

**1.0 General :**

- 1.1 All dimensions are in MILLIMETERS (mm) unless otherwise specified
- 1.2 Drawings are for informational purposes only. A PO and design specifications are required for complete design package.
- 1.3 Drawing is not to scale. All dimensions needed for understanding the design of the tower are labeled

**2.0 Standards And References :**

The following shall govern the design, fabrication, and construction of the tower structures.

- 2.1 TIA Standard - Structural Standard for Antenna Supporting Structures and Antennas (ANSI/TIA-222-G)
- 2.2 AASHTO - Structural Supports for Highway Signs, Luminaires, and Traffic Signals (AASHTO LTS 6th Edition 2015)
- 2.3 American Society for Testing & Materials (ASTM) Publications

**3.0 Basic Design Loads :**

3.1 Wind Load (W)

Wind Velocity	38 m/s
Tower Class	II
Topographical Category	1
Exposure Category	B

3.2 Appurtenance Description

Description	Qty	Mount Height
Antenna	1	18.3 m

3.3 Dead Load

Tower Weight	119 kg
Max Allowable Antenna Weight	100 kg

**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ISO TRUSS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ISO TRUSS INC. IS PROHIBITED.

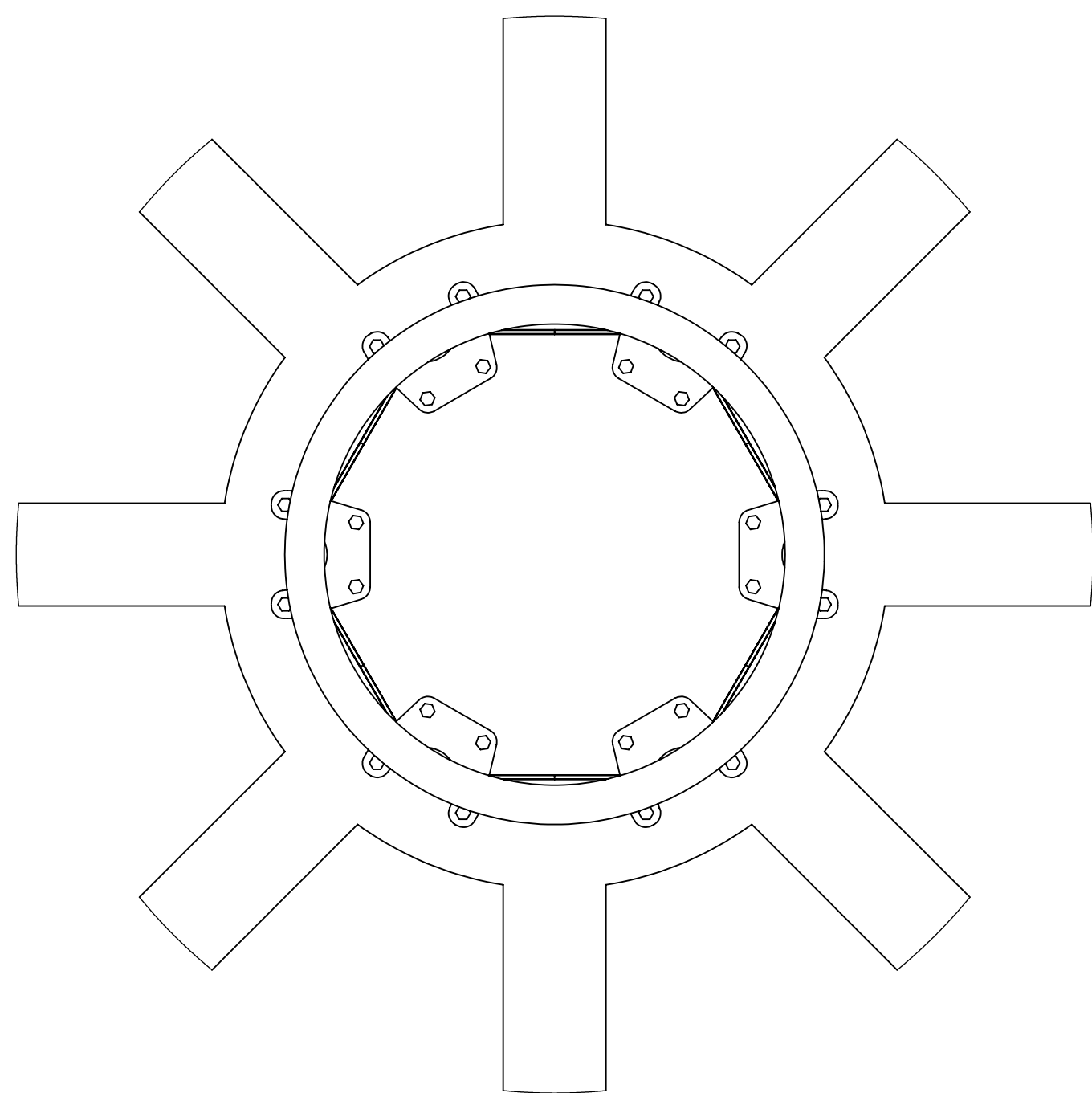
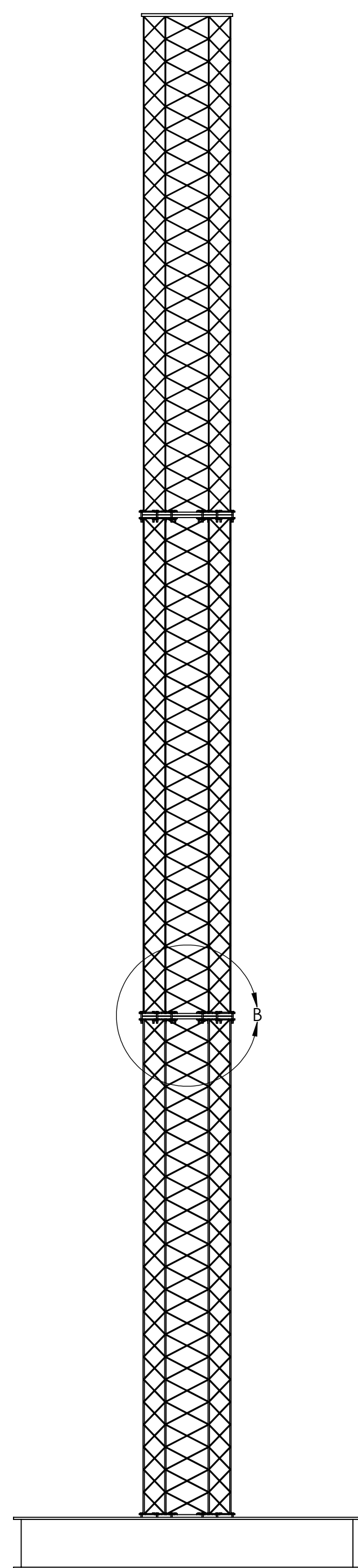
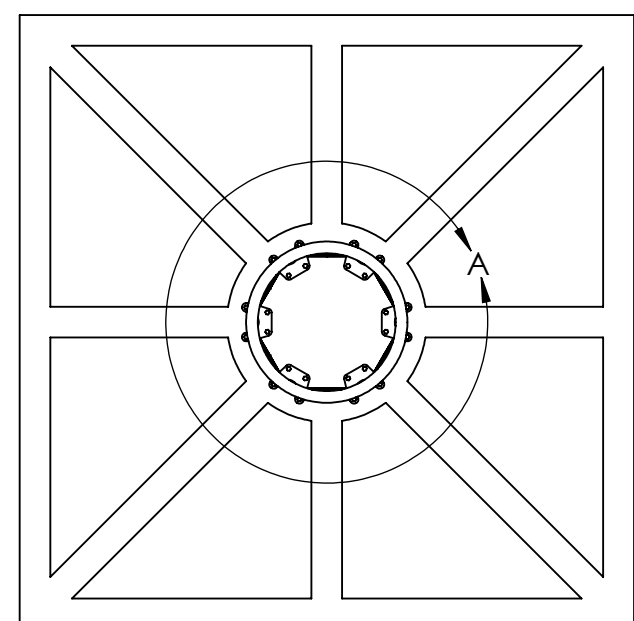
UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN MILLIMETERS		JUSTIN W.	3/24/22
TOLERANCES:			
ANGULAR: ±1			
TWO PLACE DECIMAL ±1.27			
THREE PLACE DECIMAL ±0.25			
DRAWN	CHECKED	APPROVAL	COMMENTS:
MATERIAL	N/A		
FINISH	N/A		
DO NOT SCALE DRAWING			

