engineer, john.bouck@fmglobal.com

David E Christensen, FM Global Senior Engineering Specialist, david.christensen@fmglobal.com

Frank Morelli, FM Global, Chicago Ops GMFE, frank.morelli@fmglobal.com

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BUILDING TRUST



CONTACT

Patrick Johnson
Sika Corporation · Roofing
Phone: 815-641-0634
johnson.patrick@us.sika.com

Kevin Maag, PE
AVP | Lead Engineer | Sr. Engineering Specialist
300 S. Northwest Highway
Park Ridge IL 60068 USA
Phone: 847-430-7707
Kevin.Maag@FMGlobal.com

**MILWAUKEE BREWERS – MILLER PARK – 1 BREWERS
WAY, MILWAUKEE, WI 53214 – SIKA SARNAFIL
ROOFING LETTER**

April 30, 2020

Dear Mr. Maag,

By receipt of this letter please be advised that the Milwaukee Brewers, The Sigma Group, Inc. and V & F Roof Consulting and Service are in the process of designing the roof system at the address provided above. The project will go out to bid this year and they anticipate to start the construction in Summer 2020. Below is the current Sika Sarnafil roofing system that has been in place for the past (20) plus years and from our understanding there have been no known uplift pressure complications on this project. Since this is a very high profile, unique roofing application, and an FM Insured Client we would like to obtain approval from FM Global for the proposed roofing application.

CURRENT ROOF ASSEMBLY:

Sika Sarnafil S327 PVC Membrane: 6.56 FT x 65.6 FT – Mechanically Attached
DensDeck – Mechanically Attached
Polyisocyanurate Insulation
Steel Deck

2020 PROPOSED ROOF ASSEMBLY (ROOF NAV#371714-0-0)

Sika Sarnafil S327 PVC Membrane: 6.56 FT x 65.6 FT – Mechanically Attached (Note 1)
½" DensDeck – Mechanically Attached (Note 2)
Existing PVC (Note 3)
Existing DensDeck
Existing Polyisocyanurate
Steel Deck

We are proposing on leaving the existing Sika Sarnafil single-ply PVC system in place and installing a cover board over the existing PVC. Please note that Sika Sarnafil has the exact RoofNav Assembly Number for the anticipated cross section mentioned above. The Roof Nav Assembly number that shall be referenced for this application is 371714-0-0. This will meet and exceed the uplift pressures that is highlighted in this letter. We intend to use 6.56 foot

PAGES 2/9
DATE April 30, 2020

width rolls versus the 5 foot listed under RoofNav #371714-0-0. Please see additional notes in the letter about this scenario.

- Note 1: Sarnafil S 327 Roof Membrane is a PVC thermoplastic membrane produced with an integral polyester reinforcement for high strength, guaranteed for thickness, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up. Sarnafil S 327 seams are heat-welded together by trained operators using hot-air welding equipment. Use only Sarnadisc MAX Load Plates and Sarnafil Maxload Fastener for S327 membrane attachment. The fastening pattern on this building shall be 6 inches on center at all locations. Install (5) half sheets of Sarnafil S327 membrane fastened 6 inches on center around the perimeter of entire building. The interior sheets are to run perpendicular to the deck.
- Note 2: Mechanically attach 1/2 inch DensDeck into steel decking with Sarnafasteners #12 with 3 inch Sarnaplates at a rate of 12 per 4' x 8' board in the field, 12 per board in the perimeter, and 12 per board in the corners.
- Note 3: Slice existing single ply roofing into 10 x 10 feet squares. All wet, damaged, and deteriorated components of the existing roof assembly must be removed and replaced accordingly. Existing roof components are not included in the Sika Sarnafil warranty. It would be recommended to use a third-party consulting firm to provide a scan on the existing building prior to bid. This thermal scan will give the Owner a sense of security of what will need to be replaced prior to the installation of the new roofing system.

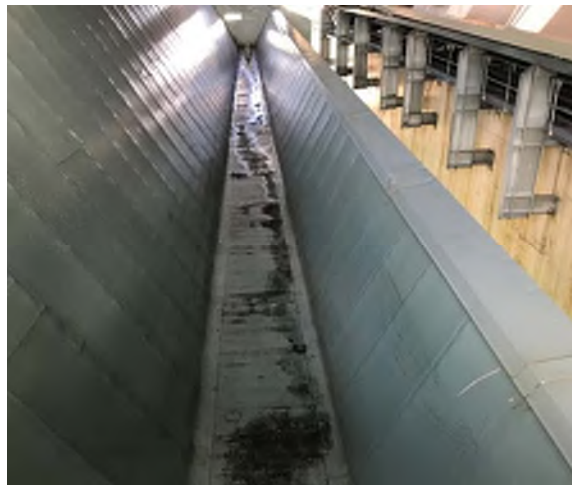
Gutter Detail Proposal:

Sika Sarnafil is proposing the following cross section to be reviewed at the gutter as the existing gutter has sustained damage to the cover board over the past (20) plus years. This will help reduce the damage that has occurred at the gutter. Please let us know if the following is acceptable at the gutter detail along the perimeter of the building. I have also attached close-up photos of this condition to better assist you.

Sika Sarnafil S327 PVC Membrane – Adhered
Plywood – Mechanically Fastened into the steel deck
Steel Deck

PAGES 3/9
DATE April 30, 2020

Figure I – Overall Gutter Condition



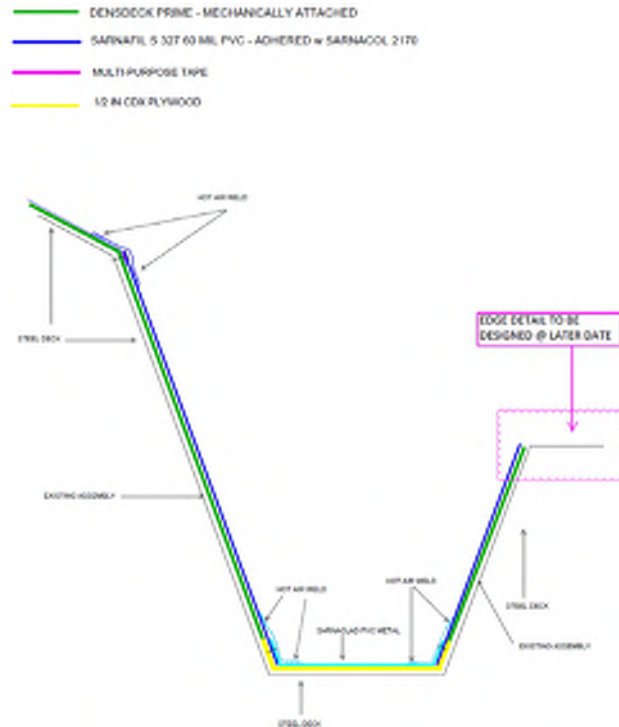
It is not visual in the photo but the cover board below the single-ply membrane has become compromised from the snow and ice over the past (20) years. The cover board in this area has broken down over the years and is inside of the steel deck. Please let us know if it is acceptable to install plywood at this condition versus a gypsum product that we know will be damaged long-term.

Figure II – Elevation Photo of Gutter



PAGES 4/9
DATE April 30, 2020

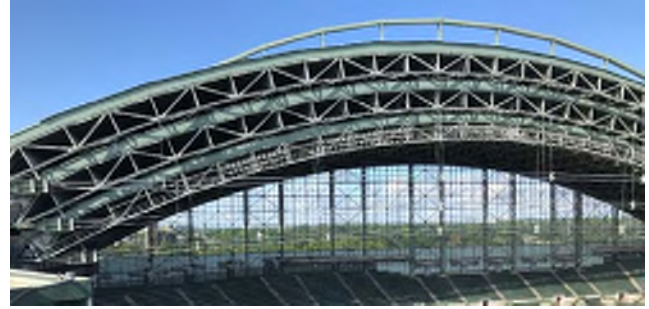
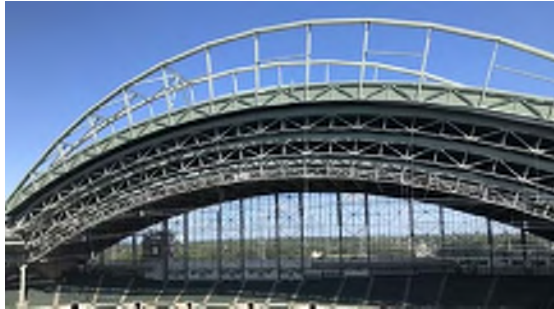
Proposed Detail at Gutter:



THIS DETAIL IS ALSO ATTACHED FOLLOWING THIS LETTER FOR A BETTER VISUAL

Miller Park has a fan-shaped roof that includes 12,000 tons of structural steel and spans approximately 600 feet from home plate to the outfield track beam. The roof covers more than 8.5 acres and is comprised of seven panels (five of which are movable). The roof can open or close in ten minutes with three of the movable roof panels stacking on the left side and two movable roof panels stacking on the right side of the ballpark. Each movable roof panel moves independently of the others, rotating on a fixed pivot bearing behind home plate. Each movable roof panel is powered by two 60-horsepower electric motors on drive trucks that move along a semi-circular rail system on the track beam about 150 feet above the playing field. Below are photographs from inside the stadium highlighting the seven individual roofs that are stacked together when the roof is open. The calculations on this project were figured per roof area versus the entire stadium.

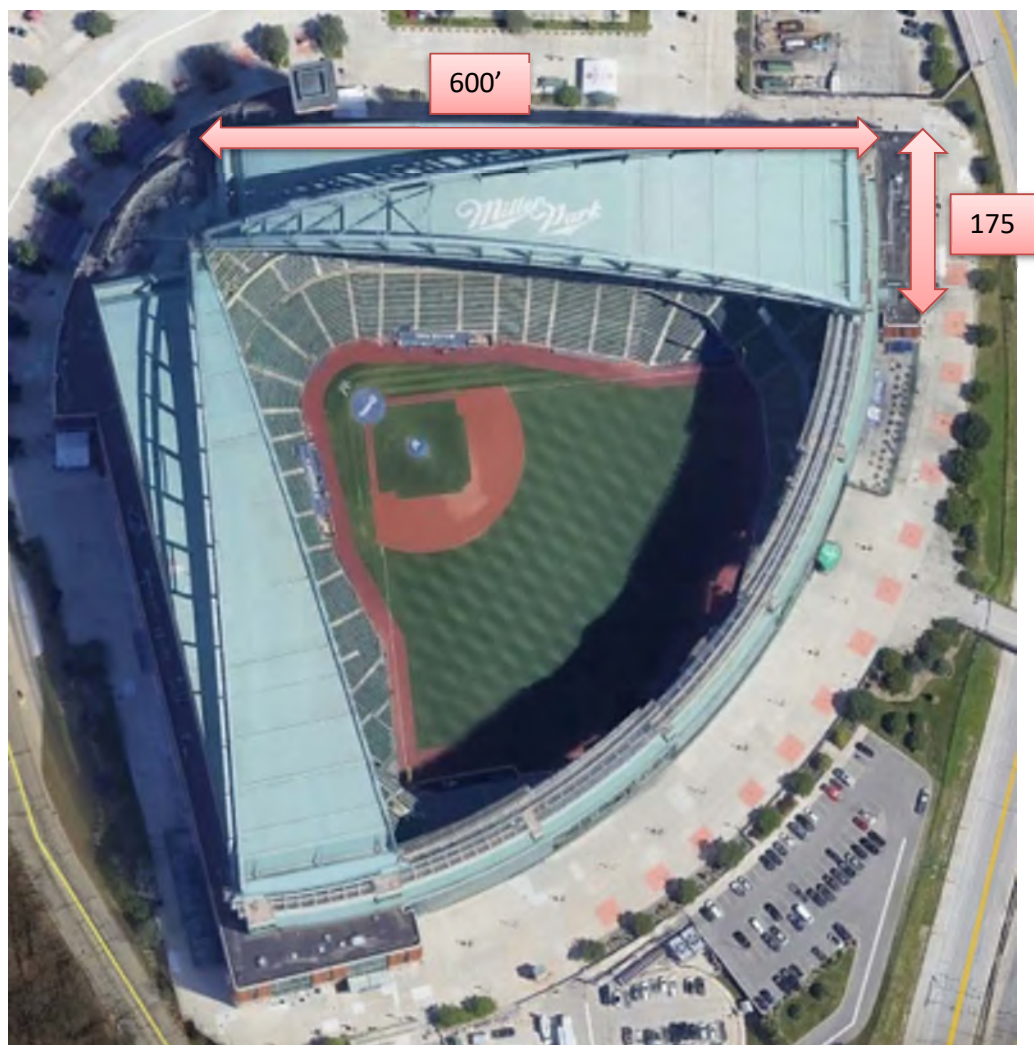
PAGES 5/9
DATE April 30, 2020



Below is the illustration on how the uplift pressures was valued for this project. Please review the uplift pressures calculated and verify that the Roof Nav Assembly mentioned in this letter will suffice for this project. The calculations on this project were figured per roof area /panel versus the entire stadium. This was also figured as an open roof area versus an enclosed roof area.

PAGES 6/9
DATE April 30, 2020

**MILLER PARK
MILWAUKEE, WISCONSIN
BUILDING HEIGHT: 330 FEET
PANEL SIZE: 600 X 175**



PAGES 7/9
DATE April 30, 2020

FM Global Property Loss Prevention Data Sheet 1-28 – WIND DESIGN



PAGES 8/9
DATE April 30, 2020

As you can see in the calculated wind uplift above the assembly needs to reach a 1-135 psf uplift pressure for each roof area or panel. The RoofNav Assembly and system intended for this project is tested for a 1-210 psf uplift pressure. As mentioned above we would like to use 6.56 foot width rolls versus the 5 foot width listed in RoofNav Assembly #371714-0-0. It will be in the drawings and specification to install (5) half sheets of Sarnafil S327 membrane fastened 6 inches on center around the perimeter of entire building. The interior sheets are to run perpendicular to the deck and will also be fastened 6 inches on center at all locations.

Attached in this letter are the pull-out values for the above referenced project. This was performed by Sika's vendor on March 02, 2020.

Additional Notes for The Milwaukee Brewers and The Sigma Group:

- It is recommended to consult with a structural engineer as the scope of work is adding additional weight to the stadium and to the track system that assists with the retractable roof.
- If aesthetics are at a premium it is recommended for Sika Corporation to take a sample of the existing membrane from the roof system. We will then be able to customize the color that is existing. Please reference the photo below highlighting a sample that was taken at the stadium versus Sika Sarnafil's standard color of patina green.



PAGES 9/9
DATE April 30, 2020

Partnership and Quality: Sika Sarnafil will support The Sigma Group, Inc., Milwaukee Brewers, and FM Global along every milestone of the project through to completion of construction. As part of value added services to this project, Sika Sarnafil will have a Representative present for the first (3) days of production, then every 8 to 14 days of production, and a final inspection. A copy of each inspection report along with pictures will be sent to all parties involved on the project.

Sika works with a select group of trained, authorized roofing applicators— only the best are invited to join our team. Maintaining strict control over the installation process means that Sika roofing quality is carried through from start to finish.

Because of Sika's dedication to its Milestone Management process, when you buy a Sarnafil roofing or waterproofing membrane system, you're getting a total system solution. From system design to final inspection, our Milestone Management process is your guarantee of superior quality, precision installation and unrivalled reliability. Every Sika Sarnafil approved contractor goes through a rigorous training and evaluation program to assure that they meet Sika Sarnafil's high standards.

Choosing a Sika Sarnafil contractor is your best assurance of a high-quality installation. You will have peace-of-mind when you choose to use Sika Sarnafil and a partner contractor.

Regardless of the outcome everyone at Sika wishes your group and everyone involved a successful and safe project. Thank you for reviewing this request by Sika Corporation at the request of your client The Milwaukee Brewers, The Sigma Group, and V & F Roof Consulting and Service. Please let us know if the assembly mentioned is acceptable through FM Global. If you need additional information or have any questions please feel free to contact the undersigned, The Sigma Group, Inc., Milwaukee Brewers, or V & F Roof Consulting and Service.

Sincerely,

Patrick Johnson
Sika Corporation

Cc: S. Schwingle (The Sigma Group, Inc.), The Milwaukee Brewers, Eric Hurst (Sika Corp,) and Pat Finger (V & F Roof Consulting & Service)



ROOFING SYSTEM CONTRACTOR PACKAGE

CONTACT INFORMATION

OVERVIEW OF WORK

Building Name/Number:		Area of Roof:	Field
Roof Area:		Index Number (Optional):	
Created In RoofNav:	Sep 24, 2019	Assembly #:	371714-0-0
Type of Work:	Re-Cover	Min 3ft (1 m) Continuous Parapet:	

ROOF AREA CLASSIFICATIONS

Roof Area Properties	Site Properties	Fire / Hail	Wind Uplift Ratings
Dimensions:	Surface Roughness:	Internal Fire:	Field:
Height:	Wind Speed:	Exterior Fire:	Perimeter:
Slope:	Wind Borne Debris Risk:	Hail:	Corner:

RATINGS FOR FM APPROVED ASSEMBLY#:

Internal/Exterior Fire:	Max Slope:	Hail:	*Wind Uplift Rating:
1/A	2.0000 in 12 (9.5°)	SH	210 psf

Assembly limited to use with noncombustible walls only:

No

* FM Approved roofs must also have corner and perimeter enhancements and FM Approved perimeter flashing. For details, see FM Global Property Loss Prevention Data Sheets 1-29 and 1-49. For Standing/Lap Seam roofs, see Property Loss Prevention Data Sheet 1-31.



