

ENCLOSED GABLE END BUILDING

MAXIMUM 30' WIDE X 16' EAVE HEIGHT WITH BOX FRAME / (UP TO) 145 M.P.H. WIND ZONE - 35 P.S.F. SNOW LOAD

FOR:

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

ISSUE DATE: 12/30/2024



12/30/2024

THESE PLANS HAVE BEEN PROPERLY
EXAMINED BY THE UNDERSIGNED. I
DETERMINED THAT THEY COMPLY
WITH EXISTING LOCAL NORTH
CAROLINA CODES AND ARE
APPROPRIATE FOR USE IN THIS AREA

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDER YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

SHEET INDEX

SHEET NUMBER	SHEET TITLE
S0	SEALED COVER 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
S7B	BASE RAIL ANCHORAGE
S7C	BASE RAIL ANCHORAGE
S7D	BASE RAIL ANCHORAGE
S7E	BASE RAIL ANCHORAGE
S7F	BASE RAIL ANCHORAGE
S7G	BASE RAIL ANCHORAGE
S7H	BASE RAIL ANCHORAGE
S8	BASE RAIL ANCHORAGE
S8A	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



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S2

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

DESIGN LOADS:

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

DEAD LOADS ROOF 13 P.S.F.
 ROOF COLLATERAL 0 P.S.F.

LIVE LOADS ROOF 20 P.S.F.

GROUND SNOW LOAD: 15 P.S.F. * DRIFT LOAD HAS NOT BEEN CALCULATED

WIND LOAD: BASIC WIND SPEED 116 M.P.H. ASCE 7-10
 EXPOSURE CATEGORY C

SEISMIC DESIGN CATEGORY ☐ A ☐ B ☒ C ☐ D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

OCCUPANCY CATEGORY II

SPECTRAL RESPONSE ACCELERATION S_s 18.8 %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 ☒ EQUIVALENT LATERAL FORCE ☐ MODAL

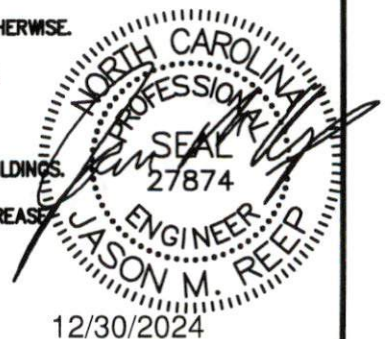
LATERAL DESIGN CONTROL? ☐ EARTHQUAKE ☒ WIND

SOIL BEARING CAPACITIES:

PRESUMPTIVE BEARING CAPACITIES: 1,500 P.S.F.

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 14ga. 50 K.S.I. MIN. UNLESS NOTED OTHERWISE.
4. ALL FASTENERS SHALL BE (2) #12 SELF TAPPING AT 9"o.c. UNLESS NOTED OTHERWISE.
5. 1,500 P.S.F. ASSUMED BEARING CAPACITY UNLESS NOTED OTHERWISE.
6. THESE DRAWINGS ARE NOT APPLICABLE TO PARTIALLY OPEN / ENCLOSED OR OPEN BUILDINGS.
7. IF FRAME SPACING IS AT 48"oc (SIDE & END WALLS) - GROUND SNOW LOAD CAN INCREASE TO 36 P.S.F. (EXCLUDING DRIFT).
8. THESE DRAWINGS ARE NOT FOR SLEEPING QUARTERS.



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

JCMT Associates, PLLC
 211 Stone Drive, Pilot Mountain, NC 27041
 Telephone: (336) 399-6277

V2.1

Donald Mceachin
 9370 Old Us 421
 Broadway, NC 27505

DRAWN BY:
 BKS

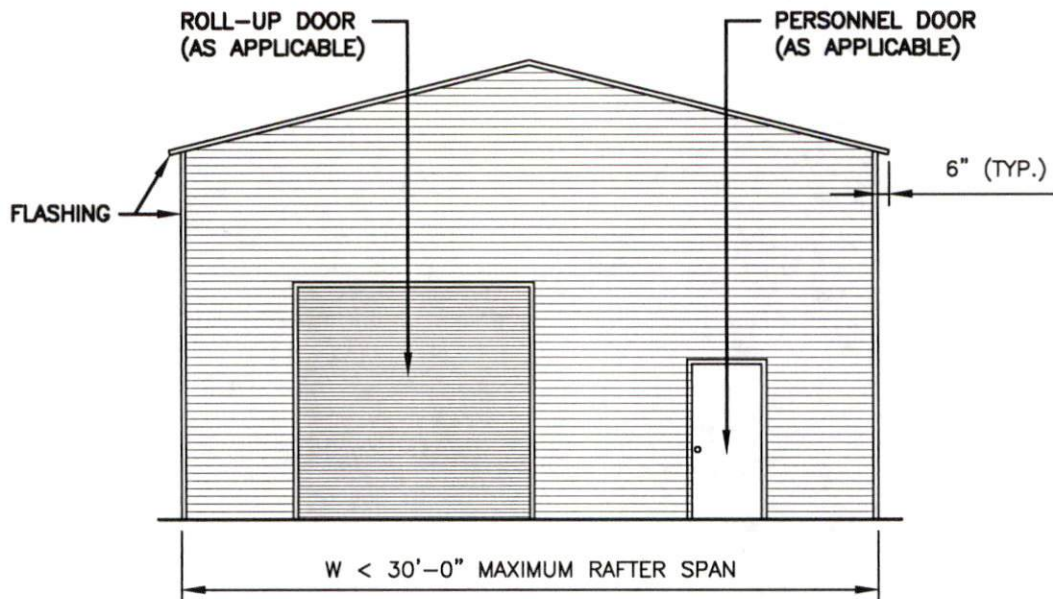
PROJECT NO:
 0724-0147

DATE:
 12/30/24

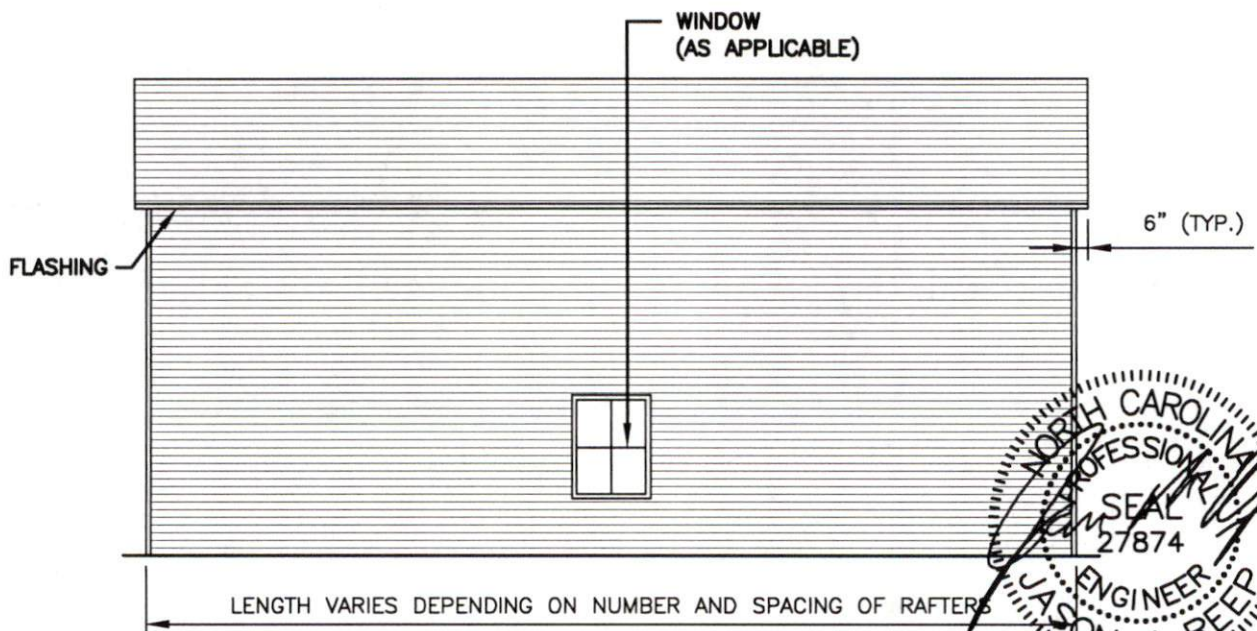
SHEET NO:
 S3

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

BOX EVE FRAME RAFTER STURCTURE



TYPICAL END ELEVATION



TYPICAL SIDE ELEVATION

12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

DATE:
12/30/24

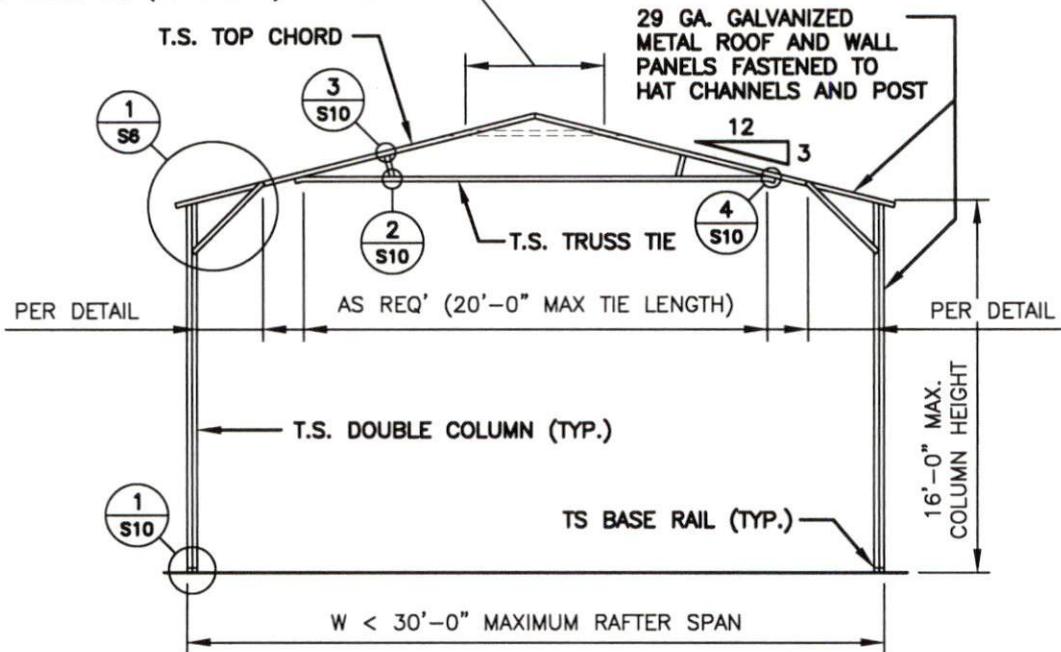
SHEET NO:
S4

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

'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

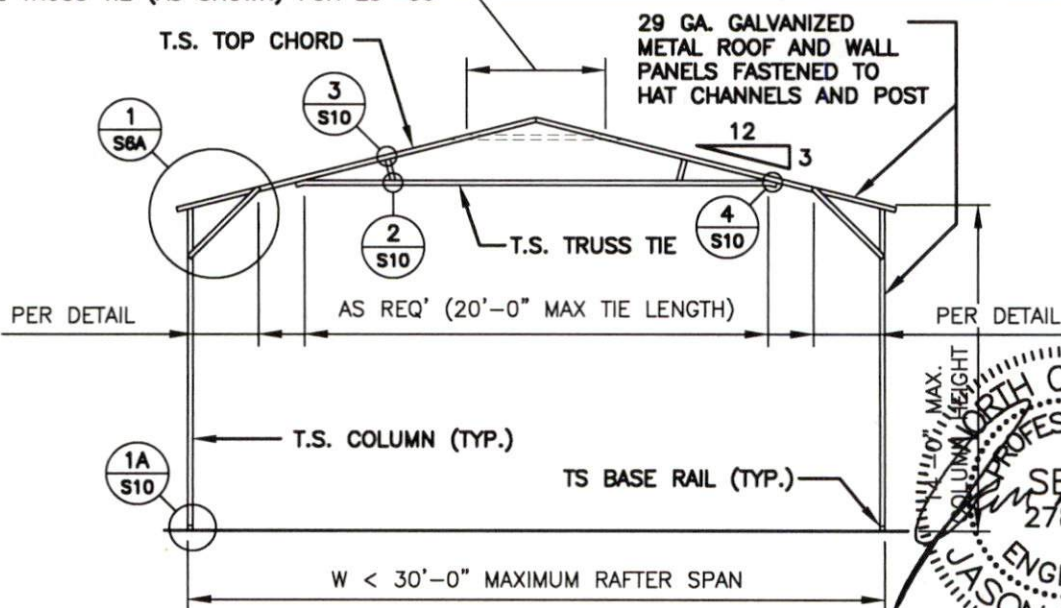
'U' BRACE TRUSS TIE - NOTE:

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

12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:

BKS

PROJECT NO:

0724-0147

DATE:

12/30/24

SHEET NO:

