# THE STATE OF DELAWARE
# DEPARTMENT OF TRANSPORTATION

U.S. CUSTOMARY UNITS

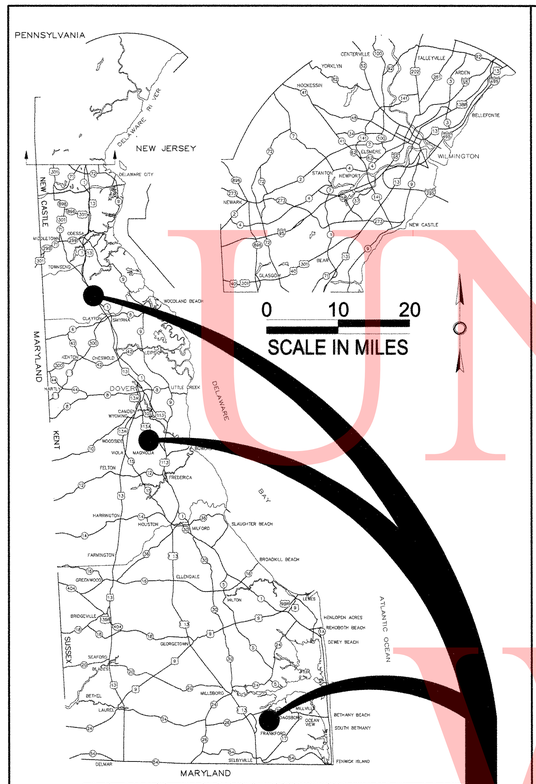
CONSTRUCTION PLANS FOR:

# FABRIC BUILDING REINFORCEMENT
## DAGSBORO YARD, MAGNOLIA YARD, & SMYRNA SOD FARM

CONTRACT NUMBER: T2012-801-01

COUNTY: SUSSEX (DAGSBORO), KENT (MAGNOLIA), & NEW CASTLE (SMYRNA)

AGREEMENT NUMBER 1578




GENERAL LOCATIONS OF CONTRACT

## PROJECT NOTES

1. NO UTILITY RELOCATION INVOLVEMENT IS ANTICIPATED. SHOULD ANY CONFLICTS BE ENCOUNTERED DURING CONSTRUCTION REQUIRING ADJUSTMENT OND/OR RELOCATION OF THE AGENCIES' EXISTING FACILITIES, THE NECESSARY RELOCATION WORK SHALL BE ACCOMPLISHED BY THE RESPECTIVE AGENCIES' FORCES, AS DIRECTED BY THE DISTRICT ENGINEER. ANY ADJUSTMENTS AND/OR RELOCATIONS OF MUNICIPALLY OWNED FACILITIES SHALL BE DONE BY THE STATES CONTRACTOR IN ACCORDANCE WITH THE RESPECTIVE AGENCIES STANDARD SPECIFICATIONS AD DIRECTED BY THE DISTRICT ENGINEER.
2. NO ENVIRONMENTAL PERMITS ARE REQUIRED FOR THIS WORK PROVIDED NO JURISDICTIONAL WETLANDS OR WATERS ARE IMPACTED. IF THERE IS ANY QUESTION AS TO WHETHER OR NOT A WATER OR WETLAND IS JURISDICTIONAL, CONTACT THE DEL DOT ENVIRONMENTAL SECTION AT 302-760-2264.
3. IT IS ANTICIPATED THAT ALL WORK WILL OCCUR WITHIN DELDOT'S EXISTING RIGHT OF WAY OR EASEMENT AREAS. SHOULD THE NEED OCCUR TO TRESPASS ONTO PRIVATE PROPERTY; IT WILL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO SECURE SUCH TRESPASS NEEDS.
4. IT IS ANTICIPATED THAT ALL WORK WILL OCCUR WITHIN DELDOT'S RIGHT OF WAY. SHOULD THE NEED OCCUR TO TRESPASS ONTO RAILROAD PROPERTY, INCLUDING THE HIGHWAY-RAIL CROSSING; IT WILL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO CONTACT THE RAILROAD CHIEF ENGINEER AND OBTAIN WRITTEN AUTHORIZATION BEFORE ENTERING.
5. THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR COORDINATING WITH THE TRAFFIC SECTION RELATING TO ANY IMPACTS TO TRAFFIC SECTION FACILITIES (INCLUDING BUT NOT LIMITED TO TRAFFIC LOOPS, JUNCTION WELLS ECT.) AT LEAST 4 WEEKS IN ADVANCE OF THE START OF THE ACTIVITY. PRIOR TO INITIATING ANY WORK ON THIS CONTRACT (OR SITES), THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING FOR APPROVAL OF THE SAFETY SECTION, A MAINTENANCE OF TRAFFIC PLAN. SUFFICIENT TIME SHALL BE PROVIDED FOR THE REVIEW AND APPROVAL OF THE PLAN. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE PROPOSED TIME RESTRICTIONS ON THE CLOSURE OF TRAVEL LANES SUBJECT TO THE APPROVAL OF THE SAFETY SECTION.
6. THE PROJECT MANAGER IS RESPONSIBLE FOR ENSURING ANY REQUIRED DOCUMENTS AND ANALYSIS AS PART OF THE ADOPTED WORK ZONE SAFETY AND MOBILITY PROCEDURES AND GUIDELINES HAS BEEN COMPLETED PRIOR TO ANY WORK STARTING ON THIS CONTRACT.

## CONSTRUCTION SPECIFICATIONS

*CONSTRUCTION ON THIS SITE SHALL BE IN CONFORMANCE WITH THE DELAWARE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED AUGUST 2001, WITH SPECIFICATION SECTIONS INDICATED BELOW:*

*DIVISION 400 – BITUMINOUS PAVEMENTS*
*SECTION 406 – HOT MIX PATCHING*

*DIVISION 600 – STRUCTURES*
*SECTION 602 – CONCRETE STRUCTURES*

*DIVISION 800 – MATERIAL DETAILS*
*SECTION 826 – STRUCTURAL STEEL*

## DESIGN DESIGNATION

| | | |
|---|---|---|
| FUNCTIONAL CLASS: _____ | D.H.V. PROJECTED: ____ | YEAR: ___ |
| TYPE OF CONSTRUCTION: _____ | DESIGN SPEED: __ M.P.H. | |
| A.A.D.T. CURRENT: ____ YEAR: ___ | TRUCKS: __ % | |
| A.A.D.T. PROJECTED: ____ YEAR: ___ | DIRECTION OF DISTRIBUTION: __ % | |

## INDEX OF SHEETS

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| S3.0 | 5 | FRONT & REAR ELEVATIONS (DAGSBORO & MAGNOLIA) |
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TOTAL SHEETS: 10

## APPROVED DESIGN EXCEPTIONS

| DESIGN PARAMETER | REQUIRED | PROVIDED | DATE |
|---|---|---|---|
| N/A | | | |

## ADDENDA & REVISIONS

| DESCRIPTION | NAME & DATE |
|---|---|

## ASSOCIATED CONTRACTS

| CONTRACT NO. | CONTRACT NAME |
|---|---|

### RECOMMENDED

MAINTENANCE IMPROVEMENT ENGINEER — DATE 5/24/11

ASSISTANT DIRECTOR STATEWIDE SUPPORT SERVICES — DATE 5/24/11

DIRECTOR MAINTENANCE AND OPERATIONS — DATE 5/24/11

### RECOMMENDED AS TO PROCESS

Natalie Barnhart
CHIEF ENGINEER

DATE 5/24/11

### PREPARED & REVIEWED BY
ENGINEERING CONSULTANT

C.C. JOHNSON & MALHOTRA, P.C.
CCJM 4640 TRINDLE ROAD CAMP HILL, PA 17011 TEL 717-730-4160

CHARLES G. BABCOCK LICENSE 5/16/2011 No. 17318 STATE OF DELAWARE PROFESSIONAL ENGINEER — SEAL

MICHAEL A. MATTHEWS LICENSE 05/14/11 No. 17347 STATE OF DELAWARE PROFESSIONAL ENGINEER — SEAL

RECOMMENDED — DATE

100% SUBMISSION

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## GENERAL NOTES

1. WORK PERFORMED SHALL COMPLY WITH THE FOLLOWING:
   A. BUILDING CODE:

| | DAGSBORO YARD (DAGSBORO) | MAGNOLIA YARD (MAGNOLIA) | SMYRNA SOD FARM (SMYRNA) |
|---|---|---|---|
| | 2003 IBC | 2006 IBC | 2006 IBC |

   B. ALL APPLICABLE STATE AND LOCAL CODES, ORDINANCES AND REGULATIONS
   C. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MANUAL PREPARED BY THE DELAWARE DEPARTMENT OF TRANSPORTATION 2001 AND ALL APPLICABLE ADDITIONS AND REVISIONS.

2. DESIGN LOADS:

| | DAGSBORO | MAGNOLIA | SMYRNA |
|---|---|---|---|
| A. BUILDING CLASSIFICATION CATEGORY | I | I | I |
| B. GROUND SNOW, Pg | 20 PSF | 25 PSF | 25 PSF |
| FLAT ROOF SNOW LOAD, Pf | 12 PSF | 15.1 PSF | 15.1 PSF |
| SNOW EXPOSURE FACTOR, Ce. | 0.9 | 0.9 | 0.9 |
| SNOW THERMAL FACTOR, Ct | 1.2 | 1.2 | 1.2 |
| SNOW IMPORTANCE FACTOR, I | 0.8 | 0.8 | 0.8 |
| C. WIND SPEED | 100 MPH | 45 MPH | 90 MPH |
| EXPOSURE | C | C | C |
| IMPORTANCE FACTOR, I | 0.87 | 0.87 | 0.87 |
| INTERNAL PRESSURE COEFFICIENT | ±0.18 | ±0.18 | ±0.18 |
| D. COLLATERAL LOAD | 1.5 PLF | 1.5 PLF | 1.5 PLF |
| E. ROOF LIVE LOAD | 5 PSF | 5 PSF | 5 PSF |
| F. SEISMIC DESIGN: | | | |
| SEISMIC IMPORTANCE FACTOR, I | I | I | I |
| MAPPED SPECTRAL RESPONSE ACCELERATION Ss | 0.12 | 0.16 | 0.20 |
| MAPPED SPECTRAL RESPONSE ACCELERATION S1 | 0.04 | 0.05 | 0.05 |
| SITE SOIL CLASS | D | D | D |
| SPECTRAL COEFFICIENT, Sds | 0.13 | 0.17 | 0.21 |
| SPECTRAL COFFICIENT, Sd1 | 0.07 | 0.08 | 0.08 |
| SEISMIC DESIGN CATEGORY | B | B | B |
| BASIC STRUCTURAL SYSTEM | BUILDING FRAME | BUILDING FRAME | BUILDING FRAME |
| SEISMIC FORCE RESISTING SYSTEM: | STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (TABLE 12.2-1H, ASCE 7-02) | STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (TABLE 12.2-1H, ASCE 7-05) | STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE (TABLE 12.2-1H, ASCE 7-05) |
| DESIGN BASE SHEAR | 0.46 KIPS | 1.36 KIPS | 2.08 KIPS |
| SEISMIC RESPONSE COEFFICIENT Cs | 0.04 | 0.06 | 0.07 |
| RESPONSE MODIFICATION FACTOR | 3 | 3 | 3 |
| SEISMIC ANALYSIS | EQUIV. LATERAL FORCE PROCEDURE | EQUIV. LATERAL FORCE PROCEDURE | EQUIV. LATERAL FORCE PROCEDURE |
| G. MINIMUM SOIL BEARING PRESSURE: | 2000 PSF | 3000 PSF | 3000 PSF |

3. THE CONTRACTOR SHALL VERIFY DIMENSIONS IN FIELD PRIOR TO FABRICATION OF MEMBERS AND COMMENCING WORK.
4. PROVIDE TEMPORARY BRACING AS REQUIRED TO RESIST WIND AND OTHER LOADS DURING CONSTRUCTION.
5. FOR SHOP DRAWING SUBMITTALS, CONTRACTOR SHALL SUBMIT FIVE (5) SETS OF SHOP DRAWINGS. REPRODUCTIONS OF CONTRACT DRAWINGS ARE NOT TO BE SUBMITTED AS SHOP DRAWINGS.
6. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, EQUIPMENT, ADJACENT GROUNDS AND PLANTS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE, AT NO ADDITIONAL COSTS TO THE OWNER, ANY ITEMS DAMAGED DURING THE CONSTRUCTION.

