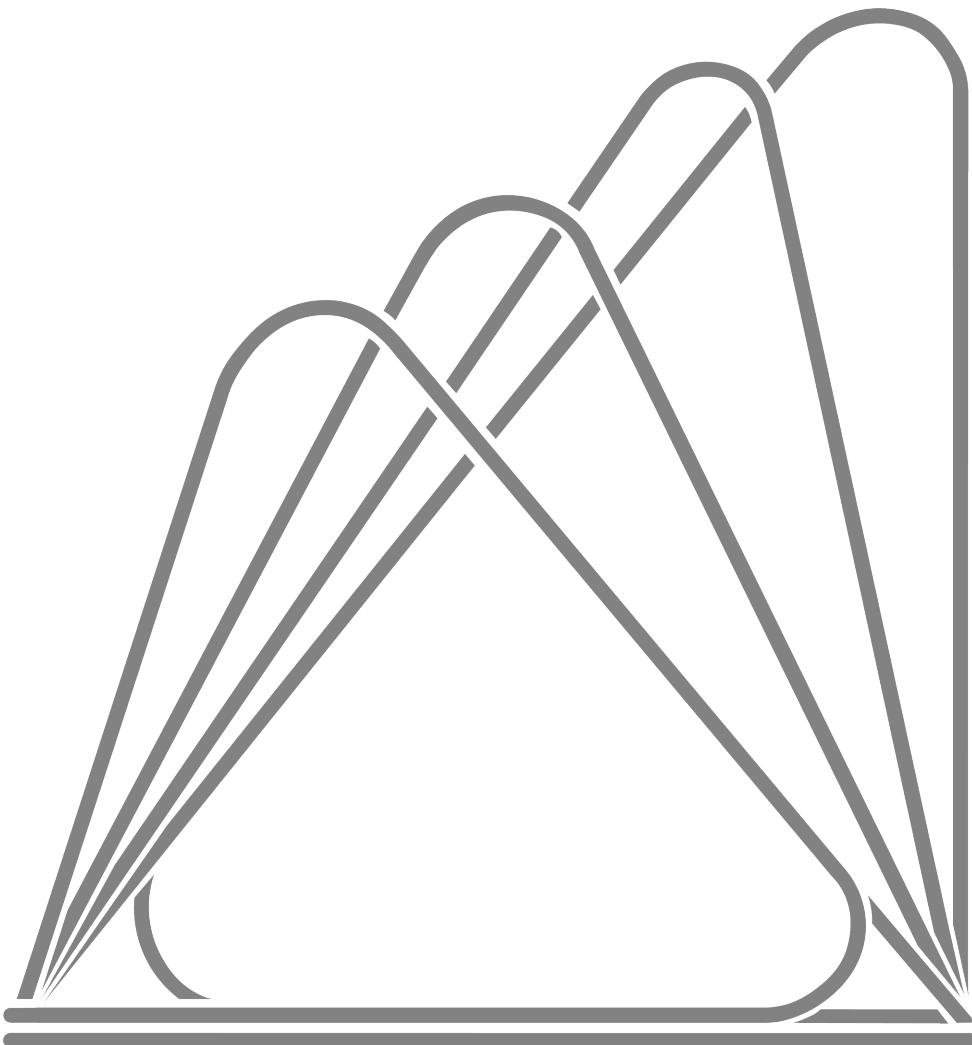


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- S0 Site Plan
- S1 Plan
- S2 Northeast Section
- S3 Southwest Elevation
- S4 Northwest Elevation
- S5 Planting Diagram
- S6 Sun Diagram
- S7 Opening Mechanism Detail
- S8 Schedule
- S9 Budget and Materials List
- S10 Studio Setup
- S11 Structure Components
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- S13 Conduit Measurement
- S14 Connection Components
- S15 Cut Sheets
- S16 Internal Bracing
- S17 Joints Detail
- S18 Edge Detail
- S19 Stakes Detail
- S20 Handle Detail
- S21 Assembly/ Disassembly
- S22 Transportation

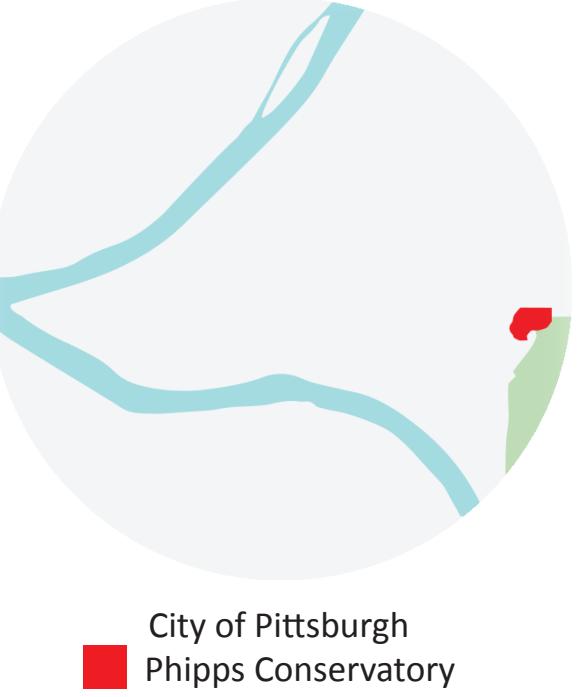
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Edward Fischer  
Ryu Kondrup  
Ale Meza  
Isabella Ouyang  
Anthony Ra

**Hoop House**  
Phipps Conservatory Rooftop Garden

**SO**

**Site Plan**  
For Review  
Scale: 1/2" - 1'  
09.10.2017  
1 of 29

Proposed Hoop House



**City of Pittsburgh**  
**Phipps Conservatory**

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Plan

For Review

Scale: 1/2'' - 1'

09.10.2017

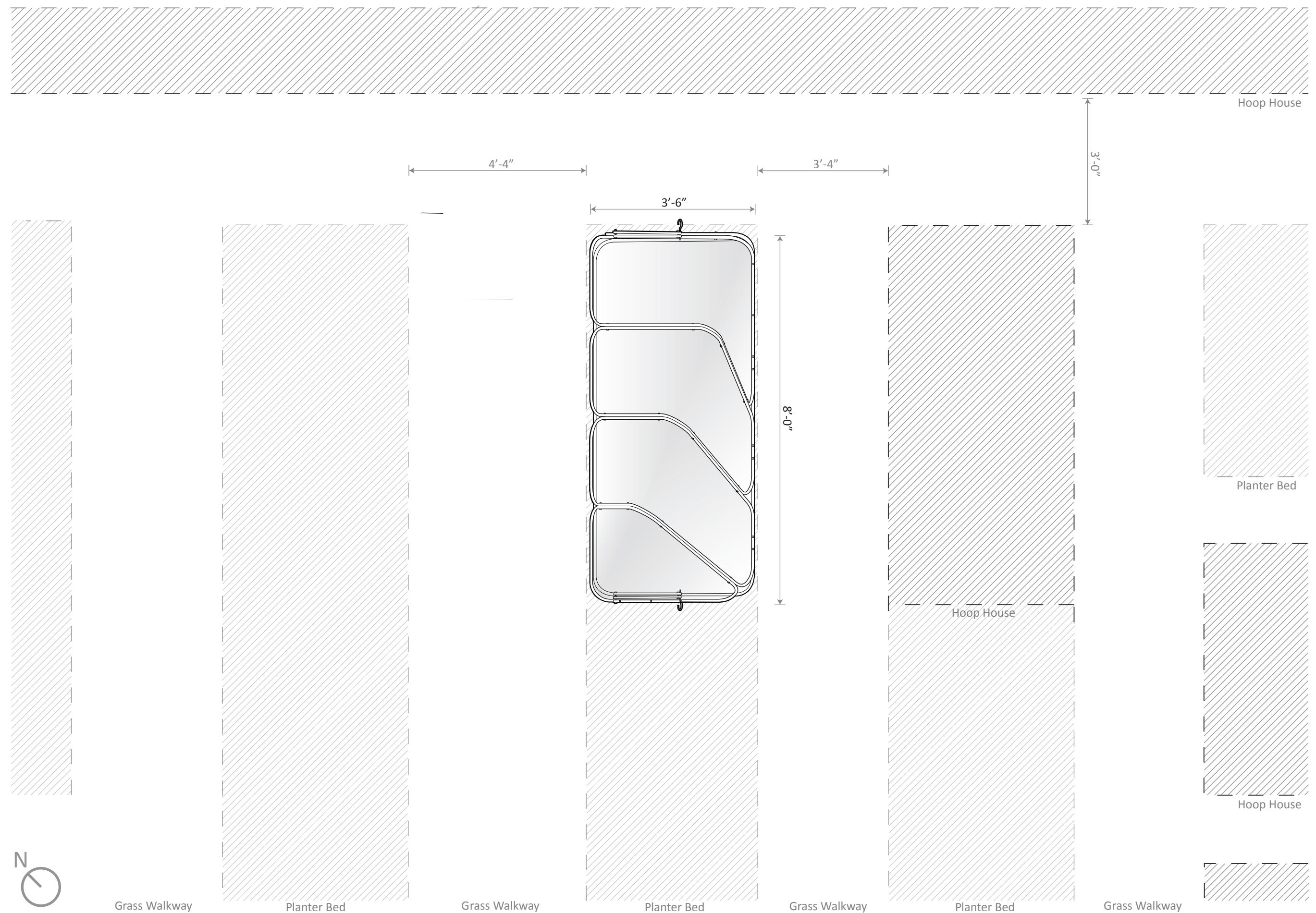
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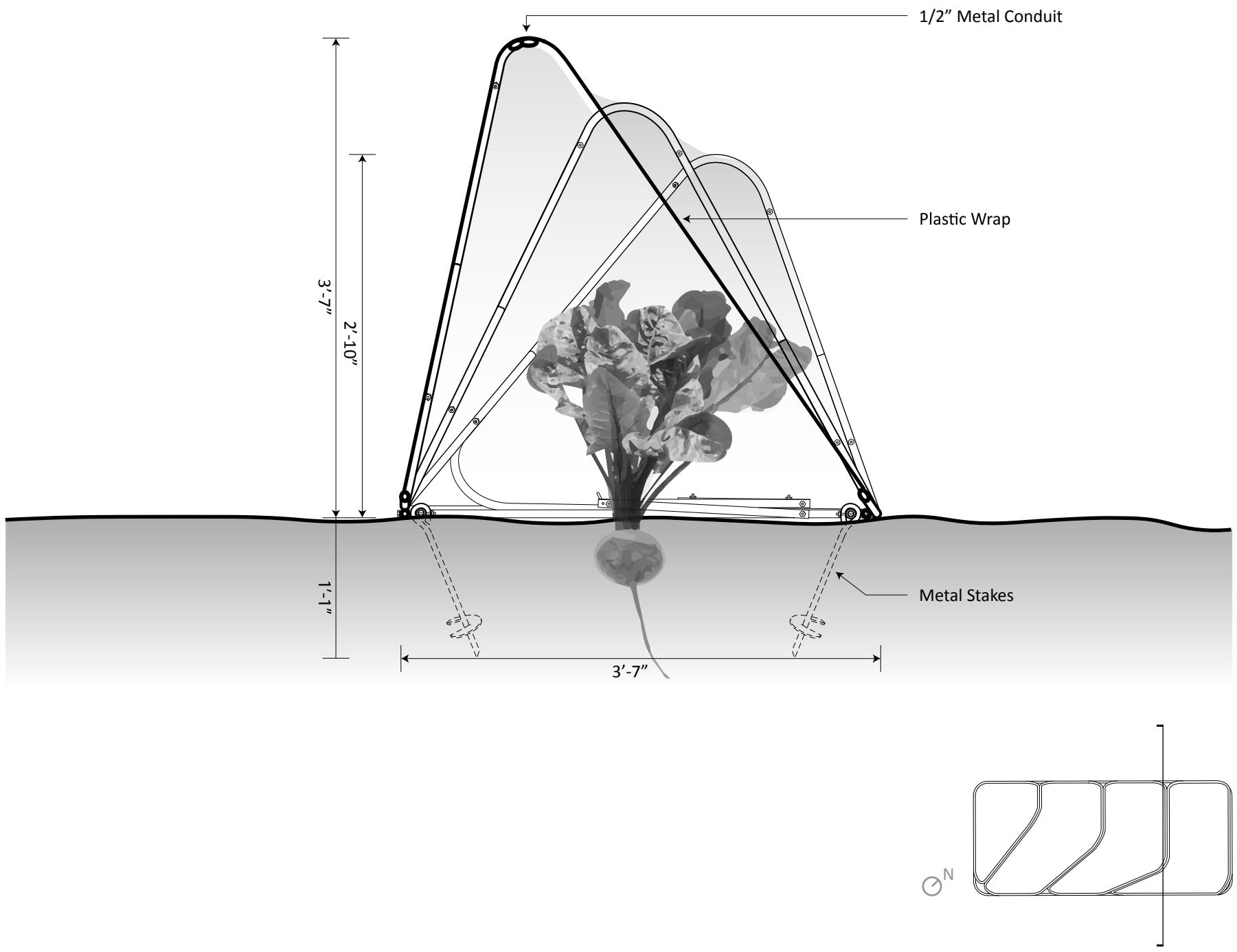
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**S2**