ROOFING SYSTEM CONTRACTOR PACKAGE

ASSEMBLY DETAIL COMMENTS

SIGNATURES

Signature of Installing Contractor: _____

Title: _____ **Date:** _____

Signature of Designer/Observer: _____

Title: _____ **Date:** _____

Signature of Client/Property Owner: _____

Title: _____ **Date:** _____



ROOFING SYSTEM CONTRACTOR PACKAGE

1. Cover (Single-ply)

Comments: none

Cover (Single-ply)

Company: Sika Sarnafil Inc
Trade Name: S327(10)
Max Width: 59.5000 in
Material: PVC (polyvinylchloride)
Min Thickness: 0.0480 in
Backing: (none)
Max Thickness: 0.0960 in
Reinforcement: polyester
Comments: none

Securement (Sheet Lap)

Comments: none

Weld (Heat)

Company: Generic
Trade Name: weld, hot air
Configuration: Single
Outside/Full Width: 1.6000 in
Inside Width: 0.0000 in
Comments: Min 6.5 in. (165 mm) wide roof cover side laps sealed with min 1.6 in. (40 mm) wide heat weld.

2. Securement (Cover) from 1. Cover (Single-ply) to 7. Existing Roof

Comments: 6.5 in (165 mm) wide side laps.



ROOFING SYSTEM CONTRACTOR PACKAGE

Fastening System (Stress Plate)

System: SSSP15403

Company

Sika Sarnafil Inc

Sika Sarnafil Inc

TradeName

Sarnafil Maxload Fastener

Sarnadisc MAX Load Plates

System Comments

none

Row Spacing:

53.0000 in

On Center:

6.0000 in

Fasteners per Plate/Clip:

1

Field Rows:

No

Field Row on Center:

0.0000 in

Number of Field Rows:

0

Application Method:

n/a

Contributory Area:

0.0000 ft2

Embedment:

0.0000 in

Comments:

none

3. Insulation (Board Stock)

Comments: none

Insulation (Board Stock)

Company:

Georgia-Pacific Gypsum LLC

Trade Name:

DensDeck

Material:

gypsum

Min Board Size:

48.00 x 96.00 in

Board Profile:

flat

Min Thickness:

0.5000 in

Max Thickness:

0.6250 in

Min Density:

0.0000 lb/ft3

Comments:

none

4. Securement (Board Stock) from 3. Insulation (Board Stock) to 7. Existing Roof

Comments: none



ROOFING SYSTEM CONTRACTOR PACKAGE

Fastening System (Stress Plate)

System: SSSP15260

Company

See Separate Stress Plate or Fastener
Manufacturer Listing

TradeName

preseurement fastener (any fastener Approved for use with the
stress plate & deck)

See Separate Stress Plate or Fastener
Manufacturer Listing

preseurement plate (any Approved stress plate)

System Comments

Refer to Data Sheet 1-29, Table 6 for preseurement fastening
requirements.

Row Spacing: 0.0000 in

On Center: 0.0000 in

Fasteners per Plate/Clip: 1

Field Rows: No

Field Row on Center: 0.0000 in

Number of Field Rows: 0

Application Method: n/a

Contributory Area: 0.0000 ft²

Embedment: 0.0000 in

Comments: none

5. Vapor Retarder

Comments: none

6. Thermal Barrier

Comments: none

7. Existing Roof

Insulation Material: Any

Single Ply Material: Any

Roof Deck: Steel

Cover: Any

Surface: Any

Steel Strength: 80.0000 ksi

Min Steel Thickness: 0.0295 in

Max Steel Thickness: 0.0000 in

Min Insulation Thick: 0.0000 in

Max Insulation Thick: 0.0000 in

Comments: See Glossary – ReCover definition for additional information

8. Structure

Structure Type:	steel
Max Spacing:	0.0000 in
Min Thickness:	0.0000 in
Min Strength:	0.0000 ksi
Comments:	none



ROOFING SYSTEM CONTRACTOR PACKAGE

Fastener Placement

Now that the configuration is complete for the field of the roof, you must select the required fastener placement from FM Global Property Loss Prevention Data Sheet 1-29.

Corner/Perimeter Enhancements

Now that you have selected a fastener placement, you must select enhancements for the corners and perimeters. Refer to FM Global Property Loss Prevention Data Sheet 1-29.

If you have sufficient detail about the roof assembly, you can select enhancements that have been approved for roofs with your specifications from Table 1A: Recommended Rating of Field, Perimeter and Corner Areas (Zones 1, 2 and 3) for Enclosed Buildings.

Otherwise, you can select the appropriate prescriptive enhancements from section 2.2.1.5.1.

Also, the deck must be secured per the requirements in Data Sheet 1-29. For a steel deck, see section 2.2.1.5.6. For installation instructions, see section 2.2.13.2.

Perimeter Flashing

Now that you have selected enhancements for the corners and perimeters, you must select an FM Approved perimeter flashing that meets a Class X rating, where X is the Wind Uplift rating for your roof. For more information, see FM Global Property Loss Prevention Data Sheet 1-49.

You can find FM Approved perimeter flashings in RoofNav. To do so, click Products. On the Product Search page, select Other for the Category and Perimeter Flashing for the Subcategory. Specify any other criteria as needed and then click Search.



March 5, 2020

Patrick Johnson
Sika Sarnafil - IL
16614 W 159th Street
LOCKPORT, IL

Re: 1 Brewers Way - Milwaukee, WI - L1 Logo Section

Dear Patrick,

I have enclosed the Job Report Number PT-06538 from the job referenced above. The report was recorded by Zachary Ehrat, OMG Technical Service Representative.

OMG is interested in your feedback on our services. Please visit www.omglistens.com to take a brief, 2-3 minute survey to help us understand how we did on this project, and more importantly, anything we can do better next time. We value your time and input, and thank you in advance for your participation.

If you have any further questions, please feel free to call.

Sincerely,

A handwritten signature in blue ink that reads "Stephen Childs".

Stephen Childs
OMG Technical Support

To: johnson.patrick@us.sika.com; mloutfi@omginc.com; ponikvar.ryan@us.sika.com; zehrat@omginc.com

PULL TEST REPORT



JOB NAME	1 Brewers Way - Milwaukee, WI - L1 Logo Section
JOB LOCATION	Milwaukee, WI
ROOF AREA (SQFT)	50,000
BUILDING HEIGHT (FT)	400'
PROJECT TYPE	Re-roof
THICKNESS OF EXISTING ROOF ASSEMBLY	3/4"
ROOF COVER TYPE	M/A Single Ply
NEW SYSTEM MANUFACTURER	Sika-Sarnafil
FASTENER(S) TESTED	Sarnafastener MaxLoad, Sarnafastener XP, Sarnafastener #12

REPORT NUMBER	PT-06538
TEST DATE / TIME	3/2/2020 10:30:00 AM
AMBIENT TEMPERATURE	39°F
TESTER MANUFACTURER	DMD Force-2000
MAX CAP OF TESTER (LBS)	2,000
TEST PERFORMED BY	Zachary Ehrat
TEST CUT AREA REPAIRED BY	Patrick Johnson Ryan Ponikvar
TEST WITNESSED BY	Patrick Johnson, Mohammed Loutfi, Ryan Ponikvar

INSULATION MANUFACTURER	INSULATION TYPE	THICKNESS
Sika Sarnafil	Dens Deck	1/2"

DECK TYPE	THICKNESS
Steel	Unknown

Disclaimer: Manufacturer's installation requirements shall be followed when using any of the tested fasteners or adhesives. Neither the technician performing the pullout tests, nor his/her company is responsible for the waterproofing integrity of the repairs. This test report does not certify the structural integrity of the roof deck.

TEST RESULTS



TEST LOCATION NUMBER	PULL VALUE (LBF)	FASTENER TESTED	PENETRATION (IN)	BIT DIAMETER (IN)	COMMENTS
1	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
2	965	Sika Sarnafil Sarnafastener XP	3/4"		
3	916	Sika Sarnafil Sarnafastener #12	3/4"		
4	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
5	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
6	748	Sika Sarnafil Sarnafastener XP	3/4"		
7	1000	Sika Sarnafil Sarnafastener XP	3/4"		
8	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
9	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
10	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
11	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		
12	1000	Sika Sarnafil Sarnafastener XP	3/4"		
13	722	Sika Sarnafil Sarnafastener XP	3/4"		
14	452	Sika Sarnafil Sarnafastener #12	3/4"		
15	1000	Sika Sarnafil Sarnafastener MaxLoad	1"		

PULL TEST COMMENTS

PULL TEST COMMENTS

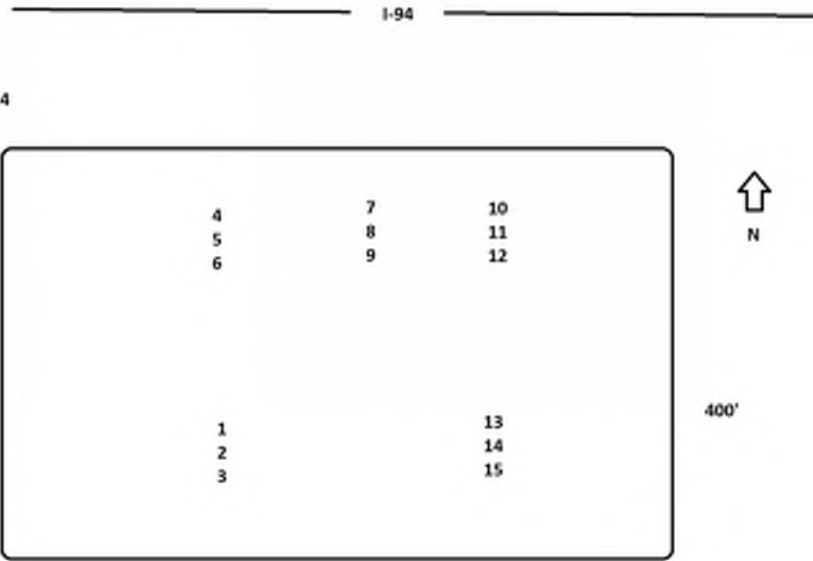
Tests were stopped if failure did not occur before 1000 lbf. was reached.

1 BREWERS WAY - MILWAUKEE,
WI - L1 LOGO SECTION

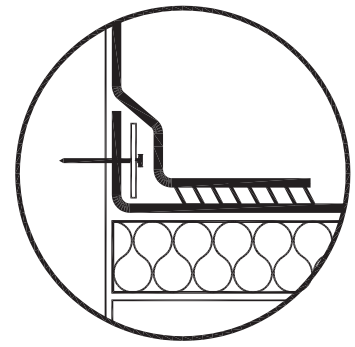
3/2/20
10:30AM

1 Brewers Way
Milwaukee, WI 53214

L1 Logo Section



END OF REPORT



SECUREMENT FASTENED AT
BASE OF WALL OR CURB

ALTERNATE BASE FASTENING

BUILDING TRUST

781-828-5400



usa.sarnafil.sika.com

JOB NAME:

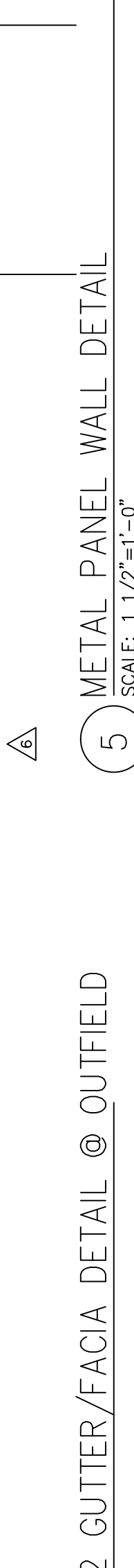
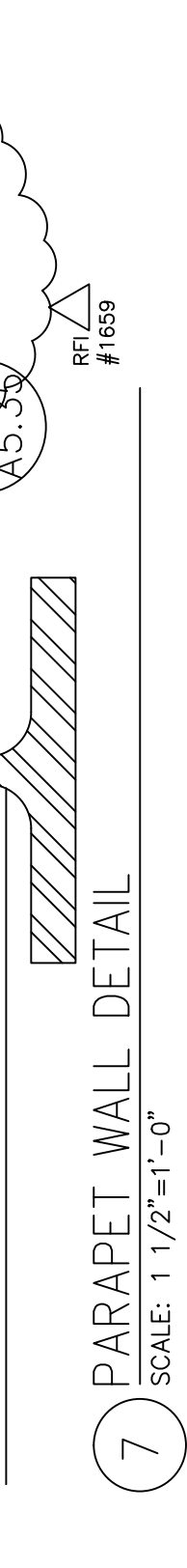
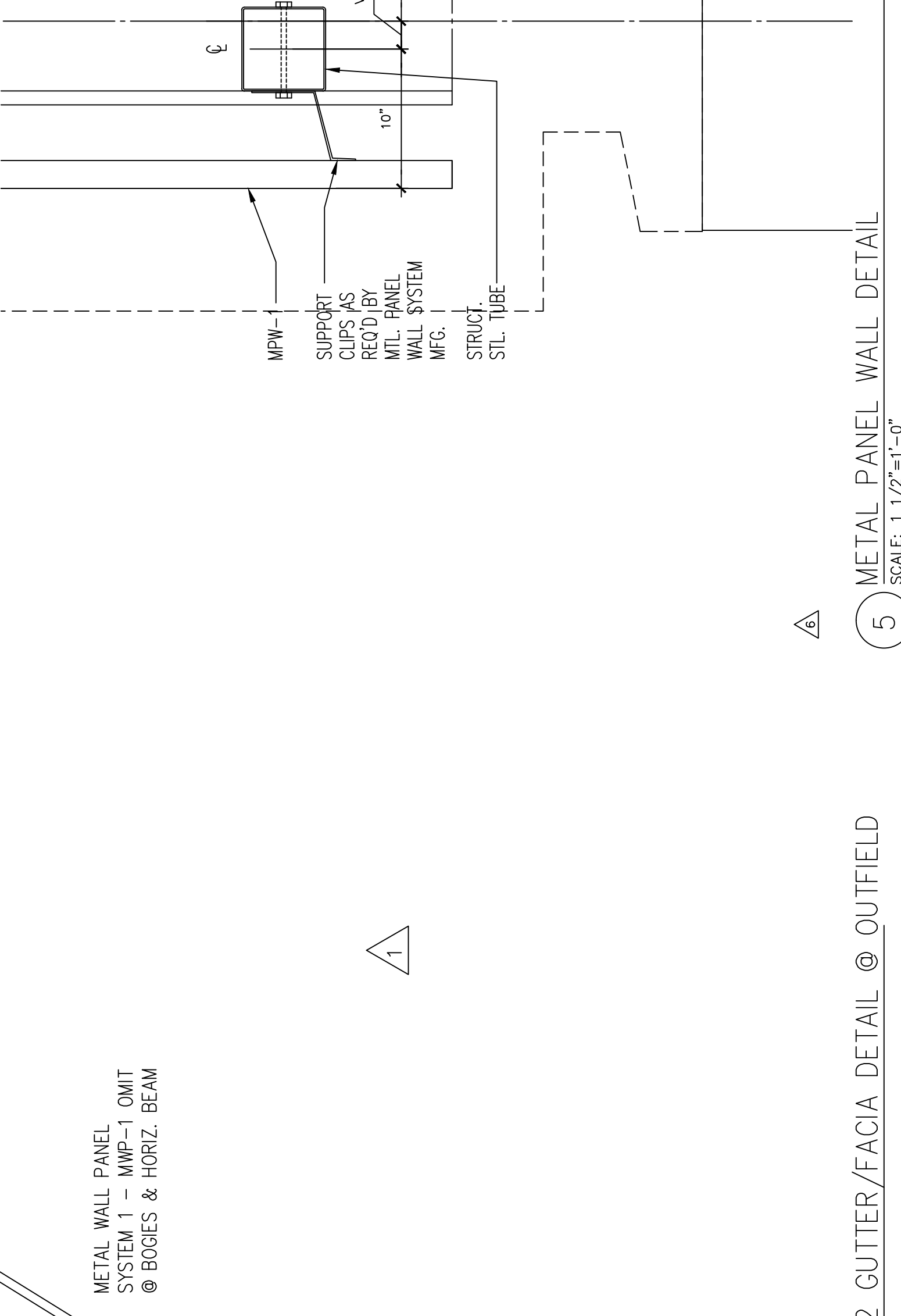
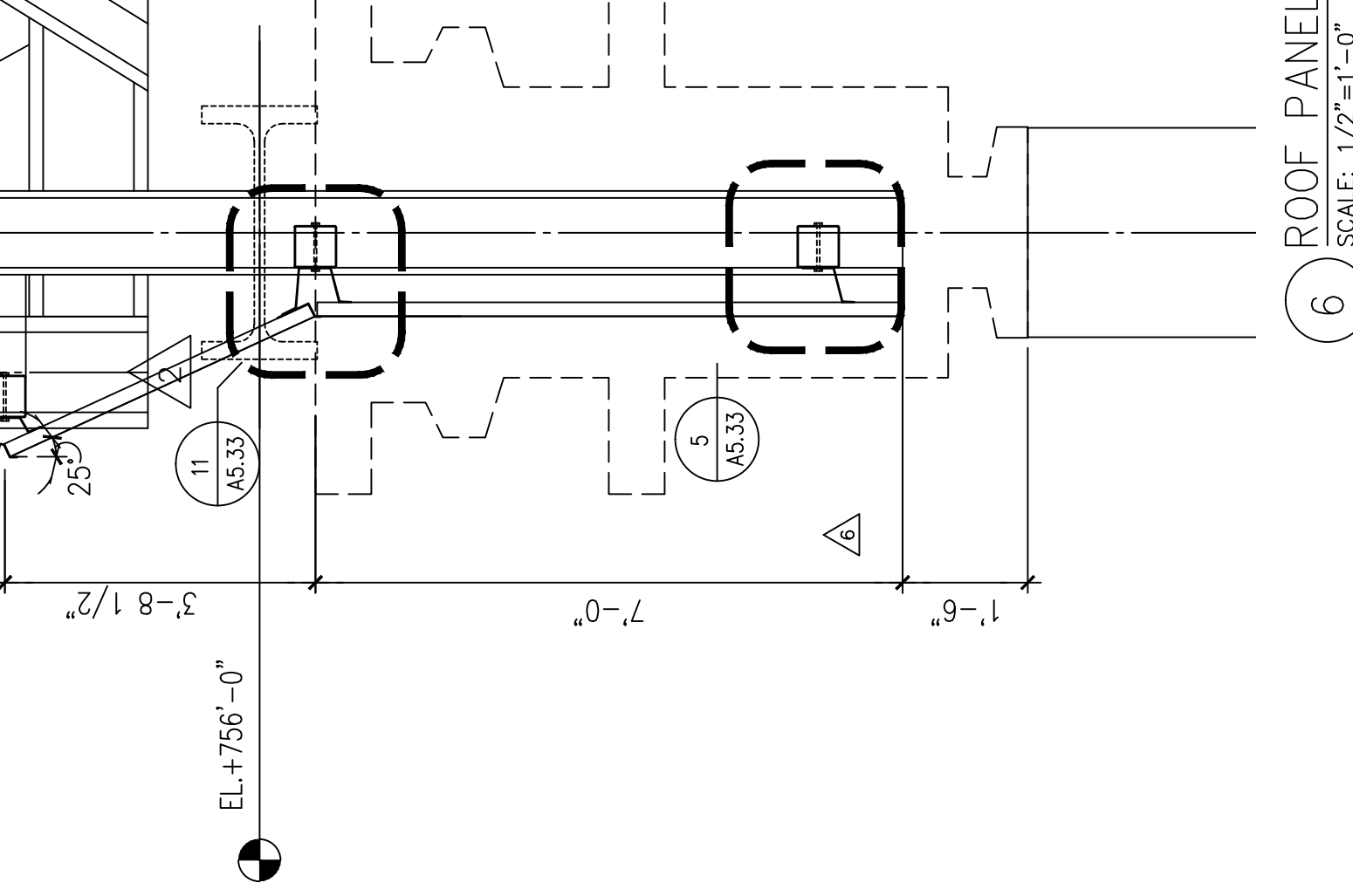
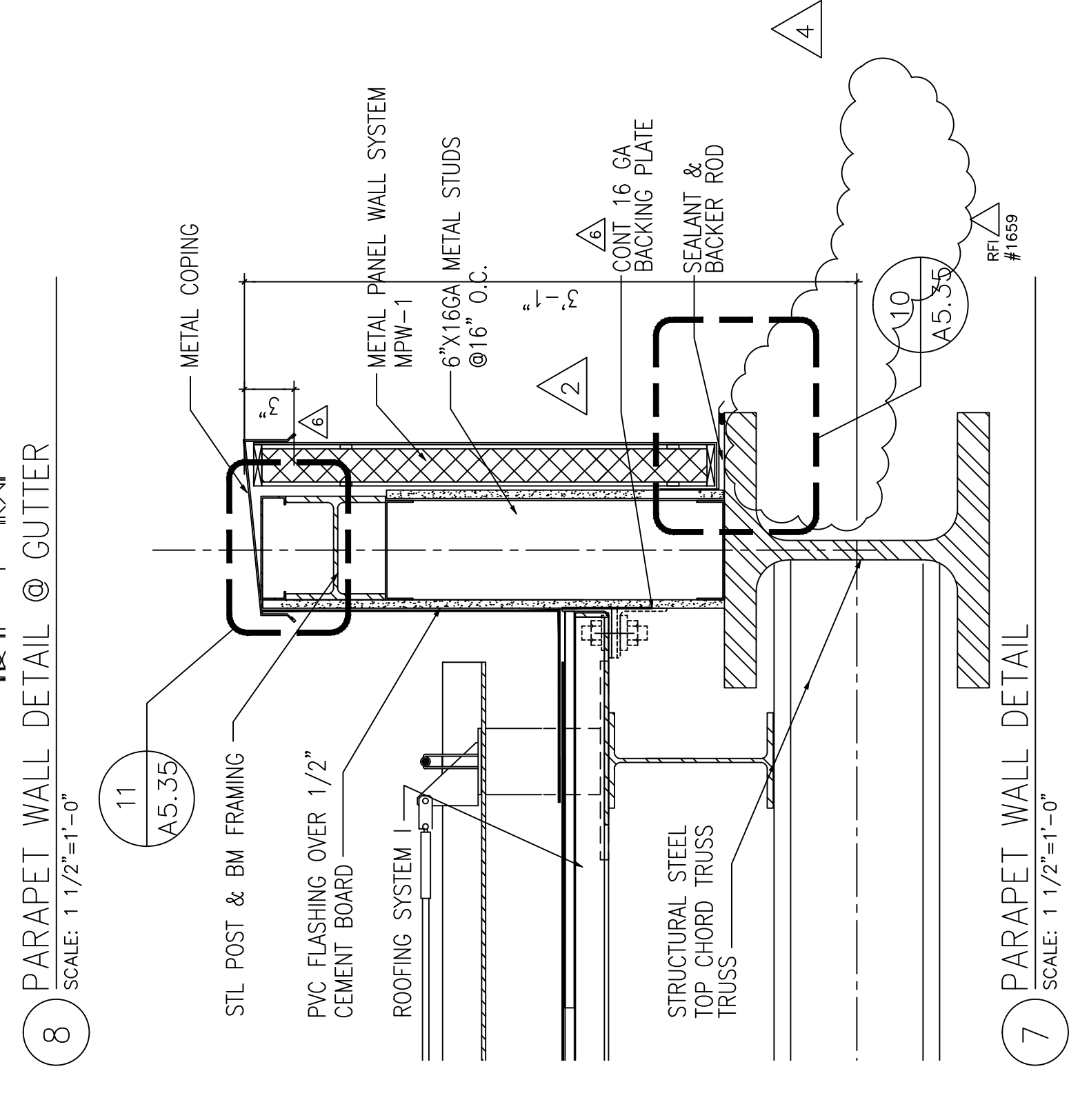
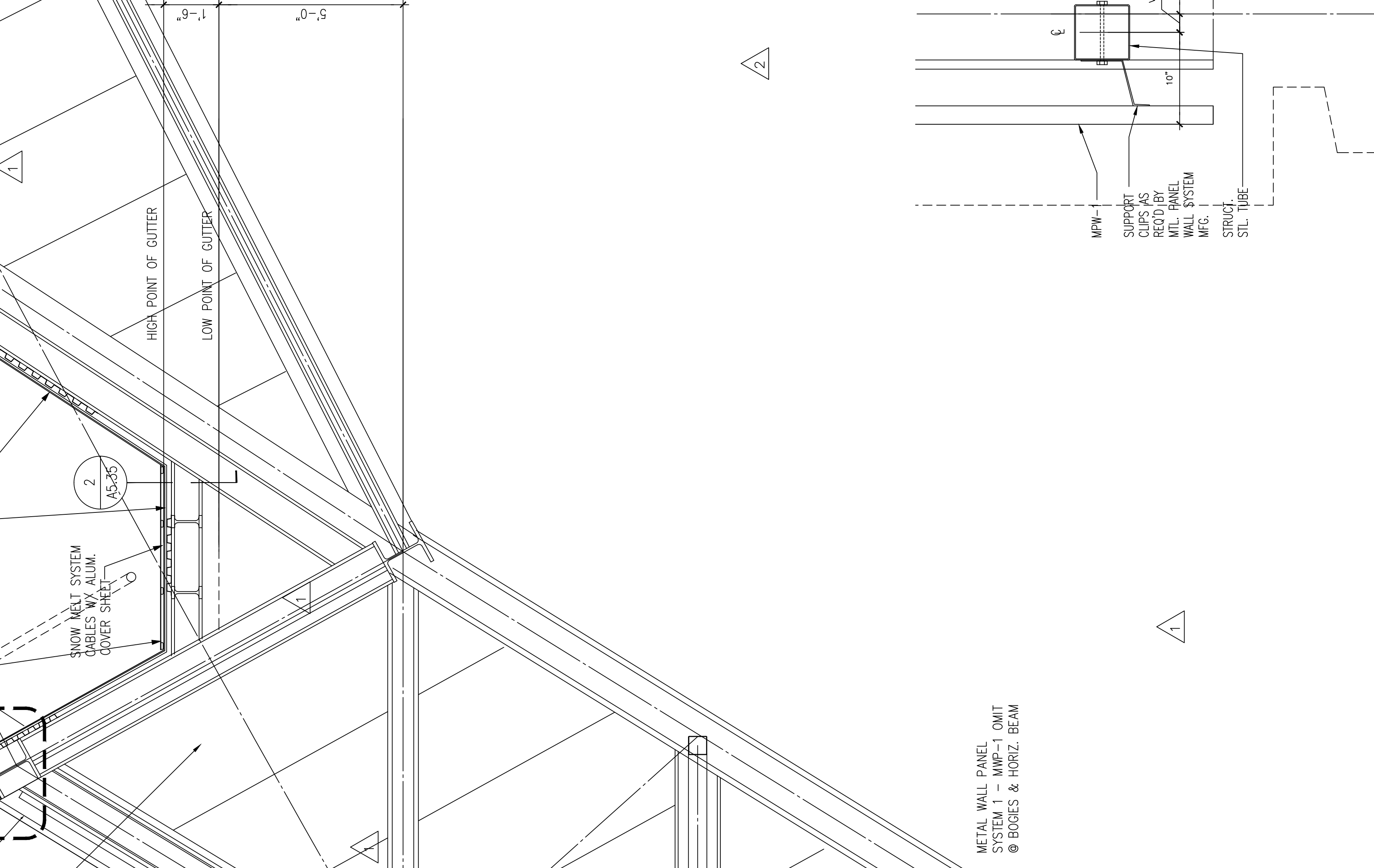
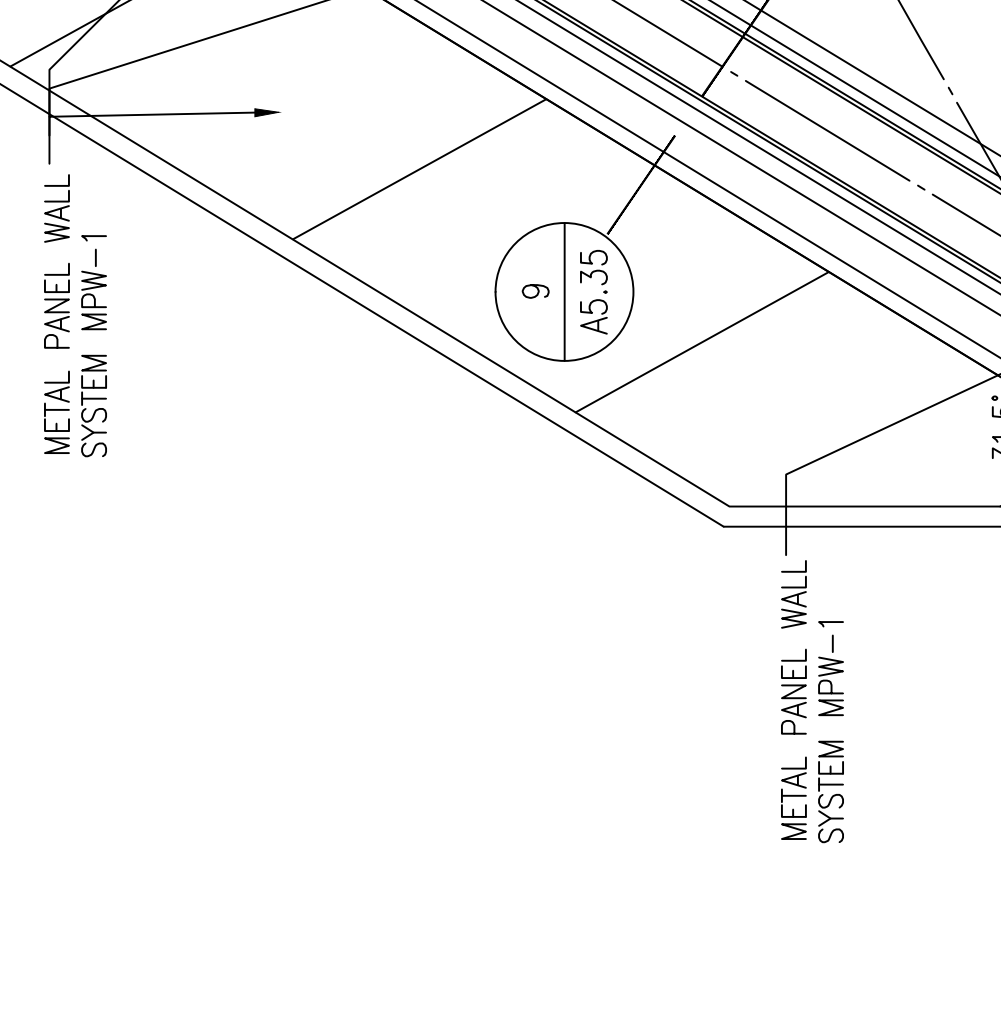
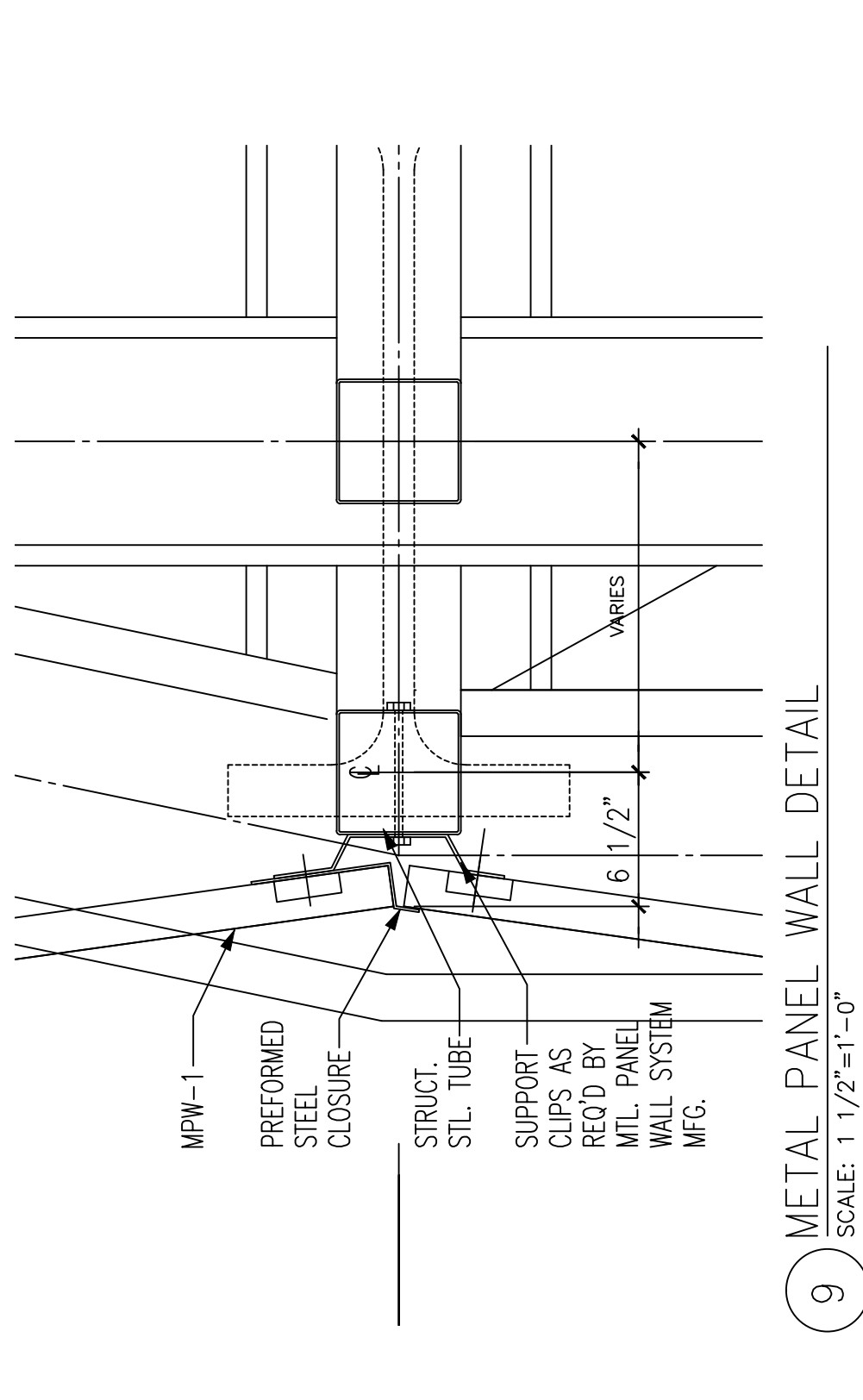
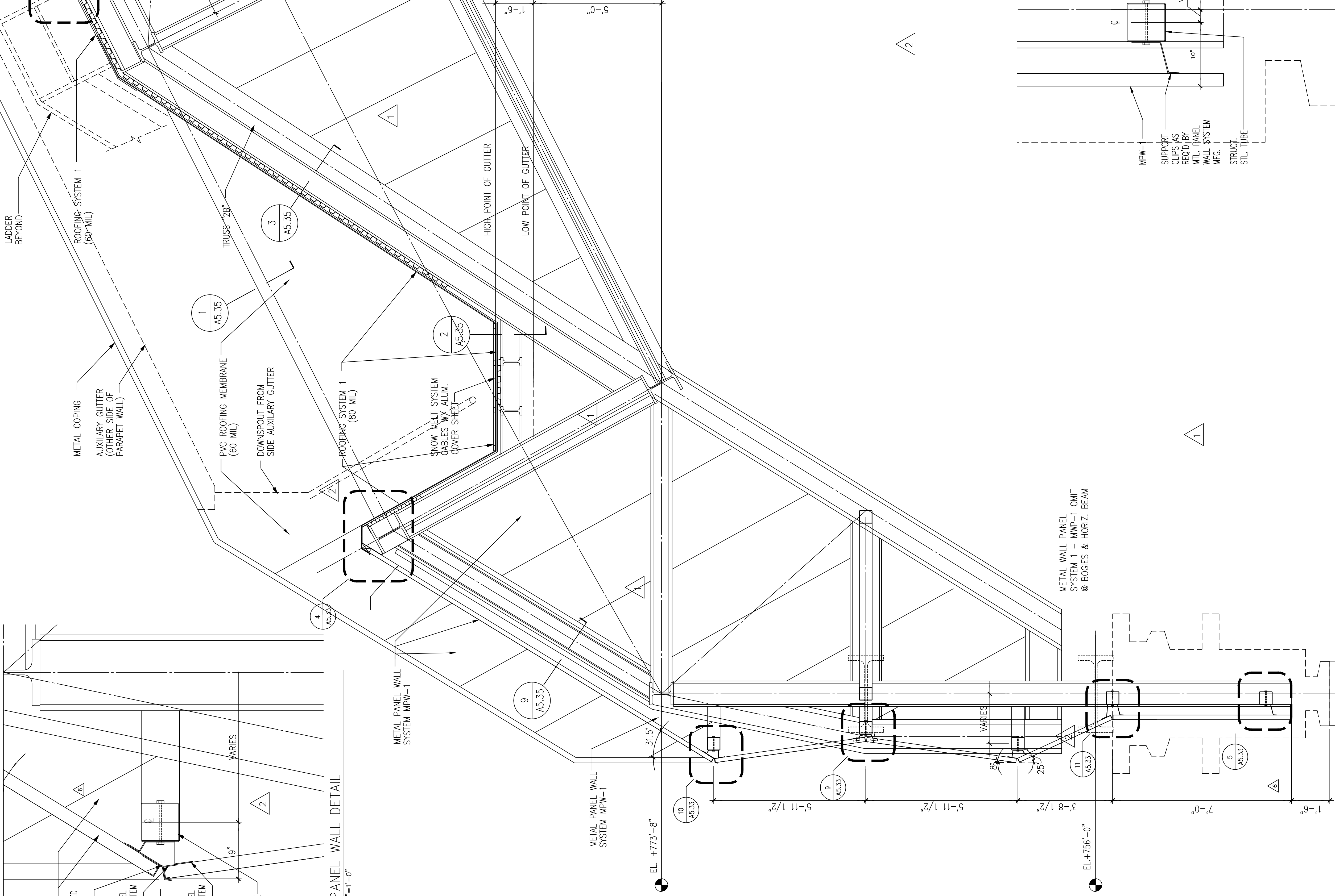
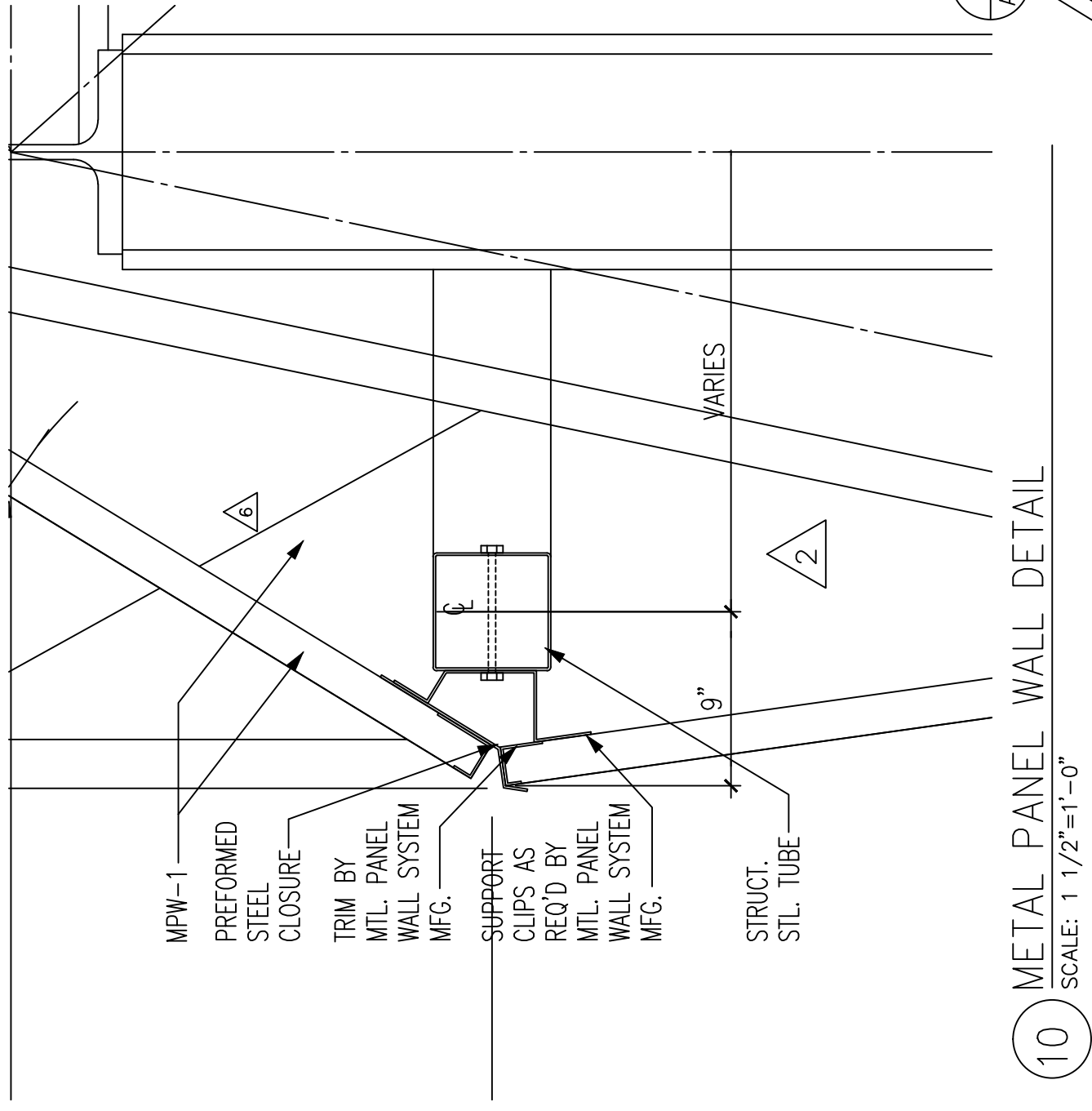
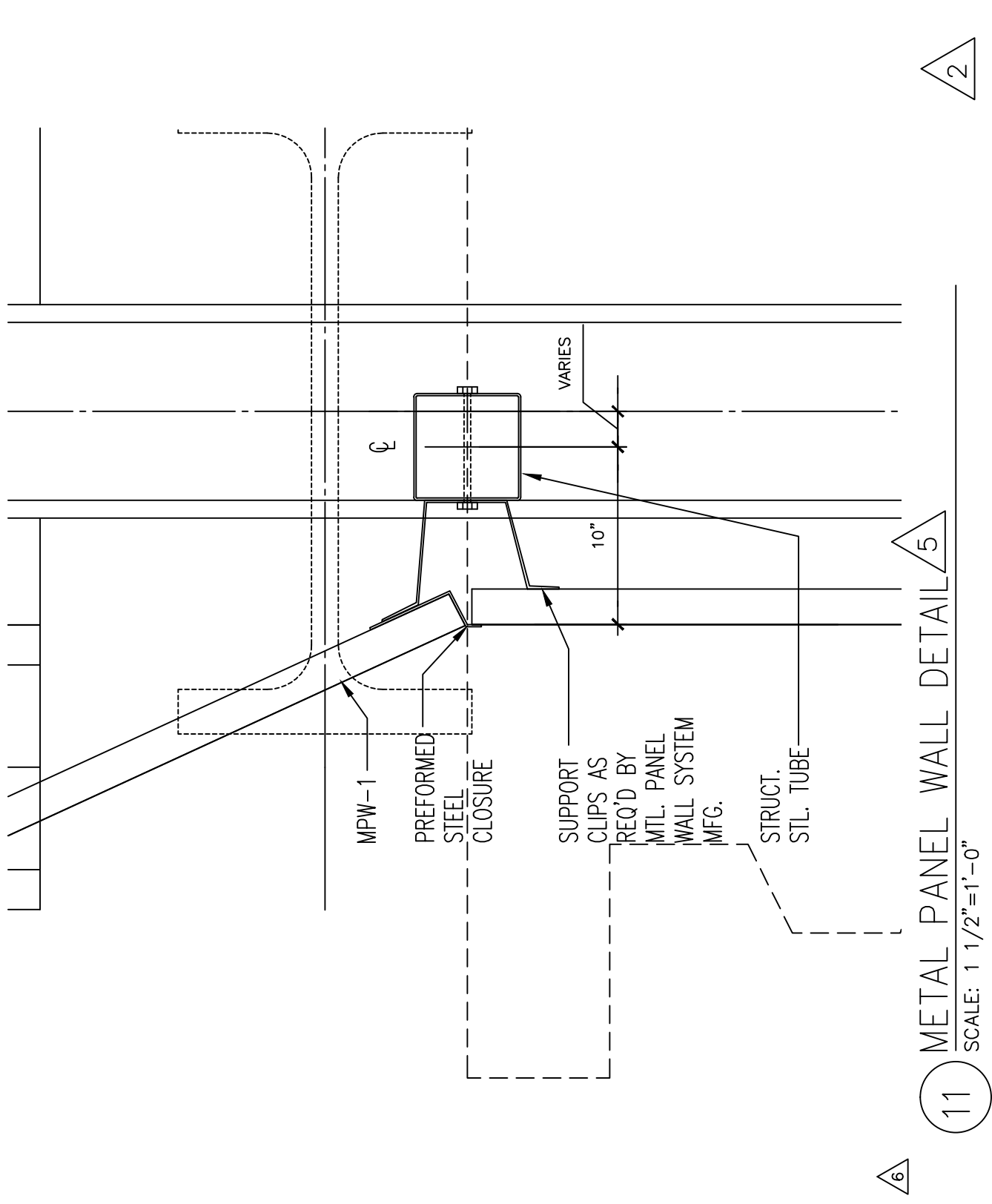
SCALE: **N.T.S.**