## CONCRETE

7. CONCRETE AND REINFORCEMENT SHALL MEET THE REQUIREMENTS OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
8. CONCRETE FOR FOOTINGS SHALL BE CLASS B CONCRETE PER TABLE 812-A OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
9. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR APPROVAL PRIOR TO USE.

## STRUCTURAL STEEL

10. STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
11. ALL STRUCTURAL STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF A.I.S.C. "MANUAL OF STEEL CONSTRUCTION". ALL STEEL ANGLES AND PLATES SHALL BE ASTM A-36. ALL STRUCTURAL STEEL TUBES SHALL BE ASTM A500 GRADE B.
12. ALL STRUCTURAL STEEL SHOP WORK TO BE WELDED WITH E70XXX ELECTRODES. FIELD WORK CONNECTIONS TO BE BOLTED WITH 3/4" HIGH STRENGTH A325X BOLTS OR WELDED WITH E70XXX ELECTRODES. PRE-DRILL HOLES IN STEEL MEMBERS AS REQUIRED FOR FASTENING, BLOCKING, ETC.
13. BASE PLATES SHALL BEAR ON LEVELING NUTS SET IN 1" THICKNESS OF APPROVED SHRINK RESISTANT GROUT EXCEPT WHEN SHOWN OTHERWISE, AND ANCHORED WITH FOUR (4) 3/4" DIAMETER 18" THREADED RODS. SHIM UNDER BASE PLATES AS REQUIRED.
14. ALL STRUCTURAL STEEL FRAMING SHALL BE HOT DIP GALVANIZED.
15. WIRE ROPE FITTINGS, INCLUDING EXTRA HEAVY THIMBLES, CLIPS, HOIST RINGS, AND TURNBUCKLES SHALL BE GALVANIZED IN SIZES INDICATED, AND MANUFACTURED BY THE CROSBY GROUP OR EQUIVALENT. ALL INSTALLATIONS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
16. WIRE ROPE SHALL BE GALVANIZED IMPROVED PLOW STEEL 6 x 19 IWRC OF THE DIAMETERS INDICATED.

## FABRIC COVERED STRUCTURE

17. EXISTING FABRIC COVERED STRUCTURES WERE TITAN BUILDING SERIES FABRICATED BY COVER-ALL BUILDING SYSTEMS INC. OF SASKATCHEWAN CANADA. COVER-ALL BUILDING SYSTEMS WAS PURCHASED BY NORSEMAN GROUP, INC. WHO CREATED NORSEMAN STRUCTURES INC. REPLACEMENT PARTS, WHERE PRACTICAL, SHALL BE BY NORSEMAN STRUCTURES, OR APPROVED EQUAL.
   ORIGINAL COVERALL PROJECT ID NUMBERS:

| DAGSBORO | MAGNOLIA | SMYRNA |
|---|---|---|
| 93-524/DSN 1846 | 93-524/DSN 1846 | 93-507/DSN 1724 |

## FOUNDATIONS

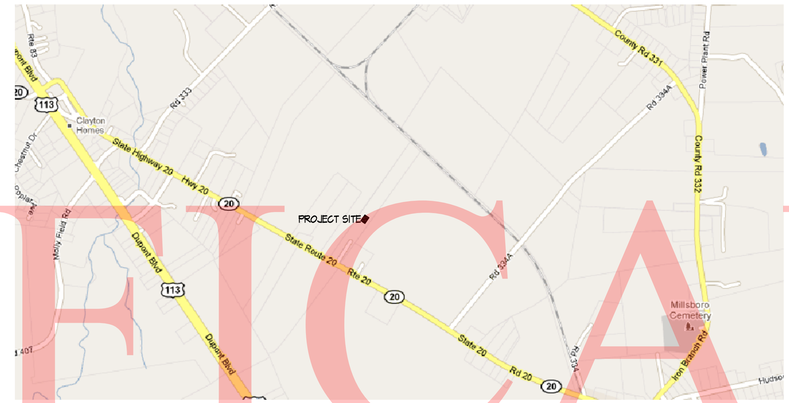
18. CONTRACTOR SHALL NOTIFY "MISS UTILITY OF DELMARVA" PRIOR TO BEGINNING EXCAVATION FOR LOCATION OF UNDERGROUND UTILITIES.
19. FOOTINGS WERE DESIGNED TO BEAR ON UNDISTURBED SOIL BELOW THE FROST LINE AND A MINIMUM OF 4'-0" BELOW EXISTING GRADE.
20. SOIL BEARING PRESSURES PROVIDED BY DELAWARE DEPARTMENT OF TRANSPORTATION. PROJECT NUMBER T2015.0014 DATED MARCH 11, 2011.

## HOT MIX PATCHING

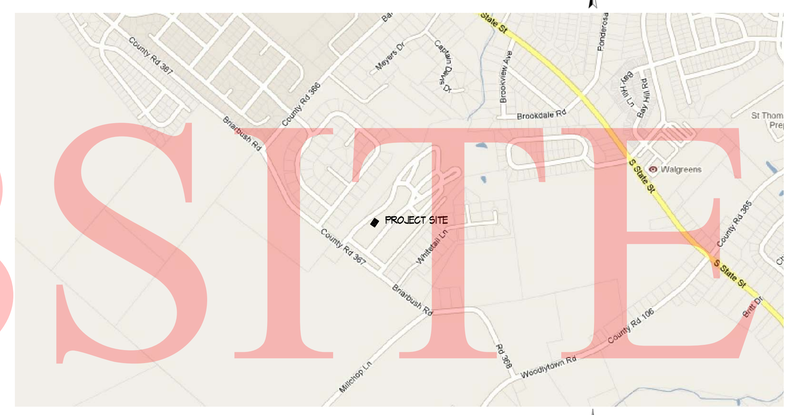
21. DO NOT DISFIGURE ADJACENT ASPHALT PAVING.
22. PATCHING OF ASPHALT SHALL MEET THE REQUIREMENTS OF THE DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

## COATINGS

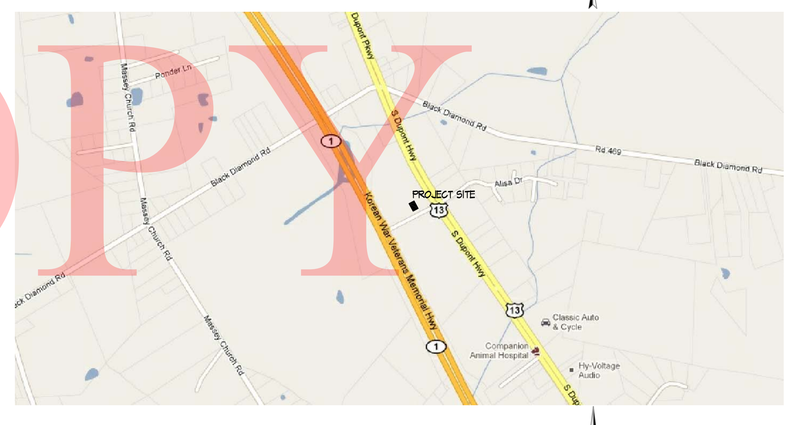
23. APPLY ROYSTON ROSKOTE R28, OR APPROVED EQUAL, MASTIC COATING TO THE BOTTOM 3'-0" OF EACH TRUSS OR ENDWALL POST MEMBER. MASTIC COATING SHALL BE APPLIED TO CLEANED STEEL MATERIAL PER MANUFACTURER REQUIREMENTS.




SITE PLAN — SUSSEX COUNTY
SCALE: 1" = 1000' — DAGSBORO




SITE PLAN — KENT COUNTY
SCALE: 1" = 1000' — MAGNOLIA




SITE PLAN — NEW CASTLE COUNTY
SCALE: 1" = 1000' — SMYRNA

| CONTRACT | F.A.P. NO. | DRAWING NO. | SHEET NO. | TOTAL SHTS |
|---|---|---|---|---|
| T2012-801-01 | | S1.0 | 2 | 10 |

# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS

CHARLES G. BABCOCK LICENSE 5/18/2011 No. 17318 DELAWARE PROFESSIONAL ENGINEER

MICHAEL A. MATTHEWS LICENSE 5/18/2011 No. 17347 DELAWARE PROFESSIONAL ENGINEER

ENGINEERING CONSULTANT

C.C. JOHNSON & MALHOTRA, P.C.

CCJM

4640 TRINDLE ROAD
CAMP HILL, PA. 17011
TEL. 717-730-4160

GRAPHIC SCALE

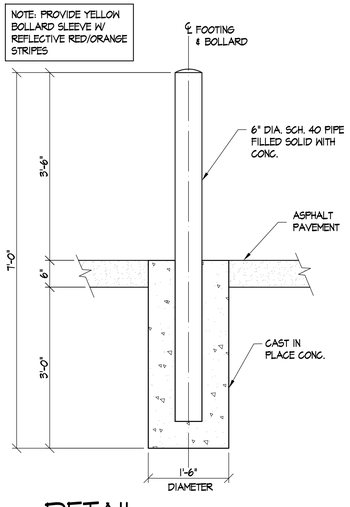
1000 0 500 1000 2000

( IN FEET )
1 inch = 1000 ft.