For Review  
Scale: 1"- 1'  
09.10.2017  
3 of 29

**Section - Northeast**

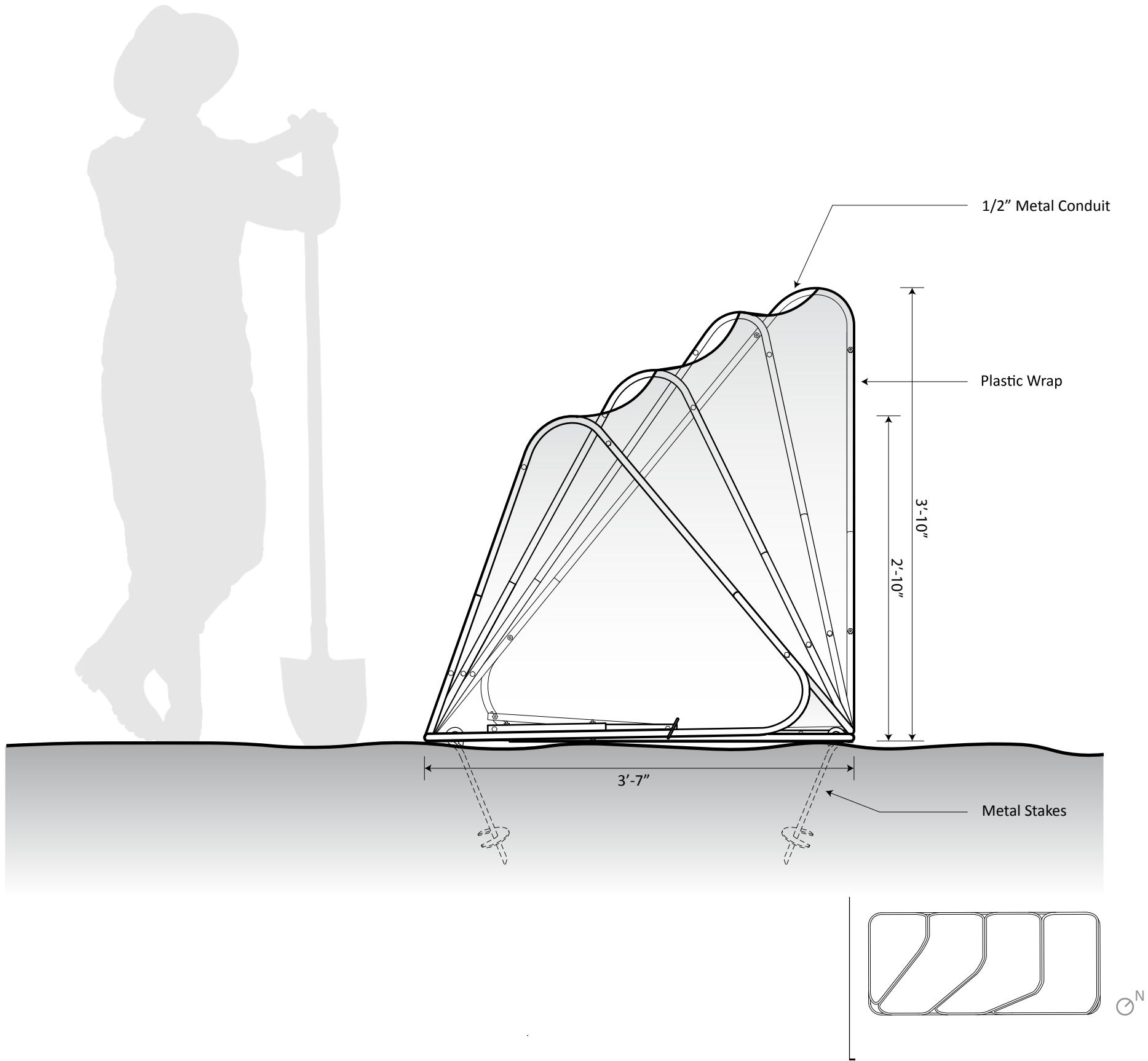


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**S3**

**Elevation - Southwest**  
For Review  
Scale: 1"- 1'  
09.10.2017  
4 of 29

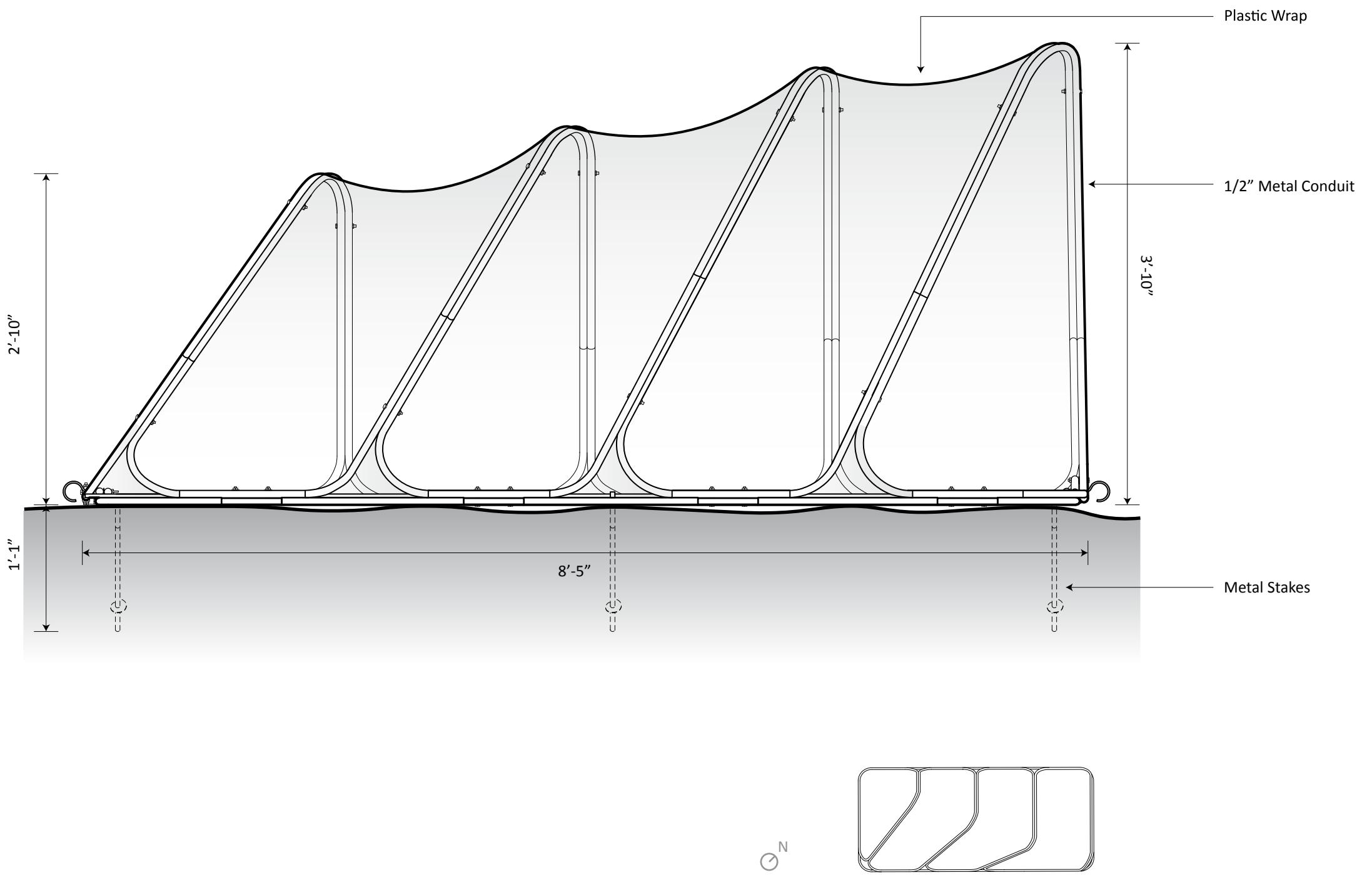


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Elevation - Northwest  
Hoop House  
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S4

For Review  
Scale: 1"- 1'  
09.10.2017  
5 of 29



## Planting Diagram

For Review

Scale: 1"- 1'

09.10.2017

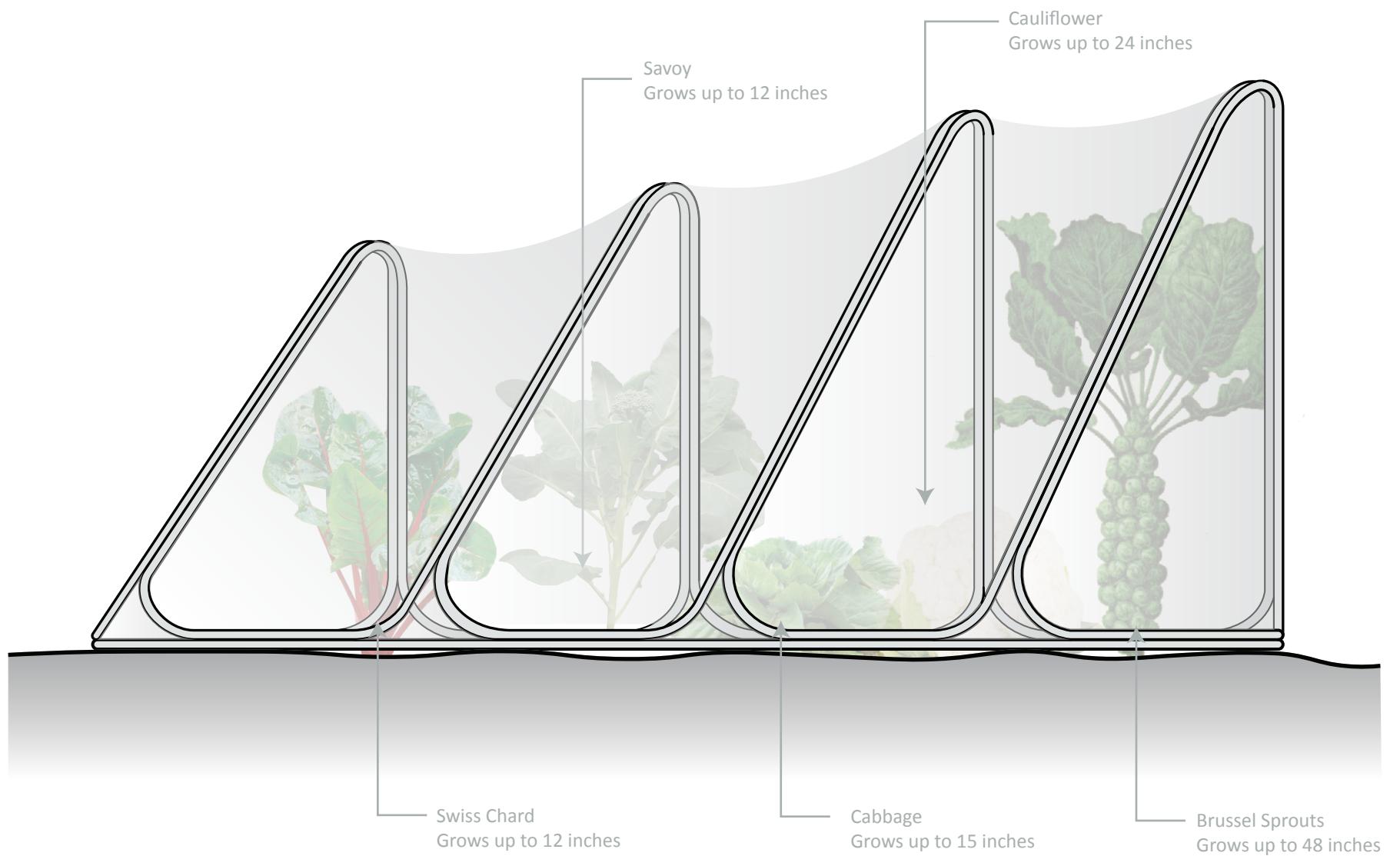
6 of 29

### Hoop House

Phipps Conservatory Rooftop Garden

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Isabella Ouyang  
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# S6

## Sun Angles Diagram

For Review

Scale: 1" - 1'

09.10.2017

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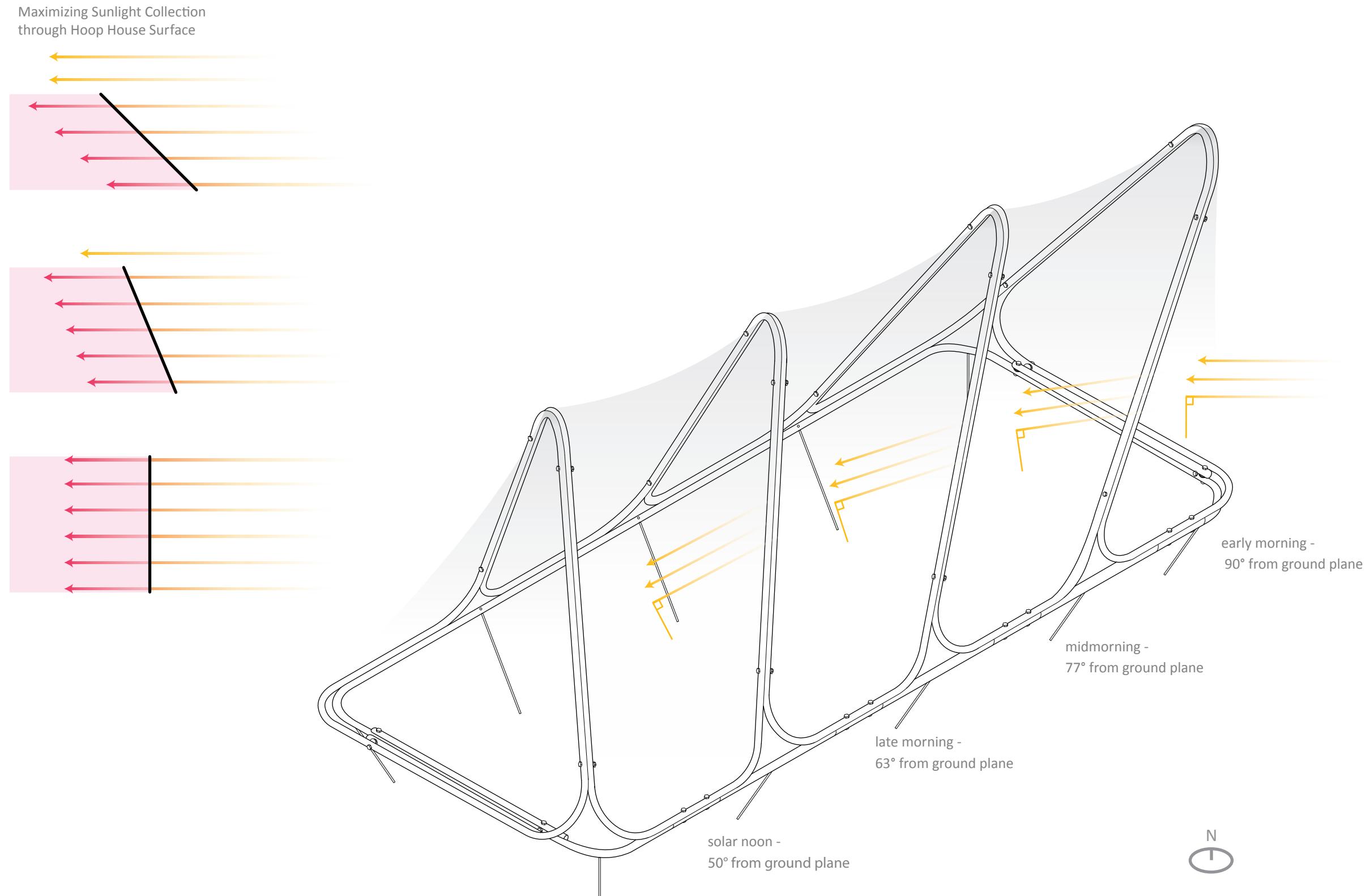
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Ryu Kondrup  
Ale Meza  
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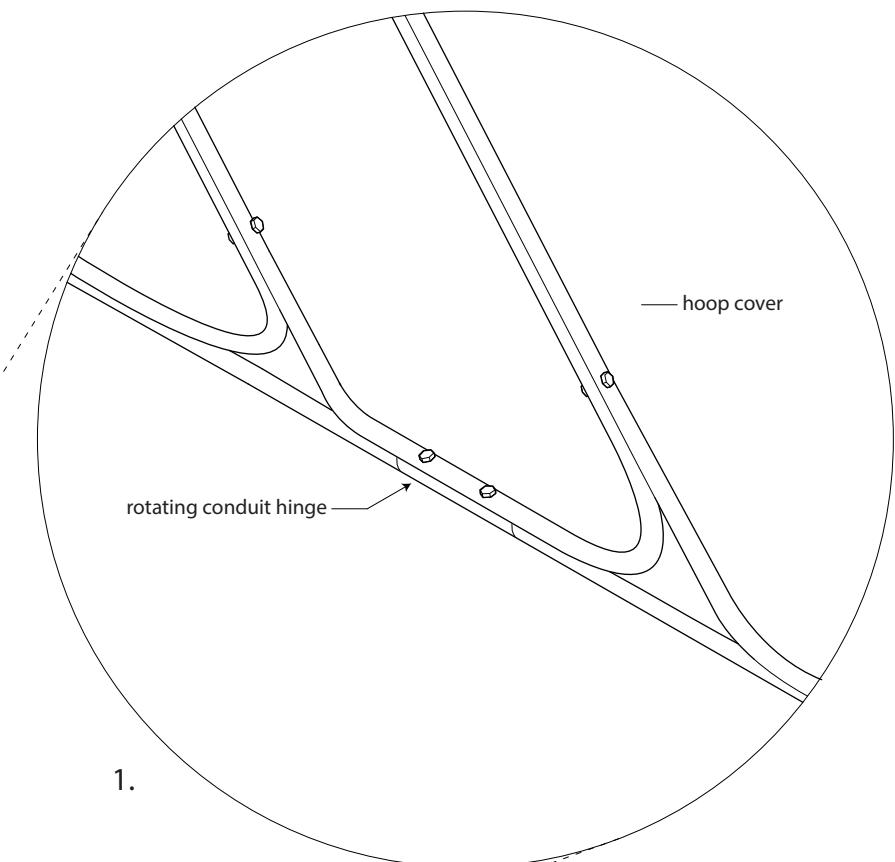
**Hoop House**  
Phipps Conservatory Roof Garden

**S7**

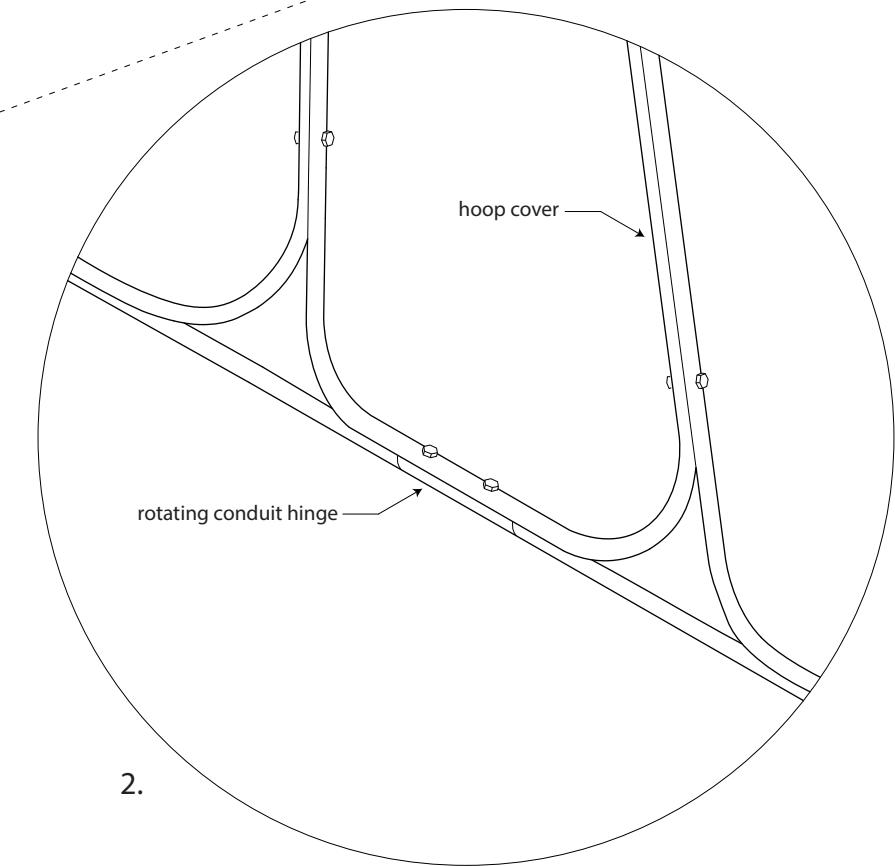
For Review  
Scale: 1" - 1'  
09.10.2017  
8 of 29

Opening Mechanism Detail

### Rotating Hinge Detail

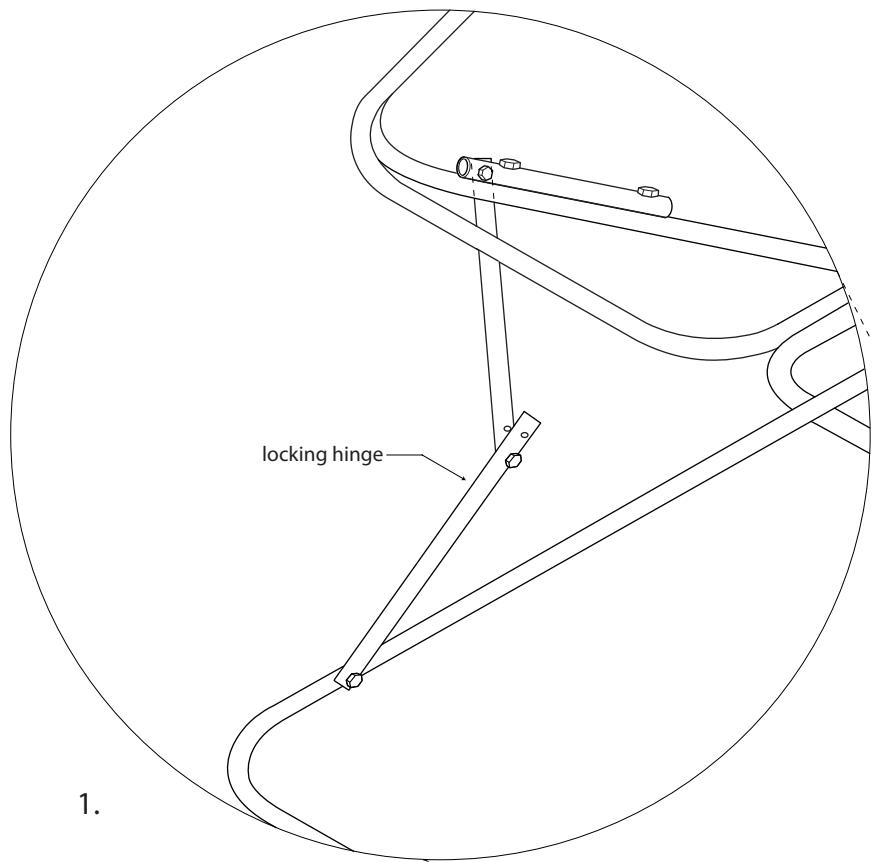


1.

