

ENCLOSED GABLE END BUILDING

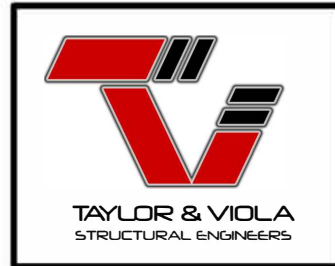
MAXIMUM 30'-0" WIDE X 16'-0" EAVE HEIGHT WITH BOX FRAME / (UP TO) 145 MPH WIND ZONE - 30 PSF SNOW LOAD

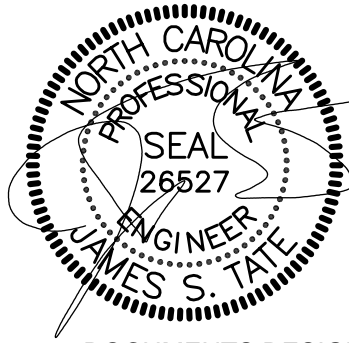
FOR:

5 STAR METAL BUILDINGS

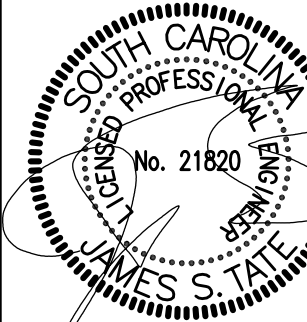
2425 OLD HIGHWAY 601 / MOUNT AIRY, NC. 27030

ISSUE DATE: JANUARY 16, 2023

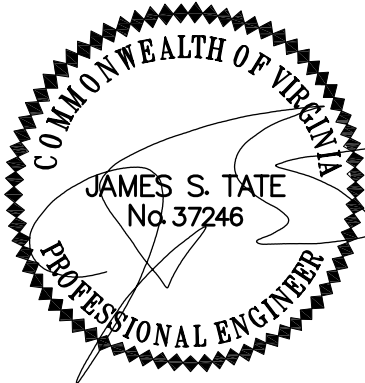
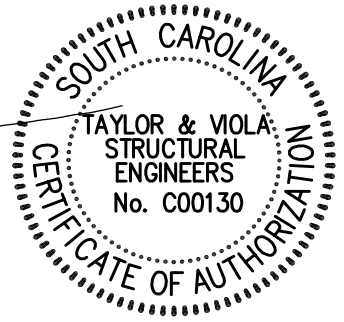




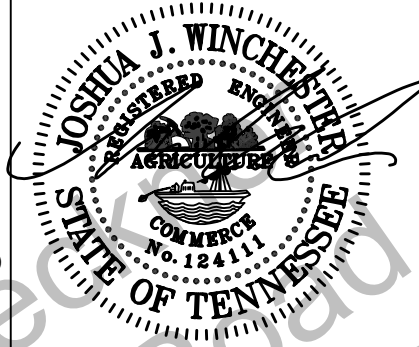
DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 NC BUILDING CODE (2015 IBC)



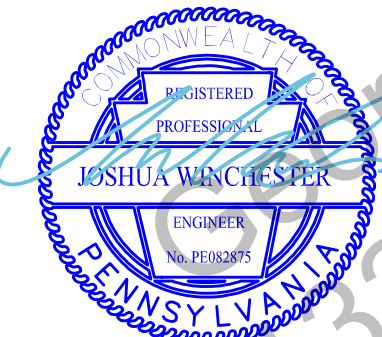
DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 SC BUILDING CODE (2021 IBC)



DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 VA CONSTRUCTION CODE (2018 IBC)



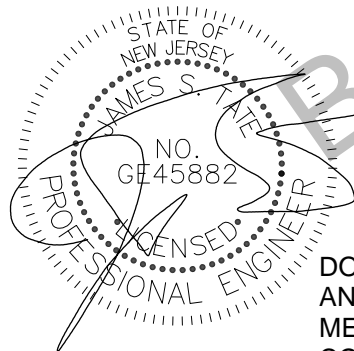
DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2012 IBC



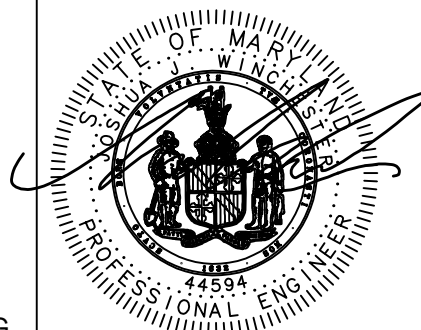
DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC



DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2020 BUILDING CODE OF NEW YORK STATE (2018 IBC)



DOCUMENTS DESIGNED AND DRAWN TO MEET THE 20210 BUILDING CODENEW JERSEY EDITION (2021 IBC)



DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC



TAYLOR & VIOLA STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S1



DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC

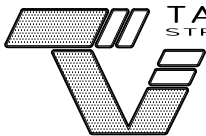


DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2021 BUILDING CODE OF ALABAMA (2021 IBC)



DOCUMENTS DESIGNED AND DRAWN TO MEET THE 2018 IBC

George Cleckner
1321 Cobb Road
Benson, NC 27504



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S1

SHEET INDEX

SHEET NUMBER	SHEET TITLE
S0	SEALED COVER SHEET
S1	P.E. SEALS SHEET
S1A	P.E. SEALS SHEET
S2	DRAWING INDEX
S3	GENERAL NOTES AND SPECIFICATIONS
S4	SIDE AND END ELEVATIONS
S5	TYPICAL RAFTER / COLUMN FRAME SECTIONS
S5A	TYPICAL RAFTER / COLUMN FRAME SECTIONS
S5B	TYPICAL RAFTER / COLUMN FRAME AND SIDE FRAMING SECTION
S6	COLUMN CONNECTION DETAILS (LACED COLUMN)
S6A	COLUMN CONNECTION DETAILS (DOUBLE AND SINGLE COLUMN)
S6B	COLUMN CONNECTION DETAILS (LACED COLUMN)
S6C	COLUMN CONNECTION DETAILS (DOUBLE AND SINGLE COLUMN)
S7	BASE RAIL ANCHORAGE
S7A	BASE RAIL ANCHORAGE
S8	BASE RAIL ANCHORAGE
S9	TYPICAL END WALL OPENINGS FRAMING SECTIONS
S9A	TYPICAL SIDE WALL OPENINGS FRAMING SECTIONS
S10	CONNECTION DETAILS
S11	CONNECTION DETAILS
S12	CONNECTION DETAILS
S13	CONNECTION DETAILS
S14	CONNECTION DETAILS
S15	LEAN-TO OPTIONS
S15A	LEAN-TO CONNECTION DETAILS
S15B	LEAN-TO CONNECTION DETAILS
S15C	LEAN-TO CONNECTION DETAILS
S16	VERTICAL ROOF / SIDING OPTION END AND SIDE ELEVATION
S16A	VERTICAL ROOF / SIDING OPTION END SECTION
S16B	VERTICAL ROOF / SIDING OPTION SIDE SECTION
S17	SIDE WALL HEADER OPTIONS
S17A	END WALL HEADER OPTIONS



5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S2

DESIGN LOADS:

IMPORTANCE FACTORS WIND (1w) 1.00
 SNOW (1s) 1.00
 SEISMIC (1e) 1.00

DEAD LOADS ROOF 13 PSF
 ROOF COLLATERAL 0 PSF

LIVE LOADS ROOF 20 PSF

GROUND SNOW LOAD: 30 PSF

GROUND LOAD: BASIC WIND SPEED V 145 mph (ASCE 7-10) *DRIFT LOAD HAS NOT
 EXPOSURE CATAGORY B BEEN CALCULATED

SEISMIC DESIGN CATAGORY A

COMPLIANCE WITH SECTION 1616.4? NO YES

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

OCCUPANCY CATEGORY I

SPECTRAL RESPONSE ACCELERATION Ss 20.5 %g S1 8.8 %g

SITE CLASSIFICATION D FIELD TEST PRESUMPTIVE HISTORICAL DATA

BASIC STRUCTURAL SYSTEM (CHECK ONE)

BEARING WALL DUAL W/ SPECTRAL MOMENT FRAME
 BUILDING FRAME DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL
 MOMENT FRAME INVERTED PENDULUM

ANALYSIS PROCEDURE SIMPLIFIED EQUIVALANT LATERAL FORCE MODAL

LATERAL DESIGN CONTROL? EARTHQUAKE WIND

SOIL BEARING CAPACITIES:

PRESUMPTIVE BEARING CAPACITIES: 2,000 PSF

GENERAL NOTES:

1. MAX FRAME SPACING SHALL BE 60"oc UNLESS NOTED OTHERWISE.
2. MAX. END-WALL COLUMN SPACING SHALL BE 60"oc UNLESS NOTED OTHERWISE.
3. TUBE MATERIAL SHALL BE 2-1/2" x 2-1/2" x 14 GA. 50 KSI MIN. UNLESS NOTED OTHERWISE.
4. ALL FASTENERS SHALL BE #12 SELF TAPPING AT 9"o.c. UNLESS NOTED OTHERWISE.
5. 2,000 PSF ASSUMED BEARING CAPACITY UNLESS NOTED OTHERWISE.



5 STAR
 METAL BUILDINGS
 2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

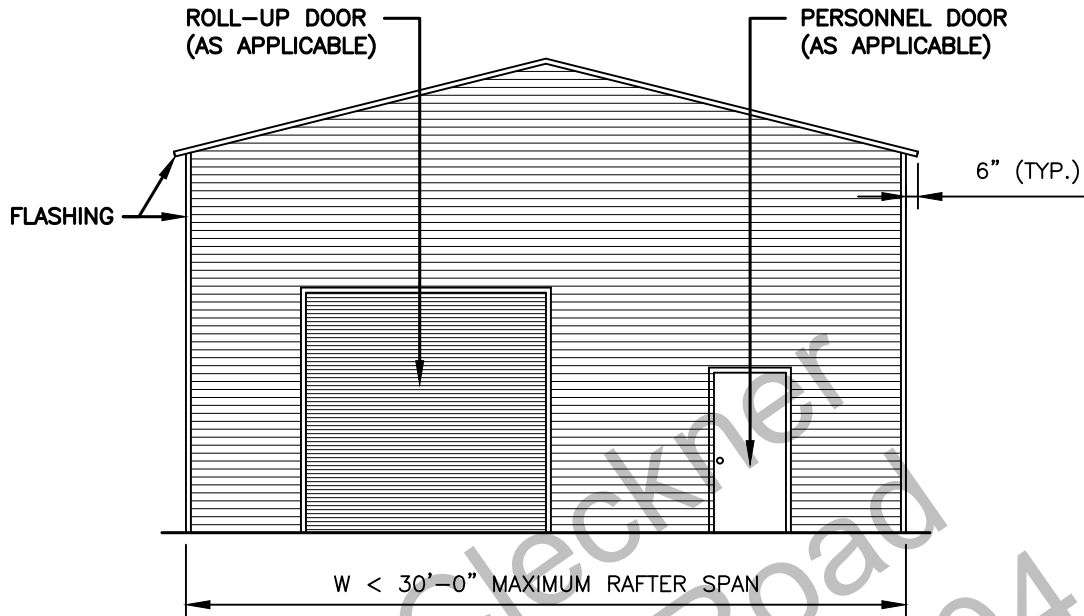
DRAWN BY:
 BKS

PROJECT NO:
 23-501

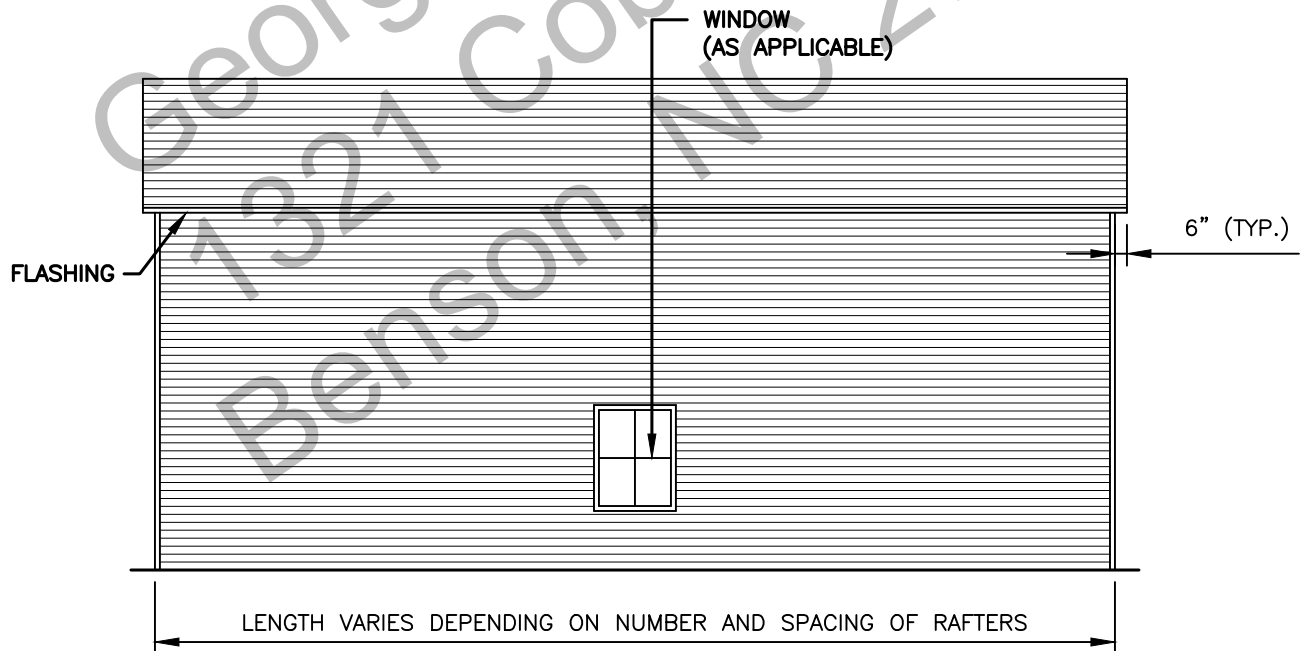
DATE:
 2023.01.16

SHEET NO:
S3

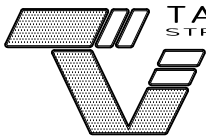
BOX EVE FRAME RAFTER STURCTURE



TYPICAL END ELEVATION



TYPICAL SIDE ELEVATION



TAYLOR & VIOLA
STRUCTURAL ENGINEERS
P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