ISO TRUSS 

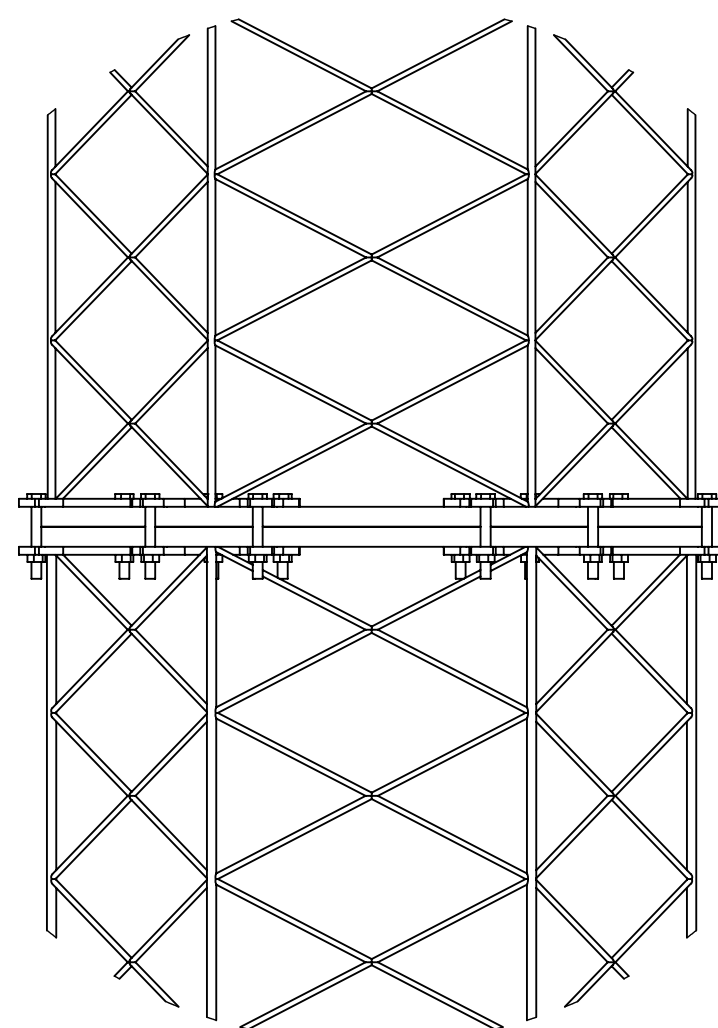
TITLE: **Assembly Notes**

SIZE: **D** Project: **SYSCOM\_20220323** REV: **A**

SCALE: N/A WEIGHT: N/A SHEET 1 OF 7



DETAIL A



DETAIL B

Note:

Bolts and clamps will be used to attach tower sections together. These will be designed and sized according to the forces that will be on the tower.

**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ISOTRUS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ISOTRUS INC. IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±1.27 THREE PLACE DECIMAL ±0.25	DRAWN Justin W.	NAME Justin W.	DATE 3/24/22
MATERIAL N/A	CHECKED	APPROVAL	COMMENTS
FINISH N/A			
DO NOT SCALE DRAWING			

ISOTRUS		TITLE: <b>18m Full Assembly</b>
SIZE <b>D</b>	Project SYSCOM_20220323	REV <b>A</b>
SCALE: N/A WEIGHT: N/A		SHEET 2 OF 7