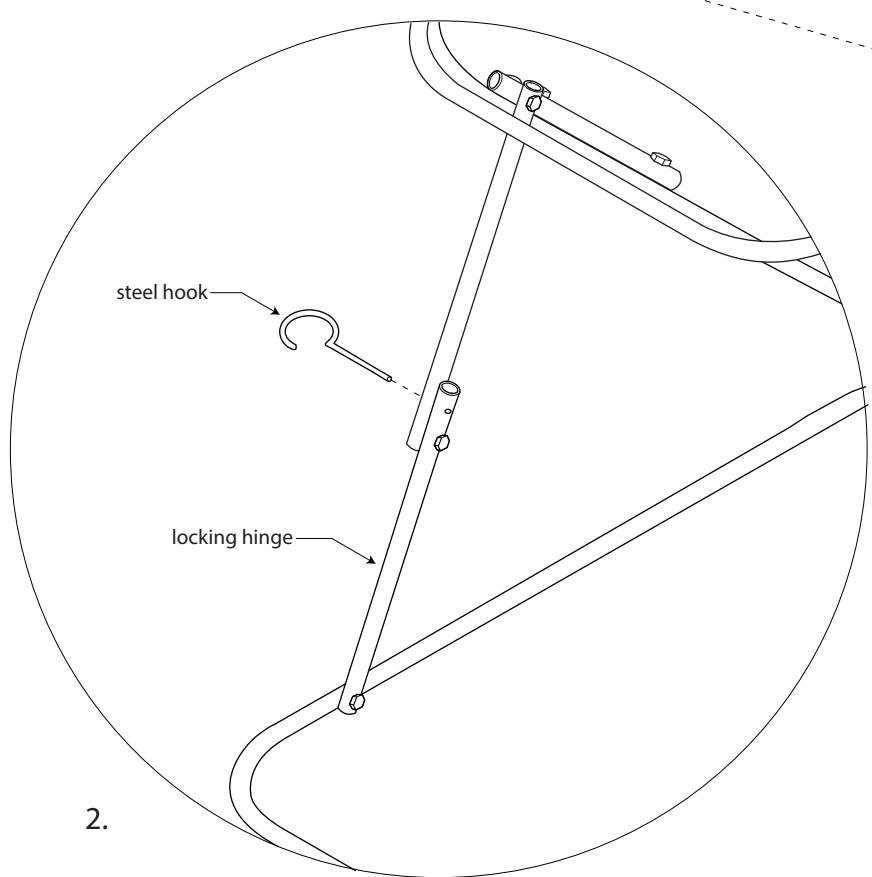


2.

### Locking Hinge Sequence



1.



2.

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Isabella Ouyang  
Anthony Ra

## Just 'Duit

### Monday Oct. 9th

Cut and Bend Conduit Panel Components  
Cut Plastic Panels

### Tuesday Oct. 10th

Cut and Bend Conduit Panel Components  
Mark placement for holes

### Wednesday Oct. 11th

Drill holes in conduit  
Assemble panels  
Begin attaching plastic to panels (once holes are drilled)

### Thursday Oct. 12th

Finish attaching plastic to panels  
Build Bracing

### Friday Oct. 13th

Heat Shrink Plastic

### Saturday Oct. 14th

Cut and Bend Conduit Base  
Drill Holes in Base

### Sunday Oct. 15th

Create and install triangle panels (edge details)

### Monday Oct. 16th

Create and assemble handles on panel  
Create and assemble opening mechanism

### Tuesday Oct. 17th

Test assembly and movement then address possible problems

### Wednesday Oct. 18th

Transportation and Installation

## Construction Schedule

For Review  
Scale: N/A  
09.10.2017  
9 of 29

# S8

## Hoop House

Phipps Conservatory Rooftop Garden

| Part                       | Quantity   | Price per Unit                   | Total Cost |
|----------------------------|--|----------------------------------|------------|
| 1/2" Steel Conduit         | 140' - 9" (includes 3" tolerance for error on each bent piece) | \$2.00 per 10' length            | \$30       |
| 1/2" PVC Pipe              | 116"   | \$2.17 per 10' length            | \$2.17     |
| 3/8" Aluminum Tube         | 64"  | \$10 per 36" length              | \$20       |
| 1/4" x 2" Bolts            | 32   | \$5.28 per 50 pack               | \$5.28     |
| 1/4" x 4" Bolts            | 4  | \$4.17 per 25 pack               | \$4.17     |
| 1/4" Nuts                  | 44   | \$2.87 per 50 pack               | \$2.87     |
| 1/4" Washers               | 18   | \$2.46 per 25 pack               | \$2.46     |
| Acrylic Sheet              | 1  | \$2.98 per 0.05" x10" x 8" sheet | \$2.98     |
| 1/4" x 3-3/4 Threaded Hook | 2  | \$0.62                           | \$1.24     |
| 1/2" 15" Stakes            | 8  | \$3.28                           | \$26.24    |

**Grand Total \$97.41**

**S9**

**S9**

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Ale Meza  
Isabella Ouyang  
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Hoop House  
Phipps Conservatory Rooftop Garden

Material and Budget List  
For Review  
Scale: N/A  
09.10.2017  
10 of 29

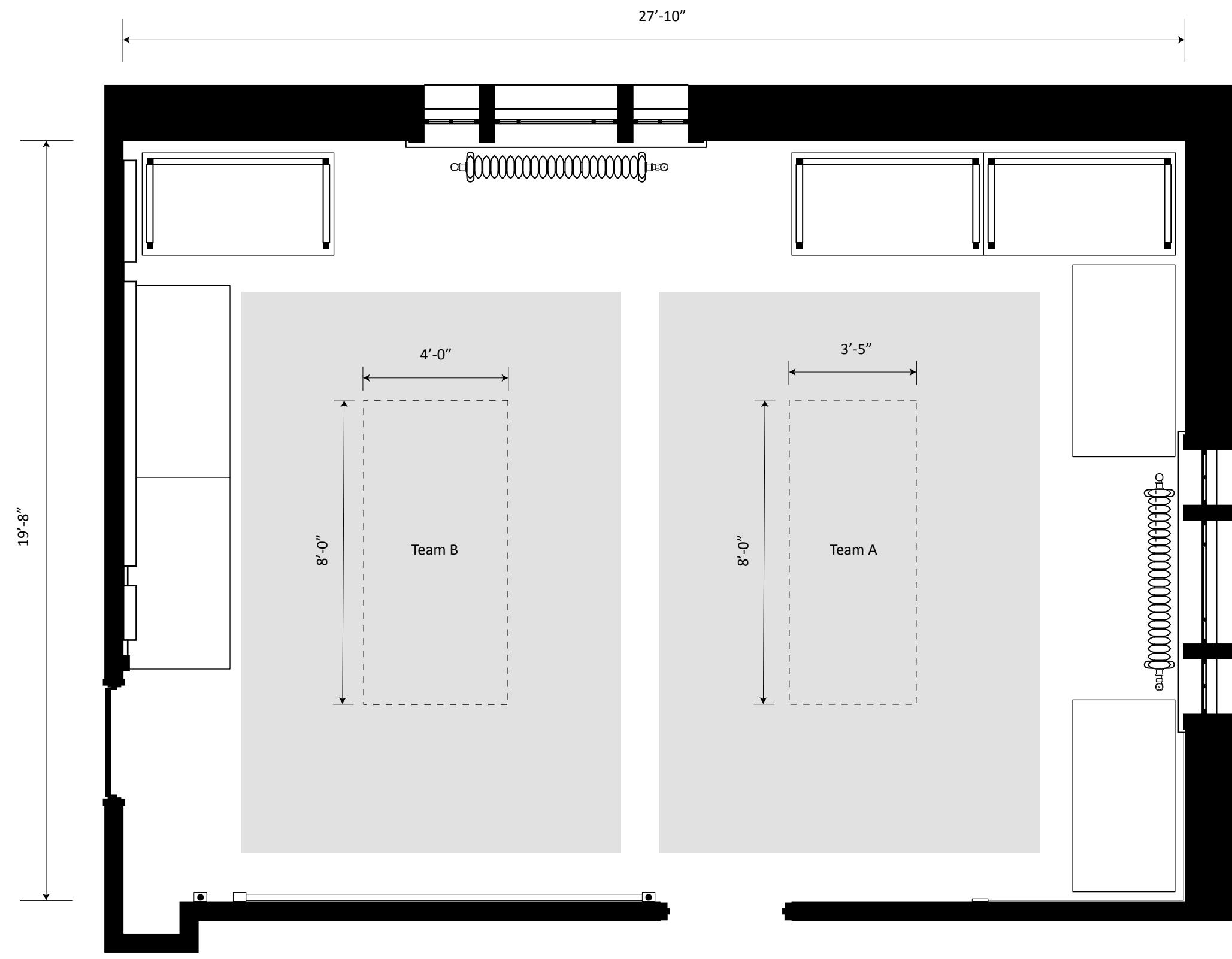
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**Hoop House**  
Phipps Conservatory Roo op Garden

**S10**

**Studio Setup**  
For Review

Scale: 1/3"- 1'  
09.10.2017  
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Room 211 - Plan

# S11

## Structure Components

For Review

Scale: N/A

09.10.2017

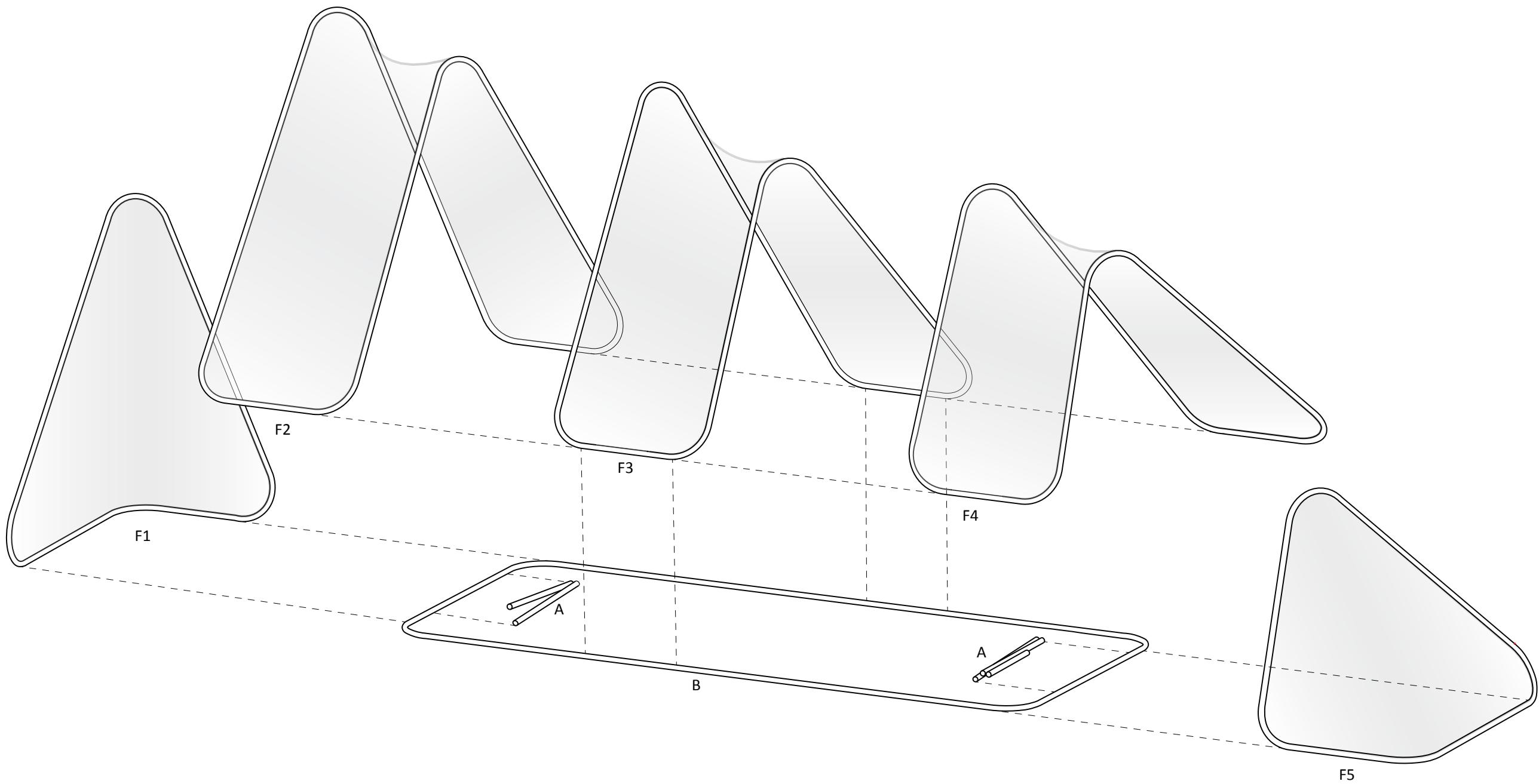
12 of 29

## Hoop House

Phipps Conservatory Rooftop Garden

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Anthony Ra



# S12

## Panel Components - F1

For Review

Scale: N/A

09.10.2017

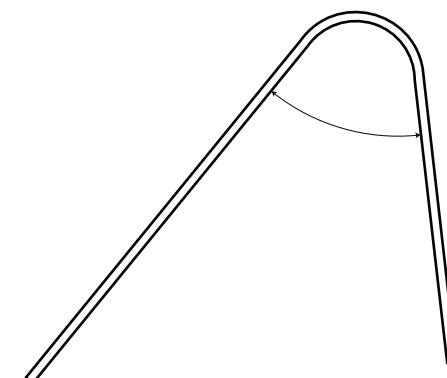
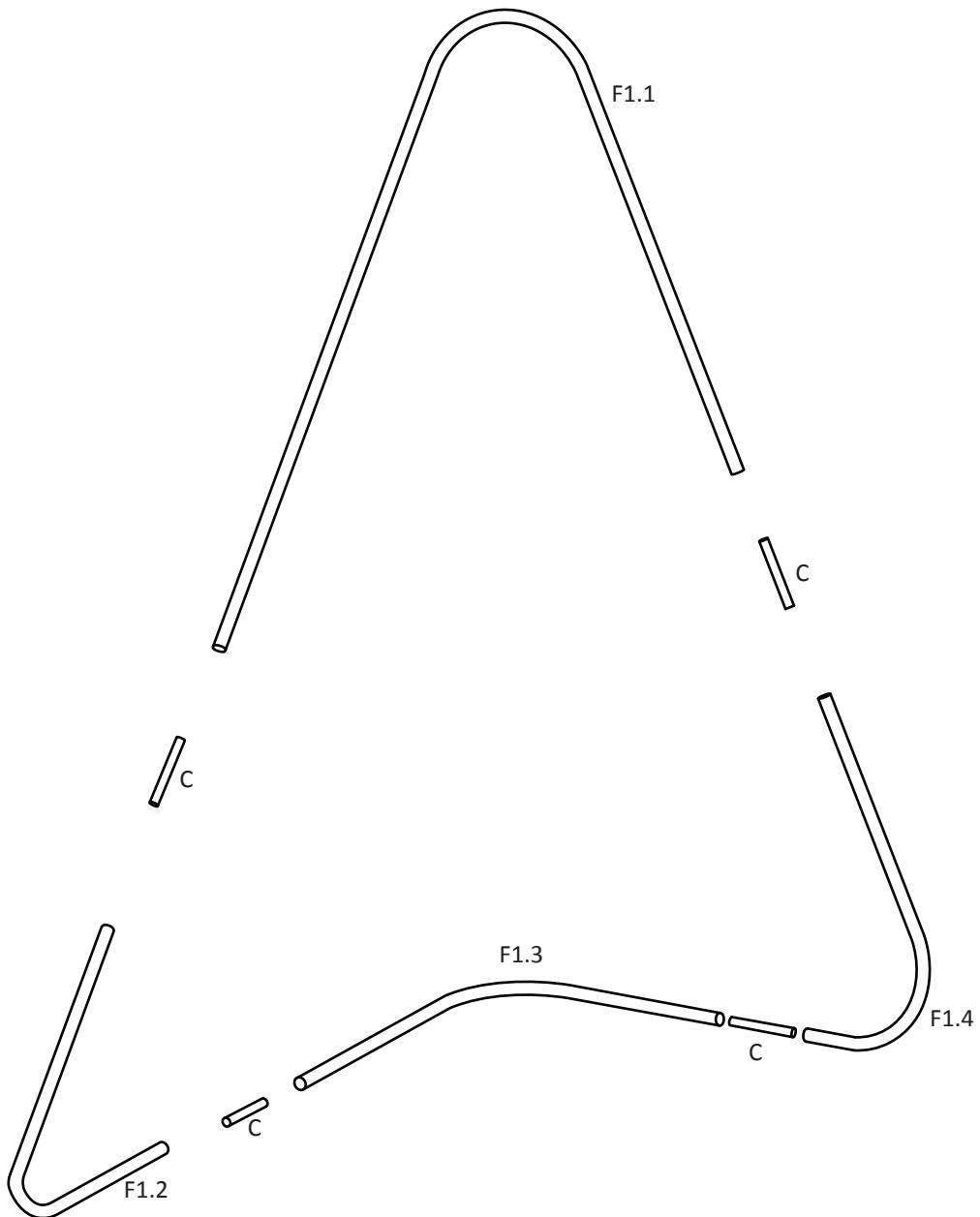
13 of 29