### ABBREVIATIONS

| | |
|---|---|
| ADD'L | ADDITIONAL |
| ℄ | CENTERLINE |
| CONC. | CONCRETE |
| DIA. | DIAMETER |
| EA. | EACH |
| ELEV. | ELEVATION |
| EQUIV. | EQUIVALENT |
| EX. | EXISTING |
| FTG. | FOOTING |
| GA. | GAUGE |
| GALV. | GALVANIZED |
| H.S. | HIGH STRENGTH |
| IBC | INTERNATIONAL BUILDING CODE |
| INFO. | INFORMATION |
| KIPS | 1,000 POUNDS |
| MAX. | MAXIMUM |
| MIN. | MINIMUM |
| MPH | MILES PER HOUR |
| O.C. | ON CENTER |
| PLF | POUNDS PER LINEAR FOOT |
| PSF | POUNDS PER SQUARE FOOT |
| TYP. | TYPICAL |
| W/ | WITH |

NOTE: PROVIDE YELLOW BOLLARD SLEEVE W/ REFLECTIVE RED/ORANGE STRIPES




DETAIL — TYPICAL BOLLARD
SCALE: 3/4" = 1'-0"

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PREL. TRACING ____ DESIGN ____ CHKD. ____

| CONTRACT | F.A.P. NO. | DRAWING NO. | SHEET NO. | TOTAL SHTS. |
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| T2012-801-01 | | S2.0 | 3 | 10 |

# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

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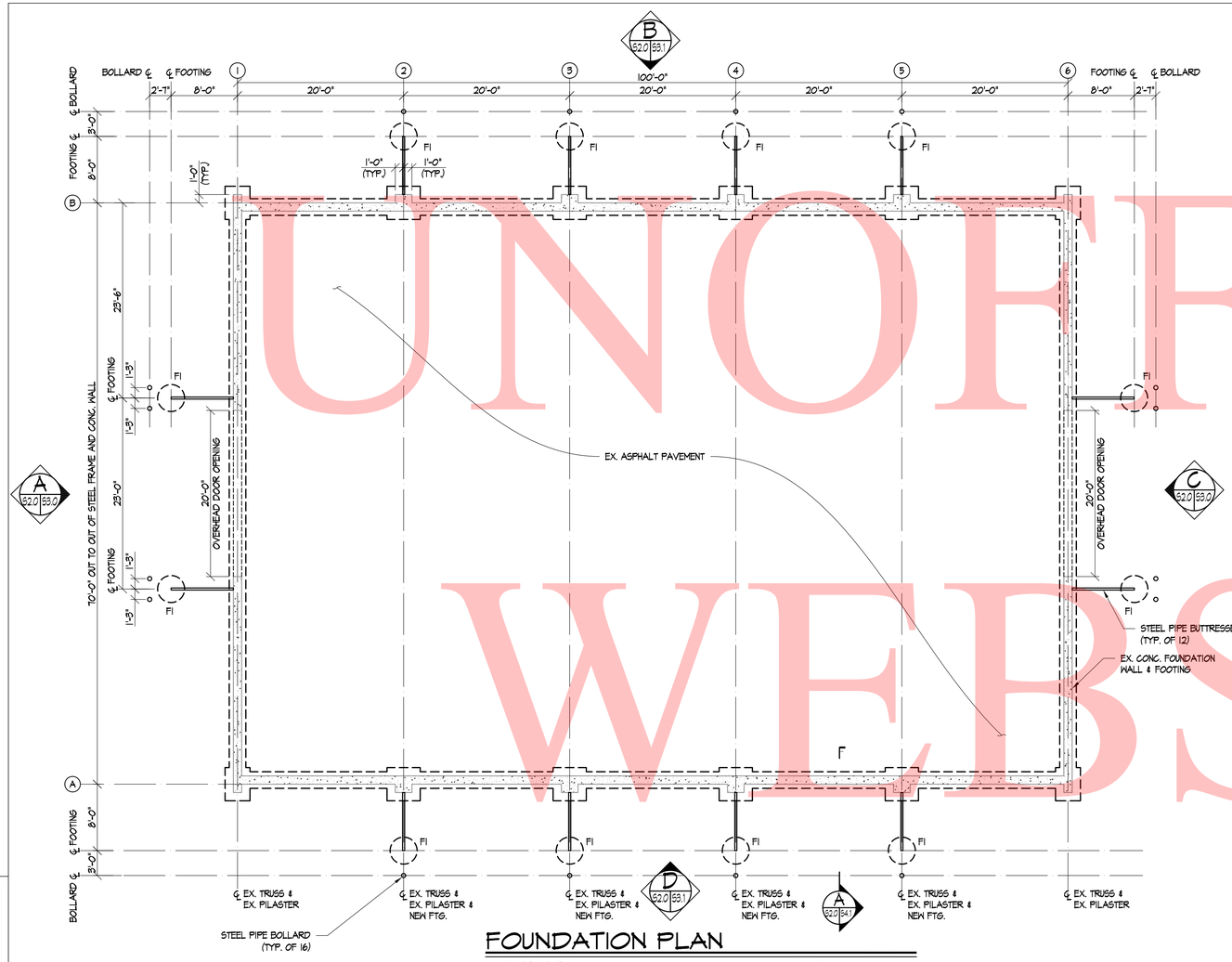
CHARLES G. BABCOCK LICENSE No. 17318 DELAWARE PROFESSIONAL ENGINEER 5/16/2011

MICHAEL A. MATTHEWS LICENSE No. 17347 DELAWARE PROFESSIONAL ENGINEER 5/16/2011

8 0 4 8 16
( IN FEET )
1/8 inch = 1 ft.

| FOOTING SCHEDULE | | | | |
|---|---|---|---|---|
| MARK | DIAMETER | DEPTH | VERT. REINF. | TIES |
| FI | 3'-3" | 4'-0" | (10) #6 | #3 @ 12" O.C. TYP. U.N.O. |




## FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

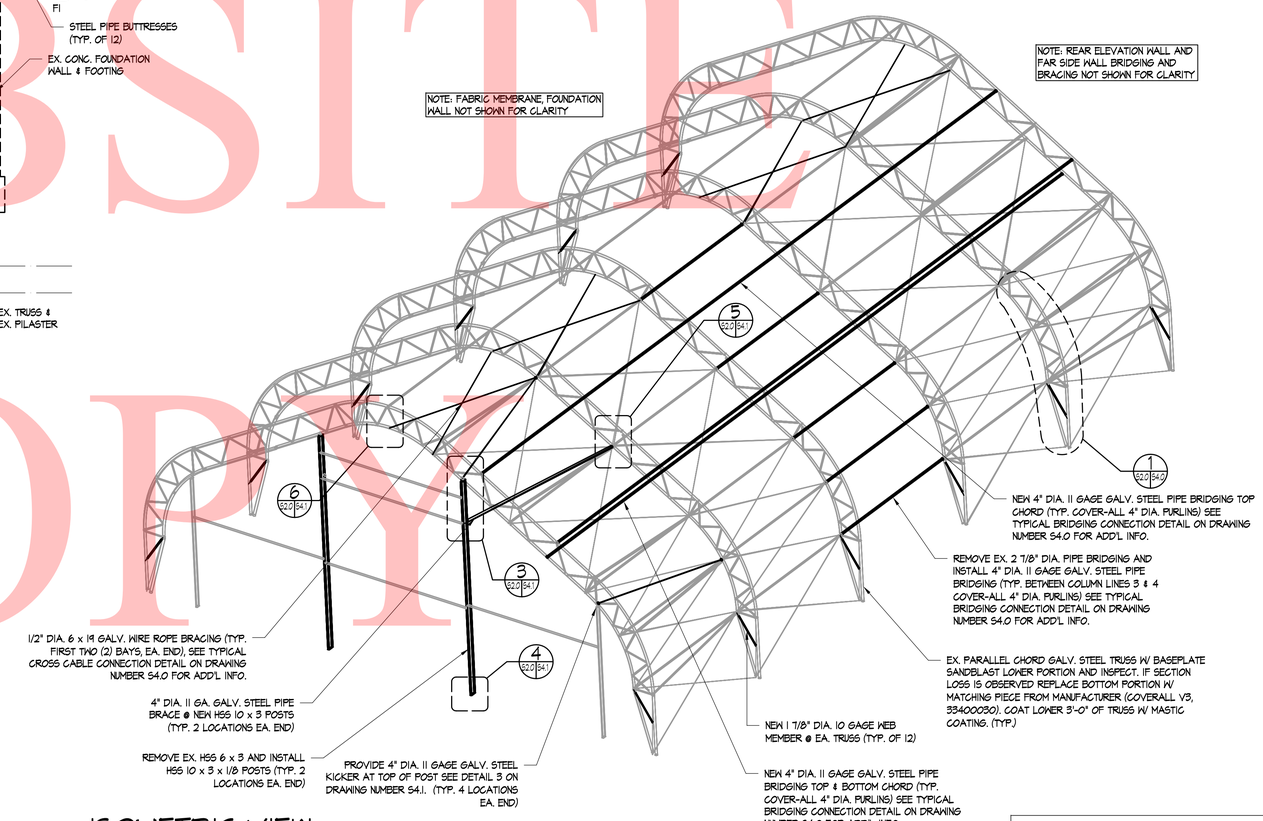
DAGSBORO & MAGNOLIA

EXISTING FOUNDATION WALL REPAIR NOTES:

1. REPAIR ALL CRACKS IN THE INTERIOR AND EXTERIOR FACES OF THE EXISTING CONCRETE FOUNDATION WALLS BY SEALING THE CRACKS WITH SIKADUR 33 OR APPROVED EQUAL, AND INSTALLING INJECTION PORTS AND INJECTING SIKADUR 35, HI-MOD LV OR APPROVED EQUAL. FOLLOW ALL APPLICABLE MANUFACTURER RECOMMENDATIONS.
2. CLEAN AND PAINT INTERIOR FACE OF EXISTING CONCRETE FOUNDATION WALL WITH SIKAGARD 62 EPOXY PAINT COLORED GRAY OR APPROVED EQUAL. FOLLOW ALL APPLICABLE MANUFACTURER RECOMMENDATIONS.

NOTE: FABRIC MEMBRANE, FOUNDATION WALL NOT SHOWN FOR CLARITY

NOTE: REAR ELEVATION WALL AND FAR SIDE WALL BRIDGING AND BRACING NOT SHOWN FOR CLARITY




## ISOMETRIC VIEW

FABRIC COVERED STRUCTURE

SCALE: 1/8" = 1'-0"

DAGSBORO & MAGNOLIA

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PREL. TRACING DESIGN CHKD.

| CONTRACT | F.A.P. NO. | DRAWING NO. | SHEET NO. | TOTAL SHTS. |
|---|---|---|---|---|
| T2012-801-01 | | S2.1 | 4 | 10 |

# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS

| | |
|---|---|
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ENGINEERING CONSULTANT