8

7

6

5

4

3

2

1

D

D

C

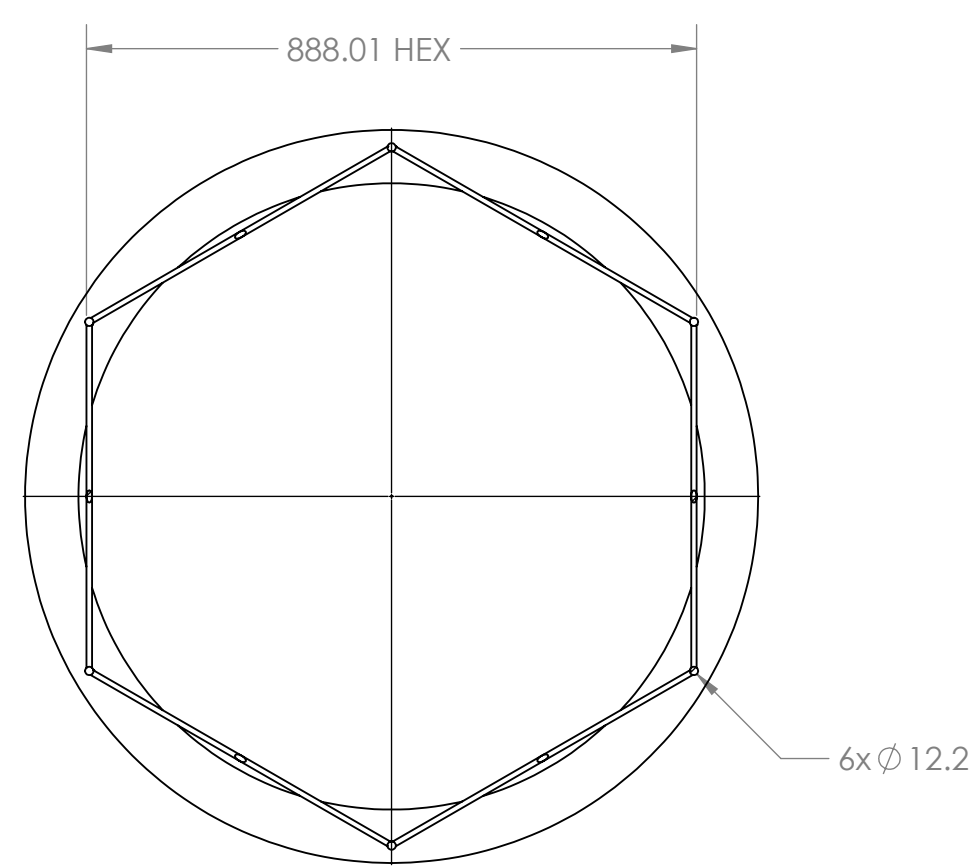
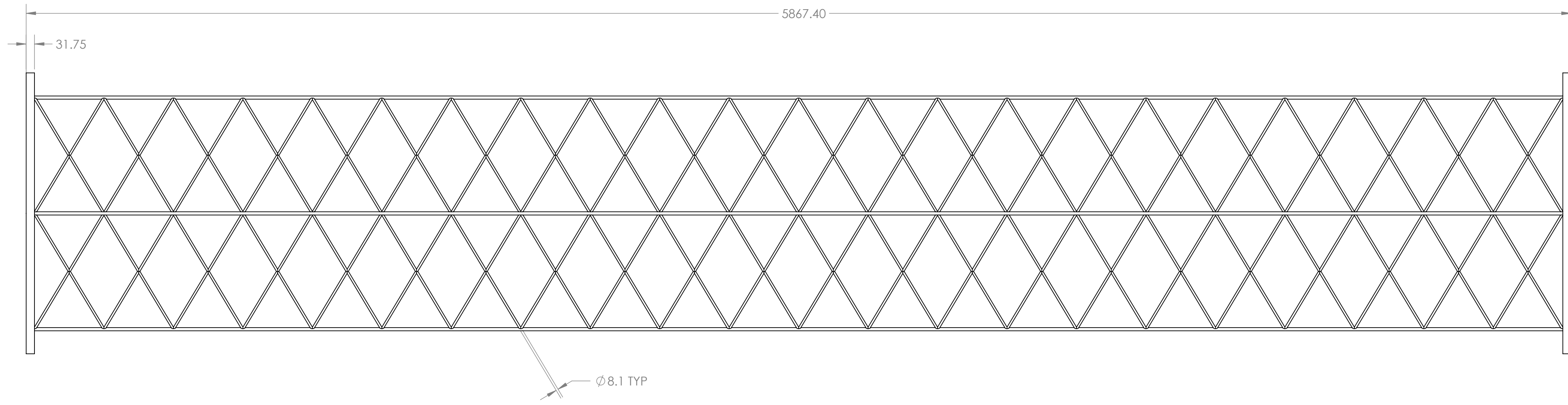
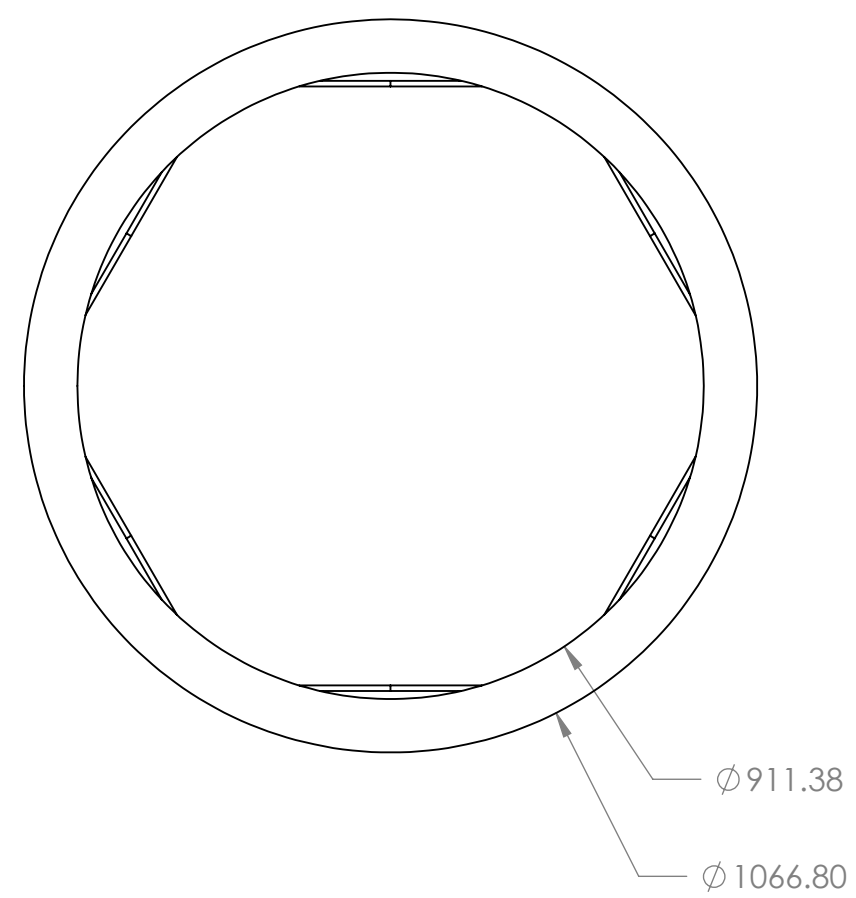
C