## Hoop House

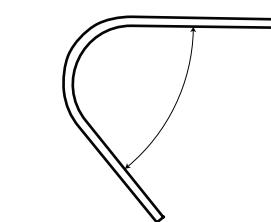
Phipps Conservatory Rooftop Garden

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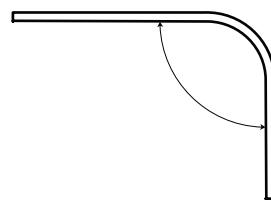
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F1.1  
Material: Conduit  
Length: 72"  
Bend: 45.75°



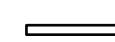
F1.2  
Material: Conduit  
Length: 34"  
Bend: 51.2°



F1.3  
Material: Conduit  
Length: 34"  
Bend: 90°



F1.4  
Material: Conduit  
Length: 27"  
Bend: 65.4°



C x 4  
Material: PVC  
Length: 4"

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# S12

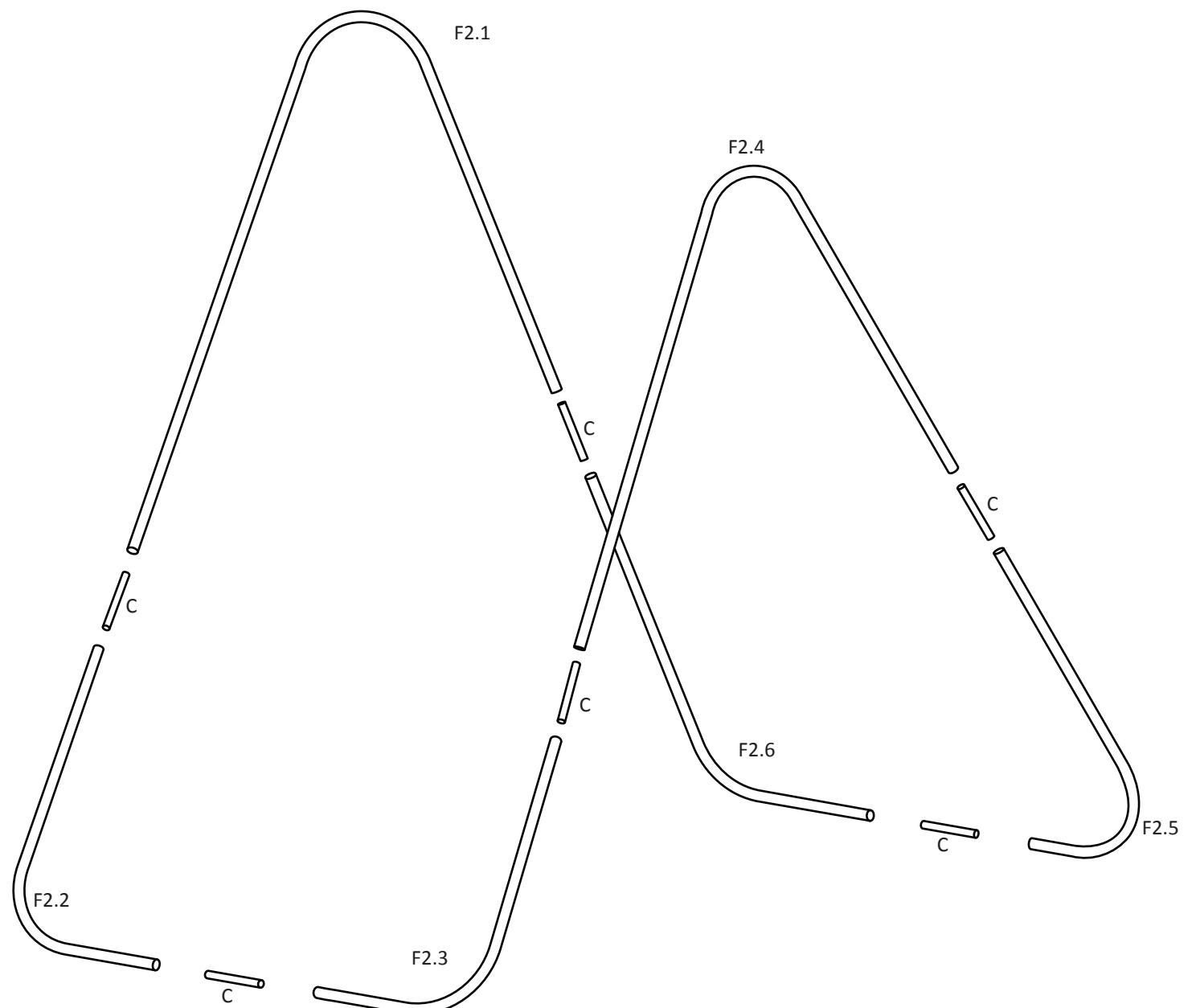
## Panel Components - F2

For Review  
Scale: N/A  
09.10.2017  
14 of 29

## Hoop House

Phipps Conservatory Rooftop Garden

## Just 'Duit



F2.1  
Material: Conduit  
Length: 71"  
Bend: 45.75°

F2.2  
Material: Conduit  
Length: 31"  
Bend: 90°

F2.3  
Material: Conduit  
Length: 30"  
Bend: 90°

F2.4  
Material: Conduit  
Length: 61"  
Bend: 52.5°

F2.5  
Material: Conduit  
Length: 31"  
Bend: 62.9°

F2.6  
Material: Conduit  
Length: 34"  
Bend: 115°

C x 6  
Material: PVC  
Length: 4"

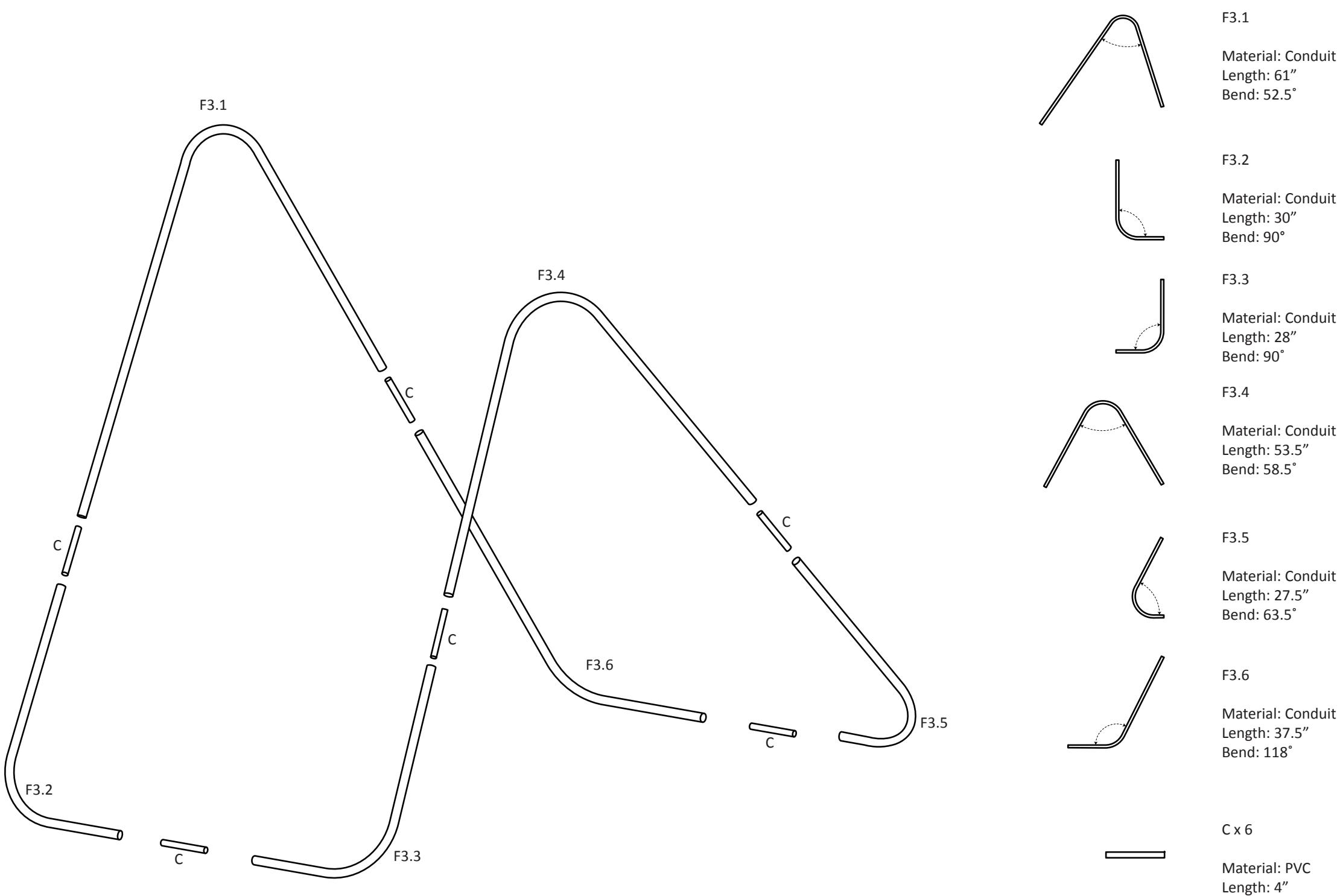
# S12

## Panel Components - F3

For Review  
Scale: N/A  
09.10.2017  
15 of 29

Hoop House  
Phipps Conservatory Rooftop Garden

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# S12

## Panel Components - F4

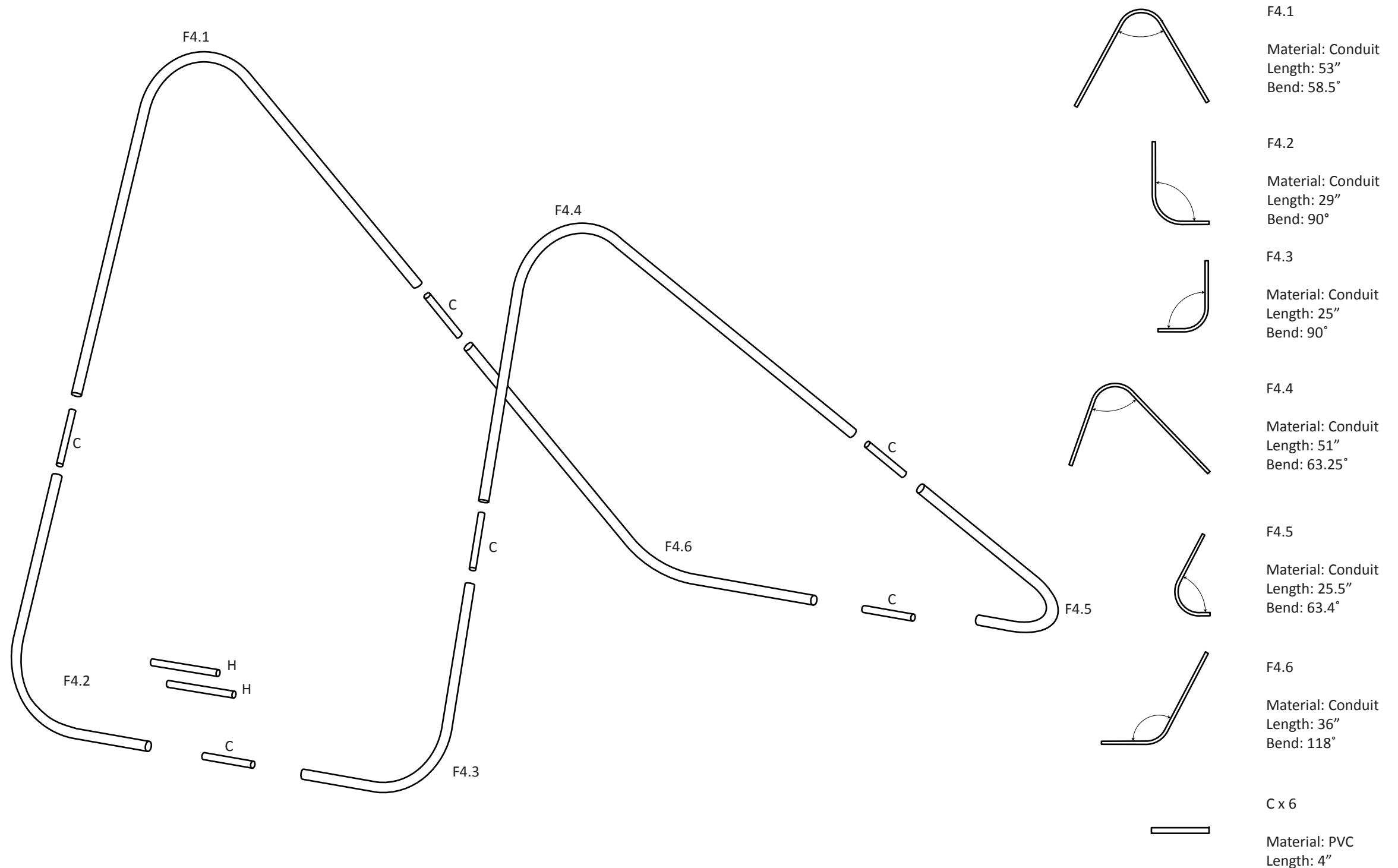
For Review  
Scale: N/A  
09.10.2017  
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## Hoop House

Phipps Conservatory Rooftop Garden

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# S12

## Panel Components - F5

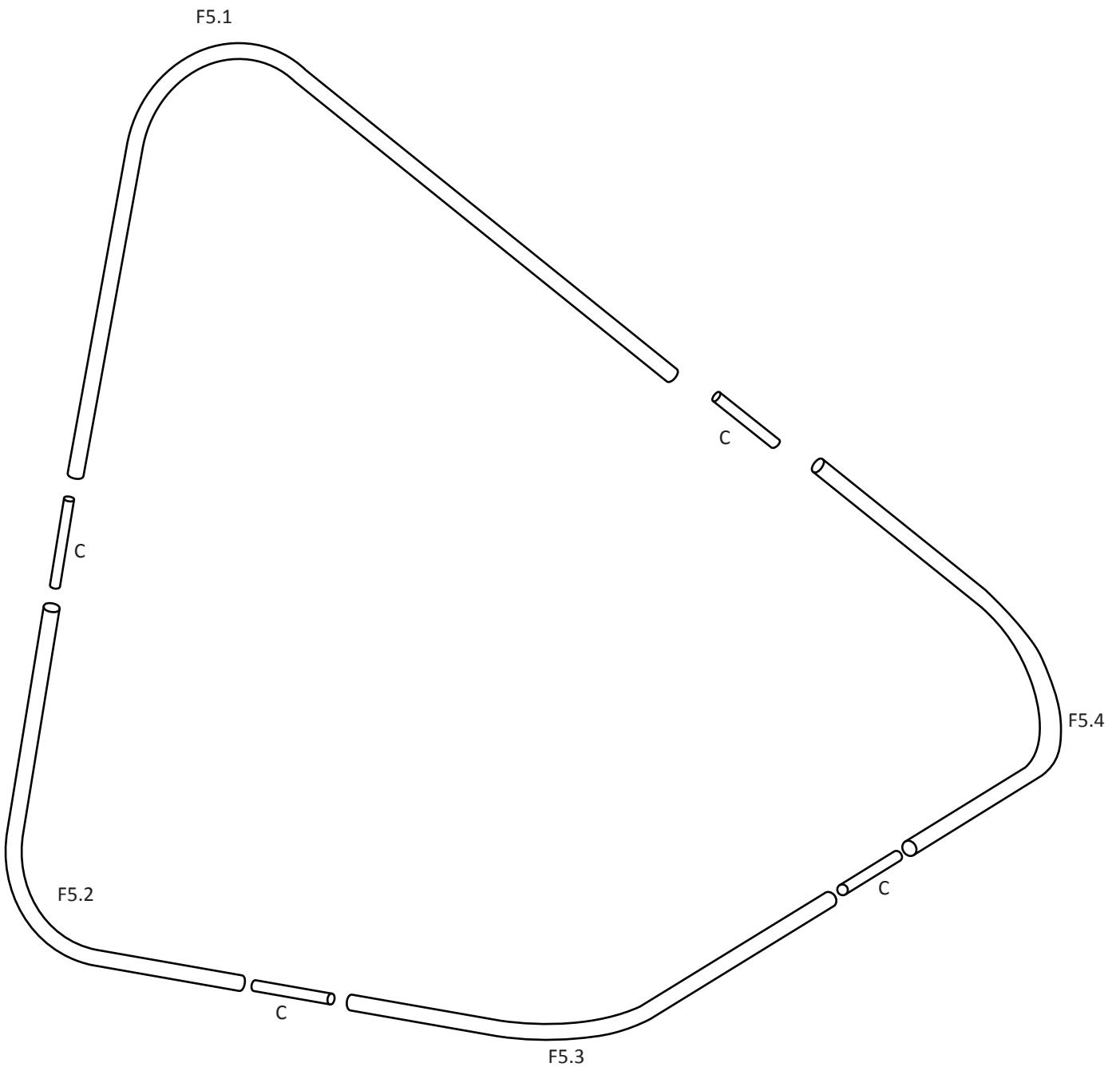
For Review  
Scale: N/A  
09.10.2017  
17 of 29

