



AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure : 300 ft Self Supported Tower
ATC Site Name : CHALYBEATE SPRINGS NC, NC
ATC Asset Number : 21268
Engineering Number : OAA766107_C3_03
Proposed Carrier : CLOUDWYZE, INC.
Carrier Site Name : CBS
Carrier Site Number : 21268
Site Location : 512 CHALYBEATE ROAD
FUQUAY VARINA, NC 27526-6035
35.502400,-78.817300
County : Harnett
Date : May 14, 2021
Max Usage : 104%
Result : Pass



Prepared By:
Cole Melody Koffi
Structural Engineer I

Reviewed By:

COA: P-1177



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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 300 ft self supported tower to reflect the change in loading by CLOUDWYZE, INC..

Supporting Documents

| | |
|----------------------------|--|
| Tower Drawings | Rohn Drawing #A981281, dated April 22, 1998 |
| Foundation Drawing | Froehling & Robertson Job #Y66-547, dated June 24, 1998 |
| Geotechnical Report | Froehling & Robertson Site ID #368-212B, dated August 19, 1998 |

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

| | |
|---------------------------------|--|
| Basic Wind Speed: | 90 mph (3-Second Gust, V_{ASD}) / 116 mph (3-Second Gust, V_{ULT}) |
| Basic Wind Speed w/ Ice: | 30 mph (3-Second Gust) w/ 3/4" radial ice concurrent |
| Code: | ANSI/TIA-222-G / 2015 IBC / 2018 North Carolina Building Code |
| Structure Class: | II |
| Exposure Category: | C |
| Topographic Category: | 1 |
| Crest Height: | 0 ft |
| Spectral Response: | $S_s = 0.17$, $S_1 = 0.08$ |
| Site Class: | D - Stiff Soil |

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.



Existing and Reserved Equipment

| Elev. ¹ (ft) | Qty | Equipment | Mount Type | Lines | Carrier | | | |
|-------------------------|----------------------------------|--|--------------|--|------------------|--------------|--|---------------|
| 302.3 | 1 | Raycap DC6-48-60-18-8F(32.8 lbs) | Sector Frame | (1) 0.28" (7.1mm) Fiber (1) 0.28" (7mm) Fiber (5) 0.78" (19.7mm) 8 AWG 6 (12) 2 1/4" Coax (1) 3/8" (0.38"-9.5mm) RET Control Cable | AT&T MOBILITY | | | |
| | 2 | Raycap DC6-48-60-18-8C-EV | | | | | | |
| 298.0 | 3 | Ericsson RRUS 4478 B14 | | | | | | |
| | 3 | Commscope NNH4-65C-R6 (102.1 lbs) | | | | | | |
| | 3 | Ericsson RRUS 4415 B30 | | | | | | |
| | 3 | Ericsson RRUS-11 800 MHz | | | | | | |
| | 6 | Kathrein Scala 742 213 | | | | | | |
| | 1 | Commscope SBNHH-1D65C | | | | | | |
| | 1 | Commscope RV4PX310R-V2 (86 lb) | | | | | | |
| | 3 | Ericsson RRUS 8843 B2, B66A | | | | | | |
| | 6 | RFS ATM192012-0 | | | | | | |
| 1 | Commscope SBNHH-1D65B (40.6 lbs) | | | | | | | |
| 285.0 | 3 | Alcatel-Lucent 800 MHz 2X50W RRH w/ Filter | | | | Sector Frame | (4) 1 1/4" Hybriflex Cable | SPRINT NEXTEL |
| | 3 | Alcatel-Lucent 1900 MHz 4X45 RRH | | | | | | |
| | 3 | RFS APXVSP18-C-A20 | | | | | | |
| | 3 | RFS APXVTM14-C-I20 | | | | | | |
| | 3 | Alcatel-Lucent TD-RRH8x20-25 w/ Solar Shield | | | | | | |
| 277.5 | 6 | Ericsson 8843 Rev 2 | Sector Frame | (6) 1 5/8" Coax (8) 1 5/8" Hybriflex | VERIZON WIRELESS | | | |
| | 6 | Ericsson Radio 4449 - B13&B5 | | | | | | |
| 276.7 | 2 | Raycap RRFDC-3315-PF-48 (32lbs) | | | | | | |
| 274.1 | 6 | Commscope NHH-65C-R2B | | | | | | |
| | 3 | Raycap RCMD-6627-PF-48 | | | | | | |
| 270.0 | 3 | Antel BXA-70063-8CF-EDIN-2 | | | | | | |
| | 3 | Ericsson KRY 112 489/2 | | | | | | |
| 264.0 | 3 | RFS APXVAARR24_43-U-NA20 | | | | Sector Frame | (1) 1 5/8" (1.63"-41.3mm) Fiber (6) 1 5/8" Coax | T-MOBILE |
| | 3 | RFS APXV18-206516S-C-A20 | | | | | | |
| | 3 | Ericsson Radio 4449 B12,B71 | | | | | | |
| 251.1 | 9 | Decibel DB848H90E-XY | Sector Frame | - | SPRINT NEXTEL | | | |

