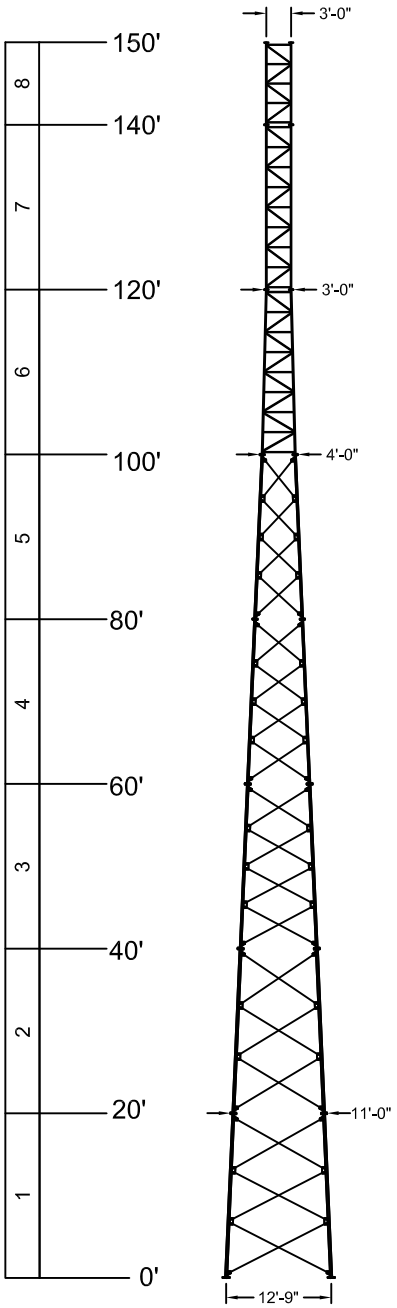
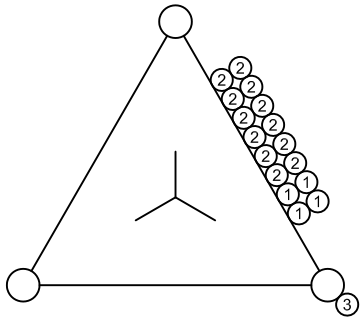




PLAN VIEW

MEMBER INFORMATION

SECTION	ELEVATION	FACE SIZE	LEG DIA.	DIAGONALS	GIRTS	# OF BAYS
1	0' - 20'	12'-9"	Ø3"	L 2 1/2" x 3/16"	N/A	3 - X
2	20' - 40'	11'-0"	Ø3"	L 2" x 3/16"	N/A	3 - X
3	40' - 60'	9'-3"	Ø2 1/2"	L 1 1/2" x 1/8"	N/A	4 - X
4	60' - 80'	7'-6"	Ø2 1/4"	L 1 1/2" x 1/8"	N/A	4 - X
5	80' - 100'	5'-9"	Ø2 1/4"	L 1 1/2" x 1/8"	N/A	4 - X
6	100' - 120'	4'-0"	Ø1 1/2"	S.R. Ø7/8"	S.R. Ø3/4"	8 - Z
7	120' - 140'	3'-0"	Ø1 1/4"	S.R. Ø3/4"	S.R. Ø5/8"	8 - Z
8	140' - 150'	3'-0"	Ø1 1/4"	S.R. Ø5/8"	S.R. Ø5/8"	4 - Z

ANTENNA INFORMATION

ELEVATION	ANTENNA	LINE
150'	(1) 10' TYP. OMNI/WHIP ANTENNA(S)	(1) 7/8" HELIAX
148'	(1) 2' STD DISH W/ RADOME	(1) 7/8" HELIAX
145'	(1) 2' STD DISH W/ RADOME	(1) 7/8" HELIAX
130'	(1) 10' TYP. OMNI/WHIP ANTENNA(S)	(1) 7/8" HELIAX
120'	(12) 72" x 12" x 3" TYP. FLAT PANEL ANTENNA(S)	(12) 1 5/8" HELIAX