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### Hoop House

Phipps Conservatory Rooftop Garden



F5.1

Material: Conduit  
Length: 51"  
Bend: 63.25°

F5.2

Material: Conduit  
Length: 26.5"  
Bend: 90°

F5.3

Material: Conduit  
Length: 33.5"  
Bend: 90°

F5.4

Material: Conduit  
Length: 34"  
Bend: 56.4°

C x 4

Material: PVC  
Length: 4"

# S12

## Panel Components - A1, 12

For Review  
Scale: N/A  
09.10.2017  
18 of 29

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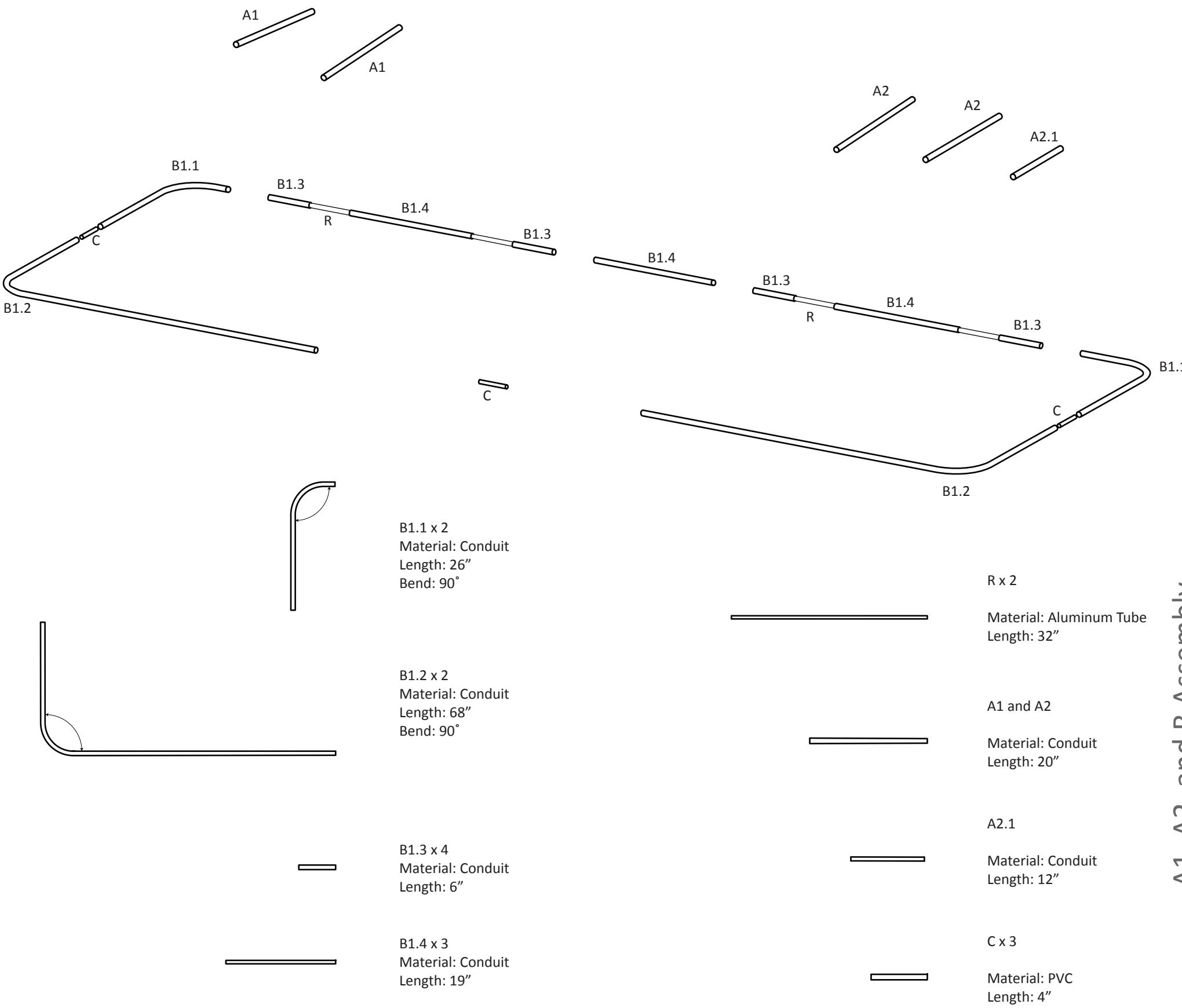
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## Hoop House

Phipps Conservatory Rooftop Garden

### A1, A2, and B Assembly

For Review  
10.09.2017



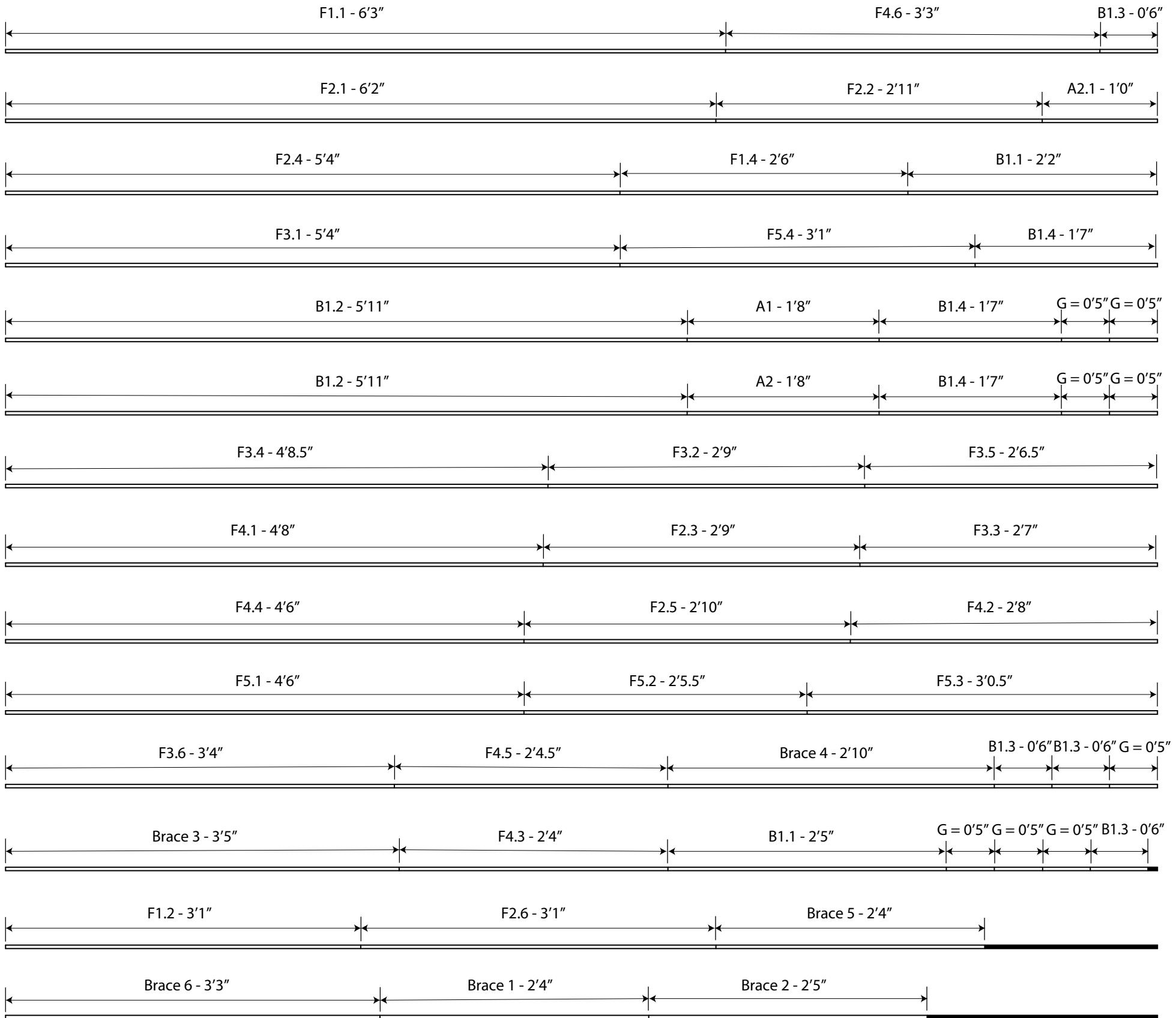
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Phipps Conservatory Roof Garden

## Conduit Measurement

For Review  
Scale: 1"- 1'  
09.10.2017  
19 of 29



## Hoop House

S13

# S14

## Connection Components

For Review  
Scale: 1'-1'  
09.10.2017  
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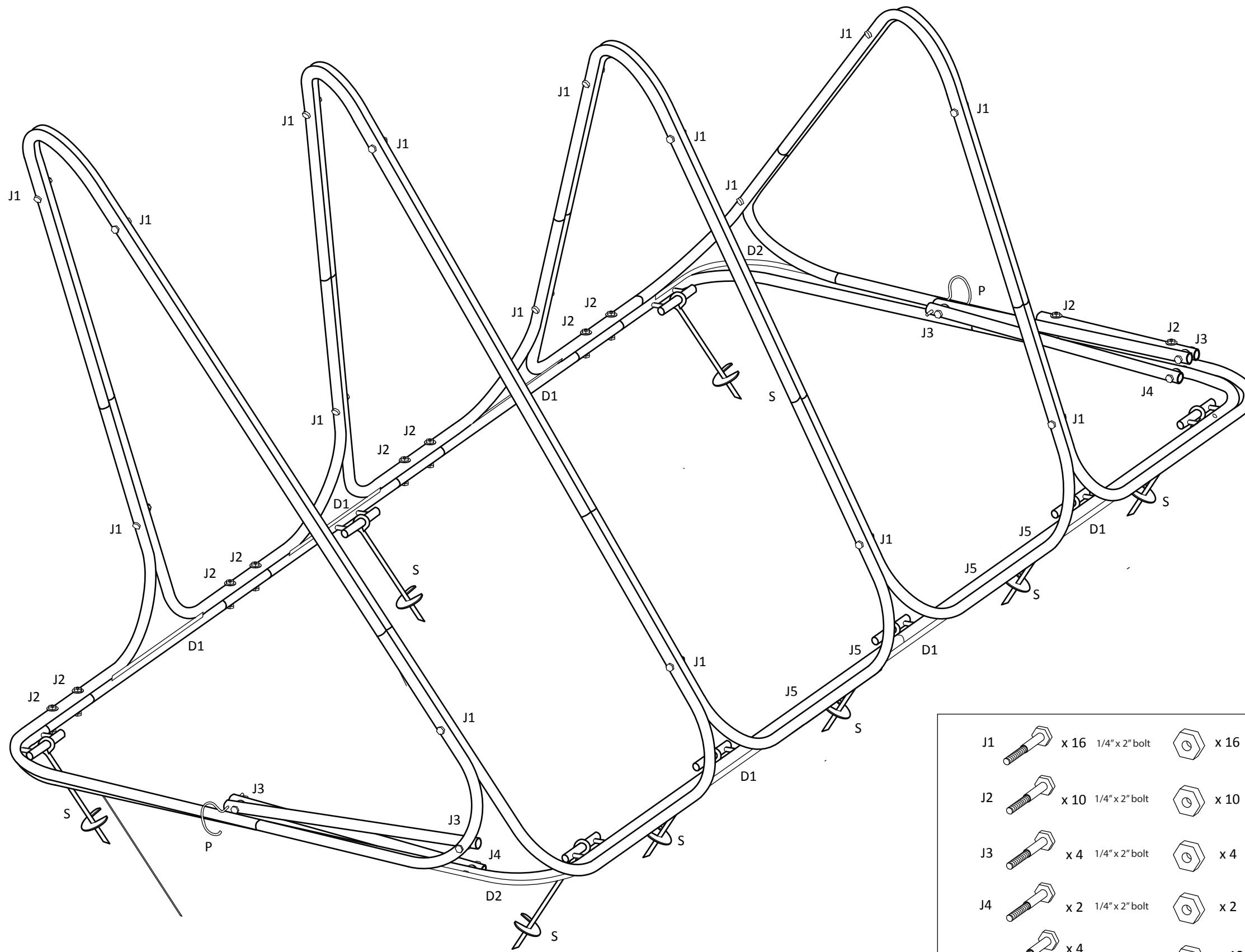
|  |      |                    |  |      |                            |
|--|------|--------------------|--|------|----------------------------|
|  | x 16 | 1/4" x 2" bolt     |  | x 16 | 1/4" nut                   |
|  | x 10 | 1/4" x 2" bolt     |  | x 10 | 1/4" nut                   |
|  | x 4  | 1/4" x 2" bolt     |  | x 4  | 1/4" nut                   |
|  | x 2  | 1/4" x 2" bolt     |  | x 2  | 1/4" nut                   |
|  | x 4  | 1/4" x 3" bolt     |  | x 12 | 1/4" nut                   |
|  | x 10 | ground anchor      |  | x 2  | 1/4" x 2" steel hook       |
|  | x 6  | 1/2" x 12" acrylic |  | x 2  | 1 1/2" x 16" acrylic strip |

## Hoop House

Phipps Conservatory Rooftop Garden

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Alejandra Meza  
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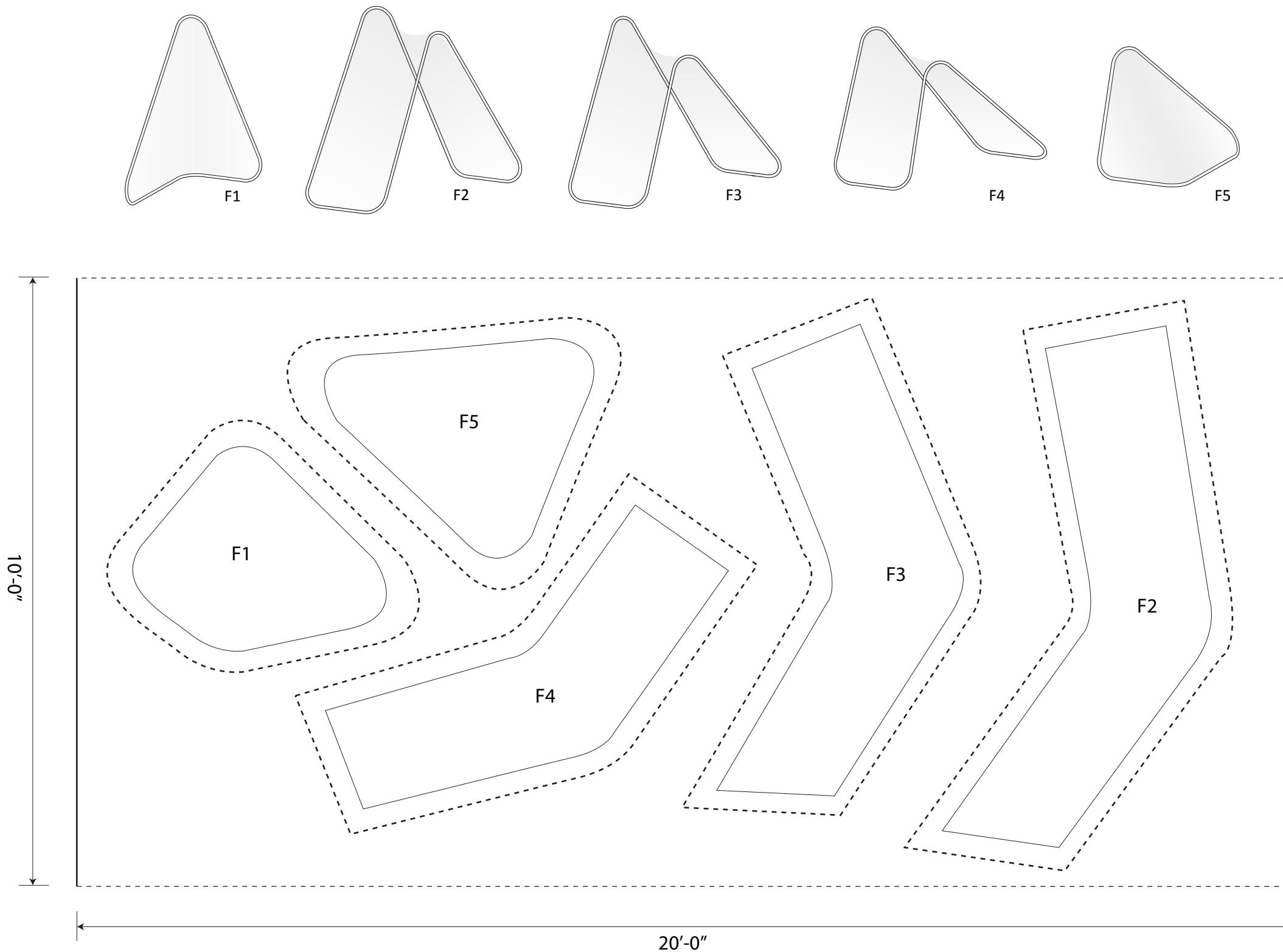
## Hoop House

Phipps Conservatory Rooftop Garden

## Cut Sheets

For Review  
Scale: 1' - 1/2"  
09.10.2017  
21 of 29

# S15



# S16

## Temporary Internal Bracing

For Review

Scale: 1"-1'