DATE:

FILE NO.:

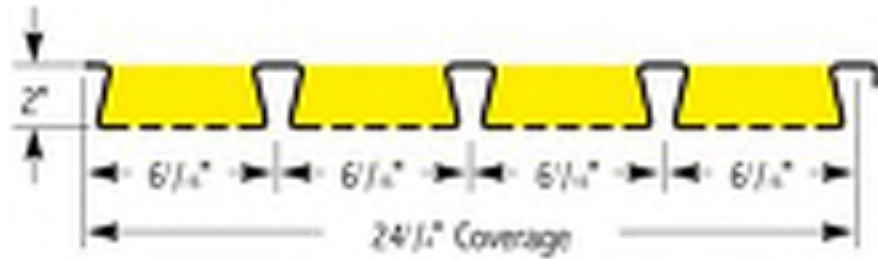
DRW. NO.:

AS A MEMBRANE MANUFACTURER, SIKA CORPORATION ("SIKA") REVIEWS DETAILS PREPARED BY THE CONSULTANT, ARCHITECT AND/OR ENGINEER FOR A PROJECT SOLELY FOR THE PURPOSE OF DETERMINING IF A SIKA WARRANTY MAY ISSUE FOR THE PROJECT. THIS REVIEW IS NOT TO BE CONSTRUED AS APPROVAL OF DETAILS BY SIKA AND IS NOT BEING CONDUCTED IN LIEU OF SOUND ENGINEERING AND ARCHITECTURAL PRACTICES AND JUDGMENT AND SHOULD NOT BE RELIED UPON FOR THAT PURPOSE. SIKA CORPORATION ASSUMES NO LIABILITY WITH RESPECT TO THE DESIGN OF THE ROOFING OR WATERPROOFING SYSTEM, THE ARCHITECT, CONSULTANT AND/OR ENGINEER OR DESIGN PROFESSIONAL FOR A PARTICULAR PROJECT BEARS THE SOLE RESPONSIBILITY FOR THE DESIGN OF THE ROOFING OR WATERPROOFING SYSTEM, FOR THE PREPARATION AND APPROVAL OF THE DETAILS AND SHOP DRAWINGS, AND FOR DETERMINING THEIR SUITABILITY FOR A PARTICULAR PROJECT OR APPLICATION, WHILE SIKA PROVIDES GENERAL INSTRUCTIONS FOR THE INSTALLATION OF ITS MEMBRANE AS WELL AS TRAINING FOR SIKA AUTHORIZED APPLICATORS, THE MEANS AND METHODS USED BY THE CONTRACTOR FOR SURFACE PREPARATION AS WELL AS THE MEANS AND METHODS EMPLOYED BY THE CONTRACTOR IN THE INSTALLATION OF THE SIKA MEMBRANE ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL SALE OF SIKA PRODUCTS AND SERVICES ARE SUBJECT TO SIKA' TERMS AND CONDITIONS OF SALE AVAILABLE AT USA.SARNAFIL.SIKA.COM.

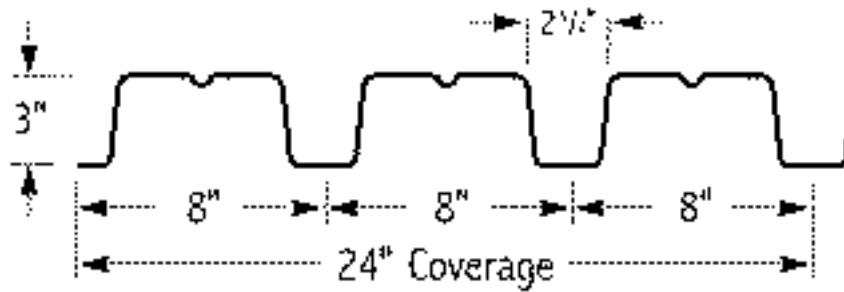


EXISTING DECK DETAILS

- Main Roof: 2" x 20 ga ER2RA acoustical deck manufactured by Epic Metals Corp; Thickness = .0358", Yield Stress = 50 ksi

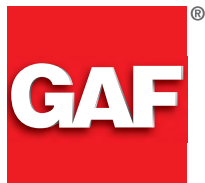


- Gutters: 3" x 16 ga E300 deck manufactured by Epic Metals Corp; Thickness = .0600", Yield Stress = 40 ksi



DensDeck® Roof Board

Updated: 7/17



*Quality You Can Trust...From
North America's Largest Roofing Manufacturer!™*



DENSDECK®

ROOF BOARD (1 of 2)

Manufactured by:



133 Peachtree Street, N.E.
Atlanta, GA 30303
Technical: 1-800-225-6119

Description

DensDeck® Roof Board combines exceptional fire resistance, a thermal barrier, and recovery board for use in various commercial roofing systems. The patented DensDeck® Roof Board design employs glass mat facings front and back that are embedded into a water-resistant gypsum core, providing excellent fire resistance, moisture resistance, and wind uplift properties. The unique construction of DensDeck® Roof Boards provides superior flute spanning that stiffens and provides increased foot traffic resistance to the roof deck. Additionally, DensDeck® panels have been shown to withstand delamination, deterioration, warping, and job site damage more effectively than other roofing membrane substrates such as paper-faced gypsum board, fiber board, and perlite insulation.

Primary Uses

Roof system manufacturers and designers have found DensDeck® Roof Boards to be compatible with many types of roofing systems, including built-up, modified bitumen, single ply, metal systems, wood shingle and shake, tile, slate, and re-cover board, as well as an overlayment protection board for polyisocyanurate and polystyrene insulation. DensDeck® can also be used as a form board for poured gypsum concrete decks in roof applications as well as a substrate for spray foam roofing systems. 1/2" (13 mm) and 5/8" (16 mm) DensDeck® Prime may also be used in vertical applications as a backer board or liner for the roof side of parapet walls. Georgia-Pacific Gypsum offers a limited warranty for up to 90 days of exposure to normal weather conditions when applied vertically on parapet walls. For complete warranty details, visit DensDeck.com.