Equipment to be Removed

| Elev. ¹ (ft) | Qty | Equipment | Mount Type | Lines | Carrier |
|--|-----|-----------|------------|-------|---------|
| No loading was considered as removed as part of this analysis. | | | | | |



Proposed Equipment

| Elev. ¹ (ft) | Qty | Equipment | Mount Type | Lines | Carrier |
|-------------------------|-----|---------------------------|------------|--|-----------------|
| 235.0 | 4 | Telrad BreezeCOMPACT 1000 | Pole Mount | (4) 0.34" (8.6mm) Cable (12) 0.36" (9.1mm) Cat 5e | CLOUDWYZE, INC. |
| | 2 | Aviat Networks WTM 4200 | | | |
| | 4 | Telrad 300794 | | | |
| | 2 | Andrew VHLP3-11W | | | |

¹ Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Bundle proposed lines on any empty face.

Structure Usages

| Structural Component | Controlling Usage | Pass/Fail |
|----------------------|-------------------|-----------|
| Legs | 104% | Pass |
| Diagonals | 86% | Pass |
| Horizontals | 73% | Pass |
| Anchor Bolts | 76% | Pass |
| Leg Bolts | 87% | Pass |

Foundations

| Reaction Component | Original Design Reactions | Factored Design Reactions* | Analysis Reactions | % of Design |
|---|---------------------------|----------------------------|--------------------|-------------|
| Uplift (Kips) | 417.1 | 563.1 | 459.5 | 82% |
| Axial (Kips) | 500.8 | 676.1 | 546.7 | 81% |
| Shear (Kips) | 89.7 | 121.1 | 93.4 | 77% |
| * The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1 | | | | |

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

| Antenna Elevation (ft) | Antenna | Carrier | Deflection (ft) | Twist (°) | Sway (Rotation) (°) |
|------------------------|---------------------------|-----------------|-----------------|-----------|---------------------|
| 235.0 | Andrew VHLP3-11W | CLOUDWYZE, INC. | 0.589 | 0.041 | 0.353 |
| | Aviat Networks WTM 4200 | | | | |
| | Telrad 300794 | | | | |
| | Telrad BreezeCOMPACT 1000 | | | | |

*Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G



Standard Conditions

All engineering services performed by A.T. Engineering Services, PLLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of A.T. Engineering Services, PLLC

It is the responsibility of the client to ensure that the information provided to A.T. Engineering Services, PLLC and used in the performance of our engineering services is correct and complete.

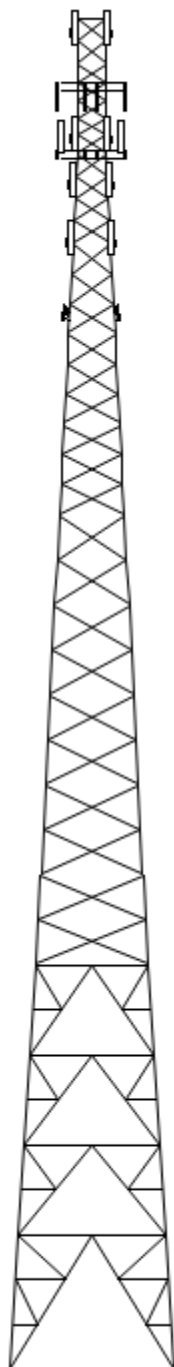
All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and A.T. Engineering Services, PLLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. A.T. Engineering Services, PLLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.