09.10.2017

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## Hoop House

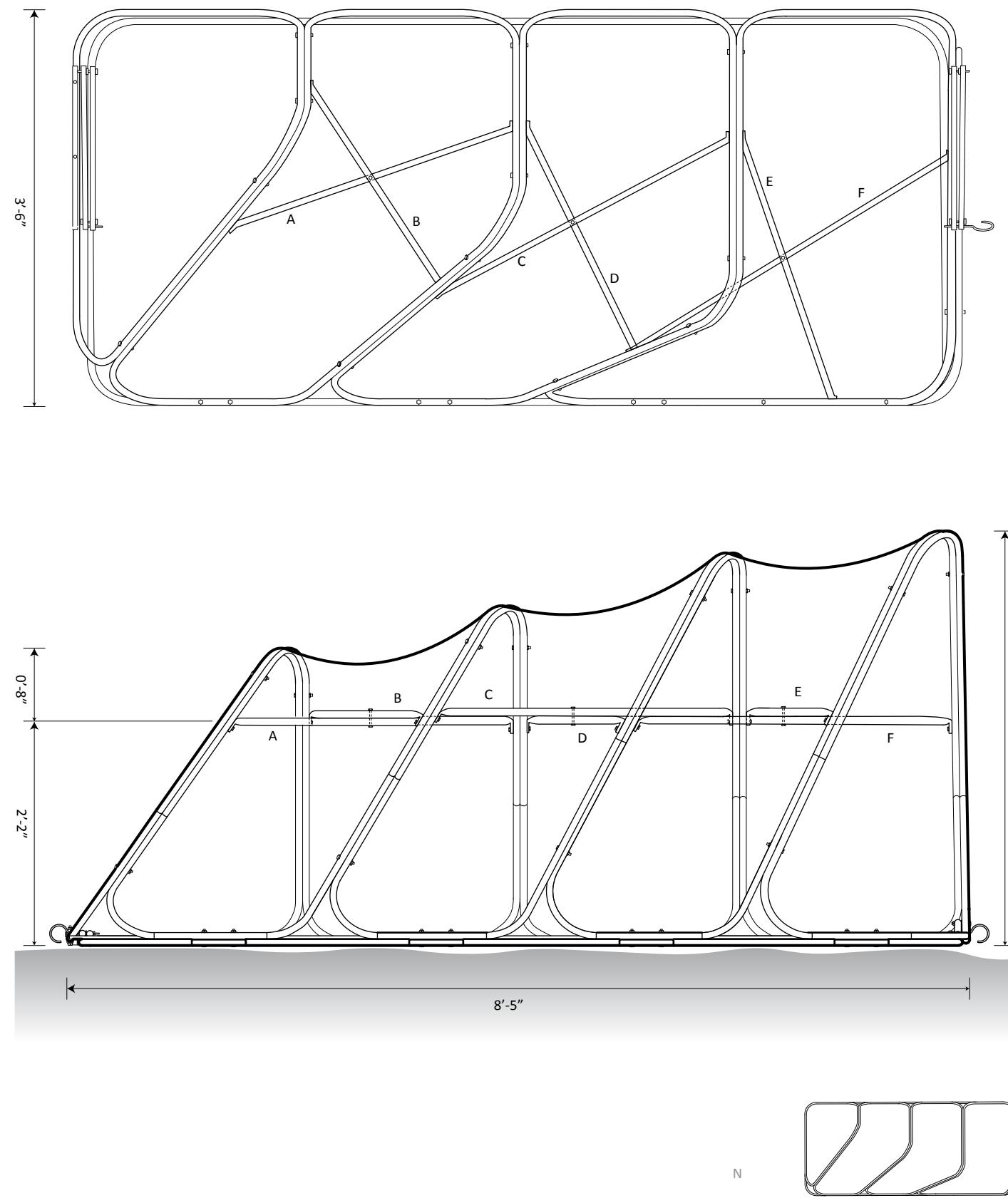
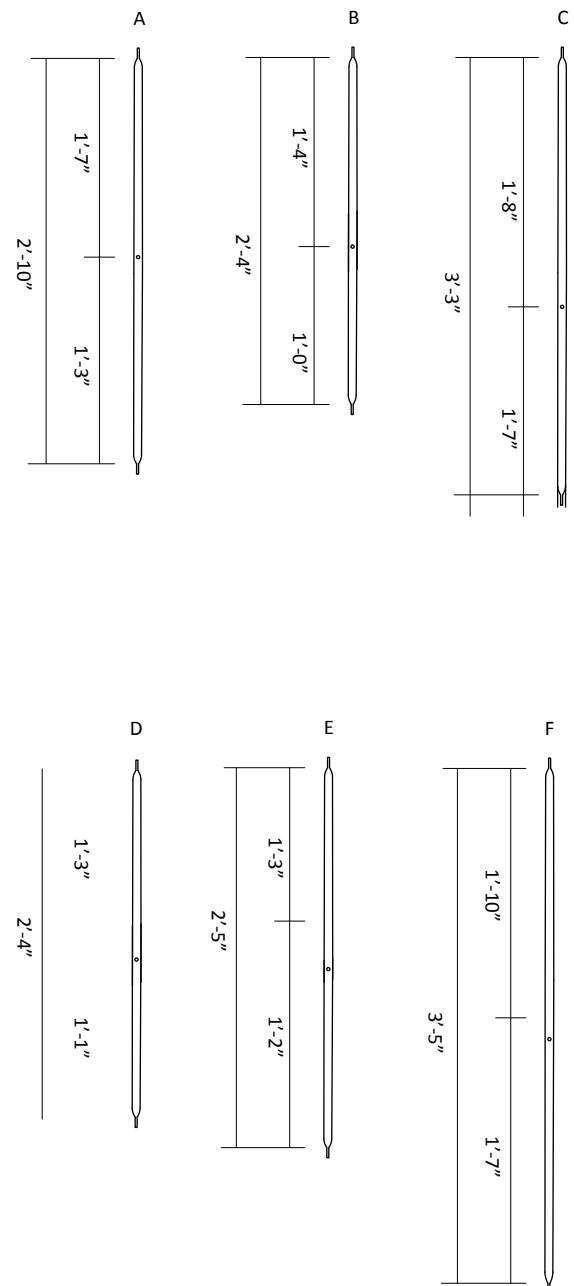
Phipps Conservatory Roof Garden

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### Components for Temporary Internal Bracing Structure

To be installed only during Heat Shrink Process  
Each crimped end measures 2" long

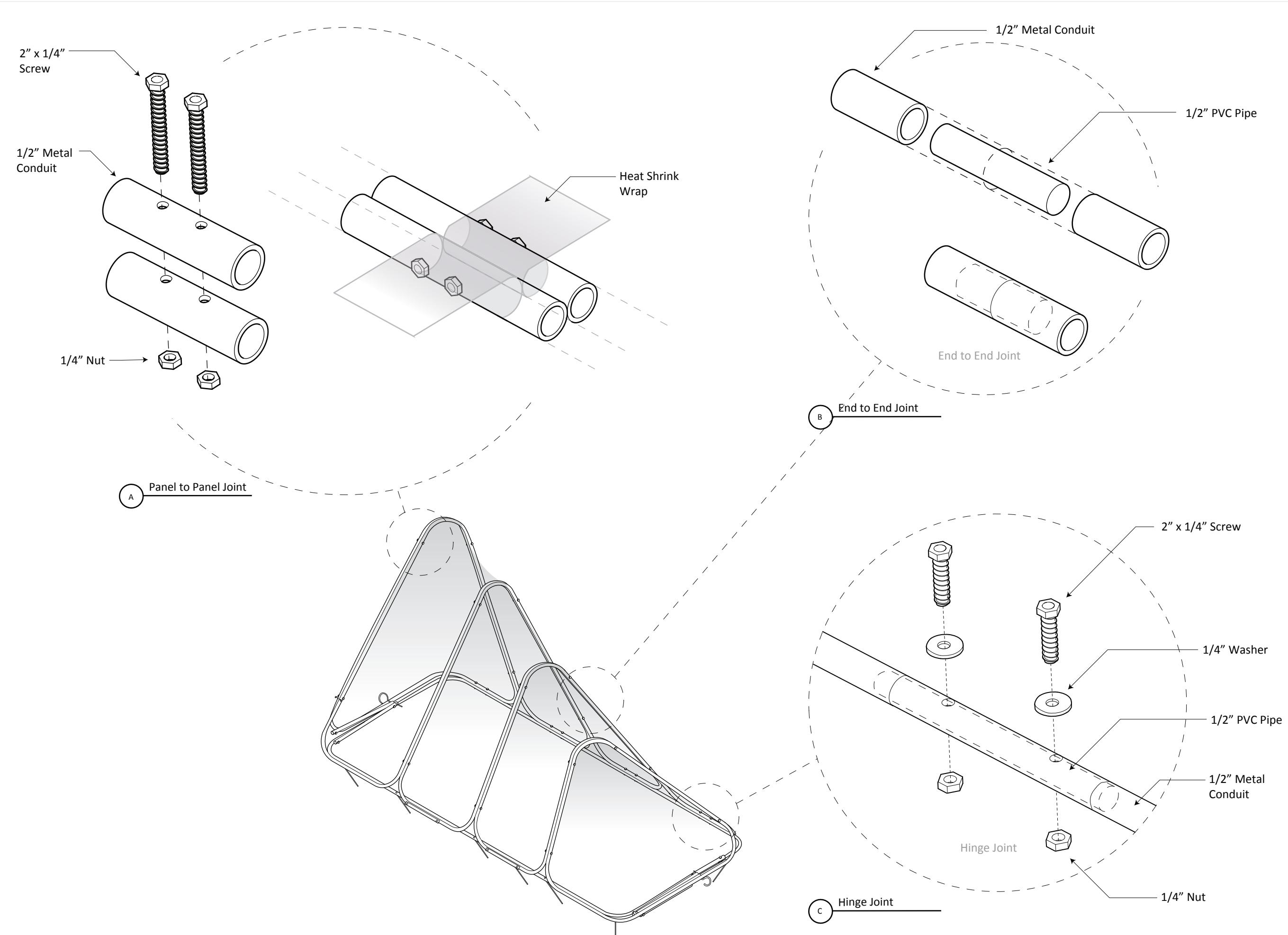


## Joints Detail

Hoop House  
Phipps Conservatory Rooftop Garden

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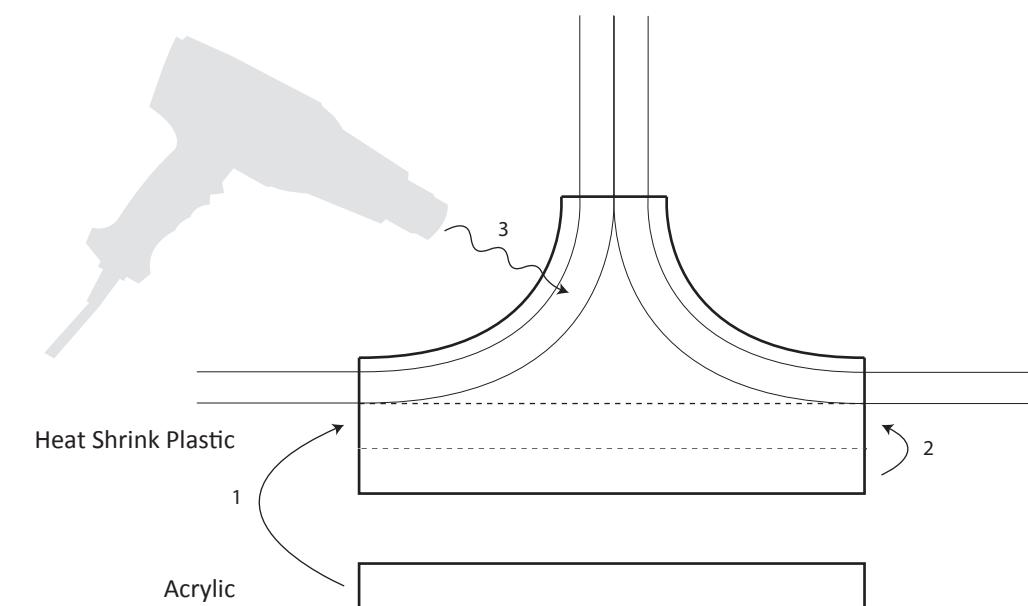
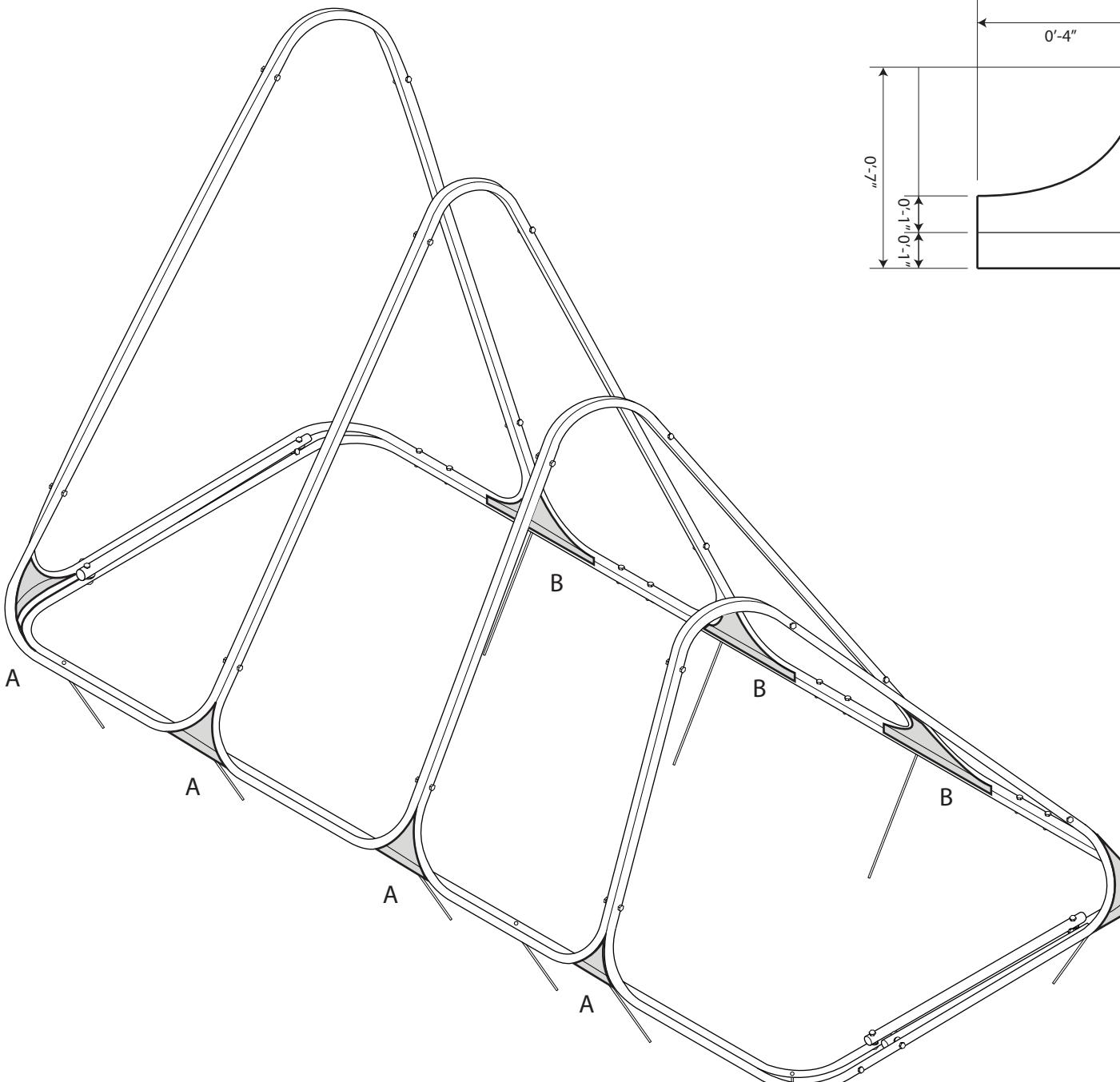
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# S18

## Bottom Edge Seal Detail

For Review  
Scale: 1"-1'  
09.10.2017  
24 of 29



1. Place acrylic strip onto shrink wrap plastic 1" above bottom edge
2. fold bottom edge 1" up to top of acrylic, then fold acrylic and wrapped plastic up 1" to the bottom edge of the curve
3. Apply light heat to wrapped acrylic to secure in place
4. Place rounded edges of plastic piece onto inside bottom edge of panel intersections and apply heat to secure in place