Some membrane manufacturers have hot mop asphalt or torch applications directly to DensDeck® without using a primer or base sheet. **Refer to specific membrane system application instructions.** System manufacturers and designers have found DensDeck® to be compatible with bonding adhesives for fully adhered single-ply membrane applications.

The DensDeck® panel's exceptional moisture resistance and low R-value make it the preferred substrate for vapor retarders.

Having excellent fire resistance, DensDeck® Roof Board features a noncombustible core and fiberglass mat that offers greater fire protection than other conventional commercial roofing products when applied over combustible roof decks and steel decks. DensDeck® Roof Boards are FM tested and approved as the only 1/2" (13 mm) gypsum product to meet the calorimeter requirements for conventionally insulated decks. Tested in accordance with ASTM E84, its surface burning characteristics are Flame Spread-0 and Smoke Developed-0. 5/8" (16 mm) DensDeck® panels can replace any generic type X gypsum board in any roof assembly in the UL Fire Resistance Directory under the prefix "P."

Limitations

DensDeck® Roof Boards are designed to act with a properly designed roof system. The actual use of DensDeck® Roof Board as a roofing component is the responsibility of the roofing system's designing authority.

Conditions beyond the control of Georgia-Pacific Gypsum such as weather conditions, dew, application temperatures, and techniques may cause adverse effects with adhered roofing systems. Always consult the roofing system manufacturer's specific instructions for applying the various roofing types to DensDeck® Roof Board.

Panels must be kept dry before, during, and after installation. Apply only as much DensDeck® Roof Board as can be covered by a roof membrane system in the same day.

Accumulation of water due to leaks or condensation in or on DensDeck® Roof Boards must be avoided during construction and after construction. Avoid over-use of non-vented direct-fired heaters during winter months. Avoid application of DensDeck® Roof Board during rains, heavy fogs, and other conditions that may deposit moisture on the surface. When applying solvent-based adhesives or primers, allow sufficient time for the solvent to flash off to avoid damage to roofing components. Maximum flute span is 2-5/8" (67 mm) for 1/4" (6 mm) DensDeck®, 5" (127 mm) for 1/2" (13 mm) DensDeck®.

Hot Mopping over DensDeck® Roof Boards:

For hot mopping asphalt or coal tar directly to DensDeck® Prime Roof Board, follow the manufacturer's recommended system application temperature guidelines and good roofing practices. DensDeck® Prime Roof Board is the preferred substrate for torch application. However, the product must be dry prior to commencing installation of torch application.

- Ensure product is dry. Ensure proper torching technique.
- Limit the heat to the roof board. Maintain a majority of the torch flame directly on the roll.
- When using DensDeck® Roof Board in lieu of DensDeck® Prime Roof Board, prime the surface of the DensDeck® Roof Board and allow to dry thoroughly.
- When torching to DensDeck® Prime Roof Boards, field priming should not be required.

Note: DensDeck® is a registered trademark of Georgia Pacific.

Product Specifications (nominal)

Thickness	1/4" – 6 mm; 1/2" – 13 mm; 5/8" – 16 mm Fireguard® Type X
Widths	4' – 1.22 mm standard, 1/8" – 3 mm tolerance
Lengths	8' – 2.44 mm standard, tolerance 1/4" – 6 mm; Optional: 4' – 1.22 mm available
Edges	Square
Spanning	1/4" (6 mm) DensDeck® spans flute widths up to 2 5/8" (67 mm)
	1/2" (13 mm) DensDeck® spans flute widths up to 5" (127 mm)
	5/8" (16 mm) DensDeck® spans flutes up to 8' wide (203 mm)



DENSDECK®

ROOF BOARD (2 of 2)

Manufactured by:


Georgia-Pacific
Gypsum

 133 Peachtree Street, N.E.
Atlanta, GA 30303
Technical: 1-800-225-6119

Technical Data

Flame spread 0, smoke developed 0, when tested in accordance with ASTM E84 or CAN/ULC-S102. Noncombustible when tested in accordance with ASTM E136. DensDeck® Fireguard®: UL Classified when tested in accordance with ASTM E119. 1/4" (6 mm) DensDeck® panels have been tested by Factory Mutual for 60 psf and 90 psf wind uplift for BUR, EPDM, thermoplastics, and modified bitumen roof systems. Higher wind uplift ratings have been achieved by numerous membrane manufacturers using DensDeck® in their FM-approved construction designs.

Installation

1. DensDeck® panels should be used with fasteners specified in accordance with FM requirements and roof membrane manufacturer's written recommendations.
2. For wind uplift/FMRC compliance where DensDeck® Roof Boards are mechanically attached to metal decks, DensDeck® Roof Boards shall be installed to the specifics of the FMRC design assembly.

3. For installations involving BUR, EPDM, thermoplastics, and modified bitumen roof systems, call GP's Technical Hotline at 1-800-225-6119 for fastener patterns of GP's FM uplift assemblies.
4. In accordance with approved shop drawings, FM-approved fasteners shall be installed with plates through the DensDeck® panels, flush with the surface.
5. Where DensDeck® is installed over combustible wood decks or insulation, all joints should be staggered. The optional separator sheet should be installed prior to the installation of DensDeck® Roof Boards.
6. Edge joints should be located on, and parallel to, deck ribs. End joints of adjacent lengths of DensDeck® should be staggered.
7. DensDeck® shall be installed with ends and edges butted tightly.
8. DensDeck® is manufactured to meet ASTM C1177.

PHYSICAL PROPERTIES

PROPERTIES	1/4" (6.4 mm)	1/2" (12.7 mm)	5/8" (15.9 mm)
Thickness, nominal	1/4" (6.4 mm) ± 1/16" (1.6 mm)	1/2" (12.7 mm) ± 1/32" (0.8 mm)	5/8" (15.9 mm) ± 1/32" (0.8 mm)
Width, standard	4' (1,219 mm) ± 1/8" (3 mm)	4' (1,219 mm) ± 1/8" (3 mm)	4' (1,219 mm) ± 1/8" (3 mm)
Length, standard	8' (1,219 mm) ± 1/4" (6.4 mm)	8' (2,438 mm) ± 1/4" (6.4 mm)	8' (2,438 mm) ± 1/4" (6.4 mm)
Weight nominal, lbs./sq. ft. (Kg/m²) ⁷	1.2 (5.9)	2.0 (9.8)	2.5 (12.2)
Surfacing	Fiberglass mat	Fiberglass mat	Fiberglass mat
Flexural Strength ¹ , parallel, lbf. min. (N)	≥40 (178)	≥80 (356)	≥100 (444)
Flute Spanability ²	2 5/8" (67 mm)	5" (127 mm)	8" (203 mm)
Permeance ³ , perms (ng/Pa•S•m²) >	50 (>2850)	>35 (>1995)	>32 (>1824)
R Value ⁴ , ft²•°F•hr/BTU (m²•°K/W)	.28	.56	.67
Lineal Variation with Change in Temp., in/in °F (mm/mm/°C)	8.5x10 ⁻⁶ (15.3x10 ⁻⁶)	8.5x10 ⁻⁶ (15.3x10 ⁻⁶)	8.5x10 ⁻⁶ (15.3x10 ⁻⁶)
Lineal Variation with Change in Moisture	6.25x10 ⁻⁶	6.25x10 ⁻⁶	6.25x10 ⁻⁶
Water Absorption ⁵ , % max	<10.0	<10.0	<10.0
Compressive Strength ⁶ , psi nominal	900	900	900
Surface Water Absorption, grams, nominal ¹	<2.5	<2.5	<2.5
Flame Spread, Smoke Developed (ASTM E84, UL 723, CAN/ULC-S102)	0/0	0/0	0/0
Fire Classification	UL Classified FM Approvals	UL Classified FM Approvals	UL Classified FM Approvals
Bending Radius	5' (1,524 mm)	8' (2,438 mm)	12' (3,658 mm)

¹ Tested in accordance with ASTM C473, method B.

² Tested in accordance with ASTM E661.

³ Tested in accordance with ASTM E96 (dry cup method).

⁴ Tested in accordance with ASTM C518 (heat flow meter).

⁵ Specified values per ASTM C1177.

⁶ Tested in accordance with ASTM C473.

⁷ Represents approximate weight for design and shipping purposes. Actual weight may vary based on manufacturing location and other factors.

MOLD RESISTANCE. When tested, as manufactured, in accordance with ASTM D3273, DensDeck® Roof Boards have scored a 10, the highest level of performance for mold resistance under the ASTM D3273 test method. The score of 10, in the ASTM D3273 test, indicates no mold growth in a 4-week controlled laboratory test. The mold resistance of any building product when used in actual job site conditions may not produce the same results as were achieved in the controlled, laboratory setting. No material can be considered mold proof. For additional information, go to www.buildgpc.com/safetyinfo.

EDGE DETAIL

All new exterior edge flashing should be prefabricated FM Approved for at least **135** psf field roof and installed in accordance with FM Global Property Loss Prevention Data Sheet 1-49, *Perimeter Flashing*, manufacturer's guidelines and the current FM Global RoofNav approval listing. Proposals should include utilizing the following "Edge 1" system, or similar, for all edge detail. Furnish and install new wood blocking installed on top of the parapet wall utilizing FM required fasteners guidelines to provide proper inside slope below the new membrane and metal edge.

Edge Systems **ONE** ECONOMICAL | FAST | TESTED

One Edge

A Economical Price

► T
p
h
O

High Quality

- Carefully designed and ANSI/SPRI/FM 4435/ES-1 tested to comply with the International Building Code
- Available in 15 popular express colors or custom finishes with a 30-year warranty
- Available in galvanized steel
- 20-year, 120 mph warranty
- Factory Mutual approved for wind uplift protection

Economical

- Lower price than other customized solutions
- Decreased labor costs due to easy installation
- Higher overall profit on your construction projects

Easy Installation

- Manufactured in 12' lengths, saving 20% - 40% in material handling when compared to 10' or 8' material
- No need for stripping-in or heat welding that are typical with other systems
- Simple snap-on cover with no crimping necessary

Versions

- Built-Up or Modified
- Fully Adhered or Mechanically Attached Single-Ply

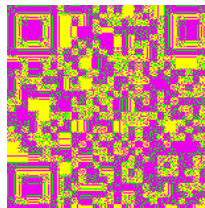


ES-1 Tested



With Metal-Era's SPEQ promise of speed, protection, expertise and quality, you are assured that Edge Systems One is backed with quality and service guarantees.

800-558-2162
www.metalera.com

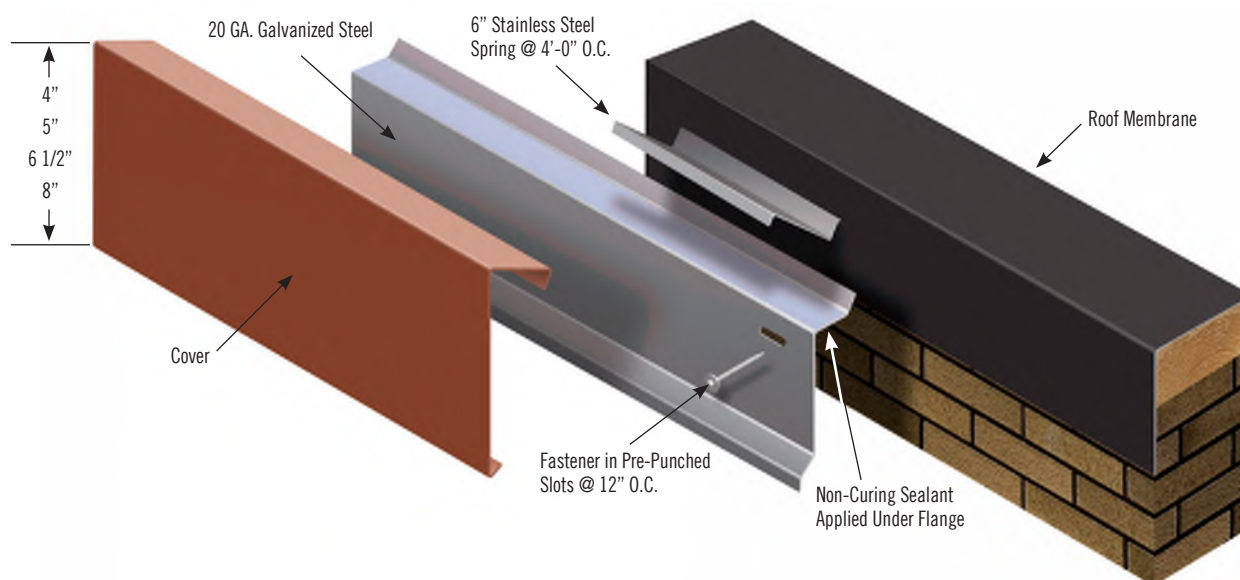


Scan to watch how Edge Systems One compares to shop fabrication.

Quick Shipping in 15 Express Colors

Standard and custom finishes are also available to meet your needs. Our finishes are made of Valspar's Fluoropon® high performance Hylar 5000®/Kynar 500® finish and include a 30-year warranty. For the most accurate color representation, contact us to request a paint chip.

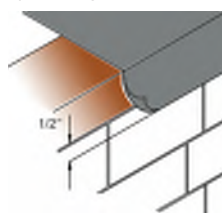
C



5-Step Easy Installation

Step 1

Place membrane over roof edge, fully covering nailer



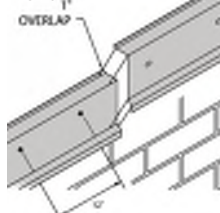
Step 2

Apply sealant to rail (rail shown with inside face up)



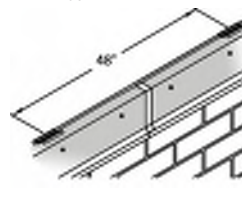
Step 3

Fasten base rail to nailer through provided slots



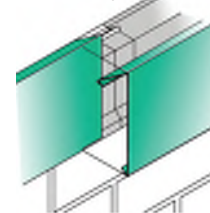
Step 4

Place spring clips every 4' o.c., typical



Step 5

Remove protective film from cover then snap onto base rail



Metal-Era, Inc. is a Minority Business Enterprise and a member of the National Minority Supplier Development Council. Download our national NMSDC Minority Business certificate at www.metalera.com.

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U.S. PATENT 2,927,023

Plytanium® plywood sheathing is ideal for residential and light commercial construction, and provides outstanding performance for walls and roofs. It adds proven performance and durability to new homes, room additions and renovations.

Available Sizes (Sized for 4' x 8')

Square Edge 3'-11⁷/₈" (1.216 m) x 7'-11⁷/₈" (2.435 m)

Building Code Performance Categories, Panel Thickness

- 3/8 CAT, 0.354" (8.99 mm)
- 15/32 CAT (3-ply), 0.451" (11.45 mm)
- 15/32 CAT (4-ply), 0.451" (11.45 mm)
- 19/32 CAT, 0.578" (14.68 mm)
- 23/32 CAT, 0.703" (17.85 mm)

Specifications

Length/Width Tolerance	+0, -1 ¹ / ₁₆ " (+0, -1.6 mm)
Straightness Tolerance	±1 ¹ / ₁₆ " (±1.6 mm)
Squareness Tolerance	±1 ¹ / ₈ " (±3.2 mm)
Primary Species	Southern Yellow Pine
Testing Agency	APA®-The Engineered Wood Association
Classifications	Exposure 1 – Plywood suitable for uses not permanently exposed to the weather. Panels classified as Exposure 1 are intended to resist the effects of moisture on structural performance as may occur due to construction delays, or other conditions of similar severity.
Code Fire Classification	Class III or C
Flame Spread Rating	76-200, smoke-developed index <450
Building Code Compliance	PS 1-09 or PS 2-10

Other Information

Forestry Certification	Plytanium plywood panels are made from wood sourced through a system that is third-party certified to the Sustainable Forestry Initiative® procurement standard.
Green Building Programs	See our Plytanium plywood <i>Sustainability Fact Sheet</i> available at www.builditbetter.com for more information on potential point contributions towards specific green building programs.
NGBS Green Certified	Plytanium plywood is Home Innovation NGBS Green Certified for Resource Efficiency and Indoor Environmental Quality. Please visit Homeinnovation.com/Green for more information.
Product Warranty	Plytanium® plywood is covered by a Lifetime Limited Warranty. For terms and conditions, please refer to our Lifetime Limited Warranty available at www.builditbetter.com .



International Shipping

To prevent the introduction and spread of plant pests, *ISPM 15: International Standards for Phytosanitary Measures*, requires that internationally shipped solid wood pallets be debarked, treated with heat or fumigated with methyl bromide, and marked with a seal of compliance. **Pallets made with engineered wood, including Plytanium plywood, are exempt from ISPM 15 regulations.** This is because the process of manufacturing engineered wood destroys any live organisms in the wood. (Source: "Boxes, Crate and Reel Manufacturing," www.PerformancePanels.com)

Formaldehyde Emissions

Plytanium plywood contains no added urea formaldehyde resins. PS 1 and PS 2 structural panels are exempt from testing by the California Air Resources Board (CARB) in the *Composite Wood Air Toxic Control Measure (ATCM)* and phenolic bonded structural panels are exempt from testing or monitoring by HUD in the *Manufactured Home Construction and Safety Standards*.