PLAN VIEW REF:
1) 7/8" HELIAX
2) 1 5/8" HELIAX
3) STEP BOLTS

BUILDING CODE DESIGN INFORMATION

1. 2015 INTERNATION BUILDING CODE.
2. SEISMIC ZONE - F. (Ss = 0.54g / S1 = 0.18g)
3. TOWER DESIGNED FOR A 120 MPH WIND SPEED NO ICE.
4. TOWER DESIGNED TO EXPOSURE C; RISK CATEGORY IV; TOPO. CAT 1.
5. TOWER DESIGNED TO TIA/EIA-222-H STANDARD.

DESIGN NOTES:
1) TOWER LEGS ARE CONSTRUCTED OF SOLID ROUND BAR MATERIAL.
2) SOLID ROUND 0.75" AND LARGER ASTM A-572 GRADE : 50 KSI MIN.
3) SOLID ROUND 0.625" AND SMALLER IS ASTM A-36 GRADE : 36 KSI MIN.
4) ALL ANGLE MATERIAL IS ASTM A-529 : 50 KSI MIN.
5) ALL BRACE AND FLANGE BOLTS ARE A325-X
6) THIS TOWER IS DESIGNED FOR STEP BOLTS UP ONE LEG FOR CLIMBING WITH SAFETY CLIMB DEVICE.
7) (6) ø1 1/4" x 4'-6" LONG (F1554-GR.105) ANCHOR BOLTS PER LEG.
8) THIS TOWER IS DESIGNED FOR A 120 M.P.H. WIND SPEED WITH NO ICE AND A 30 M.P.H. WIND SPEED WITH 2.00" IN ICE IN ACCORDANCE WITH THE TIA/EIA-222-H STANDARD. ICE IS CONSIDERED TO INCREASE IN THICKNESS WITH HEIGHT.
9) DEFLECTIONS BASED ON A 60 M.P.H. WIND.
10) TOWER DESIGNED TO EXPOSURE C; RISK CATEGORY IV; TOPO. CAT 1.

BASE REACTIONS:(FACTORED)