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Anthony Ra

## Hoop House

Phipps Conservatory Rooftop Garden

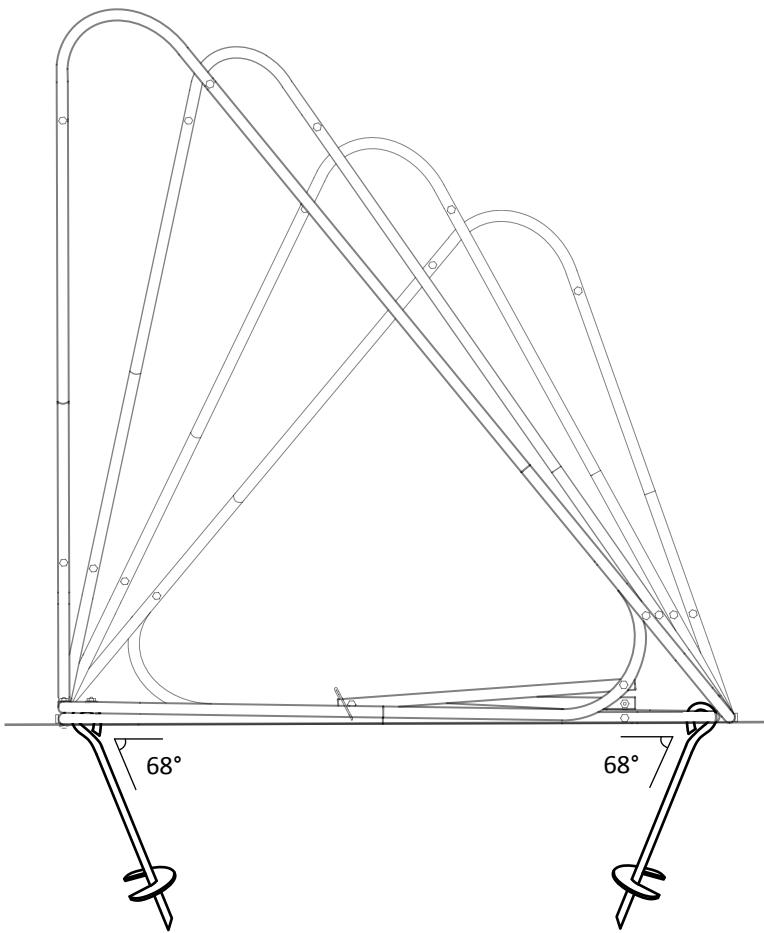
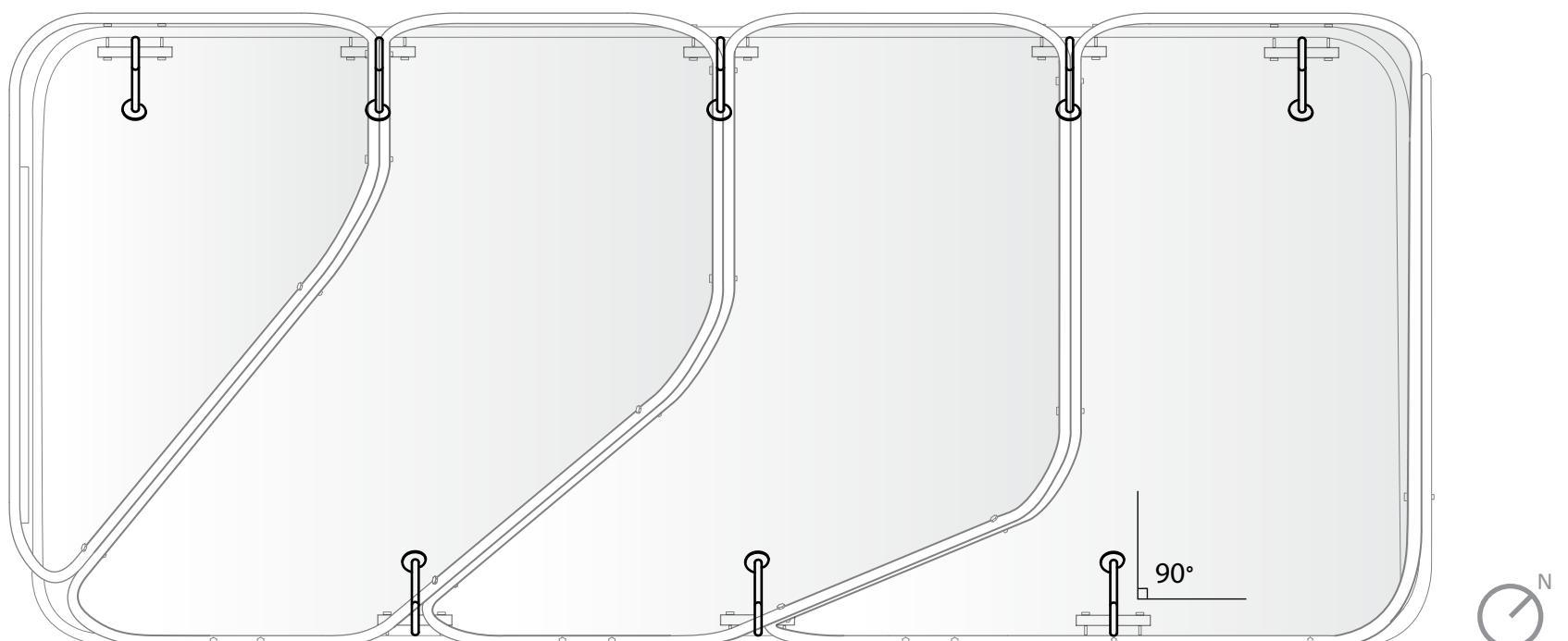
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Ryu Kondrup  
Ale Meza  
Isabella Ouyang  
Anthony Ra

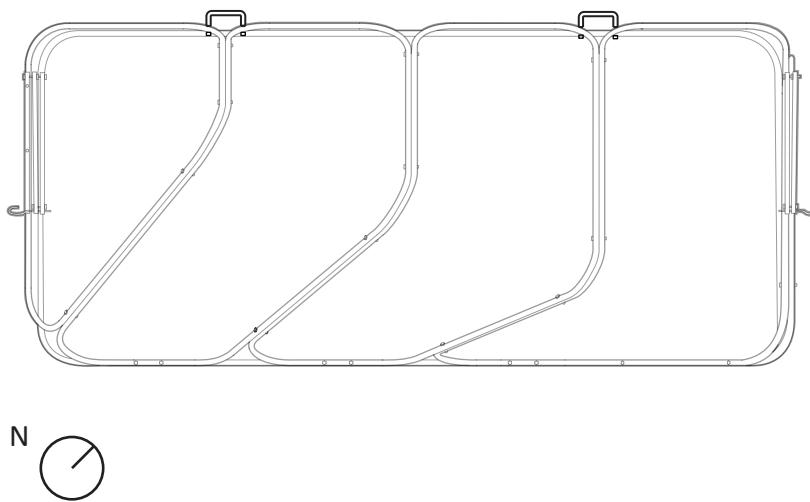
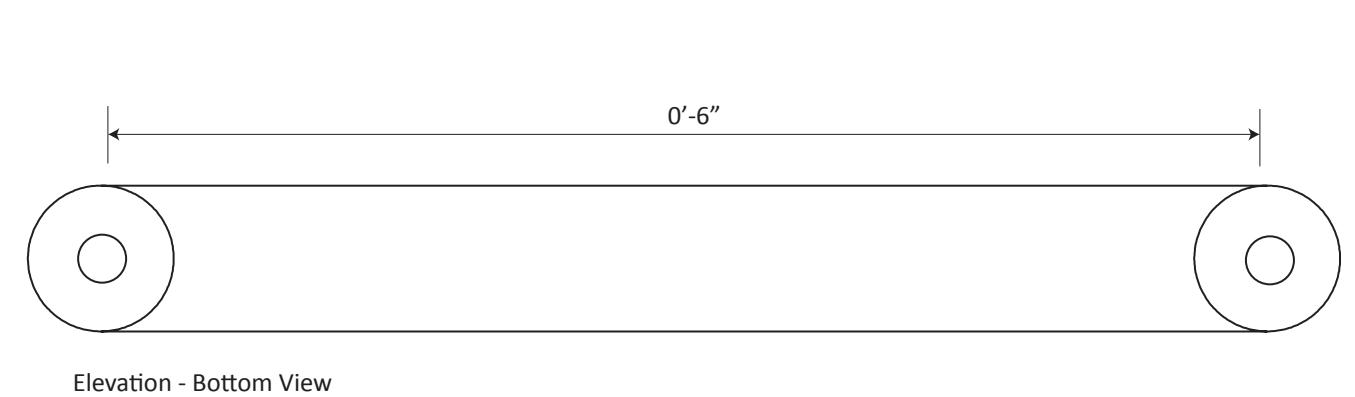
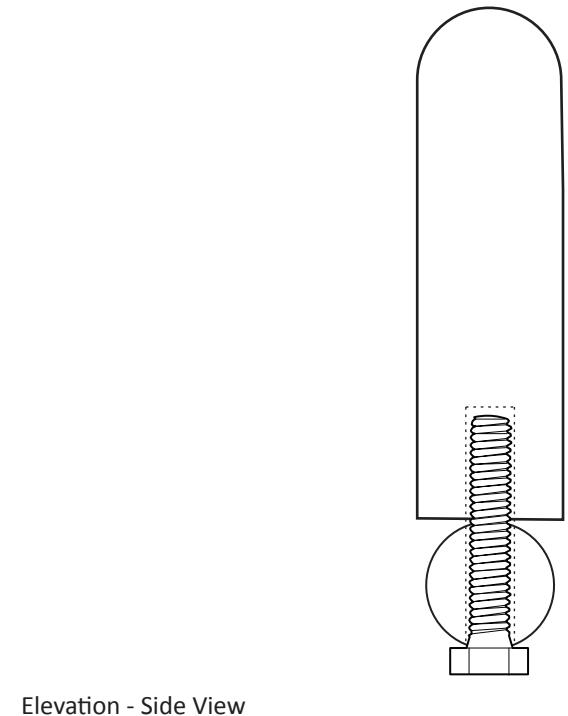
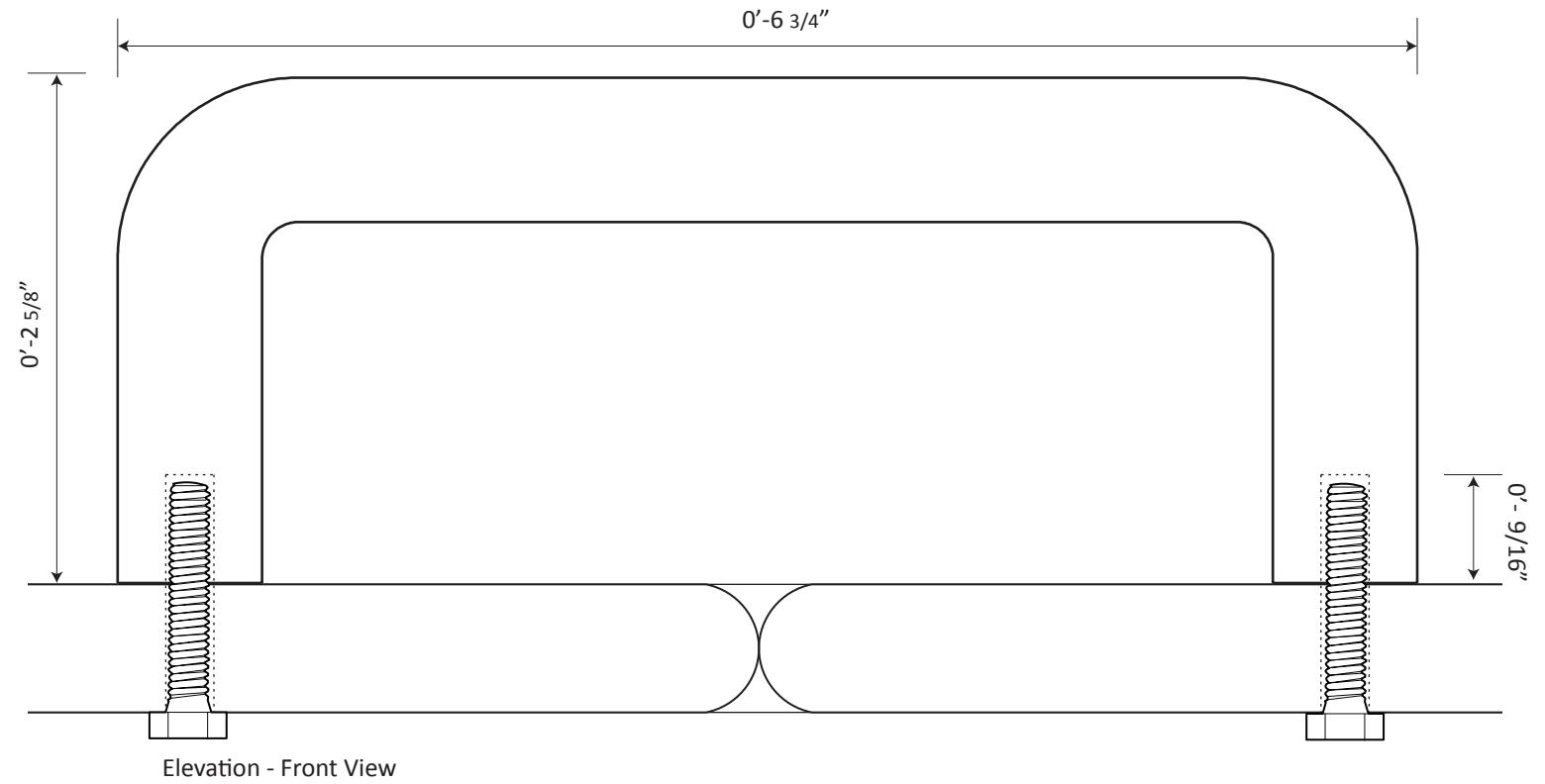
**Hoop House**  
Phipps Conservatory Roo op Garden

**Ground Anchor Detail**  
For Review

Scale: 1" - 1'  
09.10.2017  
25 of 29

**S19**





## Panel Handle Detail

For Review

Scale: 1"- 1"

09.10.2017

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## Hoop House

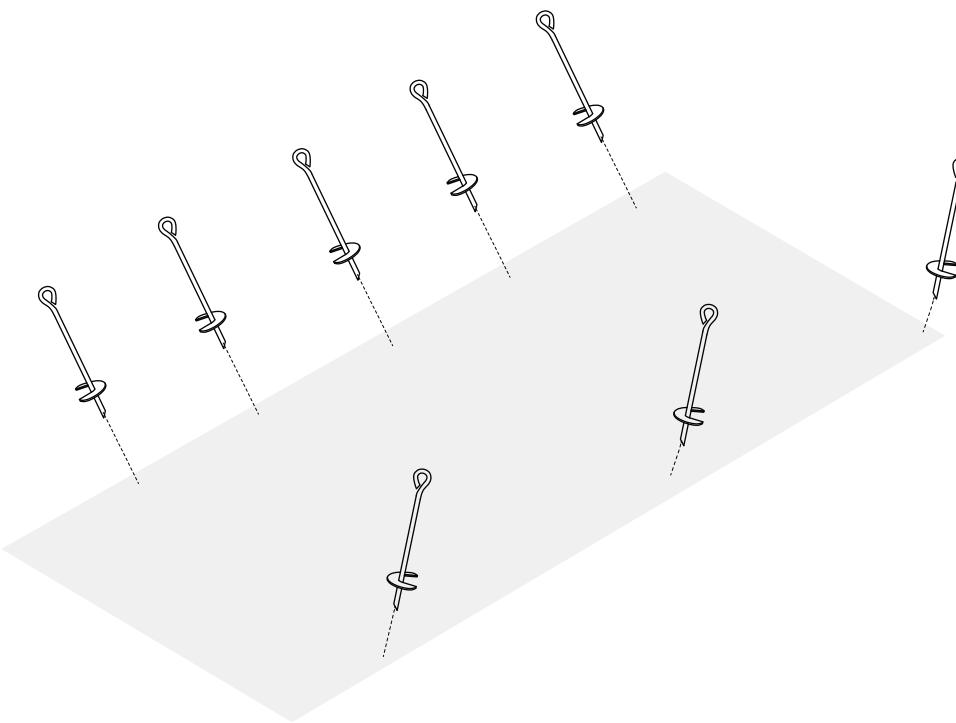
Phipps Conservatory Rooftop Garden

## Just 'Duit'

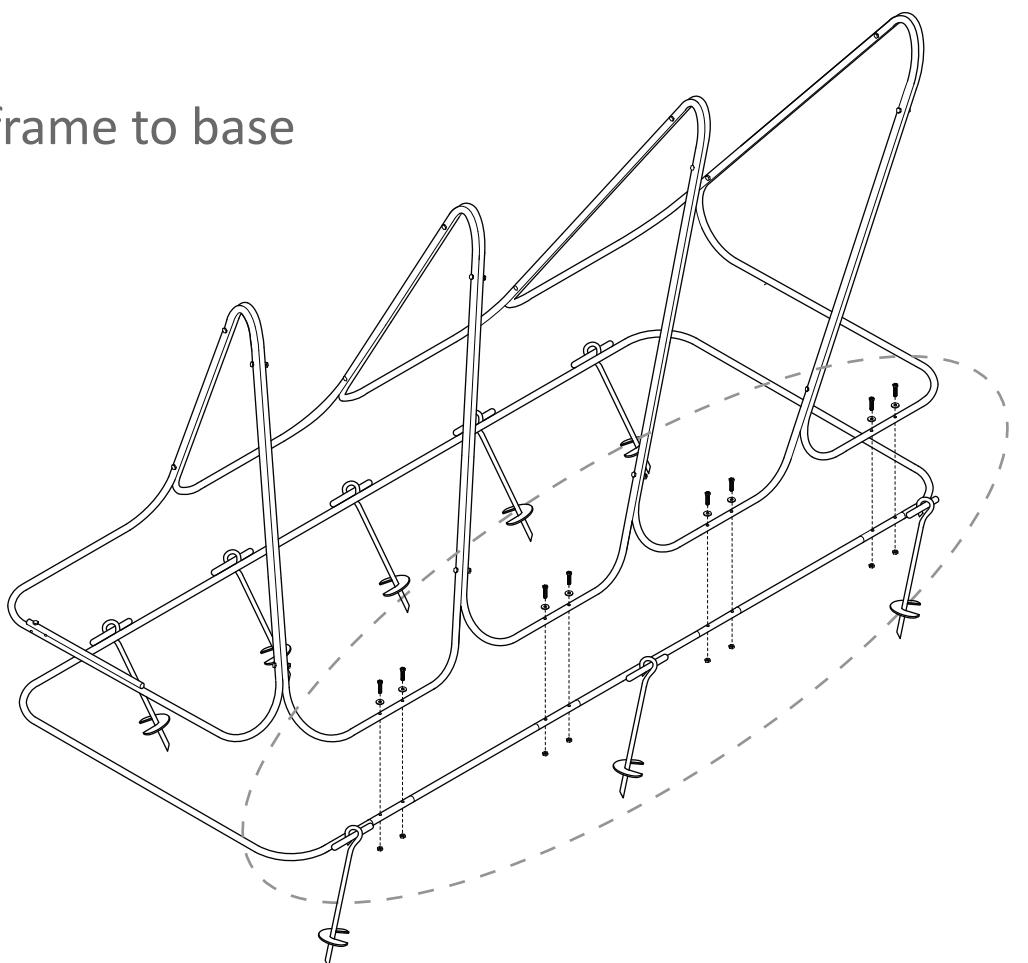
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# S20