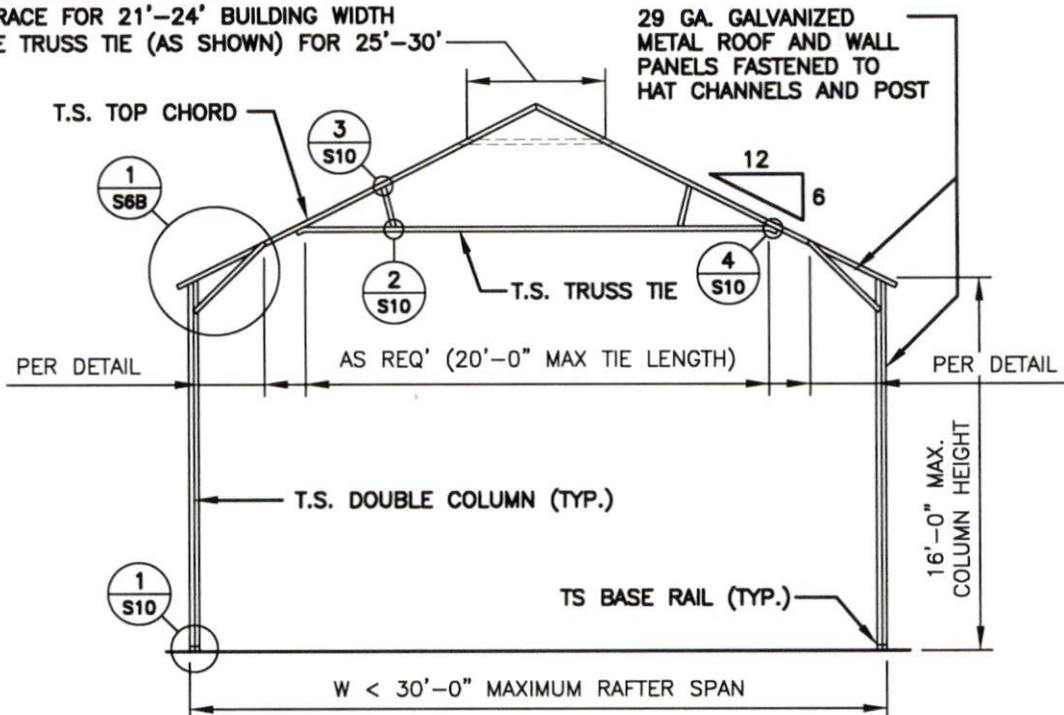
S5

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

'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

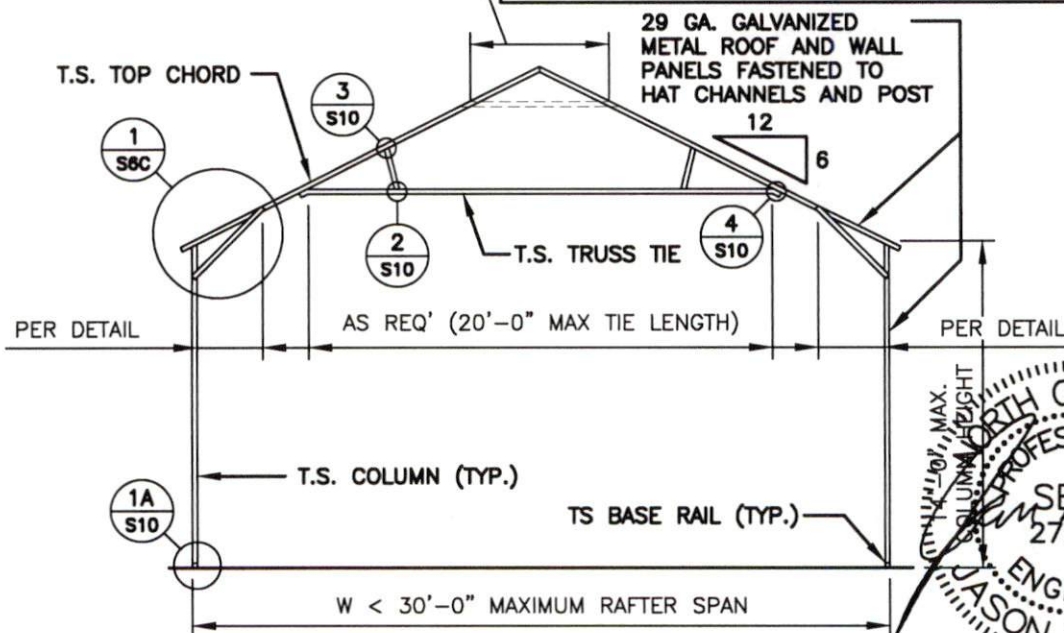
'U' BRACE TRUSS TIE - NOTE:

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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V21

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

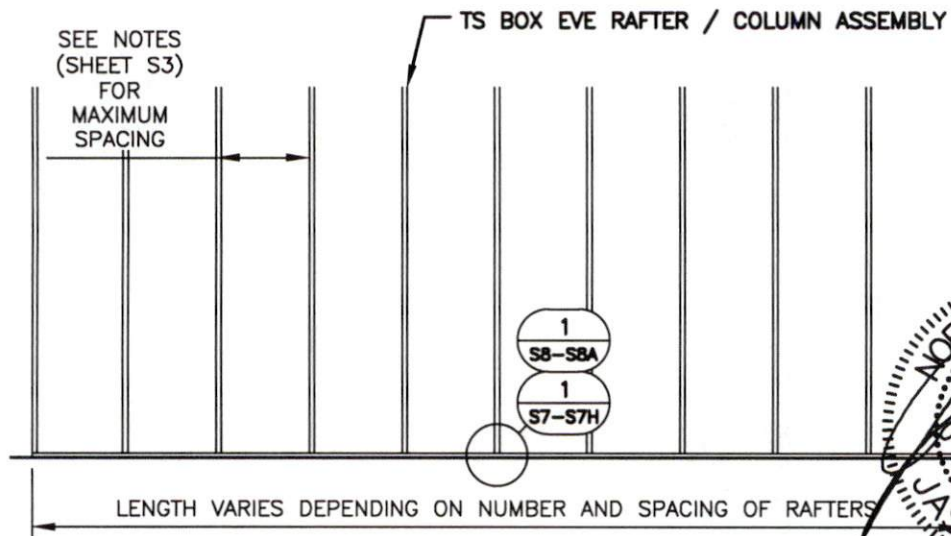
PROJECT NO:
0724-0147

DATE:
12/30/24

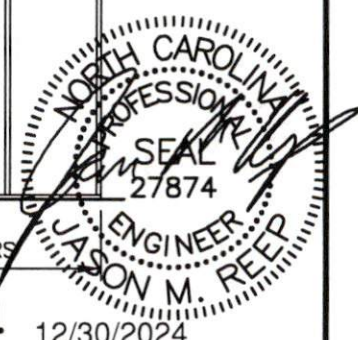
SHEET NO:
SSA

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

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



12/30/2024



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

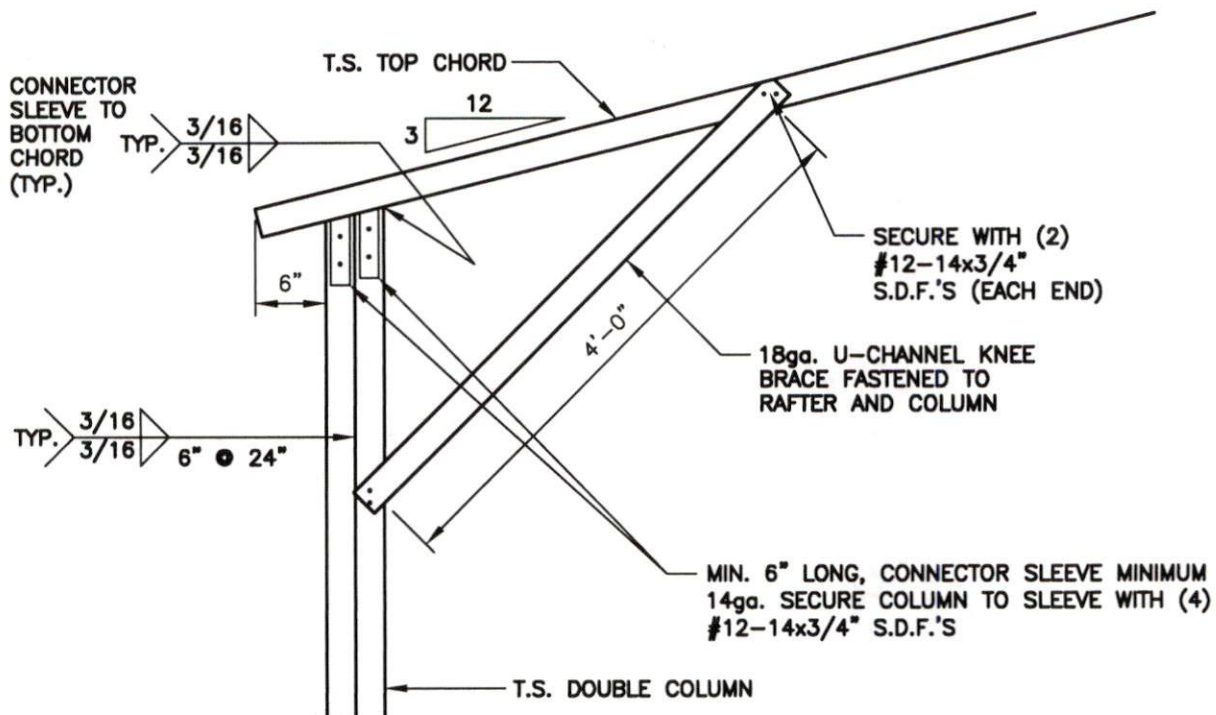
JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

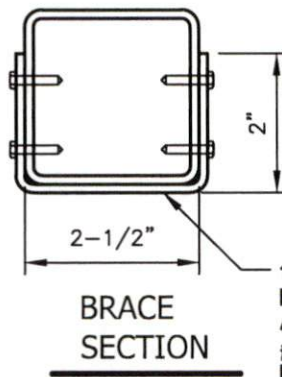
Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY: BKS	PROJECT NO: 0724-0147
DATE: 12/30/24	SHEET NO: S58

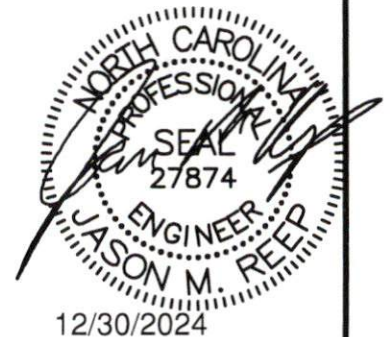
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



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



18ga. U-CHANNEL BRACE FASTENED TO THE COLUMN AND BOTTOM CHORD, WITH #12-14x3/4" S.D.F.'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

JCMT Associates, PLLC
 211 Stone Drive, Pilot Mountain, NC 27041
 Telephone: (336) 399-6277

V2.1

Donald Mceachin
 9370 Old Us 421
 Broadway, NC 27505

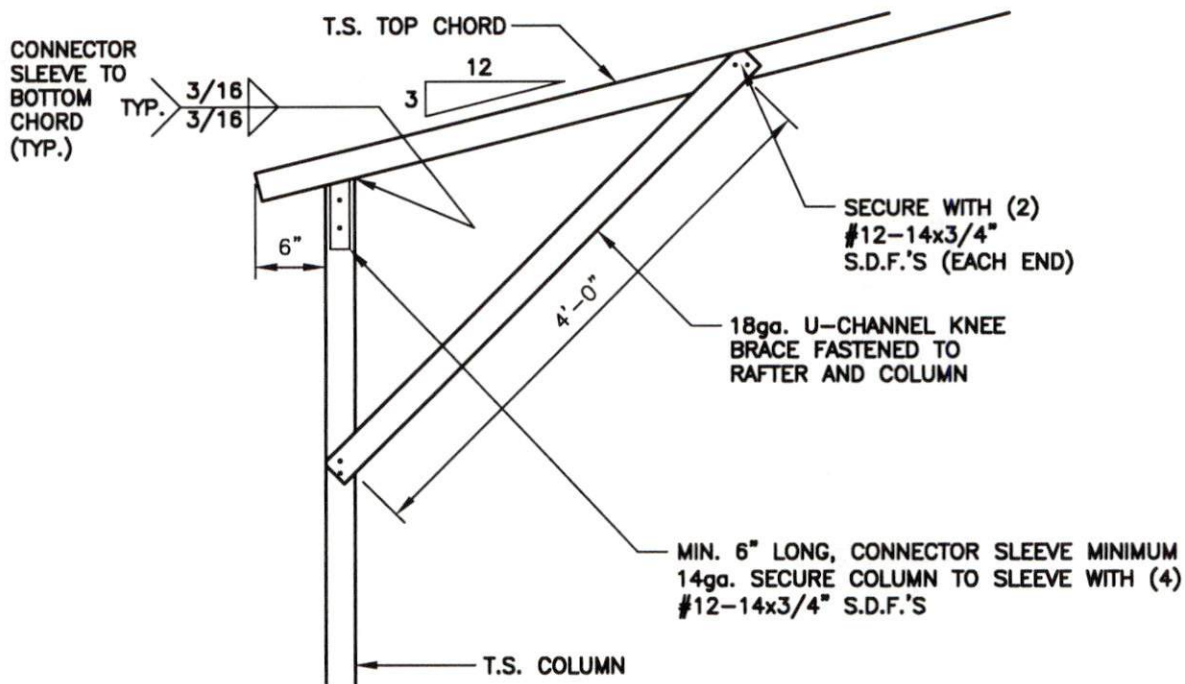
DRAWN BY:
 BKS

PROJECT NO:
 0724-0147

DATE:
 12/30/24

SHEET NO:
S6

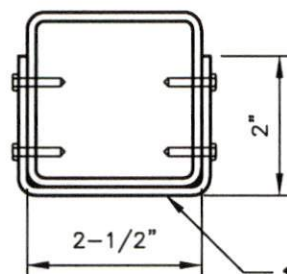
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



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

S6A

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



BRACE
SECTION

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S6A

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONNECTOR
SLEEVE TO
BOTTOM
CHORD
(TYP.)

