

## INSTALLATION NOTES AND SPECIFICATIONS

1. DESIGN IS FOR MAXIMUM 30'-0" WIDE x 20'-0" EAVE HEIGHT ENCLOSED STRUCTURES.
2. DESIGN WAS DONE IN ACCORDANCE WITH THE 2018 NORTH CAROLINA BUILDING CODE (NCBC), 2018 IBC, 2015 IBC, 2012 IBC, 2009 IBC, AND 2006 IBC.
3. DESIGN LOADS ARE AS FOLLOWS:
  - A) DEAD LOAD = 1.5 PSF
  - B) LIVE LOAD = 12 PSF
  - C) GROUND SNOW LOAD = 35 PSF (UNBALANCED SNOW LOAD DUE TO DRIFTING HAS NOT BEEN EVALUATED).
4. ULTIMATE WIND SPEED 105 TO 145 MPH (NOMINAL WIND SPEED 81 TO 112 MPH); MAXIMUM RAFTER/POST AND END COLUMN SPACING = 5.0 FEET.
5. END WALL COLUMNS (POST) ARE EQUIVALENT IN SIZE AND SPACING TO SIDE WALL POSTS (UNLESS NOTED OTHERWISE).
6. RISK CATEGORY I.
7. WIND EXPOSURE CATEGORY B.
8. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2"x2 1/2"-14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE). WHERE TS 2 1/2' x 2 1/2' - 14 GAUGE IS SPECIFIED, TS 2 1/4' x 2 1/4' - 12 GAUGE MAY BE USED AS AN OPTION.
9. AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR HAT CHANNELS, AND COLUMNS (INTERIOR OR END) = 10" O.C. (MAX.)
10. FASTENERS CONSIST OF #12-14x3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14' (3:12 PITCH) OR LESS. REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY. ROOFING WITH SLOPES LESS THAN 3:12 MUST BE LAP SEALANT.
11. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES.
12. GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/ WELDED NUT x 36" LONG AND MAY ONLY BE USED IN SUITABLE SOILS. HELIX ANCHORS, SEE DETAIL 2B, MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED.
13. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
  - SOIL SITE CLASS = D
  - RISK CATEGORY I
  - R = 3.25                      I<sub>E</sub> = 1.0
  - S<sub>DS</sub> = 2.039                V = C<sub>s</sub>W
  - S<sub>DI</sub> = 1.258

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDM**

**PROJECT MGR: WSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: P01265**

**SHT. 3**

**DWG. NO: SK-3**

**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# DRAWING INDEX

SHEET 1	PE SEAL COVER SHEET (1 OF 2)
SHEET 1A	PE SEAL COVER SHEET (2 OF 2)
SHEET 2	DRAWING INDEX
SHEET 3	INSTALLATION NOTES AND SPECIFICATIONS
SHEET 4	TYPICAL SIDE AND END ELEVATIONS
SHEET 5	TYPICAL RAFTER/COLUMN END FRAMING SECTION (BOX EAVE RAFTER)
SHEET 5A	TYPICAL RAFTER/COLUMN END AND SIDE FRAMING SECTION (BOX EAVE RAFTER)
SHEET 6	COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)
SHEET 6A	COLUMN CONNECTION DETAILS (BOX EAVE STRUCTURE)
SHEET 7	TYPICAL RAFTER/COLUMN END FRAMING SECTION (BOW RAFTER)
SHEET 7A	TYPICAL RAFTER/COLUMN END AND SIDE FRAMING SECTION (BOW RAFTER)
SHEET 8	COLUMN CONNECTION DETAILS (BOW RAFTER STRUCTURE)
SHEET 8A	COLUMN CONNECTION DETAILS (BOW RAFTER STRUCTURE)
SHEET 9	BASE RAIL ANCHORAGE OPTIONS
SHEET 10	TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOX EAVE)
SHEET 11	TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOW RAFTER)
SHEET 12	CONNECTION DETAILS
SHEET 13	CONNECTION DETAILS
SHEET 14	CONNECTION DETAILS
SHEET 15	CONNECTION DETAILS
SHEET 16	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 17	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 17A	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 17B	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 17C	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 18	LEAN-TO OPTIONS (BOW RAFTER)
SHEET 18A	LEAN-TO OPTIONS (BOW RAFTER)
SHEET 18B	LEAN-TO OPTIONS (BOW RAFTER)
SHEET 18C	LEAN-TO OPTIONS (BOW RAFTER)
SHEET 18D	LEAN-TO OPTIONS (BOW RAFTER)
SHEET 19	VERTICAL ROOF/SIDING OPTION END AND SIDE ELEVATION AND SECTION
SHEET 20	HEADER OPTIONS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDM**

**PROJECT MGR: WSH**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

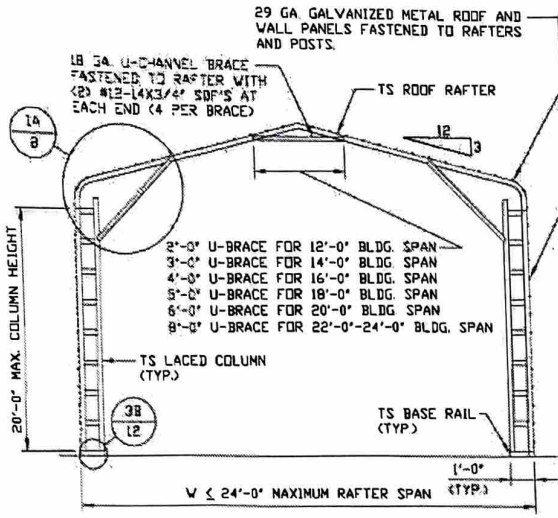
**JOB NO: 201265**

**SHT. 2**

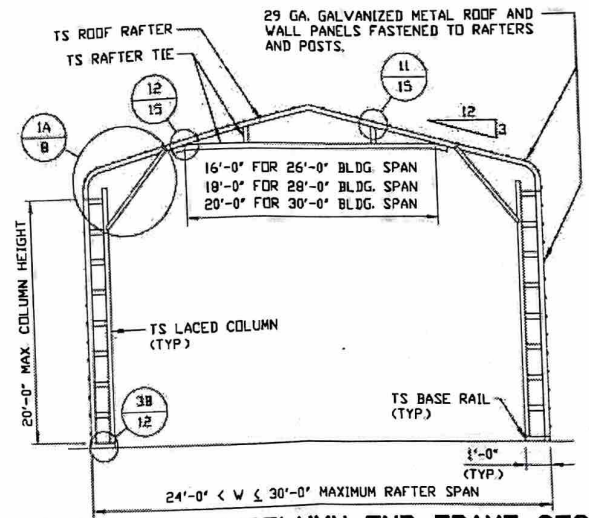
**DWG. NO SK-3**

**REV: 0**

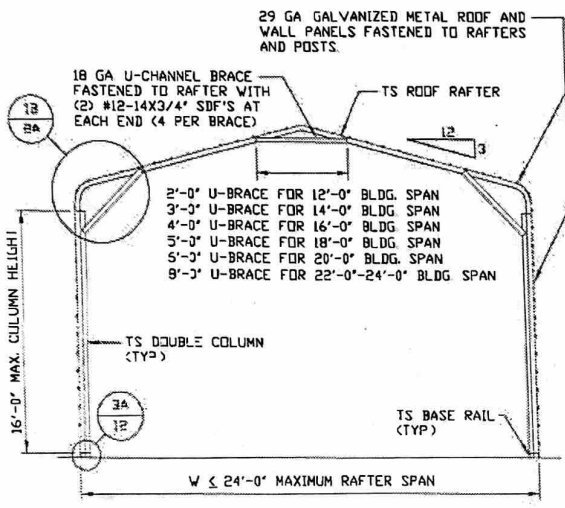
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



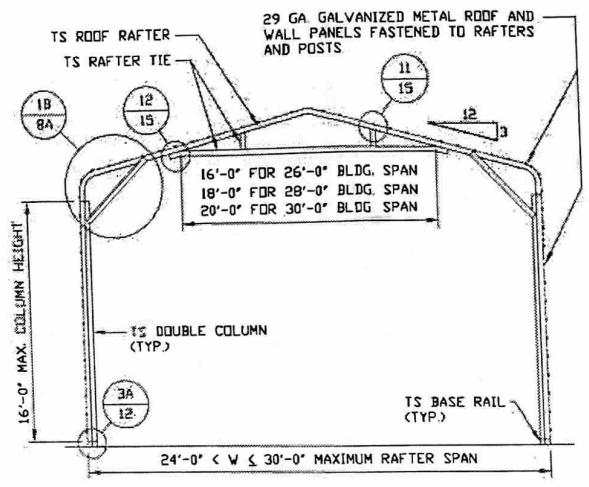
**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS

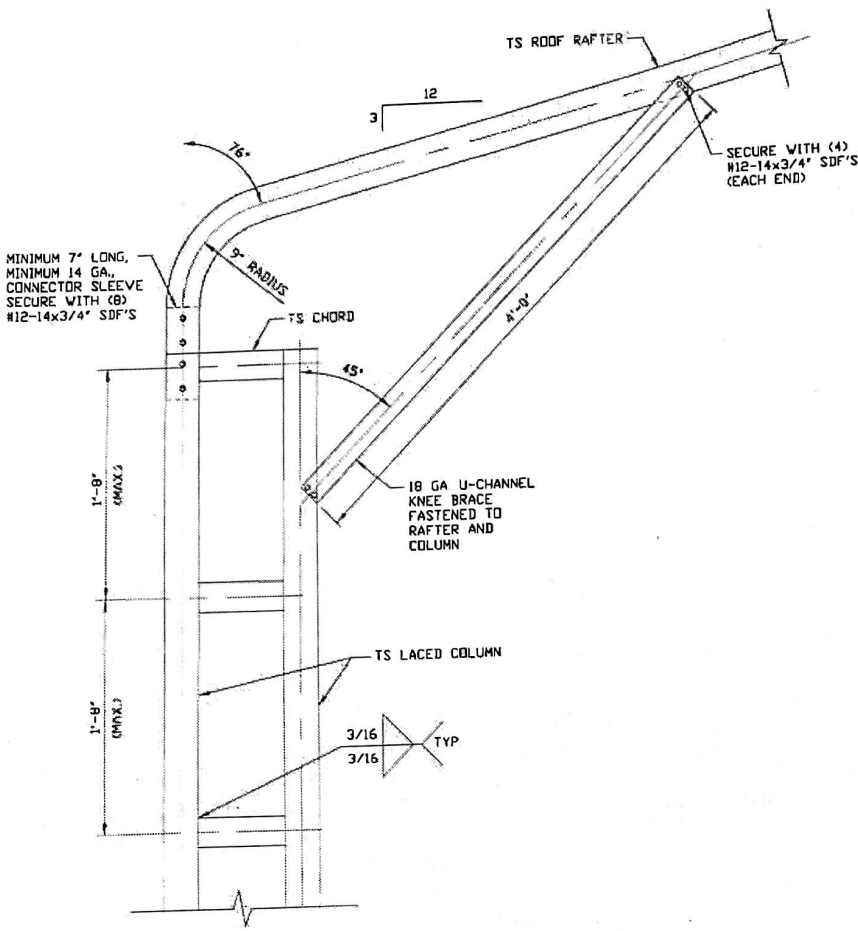
**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY:** AT  
**CHECKED BY:** PJM  
**PROJECT MGR:** WSM  
**CLIENT:** TNT

**TNT CARPORTS, INC.**  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE  
**DATE:** 6-23-20  
**SCALE:** NTS  
**DWG. NO.:** SK-3  
**REV.:** 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

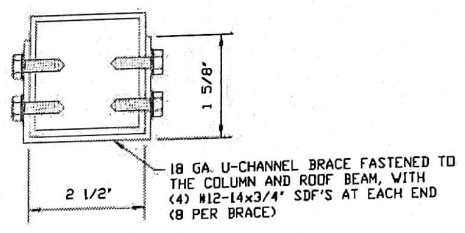
**DATE:** 6-23-20  
**SHT.:** 7  
**JOB NO.:** 201265  
**REV.:** 0