B

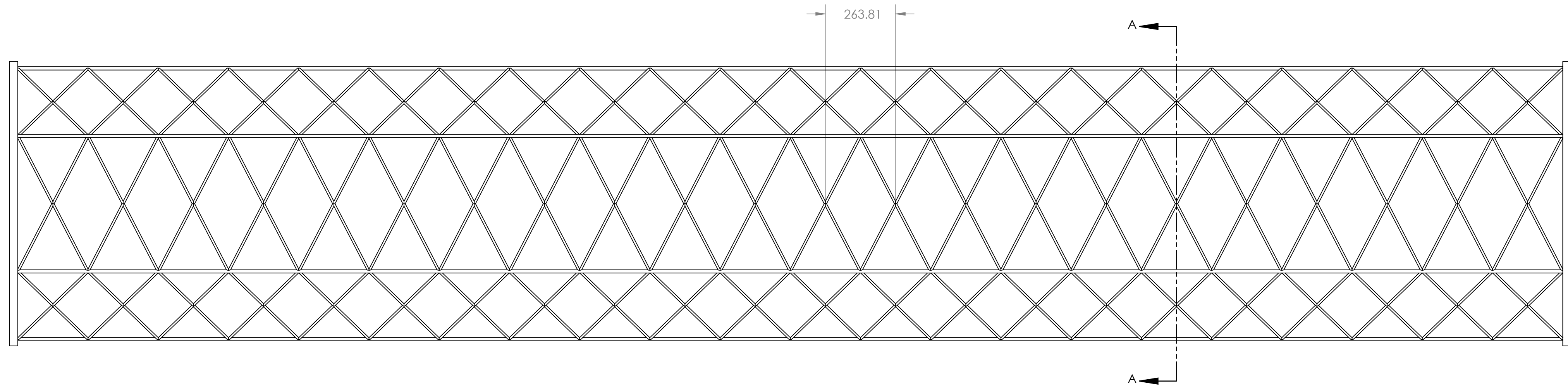
B

A

A



SECTION A-A



**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ISOTRUS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ISOTRUS INC. IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±1.27 THREE PLACE DECIMAL ±0.25	DRAWN Justin W.	NAME Justin W.	DATE 3/23/22
MATERIAL N/A	CHECKED	APPROVAL	COMMENTS
FINISH N/A			
DO NOT SCALE DRAWING			