Manufacturing Locations

Location	APA Mill Number	Zip Code	Harvest Radius
Camden, TX	515	75934	90 miles
Corrigan, TX	516	75939	90 miles
Dudley, NC	348	28333	80 miles
Emporia, VA	230	23847	40 miles
Gurdon, AR	517	71743	60 miles
Madison, GA	404	30650	100 miles
Prosperity, SC	329	29127	80 miles
Taylorsville, MS	282	39168	50 miles
Warm Springs, GA	324	31830	450 miles



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



APPENDIX B

Wisconsin Professional Baseball Park District
standard General Conditions to Construction Services Contract

**GENERAL CONDITIONS TO
CONSTRUCTION SERVICES CONTRACT
WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT ("DISTRICT")**

Article 1 GENERAL PROVISIONS

1.1 The Contract

The Contract represents the entire agreement between the parties and supersedes all prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a written modification signed by authorized representatives of both parties.

1.2 The Contract Documents

The Contract shall consist of these General Conditions, a signed Purchase Order issued by the District, a signed accepted bid or proposal, drawings, shop drawings, specifications, schedule and addenda, as applicable (collectively, the "Contract Documents"). The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. Where there is conflict in provisions between general provisions in individual contract documents, the terms and conditions of these General Conditions shall control. In case of any conflict in provisions in the individual contract documents that are specific to the Work, (e.g., specifications, deadlines, etc.), the most stringent specification and earliest deadlines shall govern.

1.3 The Ownership of Contract Documents

All documents, reports, data, drawings, specifications and other materials prepared by the Contractor for performance of the Work (the "Documents") are instruments of the Contractor's Work, and are for use solely with respect to this Project. All Documents shall be the property of the District, or, where applicable, of the Brewers ("Instruments of Service"). Upon payment of all sums approved by the District as being due the Contractor, the District, or, where applicable, the Brewers, shall own all common law, statutory, and other reserved rights, in addition to the copyrights, in and to the Instruments of Service. Contractor shall not withhold delivery of the Instruments of Service on account of any dispute with the District, or, where applicable, the Brewers, including a dispute over any sums claimed due and owing by Contractor. The Instruments of Service are not to be used by the Contractor or any subcontractor on any other project without written consent of the District, or, where applicable, the Brewers, which may be withheld in the District's or the Brewer's sole discretion.

Article 2 THE DISTRICT

2.1 Duties

The District shall provide any site information in its possession related to the construction site. Except for Permits as defined in Section 3.8 below, the District shall obtain and pay for all necessary approvals, easements, special assessments and charges. The furnishing of any information by the District shall not relieve Contractor of any duty under the Contract Documents. Contractor shall notify the District within three (3) business days following discovery of any discrepancy between the information provided and actual site conditions. Failure to notify the District within such time shall constitute a waiver of any claim relating to the condition so discovered.

2.2 Right To Stop Work

If Contractor fails to correct Work that is not in accordance with the Contract Documents, or has failed to carry out Work in accordance with the Contract Documents, the District may direct Contractor in writing to stop the Work, or any part thereof, until the correction is made.

2.3 Right To Carry Out The Work

If Contractor neglects or fails to carry out the Work in accordance with the Contract Documents, after written notice as set forth in Section 10.7 hereof, in addition to any other rights the District has, the District may enter into contracts with other parties to complete, repair or replace the incomplete or defective Work, and may deduct from payments then or thereafter due Contractor the cost of correcting the deficiencies, including compensation for additional architectural services, legal fees, and other expenses that may be made necessary by the default of Contractor. If payments then or thereafter due Contractor are not sufficient to cover the costs of correcting the deficiencies, Contractor shall pay the District the difference no later than ten (10) days after the District's demand. Any amount not paid by Contractor when and as due shall be subject to interest at the rate of 18% per annum from the due date.

Article 3 CONTRACTOR

3.1 Duties

Contractor shall be responsible for providing all labor and materials as set forth on the accepted bid/proposal and in the Contract Documents (Work). Unless specifically excluded from the scope of the Work, Contractor shall be responsible for paying for all labor, materials, tools, utilities, transportation, as well as taxes thereon, and other facilities and services necessary to properly complete the Work. Execution of this agreement by Contractor is a representation that Contractor has studied the Contract Documents, visited the site, become familiar with the local conditions, and verified the grades, dimensions, elevations, and locations of existing conditions at the site.

3.2 Subcontracts and Subcontractors

Contractor shall contract with subcontractors as Contractor deems necessary for completion of the Work, and shall be responsible for the Work performed by such subcontractors as though the Work was performed by Contractor. Contractor shall provide advance written notice to the District of selected subcontractors. The District will provide in writing any reasonable objection to the subcontractors. The foregoing notwithstanding, the District shall have no responsibility for the acts, omissions or breach of contract of any subcontractor. Every Subcontract shall require the Subcontractor to be bound by the terms of the Contract Documents, and to assume to the Contractor all obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work, which the Contractor assumes herein to the District. Contractor shall require its subcontractors and vendors to provide similar insurance as required and include the District, any mortgagee, and the Project Administrator, and their respective successors, as additional insured and hold such parties harmless for their negligence.

3.3 Supervision

The Contractor shall be responsible for all means and methods of construction of the Work, and shall supervise and direct its own employees and all subcontractors, using its best skill and attention. Contractor shall be responsible for ensuring the Work, including the Work performed by all subcontractors, strictly complies with the Contract Documents.

3.4 Coordination

Certain portions of the Work may be completed by contractors hired directly by the District. Contractor shall be responsible for coordinating its Work on the Project, including coordinating deliveries, storage, installations, and use of utilities with such contractors.

3.5 Safety and Security

Contractor shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on the Work, including all applicable safety laws, standards, rules and regulations, and shall take all necessary precautions for the safety of, and shall provide all necessary protection to prevent injury to, or loss to all persons, the Work, materials, equipment, and other property at the site or adjacent thereto. Contractor shall, in the performance of its duties, be responsible for initiating, maintaining and supervising all safety precautions and programs, including those required by law or in conjunction with any governmental authority. Contractor shall promptly report to Project Administrator and the District all accidents arising out of or in connection with the performance of the Work, giving full details including statements of witnesses. Contractor shall promptly remedy any damage, injury or loss to property, as well as any condition posing undue threat of damage, injury or loss, at the site caused by the Contractor, subcontractors, or anyone else directly or indirectly associated with such condition. Contractor shall secure the construction site, limiting access to authorized personnel only. The use of a drone anywhere on the ballpark site or within the ballpark facility requires prior written consent from the District, which may be withheld in the District's sole discretion and may be limited to specific date(s) and time(s) of use.

3.6 Quality

Unless specifically provided in the Contract Documents, all materials incorporated into the Work shall be new and meet the specifications for the Project. Upon the District's request, Contractor shall promptly provide the product labels and delivery slips for materials incorporated into the Work.

3.7 Warranty

Contractor warrants that: (1) materials and equipment furnished by Contractor will be of good quality and new; (2) the Work will be free from defects in workmanship, material, and design; (3) the Work will conform to the applicable specifications, drawings, designs, samples, and other requirements of the Contract Documents; (4) the Work will be fit for their intended purpose and operate as intended; (5) be free and clear of all liens, security interests or other encumbrances; (6) not infringe or misappropriate any third party's patent or other intellectual property rights; and (7) it shall perform the Work using personnel of required skill, experience and qualifications and in a professional and workmanlike manner in accordance with best industry standards for similar services and shall devote adequate resources to meet its obligations hereunder and under any Contract Documents. These warranties survive any delivery, inspection, acceptance, or payment of or for the Work by the District. Contractor warrants that the Work shall be free from defects in material and workmanship arising from normal usage for a period of one year from the Substantial Completion Date and that its Work will be free from defects in workmanship, design and material until the end of the Term, or for one year, whichever is later. Establishment of this one year period for correction of defective Work does not affect or in any way limit the applicable statutory limitations or statute of repose periods. Upon written notice from the District, Contractor shall, at its option, repair or replace the defective Work or re-perform defective services. These warranties do not extend to any Work or services that have been abused, altered, misused, or repaired by the District or third parties without the supervision of and prior written approval of Contractor; or if Contractor serial numbers or warranty date decals have been removed or altered. The District must promptly report any failure of the equipment to Contractor in writing.

The warranties set forth in this Section 3.7 are cumulative and in addition to any other warranty provided by law or equity. Any applicable statute of limitations runs from the date of the District's discovery of the noncompliance of the Work or services. If Contractor installs or furnishes a piece of equipment under the Contract, and that equipment is covered by a warranty from the manufacturer, Contractor will transfer the benefits of that manufacturer's warranty to the District if the Contract with the District terminates before the equipment manufacturer's warranty expires.

3.8 Permits

Contractor shall pay for and obtain all building permits, governmental fees, licenses and inspections necessary for proper completion of the Work (collectively, "Permits"). Contractor shall give all required notices to all governmental agencies having jurisdiction over the Work.

3.9 Hot Work

Contractor acknowledges and agrees that if any Hot Work (any operation involving open flames or producing heat and/or sparks conducted outside a Hot Work Designated Area) is required as part of the Work, a Hot Work Permit provided by FM Global will be required prior to commencement of any Hot Work. Contractor further acknowledges and agrees that it will be required to either: (1) bring a completed Hot Work Permit to American Family Field, or (2) complete a Hot Work Permit at American Family Field on the date which Work is to be provided.

3.10 Construction Site Pollution Control

Prior to any land disturbance Work commencement, Contractor shall supply an erosion and sediment control plan, details, notes, and necessary sequencing plan to the District that Contractor shall implement to comply with the Construction Site Erosion & Sediment Control Standards applicable to the Work. The plan shall outline all necessary DNR approved technical standards related to erosion/sediment control and/or storm water management that the Contractor will implement, maintain, and inspect as required throughout the duration of construction until final restoration (as needed) is achieved. The Contractor shall be responsible for the proper design; and the Contractor shall be responsible for the proper installation, inspection and repair/maintenance of the erosion/sediment control measures and/or storm water management measures and shall document records of inspections (on DNR inspection reports:

<http://dnr.wi.gov/topic/stormwater/construction/forms.html>) and records of repair/maintenance activities in daily logs during the Work in accordance with ch. NR 151 and ch. NR 216, Wisconsin Administrative Code. The inspection reports and repair/maintenance logs shall be kept on-site in an accessible location along with the approved erosion and sediment control plan, details, notes and sequencing plan.

Contractor shall not permit any Hazardous Materials to be deposited, stored, disposed, placed, generated, manufactured, buried, refined, transported, treated, discharged, handled, exacerbated, or located on District property. Contractor shall promptly notify the District of the discovery of any Hazardous Material on the District property, recommend appropriate action, and implement and supervise the course of action approved or directed by the District. For purpose of this Contract, "Hazardous Materials" means any hazardous, toxic, or harmful substances, wastes, materials, pollutants, or contaminants (including, without limitation, asbestos, lead-based paint, polychlorinated biphenyls, petroleum products, flammable explosives, radioactive materials, infectious substances, or raw materials which include hazardous constituents) or any other substances or materials which are included under or regulated by Environmental Laws, or any molds, spores, fungi, or other harmful microbial matter. "Environmental Laws" means any federal, state, or local law, rule, or regulation

pertaining to environmental regulation, contamination, remediation, or cleanup, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. § 9601 et seq. and 40 CFR § 302.1 et seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6901 et seq.), the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq. and 40 CFR § 116.1 et seq.), those relating to lead based paint, the Hazardous Materials Transportation Act (49 U.S.C. § 1801 et seq.), and the regulations promulgated pursuant to said laws, all as amended.

3.11 Schedule

If indicated in the Signed Purchase Order or as otherwise required by the Contract Documents, before it starts construction, Contractor shall provide to the District and obtain the District's approval of a schedule of performance of the Work, showing the critical path and milestones for completion of the Work according to the Contract Documents. The District shall note any deficiencies in scheduling prior to accepting the schedule.

3.12 Clean-Up

Contractor shall keep the premises and surrounding area free from debris and trash related to the Work. Contractor shall be responsible for daily clean-up of construction materials, debris and dust control. Upon completion of the Work, Contractor shall provide a final clean-up of all surfaces.

3.13 Indemnity

To the fullest extent permitted by law, Contractor shall indemnify, defend and hold harmless the District, the Project Administrator, the Milwaukee Brewers Baseball Club, L.P. (the "Brewers"), Major League Baseball, and the directors, authorized representatives, consultants and agents of each ("Indemnitees") from and against all claims, liabilities, costs, damages, losses, payments, judgments, and expenses including, but not limited to, reasonable attorneys' fees and other litigation expenses (collectively, "Losses"), arising out of or resulting from: (a) bodily injury, death of any person, sickness, disease, or damage to real property resulting from the willful, fraudulent, or negligent acts or omissions of Contractor or Contractor personnel and subcontractors; or (b) Contractor's breach of any representation, warranty, or obligation of Contractor set forth in the Contract (including, without limitation, any violation of applicable safety laws described in Section 3.5, above or environmental requirements as described in Section 3.10 above). This obligation is in addition to any other obligations set forth herein or under applicable law. In claims against any person or entity indemnified under this Subsection 3.13 by an employee of the Contractor, anyone directly or indirectly employed by Contractor, or anyone for whose acts Contractor may be liable, the indemnification obligation under this Section shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

Contractor shall defend, indemnify, and hold harmless the Indemnitees from and against all Losses based on a claim that any of the Work or the District's receipt or use thereof infringes or misappropriates the patent, copyright, trade secret or other intellectual property right of any third party. In no event shall Contractor enter into any settlement without the District's or Indemnitee's prior written consent.

The provisions of this Section 3.13 will survive the expiration or earlier termination of the Contract.

Article 4 PROJECT ADMINISTRATOR

The District's Project Administrator, or such other person or entity designated by the District ("Project Administrator"), will provide administration of the Contract. The Project Administrator will visit the site at regular intervals, and based upon the observations made, will evaluate Contractor's invoice and certify the amount due. The Project Administrator will have the authority to reject non-conforming or defective Work. The Project Administrator will promptly interpret and advise concerning the Contractor's performance of the requirements of the Contract Documents.

Article 5 TIME AND SCHEDULE

TIME IS OF THE ESSENCE as to completion of the Work according to the Contract Documents. If Contractor is delayed at any time in the progress of the Work, the time for performance may be extended by a revised Purchase Order approved by the District in its sole discretion. Contractor shall give notice of the delay within five (5) days of the occurrence giving rise to the delay, stating the period of time the occurrence is expected to continue. No other extensions of time shall be approved. The date of commencement of the construction ("Commencement Date") and the date upon which Contractor shall achieve Substantial Completion ("Substantial Completion Date") are set forth in the Purchase Order.

Article 6 COSTS, PAYMENT AND COMPLETION

6.1 Contract Sum

The Contract Sum is the total amount payable by the District to the Contractor for the full and complete performance of the Work under the Contract Documents. Without limitation, the Contract Sum includes: (i) all subcontractors' Work (including any mark-up on subcontractors' Work); (ii) all self-performed work; (iii) the costs of all materials and supplies; (iv) the costs of all equipment; (v) all labor necessary to perform the Work; (vi) the costs of all bonds and insurance required to be furnished and/or provided by Contractor under the Contract Documents; (vii) the costs of all Permits; (viii) any and all other direct or indirect costs; and (ix) Contractor's fee, profit and/or recoverable overhead. As indicated in the Purchase Order, the Contract Sum shall either be in the form of a "Lump Sum", "Actual Cost - Not to Exceed" (which Contractor shall submit to the District), or such other method of payment as agreed upon by the District and Contractor.

6.2 Invoicing

Contractor shall submit invoice(s) to the District that shall be on a form acceptable to the District. Each invoice shall be supported by work logs and other data substantiating the Contractor's right to payment. Contractor shall submit with each invoice a conditional waiver and release of lien for the Contractor and for each subcontractor and material supplier who has furnished labor, equipment, materials, or services to the Project for the period covered by the invoice. The Project Administrator will review the invoice as set forth in Article 4 above, and will authorize payment as long as there are no outstanding liens or claims and so long as the Work has been performed in accordance with the Contract Documents. Contractor shall further warrant that, upon submittal of an invoice: (i) title to all Work covered by the invoice will pass to the District no later than the time of payment; and (ii) all Work for which invoices have previously been paid by the District shall be paid to all subcontractors to whom payments are due and that the Project is free and clear of any and all liens, claims, security interests or other encumbrances adverse to the District. All invoices will be delivered via email and are due net 30 days from of the District's receipt of the invoice, including all required supporting documentation, except for any amounts disputed by the District in good faith. The parties shall seek to resolve all such

disputes expeditiously and in good faith. Contractor shall continue performing obligations notwithstanding any such dispute.

6.3 Progress Payments

Neither the District nor the Project Administrator shall be responsible for direct payment of any monies to subcontractors or material suppliers. Issuance of a Certificate for Payment, or occupancy or use of the Project by the District, shall not constitute acceptance of Work that is not in conformance with the requirements of the Contract Documents. Notwithstanding the above, the District reserves the right to make payments in the event of any default by the Contractor to any subcontractor in such amount as the District determines necessary to protect the District's interests from lien or other claim. Payment of any such amounts directly to a subcontractor shall be credited against amounts otherwise due Contractor.