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

T.S. TOP CHORD

12

6

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

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

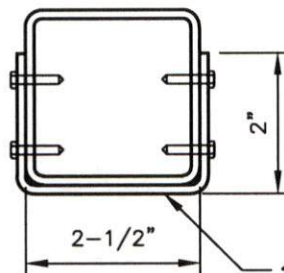
MIN. 6" LONG, CONNECTOR SLEEVE MINIMUM
14ga. SECURE COLUMN TO SLEEVE WITH (4)
#12-14x3/4" S.D.F.'S

T.S. COLUMN

1
S6C

BOX EAVE / CORNER POST CONNECTION DETAIL FOR HEIGHTS 14'-1" < TO <16'-0"

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



BRACE
SECTION

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

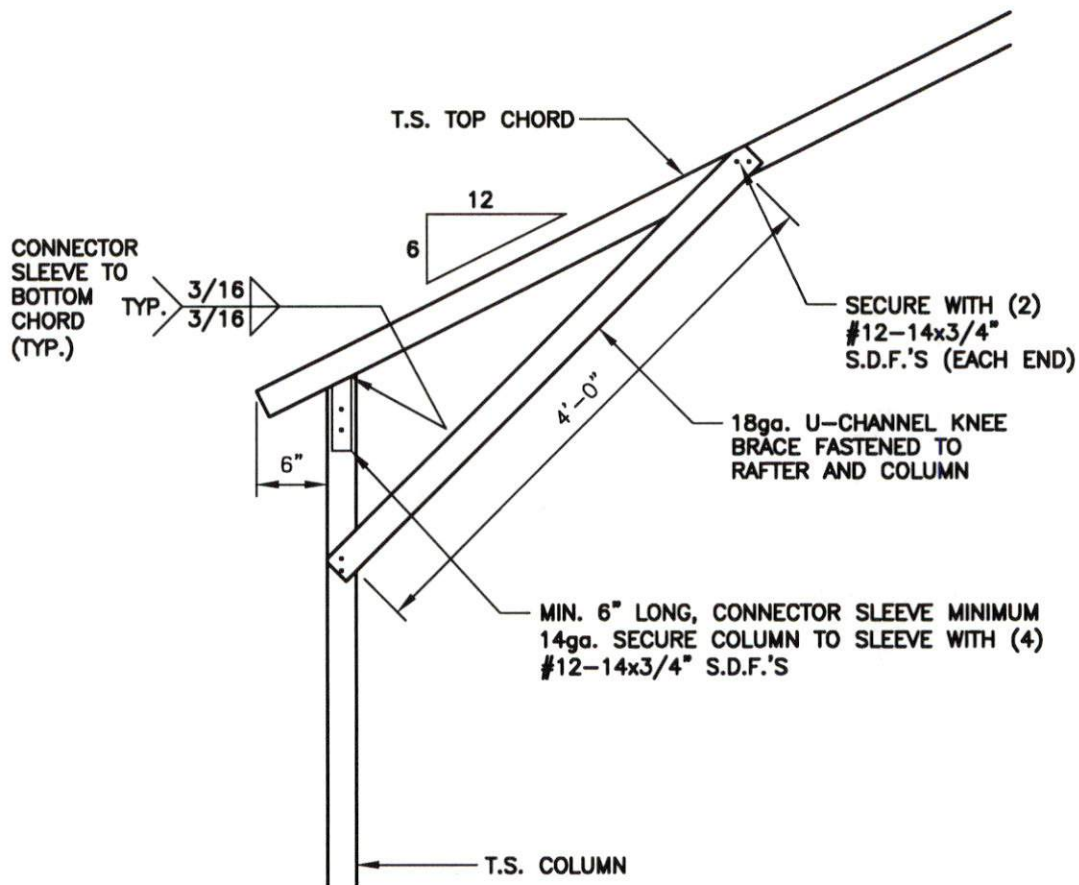
DRAWN BY:
BKS

PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S6B

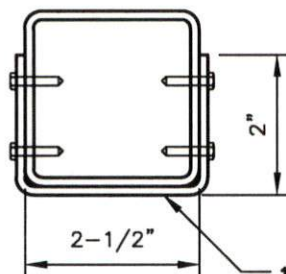
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.



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

S6C

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



BRACE SECTION

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

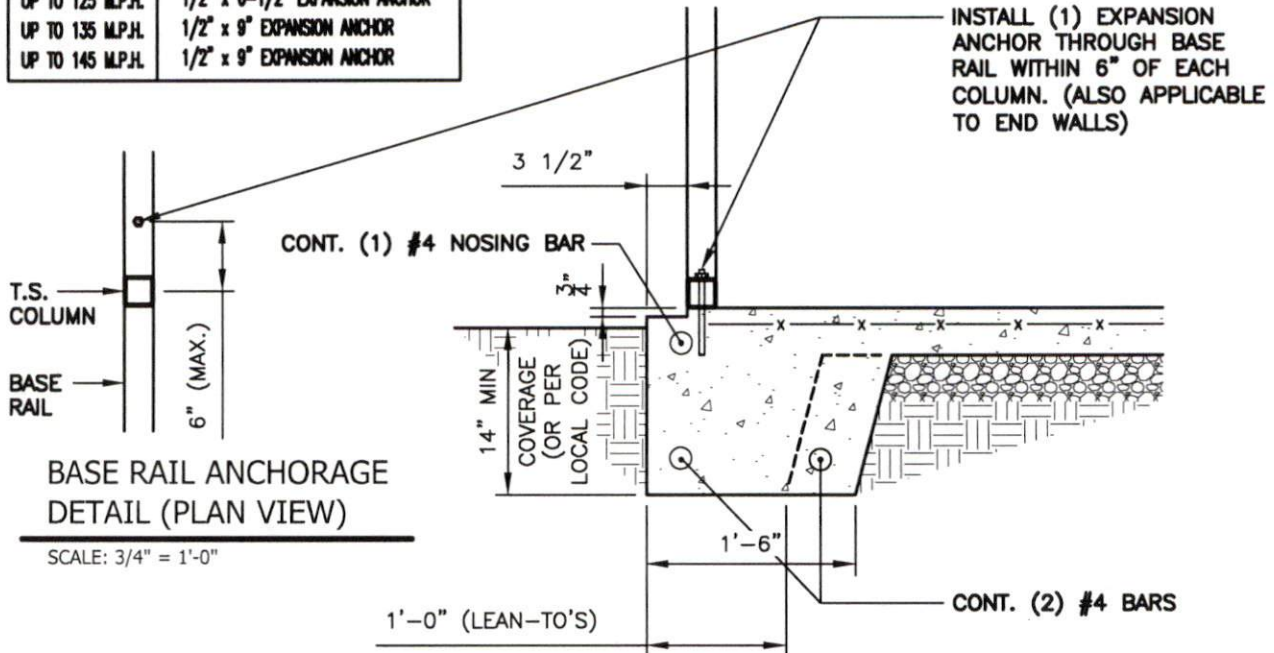
DATE:
12/30/24

SHEET NO:
S6C

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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.



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

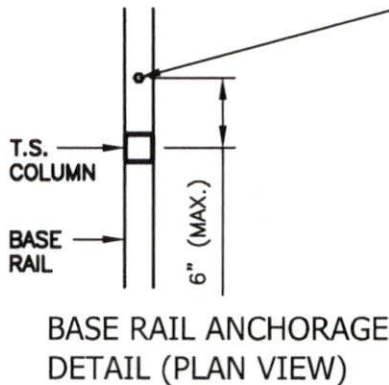
DATE:
12/30/24

SHEET NO:
S7

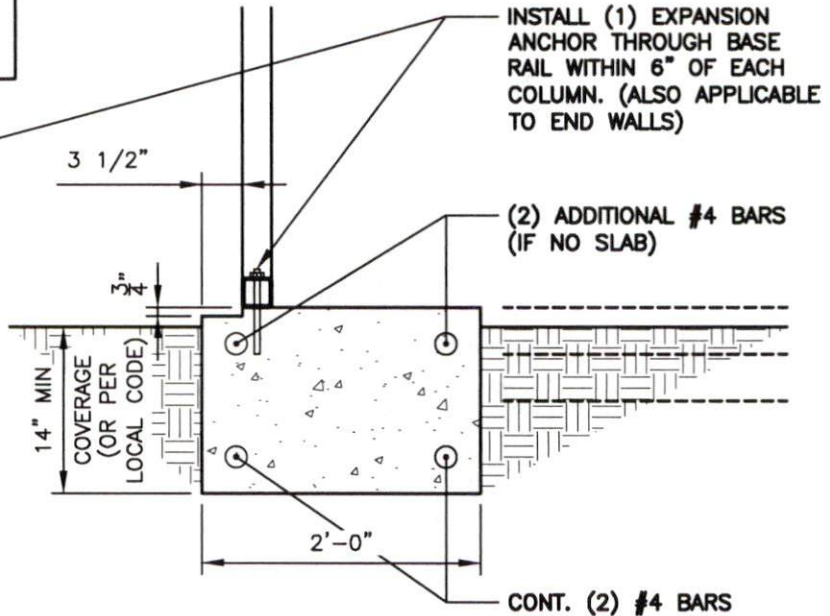
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE (NO SLAB)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



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



BASE RAIL ANCHORAGE DETAIL (NO SLAB)

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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.



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

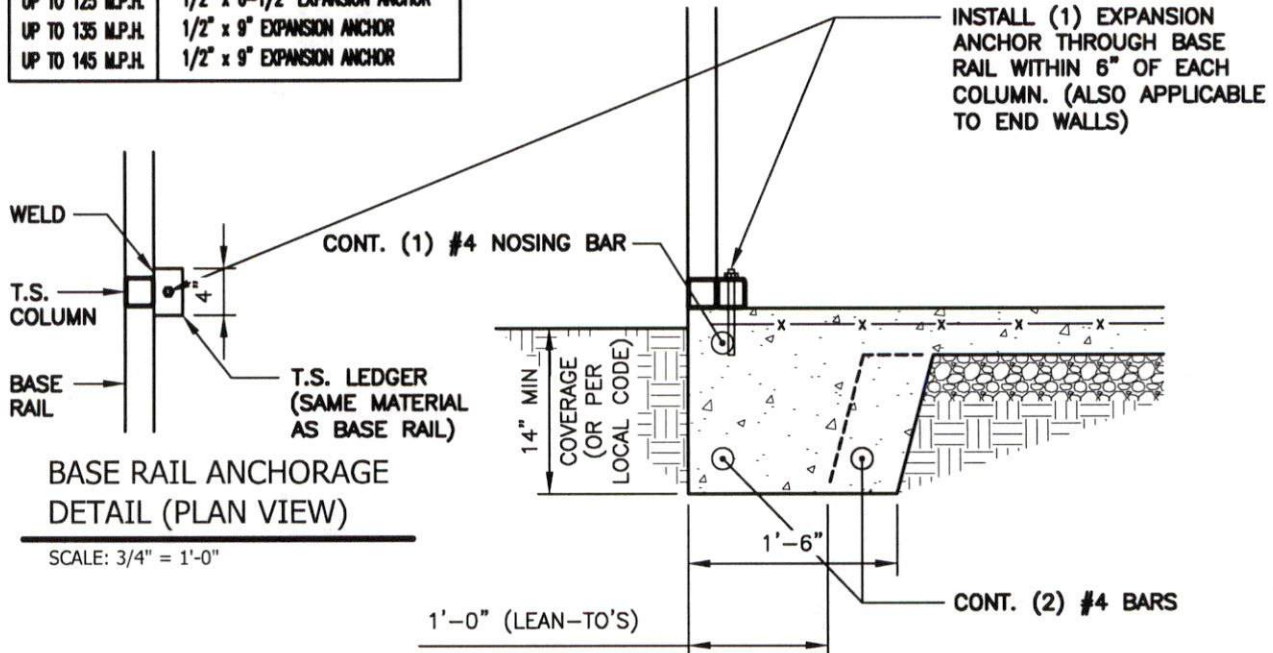
DATE:
12/30/24

SHEET NO:
S7A

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE (NO LEDGE)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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.