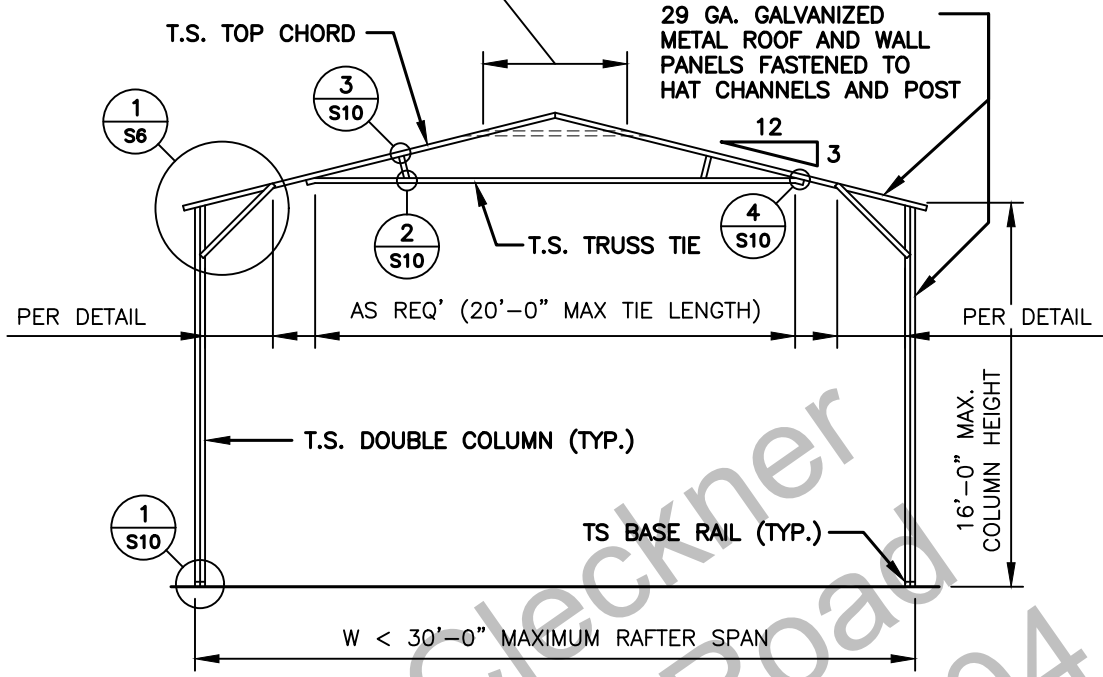
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S4

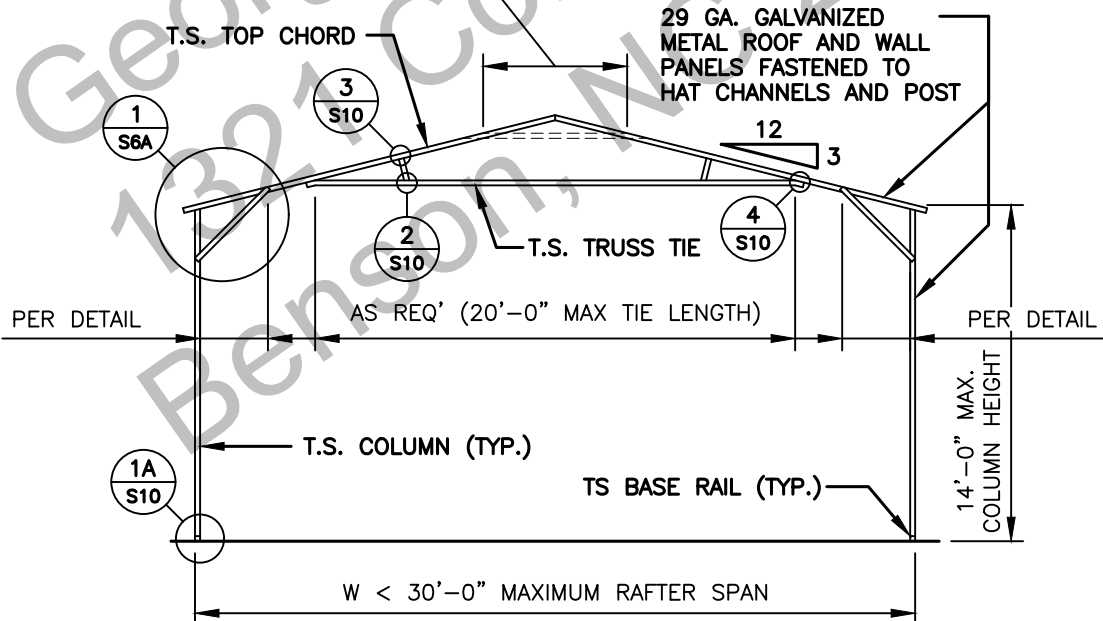
'U' BRACE TRUSS TIE - NOTE:
 6'-0" BRACE FOR 21'-24' BUILDING WIDTH
 20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'



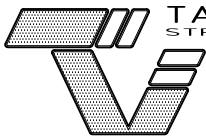
TYPICAL RAFTER / COLUMN FRAME SECTION

'U' BRACE TRUSS TIE - NOTE:
 6'-0" BRACE FOR 21'-24' BUILDING WIDTH
 20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'

NOTE:
 H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.
 MATERIAL MAY BE USED FOR TRUSS METAL.



TYPICAL RAFTER / COLUMN FRAME SECTION

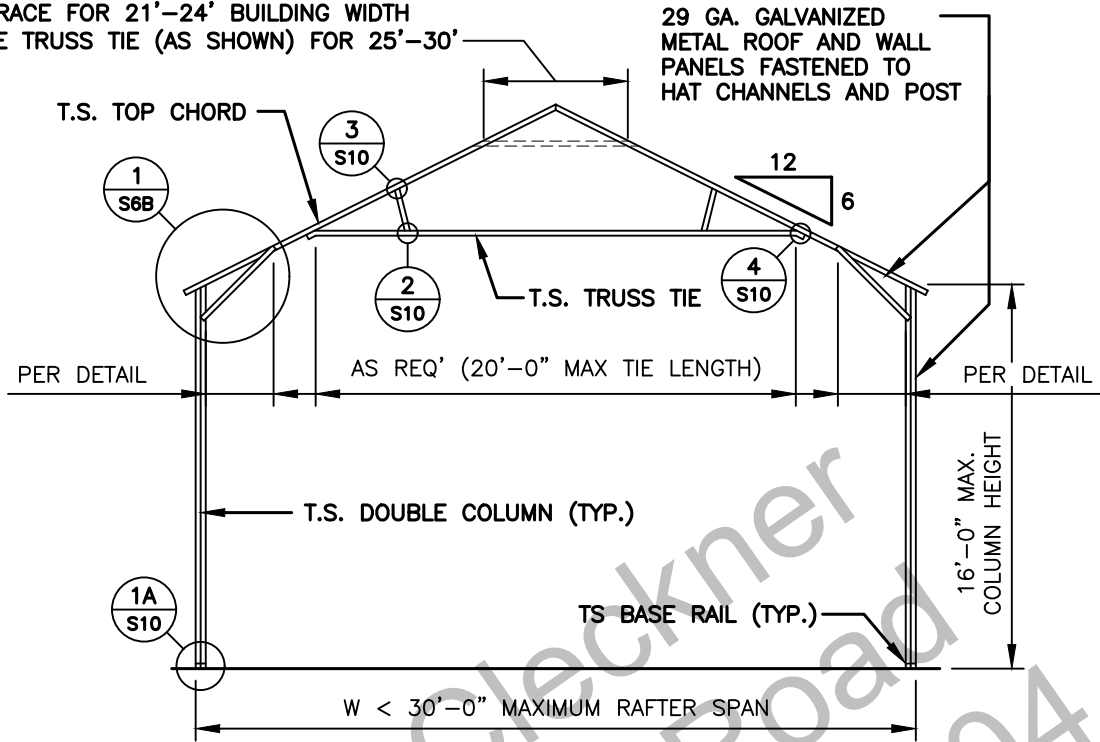


TAYLOR & VIOLA
 STRUCTURAL ENGINEERS
 P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
 2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

DRAWN BY: BKS	PROJECT NO: 23-501
DATE: 2023.01.16	SHEET NO: S5

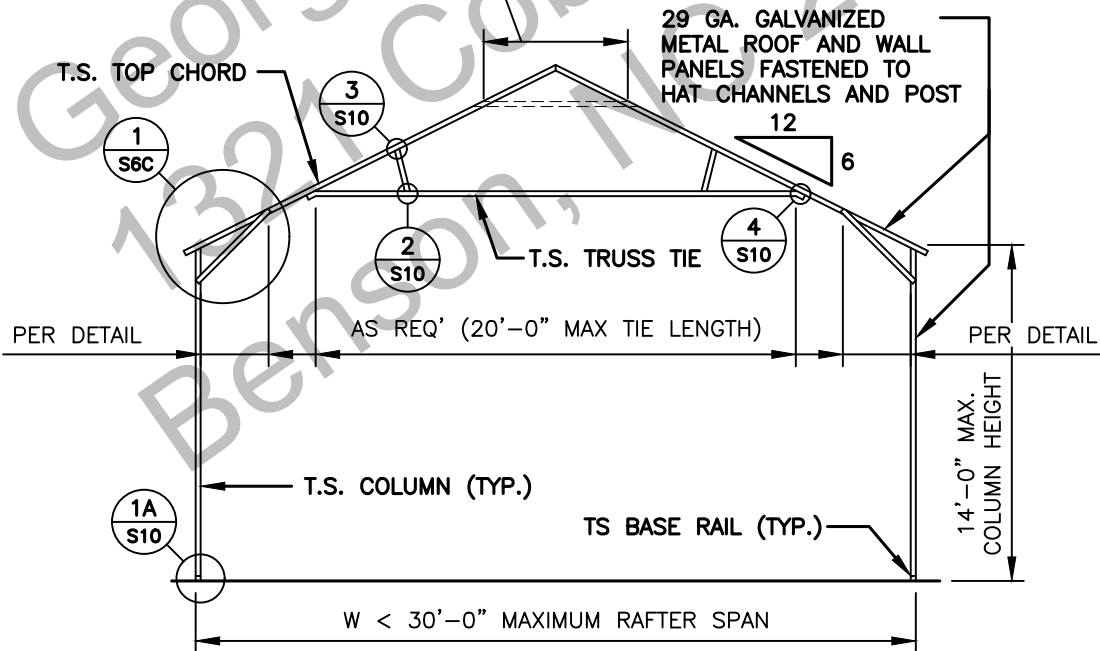
'U' BRACE TRUSS TIE - NOTE:
 6'-0" BRACE FOR 21'-24' BUILDING WIDTH
 20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'



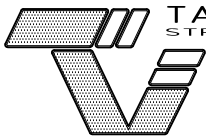
TYPICAL RAFTER / COLUMN FRAME SECTION

'U' BRACE TRUSS TIE - NOTE:
 6'-0" BRACE FOR 21'-24' BUILDING WIDTH
 20' TUBE TRUSS TIE (AS SHOWN) FOR 25'-30'

NOTE:
 H.S.S. 2-1/2"x2-1/2"x14ga. OR 2-1/4"x2-1/4"x14ga.
 MATERIAL MAY BE USED FOR TRUSS METAL.