6.4 Substantial Completion

Substantial Completion occurs when the Work is sufficiently complete in accordance with the Contract Documents such that the District can occupy or use the Work for its intended purpose and when all required occupancy permits have been issued and delivered to the District. Upon Substantial Completion, as determined by the Project Administrator, the District shall make payment, excepting only such Work as required to complete the punch list. When Contractor Substantially Completed the Work in all material respects, Contractor shall notify the District in writing of such completion. Contractor shall promptly meet with the District after the date of Contractor's notice of its completion of the Work to inspect the premises and prepare with the District a "punch list" of corrections of construction that are required to cause any applicable portion of the Work to conform with the Contract Documents in all material respects. Contractor shall within fifteen (15) days cause all items on the punch list to be completed or remedied.

6.5 Final Completion

Upon receipt of a final invoice, the Project Administrator will inspect the Work, and if the Project Administrator finds the Work acceptable and the Contract fully performed, will approve final payment. Final payment shall not become due until the Contractor submits to the District release and final lien waivers satisfying all obligations, claims, security interests, or other encumbrances arising out of the Contract, together with all warranties, guarantees, record documents including all drawings, plans, specifications, maintenance manuals, or other documents provided by the Contractor or material suppliers. Acceptance of final payment by the Contractor shall constitute a waiver of all claims by the Contractor except those previously made in writing and unsettled as of the time of the final invoice submittal.

Article 7 CHANGES IN THE WORK

Changes in the Work shall be accomplished only through a revised Purchase Order. Contractor shall provide documentation justifying the adjustment to the Contract Sum before commencement of any Work specified in the revised Purchase Order. Any request for an extension of Contract Time shall be accompanied by a revised schedule for performance of the Work, showing both the original schedule and revisions, as well as the effect of the requested extension. Contractor shall not be entitled to compensation for additional work performed prior to receipt of a fully executed revised Purchase Order, which shall be at the District's sole discretion.

Article 8 INSURANCE AND BONDS

The Contractor shall purchase and maintain, at its expense, a policy covering the Work to be performed hereunder for the Contractor's negligent acts, errors and omissions in the amounts set forth on Exhibit A attached hereto. Contractor shall keep this policy in force for not less than three (3) years after the completion of the Work under the Contract.

The Contractor shall also procure and maintain during the life of the Contract the following types of insurance: (i) Workers' Compensation Insurance; (ii) Employer's Liability Insurance; (iii) Commercial General Liability Insurance; and (iv) Commercial Automobile Liability Insurance, all in accordance with the amounts and other requirements set forth in Exhibit A attached hereto and incorporated herein.

Prior to the Commencement Date of the Work, Contractor shall provide to the District certificates of insurance evidencing the foregoing coverages. Each policy maintained by the Contractor pursuant to this Article 8 shall comply with the requirements in Exhibit A and provide that it will not be canceled or materially altered without thirty (30) days advance written notice by mail to the District mailed to the address indicated herein, and the policies or certificates of insurance shall so state.

Article 9 TERMINATION

9.1 Termination By Contractor

Contractor may terminate the Contract upon occurrence of any of the following:

1. issuance of a court or other public authority order stopping all Work;
2. an act of government declaring all Work is to stop; or
3. failure of the District to make payment upon an invoice validly approved by the Project Administrator within thirty (30) days of approval, which failure continues for a period of seven (7) days after written notice from Contractor to the District.

Upon such termination, the Contractor shall be compensated for all Work completed to the date of termination. Contractor shall not be entitled to any anticipated profits, consequential damages, or mobilization expenses.

9.2 Termination By the District For Cause

The District may terminate the Contract if the Contractor:

1. repeatedly (more than 1 time) refuses or fails to adequately supply properly skilled labor or materials;
2. fails to make payments to subcontractors for materials or labor in accordance with the respective subcontract agreements;
3. disregards laws, ordinances, rules regulations or orders of any public authority having jurisdiction over the Project;
4. breaches any provision of the Contract Documents;
5. becomes insolvent; or

6. becomes the subject of a bankruptcy filing, a receivership, voluntary or involuntary, a composition or any other proceeding designed for the benefit of creditors generally or specifically that is not dismissed within 60 days of filing.

Without regard to the remedies at law or as stated herein, after a seven (7) day notice to Contractor of any cause set forth above, the District may terminate the Contract and exercise its rights as set forth within Article 2 herein. The District may terminate the Contract immediately in the event subpart 5 or 6 above becomes applicable.

9.3 Termination By The District For Convenience

Notwithstanding any other provision to the contrary in the Contract Documents, the District may terminate the services of the Contractor and the Work by giving Contractor seven (7) days prior written notice. In such event, the Contractor shall be entitled to payment for all Work completed, but for no other compensation or damages.

Upon expiration or termination of the Contract for any reason or no reason, Contractor shall: (i) deliver to the District all documents, work product, and other materials, whether or not complete, prepared by or on behalf of Contractor in the course of performing the Work; (ii) return to the District all District-owned property, equipment, or other materials in its possession or control; (iii) remove any Contractor-owned property, equipment, or materials located at the District's locations; and (iv) provide reasonable cooperation and assistance to the District upon the District's written request in transitioning the Work to an alternate service provider.

9.4 Suspension By The District

The District may order the Contractor to suspend, delay or interrupt the Work for a period of time as the District may direct. In such event, the Contract Sum and Contract Time shall be adjusted if necessary pursuant to the provision of Article 7 herein.

9.5 No Suspension by Contractor

Under no circumstances shall the Contractor suspend the Work without the prior, written consent of the District, which may be withheld in the District's sole discretion.

Article 10 MISCELLANEOUS PROVISIONS

- 10.1 **Applicable Law.** The Contract is entered into and shall be interpreted in accordance with the laws of the State of Wisconsin, without regard for conflict of laws principles.
- 10.2 Any legal suit, action, or proceeding arising out of or related to the Contract or the Services provided hereunder shall be instituted exclusively in the federal courts of the United States or the courts of Wisconsin, in each case located in the City of Milwaukee and County of Milwaukee, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action, or proceeding. The parties hereby waive any claims or defenses that venue in such jurisdiction is inappropriate, inconvenient or wrongful. EACH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THE CONTRACT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

- 10.3 If any term or provision of the Contract is invalid, illegal, or unenforceable, such invalidity, illegality, or unenforceability shall not affect any other term or provision of the Contract or invalidate or render unenforceable such term or provision. Upon such determination that any term or other provision is invalid, illegal, or unenforceable, the parties hereto shall negotiate in good faith to modify the Contract so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the greatest extent possible.
- 10.4 No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. Except as otherwise set forth in the Contract, no failure to exercise, or delay in exercising, any rights, remedy, power, or privilege arising from the Contract shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power, or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power, or privilege.
- 10.5 Except as set forth herein, this Agreement shall be binding upon all successors and heirs of the respective parties. The foregoing notwithstanding, other than the right to subcontract the Work, the Contractor may not assign the Contract Documents to any third party without the prior written consent of the District, which the District may withhold in its absolute discretion.
- 10.6 Remedies
- In addition to all rights and remedies available under law, the District may set off any and all damages for which Contractor is liable under the Contract Documents. The prevailing party in any dispute between the District and Contractor shall be awarded its costs and expenses, including reasonable attorney's fees.
- 10.7 Notice
- All notices, requests, consents, claims, demands, waivers, and other communications hereunder shall be in writing and shall be deemed to have been given (a) when delivered by hand (with written confirmation of receipt); (b) when received by the addressee if sent by a nationally recognized overnight courier (receipt requested); or (c) on the third day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid or when actually received. Such communications must be sent to the respective parties at the last known registered address of such party (or at such other address for a party as shall be specified in a notice given in accordance with this Section 10.7).
- 10.8 The Contract may be signed in two or more counterparts. When at least one such counterpart has been signed by each party, the Contract shall be deemed to have been fully executed and each counterpart shall be deemed to be an original and all counterparts taken together shall be one and the same Contract. The Contract may be signed by e-mailed or other electronic signatures (e.g., DocuSign) and e-mail or such other electronic signatures hereon shall be deemed originals for all purposes.
- 10.9 Each party signing the Contract, including these Terms and Conditions, represents and warrants: (i) they have read and understand the Contract; (ii) it has the full right, power, and authority to enter into the Contract, to grant the rights and licenses granted hereunder and to perform its obligations hereunder, and (iii) when executed and delivered by such party, the Contract will constitute the legal, valid, and binding obligation of such party, enforceable against such party in accordance with its terms.

- 10.10 Each party shall, upon the reasonable request of the other party, execute such documents and perform such acts as may be necessary to give full effect to the terms the Contract.
- 10.11 The parties are independent contractors, and nothing contained in the Contract shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment, or fiduciary relationship between them. Neither party shall be authorized to contract for or bind the other party in any manner whatsoever.

Article 11 DISPUTE RESOLUTION

Should a dispute arise between the District and Contractor during the performance of Work or thereafter, the parties shall make a good faith attempt to resolve the dispute amongst themselves within ten (10) days of notice of dispute having been given. Notwithstanding the existence of a dispute between the parties, Contractor shall be obligated to prosecute the Work in a good and workmanlike manner and in accordance with the Contract Documents as long as the District continues to make payment of undisputed amounts. Contractor and its subcontractors shall have no right to suspend the performance of Work hereunder, or to cause the Work to be delayed because of the existence of a dispute.

The exclusive forum for the resolution of any and all disputes arising under this Contract or in any way relating to the Work shall be litigation in Milwaukee County Circuit Court, State of Wisconsin. The parties hereby waive any claims or defenses that venue in such court is inappropriate, inconvenient or wrongful.

Article 12 DEFINITIONS

12.1 The Work

The term “Work” means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor’s obligations.

12.2 The Project

The “Project” is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.

EXHIBIT A

A. Commercial General Liability – Occurrence Basis (including equipment overload):

	Limits
General Aggregate (per project)	\$2,000,000
Products – Completed Operations Aggregate	\$2,000,000
Personal & Advertising Injury	\$1,000,000
Each Occurrence	\$1,000,000

The policy shall not contain exclusions relating to: contractual liability, independent contractors, or explosion, collapse or underground exclusions.

B. Business Auto Liability – All Autos including Hired, leased, and Non-Owned Autos:

Bodily Injury & Property Damage-Combined Single Limit	\$1,000,000
---	-------------

C. Worker's Compensation and Employers Liability:

Workers Compensation	Statutory
Employers Liability	
Bodily Injury by Accident (each accident)	\$1,000,000
Bodily Injury by Disease (policy limit)	\$1,000,000
Bodily Injury by Disease (each employee)	\$1,000,000

D. Excess or Umbrella Liability:

Each Occurrence	\$10,000,000
Aggregate	\$10,000,000

E. Professional Liability Limits: This requirement applies if the Contract involves professional design services or your Work has an element of design services.

Each Claim	\$5,000,000
Aggregate	\$5,000,000

F. Pollution Liability – Applicable if your work involves the use, disposal or transportation of pollutants or other hazardous materials:

Each Occurrence	\$2,000,000
Aggregate	\$2,000,000

G. Contractor's Equipment – All Contractors will be responsible for insuring their own equipment. The District will bear no responsibility for equipment used, rented or leased by contractors on or off-site. If cranes are used, Contractors should be certain to obtain special endorsements for loss by exceeding lifting capacity (i.e., overload). Contractors shall procure All Risk Property Insurance upon all equipment, material, inventory and business personal property owned, borrowed or leased by Contractor for the full replacement cost value thereof. Such policy shall include a waiver of subrogation provision and Contractor agrees to waive its carrier's right of subrogation against the Additional Insureds.

H. Rigger's & Erector's Liability – If your work involves rigging or erecting, special liability limits are required:

Each Occurrence	\$20,000,000
Aggregate	\$20,000,000

- I. Additional Insured:** The Wisconsin Professional Baseball Park District (and its officers and directors) and the Milwaukee Brewers Baseball Club, L.P. shall be named as an Additional Insured on Commercial General Liability, Business Auto Liability, and Excess or Umbrella Liability Insurance policies. Contractors shall also require that each of its subcontractors name the Additional Insureds as additional insureds on the subcontractors' Commercial General Liability, Commercial Automobile and Umbrella Liability policies. Additional insured coverage shall be extended to include products-completed operations coverage. All liability insurance policies must provide Cross Liability coverage (separation of insureds or severability of interest provisions). The Commercial General Liability policy shall include no third-party-over action exclusions or similar endorsements or limitations.
- J. Certificate of Insurance:** The District shall receive a Certificate of Insurance evidencing compliance with these insurance requirements prior to commencing any work, and a renewal Certificate of Insurance prior to the expiration or cancellation of any policy. However, the District permitting Contractor to commence Work prior to District's receipt of the required certificate of insurance shall not be a waiver of the Contractor's obligation to provide all of the above insurance. Acceptance by the District of insurance submitted by the Contractor shall not relieve or decrease in any manner the liability of the Contractor under this Contract.
- K. Coverage Term:** All insurance must remain in force for the duration of the project and three years following project completion.
- L. A.M. Best Rating:** All insurers must be rated A- or better by A.M. Best & Company.



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



APPENDIX C

Current 2025 Milwaukee Brewers Baseball Schedule



2025 SCHEDULE

● HOME ● AWAY All times CT. Game dates and times subject to change.

MARCH / APRIL

SUN	MON	TUE	WED	THU	FRI	SAT
				27 NYY 2:05	28	29 NYY 12:05
30 NYY TBD	31 KC 1:10	1 KC 6:40	2 KC 12:10	3 CIN 6:40	4 CIN 7:10	5 CIN 6:10
6 CIN 1:10	7	8 COL 7:40	9 COL 7:40	10 COL 2:10	11 AZ 8:40	12 AZ 7:10
13 AZ 3:10	14 DET 6:40	15 DET 6:40	16 DET 12:10	17	18 ATH 7:10	19 ATH 6:10
20 ATH 1:10	21 SF 8:45	22 SF 8:45	23 SF 8:45	24 SF 2:45	25 STL 7:15	26 STL 1:15
27 STL 1:15	28	29 CWS TBD	30 CWS TBD			

MAY

SUN	MON	TUE	WED	THU	FRI	SAT
				1 CWS TBD	2 CHC 7:10	3 CHC 6:10
4 CHC 1:10	5 HOU 6:40	6 HOU 6:40	7 HOU 12:10	8	9 TB TBD	10 TB TBD
11 TB TBD	12 CLE TBD	13 CLE TBD	14 CLE TBD	15	16 MIN 7:10	17 MIN 6:15
18 MIN 1:10	19 BAL 6:40	20 BAL 6:40	21 BAL 12:10	22 PIT 5:40	23 PIT 5:40	24 PIT 3:05
25 PIT 12:35	26 BOS 1:10	27 BOS 6:40	28 BOS 12:10	29	30 PHI 5:45	31 PHI 3:05

JUNE

SUN	MON	TUE	WED	THU	FRI	SAT
1 PHI 12:35	2 CIN 6:10	3 CIN 6:10	4 CIN 11:40A	5	6 SD 7:10	7 SD 6:35
8 SD 1:10	9 ATL 6:40	10 ATL 6:40	11 ATL 1:10	12 STL 6:40	13 STL 7:10	14 STL 3:10
15 STL 1:10	16	17 CHC 7:05	18 CHC 7:05	19 CHC 1:20	20 MIN 7:10	21 MIN 1:10
22 MIN 1:10	23 PIT 6:40	24 PIT 6:40	25 PIT 1:10	26	27 COL 7:10	28 COL 3:10
29 COL 1:10	30					

JULY

SUN	MON	TUE	WED	THU	FRI	SAT
		1 NYM 6:10	2 NYM 6:10	3 NYM 6:10	4 MIA 6:10	5 MIA 3:10
6 MIA 12:40	7 LAD 6:40	8 LAD 6:40	9 LAD 1:10	10	11 WSH 7:10	12 WSH 3:10
13 WSH 1:10	14	15	16	17	18 LAD 9:10	19 LAD 8:10
20 LAD 3:10	21 SEA 8:40	22 SEA 8:40	23 SEA 2:40	24	25 MIA 3:10	26 MIA 6:10
27 MIA 1:10	28 CHC 6:40	29 CHC 6:40	30 CHC 1:10	31		

AUGUST

SUN	MON	TUE	WED	THU	FRI	SAT
					1 WSH 5:45	2 WSH 3:05
3 WSH 12:35	4 ATL 6:15	5 ATL 6:15	6 ATL 6:15	7	8 NYM 7:10	9 NYM 6:10
10 NYM 1:10	11 PIT 6:40	12 PIT 6:40	13 PIT 1:10	14	15 CIN 5:40	16 CIN 5:40
17 CIN 12:40	18 CHC 7:05	19 CHC 7:05	20 CHC 7:05	21 CHC 1:20	22 SF 7:10	23 SF 6:10
24 SF 1:10	25 AZ 6:40	26 AZ 6:40	27 AZ 6:40	28 AZ 1:10	29 TOR 6:07	30 TOR 2:07
31 TOR 12:37						

SEPTEMBER

SUN	MON	TUE	WED	THU	FRI	SAT
	1 PHI 3:10	2	3 PHI 6:40	4 PHI 3:10	5 PIT 5:40	6 PIT 5:40
7 PIT 12:35	8 TEX 7:05	9 TEX 7:05	10 TEX 1:35	11	12 STL 7:10	13 STL 6:10
14 STL 1:10	15	16 LAA 6:40	17 LAA 6:40	18 LAA 6:40	19 STL 7:15	20 STL 6:15
21 STL 1:15	22 SD 8:40	23 SD 8:40	24 SD 3:10	25	26 CIN 7:10	27 CIN 6:10
28 CIN 2:10	29	30				



WISCONSIN PROFESSIONAL BASEBALL PARK DISTRICT



APPENDIX D

Wisconsin Professional Baseball Park District Diversity Contracting Program



DIVERSITY CONTRACTING PROGRAM FORM INSTRUCTIONS

Is your firm a Diverse Firm?