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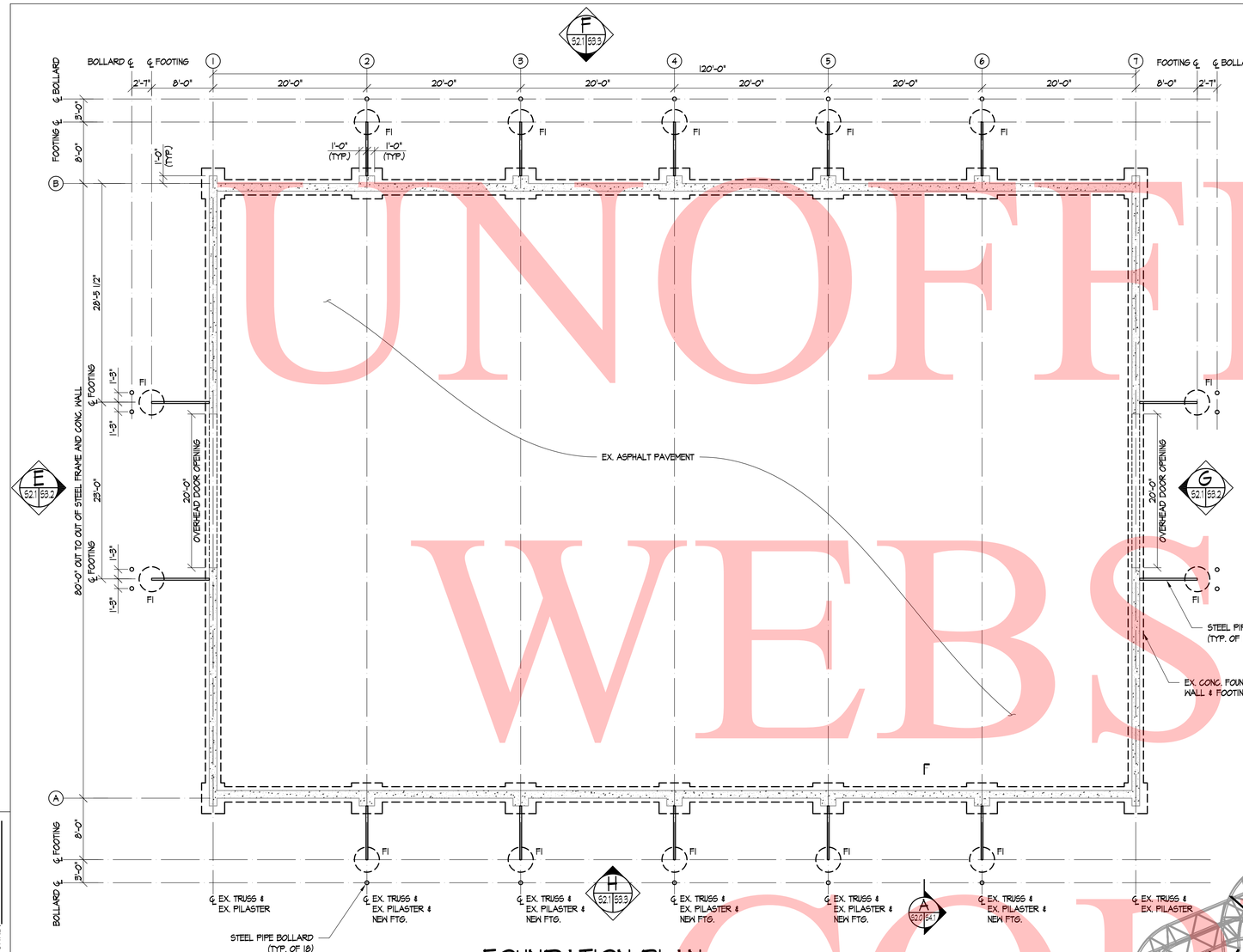
GRAPHIC SCALE

8 0 4 8 16

( IN FEET )
1/8 inch = 1 ft.

| FOOTING SCHEDULE | | | | |
|---|---|---|---|---|
| MARK | DIAMETER | DEPTH | VERT. REINF. | TIES |
| FI | 3'-3" | 4'-0" | (10) #6 | #3 @ 12" O.C. TYP. U.N.O. |




## FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

SMYRNA

EXISTING FOUNDATION WALL REPAIR NOTES:

1. REPAIR ALL CRACKS IN THE INTERIOR AND EXTERIOR FACES OF THE EXISTING CONCRETE FOUNDATION WALLS BY SEALING THE CRACKS WITH SIKADUR 33 OR APPROVED EQUAL, AND INSTALLING INJECTION PORTS AND INJECTING SIKADUR 35, HI-MOD LV OR APPROVED EQUAL. FOLLOW ALL APPLICABLE MANUFACTURER RECOMMENDATIONS.
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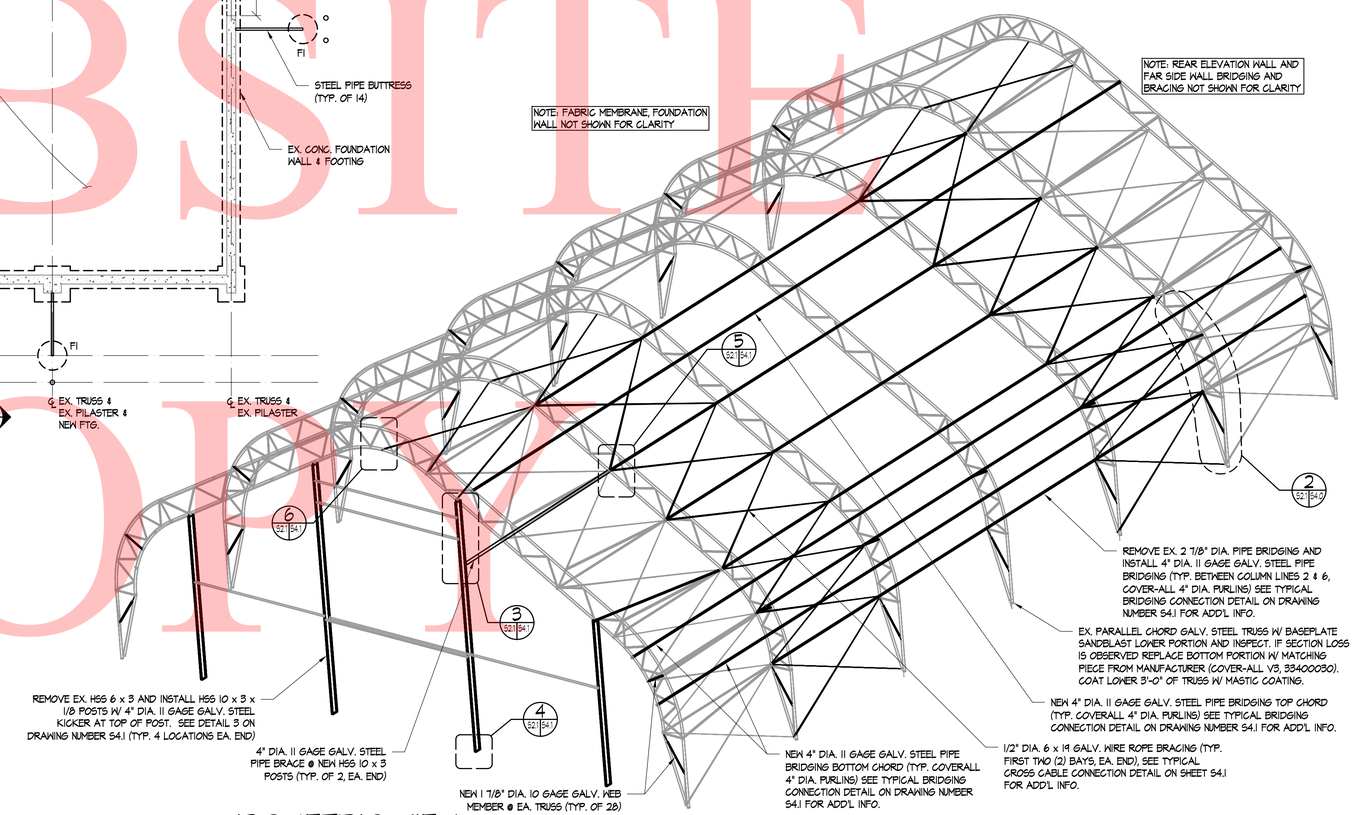


## ISOMETRIC VIEW

SCALE: 1/8" = 1'-0"

FABRIC COVERED STRUCTURE

SMYRNA

100% SUBMISSION


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PREL. TRACING DESIGN CHKD.

| CONTRACT | F.A.P. NO. | DRAWING NO. | SHEET NO. | TOTAL SHTS |
|---|---|---|---|---|
| T2012-801-01 | | S3.0 | 5 | 10 |

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GRAPHIC SCALE

8 0 4 8 16

( IN FEET )
1/8 inch = 1 ft.

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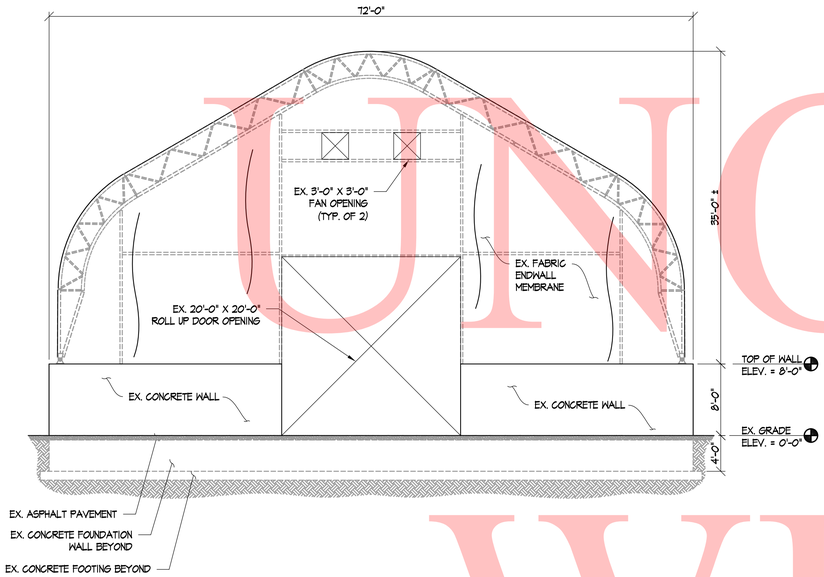
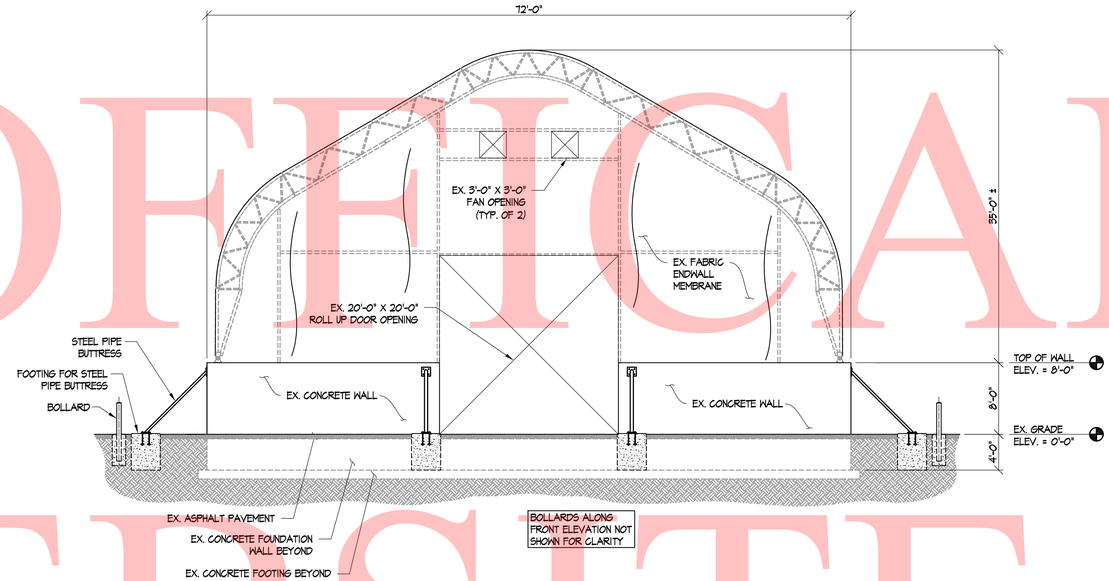