TOTAL SHEAR	= 16 KIPS
AXIAL LOAD	= 68 KIPS
UPLIFT / LEG	= 105 KIPS
COMP. / LEG	= 119 KIPS
O.T. MOMENT	= 1253 FT-K

APPROX. WEIGHT
10.09 KIPS

REV #:	DESCRIPTION	DATE	BY
A	ADDED BUILDING CODE	5/29/2019	JLW

SCALE: NTS

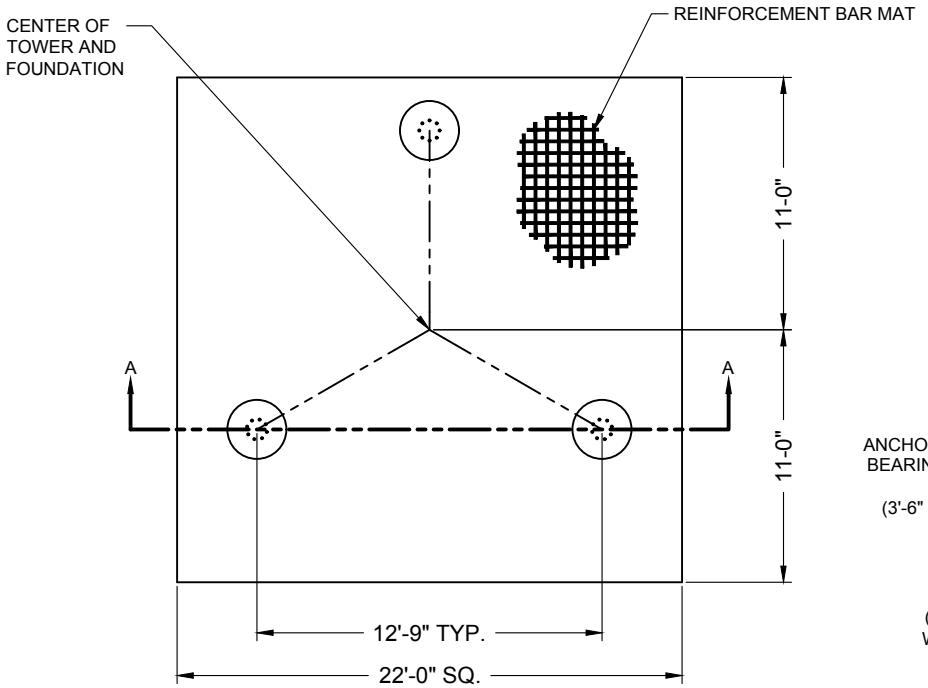
UNLESS OTHERWISE NOTED DIMENSIONS ARE IN: INCHES

TOLERANCE BANDS:
.X +3/32"/-0 ANGLES +/- 2°
.XX +3/32"/-0
.XXX +1/16"/-0 HOLES +Ø1/16"/-0

ALLSTATE TOWER
PITTSBURG TANK & TOWER GROUP Since 1919
ALLSTATE TOWER INC.
P.O. BOX 25
HENDERSON, KY 42419
PHONE: (270) 830-8512
FAX: (270) 830-8475
WWW.PTTG.COM

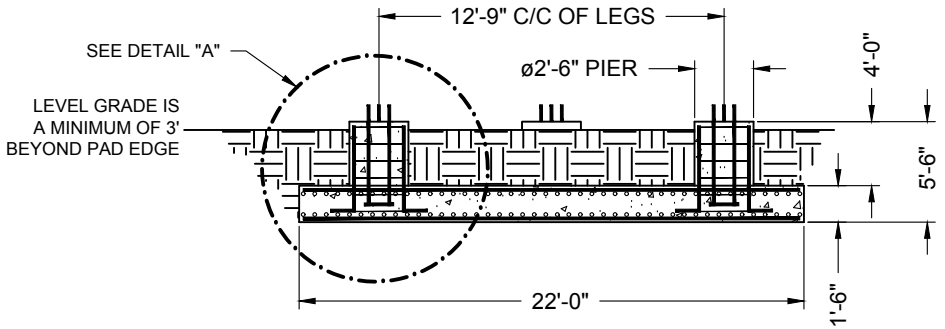
DESCRIPTION:
TOWER OVERVIEW
INDUSTRIAL ENGINEERED SYSTEMS
150' SELF SUPPORT TOWER
ST. LOUIS, ST. LOUIS CO., MO

DRAWN BY: RC
DATE: 11/12/2018
FILE NAME: ER074528A - A
DESIGN: ER074528
SHEET: A

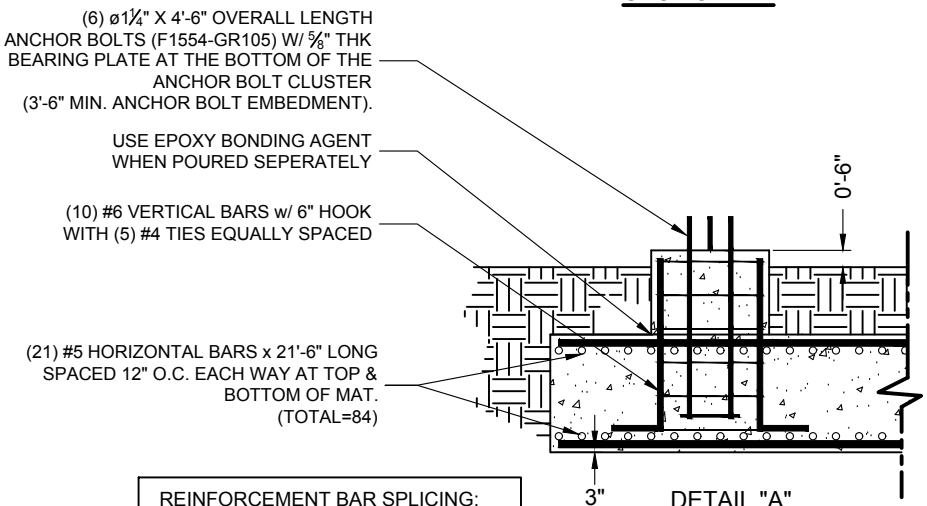


PLAN VIEW

TOTAL VOLUME OF CONCRETE = 29.1 YD^3



SECTION A-A



DETAIL "A"