TYPICAL RAFTER / COLUMN FRAME SECTION



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS
 P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
 2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

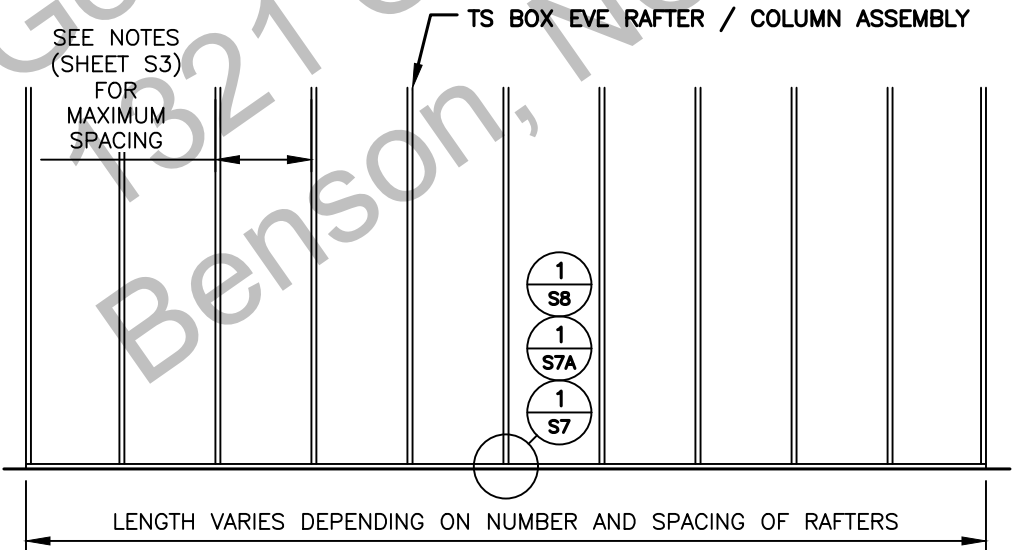
DRAWN BY:
 BKS

PROJECT NO:
 23-501

DATE:
 2023.01.16

SHEET NO:
SSA

NOTE:
H.S.S. 2-1/2"x2-1/2"x14ga. OR
2-1/4"x2-1/4"x14ga. MATERIAL
MAY BE USED FOR TRUSS METAL.



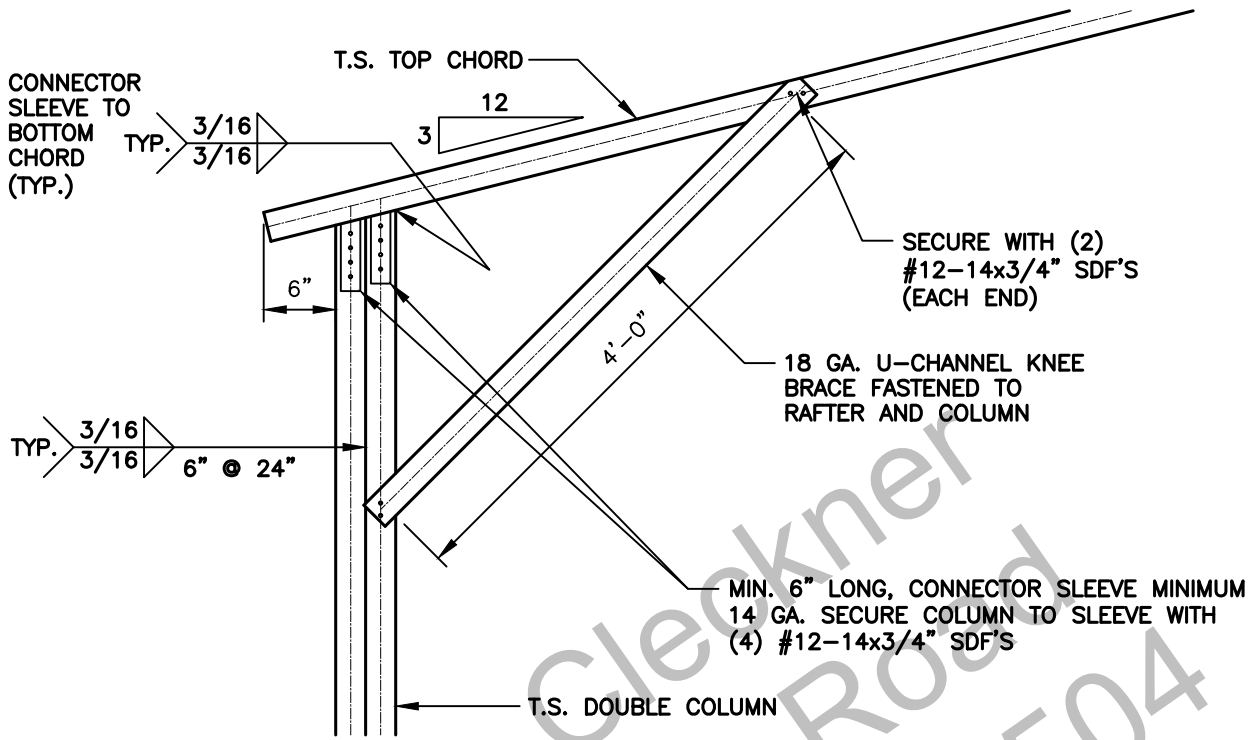
TYPICAL RAFTER / COLUMN SIDE FRAME SECTION



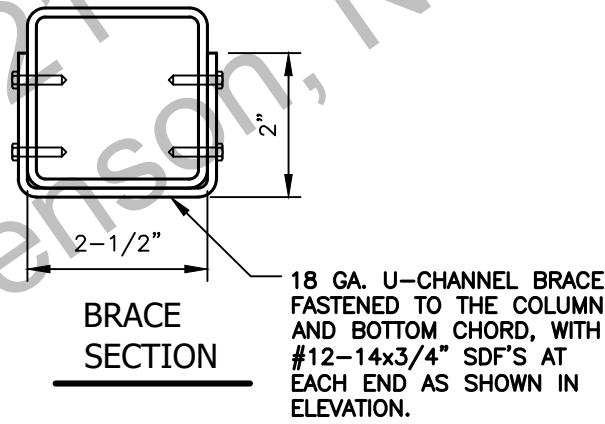
TAYLOR & VIOLA
STRUCTURAL ENGINEERS
P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

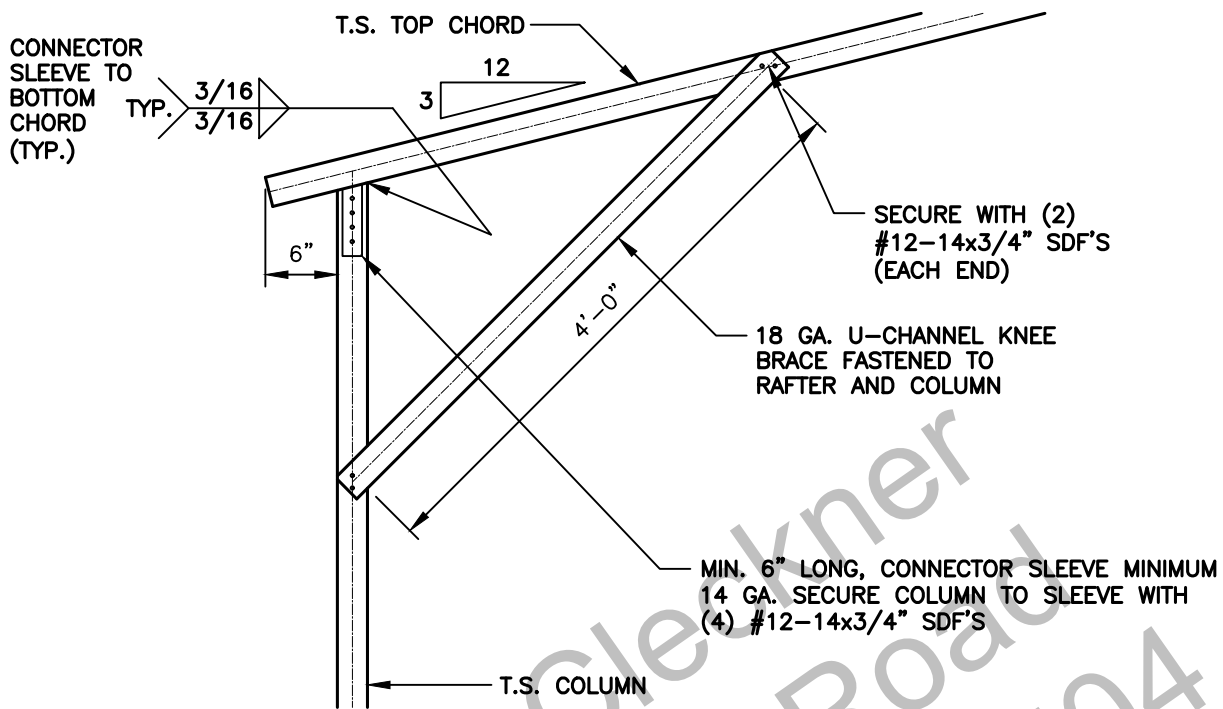
DRAWN BY: BKS	PROJECT NO: 23-501
DATE: 2023.01.16	SHEET NO: S5B



1 BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS 14'-1" < TO <16'-0"
 S6 SCALE: 3/4" = 1'-0"

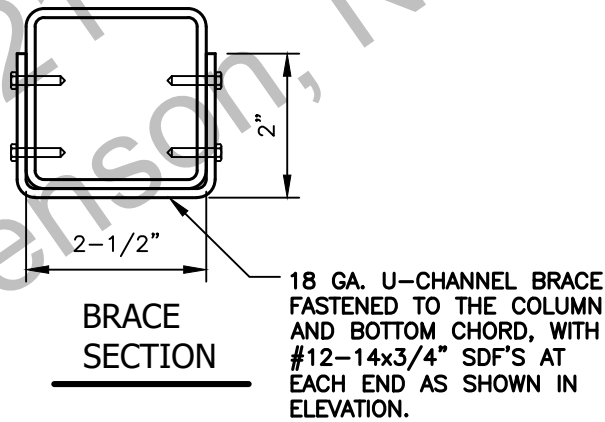


 <p>TAYLOR & VIOLA STRUCTURAL ENGINEERS</p> <p>P.O.B. 2616 HICKORY NORTH CAROLINA TELE: 828-328-6331 FAX: 828-322-1801 WWW.TAYLORVIOLA.COM</p>	<p>5 STAR METAL BUILDINGS</p> <p>2425 OLD HIGHWAY 601 MOUNT AIRY, NORTH CAROLINA 27030 TELE: 844-308-9705</p>	<p>DRAWN BY: BKS</p>	<p>PROJECT NO: 23-501</p>
		<p>DATE: 2023.01.16</p>	<p>SHEET NO: S6</p>



1 BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS < 14'-0"

S6A SCALE: 3/4" = 1'-0"



5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

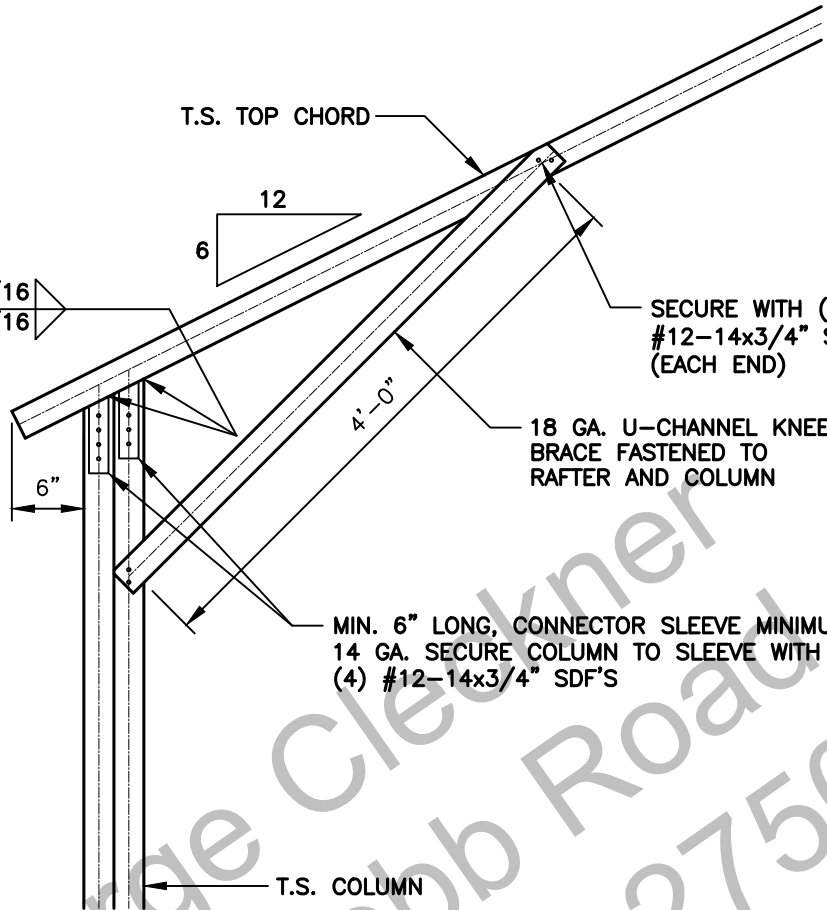
PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S6A

CONNECTOR SLEEVE TO BOTTOM CHORD (TYP.)