Quadrant 1

300.00
 290.00 (Sect 15)
 270.00 (Sect 14)
 250.00 (Sect 13)
 230.00 (Sect 12)
 210.00 (Sect 11)
 190.00 (Sect 10)
 170.00 (Sect 9)
 150.00 (Sect 8)
 130.00 (Sect 7)
 110.00 (Sect 6)
 90.00 (Sect 5)
 70.00 (Sect 4)
 50.00 (Sect 3)
 30.00 (Sect 2)
 Sect 1



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Loads: 90 mph no ice
 30 mph w/ 3/4" radial ice
 Site Class: D Ss: 0.17 S1: 0.08
 60 mph Serviceability

Job Information

Client : CLOUDWYZE, INC.
 Tower : 21268 Location : CHALYBEATE Base Width : 36.63 ft
 Code : ANSI/TIA-222-G Top Width : 6.58 ft
 Tower Ht : 300.00 ft
 Shape : Triangle

Sections Properties

| Section | Leg Members | Diagonal Members | Horizontal Members |
|---------|----------------------------|-----------------------------|------------------------|
| 1 - 2 | PX 50 ksi 10" DIA PIPE | PST 50 ksi 3" DIA PIPE | PST 50 ksi 3" DIA PIPE |
| 3 - 4 | PSP 50 ksi 8.75" OD x 0.5" | PST 50 ksi 3" DIA PIPE | PST 50 ksi 3" DIA PIPE |
| 5 | PSP 50 ksi 8.75" OD x 0.5" | SAE 36 ksi 5X5X0.375 | |
| 6 | PSP 50 ksi ROHN 8 EHS | SAE 50 ksi 4X4X0.375 | |
| 7 | PSP 50 ksi ROHN 8 EHS | SAE 50 ksi 4X4X0.3125 | |
| 8 | PX 50 ksi 6" DIA PIPE | SAE 50 ksi 4X4X0.3125 | |
| 9 | PSP 50 ksi ROHN 6 EHS | SAE 50 ksi 4X4X0.3125 | |
| 10 | PSP 50 ksi ROHN 5 EH | SAE 50 ksi 3X3X0.25 | |
| 11 | PX 50 ksi 4" DIA PIPE | SAE 36 ksi 2.5X2.5X0.25 | |
| 12 | PX 50 ksi 4" DIA PIPE | SAE 36 ksi 2.5X2.5X0.1875 | |
| 13 | PX 50 ksi 3-1/2" DIA PIPE | SAE 36 ksi 2X2X0.1875 | |
| 14 | PST 50 ksi 3" DIA PIPE | SAE 36 ksi 1.75X1.75X0.1875 | |
| 15 | PST 50 ksi 2-1/2" DIA PIPE | SAE 36 ksi 1.75X1.75X0.1875 | SAE 36 ksi 2X2X0.1875 |

Redundant Secondary Bracing

| Section | Sub Diag 1 | Sub Horiz 1 | Sub Diag 2 | Sub Horiz 2 | Sub Diag 3 | Sub Horiz 3 |
|---------|-------------------|-------------------|----------------|-----------------|------------|-------------|
| 1 | S1.75X1.75X0.1875 | S1.75X1.75X0.1875 | D1.5X1.5X0.125 | S1.75X1.75X0.12 | - | - |
| 2 - 4 | S2X2X0.125 | D2X2X0.1875 | - | - | - | - |
| 5 - 15 | - | - | - | - | - | - |