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

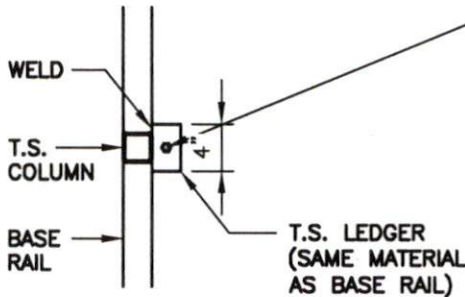
DATE:
12/30/24

SHEET NO:
S7B

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

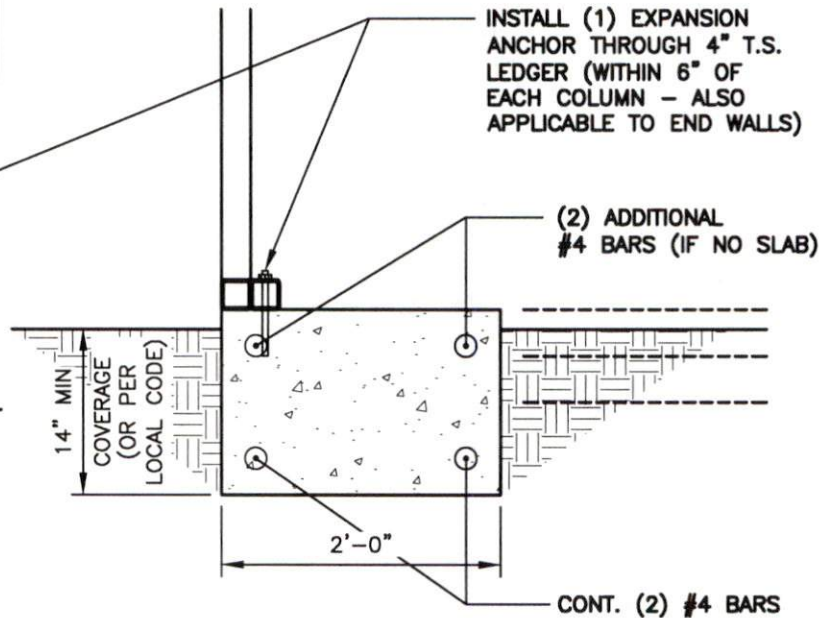
CONCRETE BASE RAIL ANCHORAGE (NO LEDGE / NO SLAB)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



BASE RAIL ANCHORAGE
DETAIL (PLAN VIEW)

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



BASE RAIL ANCHORAGE DETAIL (NO SLAB)

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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.



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

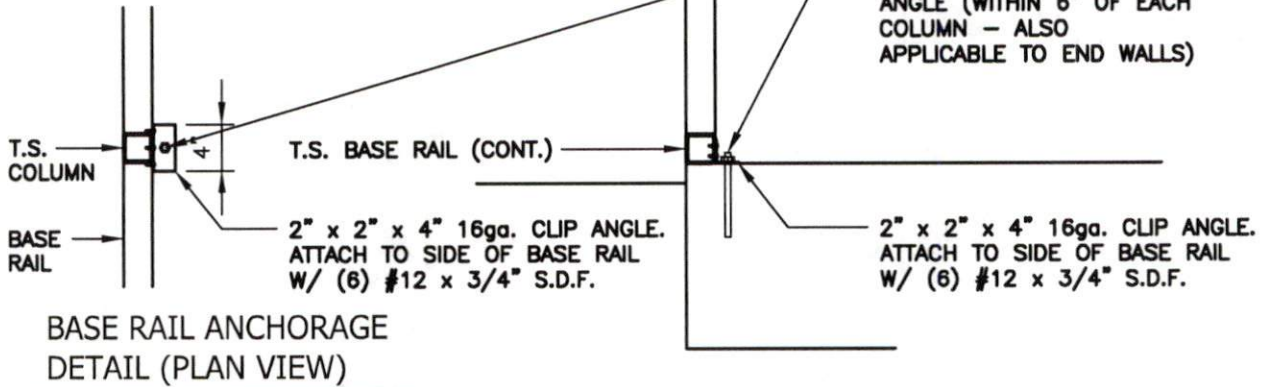
DATE:
12/30/24

SHEET NO:
S7C

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE (CLIP ANGLE ATTACHMENT OPTION)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



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

BASE RAIL ANCHORAGE DETAIL (CLIP ANGLE ATTACHMENT OPTION)



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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

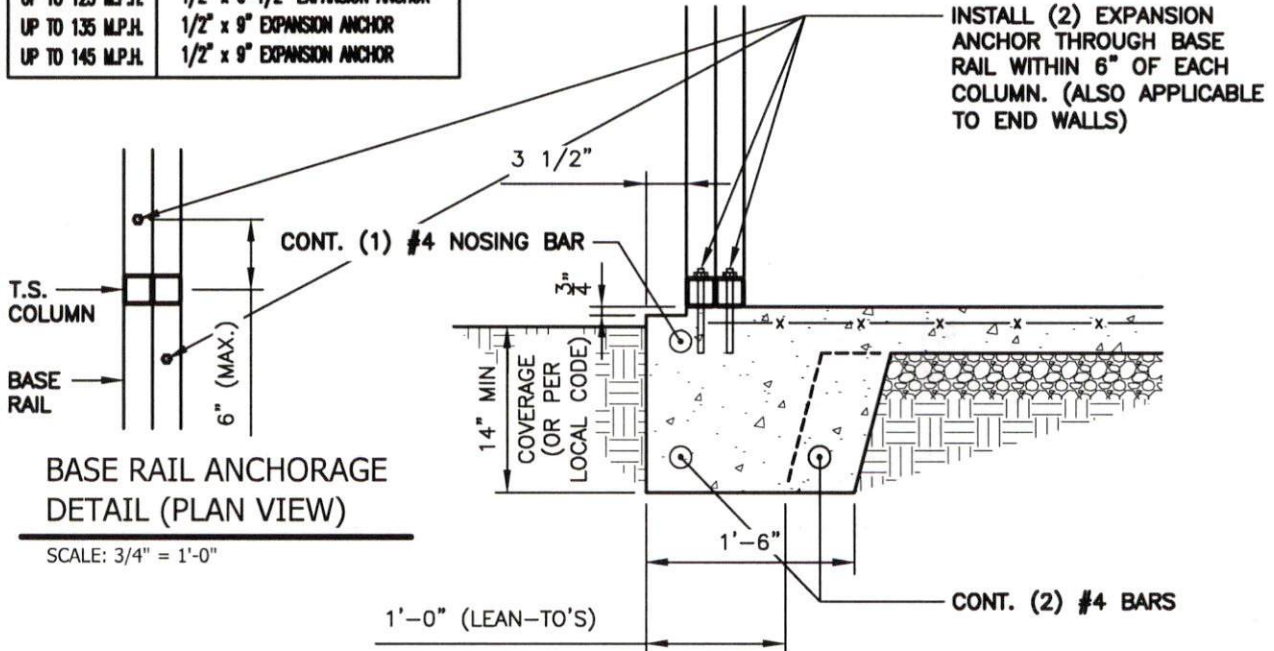
DATE:
12/30/24

SHEET NO:
S7D

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



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

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



BASE RAIL ANCHORAGE DETAIL

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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.



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald McEachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

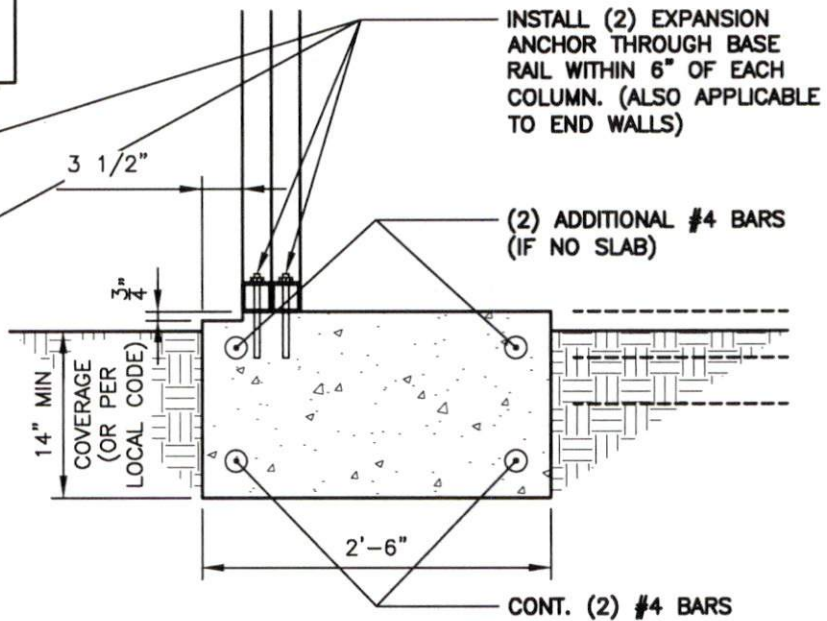
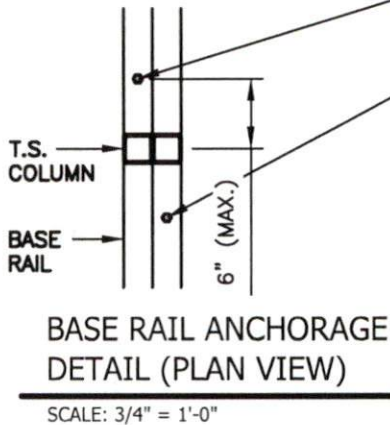
DATE:
12/30/24

SHEET NO:
S7E

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE (NO SLAB)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



BASE RAIL ANCHORAGE DETAIL (NO SLAB)

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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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 REINFORCING 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.



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

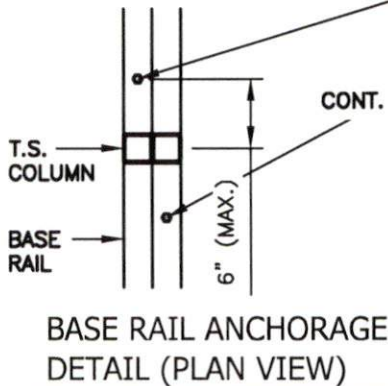
DATE:
12/30/24

SHEET NO:
S7F

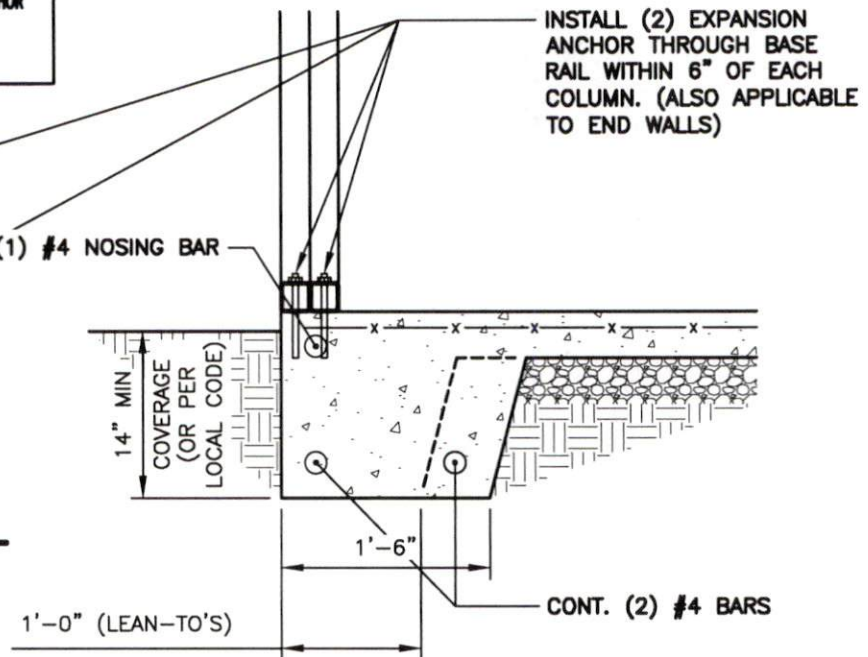
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONCRETE BASE RAIL ANCHORAGE (NO LEDGE)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



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



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

GENERAL NOTES:

ALL CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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 REINFORCING STEEL 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.