TYP. $\frac{3}{16}$ / $\frac{3}{16}$



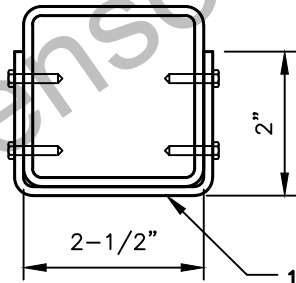
SECURE WITH (2) #12-14x3/4" SDF'S (EACH END)

18 GA. U-CHANNEL KNEE BRACE FASTENED TO RAFTER AND COLUMN

MIN. 6" LONG, CONNECTOR SLEEVE MINIMUM 14 GA. SECURE COLUMN TO SLEEVE WITH (4) #12-14x3/4" SDF'S

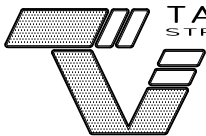
T.S. COLUMN

1 BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS 14'-1" < TO <16'-0"
S6C SCALE: 3/4" = 1'-0"



BRACE SECTION

18 GA. U-CHANNEL BRACE FASTENED TO THE COLUMN AND BOTTOM CHORD, WITH #12-14x3/4" SDF'S AT EACH END AS SHOWN IN ELEVATION.



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

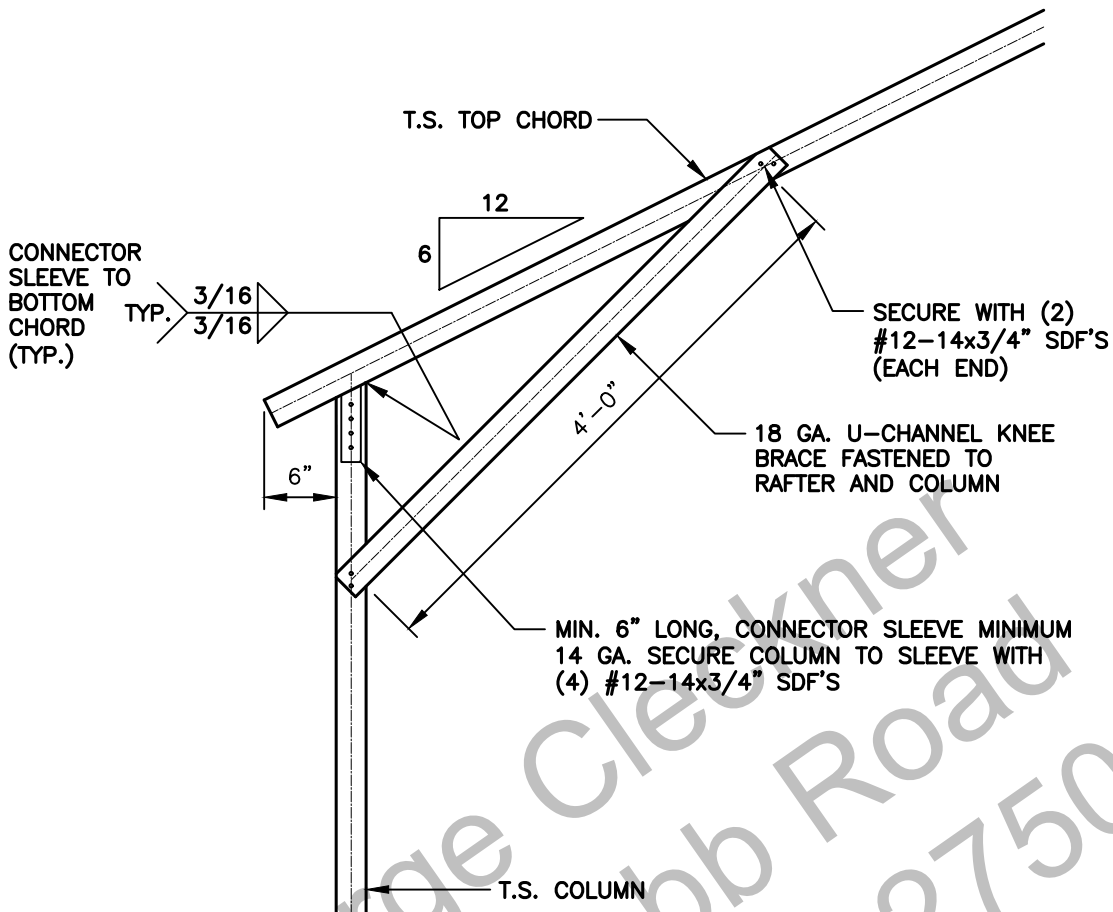
2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

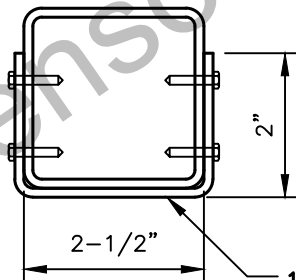
SHEET NO:
S6B



1 BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS < 14'-0"

S6C

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



BRACE SECTION

18 GA. U-CHANNEL BRACE FASTENED TO THE COLUMN AND BOTTOM CHORD, WITH #12-14x3/4" SDF'S AT EACH END AS SHOWN IN ELEVATION.



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

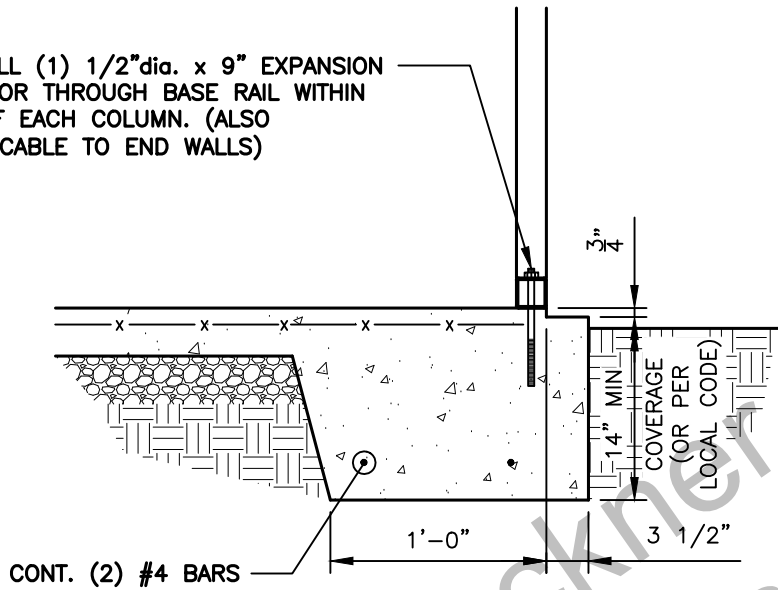
PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S6C

CONCRETE BASE RAIL ANCHORAGE

INSTALL (1) 1/2" dia. x 9" EXPANSION ANCHOR THROUGH BASE RAIL WITHIN 6" OF EACH COLUMN. (ALSO APPLICABLE TO END WALLS)



BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 2,000 PSF

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS

COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:

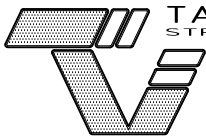
3" IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH AND WEATHER AND 1-1/2" ELSEWHERE.

REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

REINFORCEMENT MAT BE BENT IN THE SHOP OF THE FIELD PROVIDED:

1. REINFORCEMENT IS BENT COLD.
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

PROJECT NO:
23-501

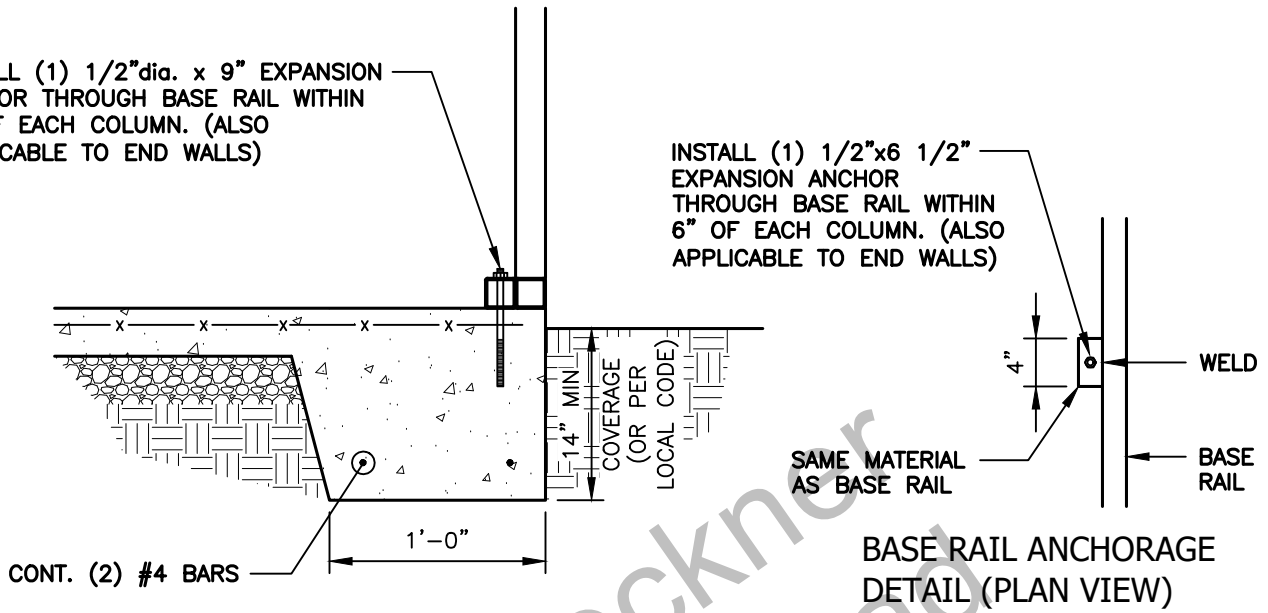
DATE:
2023.01.16

SHEET NO:
S7

CONCRETE BASE RAIL ANCHORAGE

INSTALL (1) 1/2" dia. x 9" EXPANSION ANCHOR THROUGH BASE RAIL WITHIN 6" OF EACH COLUMN. (ALSO APPLICABLE TO END WALLS)

INSTALL (1) 1/2"x6 1/2" EXPANSION ANCHOR THROUGH BASE RAIL WITHIN 6" OF EACH COLUMN. (ALSO APPLICABLE TO END WALLS)



**BASE RAIL ANCHORAGE
DETAIL (PLAN VIEW)**

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



1 BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 2,000 PSF

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS

COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:

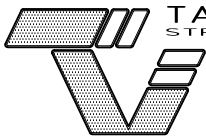
3" IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH AND WEATHER AND 1-1/2" ELSEWHERE.

REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

REINFORCEMENT MAT BE BENT IN THE SHOP OF THE FIELD PROVIDED:

1. REINFORCEMENT IS BENT COLD.
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

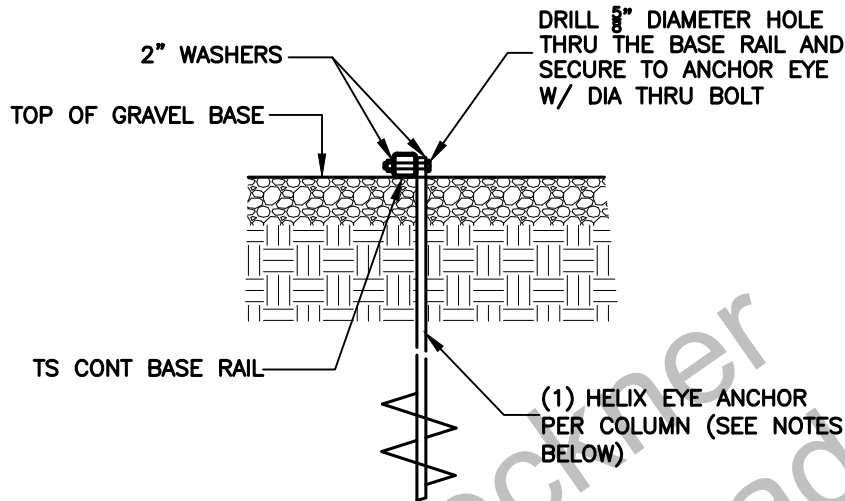
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S7A

SOIL NAIL BASE RAIL ANCHORAGE



1
S8

BASE RAIL ANCHORAGE DETAIL

SCALE: $\frac{3}{4}$ " = 1'-0"

HELIX EMBEDMENT INFORMATION:

FOR VERY DENSE OR CEMENTED SANDS, COARSE GRAVEL, COBBLES, CALICHE, PRELOADED SILTS AND CLAYS, USE MIN (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT, ONE EACH END BASE RAIL, PROVIDE #4 REBAR AT 5'-0"oc BETWEEN.

FOR CORAL, USE MIN (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT, ONE EACH END BASE RAIL, PROVIDE #4 REBAR AT 5'-0"oc BETWEEN.

FOR MED DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILTS, AND CLAYS, USE MIN (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT, ONE EACH END BASE RAIL, PROVIDE #4 REBAR AT 5'-0"oc BETWEEN.

FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS, USE MIN (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT, ONE EACH END BASE RAIL, PROVIDE #4 REBAR AT 5'-0"oc BETWEEN.