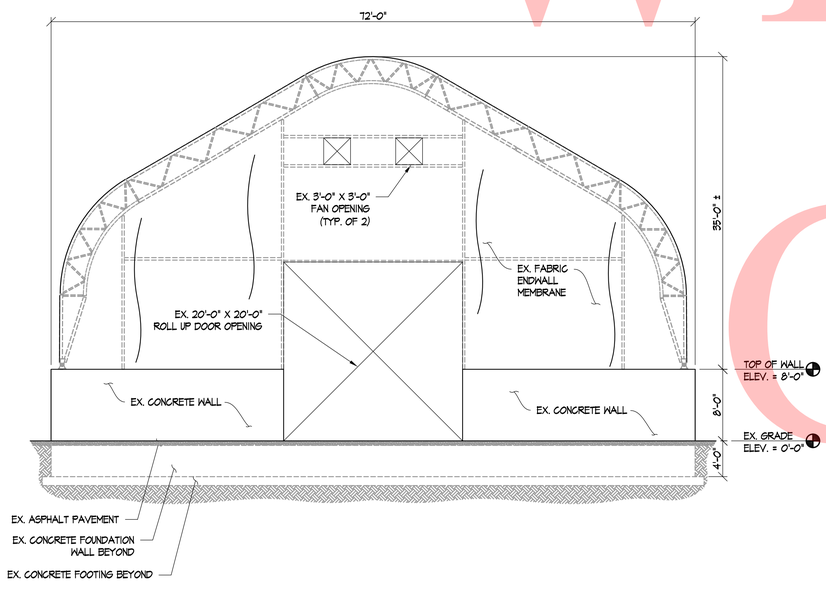

FRONT ELEVATION EXISTING (A / S2.0 | S3.0)

SCALE: 1/8" = 1'-0" DAGSBORO & MAGNOLIA



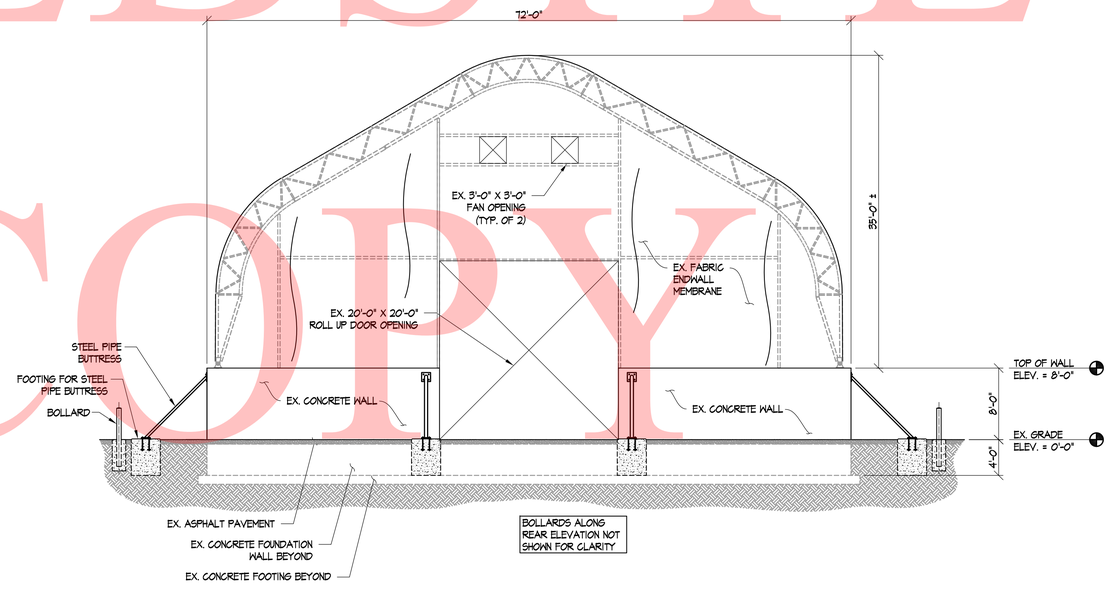

FRONT ELEVATION PROPOSED (A / S2.0 | S3.0)

SCALE: 1/8" = 1'-0" DAGSBORO & MAGNOLIA




REAR ELEVATION EXISTING (C / S2.0 | S3.0)

SCALE: 1/8" = 1'-0" DAGSBORO & MAGNOLIA




REAR ELEVATION PROPOSED (C / S2.0 | S3.0)

SCALE: 1/8" = 1'-0" DAGSBORO & MAGNOLIA

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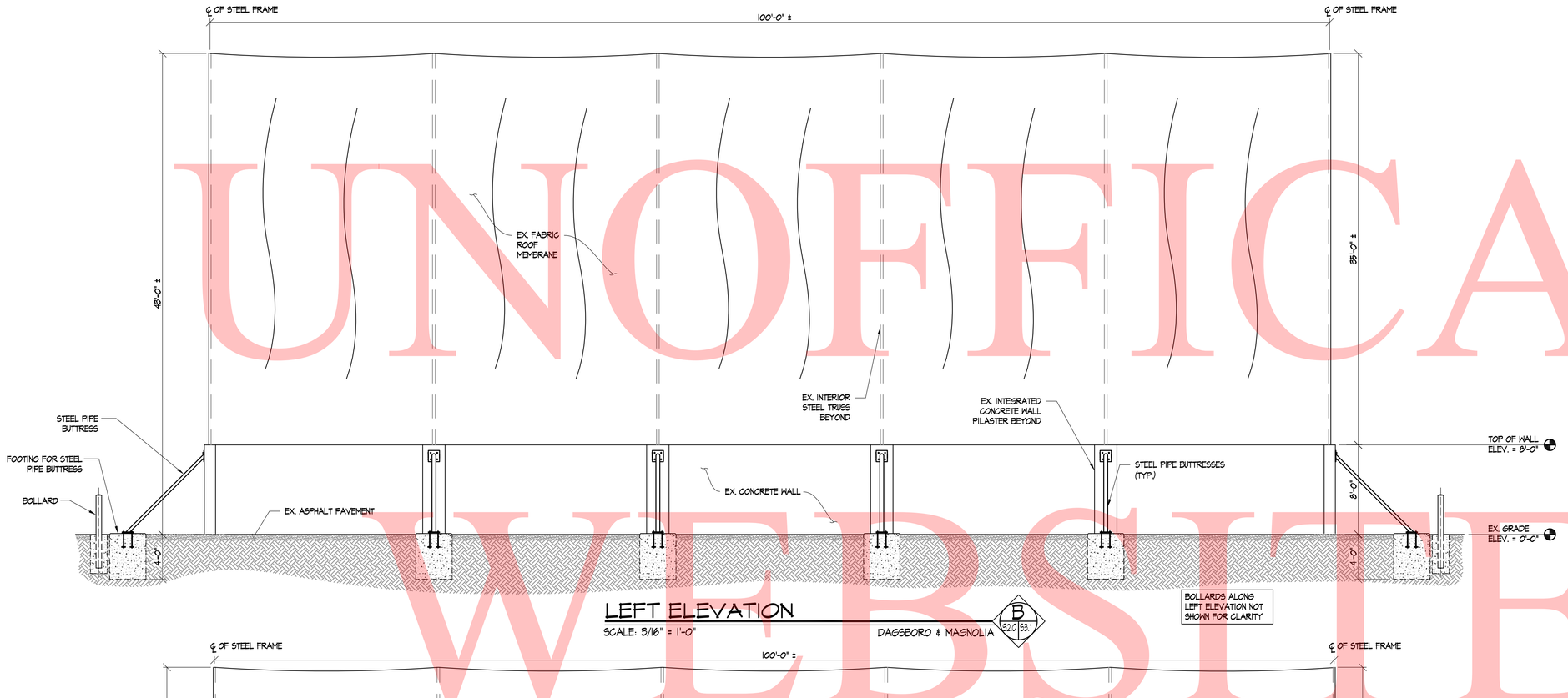
| T2012-801-01 | | S3.1 | 6 | 10 |

# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS



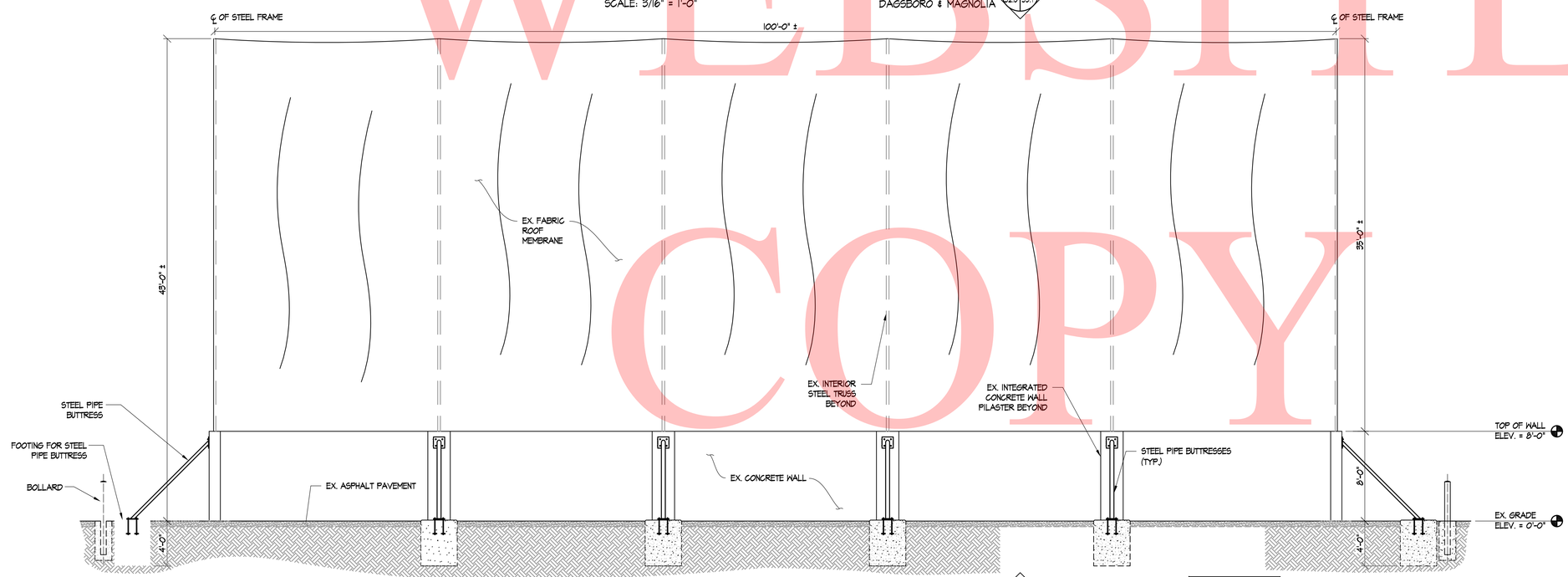

LEFT ELEVATION

SCALE: 3/16" = 1'-0"

DAGSBORO & MAGNOLIA

B 52.0 53.1

BOLLARDS ALONG LEFT ELEVATION NOT SHOWN FOR CLARITY




RIGHT ELEVATION

SCALE: 3/16" = 1'-0"

DAGSBORO & MAGNOLIA

D 52.0 53.1

BOLLARDS ALONG RIGHT ELEVATION NOT SHOWN FOR CLARITY

ENGINEERING CONSULTANT

C.C. JOHNSON & MALHOTRA, P.C.