12/30/2024



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

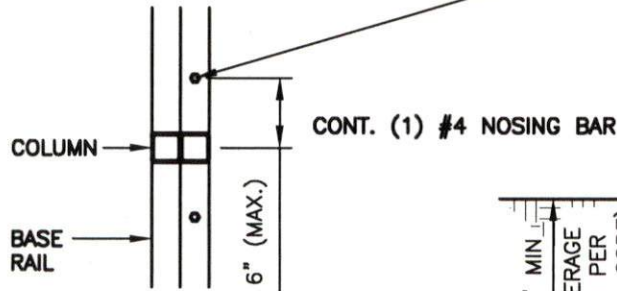
DATE:
12/30/24

SHEET NO:
S7G

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

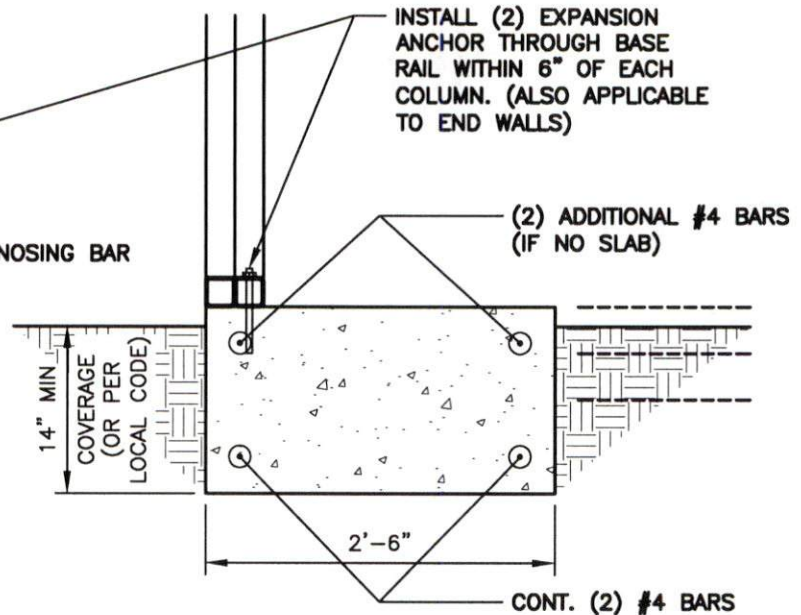
CONCRETE BASE RAIL ANCHORAGE (NO LEDGE / NO SLAB)

ANCHORAGE BOLT SCHEDULE	
WIND SPEED	BOLT SIZE
UP TO 115 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 125 M.P.H.	1/2" x 6-1/2" EXPANSION ANCHOR
UP TO 135 M.P.H.	1/2" x 9" EXPANSION ANCHOR
UP TO 145 M.P.H.	1/2" x 9" EXPANSION ANCHOR



**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 1,500 P.S.F.

CONCRETE:

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 P.S.I. 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.



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald McEachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

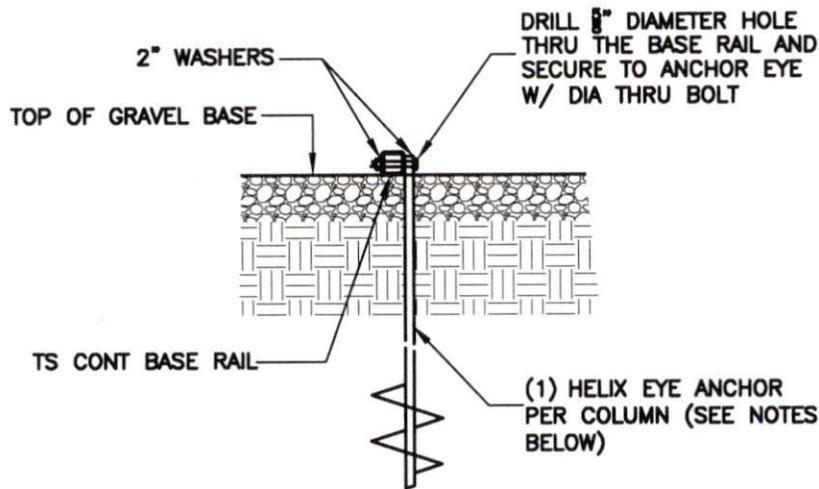
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S7H

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

SOIL NAIL BASE RAIL ANCHORAGE



BASE RAIL ANCHORAGE DETAIL

SCALE: 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 AND 20'-0"oc MAX. WITH #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 AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

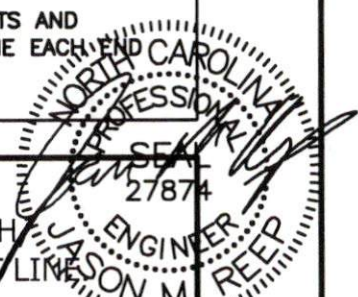
FOR MED DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILTS, AND CLAYS, USE MIN (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH 50" EMBEDMENT - ONE EACH END BASE RAIL AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

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 AND 20'-0"oc MAX. WITH #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 AND 20'-0"oc MAX. WITH #4 REBAR AT 5'-0"oc BETWEEN.

NOTE:

IN ALL CASES, IF FROST DEPTH EXCEEDS STATED DEPTH, ANCHOR SHOULD EXTEND A MIN. OF 12" BELOW FROST LINE.



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

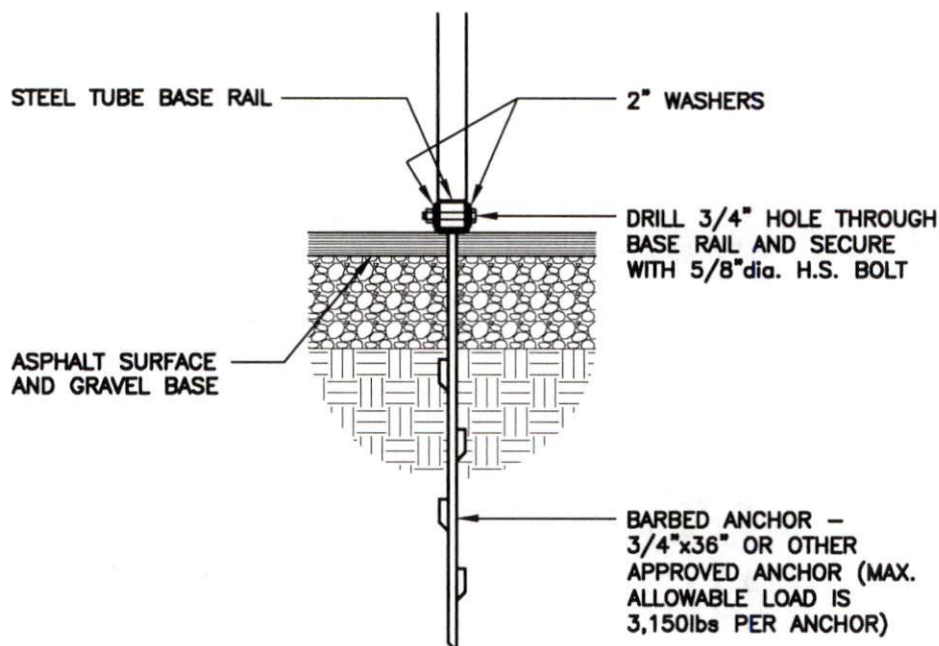
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S8

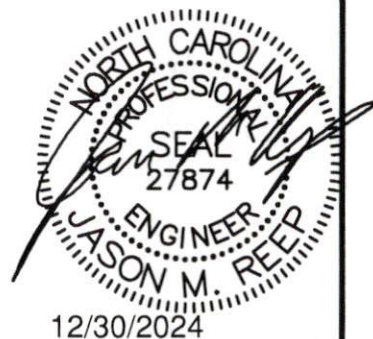
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

ASPHALT ANCHOR BASE RAIL ANCHORAGE



ASPHALT / BASE RAIL ANCHORAGE DETAIL

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

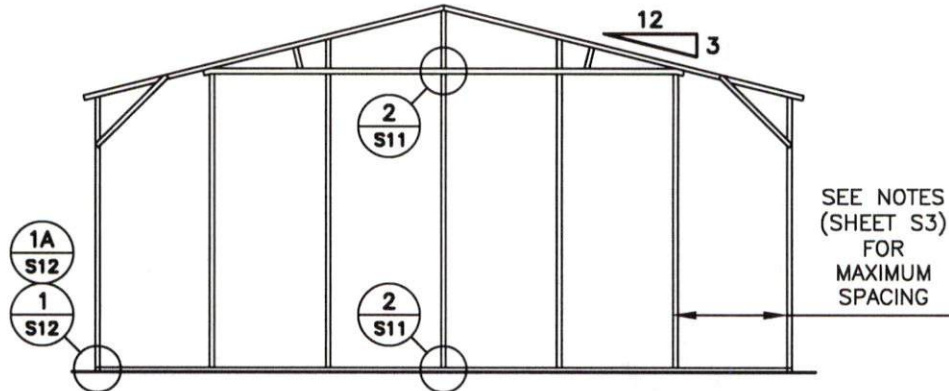
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
SBA

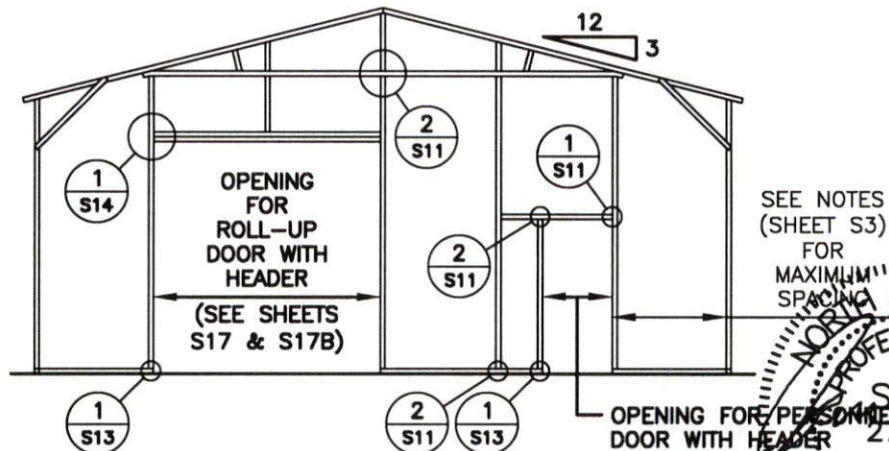
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

DATE:
12/30/24

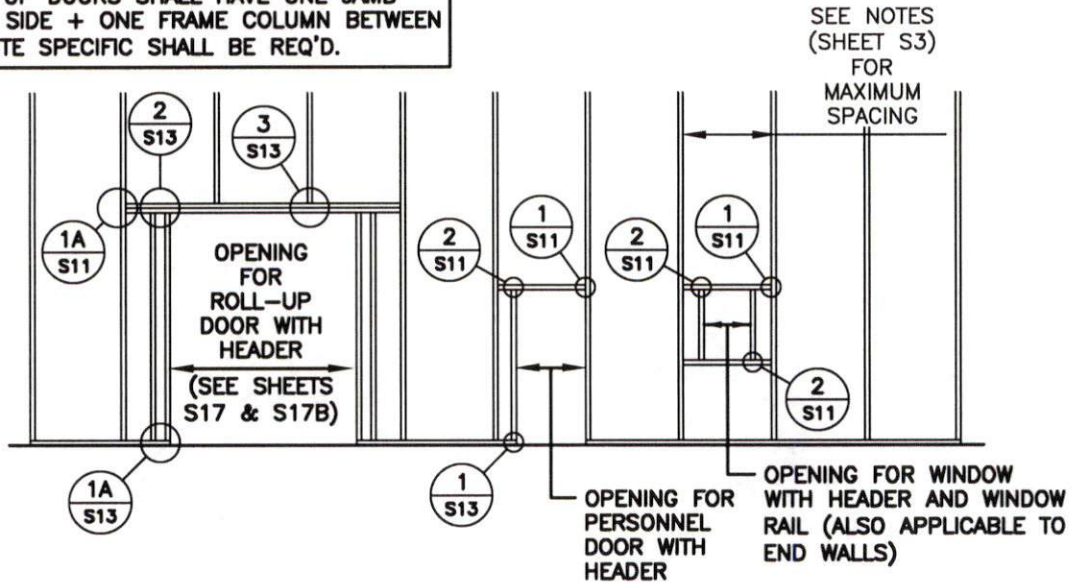
PROJECT NO:
0724-0147

SHEET NO:
S9

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

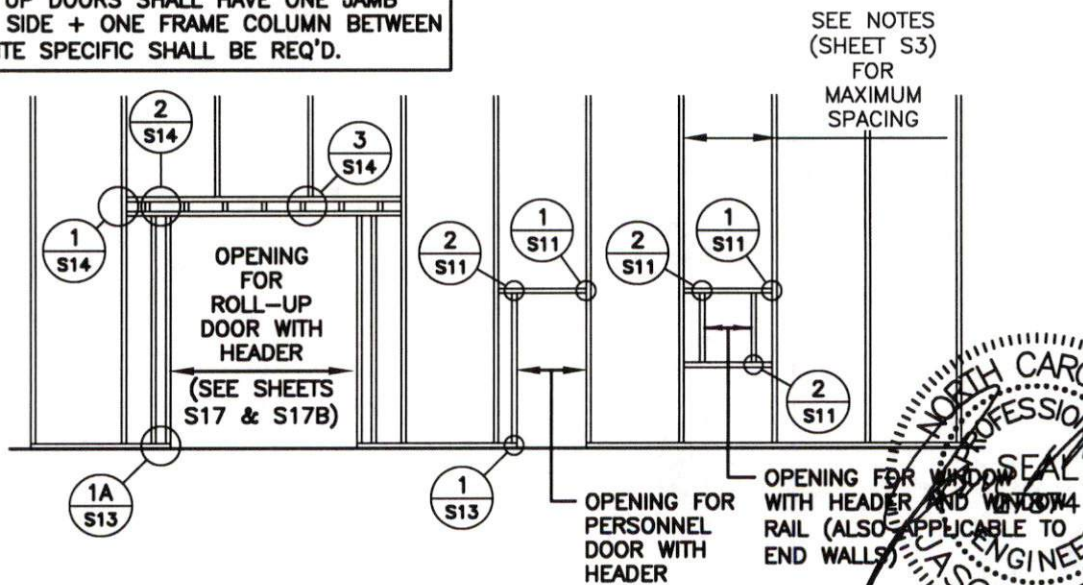
BOX EVE RAFTER END WALL AND SIDE WALL OPENINGS