FOR VERY LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS AND ALLUVIAL FILL, USE MIN (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT, ONE EACH END BASE RAIL, PROVIDE #4 REBAR AT 5'-0"oc BETWEEN.



5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

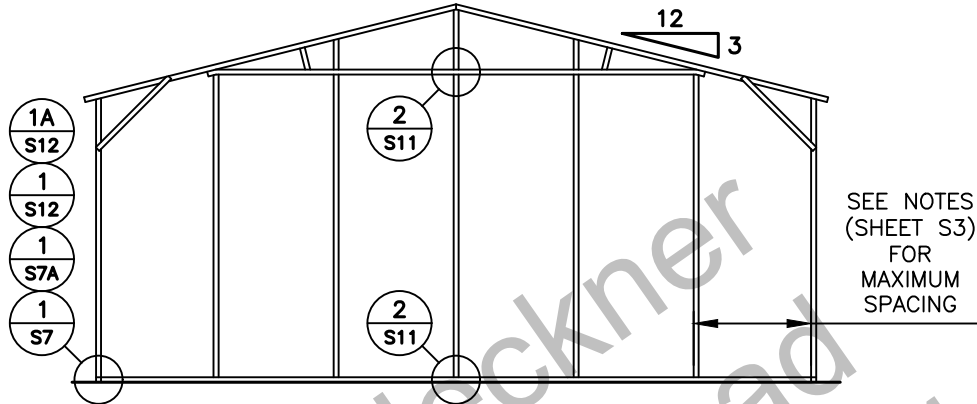
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

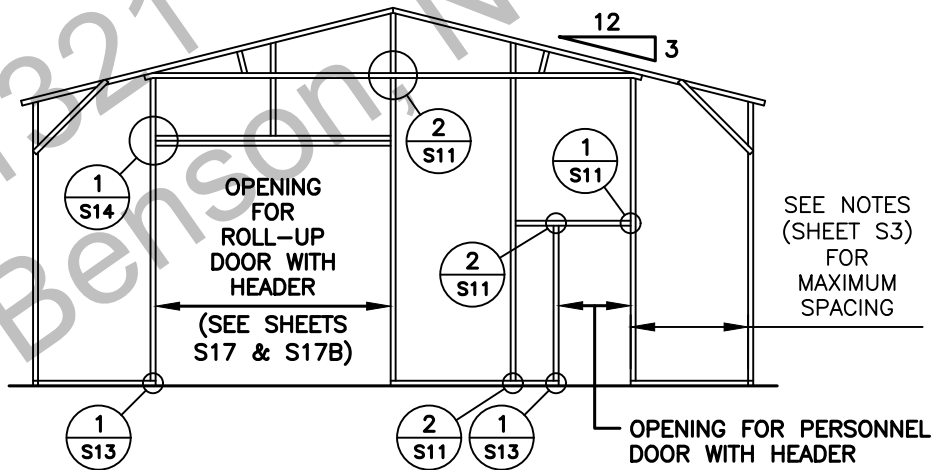
SHEET NO:
S8

BOX EVE RAFTER END WALL OPENINGS



TYPICAL BOX EVE RAFTER / END WALL COLUMN FRAME SECTION

NOTE:
 ROLL UP DOORS SHALL
 HAVE ONE JAMB EACH
 SIDE + ONE FRAME
 COLUMN BETWEEN OR SITE
 SPECIFIC SHALL BE REQ'D.



TYPICAL BOX EVE RAFTER END WALL OPENINGS FRAMING SECTION



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS
 P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
 2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

DRAWN BY:
 BKS

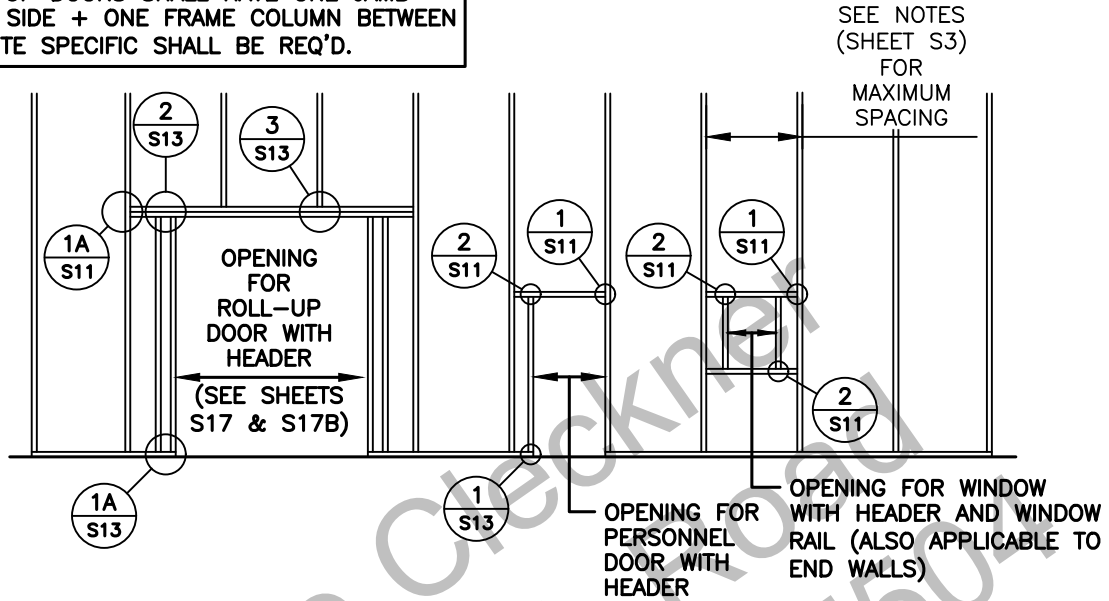
PROJECT NO:
 23-501

DATE:
 2023.01.16

SHEET NO:
S9

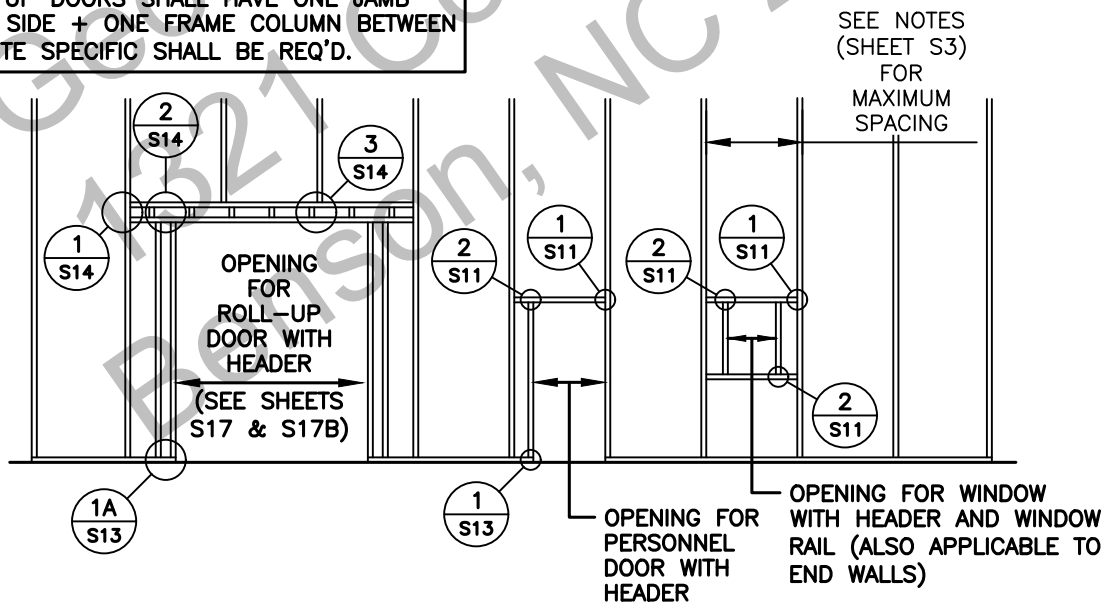
BOX EVE RAFTER END WALL AND SIDE WALL OPENINGS

NOTE:
 ROLL UP DOORS SHALL HAVE ONE JAMB
 EACH SIDE + ONE FRAME COLUMN BETWEEN
 OR SITE SPECIFIC SHALL BE REQ'D.



TYPICAL END WALL OPENING FRAMING SECTION

NOTE:
 ROLL UP DOORS SHALL HAVE ONE JAMB
 EACH SIDE + ONE FRAME COLUMN BETWEEN
 OR SITE SPECIFIC SHALL BE REQ'D.



TYPICAL SIDE WALL OPENING FRAMING SECTION



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS
 P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
 2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

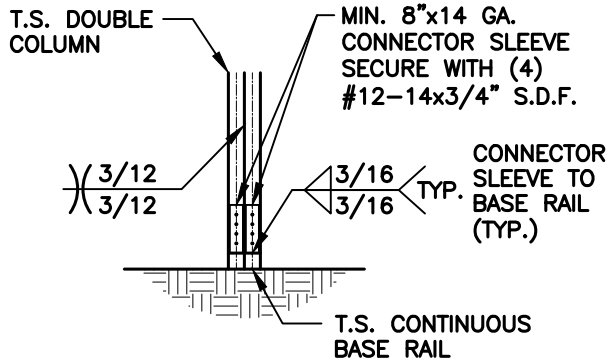
DRAWN BY:
 BKS

PROJECT NO:
 23-501

DATE:
 2023.01.16

SHEET NO:
S9A

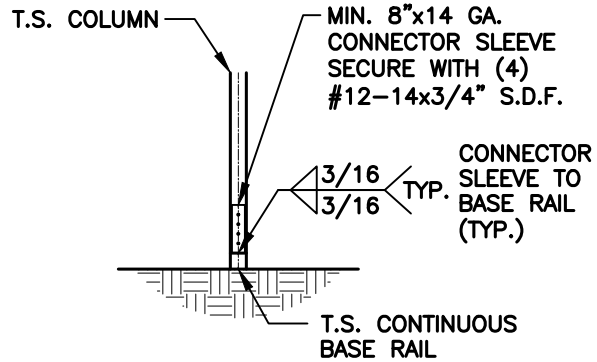
CONNECTION DETAILS



1
POST / BASE RAIL
CONNECTION DETAIL

S10

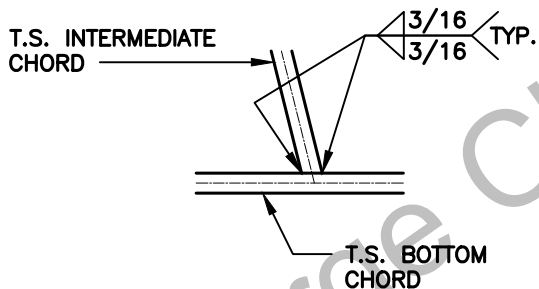
SCALE: 1/2" = 1'-0"



1A
POST / BASE RAIL
CONNECTION DETAIL

S10

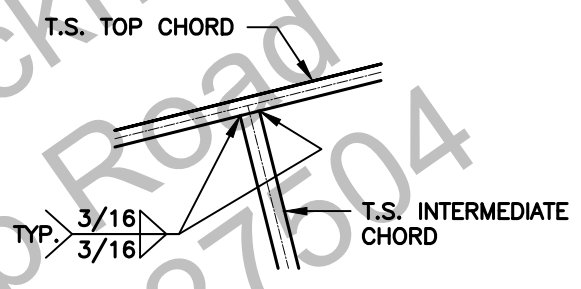
SCALE: 1/2" = 1'-0"



2
INTERMEDIATE CHORD
TO BOTTOM CHORD
CONNECTION DETAIL

S10

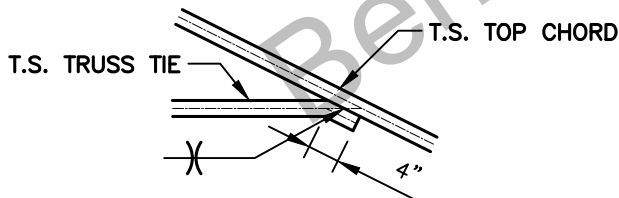
SCALE: 1/2" = 1'-0"



3
INTERMEDIATE CHORD TO TOP
CHORD CONNECTION DETAIL

S10

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



4
TRUSS TIE
CONNECTION DETAIL

S10

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



TAYLOR & VIOLA
STRUCTURAL ENGINEERS
P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

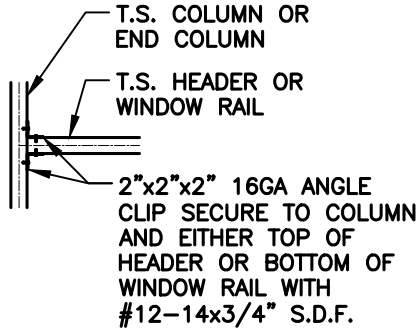
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S10