CCJM

4640 TRINDLE ROAD
CAMP HILL, PA. 17011
TEL. 717-730-4160

CHARLES G. BABCOCK LICENSE No. 17318 STATE OF DELAWARE PROFESSIONAL ENGINEER 5/16/2011

MICHAEL A. MATTHEWS LICENSE No. 17347 STATE OF DELAWARE PROFESSIONAL ENGINEER 5/16/2011

GRAPHIC SCALE

5.33 0 2.67 5.33 10.67

( IN FEET )
3/16 inch = 1 ft.

100% SUBMISSION

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# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS

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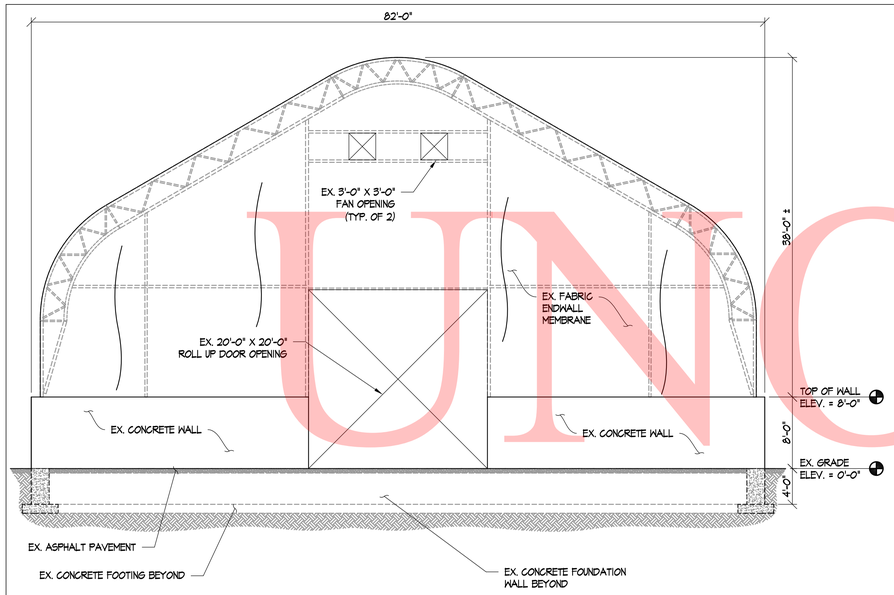
MICHAEL A. MATTHEWS LICENSE No. 17347 STATE OF DELAWARE PROFESSIONAL ENGINEER 5/16/2011

GRAPHIC SCALE

8 0 4 8 16

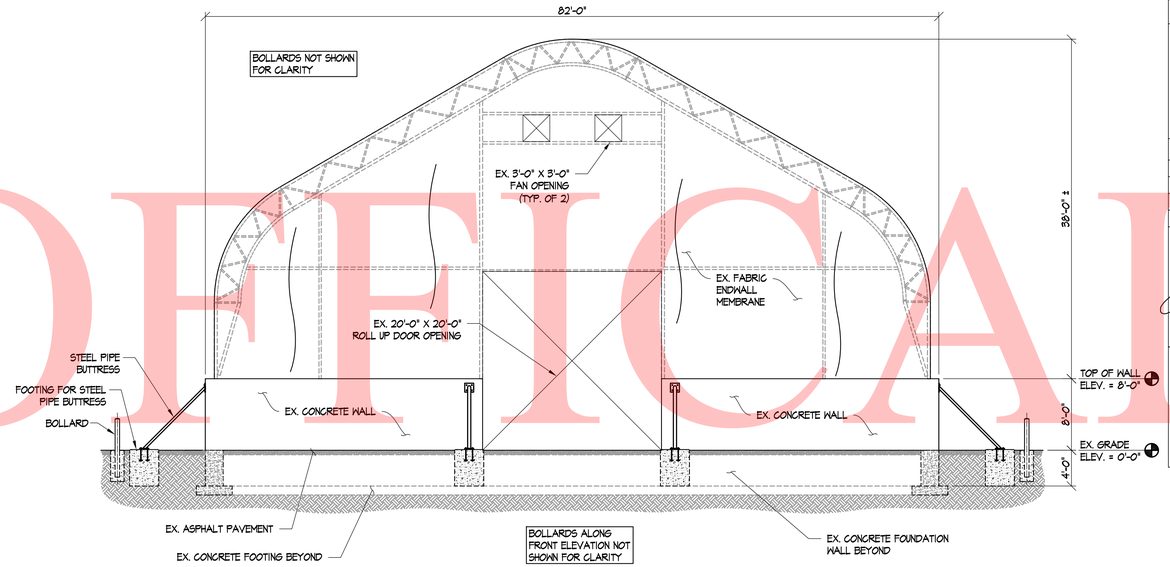
( IN FEET )
1/8 inch = 1 ft.




## FRONT ELEVATION EXISTING

SCALE: 1/8" = 1'-0"

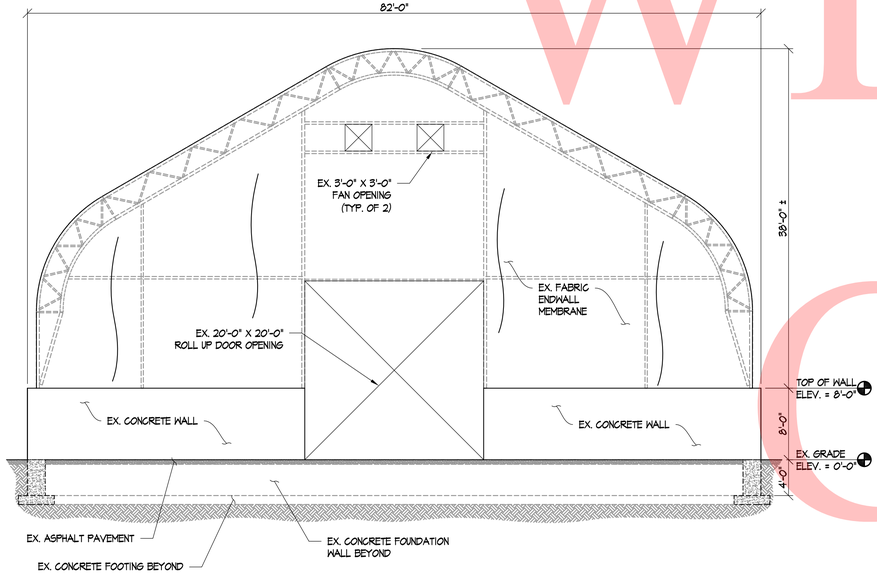
SMYRNA E S2.1 S3.2




## FRONT ELEVATION PROPOSED

SCALE: 1/8" = 1'-0"

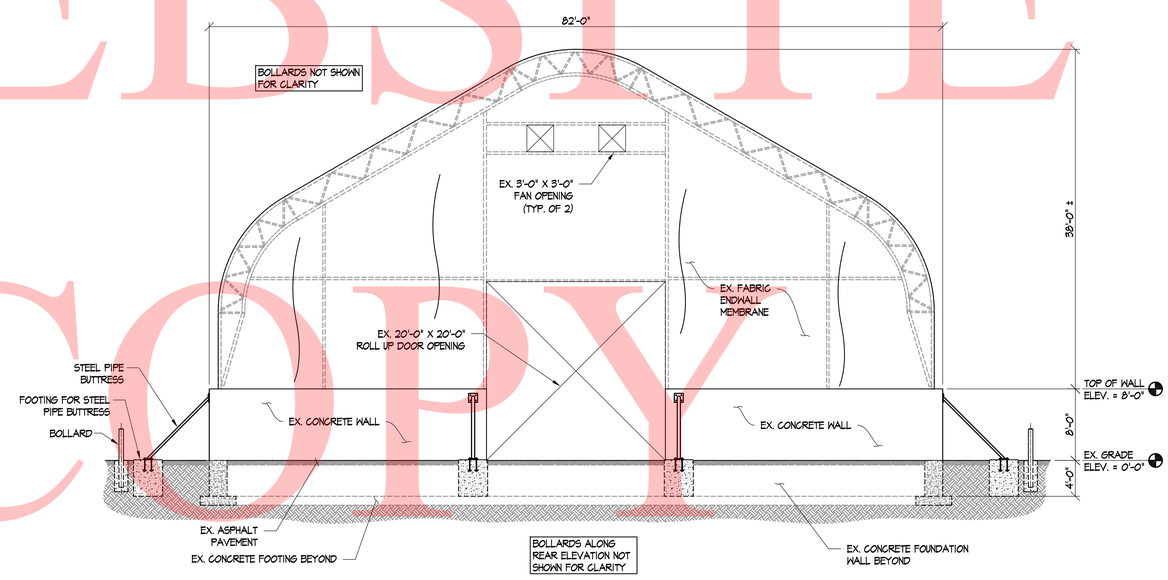
SMYRNA E S2.1 S3.2




## REAR ELEVATION EXISTING

SCALE: 1/8" = 1'-0"

SMYRNA G S2.1 S3.2




## REAR ELEVATION PROPOSED

SCALE: 1/8" = 1'-0"

SMYRNA G S2.1 S3.2

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# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS

CHARLES G. BABCOCK LICENSE No. 17318 STATE OF DELAWARE PROFESSIONAL ENGINEER 3/16/20

MICHAEL A. MATTHEWS LICENSE No. 17347 STATE OF DELAWARE PROFESSIONAL ENGINEER 3/16/20


ENGINEERING CONSULTANT

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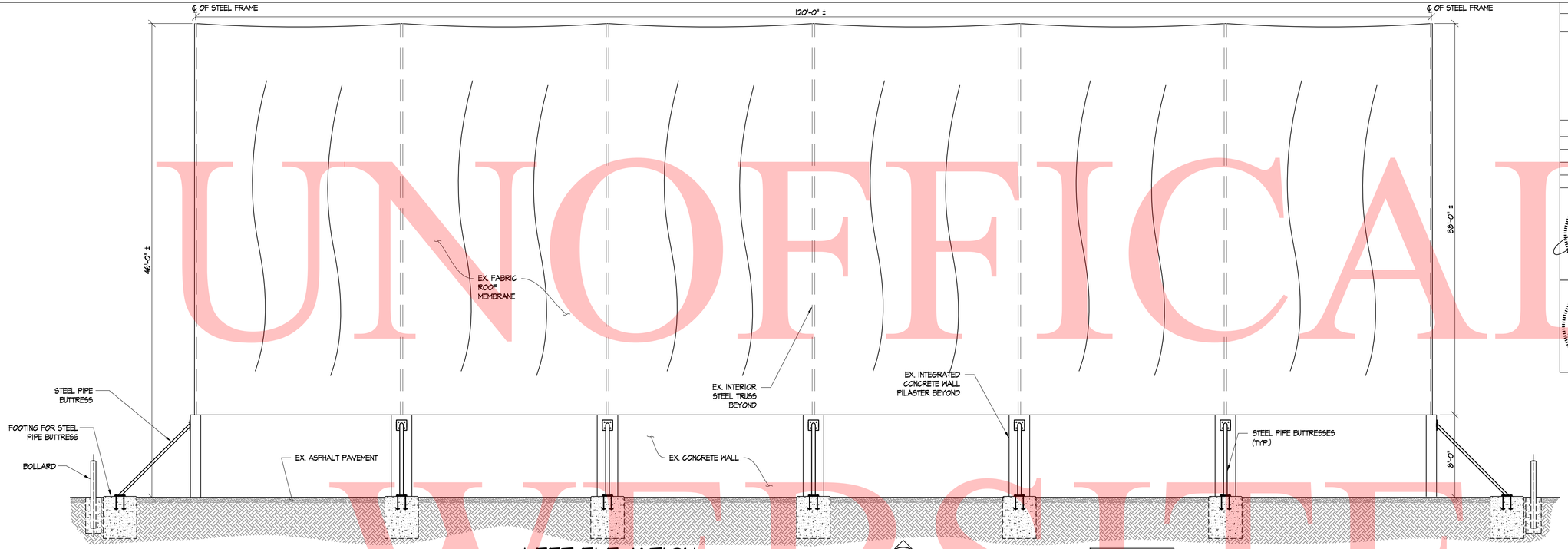
CAMP HILL, PA. 17011
TEL. 717-730-4160


GRAPHIC SCALE

5,33 0 2,67 5,33 10,67

( IN FEET )
3/16 inch = 1 ft.

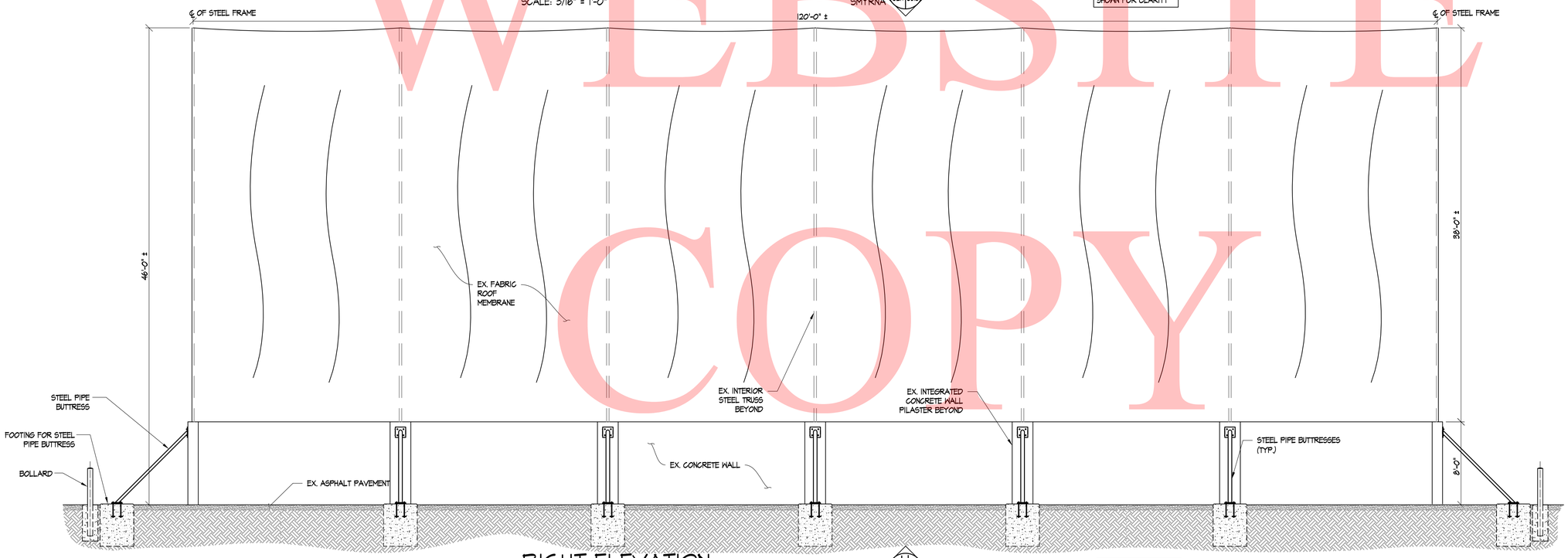



LEFT ELEVATION

SCALE: 3/16" = 1'-0"

SMYRNA F 52.1 53.3

BOLLARDS ALONG LEFT ELEVATION NOT SHOWN FOR CLARITY




RIGHT ELEVATION

SCALE: 3/16" = 1'-0"

SMYRNA H 52.1 53.3

BOLLARDS ALONG RIGHT ELEVATION NOT SHOWN FOR CLARITY

100% SUBMISSION

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| T2012-801-01 | | S4.0 | 9 | 10 |

# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS


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MICHAEL A. MATTHEWS LICENSE No. 17347 STATE OF DELAWARE PROFESSIONAL ENGINEER 5/16/2011

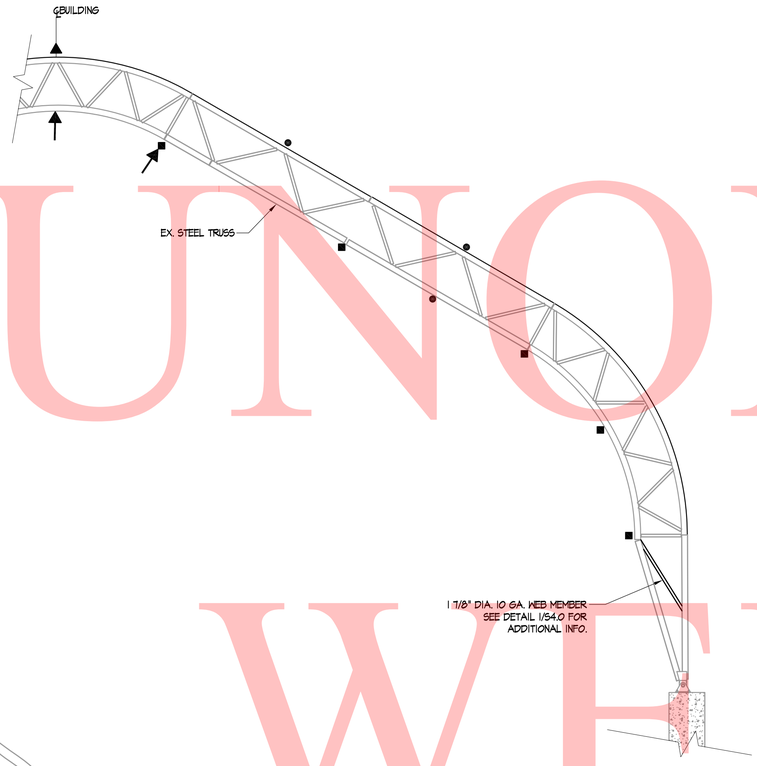

GRAPHIC SCALE

4 0 2 4 8

( IN FEET )
1/4 inch = 1 ft.

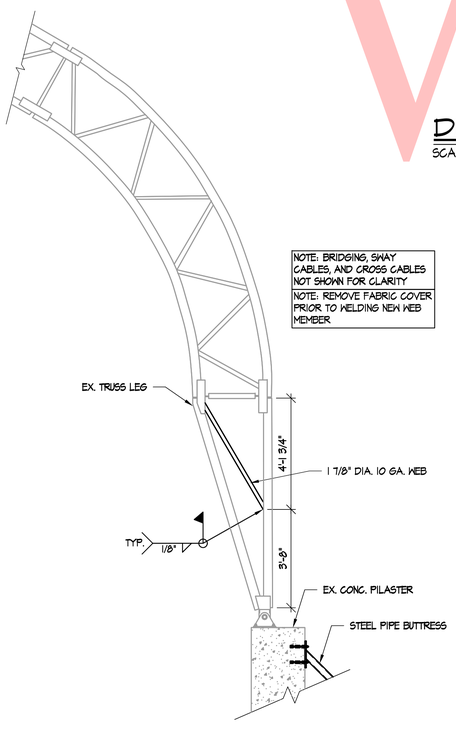
2.67 0 1.33 2.67 5.33

( IN FEET )
3/8 inch = 1 ft.

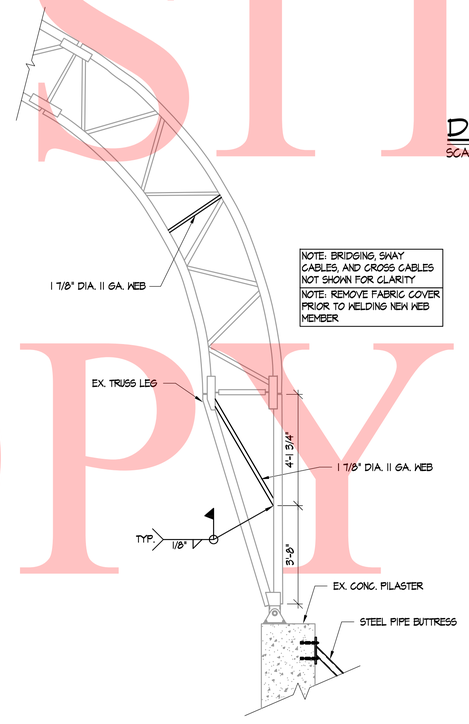



DETAIL — TYPICAL BRIDGING AND BRACING — DAGSBORO & MAGNOLIA
SCALE: 1/4" = 1'-0"

DETAIL — TYPICAL BRIDGING AND BRACING — SMYRNA
SCALE: 1/4" = 1'-0"




DETAIL — BRIDGING CONNECTION AT TRUSS 1 — DAGSBORO & MAGNOLIA — S2.0 | S4.0
SCALE: 3/8" = 1'-0"




DETAIL — BRIDGING CONNECTION AT TRUSS 2 — SMYRNA — S2.1 | S4.0
SCALE: 3/8" = 1'-0"

## LEGEND

- ▲ - LOCATION OF EX. 4" DIA 11 GA. RIDGE BRIDGING
- ● - LOCATION OF NEW 4" DIA. 11 GA. BRIDGING, CONT. FULL LENGTH
- ■ - LOCATION OF EX. 2 7/8" DIA. 14 GA. BRIDGING IN INTERIOR BAYS. REPLACE EX. BRIDGING WITH 4" DIA. 11 Ga. BRIDGING (BETWEEN COLUMN LINES 2 & 6)
- → - LOCATION OF NEW CROSS CABLE "X" BRACE WITHIN FRONTMOST AND REARMOST (2) BAYS OF STRUCTURE

NOTES:
1. BRIDGING AND BRACING LOCATIONS ON TRUSS SYMMETRICAL ABOUT ℄ OF BUILDING
2. BRIDGING AND BRACING SHALL BE INSTALLED AS CLOSE TO LOCATION INDICATED AS POSSIBLE.