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

12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

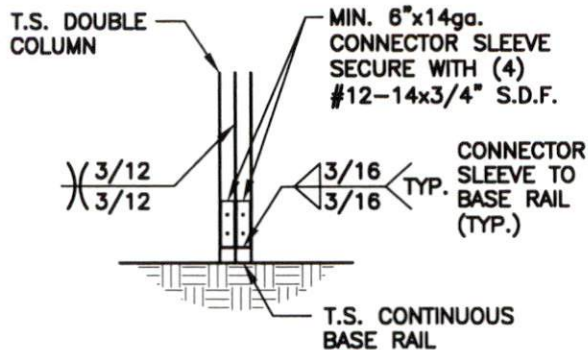
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S9A

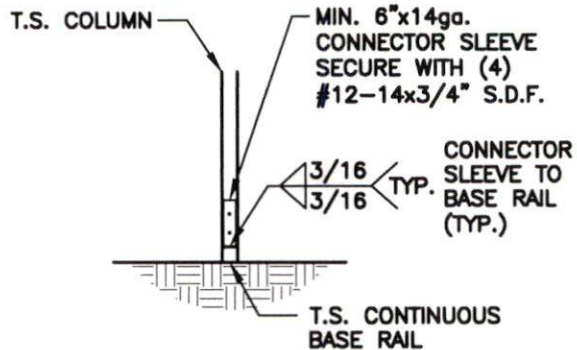
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONNECTION DETAILS



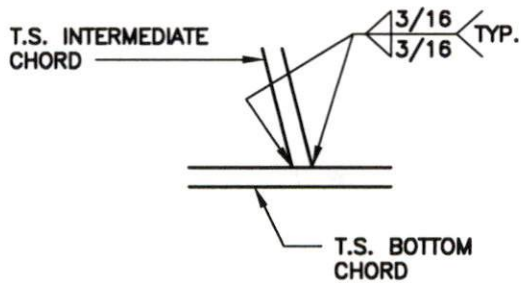
1
S10 POST / BASE RAIL
CONNECTION DETAIL

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



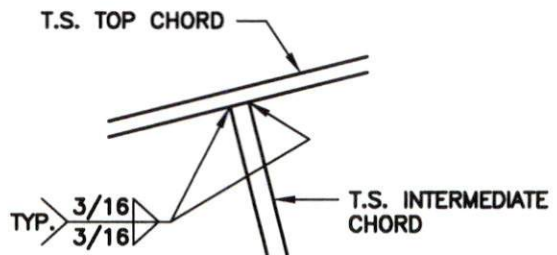
1A
S10 POST / BASE RAIL
CONNECTION DETAIL

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



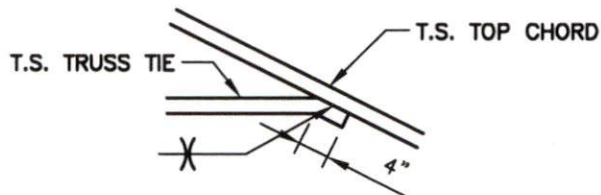
2
S10 INTERMEDIATE CHORD
TO BOTTOM CHORD
CONNECTION DETAIL

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



3
S10 INTERMEDIATE CHORD TO TOP
CHORD CONNECTION DETAIL

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



4
S10 TRUSS TIE
CONNECTION DETAIL

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

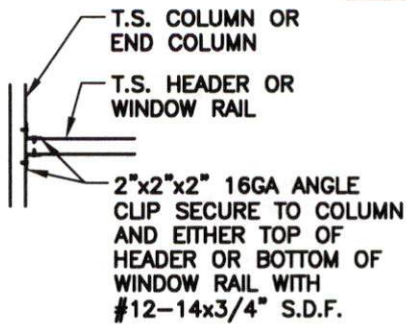
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S10

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

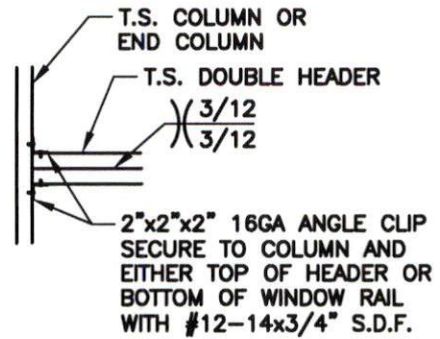
CONNECTION DETAILS



COLUMN OR WINDOW
RAIL / WALL GIRT TO POST
CONNECTION DETAIL

1
S11

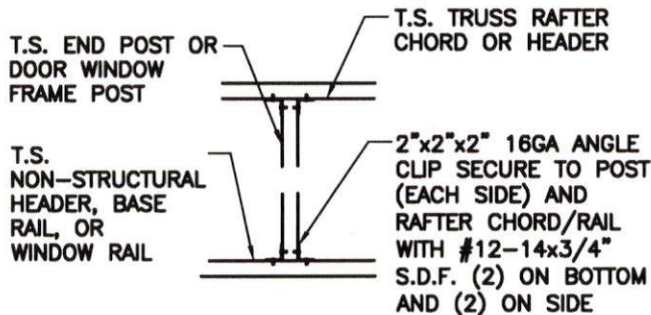
SCALE: 1/2" = 1'-0"



COLUMN / DOUBLE HEADER
CONNECTION DETAIL

1A
S11

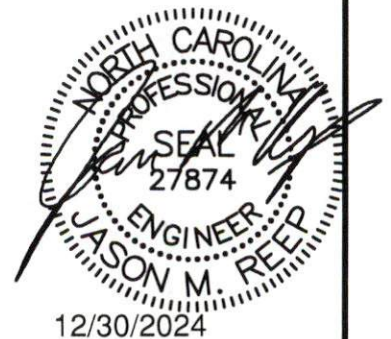
SCALE: 1/2" = 1'-0"



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

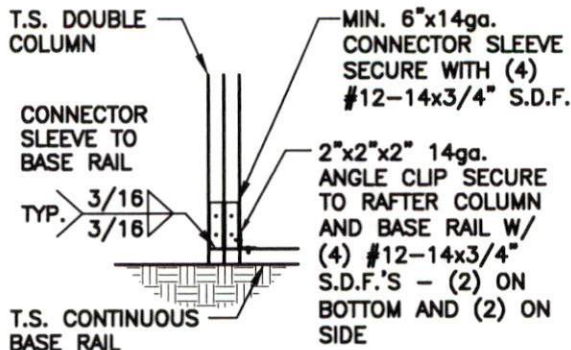
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S11

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

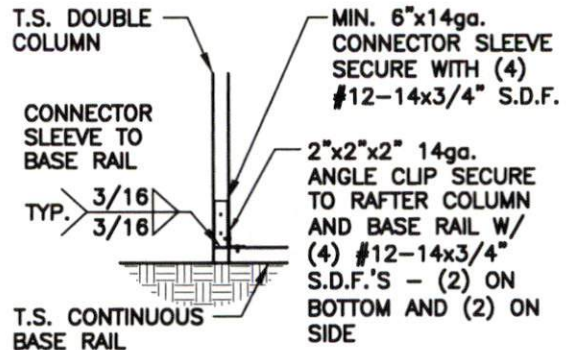
CONNECTION DETAILS



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"



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

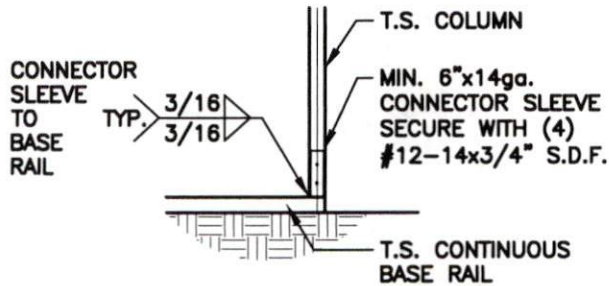
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S12

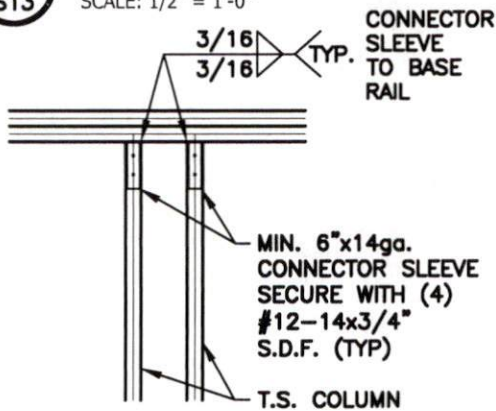
NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

CONNECTION DETAILS



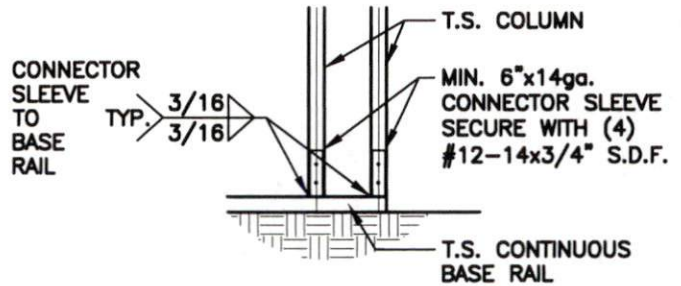
1
S13 COLUMN / BASE RAIL
CONNECTION DETAIL

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



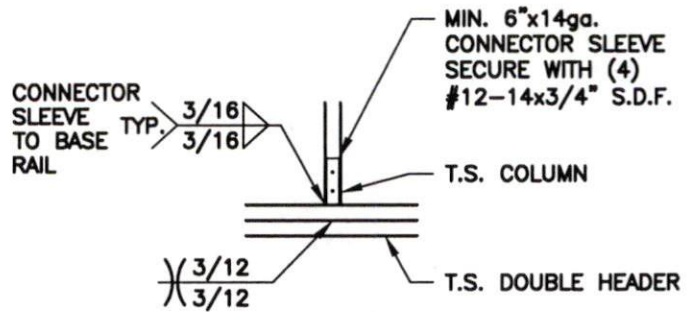
2
S13 DOUBLE HEADER / COLUMN
CONNECTION DETAIL

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



1A
S13 COLUMN / BASE RAIL
CONNECTION DETAIL

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



3
S13 COLUMN / DOUBLE HEADER
CONNECTION DETAIL

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

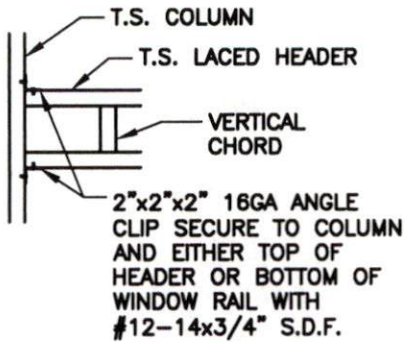
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S13

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

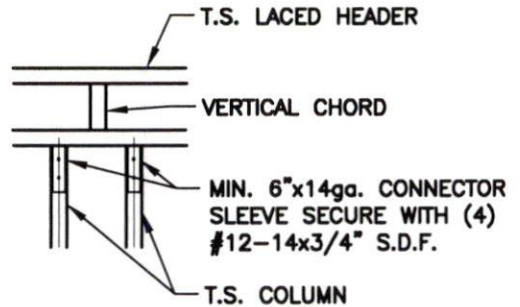
CONNECTION DETAILS



COLUMN / LACED HEADER
CONNECTION DETAIL

1
S14

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

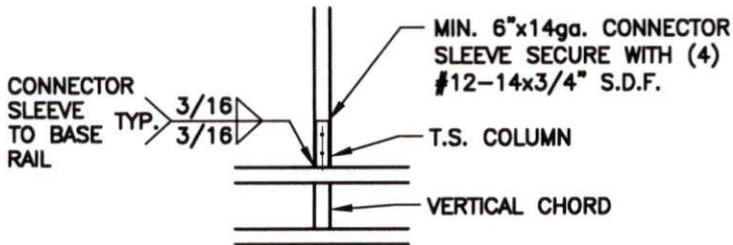


LACED HEADER / COLUMN
CONNECTION DETAIL

2
S14

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

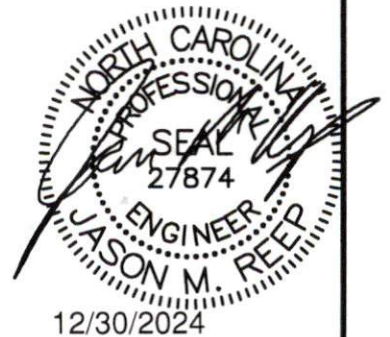
CONCRETE BASE RAIL ANCHORAGE



COLUMN / LACED HEADER
CONNECTION DETAIL

3
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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