Does your firm maintain one of the socio-economic status certifications listed at the top of the page 2 in the [District's Diverse Contracting Program](#)? Please note, registration based solely on NAICS code and number of employees with the U.S. Small Business Administration **does not** qualify your firm as a Diverse Firm under the District's program.

Does your firm's address (location bidding the work) fall within an "at risk" or "distressed" community in the Distressed Communities Index? To check if your firm is located in an Economically Distressed Community, please search by zip code at this link <https://eig.org/dci/interactive-map>.

YES!

You are done! Please submit proof of Diverse Firm qualification with your bid/ proposal.

NO

The District maintains a Diverse Firm participation goal of 10 % for professional services and 15 % for improvement projects. Please review Diverse Firm contracting options and continue below.

Will your firm be utilizing a Diverse Firm subcontractor for this project?

YES!

We will be utilizing a Diverse Firm subcontractor. Continue to the "Using a Diverse Firm" section below.

NO

We were unable to secure a Diverse Firm subcontractor. Continue to the "Not Using a Diverse Firm" section below.

Using a Diverse Firm

OR

Not Using a Diverse Firm

Utilization Plan

If your firm will be utilizing a Diverse Firm subcontractor, please complete this Utilization Plan. Submit this form with your bid/ proposal. To access this form, please use the following link.

<https://wibaseballdistrict.com/wp-content/uploads/2024/06/Diversity-Firm-Utilization-Plan-2024-06.pdf>

After your firm is awarded a bid or contract

Utilization Form

Complete the Utilization Form and submit it with each invoice that includes payments to the Diverse Firm subcontractor. To access this form, please use the following link.

<https://wibaseballdistrict.com/wp-content/uploads/2024/06/Diversity-Firm-Utilization-Form-2024-06.pdf>

Exemption Certification

If the project was unable to include Diverse Firm participation, please review the Exemption Certification. Determine if your project qualifies for an exemption. If your project or a portion of your project qualifies for an exemption, please indicate this on the form. Submit this form with your bid/proposal. To access this form, please use the following link.

<https://wibaseballdistrict.com/wp-content/uploads/2024/06/Diversity-Firm-Exemption-Certification-2024-06.pdf>

If your project does not qualify for an exemption or you selected exemption category 3 or 4, please complete Certification of Good Faith Effort.

Certification of Good Faith Effort

Review the checklist and initial and date each item your firm performed to obtain Diverse Firm participation. Be sure to sign and date the form. Return this form with your bid/proposal. To access this form, please use the following link.

<https://wibaseballdistrict.com/wp-content/uploads/2024/06/Diversity-Firm-Certification-of-Good-Faith-Effort-2024-06.pdf>

Wisconsin Professional Baseball Park District Diversity Contracting Program

Adopted: June 9, 2020

Program Overview

The Wisconsin Professional Baseball Park District (the “District”) is a special district that is a body corporate and politic, and a local governmental unit, separate and independent of the State of Wisconsin. Under Sec. 229.67, Wis. Stats., the jurisdiction of the District includes Milwaukee, Racine, Waukesha, Washington, and Ozaukee Counties (collectively, the “Jurisdiction”). The following policies and procedures (the “Program”) will be utilized for the inclusion of Diverse Firms in ongoing completion of improvements to the District’s baseball park facilities (“Improvement Projects”), as well as in its needs for professional, administrative and operations services (“Service Projects”) for the District (collectively, the “Operations”).

It is the District’s intent to utilize Contractors reflective of the diversity of its entire Jurisdiction. The District, therefore, notifies all Contractors that no one will be discriminated against in the awarding of any Operations contract on the grounds of sex, race, color, national origin, sexual orientation, religious belief, age, veteran status, marital status, economic status, creed, ethnic identity, gender identity or expression or disability or legally protected status.

While the District has no statutory obligation mandating participation in its Operations contracting, the District’s policy will be to enforce full, good faith compliance with this Program by all Contractors, and to provide Diverse Firms a meaningful opportunity for substantive participation in ongoing District Operations. This Program has been designed to promote and encourage open competition and participation in Operations activities and to enhance opportunities for Diverse Firms to successfully compete in Operations contracting.

It is the intent of this policy to widen opportunities for participation, increase competition, and establish procedures designed to assure Diverse Firms access to information and opportunities available to all Vendors. It is not the policy of the Wisconsin Professional Baseball Park District or its Board of Directors to provide information or other opportunities to Diverse Firms that will not be available to all other business enterprises.

Vendor commitments to District

Vendors shall take all reasonable steps necessary to ensure that Diverse Firms have a full and fair opportunity to compete for the performance of contracts. As a condition of submitting a bid or proposal, each Vendor hereby agrees to:

1. not discriminate against any person or business on the basis of sex, race, color, national origin, sexual orientation, religious belief, age, veteran status, marital status, economic status, creed, ethnic identity, gender identity or expression or disability or legally protected status;
2. ensure that Diverse Firms have fair opportunity to compete for and substantively perform with them in completing contracts;
3. commit best efforts to meet Diverse Firm procurement and contracting goals (inclusive of all accepted alternates, actual allowance values, change orders, modifications and amendments) through Diverse Firms’ participation; and
4. acknowledge that they have not required Diverse Firms to engage in exclusive relationships with them as a condition to their participation in the bid or proposal.

The District places all Vendors on notice that the District will not hire those that engage in restraint of trade or attempts to monopolize utilization of Diverse Firms.

Diverse Firm Participation Level Goal

It is the goal of the District to provide an equal opportunity for Diverse Firms to participate in the performance of contracts. For qualifying Operations, the District will maintain goals that:

- 10% of the aggregated dollar value of Service Projects, and
- 15% of the aggregated dollar value of Improvement Projects contracts awarded on District Operations shall be made to Diverse Firms (collectively, the “Participation Level”).

A Diverse Firm is a firm fulfilling at least one of the following:

- Maintains one or more of the socio-economic status certifications from a federal, state or local government agency or by a third-party certifier (Minority Supplier Diversity Council, National Women Business Owners Corporation, Disability: IN, National LGBT Chamber of Commerce, etc.) including, but not limited to the following:
 - Disabled-Owned Business Enterprise (DOBE)
 - Disadvantaged Business Enterprise (DBE)
 - Lesbian, Gay, Bisexual, Transgender Business Enterprise (LGBTBE)
 - Minority-Owned Business Enterprise (MBE)
 - Service -Disabled Veteran-Owned Small Business (SDVOSB)
 - Small Business Enterprise (SBE)
 - Women-Owned Business Enterprise (WBE)
 - Veteran-Owned Small Business Enterprise (VOSB)
 - Historically Underutilized Business Zone (HUBZone)
 - 8(a) Business Development Program (8(a))
- Maintains a physical business location in an Economically Distressed Community.
- Can produce other documentation verifying it qualifies as a Diverse Firm. This is designed to cover sole proprietorships, small partnerships, closely held corporations and companies that do not have the resources to seek a governmental or third-party certification.

The District and Contractors will use best efforts to utilize Diverse Firms that have provided written evidence confirming their status as a Diverse Firm for their performance of Operations contracts consistent with the District’s Participation Level goals. No credit will be given for the dollar value of materials, equipment, supplies and/or services provided by a Diverse Firm that operates as a pass-through broker. The District reserves the right to set specific Diverse Firm percentage goals for each Operations project bid package, based on availability of Diverse Firms to perform the work necessary for the project.

Process

Reasonable efforts will be made by the District and Vendors to seek out Diverse Firms for the procurement of goods or services and, in particular, Diverse Firms from the Jurisdiction.

Bidding process

In submitting a bid/proposal, Vendors shall comply with the following submittal requirements. Failure to submit complete information and/or provide documents in accordance with this section shall entitle the District to reject the Vendor’s bid/proposal as non-conforming.

Vendors that are Diverse Firms must submit written evidence confirming their status as a Diverse Firm.

Vendors that are not themselves a Diverse Firm must submit with their bid/proposal to the District a sworn statement committing them to use specific, listed Diverse Firms if their bid is accepted (a “Utilization Plan”). Except in cases where the bidder/proposer has submitted an Exemption Certification in accordance with this Program, the Diverse Firm Utilization Plan must commit to the expenditure of a specific dollar amount or percentage of final contract amount of participation by each such Diverse Firm included in the Utilization Plan.

The Utilization Plan may include a reduction or exemption request, supplying information as required in this Policy.

Process after the contract is awarded

Upon approval and award of a contract, the Contractor will maintain the Participation Level approved in its contract, as may be amended from time to time in writing by the District, during Contractor's performance of the Operations work or services.

If the contract includes a Utilization Plan, the Contractor shall prepare and submit to the District a Diverse Firm Utilization Form with each invoice or pay application that includes payment to a Diverse Firm during that billing cycle. Failure to submit the required form to the District may result in delay of payments.

Any changes in the qualifying status of the Diverse Firm under this program shall be reported to the District immediately.

The District shall be entitled to request, and the Contractor will submit to the District, a copy of its executed Diverse Firm subcontract within fifteen (15) days after the District makes a written request.

If, during the performance of an Operations contract, the Contractor is not in compliance with the Participation Level approved in its contract, fails to provide adequate documentation of compliance, or submits any documentation regarding a Diverse Firm that contains false, misleading or fraudulent information, the District may take one or more of the following actions:

1. Withhold payments on the contract and/or pay Contractor's subcontractors directly while withholding overhead and profit of the Contractor.
2. Terminate the Contractor's contract, in whole or in part, for cause.
3. Deny participation on other portions of the Operations and/or in any future contracts awarded by the District.
4. Any other remedy available to the District at law or in equity.

If any document or statement submitted to the District or Contractor by a Diverse Firm contains false, misleading or fraudulent information, the District will require the Contractor to terminate the Diverse Firm and make reasonable efforts to identify and engage a qualified Diverse Firm as its replacement.

Exemption Certification

The District and Vendors will make every effort to include as much Diverse Firm participation as possible. However, if any of the following criteria identified below are met, the project/contract dollars or portion of a project/contract dollars will be exempt from Participation Level goals.

1. The procurement of insurance and office necessities, including, but not limited to, software, hardware, and technology, or other services and the payment of government-imposed fees, taxes, and permitting.
2. The procurement of materials, labor, equipment or goods uniquely designed for the needs of the baseball park facility.
3. The cost to utilize a Diverse Firm would be unreasonably higher and financially burdensome.
4. Despite efforts to solicit participation, there was no response from a Diverse Firm capable of supplying the required goods, materials or performing the type of work requested.

If any of the criteria in categories 2 – 4 above are met, the Vendor is responsible for submitting the Exemption Certification form, a Certification of Good Faith Effort and, if requested by the District, supporting documentation which demonstrated the identified Good Faith Efforts attempted. The supporting documentation may include e-mail correspondence, physical correspondence, pre-proposal notices, newspaper advertisements, etc.

demonstrating the lack of response, or detail justifying why the Diverse Firm respondents were not capable of performing the work or that the costs were excessive.

Definitions

In addition to those definitions set forth elsewhere in this document, when used in this Program, the following terms (whether used in singular or plural tense) shall have the meanings identified below:

Bid / Proposal: Offer to provide goods and/or services for a specified price.

Contractor: All construction contractors and Service Providers hired directly by the District for any Improvement Projects and/or any Service Projects related to the Operations.

Economically Distressed Community: A geographic area within an “At Risk” or “Distressed” zip code as identified by the Distressed Communities Index (DCI) or an equivalent database.

Participation Levels: The percentage level goals for aggregate participation of Diverse Firms established within this Program.

Reasonable efforts/ good faith efforts: All commercially reasonable efforts necessary and practicable to increase the opportunities available in order to meet the applicable Diverse Firm Participation Levels.

Service Provider: Any architect, engineer, surveyor, environmental analyst, developer, legal, accounting and audit, marketing/public communications or other professional service consultant, including District management and administrative staff, retained to perform services related to the Operations.

Vendor: A person or company offering the District a good and/or service for sale.

Forms

- Diverse Firm Utilization Plan (submitted with Vendor Bid/Proposal)
- Diverse Firm Utilization Form (submitted with Contractor invoices or pay applications)
- Exemption Certification (submitted with Vendor Bid/Proposal, if necessary)
- Certification of Good Faith Effort (submitted with Vendor Bid/Proposal, if necessary)

Wisconsin Professional Baseball Park District Diverse Firm Utilization Plan

Purpose: Please complete this form and return with your bid/proposal. Complete a section for each Diverse Firm anticipated to contribute to the project.

Diverse Firm Name			Contact Name	
Diverse Firm Address				
Total Amount to be Paid to Diverse Firm		OR	Percentage of dollars to be Paid to Diverse Firm	
Brief description of work to be performed by the Diverse Firm				

Diverse Firm Name			Contact Name	
Diverse Firm Address				
Total Amount to be Paid to Diverse Firm		OR	Percentage of dollars to be Paid to Diverse Firm	
Brief description of work to be performed by the Diverse Firm				

Diverse Firm Name			Contact Name	
Diverse Firm Address				
Total Amount to be Paid to Diverse Firm		OR	Percentage of dollars to be Paid to Diverse Firm	
Brief description of work to be performed by the Diverse Firm				

Signature

Title

Typed or Printed Name

Date

**Wisconsin Professional Baseball Park District
Diverse Firm Utilization Form**

Purpose: When a contract includes a Diverse Firm Utilization Plan, the Contractor shall prepare and submit to the District a Diverse Firm Utilization Form with each invoice or pay application that includes payment to a Diverse Firm during that billing cycle. For questions, please contact Lisa Wozny at (414) 902-4043 or lwozny@wibaseballdistrict.com.

Company Name	
P.O. #	

Diverse Firm Name	
Services provided by Diverse Firm	
Amount Paid to Diverse Firm	

Diverse Firm Name	
Services provided by Diverse Firm	
Amount Paid to Diverse Firm	

Signature

Title

Typed or Printed Name

Date

Wisconsin Professional Baseball Park District Exemption Certification

To request an exemption, please initial and date the box to the left of the applicable category, identify the qualifying whole project or phase of project, and record the dollar amount associated with each applicable section.

Please submit a "Certification of Good Faith Effort" form, if the cost to utilize a Diverse Firm would be unreasonably higher, there were no Diverse Firms which responded, or there were Diverse Firms which responded but were not capable of performing the work requested.

<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	Category 2	Identify whole project or applicable portion of project.	Dollar Amount
	Materials, labor, equipment or specialized goods unique for the needs of the baseball park facility.	<input type="checkbox"/> Entire project.	
		<input type="checkbox"/> Portion(s) of project Description:	
		<input type="checkbox"/> Portion(s) of project Description:	
		<input type="checkbox"/> Portion(s) of project Description:	
		<input type="checkbox"/> Portion(s) of project Description:	

FOR CATEGORIES 3 – 4 PLEASE SUBMIT CERTIFICATION OF GOOD FAITH EFFORT.

<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	Category 3	The cost to utilize a Diverse Firm would be unreasonably higher and financially burdensome.
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	Category 4	Despite efforts to solicit participation, there was no response from a Diverse Firm capable of supplying the required goods, materials or performing the type of work requested.

Signature

Title

Typed or Printed Name

Date

Wisconsin Professional Baseball Park District Certification of Good Faith Effort

By submitting the signed, the Vendor certifies that the Vendor took the following steps to attempt to obtain sufficient Diverse Firm participation to achieve the Participation Level goals.

Upon request, the Vendor shall also submit documentation which demonstrates the identified Good Faith Efforts attempted. Documentation includes, but is not limited to, e-mail correspondence, physical correspondence, pre-proposal notices, newspaper advertisements, etc.

Initial and date the box to the right of each effort that was undertaken.

Good Faith Efforts	Initial
Delivered written notice of subcontracting opportunities on eligible contracts to the appropriate and industry-specific Diverse Firms.	
Utilized local or targeted newspapers, periodicals and diverse firm focused associations and websites for notice purposes regarding subcontracting opportunities.	
Responded to requests for information from Diverse Firms regarding the bid / proposal.	
Divided tasks within the eligible contract, in accordance with normal industry practice, into small, economically feasible segments that can be performed by Diverse Firms.	
Developed internal management policies and procedures within the company that are designed to assist in achieving Diverse Firm participation on contracts.	
Attempted to negotiate, in good faith, with a Diverse Firm to provide goods or services related to this contracting opportunity.	
Documented and maintained accurate and accessible records of such Good Faith Efforts to utilize Diverse Firms.	
Ensured that written notices contain the following:	
<ul style="list-style-type: none"> adequate information about the plans, specifications, and relevant terms and conditions of the contract and about the work to be subcontracted to, or the goods to be obtained from, subcontractors and suppliers; a contact person with the proposer's office to answer questions; information regarding the proposer's bonding and insurance requirements; and the last date for receipt by the proposer of Diverse Firm price quotations. 	
OTHER:	

Signature

Title

Typed or Printed Name

Date