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# DELAWARE DEPARTMENT OF TRANSPORTATION

## FABRIC BUILDING REINFORCEMENT

DAGSBORO YARD, MAGNOLIA YARD, SMYRNA SOD FARM

REVISIONS


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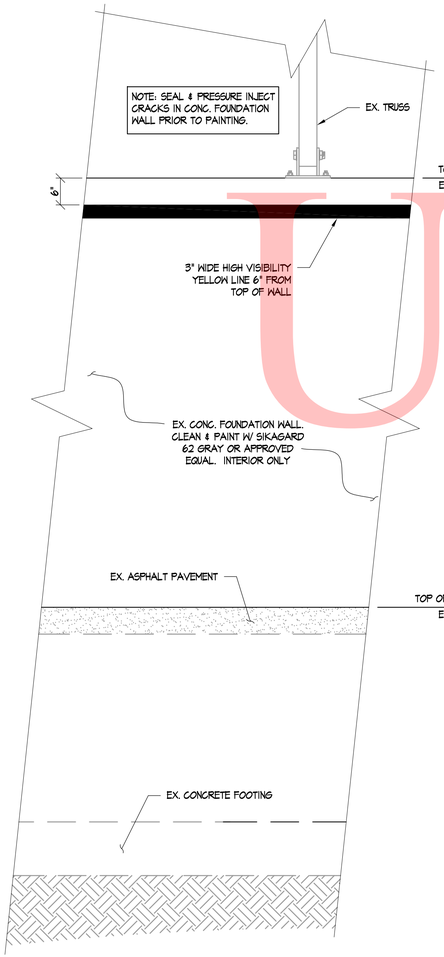
GRAPHIC SCALE

4 0 2 4 8 ( IN FEET ) 1/4 inch = 1 ft.

1.33 0 0.67 1.33 2.67 ( IN FEET ) 3/4 inch = 1 ft.

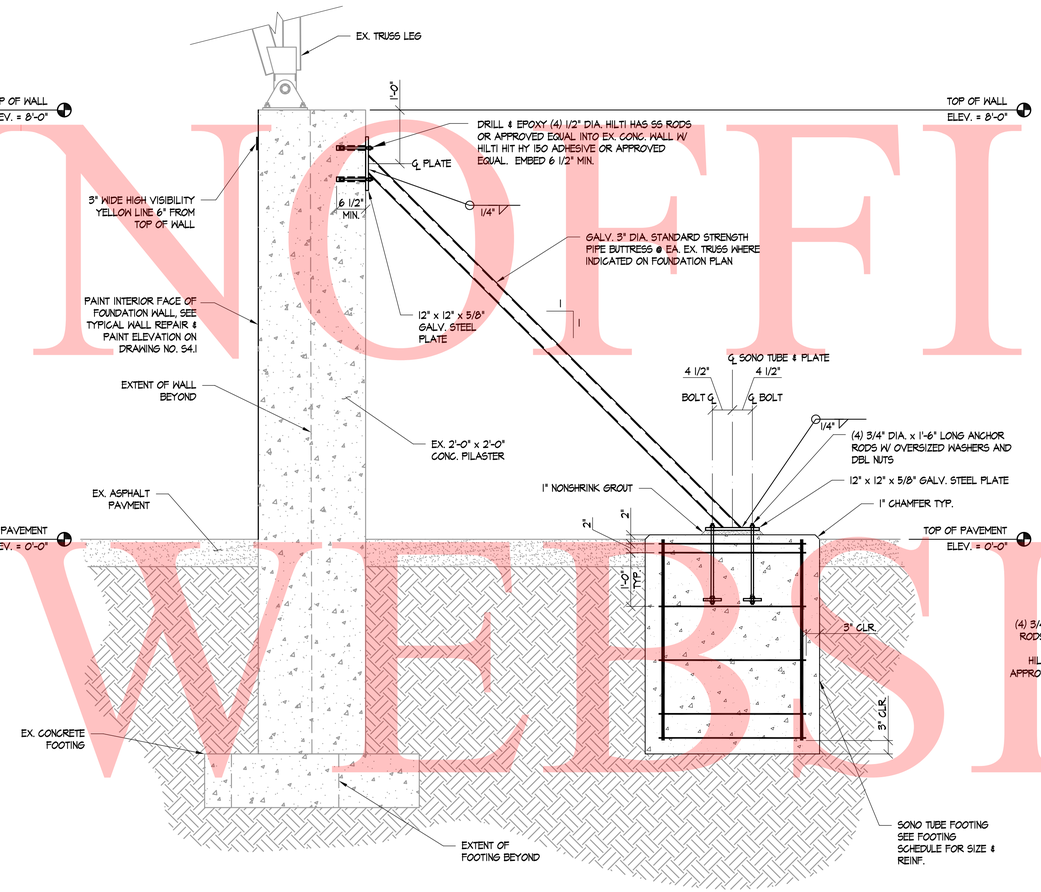
1 0 .50 1 2 ( IN FEET ) 1 inch = 1 ft.

0.67 0 0.33 0.67 1.33 ( IN FEET ) 1 1/2 inch = 1 ft.




## ELEVATION — WALL REPAIR & PAINT

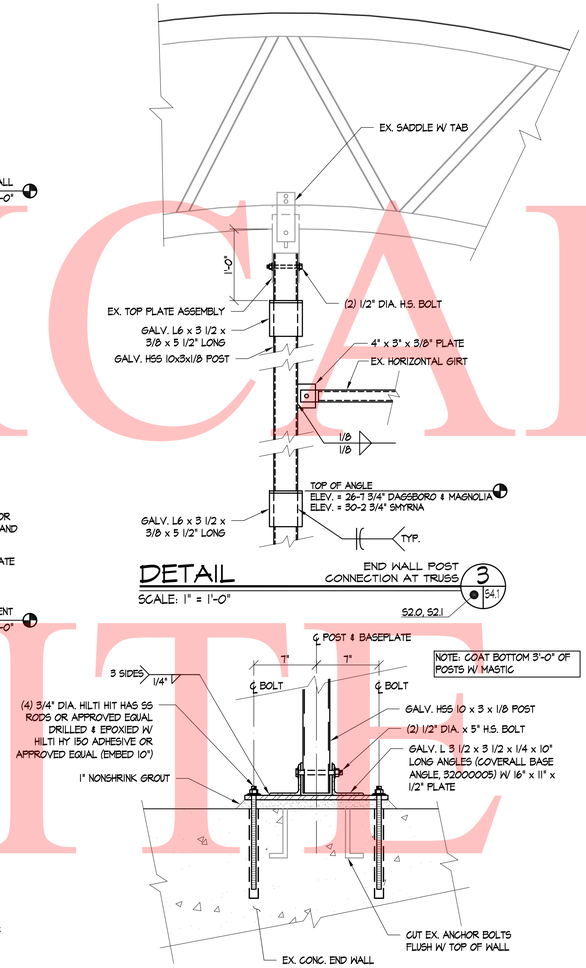
SCALE: 3/4" = 1'-0"




## SECTION A

SCALE: 3/4" = 1'-0"

S2.0, S2.1




## DETAIL — END WALL POST CONNECTION AT TRUSS (3)

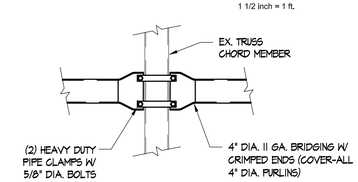
SCALE: 1" = 1'-0"

S2.0, S2.1

## DETAIL — END WALL POST BASE CONNECTION (4)

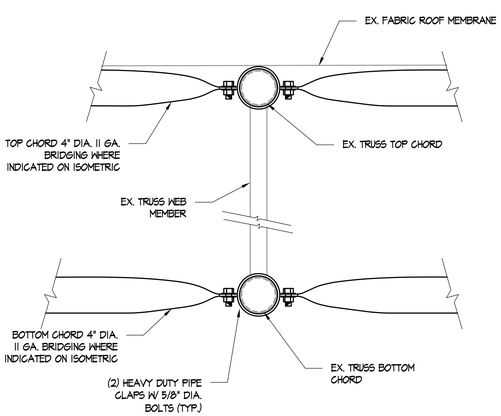
SCALE: 1 1/2" = 1'-0"

S2.0, S2.1



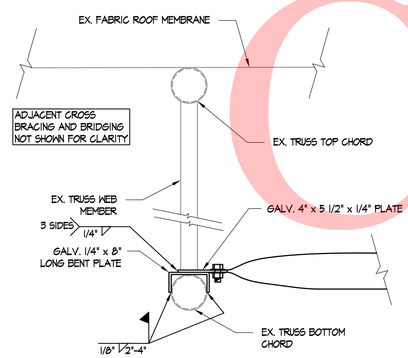

## DETAIL — TYP. BRIDGING CONNECTION AT TRUSS

SCALE: 1" = 1'-0"




## DETAIL — TYPICAL BRIDGING CONNECTION

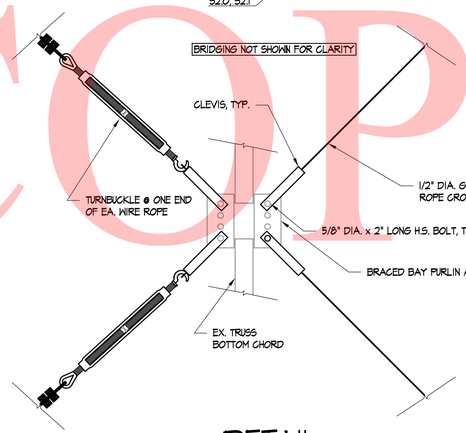
SCALE: 1 1/2" = 1'-0"




## DETAIL — TYPICAL KICKER & DIAGONAL BRACING CONNECTION (5)

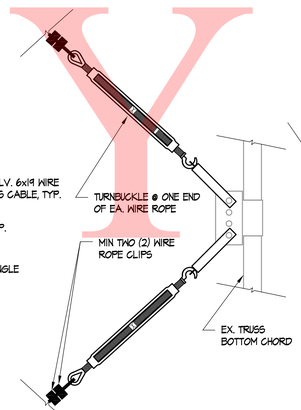
SCALE: 1 1/2" = 1'-0"

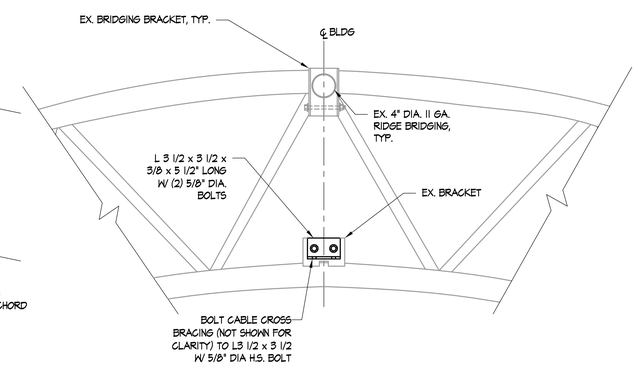
S2.0, S2.1




## DETAIL — TYPICAL CROSS CABLE CONNECTION

SCALE: 1 1/2" = 1'-0"




## DETAIL (6)

SCALE: 1" = 1'-0"

S2.0, S2.1

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