**ISO TRUSS**

TITLE: **18m Tower Section 2**

SIZE: Project **D** SYSCOM\_20220323 REV: **A**

SCALE: N/A | WEIGHT: 77 lbs | SHEET 4 OF 6

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

D

D

C

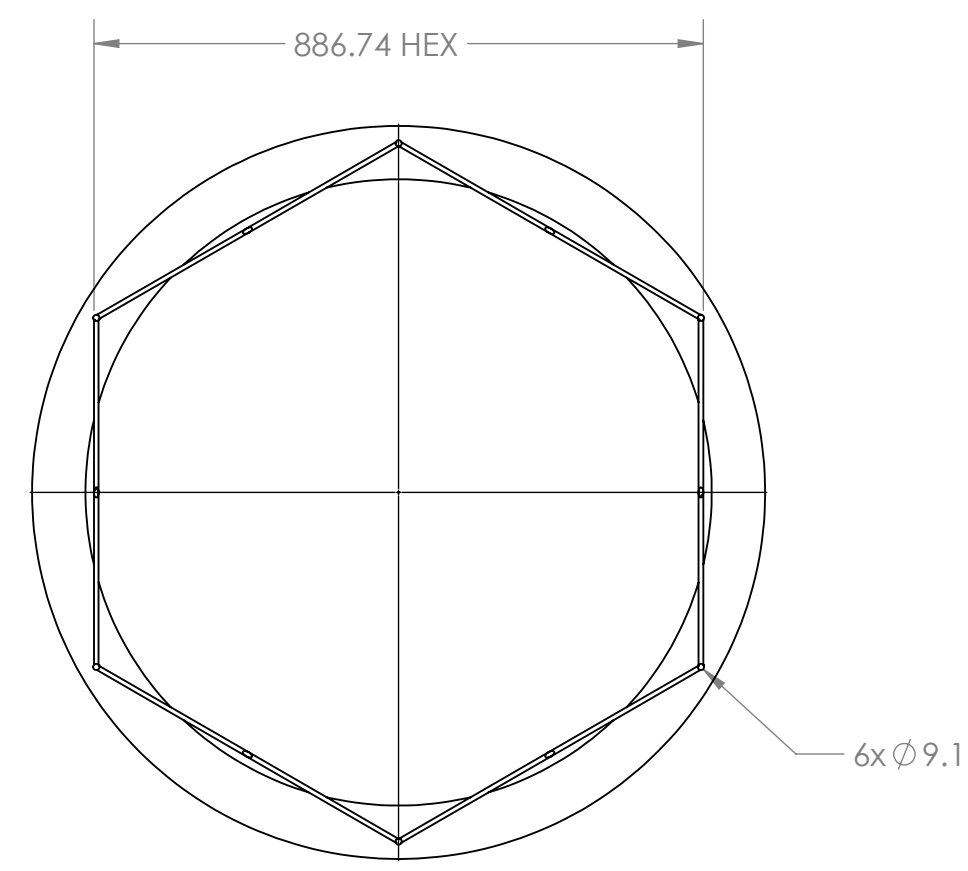
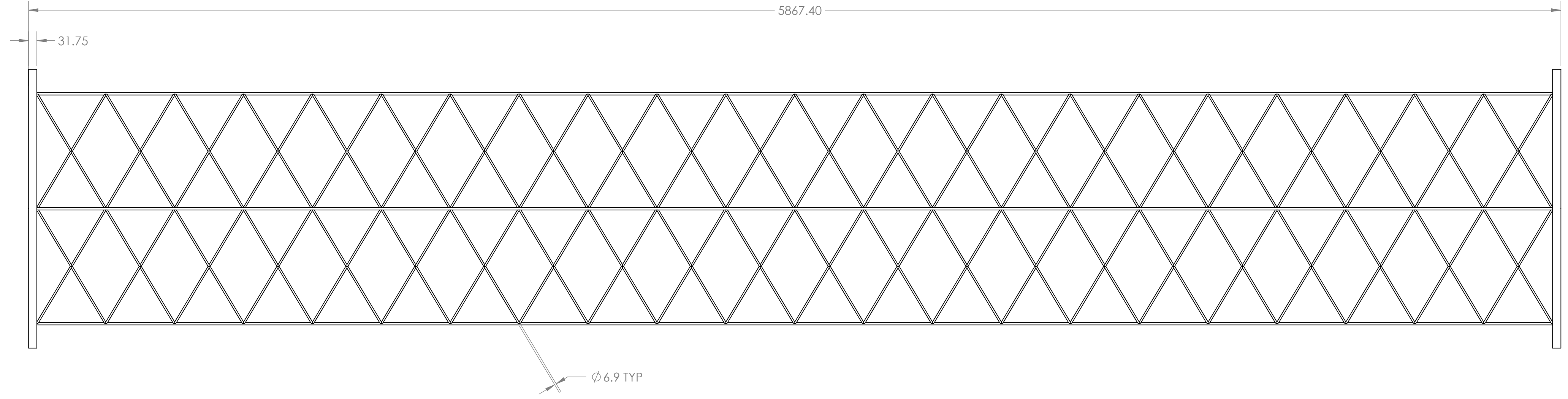
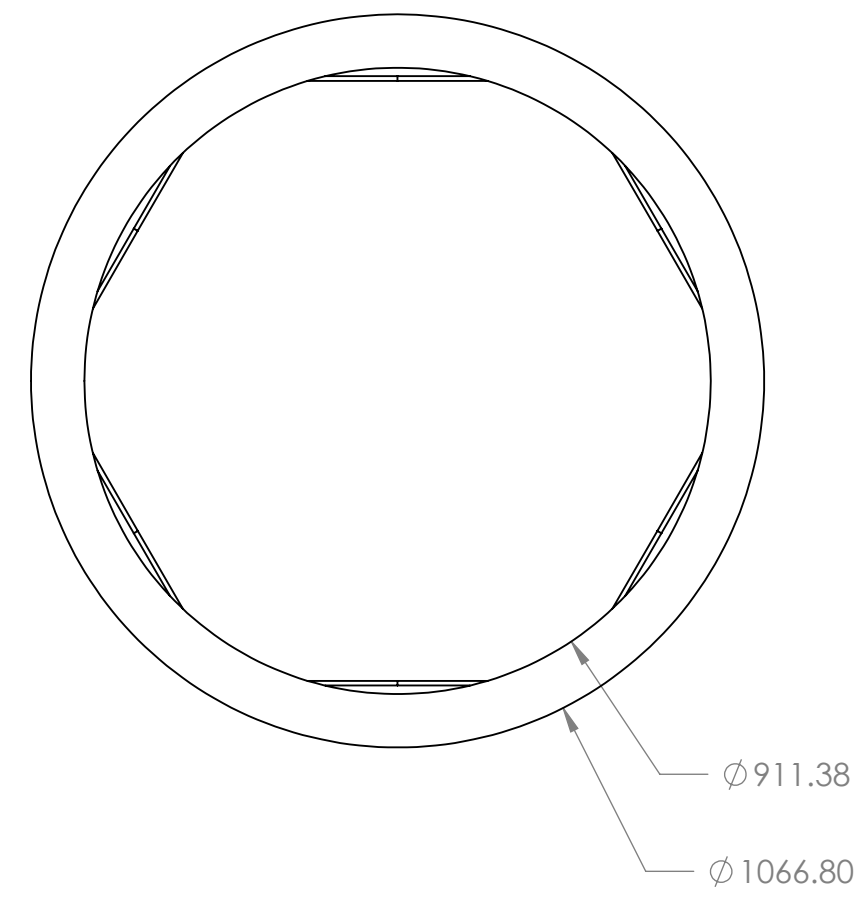
C