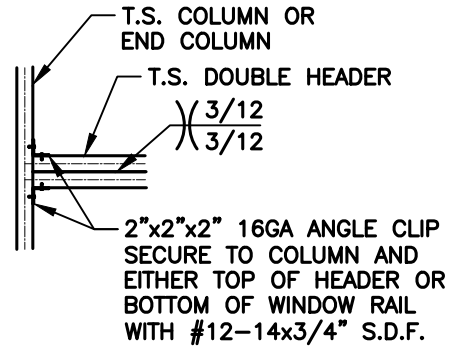
CONNECTION DETAILS



COLUMN OR WINDOW
RAIL / WALL GIRT TO POST
CONNECTION DETAIL

1
S11

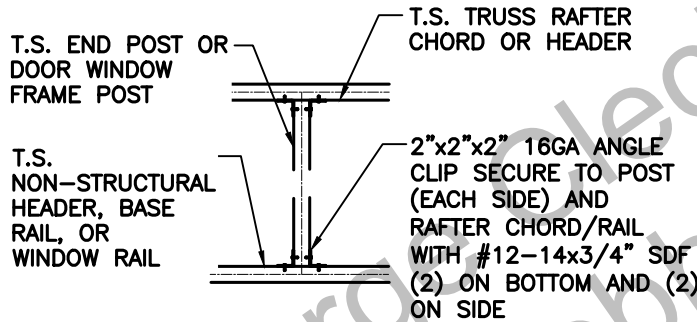
SCALE: 1/2" = 1'-0"



COLUMN / DOUBLE HEADER
CONNECTION DETAIL

1A
S11

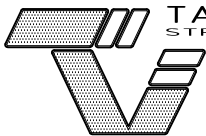
SCALE: 1/2" = 1'-0"



DOOR OR WINDOW HEADER
RAIL TO POST CONNECTION
DETAIL

2
S11

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



TAYLOR & VIOLA
STRUCTURAL ENGINEERS
P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

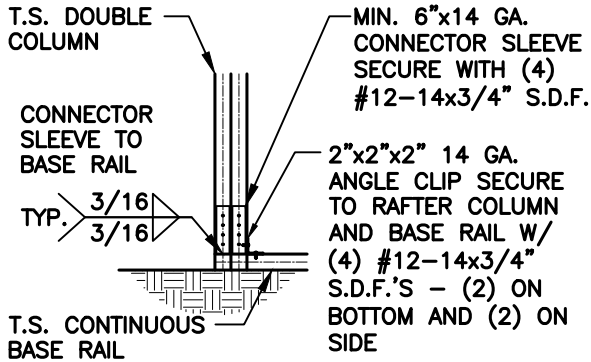
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S11

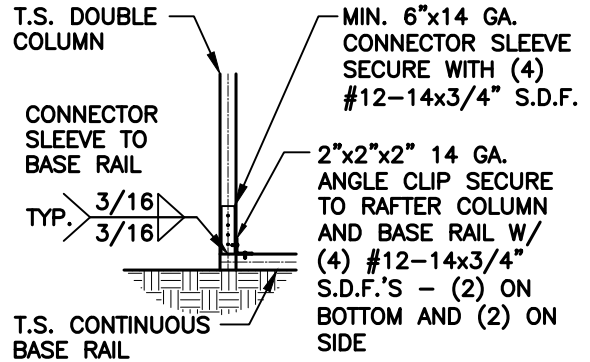
CONNECTION DETAILS



END COLUMN / BASE RAIL
CONNECTION DETAIL

1
S12

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

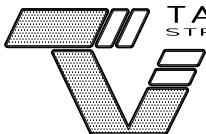


END COLUMN / BASE RAIL
CONNECTION DETAIL

1A
S12

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

George Cleckner
1321 Cobb Road
Benson, NC 27504



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

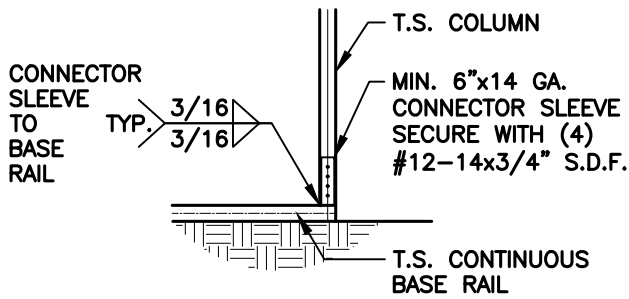
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S12

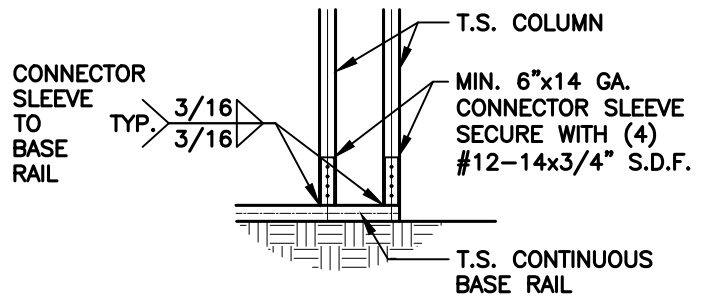
CONNECTION DETAILS



1
COLUMN / BASE RAIL
CONNECTION DETAIL

S13

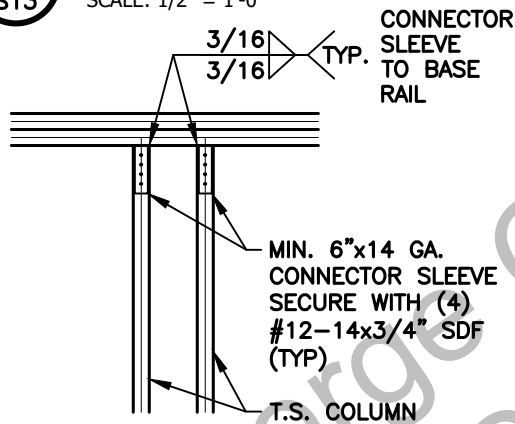
SCALE: 1/2" = 1'-0"



1A
COLUMN / BASE RAIL
CONNECTION DETAIL

S13

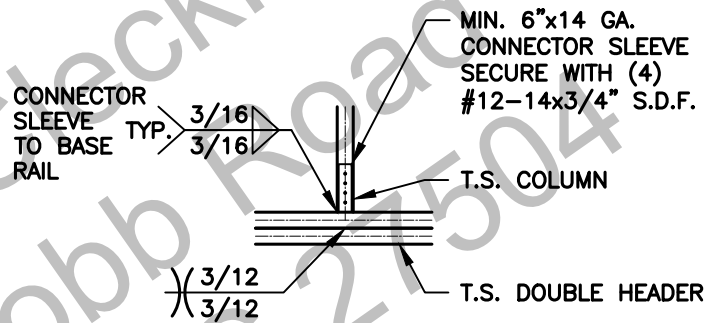
SCALE: 1/2" = 1'-0"



2
DOUBLE HEADER / COLUMN
CONNECTION DETAIL

S13

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



3
COLUMN / DOUBLE HEADER
CONNECTION DETAIL

S13

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



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

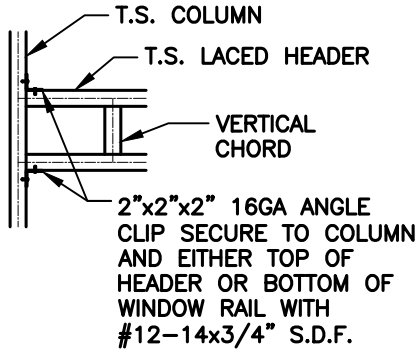
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S13

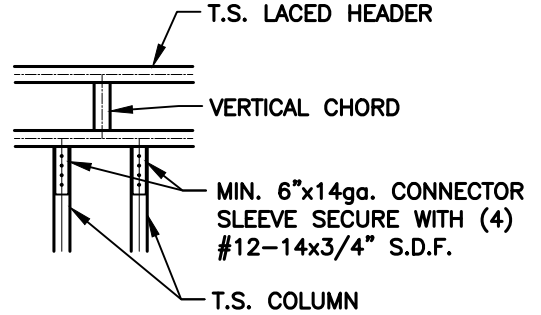
CONNECTION DETAILS



1
COLUMN / LACED HEADER CONNECTION DETAIL

S14

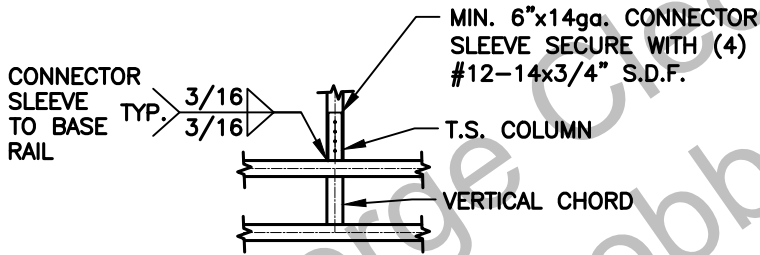
SCALE: 1/2" = 1'-0"



2
LACED HEADER / COLUMN CONNECTION DETAIL

S14

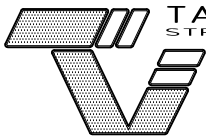
SCALE: 1/2" = 1'-0"



3
COLUMN / LACED HEADER CONNECTION DETAIL

S14

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



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

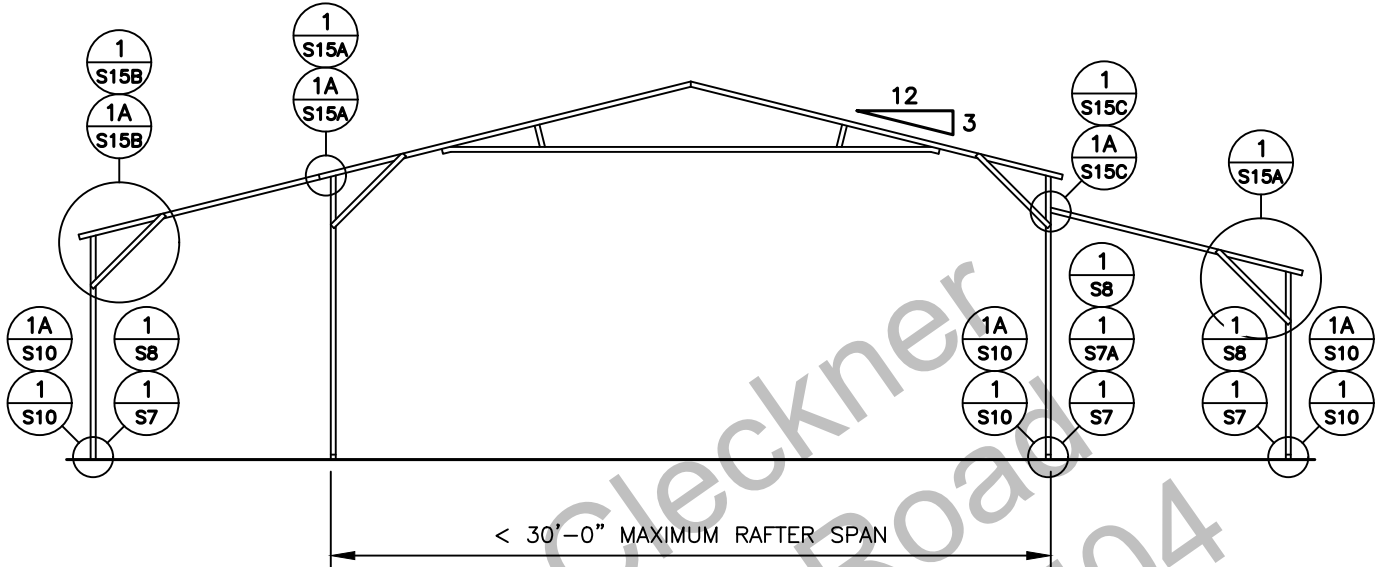
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

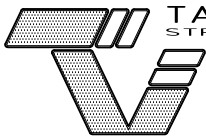
SHEET NO:
S14

BOX EVE RAFTER LEAN-TO OPTIONS



TYPICAL LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

MAXIMUM WIDTH OF SINGLE MEMBER ROOF EXTENSION AND LEAN-TO OPTION IS 12'-0"
 MAXIMUM WIDTH OF DOUBLE MEMBER ROOF EXTENSION AND LEAN-TO IS 15'-0"
 12'-0" MAX. LEAN-TO HEIGHT WITH SINGLE COLUMN



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

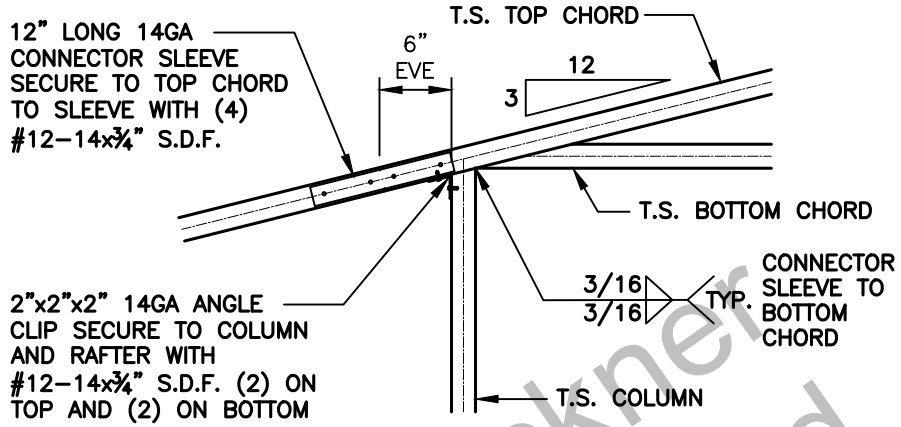
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S15