**BOW EAVE RAFTER COLUMN CONNECTION  
DETAIL FOR HEIGHTS 16'-0" < TO ≤ 20'-0"**

**1A**

SCALE: NTS



**BRACE SECTION**

SCALE: NTS

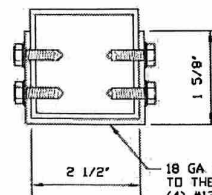
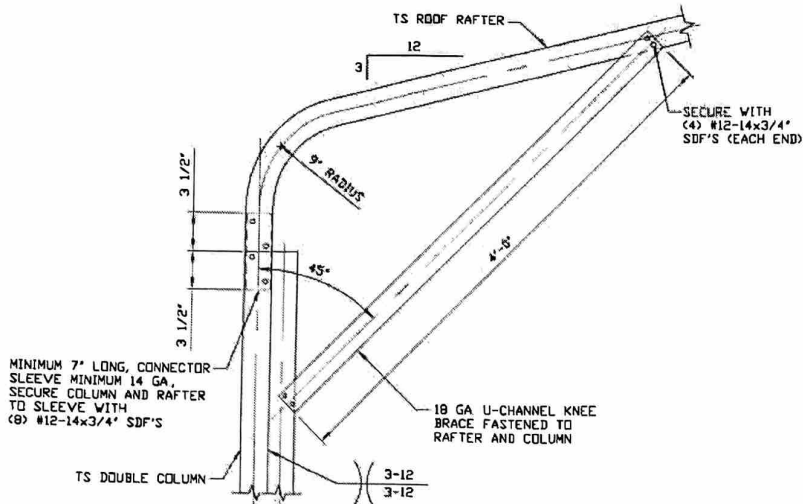
**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**  
**CHECKED BY: PDH**  
**PROJECT MGR: WSM**  
**CLIENT: TNT**

**TNT CARPORTS, INC.**  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

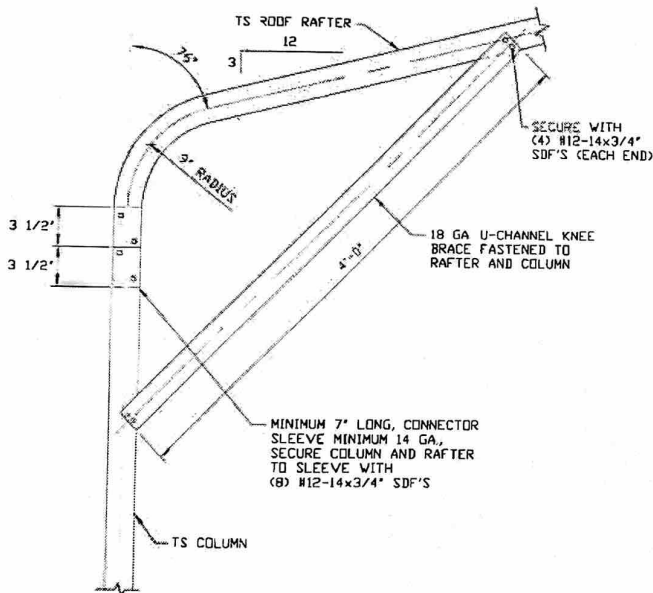
**DATE: 6-23-20**    **SCALE: NTS**    **JOB NO: 201265**  
**SHT. 8**    **DWG. NO: SK-3**    **REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



**BRACE SECTION**  
SCALE: NTS

**1B**  
**BOW EAVE RAFTER COLUMN CONNECTION DETAIL FOR HEIGHTS 12'-0" < TO <= 16'-0"**  
SCALE: NTS



**1C**  
**BOW EAVE RAFTER COLUMN CONNECTION DETAIL FOR HEIGHTS <= 12'-0"**  
SCALE: NTS

NOTE: 2'-0" KNEE BRACE MAY BE USED FOR BUILDING WIDTHS < 24'-0".

**MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: WSH**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: 20126S**

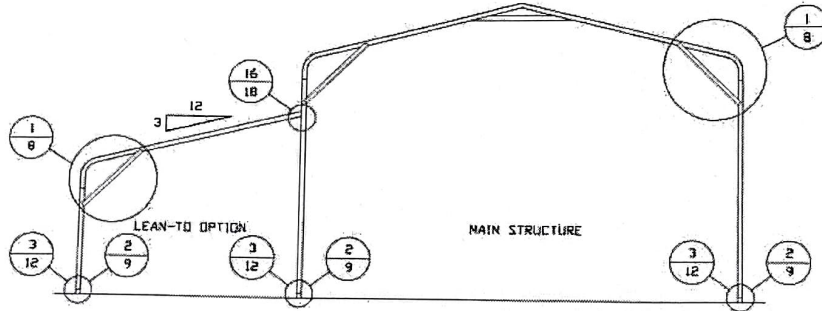
**SHT. 8A**

**DWG NO: SK-3**

**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

**BOW EAVE RAFTER LEAN-TO OPTION**



**TYPICAL BOW RAFTER LEAN-TO OPTION FRAMING SECTION**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

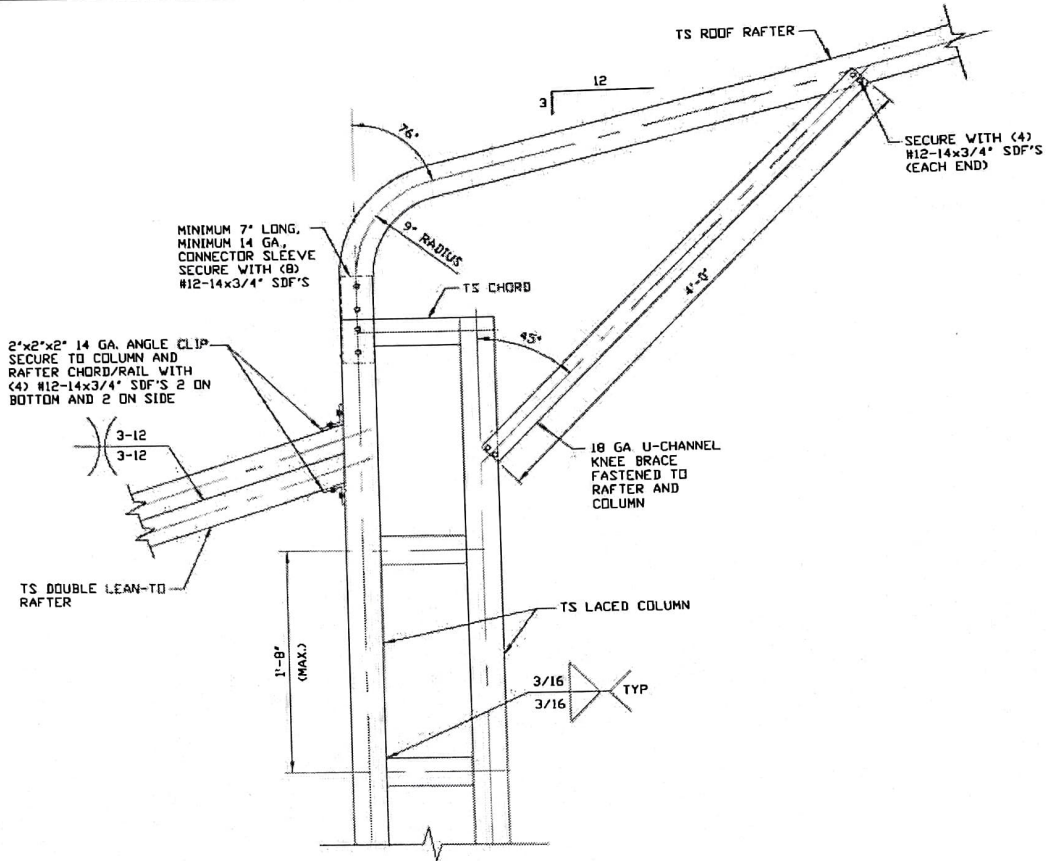
**DRAWN BY: AT**  
**CHECKED BY: PDH**  
**PROJECT MGR: WSM**  
**CLIENT: TNT**

**TNT CARPORTS, INC.**  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**    **SCALE: NTS**    **JOB NO: 201265**  
**SHT. 18**    **DWG. NO SK-3**    **REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# BOW EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS 12'-0" < TO ≤ 16'-0"



SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 16'-0" < TO ≤ 20'-0"

16D

SCALE: NTS

MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.

DRAWN BY: AT

CHECKED BY: PDH

PROJECT MGR: VSM

CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SCALE: NTS

JOB NO: 201265

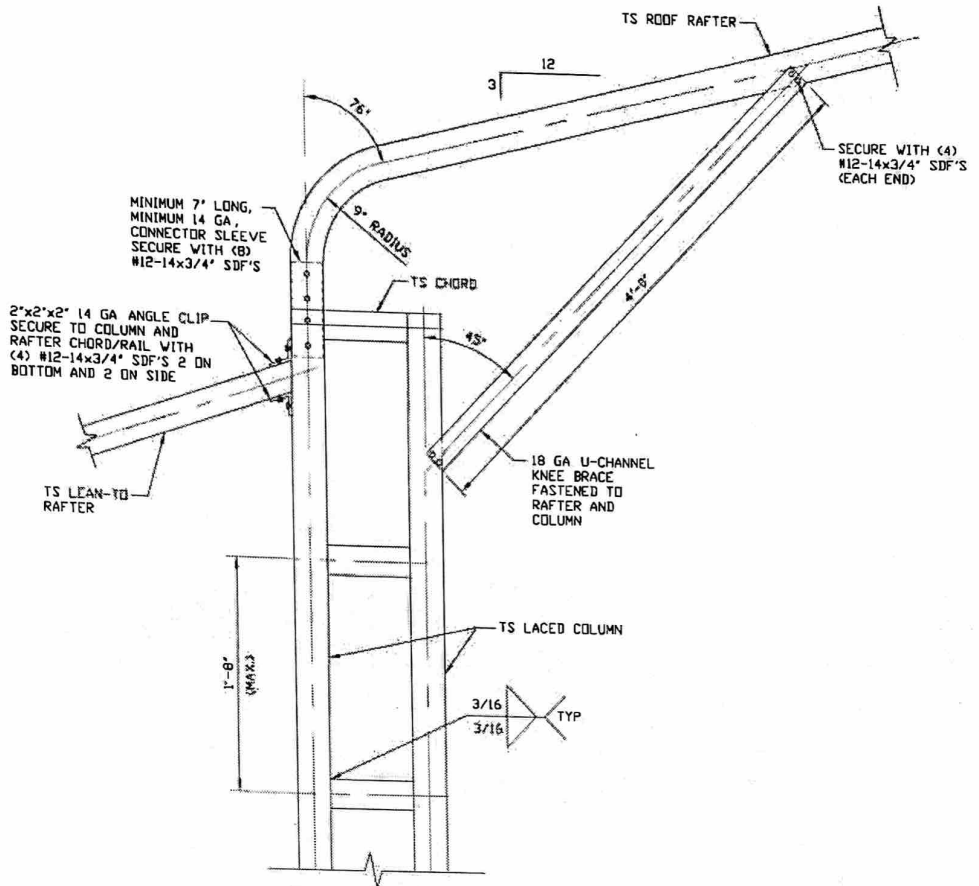
SHT. 10C

DWG. NO: SK-3

REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# BOW EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS $\leq 12'-0''$



**SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 16'-0" < TO  $\leq$  20'-0"**  
SCALE: NTS

16A

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: AT

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SCALE: NTS

JOB NO: 201265

SHT. 18A

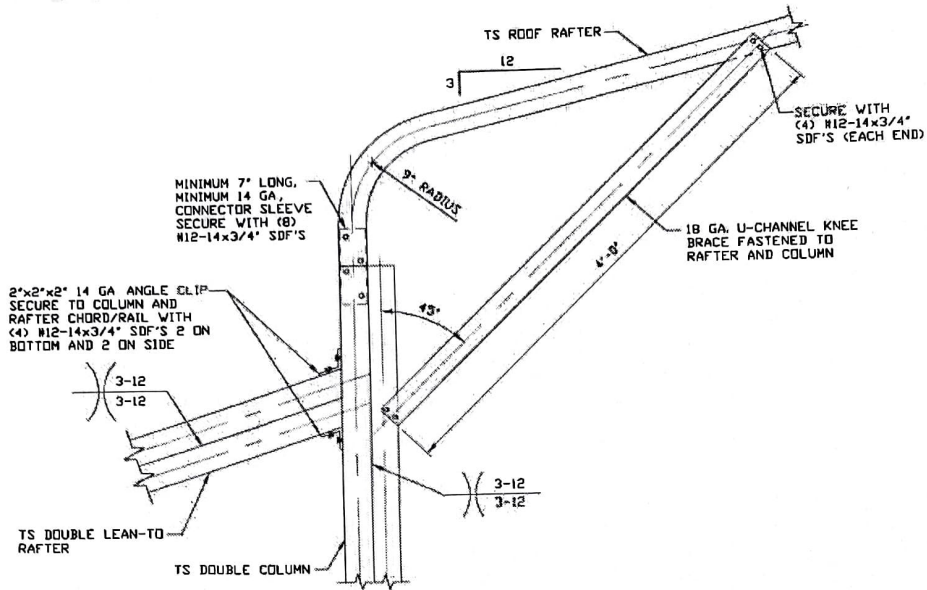
DWG. NO: SK-3

REV: 0

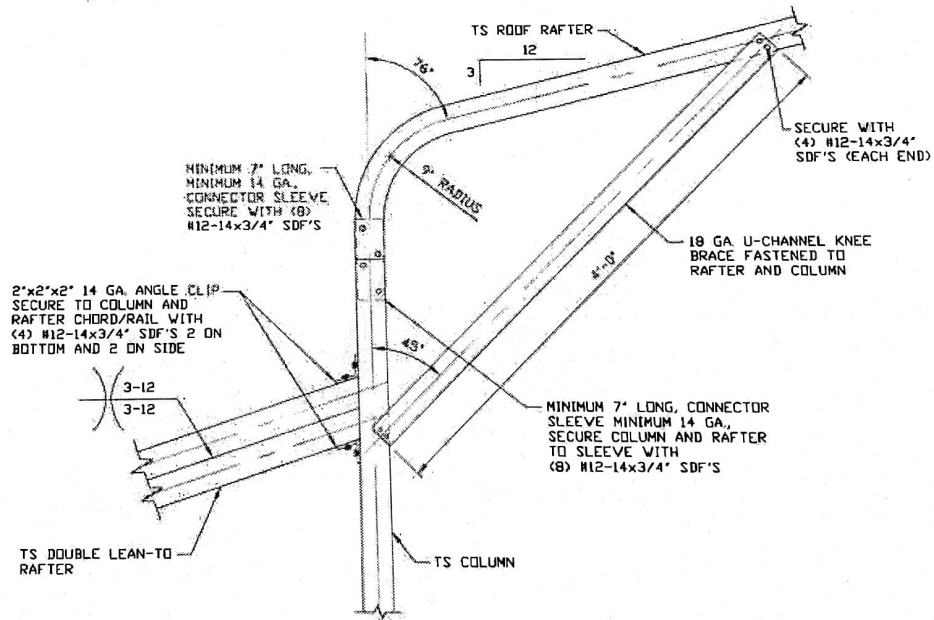
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



**BOW EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS 12'-0" < TO ≤ 16'-0"**



**16E** SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 12'-0" < TO ≤ 16'-0"  
SCALE: NTS.



**16F** SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS < 12'-0"  
SCALE: NTS.  
NOTE: 2'-0" KNEE BRACE MAY BE USED  
FOR BUILDING WIDTHS < 24'-0".

MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.

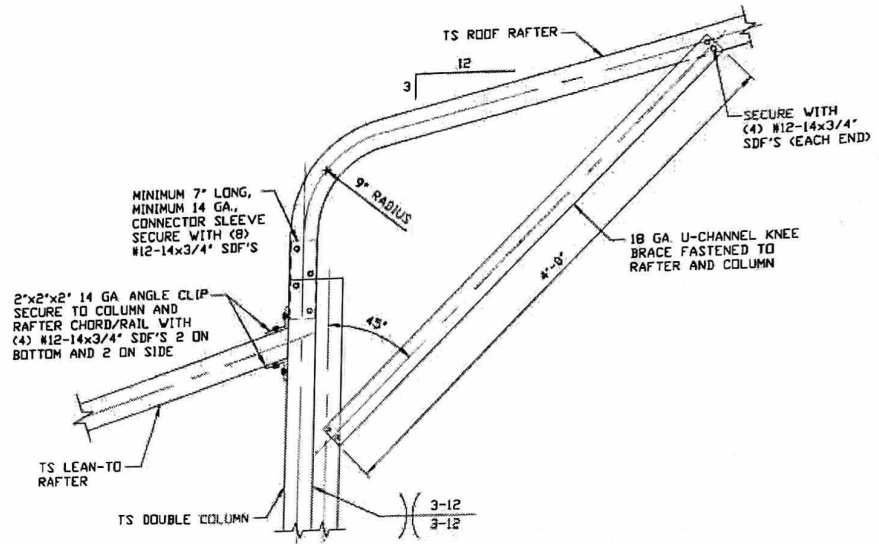
DRAWN BY: AT  
CHECKED BY: PDH  
PROJECT MGR: WSM  
CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

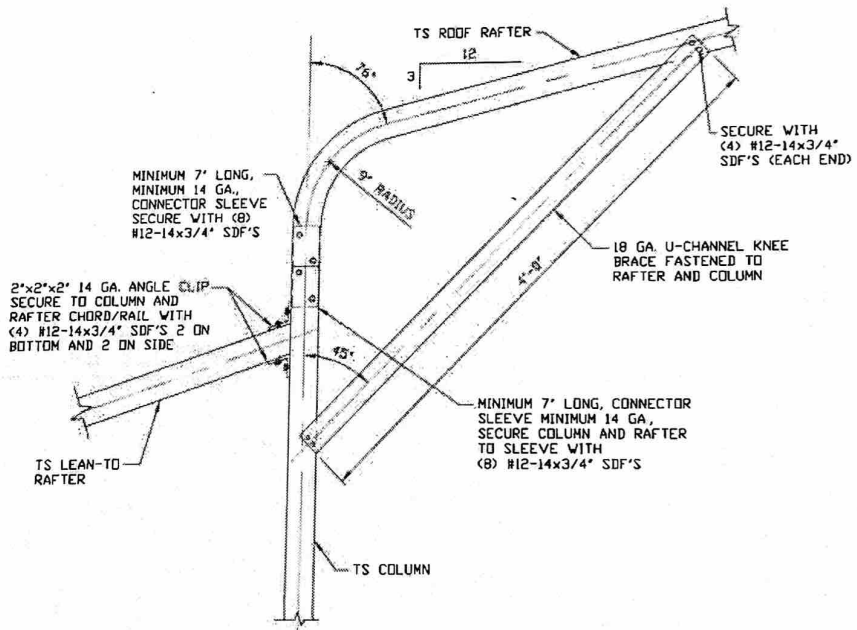
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

DATE: 6-23-20  
SCALE: NTS  
JOB NO: 20126S  
SHT. 18D  
DWG. NO: SK-3  
REV: 0

# BOW EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS $\leq 12'-0''$



**16B**  
 SIDE EXTENSION RAFTER/  
 COLUMN DETAIL FOR  
 HEIGHTS 12'-0" < TO  $\leq$  16'-0"  
 SCALE: NTS



**16C**  
 SIDE EXTENSION RAFTER/  
 COLUMN DETAIL FOR  
 HEIGHTS  $\leq$  12'-0"  
 SCALE: NTS

NOTE: 2'-0" KNEE BRACE MAY BE USED FOR BUILDING WIDTHS  $<$  24'-0".

MOORE AND ASSOCIATES  
 ENGINEERING AND CONSULTING, INC.

DRAWN BY: AT

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: TNT

TNT CARPORTS, INC.  
 170 HOLLY SPRINGS ROAD  
 MOUNT AIRY, NC 27030  
 30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SHT. 18B

SCALE: NTS

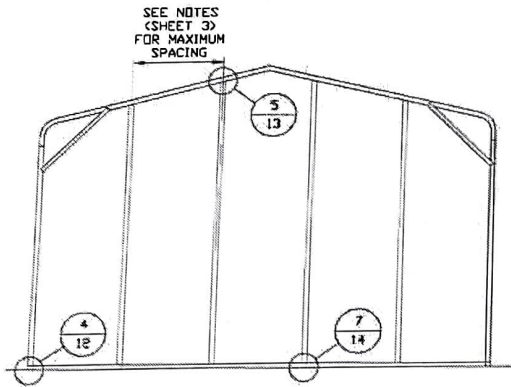
DWG. NO: SK-3

JOB NO: 201265

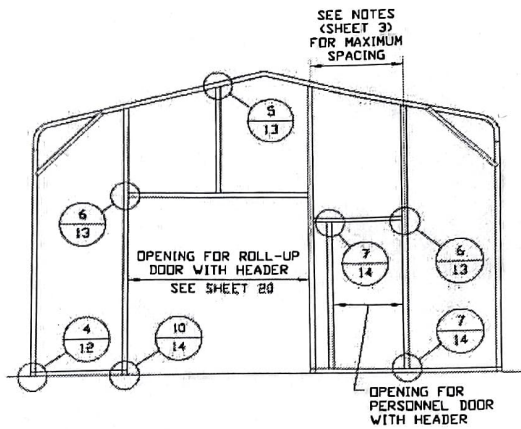
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

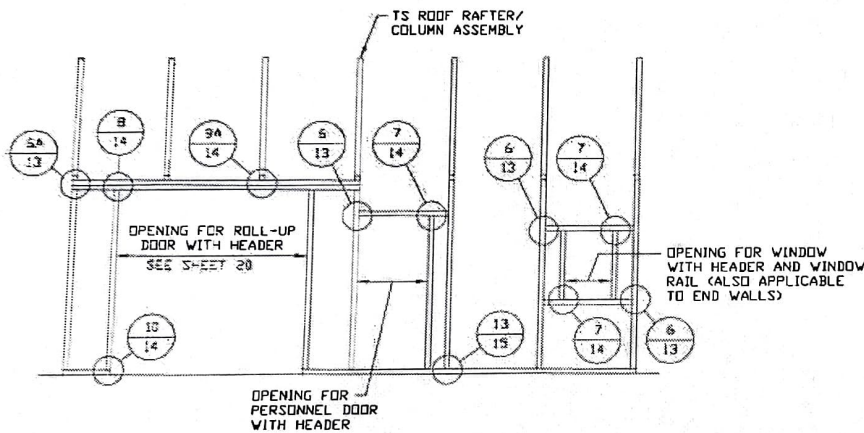
# BOW RAFTER END WALL AND SIDE WALL OPENINGS



**TYPICAL BOW RAFTER  
END WALL FRAMING SECTION**  
SCALE: NTS



**TYPICAL BOW RAFTER END  
WALL OPENINGS FRAMING SECTION**  
SCALE: NTS



**TYPICAL BOW RAFTER SIDE  
WALL OPENINGS FRAMING SECTION**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SHT. 11**

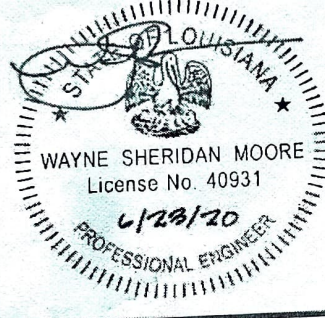
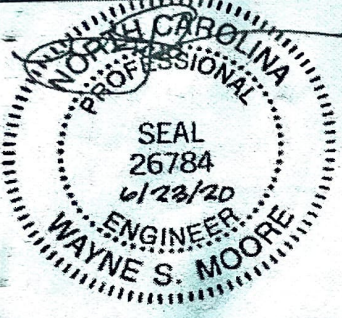
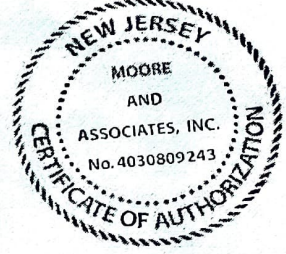
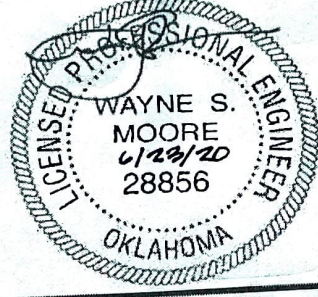
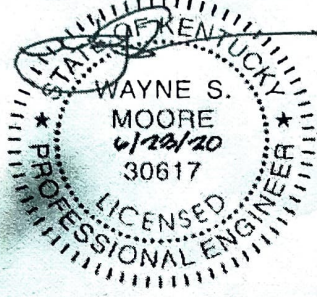
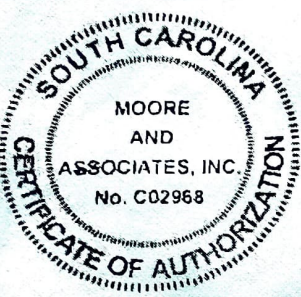
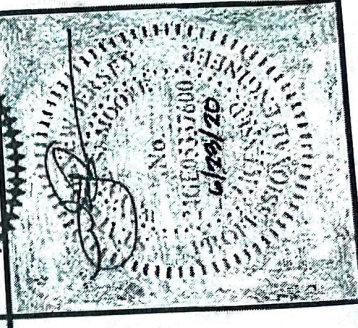
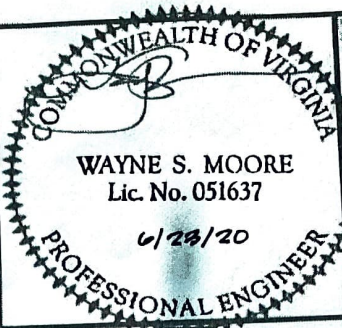
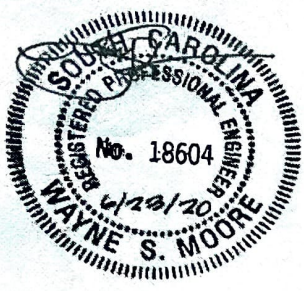
**SCALE: NTS**