B

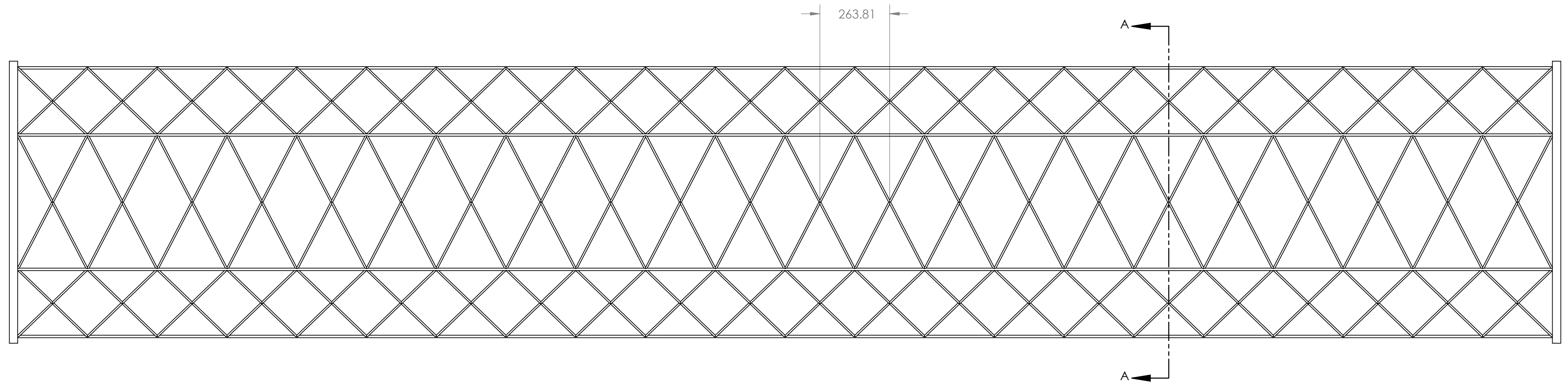
B

A

A



SECTION A-A



**PROPRIETARY AND CONFIDENTIAL**  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ISOTRUSS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ISOTRUSS INC. IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±1.27 THREE PLACE DECIMAL ±0.25	DRAWN Justin W.	NAME Justin W.	DATE 3/23/22
MATERIAL N/A	CHECKED	APPROVAL	
FINISH N/A	COMMENTS:		
DO NOT SCALE DRAWING			