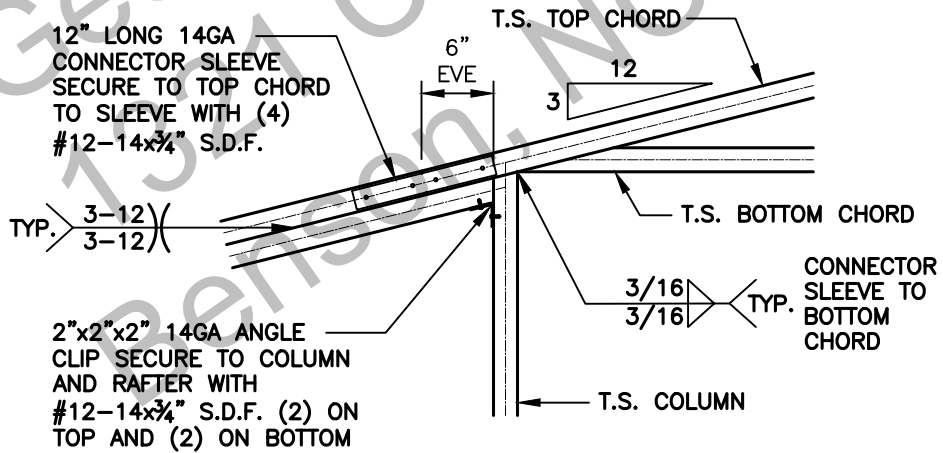
LEAN-TO CONNECTION DETAILS



1
S15A

ROOF EXTENSION RAFTER / CORNER POST
DETAIL FOR WIDTHS < 12'-0"

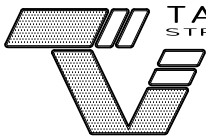
SCALE: 3/4" = 1'-0"



1A
S15A

ROOF EXTENSION RAFTER / CORNER POST
DETAIL FOR WIDTHS < 15'-0"

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



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

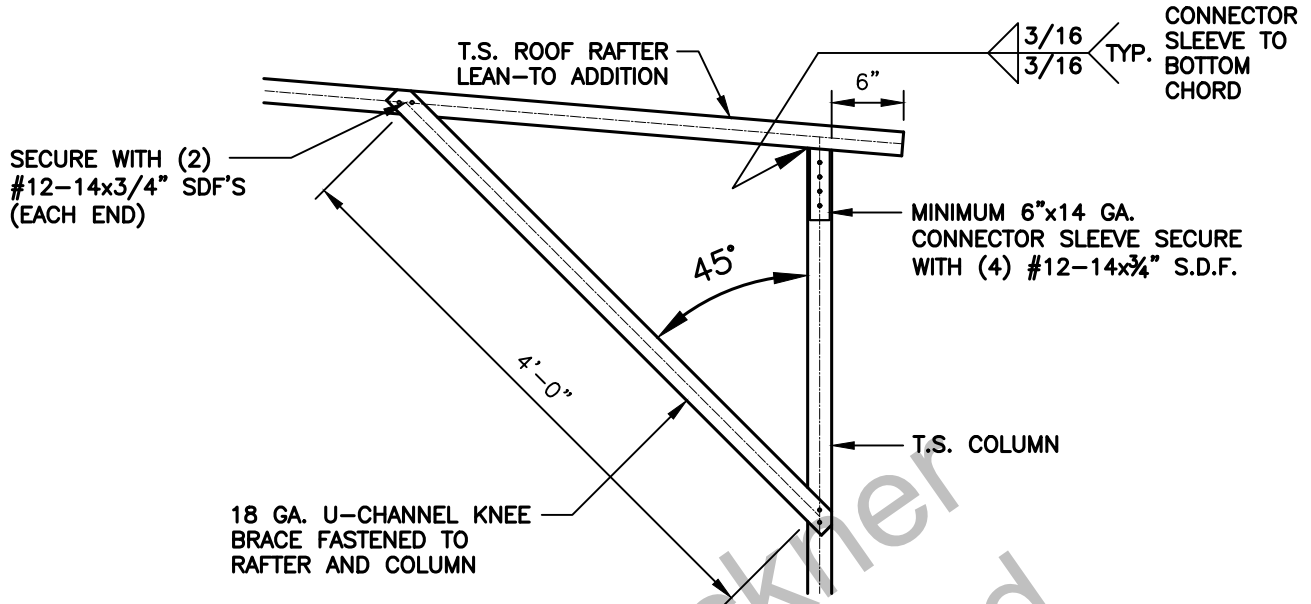
DRAWN BY:
BKS

PROJECT NO:
23-501

DATE:
2023.01.16

SHEET NO:
S15A

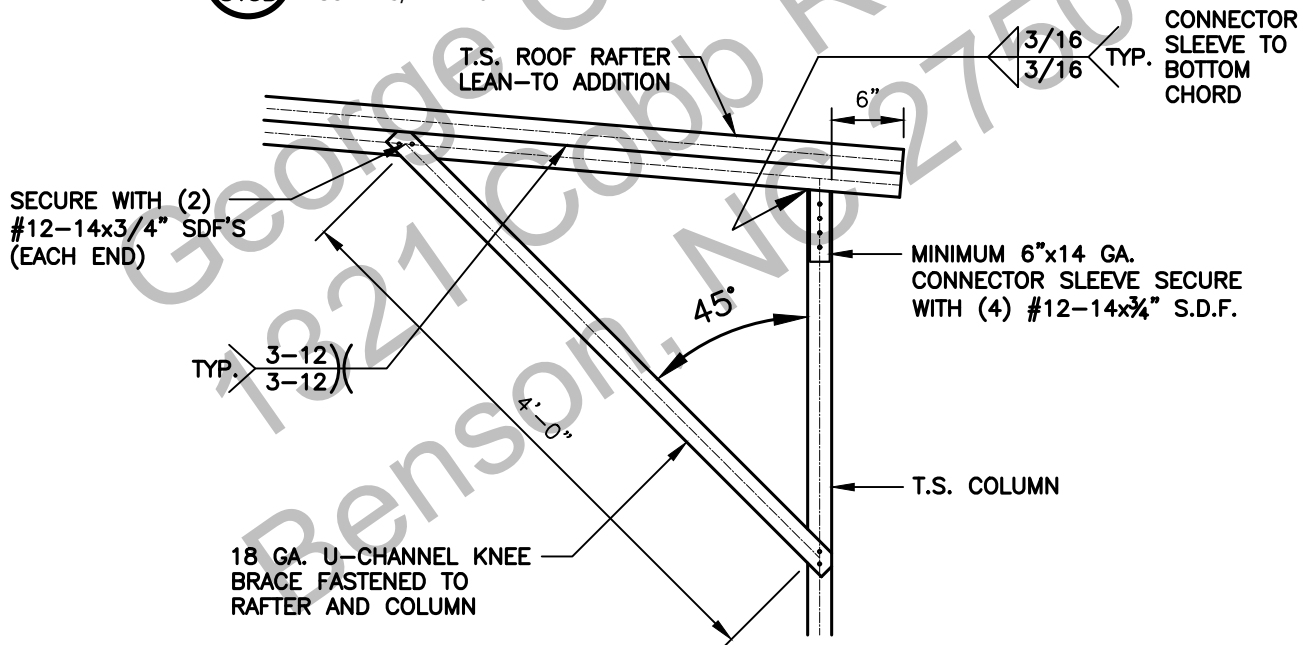
LEAN-TO CONNECTION DETAILS



**BOX EAVE RAFTER COLUMN CONNECTION
DETAIL FOR LEAN-TO RAFTER SPAN <12'-0"**

1
S15B

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



**BOX EAVE RAFTER COLUMN CONNECTION
DETAIL FOR LEAN-TO RAFTER SPAN <15'-0"**

1A
S15B

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



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

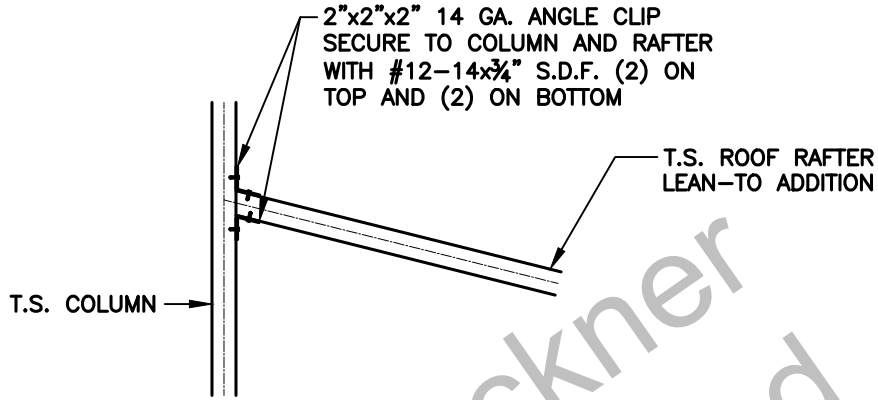
DRAWN BY:
BKS

PROJECT NO:
23-501

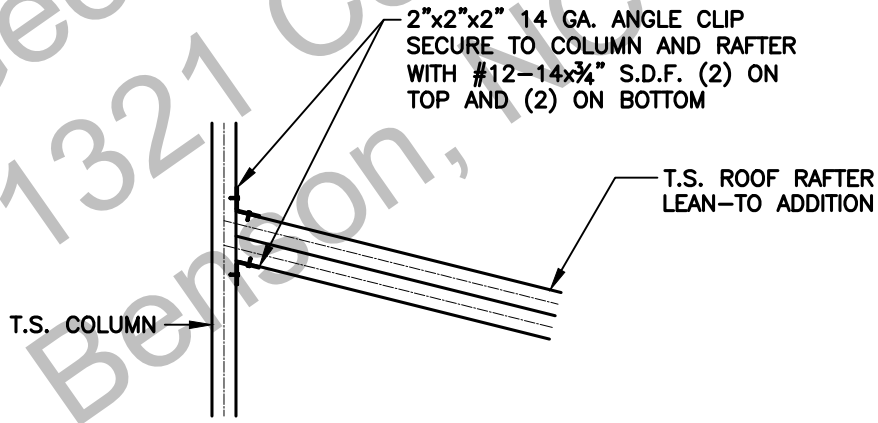
DATE:
2023.01.16

SHEET NO:
S15B

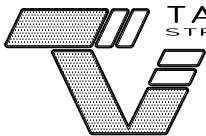
LEAN-TO CONNECTION DETAILS



1
S15C LEAN-TO RAFTER TO RAFTER POST
CONNECTION DETAIL FOR WIDTHS < 12'-0"
SCALE: 3/4" = 1'-0"



1A
S15C LEAN-TO RAFTER TO RAFTER POST
CONNECTION DETAIL FOR WIDTHS < 15'-0"
SCALE: 3/4" = 1'-0"



TAYLOR & VIOLA
STRUCTURAL ENGINEERS
P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