**DWG. NO SK-3**

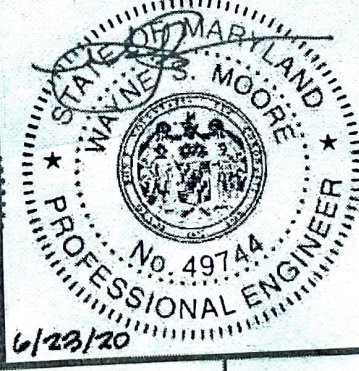
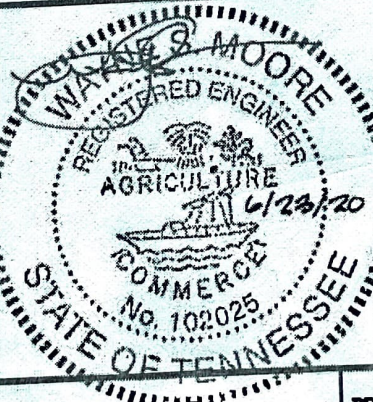
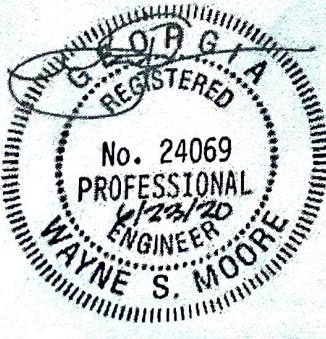
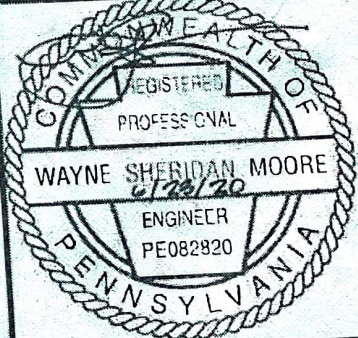
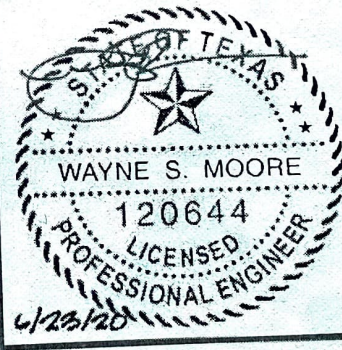
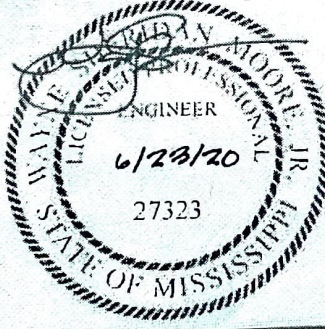
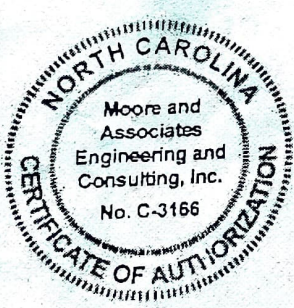
**JOB NO: 201265**

**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



I HAVE RESEARCHED THIS CHAPTER AND THE LOUISIANA STATE UNIFORM CONSTRUCTION CODE AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, THESE DRAWINGS ARE IN COMPLIANCE THEREWITH. I TAKE FULL RESPONSIBILITY FOR THE CONTENTS OF THESE PLANS.



**Professional Certification.**  
I hereby certify that these documents were prepared and approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 49744, Expiration Date 6/6/2025

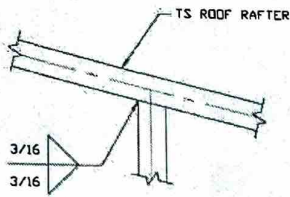
**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: AT  
CHECKED BY: PDH  
PROJECT MGR: VSM  
CLIENT: TNT

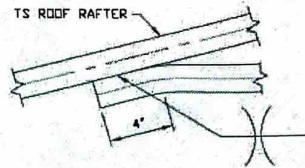
TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE  
DATE: 6-23-20  
SCALE: NTS  
JOB NO: 201265  
SHT. 1  
DWG. NO SK-3  
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

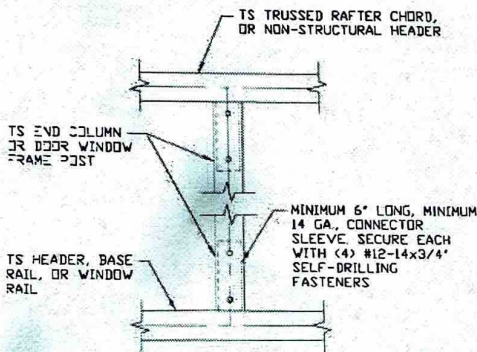
# CONNECTION DETAILS



**11** **RAFTER TO CHORD CONNECTION DETAIL**  
SCALE: NTS



**12** **COLLAR TIE CONNECTION DETAIL**  
SCALE: NTS



**13** **COLUMN TO HEADER OR BASE RAIL CONNECTION DETAIL**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

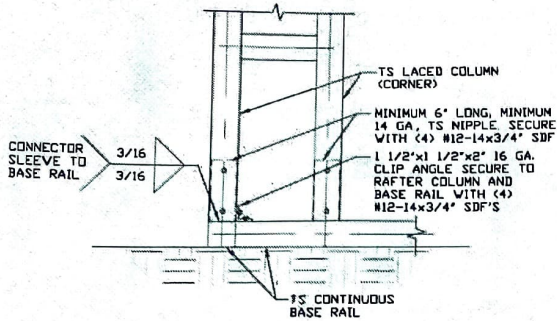
**DRAWN BY: AT**  
**CHECKED BY: PDH**  
**PROJECT MGR: WSM**  
**CLIENT: TNT**

**TNT CARPORTS, INC.**  
**170 HOLLY SPRINGS ROAD**  
**MOUNT AIRY, NC 27030**  
**30'-0" x 20'-0" SP ENCLOSED STRUCTURE**

**DATE: 6-23-20** **SCALE: NTS** **JOB NO: 201265**  
**SHT. 15** **DWG. NO SK-3** **REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC. UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRACTION THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

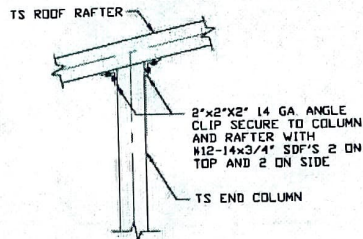
## CONNECTION DETAILS



**4B**

### END COLUMN/BASE RAIL CONNECTION DETAIL

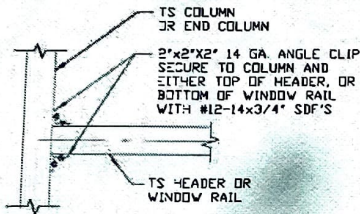
SCALE: NTS



**5**

### END COLUMN/RAFTER CONNECTION DETAIL

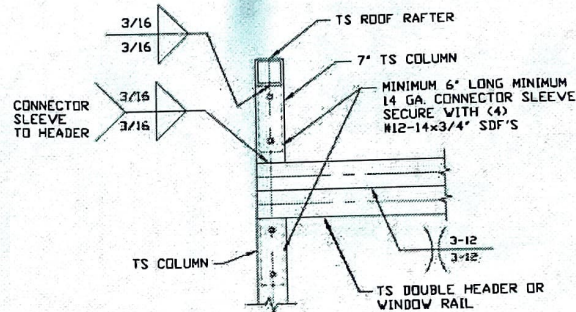
SCALE: NTS



**6**

### COLUMN OR WINDOW RAIL/GIRT TO POST CONNECTION DETAIL

SCALE: NTS



**6A**

### COLUMN OR WINDOW RAIL TO POST CONNECTION DETAIL

SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SHT. 13**

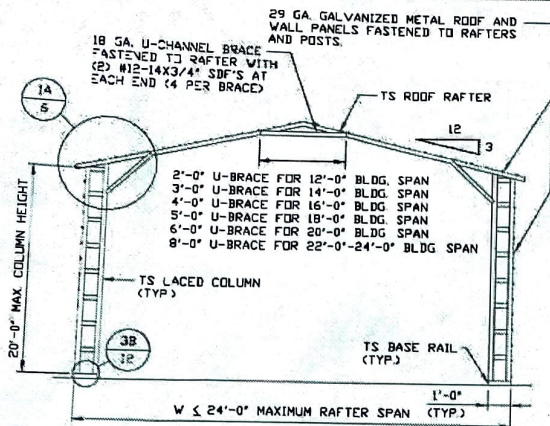
**SCALE: NTS**

**DWG. NO: SK-3**

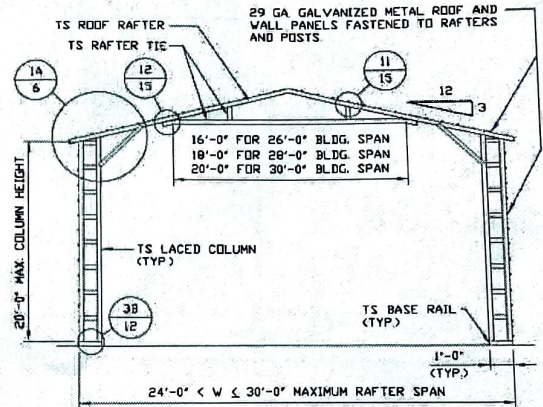
**JOB NO: 20126**

**REV: 0**

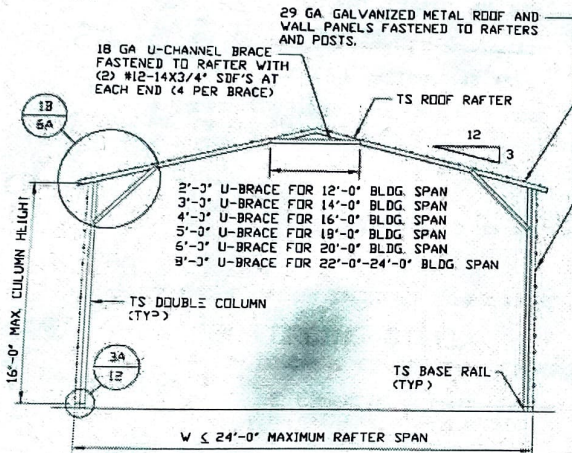
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



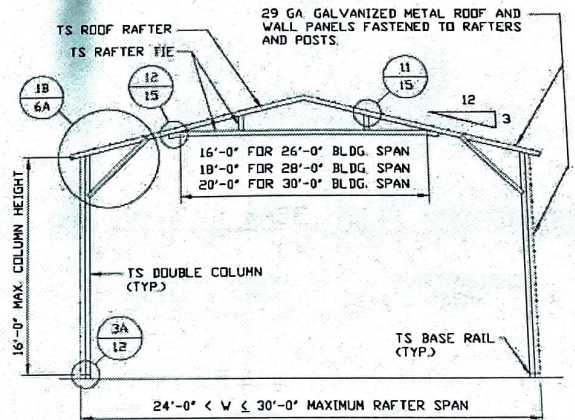
**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
 SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
 SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
 SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
 SCALE: NTS