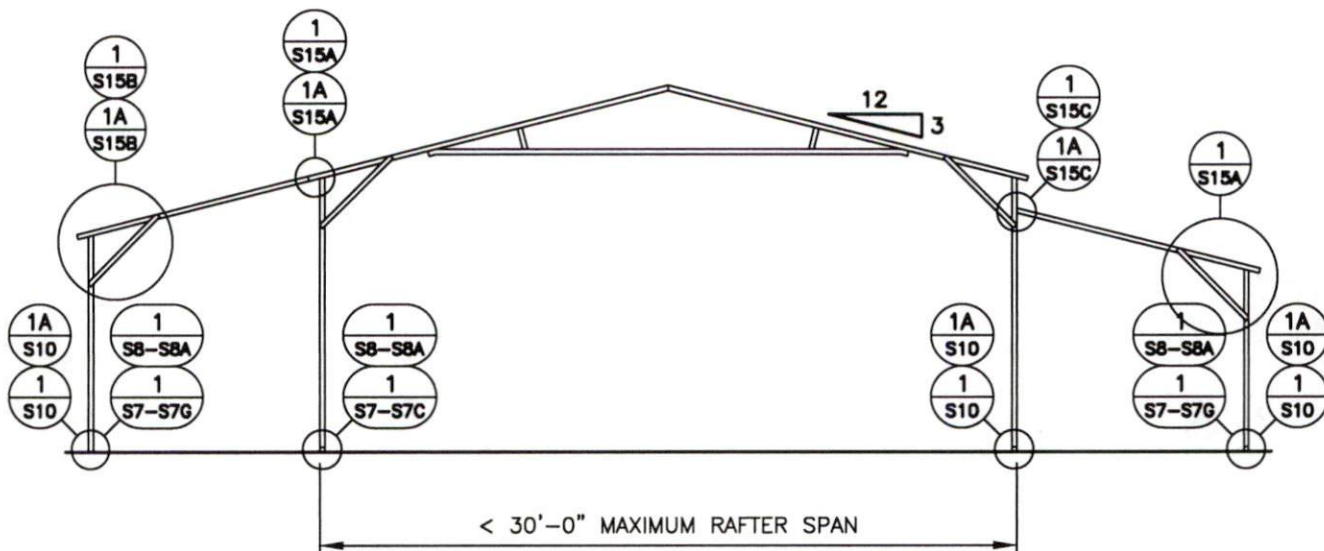
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S14

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

BOX EVE RAFTER LEAN-TO OPTIONS



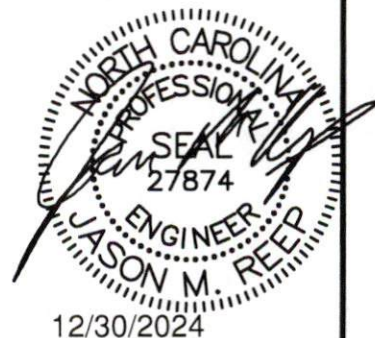
TYPICAL LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

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

16'-0" MAX. LEAN-TO HEIGHT WITH DOUBLE COLUMN



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

JCMT Associates, PLLC

211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

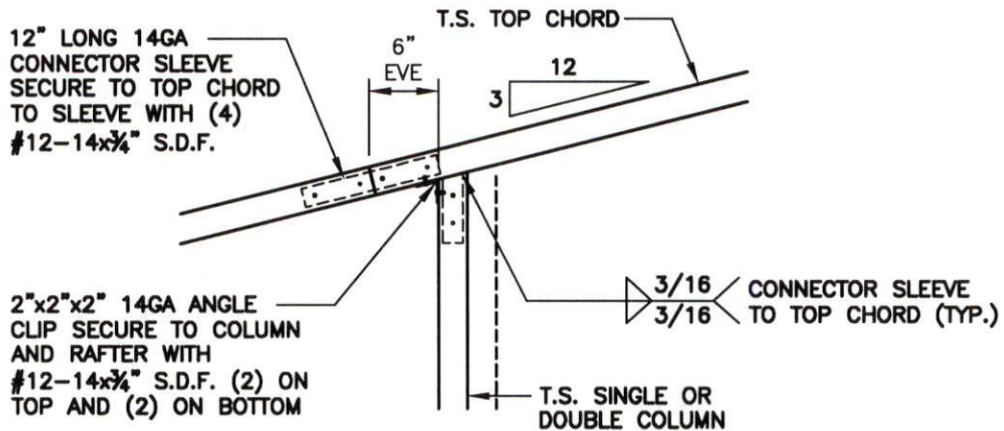
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S15

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

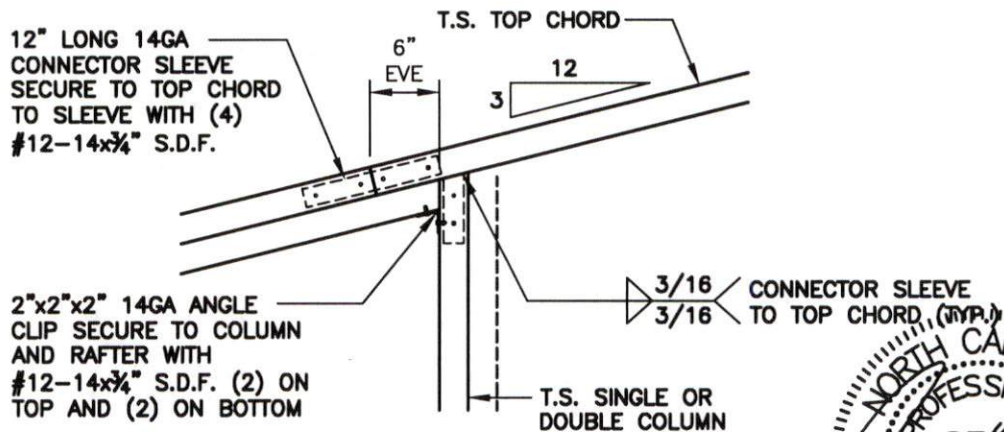
LEAN-TO CONNECTION DETAILS



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

1
S15A

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



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

1A
S15A

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

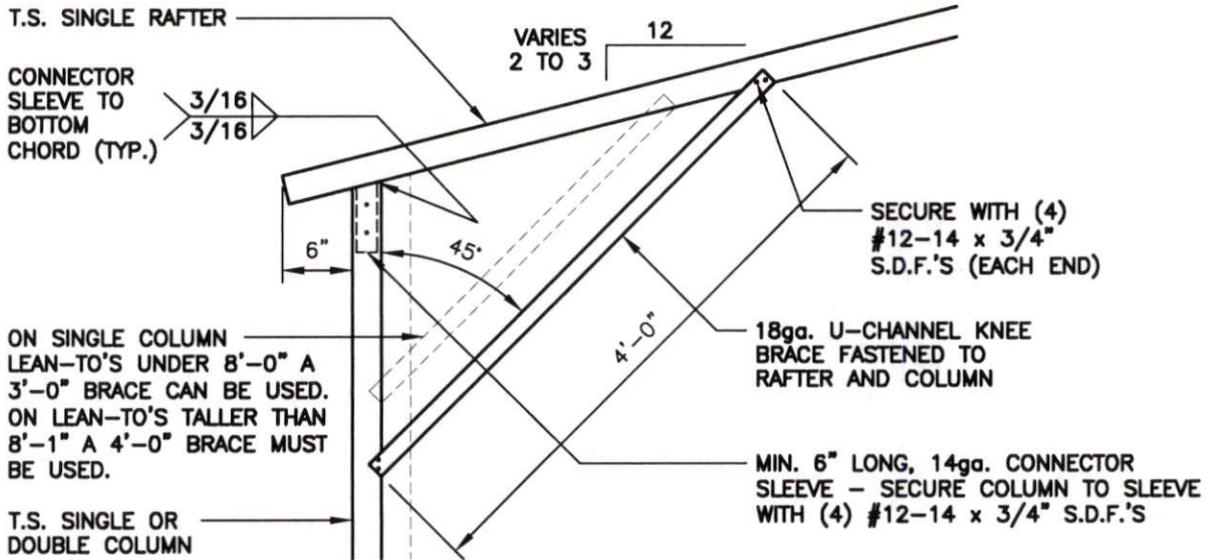
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S15A

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

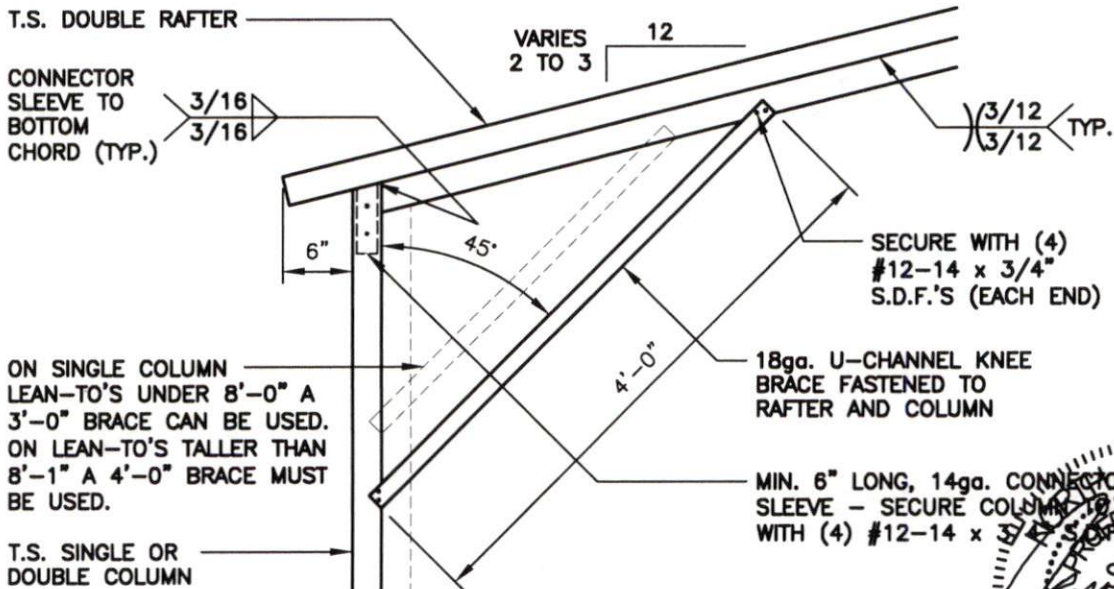
LEAN-TO CONNECTION DETAILS - SINGLE COLUMN



LEAN-TO SINGLE RAFTER / SINGLE COLUMN CONNECTION DETAIL

1
S15B

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



LEAN-TO DOUBLE RAFTER / SINGLE COLUMN CONNECTION DETAIL

1A
S15B

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

12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald McEachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

DATE:
12/30/24

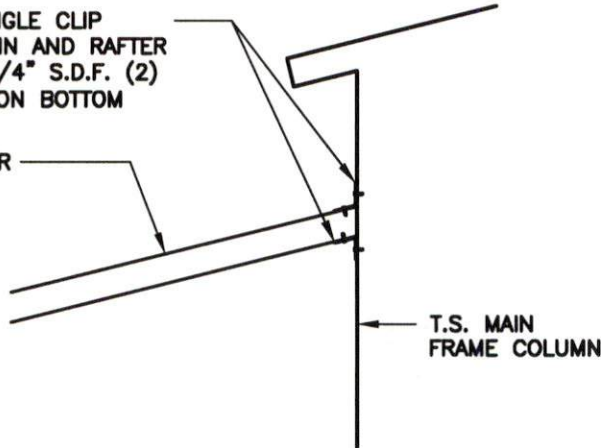
SHEET NO:
S15B

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

LEAN-TO / MAIN FRAME CONNECTION DETAILS

2"x2"x2" 14ga. ANGLE CLIP
SECURE TO COLUMN AND RAFTER
WITH #12-14 x 3/4" S.D.F. (2)
ON TOP AND (2) ON BOTTOM

T.S. SINGLE RAFTER



LEAN-TO SINGLE RAFTER / BUILDING FRAME CONNECTION DETAIL

1
S15C

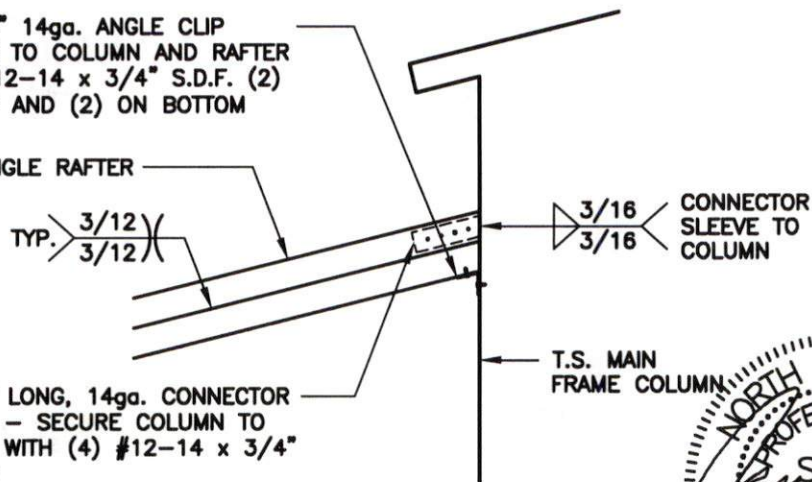
SCALE: 3/4" = 1'-0"