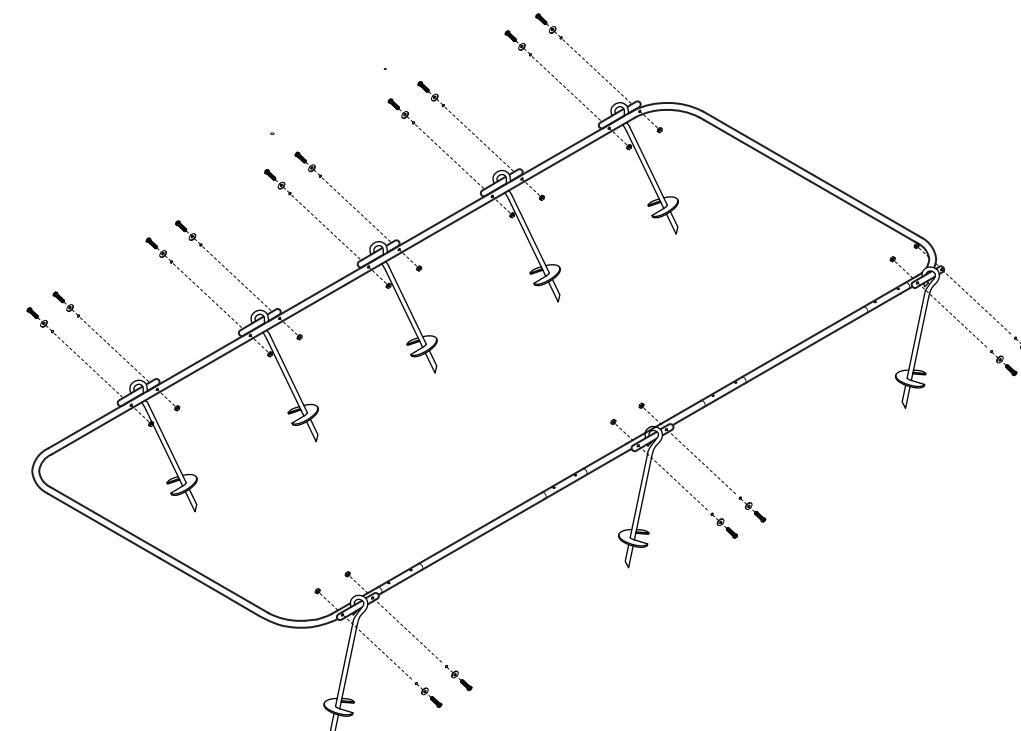
Step 1:  
Embed Ground Anchors



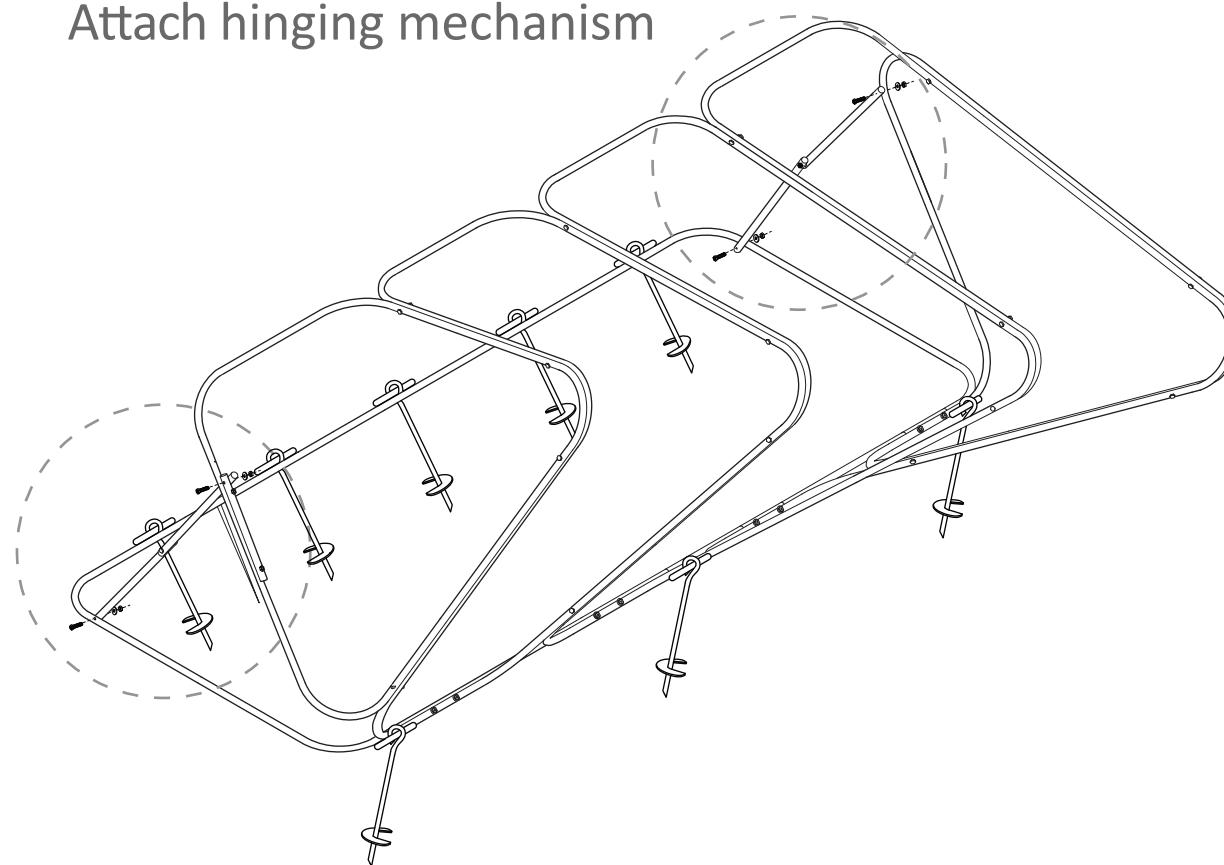
Step 2:  
Attach frame to base



Step 2:  
Attach Base to Ground Anchors



Step 4:  
Attach hinging mechanism



## Storage Disassembly

For Review

Scale: 1"-1'

09.10.2017

27 of 29

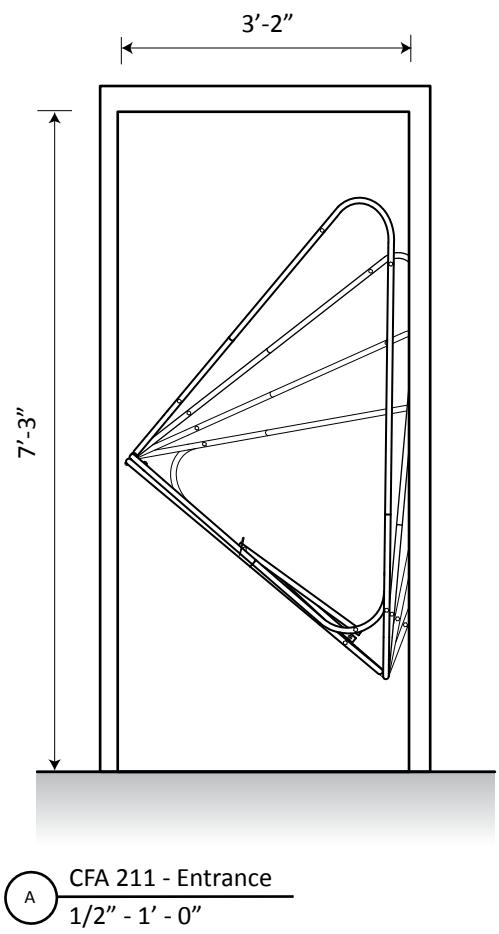
## Hoop House

Phipps Conservatory Rooftop Garden

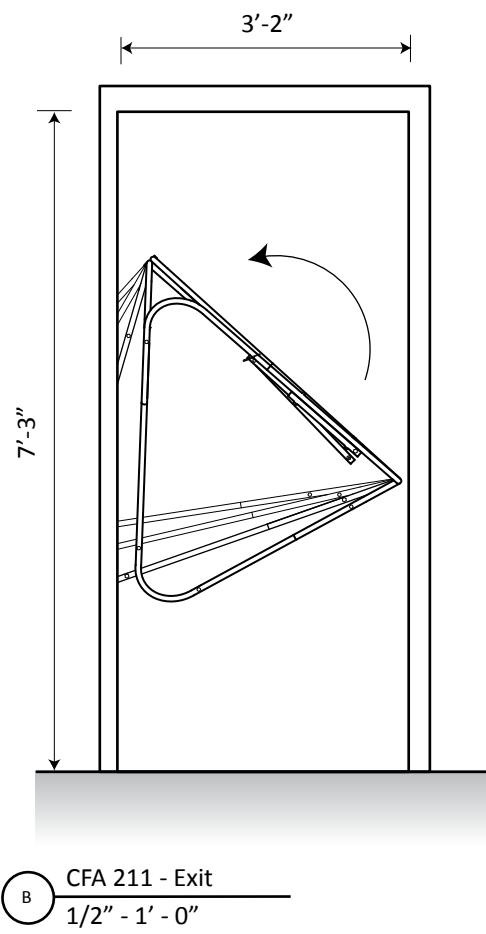
## Just 'Duit

Alejandra Meza  
Anthony Ra  
Colleen Duong  
Isabella Ouyang  
Ryu Kondrup

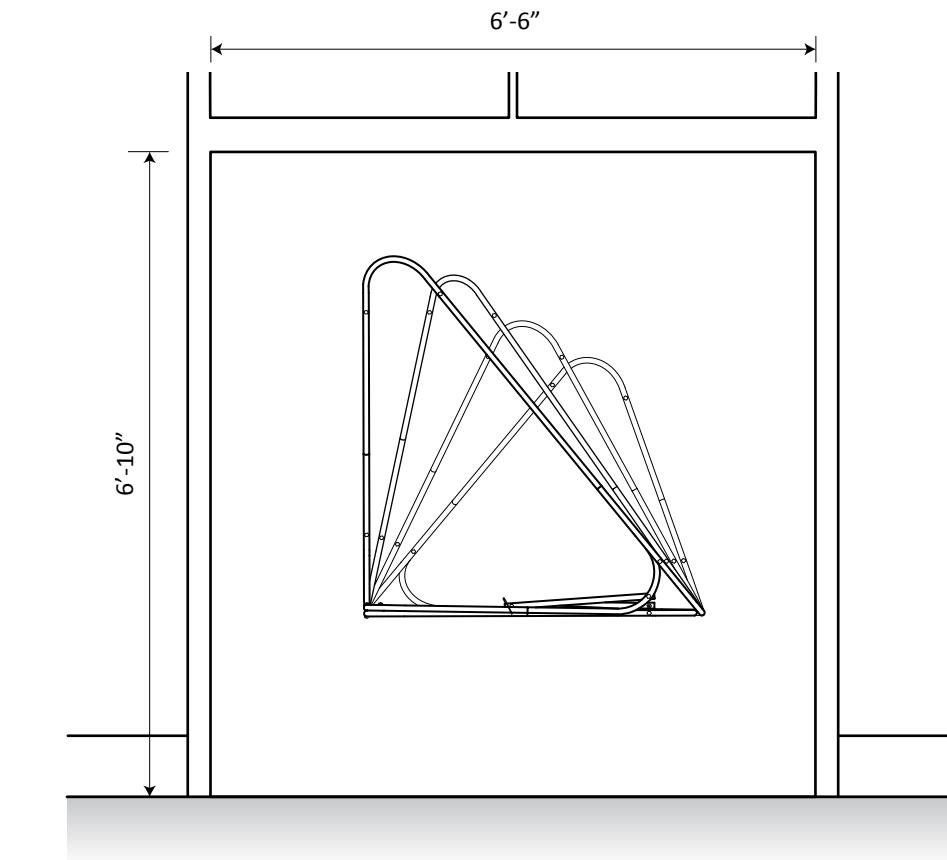
S21



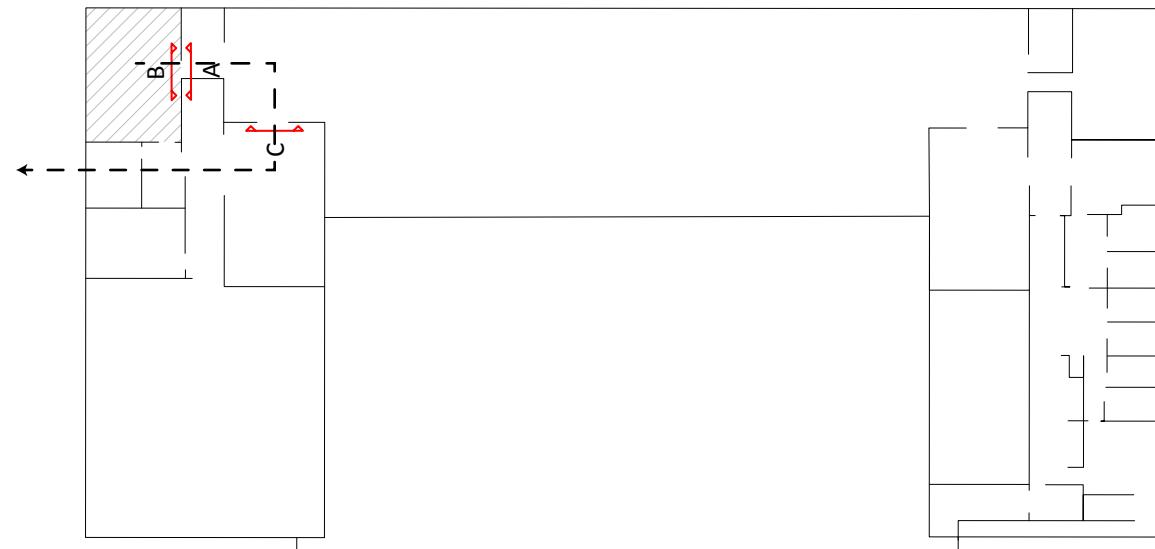
A CFA 211 - Entrance  
1/2" - 1' - 0"



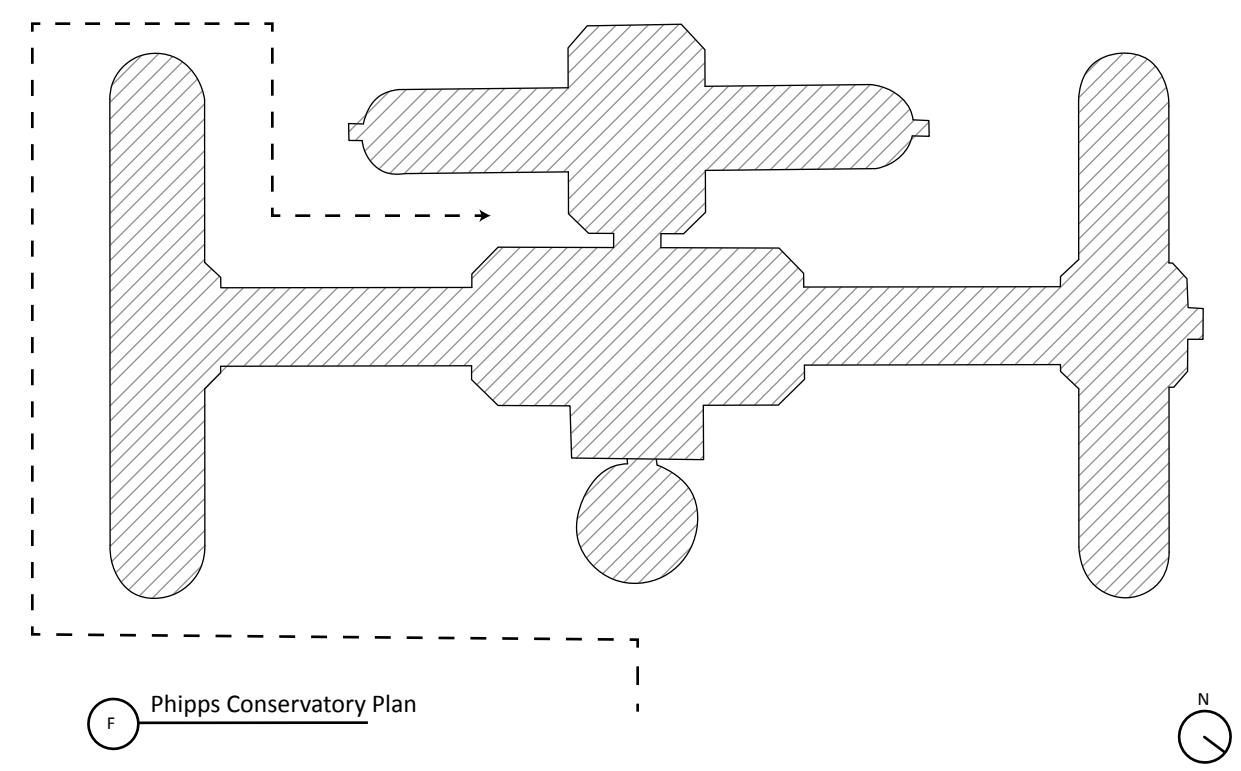
B CFA 211 - Exit  
1/2" - 1' - 0"



C CFA 200 - Exit  
1/2" - 1' - 0"



D CFA 2nd Floor Plan



F Phipps Conservatory Plan

## Just 'Duit'

Colleen Duong  
Edward Fischer  
Ryu Kondrup  
Ale Meza  
Isabella Ouyang  
Anthony Ra

## Hoop House

Phipps Conservatory Rooftop Garden

## Transportation - Diagram

For Review  
Scale: 1/2"-1'  
09.10.2017  
28 of 29

# S22

# S22

## Transportation - Diagram

For Review  
Scale: 1"- 1'  
09.10.2017  
29 of 29

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Colleen Duong  
Edward Fischer  
Ryu Kondrup  
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