**MOORE AND ASSOCIATES  
 ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**  
**CHECKED BY: PIH**

TNT CARPORTS, INC.  
 170 HOLLY SPRINGS ROAD  
 MOUNT AIRY, NC 27030  
 30'-0"x20'-0" SP ENCLOSED STRUCTURE

**PROJECT MGR: WSM**

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: 201265**

**CLIENT: TNT**

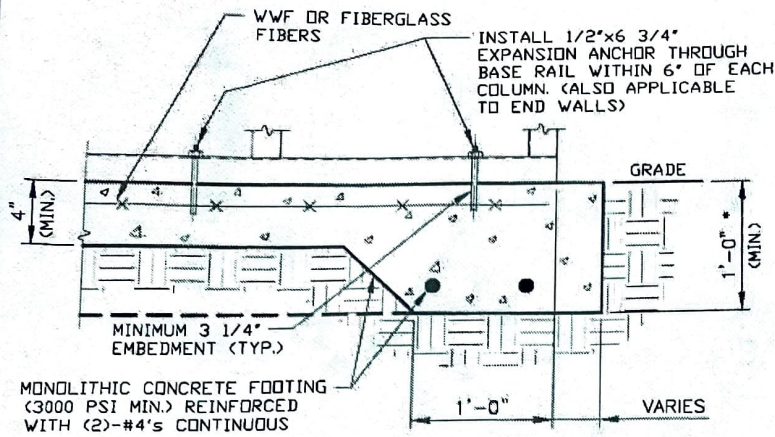
**SHT. 5**

**DWG. NO: SK-3**

**REV: 0**

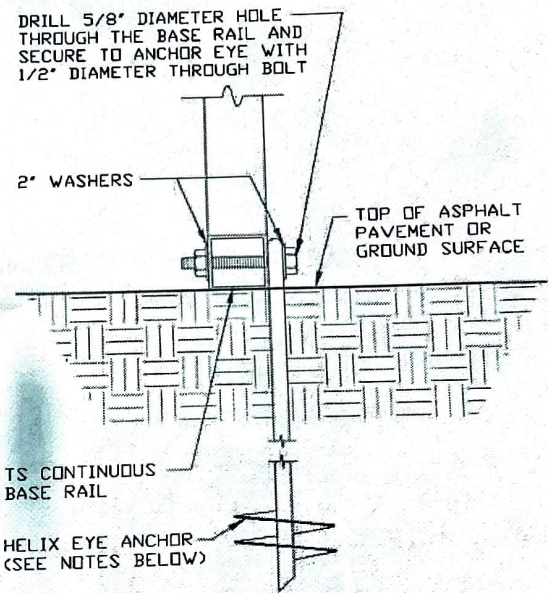
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# BASE RAIL ANCHORAGE OPTIONS



**2A CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE**  
 SCALE: NTS  
 MINIMUM ANCHOR EDGE DISTANCE IS 4"

\* COORDINATE WITH LOCAL BUILDING CODE AND/OR BUILDING OFFICIAL REGARDING REQUIRED FOOTING DEPTH.



**2B GROUND BASE HELIX ANCHORAGE**  
 SCALE: NTS (CAN BE USED FOR ASPHALT)

\* COORDINATE WITH LOCAL BUILDING CODE AND/OR BUILDING OFFICIAL REGARDING REQUIRED FOOTING DEPTH.

## GENERAL NOTES

NOTE: CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 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 OR 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 MAY BE BENT IN THE SHOP OR 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

### HELIX ANCHOR NOTES:

- 1 FOR VERY DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILTS AND CLAYS, USE MINIMUM (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT
- 2 FOR CORAL USE MINIMUM (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
3. FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY STIFF SILTS, AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
- 4 FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT
5. FOR VERY LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS, ALLUVIAL FILL, USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT.

**MOORE AND ASSOCIATES  
 ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: VSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
 170 HOLLY SPRINGS ROAD  
 MOUNT AIRY, NC 27030  
 30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: 20**

**SHT. 9**

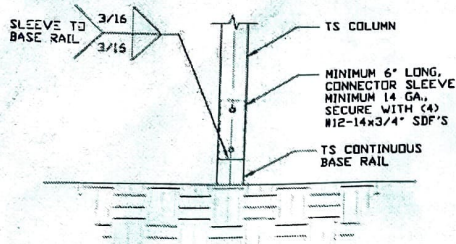
**DWG NO SK-3**

**REV:**

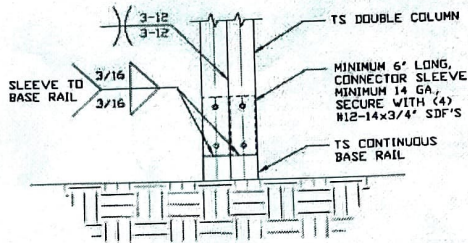
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



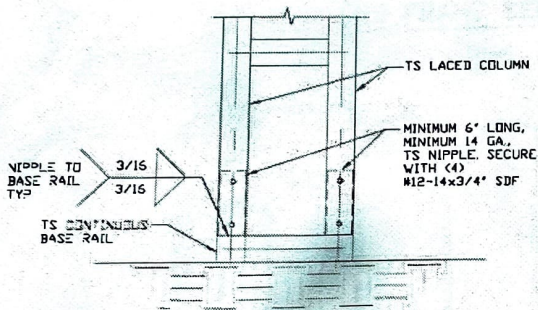
## CONNECTION DETAILS



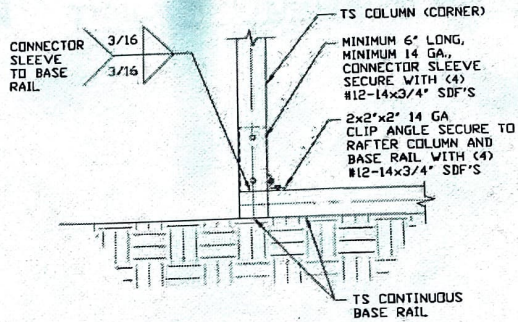
**3** RAFTER COLUMN/BASE RAIL CONNECTION DETAIL  
SCALE: NTS



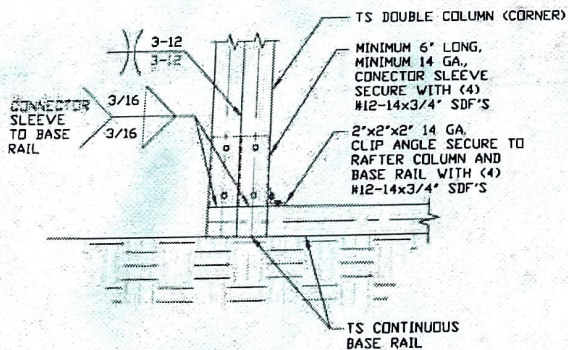
**3A** RAFTER COLUMN/BASE RAIL CONNECTION DETAIL  
SCALE: NTS



**3B** RAFTER COLUMN/BASE RAIL CONNECTION DETAIL  
SCALE: NTS



**4** END COLUMN/BASE RAIL CONNECTION DETAIL  
SCALE: NTS



**4A** END COLUMN/BASE RAIL CONNECTION DETAIL  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TNT**

**TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"X20'-0" SP ENCLOSED STRUCTURE**

**DATE: 6-23-20**

**SCALE: NTS**

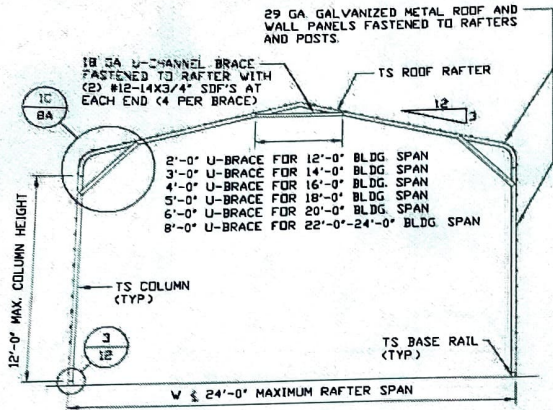
**JOB NO: 201265**

**SHT. 12**

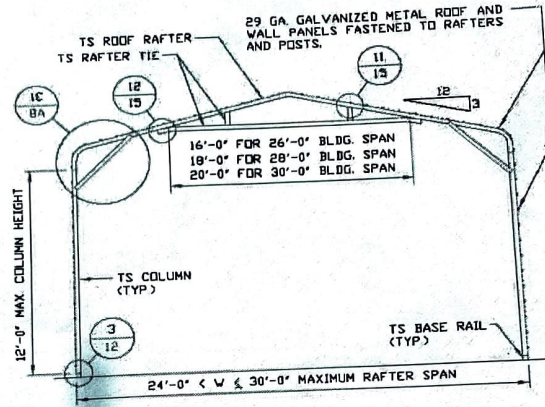
**DWG NO SK-3**

**REV: 0**

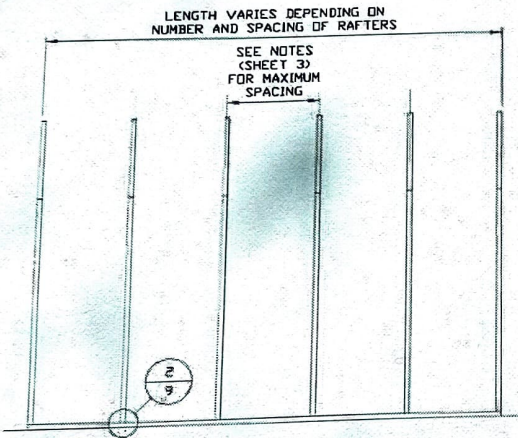
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN FRAMING SIDE SECTION**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: AT

CHECKED BY: PDH

PROJECT MGR: WSM

CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SCALE: NTS

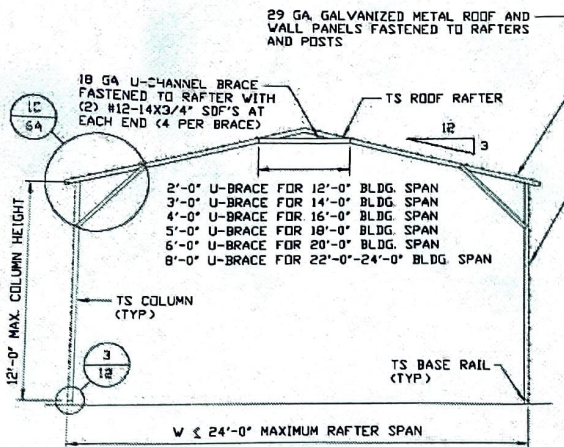
JOB NO: 201265

SHT. 7A

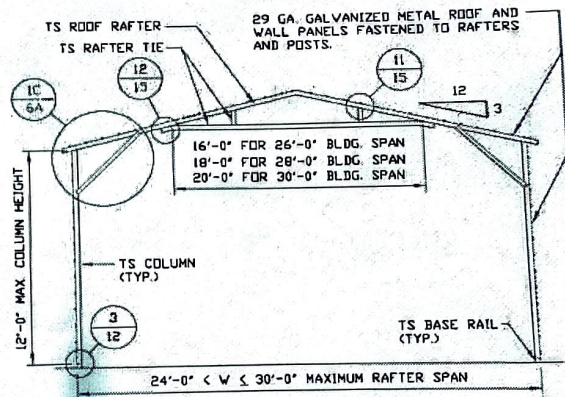
DWG. NO: SK-3

REV: 0

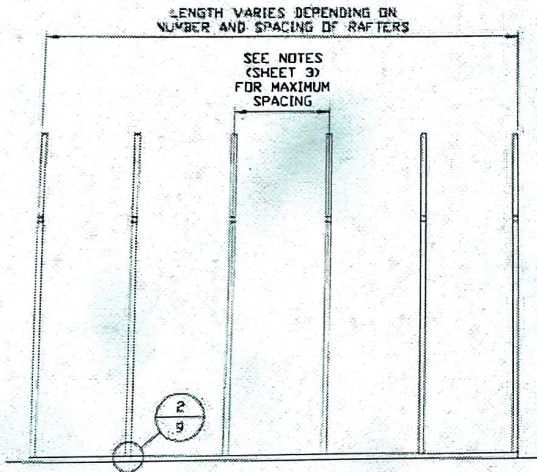
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



**TYPICAL RAFTER/COLUMN END FRAME SECTION**  
SCALE: NTS



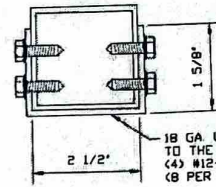
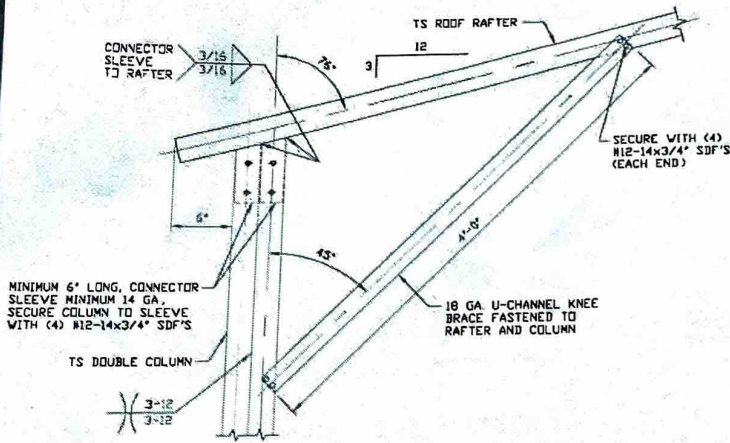
**TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**  
**CHECKED BY: PDH**  
**PROJECT NO: VSM**  
**CLIENT: TNT**