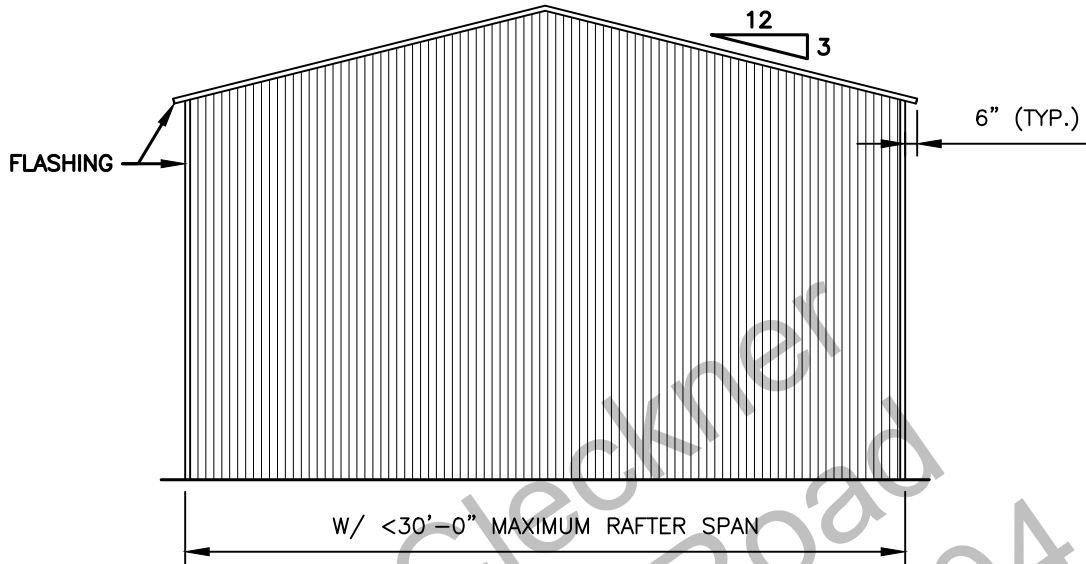
DRAWN BY:
BKS

PROJECT NO:
23-501

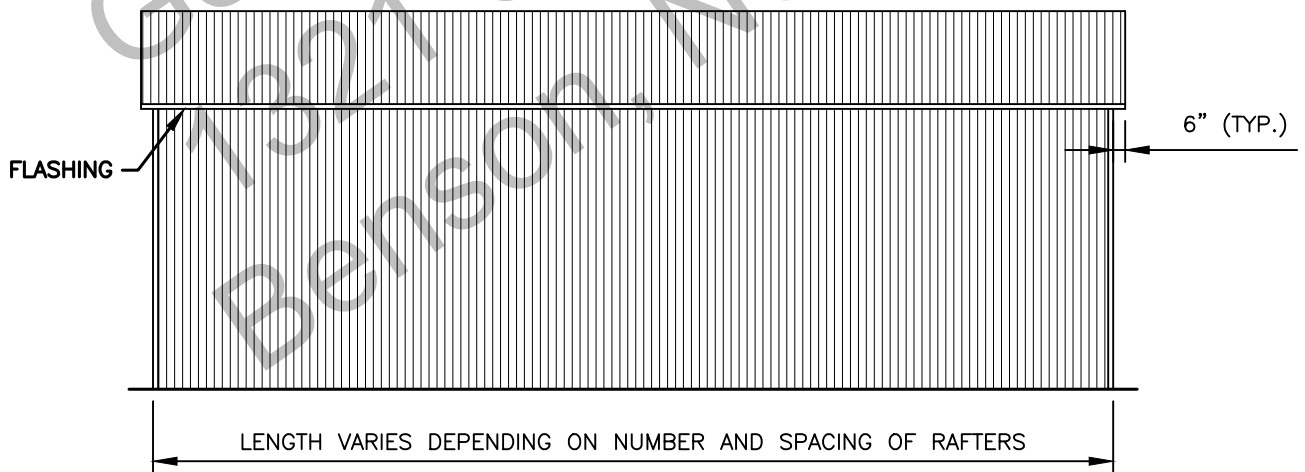
DATE:
2023.01.16

SHEET NO:
S15C

VERTICAL ROOF / SIDING OPTION



TYPICAL END ELEVATION - VERTICAL ROOF / SIDING



TYPICAL SIDE ELEVATION - VERTICAL ROOF / SIDING



TAYLOR & VIOLA
STRUCTURAL ENGINEERS
P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS
2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

DRAWN BY:
BKS

PROJECT NO:
23-501

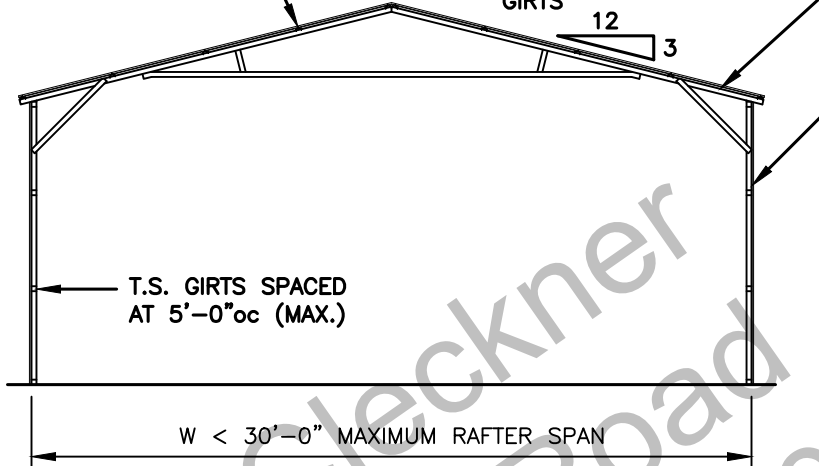
DATE:
2023.01.16

SHEET NO:
S16

VERTICAL ROOF / SIDING OPTION

1.125"-18 GA. HAT CHANNELS FASTENED TO EACH RAFTER WITH (2) #12-14x3/4" S.D.F. SPACED AT 4'-0"oc MAX.

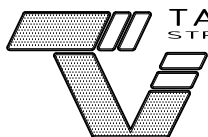
29 GA. GALVANIZED METAL ROOF AND WALL PANELS FASTENED TO HAT CHANNELS AND GIRTS



TYPICAL SECTION VERTICAL ROOF / SIDING OPTION

NOTE:
 H.S.S. 2-1/2"x2-1/2"x14ga. OR
 2-1/4"x2-1/4"x14ga. MATERIAL
 MAY BE USED FOR TRUSS METAL.

George Cleckner
 1321 Old Highway Road
 Benson, NC 27504



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
 METAL BUILDINGS

2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

DRAWN BY:
 BKS

PROJECT NO:
 23-501

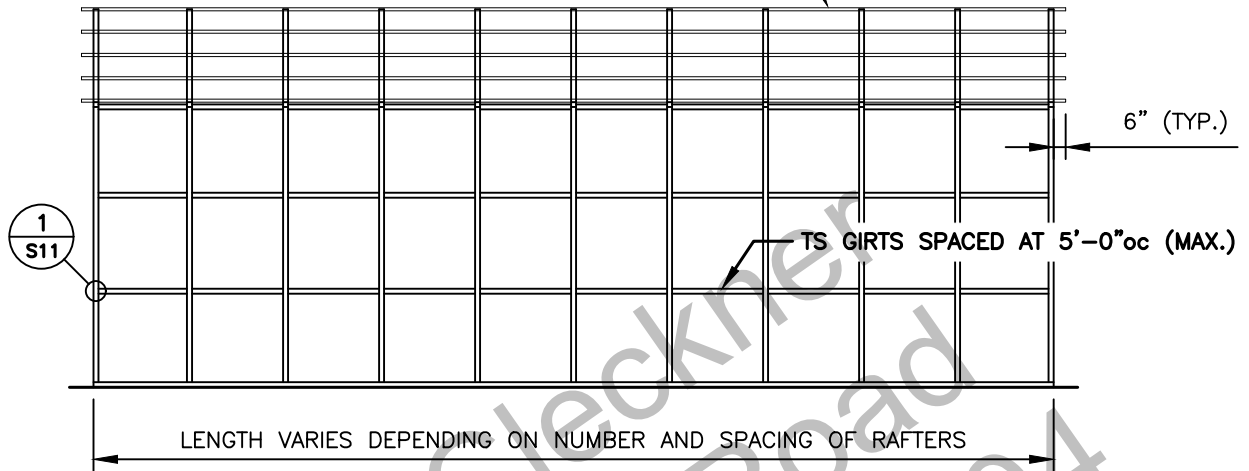
DATE:
 2023.01.16

SHEET NO:
S16A

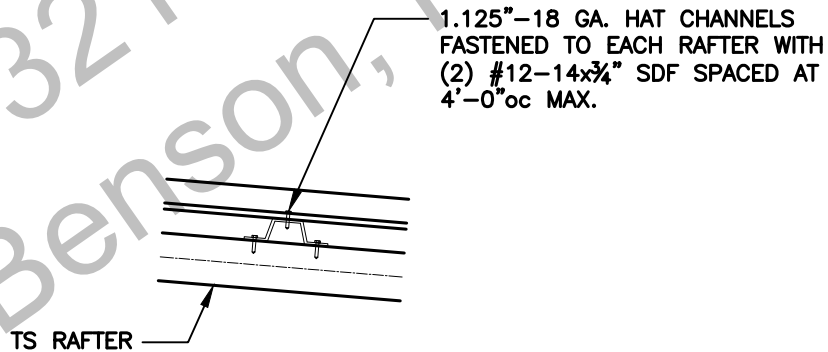
VERTICAL ROOF / SIDING OPTION

SEE NOTES
(SHEET S3)
FOR MAXIMUM
SPACING

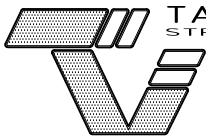
1.125"-18 GA. HAT CHANNELS
FASTENED TO EACH RAFTER
WITH (2) #12-14x3/4" S.D.F.
SPACED AT 4'-0"oc MAX.



TYPICAL SIDE FRAMING SECTION VERTICAL ROOF / SIDING OPTION



ROOF PANEL ATTACHMENT
NTS



TAYLOR & VIOLA
STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
TELE: 828-328-6331 FAX: 828-322-1801
WWW.TAYLORVIOLA.COM

5 STAR
METAL BUILDINGS

2425 OLD HIGHWAY 601
MOUNT AIRY, NORTH CAROLINA 27030
TELE: 844-308-9705

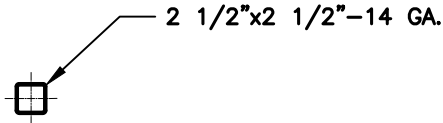
DRAWN BY:
BKS

PROJECT NO:
23-501

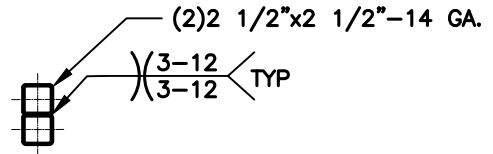
DATE:
2023.01.16

SHEET NO:
S16B

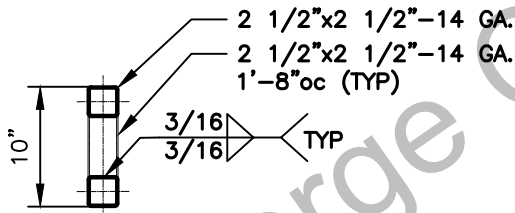
SIDE WALL HEADER OPTIONS



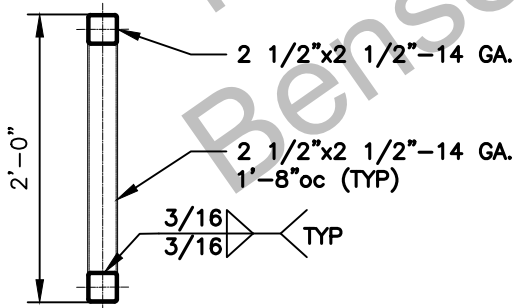
HEADER DETAIL FOR DOOR
OPENINGS < 4'-0"
 NTS



HEADER DETAIL FOR DOOR
OPENINGS 4'-1" < TO < 12'-0"
 NTS



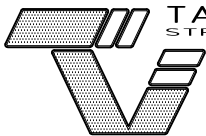
LACED HEADER DETAIL FOR DOOR
OPENINGS 12'-1" < TO < 15'-0"
 NTS



LACED HEADER DETAIL FOR DOOR
OPENINGS 15'-1" < TO < 20'-0"

GENERAL NOTE:

PROVIDE DOUBLE WYTHE HEADER
 ON DOUBLE COLUMNS AND LACED
 COLUMNS



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
 METAL BUILDINGS

2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

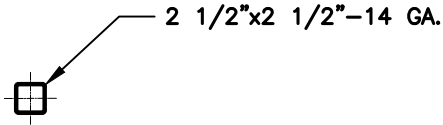
DRAWN BY:
 BKS

PROJECT NO:
 23-501

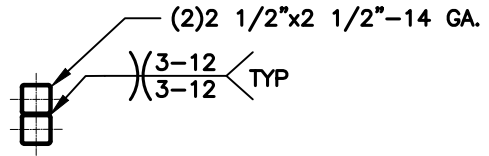
DATE:
 2023.01.16

SHEET NO:
S17

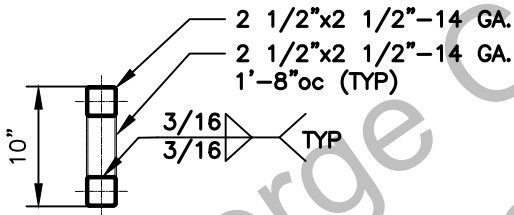
END WALL HEADER OPTIONS



HEADER DETAIL FOR DOOR
OPENINGS < 7'-0"
 NTS



HEADER DETAIL FOR DOOR
OPENINGS 7'-1" < TO < 16'-0"
 NTS



LACED HEADER DETAIL FOR DOOR
OPENINGS 16'-1" < TO < 20'-0"
 NTS

GENERAL NOTE:

PROVIDE DOUBLE WYTHE HEADER
 ON DOUBLE COLUMNS AND LACED
 COLUMNS



TAYLOR & VIOLA
 STRUCTURAL ENGINEERS

P.O.B. 2616 HICKORY NORTH CAROLINA
 TELE: 828-328-6331 FAX: 828-322-1801
 WWW.TAYLORVIOLA.COM

5 STAR
 METAL BUILDINGS

2425 OLD HIGHWAY 601
 MOUNT AIRY, NORTH CAROLINA 27030
 TELE: 844-308-9705

DRAWN BY:
 BKS

PROJECT NO:
 23-501

DATE:
 2023.01.16

SHEET NO:
S17A