REINFORCEMENT BAR SPLICING:

1. ALL LAP SPLICES SHALL CONFORM TO ACI 318 REQUIREMENTS.
2. REFER TO CHART BELOW WHEN REINFORCMENT BAR SPLICING IS NECESSARY.

REINFORCING BAR SIZE	LAP SPLICE LENGTH
3	15"
4	17"
5	21"
6	26"
7	30"
8	36"
9	46"
10	58"
11	71"

FOUNDATION INSTALLATION/DESIGN NOTES:

1. THIS FOUNDATION IS DESIGNED TO MEET ALL STANDARDS SET FORTH BY ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ANSI/TIA/EIA 222-H: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
2. THIS FOUNDATION IS DESIGNED UTILIZING THE GEOTECHNICAL REPORT PERFORMED BY GEOTECHNOLOGY, INC.; DATED 2-10-2014; GEOTECHNOLOGY PROJECT NO. J021419.01. THE FOUNDATION CONTRACTOR SHALL INSTALL THE FOUNDATIONS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
3. ALL WORK PERFORMED FROM THESE DRAWINGS SHOULD BE BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER FOUNDATION CONSTRUCTION.
4. ALL FOOTING EXCAVATIONS SHALL BE MANUALLY CLEANED PRIOR TO PLACING CONCRETE. COMPACT THE EXPOSED SOIL SURFACE AND ANY GRANULAR FILL UNDER THE FOUNDATION TO 90% OF THE MODIFIED PROCTOR DENSITY.
5. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS. COPIES OF THE CONCRETE CYLINDER TEST REPORTS SHALL BE SENT TO THE RESIDENT ENGINEER / INSPECTOR.
6. CONCRETE COVER FOR REINFORCING BARS SHALL BE 2" UNLESS NOTED OTHERWISE. ALL REINFORCING BARS SHALL BE GRADE 60 REBAR (MIN YIELD = 60KSI).
7. FIELD BENDING OR WELDING OF REINFORCEMENT BARS IS NOT PERMITTED.
8. PROVIDE CHAMFERS AT ALL EXPOSED CORNERS OF CONCRETE.
9. BACKFILL NEAR AND AROUND THE FOUNDATIONS SHALL BE A WELL GRADED FILL MATERIAL PLACED IN 8" THICK LAYERS THAT HAS BEEN COMPACTED TO 90% OF THE MODIFIED PROCTOR DENSITY PER ASTM D1557.
10. SOME DETAIL HAS BEEN PURPOSELY OMITTED TO CLARIFY ILLUSTRATION.

REV #:	DESCRIPTION	DATE	BY
A	ADDED DIM TO DETAIL A, AND UPDATED NOTE #6 IN DESIGN NOTES.	6/3/2019	RC

SCALE: NTS

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN: INCHES

TOLERANCE BANDS:
.X +3/32" / -0 ANGLES +/- 2°
.XX +3/32" / -0
.XXX +1/16" / -0 HOLES + Ø1/16" / -0

DRAWN BY: RC

DATE: 11/12/2018

ALLSTATE TOWER
PITTSBURG TANK & TOWER GROUP Since 1919
ALLSTATE TOWER INC.
P.O. BOX 25
HENDERSON, KY 42419
PHONE: (270) 830-8512
FAX: (270) 830-8475
WWW.PTTG.COM

DESCRIPTION:
PAD & PIER FOUNDATION DESIGN
INDUSTRIAL ENGINEERED SYSTEMS
150' SELF SUPPORT TOWER
ST. LOUIS, ST. LOUIS CO., MO

FILE NAME: ER074528A - B

DESIGN: ER074528

SHEET: B