**TNT CARPORTS, INC.**  
**170 HOLLY SPRINGS ROAD**  
**MOUNT AIRY, NC 27030**  
**30'-0"x20'-0" SP ENCLOSED STRUCTURE**  
**DATE: 6-23-20**  
**SCALE: NTS**  
**JOB NO: 201265**  
**SHT. 5A**  
**DWG. NO: SK-3**  
**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC. ANY REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

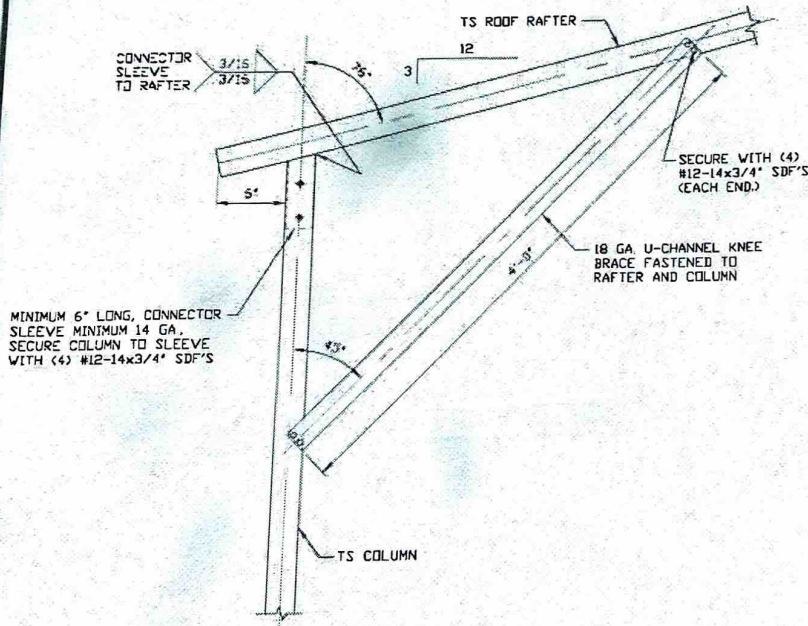


**BRACE SECTION**  
SCALE: NTS

**BOX EAVE RAFTER COLUMN CONNECTION DETAIL FOR HEIGHTS 12'-0" < TO <= 16'-0"**

1B

SCALE: NTS



**BOX EAVE RAFTER COLUMN CONNECTION DETAIL FOR HEIGHTS <= 12'-0"**

1C

SCALE: NTS

NOTE: 2'-0" KNEE BRACE MAY BE USED FOR BUILDING WIDTHS < 24'-0".

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT NO: WSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: 2012**

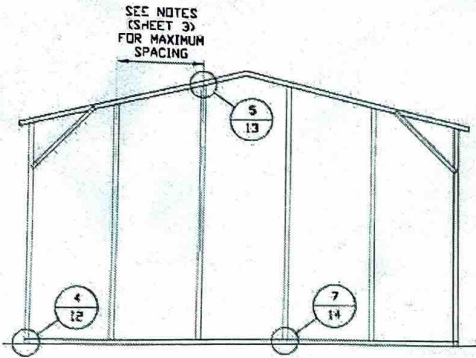
**SHT. 6A**

**DWG. NO SK-3**

**REV: 0**

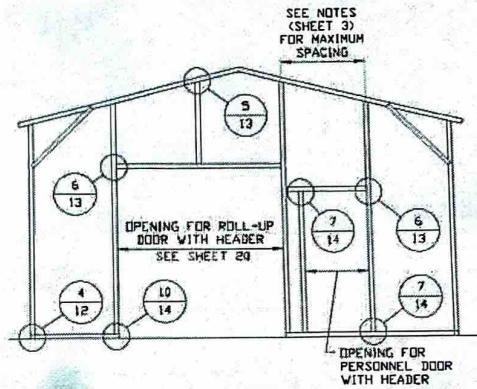
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC. UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS



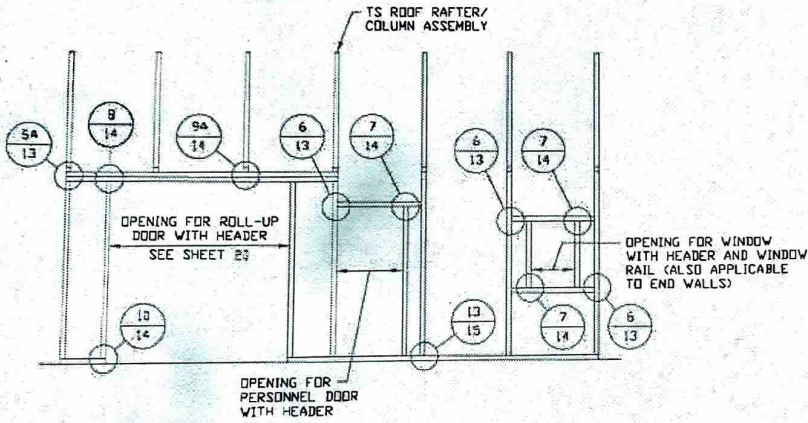
**TYPICAL BOX EAVE RAFTER  
END WALL FRAMING SECTION**

SCALE: NTS



**TYPICAL BOX EAVE RAFTER END  
WALL OPENINGS FRAMING SECTION**

SCALE: NTS



**TYPICAL BOX EAVE RAFTER  
SIDE WALL OPENINGS FRAMING SECTION**

SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY:** AT  
**CHECKED BY:** PDH  
**PROJECT MGR:** WSM  
**CLIENT:** TNT

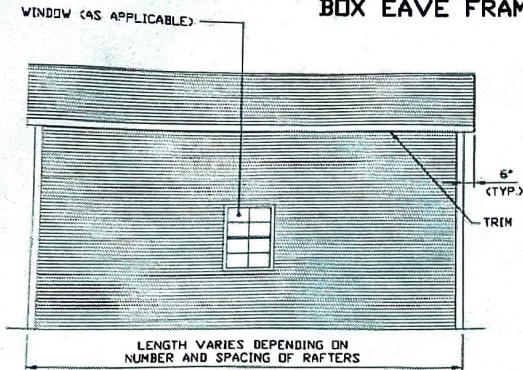
TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE:** 6-23-20    **SCALE:** NTS    **JOB NO:** 201265  
**SHT.:** 10    **DWG. NO:** SK-3    **REV.:** 0

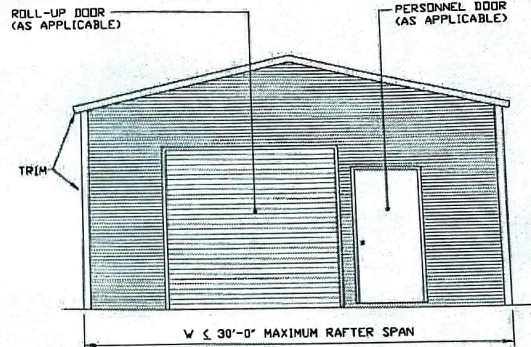
PC  
W

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC. UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

**BOX EAVE RAFTER STRUCTURE**

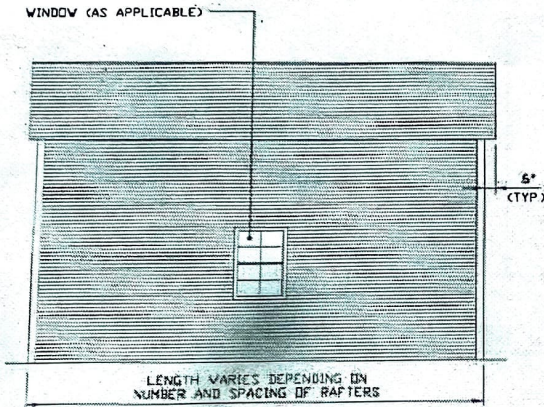


**TYPICAL SIDE ELEVATION**  
SCALE: NTS

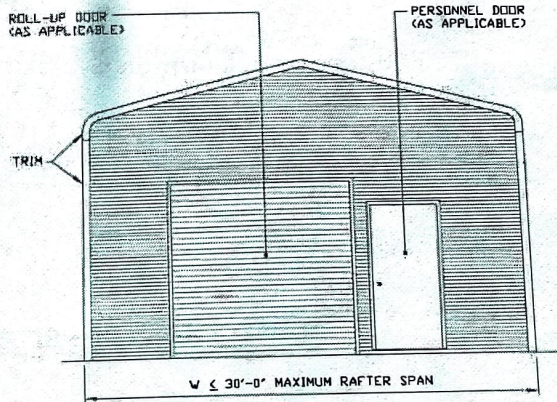


**TYPICAL END ELEVATION**  
SCALE: NTS

**BOW FRAME RAFTER STRUCTURE**



**TYPICAL SIDE ELEVATION**  
SCALE: NTS



**TYPICAL END ELEVATION**  
SCALE: NTS

Roll  
Up  
Door

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

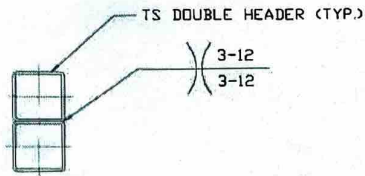
**DRAWN BY:** AT  
**CHECKED BY:** PDH  
**PROJECT MGR:** VSM  
**CLIENT:** TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE:** 6-23-20    **SCALE:** NTS    **JOB NO:** 20126S  
**SHT.:** 4    **DWG. NO:** SK-3    **REV.:** 0

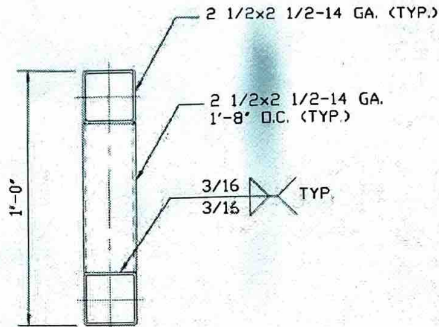
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

## SIDE WALL HEADER OPTIONS



### HEADER DETAIL FOR LENGTHS $\leq 12'-0''$

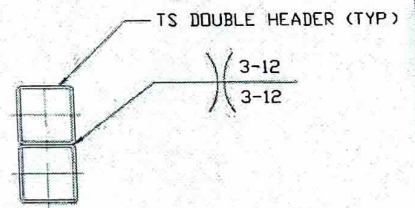
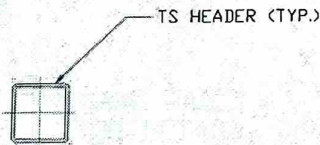
SCALE: NTS



### HEADER DETAIL FOR LENGTHS $12'-0'' < TO \leq 14'-0''$

SCALE: NTS

## END WALL HEADER OPTION



### HEADER DETAIL FOR LENGTHS $\leq 12'-0''$

SCALE: NTS

### HEADER DETAIL FOR LENGTHS $12'-0'' < TO \leq 14'-0''$

SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: VSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SHT. 20**

**SCALE: NTS**

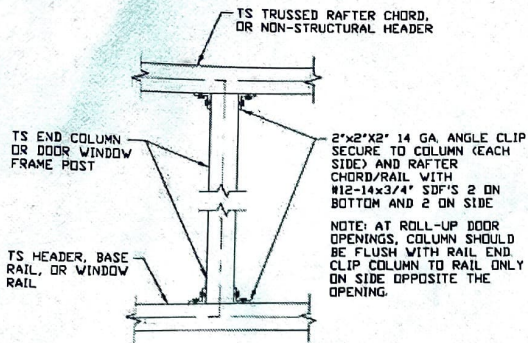
**DWG. NO: SK-3**

**JOB NO: P01265**

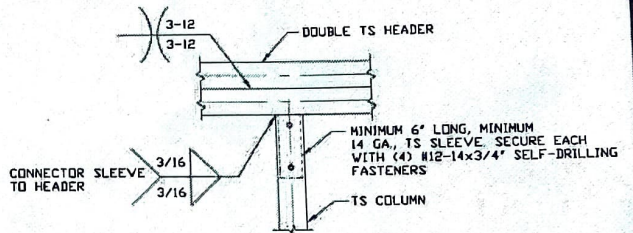
**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