**ISOTRUSS**  
INC.

TITLE:  
**18m Tower Section 3**

SIZE Project  
**D** SYSCOM\_20220323 REV **A**

SCALE: N/A | WEIGHT: 63 lbs | SHEET 5 OF 6

8

7

6

5

4

3

2

1

8

7

6

5

4

3

2

1

D

D

C

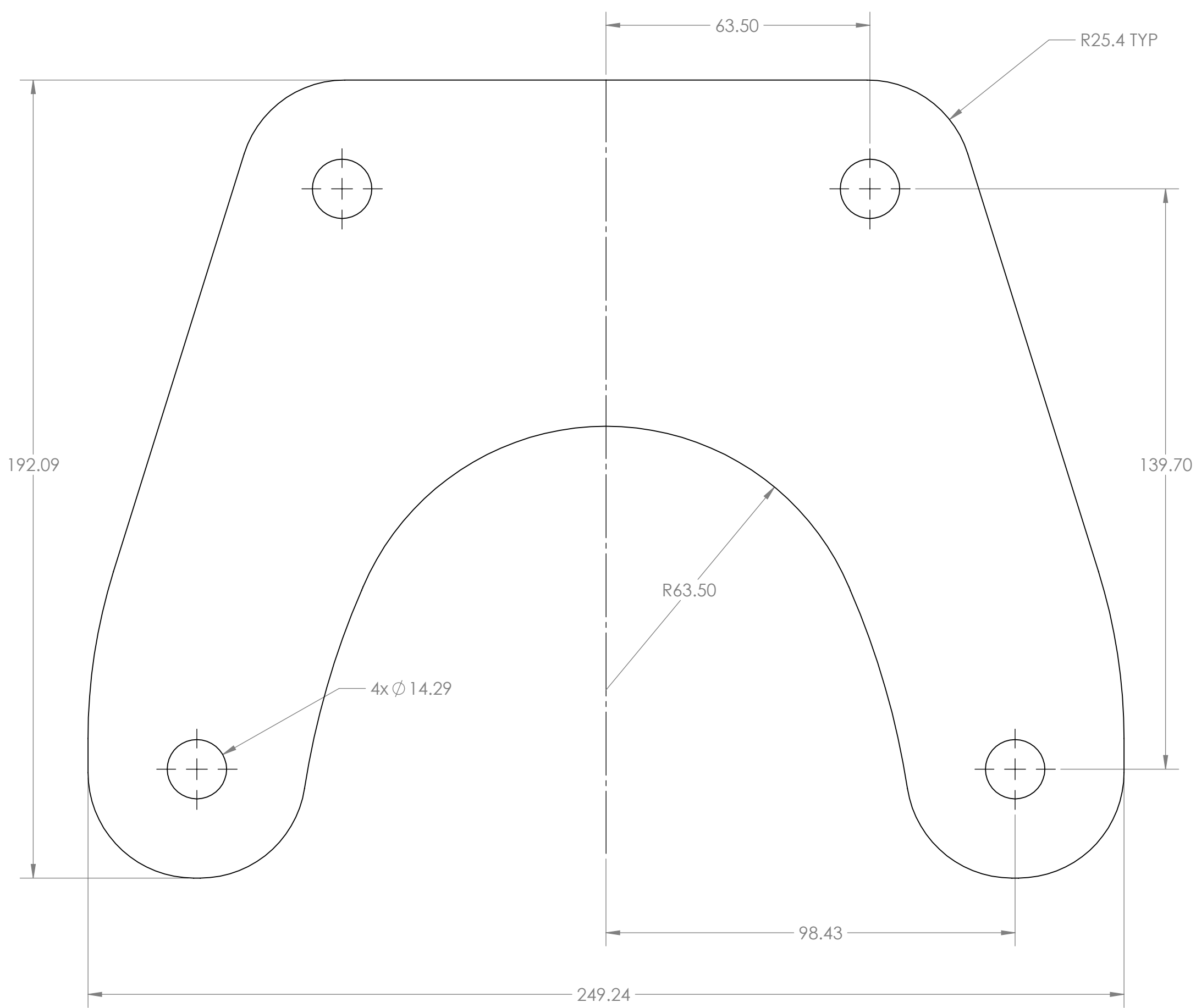
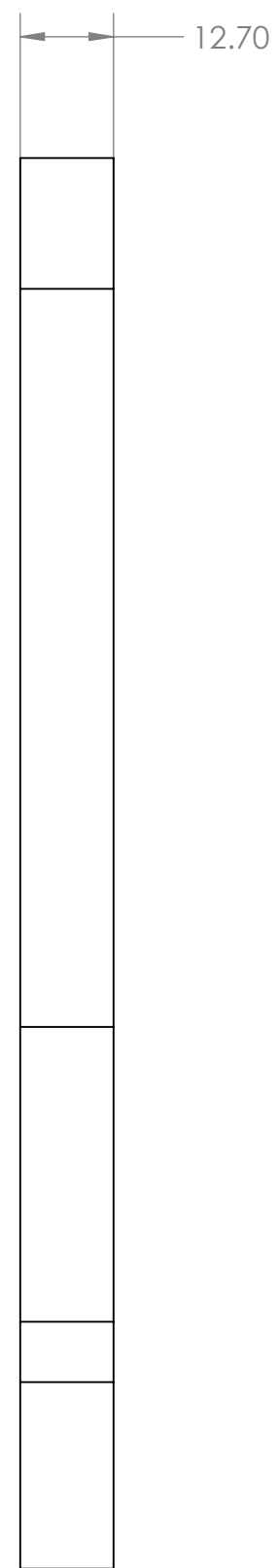
C

B

B

A

A



**PROPRIETARY AND CONFIDENTIAL**  
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF ISO TRUSS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF ISO TRUSS INC. IS PROHIBITED.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±1.27 THREE PLACE DECIMAL ±0.25	DRAWN Justin W.	NAME Justin W.	DATE 3/24/22
MATERIAL Galvanized A514 Steel	CHECKED	ENG APPR.	COMMENTS:
FINISH N/A			
DO NOT SCALE DRAWING			

ISO TRUSS
TITLE: <b>Section Clamp</b>
SIZE Project <b>D</b> SYSCOM_20220323
SCALE: N/A WEIGHT: N/A SHEET 6 OF 6

REV <b>A</b>
-----------------

8

7

6

5

4

3

2

1