2"x2"x2" 14ga. ANGLE CLIP
SECURE TO COLUMN AND RAFTER
WITH #12-14 x 3/4" S.D.F. (2)
ON TOP AND (2) ON BOTTOM

T.S. SINGLE RAFTER

TYP. 3/12
3/12

MIN. 6" LONG, 14ga. CONNECTOR
SLEEVE - SECURE COLUMN TO
SLEEVE WITH (4) #12-14 x 3/4"
S.D.F.'S



LEAN-TO DOUBLE RAFTER / BUILDING FRAME CONNECTION DETAIL

1A
S15C

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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

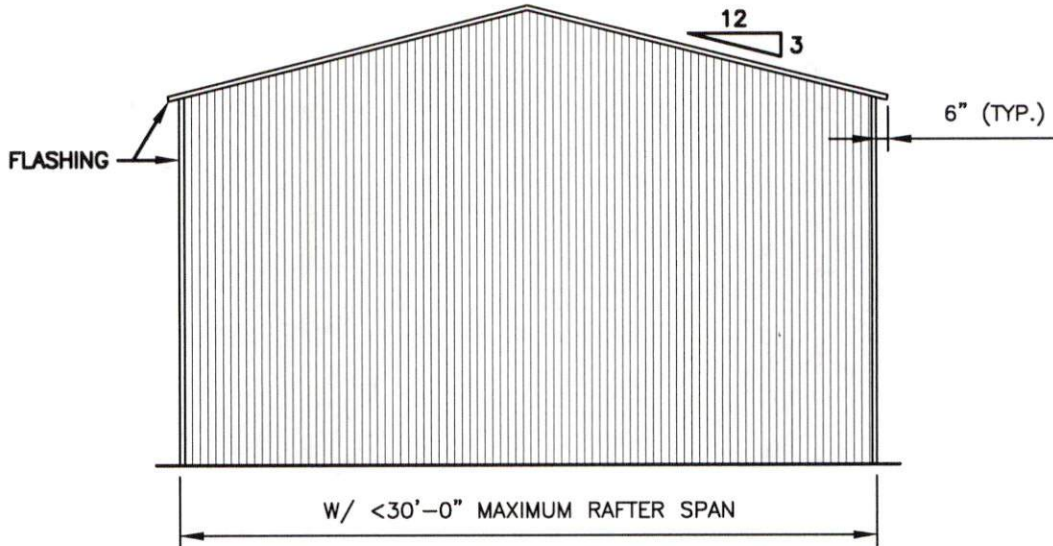
PROJECT NO:
0724-0147

DATE:
12/30/24

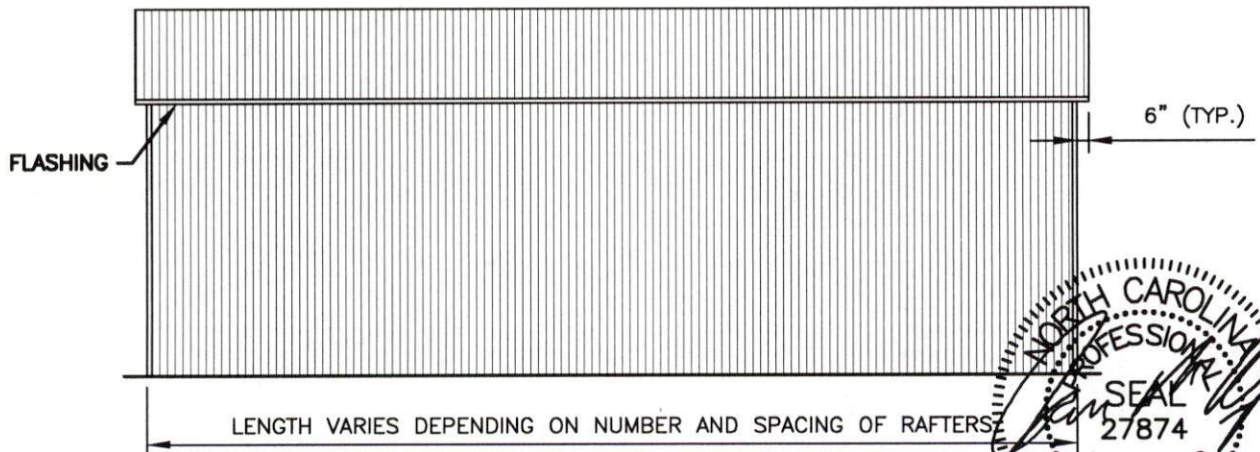
SHEET NO:
S15C

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

VERTICAL ROOF / SIDING OPTION



TYPICAL END ELEVATION - VERTICAL ROOF / SIDING



TYPICAL SIDE ELEVATION - VERTICAL ROOF / SIDING

12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

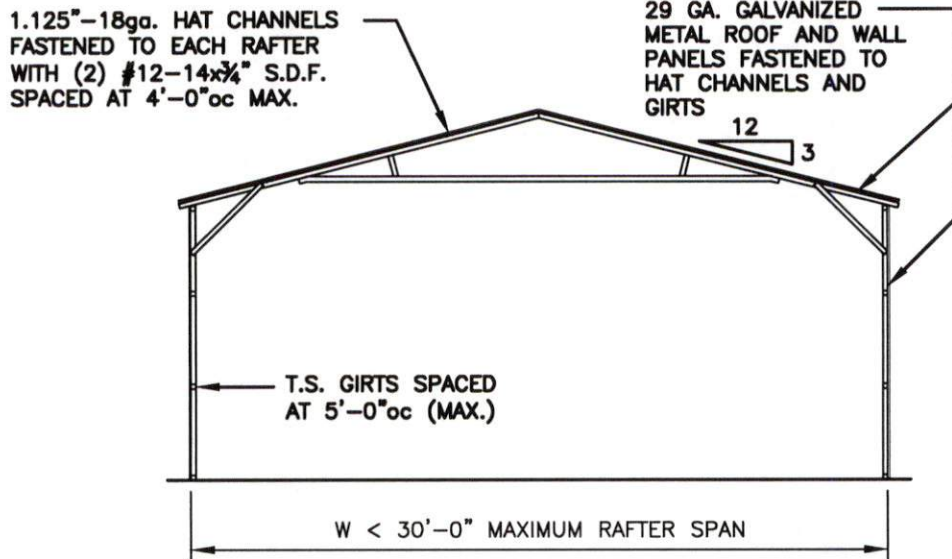
PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S16

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

VERTICAL ROOF / SIDING OPTION



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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

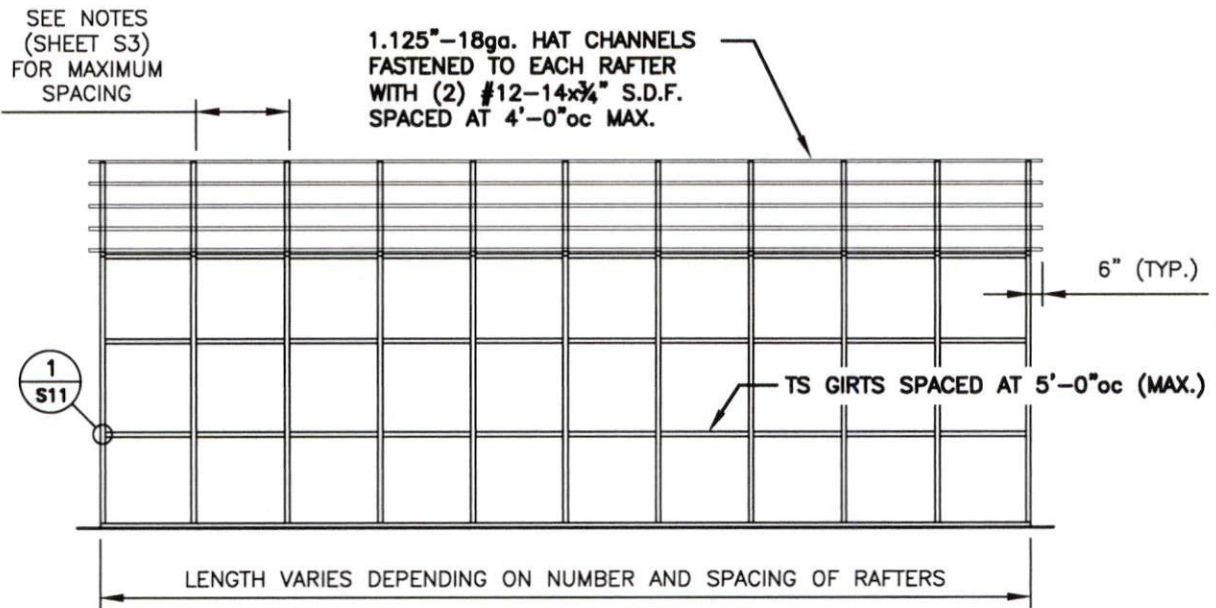
PROJECT NO:
0724-0147

DATE:
12/30/24

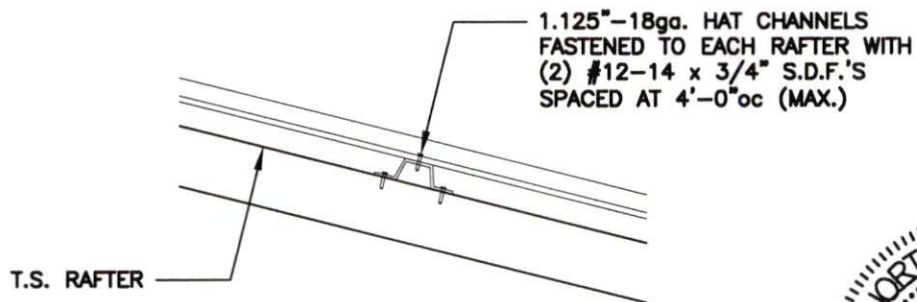
SHEET NO:
S16A

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

VERTICAL ROOF / SIDING OPTION



TYPICAL SIDE FRAMING SECTION VERTICAL ROOF / SIDING OPTION



(TYPICAL) ROOF PANEL ATTACHMENT



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

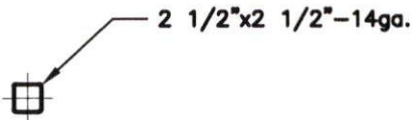
PROJECT NO:
0724-0147

DATE:
12/30/24

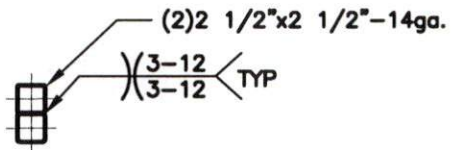
SHEET NO:
S16B

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

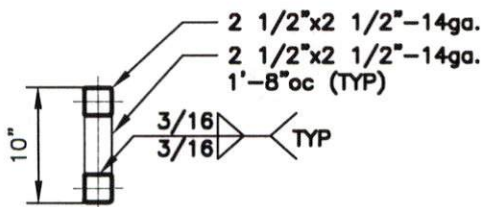
SIDE WALL HEADER OPTIONS



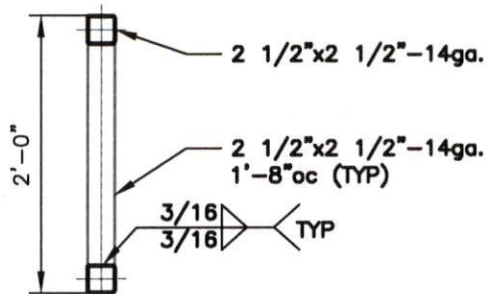
HEADER DETAIL FOR DOOR
OPENINGS < 4'-0"
 NTS



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



12/30/2024



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

JCMT Associates, PLLC
 211 Stone Drive, Pilot Mountain, NC 27041
 Telephone: (336) 399-6277

V2.1

Donald Mceachin
 9370 Old Us 421
 Broadway, NC 27505

DRAWN BY:
 BKS

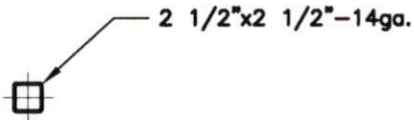
PROJECT NO:
 0724-0147

DATE:
 12/30/24

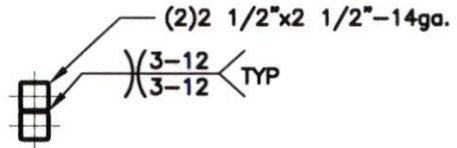
SHEET NO:
S17

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.

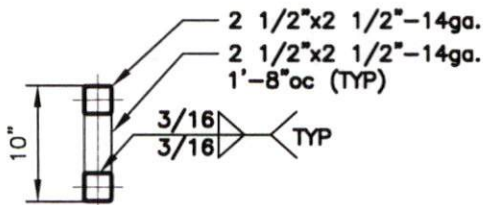
END WALL HEADER OPTIONS



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



12/30/2024



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

JCMT Associates, PLLC
211 Stone Drive, Pilot Mountain, NC 27041
Telephone: (336) 399-6277

V2.1

Donald Mceachin
9370 Old Us 421
Broadway, NC 27505

DRAWN BY:
BKS

PROJECT NO:
0724-0147

DATE:
12/30/24

SHEET NO:
S17A

NOTE: THESE DRAWINGS ARE VALID FOR (1) CALENDAR YEAR AFTER THE ISSUE DATE LISTED ON THIS SHEET.