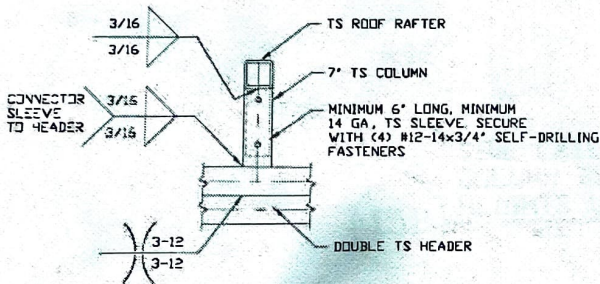
# CONNECTION DETAILS



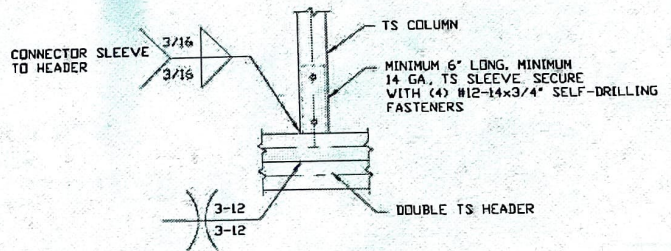
**7** COLUMN TO WINDOW RAIL CONNECTION DETAIL  
SCALE: NTS



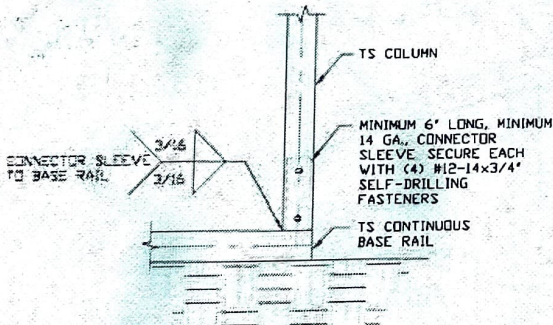
**8** DOUBLE HEADER/COLUMN CONNECTION DETAIL  
SCALE: NTS



**9A** COLUMN/DOUBLE HEADER CONNECTION DETAIL  
SCALE: NTS



**9B** COLUMN/DOUBLE HEADER CONNECTION DETAIL  
SCALE: NTS



**10** COLUMN/BASE RAIL CONNECTION DETAIL  
SCALE: NTS

Heo

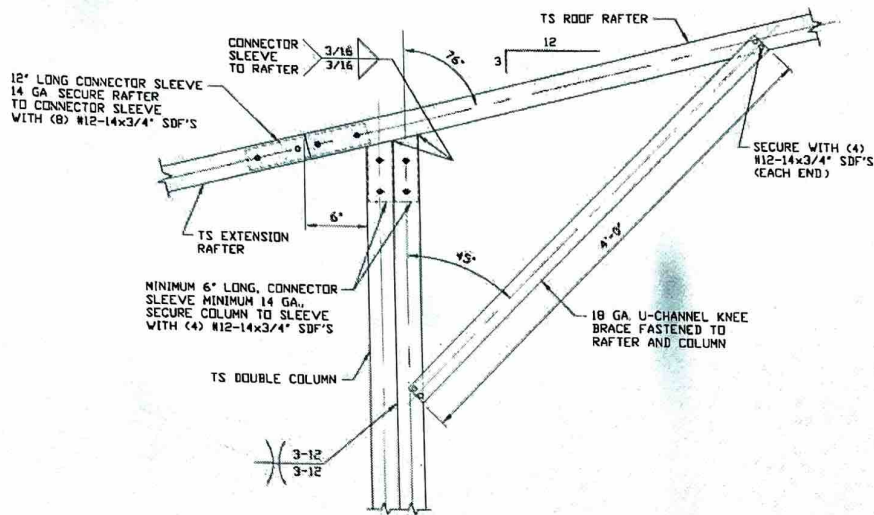
**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

DRAWN BY: AT		TNT CARPORTS, INC. 170 HOLLY SPRINGS ROAD MOUNT AIRY, NC 27030 30'-0"X20'-0" SP ENCLOSED STRUCTURE	
CHECKED BY: PDH			
PROJECT MGR: VSM	DATE: 6-23-20	SCALE: NTS	JOB NO: 20126S
CLIENT: TNT	SHT. 14	DWG. NO: SK-3	REV: 0

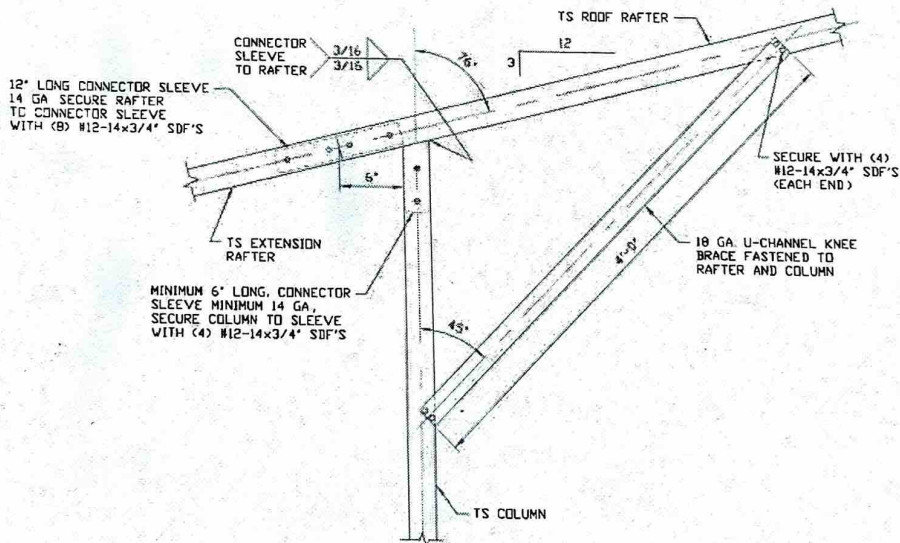


# BOX EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS $\leq 12'-0''$



15B

**SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 12'-0" < TO < 16'-0"**  
SCALE: NTS



15C

**SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS < 12'-0"**  
SCALE: NTS

NOTE: 2'-0" KNEE BRACE MAY BE USED  
FOR BUILDING WIDTHS < 24'-0".

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: AT

CHECKED BY: PDH

PROJECT MGR: VSM

CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SCALE: NTS

JOB NO: 201265

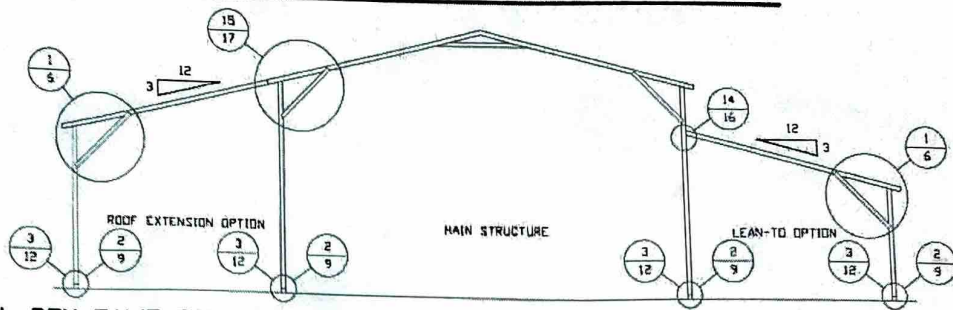
SHT. 17A

DWG. NO: SK-3

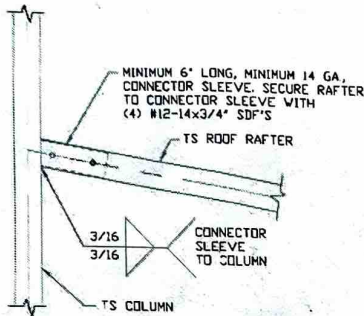
REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRACTION THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# BOX EAVE RAFTER LEAN-TO OPTIONS

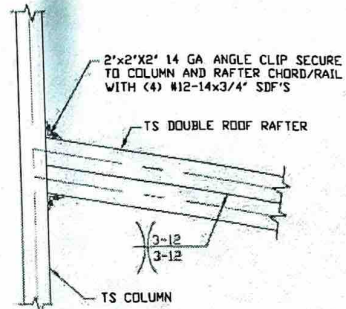


**TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)**  
SCALE: NTS



**LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS  $\leq 12'-0"$**   
SCALE: NTS

14A



**LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS  $12'-0" < TO \leq 16'-0"$**   
SCALE: NTS

14B

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: AT

CHECKED BY: PDH

PROJECT MGR: VSM

CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SCALE: NTS

JOB NO: 201265

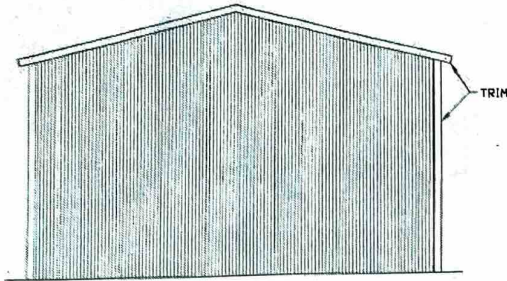
SHT. 16

DWG NO SK-3

REV: 0

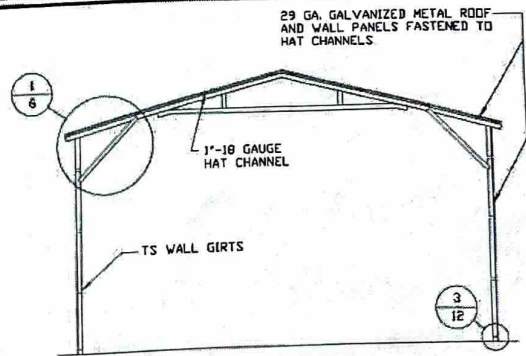
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

# BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



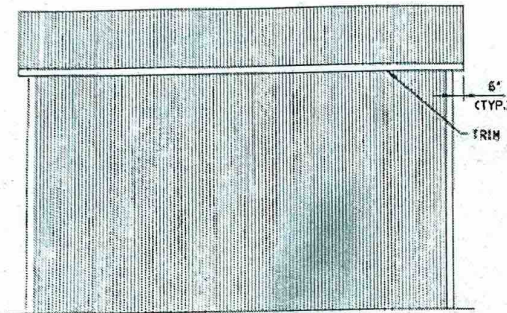
**TYPICAL END ELEVATION  
VERTICAL ROOF/SIDING**

SCALE: NTS



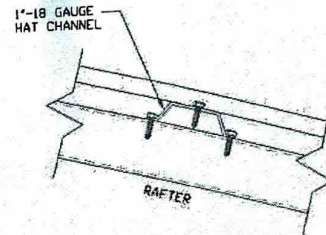
**TYPICAL SECTION VERTICAL  
ROOF/SIDING OPTION**

SCALE: NTS



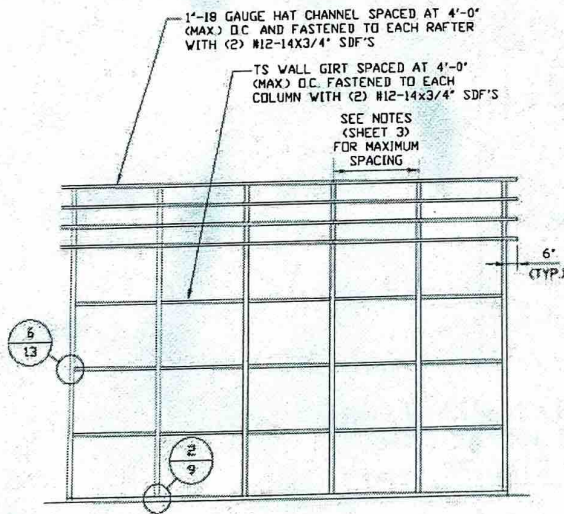
**TYPICAL SIDE ELEVATION  
VERTICAL ROOF/SIDING**

SCALE: NTS



**PANEL ATTACHMENT**

(ALTERNATE FOR VERTICAL ROOF PANELS)  
SCALE: NTS



**TYPICAL FRAMING SECTION  
VERTICAL ROOF/SIDING OPTION**

SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: 201265**

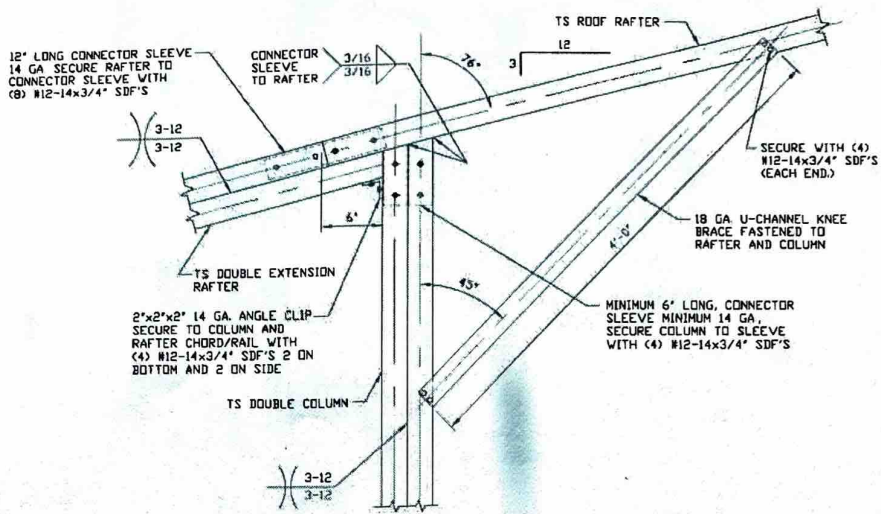
**SHT. 19**

**DWG. NO SK-3**

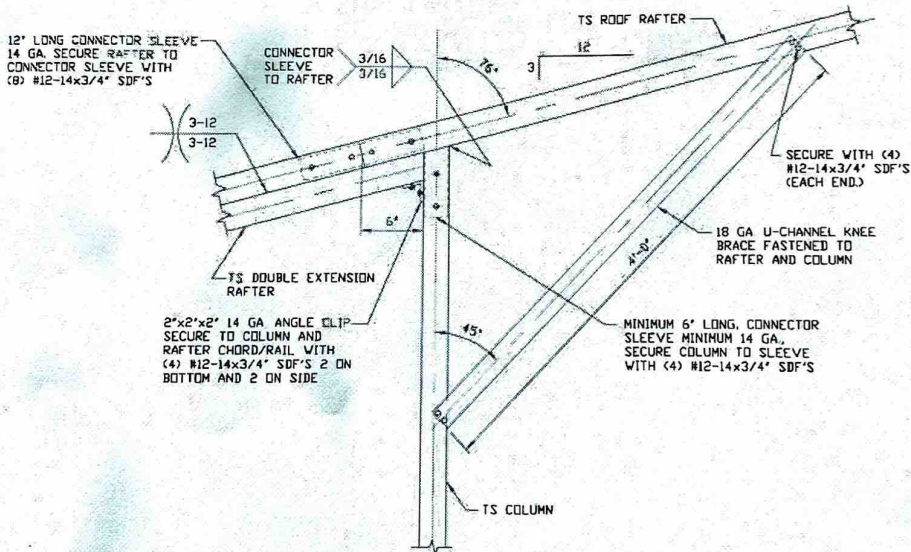
**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

**BOX EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS 12'-0" < TO ≤ 16'-0"**



**15E**  
SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 12'-0" < TO ≤ 16'-0"  
SCALE: NTS



**15F**  
SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS < 12'-0"  
SCALE: NTS

NOTE: 2'-0" KNEE BRACE MAY BE USED  
FOR BUILDING WIDTHS < 24'-0".

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: AT

CHECKED BY: POH

PROJECT MGR: VSM

CLIENT: TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE

DATE: 6-23-20

SCALE: NTS

JOB NO: 201265

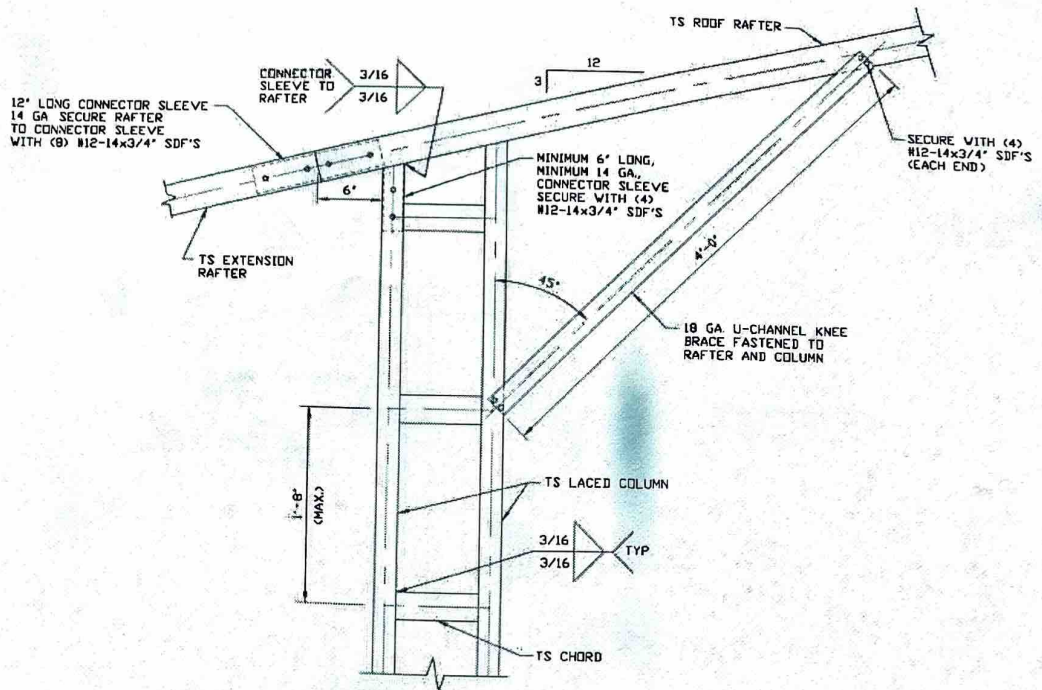
SHT. 17C

DWG. NO: SK-3

REV: 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

**BOX EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS  $\leq 12'-0''$**



**15A** SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 16'-0" < TO ≤ 20'-0"  
SCALE: NTS

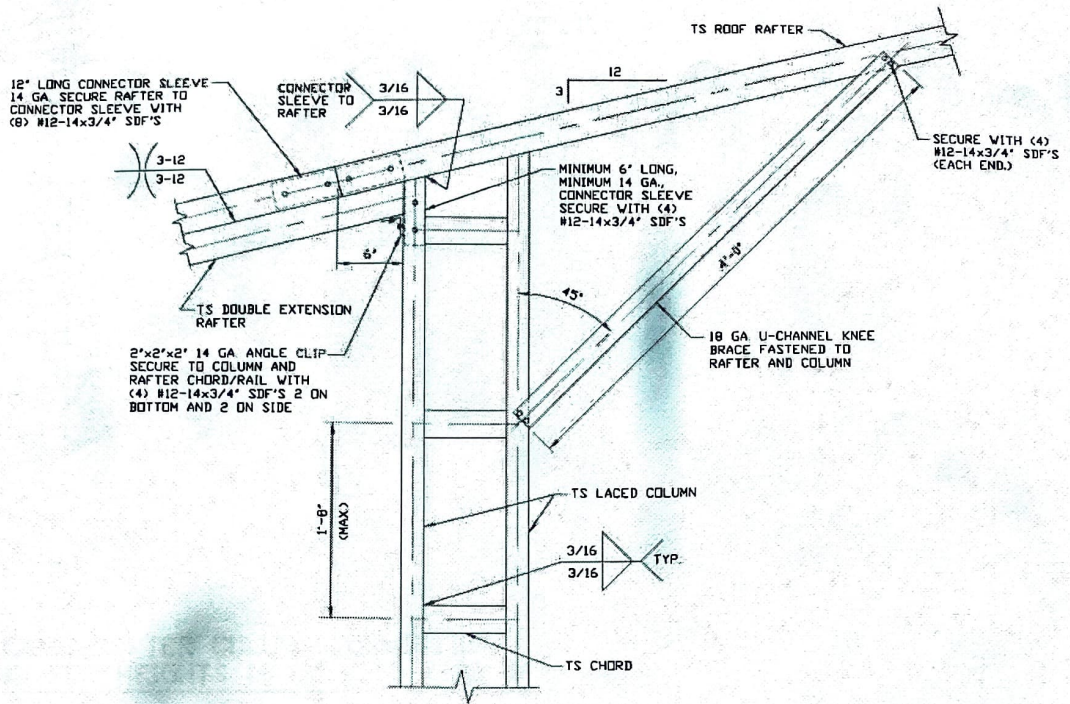
**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY:** AT  
**CHECKED BY:** PDH  
**PROJECT MGR:** VSH  
**CLIENT:** TNT

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0" x 20'-0" SP ENCLOSED STRUCTURE  
**DATE:** 6-23-20  
**SCALE:** NTS  
**JOB NO:** 20126S  
**SHT.** 17  
**DWG. NO:** SK-3  
**REV.:** 0

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

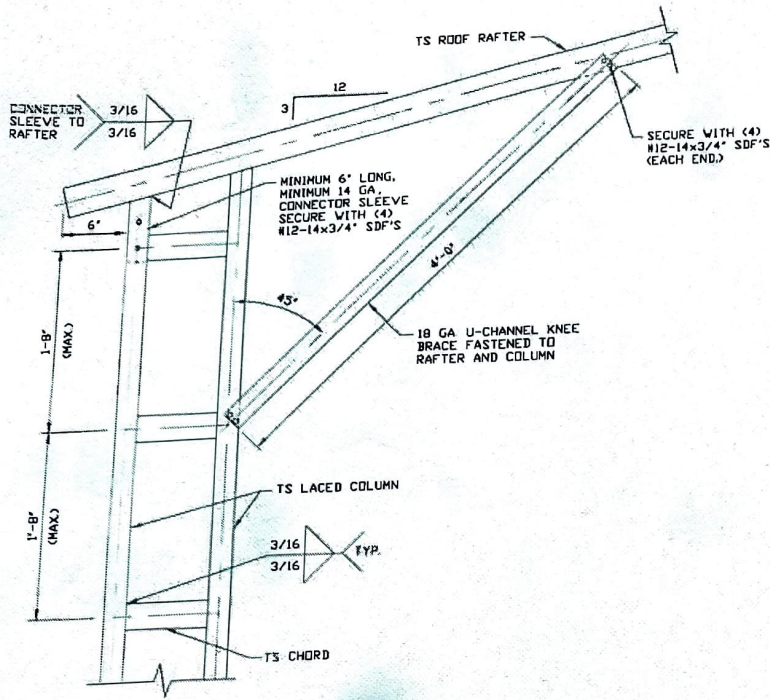
**BOX EAVE RAFTER LEAN-TO OPTIONS FOR RAFTER SPANS 12'-0" < TO ≤ 16'-0"**



**SIDE EXTENSION RAFTER/  
COLUMN DETAIL FOR  
HEIGHTS 16'-0" < TO ≤ 20'-0"**  
SCALE: NTS

15D

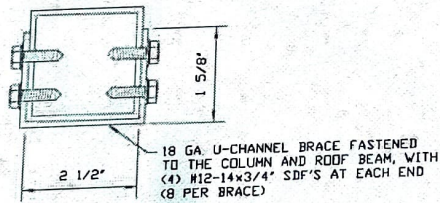
<b>MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.</b>	<b>DRAWN BY: AT</b>		<b>TNT CARPORTS, INC. 170 HOLLY SPRINGS ROAD MOUNT AIRY, NC 27030</b>	
	<b>CHECKED BY: PDH</b>		<b>30'-0"x20'-0" SP ENCLOSED STRUCTURE</b>	
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	<b>PROJECT MGR: WSM</b>	<b>DATE: 6-23-20</b>	<b>SCALE: NTS</b>	<b>JTB NO: E01265</b>
	<b>CLIENT: TNT</b>	<b>SHT. 17B</b>	<b>DWG. NO: SK-3</b>	<b>REV. 0</b>



**BOX EAVE RAFTER COLUMN CONNECTION  
DETAIL FOR HEIGHTS 16'-0" < TO ≤ 20'-0"**

**1A**

SCALE: NTS



**BRACE SECTION**  
SCALE: NTS

**MOORE AND ASSOCIATES  
ENGINEERING AND CONSULTING, INC.**

**DRAWN BY: AT**

**CHECKED BY: PDH**

**PROJECT MGR: WSM**

**CLIENT: TNT**

TNT CARPORTS, INC.  
170 HOLLY SPRINGS ROAD  
MOUNT AIRY, NC 27030  
30'-0"x20'-0" SP ENCLOSED STRUCTURE

**DATE: 6-23-20**

**SCALE: NTS**

**JOB NO: 201265**

**SHT. 6**

**DWG NO: SK-3**

**REV: 0**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.