Discrete Appurtenance

| Elev (ft) | Type | Qty | Description |
|-----------|----------------|-----|--------------------------------|
| 302.30 | | 2 | Raycap DC6-48-60-18-8C-EV |
| 302.30 | | 1 | Raycap DC6-48-60-18-8F(32.8 lb |
| 298.00 | Panel | 3 | Commscope NNH4-65C-R6 (102.1 l |
| 298.00 | Panel | 1 | Commscope RV4PX310R-V2 (86 lb) |
| 298.00 | Panel | 1 | Commscope SBNHH-1D65C |
| 298.00 | Panel | 6 | Kathrein Scala 742 213 |
| 298.00 | | 3 | Ericsson RRUS-11 800 MHz |
| 298.00 | | 3 | Ericsson RRUS 4415 B30 |
| 298.00 | Panel | 1 | Commscope SBNHH-1D65B (40.6 |
| 298.00 | | 3 | Ericsson RRUS 4478 B14 |
| 298.00 | | 3 | Ericsson RRUS 8843 B2, B66A |
| 298.00 | | 6 | RFS ATM192012-0 |
| 297.00 | Mounting Frame | 3 | Kenwood T1672KT12 SF |
| 285.00 | Panel | 3 | RFS APXVSP18-C-A20 |
| 285.00 | Panel | 3 | RFS APXVTM14-C-I20 |
| 285.00 | | 3 | Alcatel-Lucent TD-RRH8x20-25 w |
| 285.00 | Mounting Frame | 3 | Round Sector Frames |
| 285.00 | | 3 | Alcatel-Lucent 1900 MHz 4X45 R |
| 285.00 | | 3 | Alcatel-Lucent 800 MHz 2X50W R |
| 277.50 | | 6 | Ericsson Radio 4449 - B13&B5 |
| 277.50 | | 6 | Ericsson 8843 Rev 2 |
| 276.70 | | 2 | Raycap RRFDC-3315-PF-48 (32lbs |
| 274.10 | Panel | 6 | Commscope NHH-65C-R2B |
| 270.00 | Panel | 3 | Antel BXA-70063-8CF-EDIN-2 |
| 270.00 | | 3 | Raycap RCMDC-6627-PF-48 |
| 270.00 | Mounting Frame | 3 | Round Sector Frame |
| 264.00 | Panel | 3 | RFS APXVAARR24_43-U-NA20 |
| 264.00 | Panel | 3 | RFS APXV18-206516S-C-A20 |
| 264.00 | | 3 | Ericsson Radio 4449 B12,B71 |
| 264.00 | | 3 | Ericsson KRY 112 489/2 |
| 260.00 | Mounting Frame | 3 | Round Sector Frames |
| 251.10 | Panel | 9 | Decibel DB848H90E-XY |

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| Job Information | | |
|--------------------------|-----------------------|-----------------------|
| Client : CLOUDWYZE, INC. | | |
| Tower : 21268 | Location : CHALYBEATE | Base Width : 36.63 ft |
| Code : ANSI/TIA-222-G | | Top Width : 6.58 ft |
| | | Tower Ht : 300.00 ft |
| | | Shape : Triangle |

| | | | |
|--------|----------------|---|---------------------------|
| 250.00 | Mounting Frame | 3 | Flat Light Sector Frames |
| 235.00 | Dish | 2 | Andrew VHLP3-11W |
| 235.00 | Panel | 4 | Telrad 300794 |
| 235.00 | | 2 | Aviat Networks WTM 4200 |
| 235.00 | | 4 | Telrad BreezeCOMPACT 1000 |

| Linear Appurtenance | | | | |
|---------------------|--------|-----|-----------------------|--|
| Elev (ft) | | | | |
| From | To | Qty | Description | |
| 0.00 | 298.00 | 1 | 3/8" (0.38"- 9.5mm) | |
| 0.00 | 298.00 | 12 | 2 1/4" Coax | |
| 0.00 | 298.00 | 5 | 0.78" (19.7mm) 8 AWG | |
| 0.00 | 298.00 | 1 | 0.28" (7mm) Fiber | |
| 0.00 | 298.00 | 1 | 0.28" (7.1mm) Fiber | |
| 0.00 | 297.00 | 1 | Waveguide | |
| 0.00 | 285.00 | 1 | Waveguide | |
| 0.00 | 285.00 | 4 | 1 1/4" Hybriflex Cab | |
| 0.00 | 270.00 | 1 | Waveguide | |
| 0.00 | 270.00 | 8 | 1 5/8" Hybriflex | |
| 0.00 | 270.00 | 6 | 1 5/8" Coax | |
| 0.00 | 264.00 | 6 | 1 5/8" Coax | |
| 0.00 | 264.00 | 1 | 1 5/8" (1.63"-41.3mm) | |
| 0.00 | 260.00 | 1 | Waveguide | |
| 0.00 | 235.00 | 1 | Waveguide | |
| 0.00 | 235.00 | 12 | 0.36" (9.1mm) Cat 5e | |
| 0.00 | 235.00 | 4 | 0.34" (8.6mm) Cable | |

| Global Base Foundation Design Loads | | | |
|-------------------------------------|---------------|----------------|------------------|
| Load Case | Moment (k-ft) | Vertical (kip) | Horizontal (kip) |
| DL + WL | 16,237.48 | 104.59 | 93.40 |
| DL + WL + IL | 1,963.16 | 250.59 | 11.28 |

| Individual Base Foundation Design Loads | | |
|---|--------------|------------------|
| Vertical (kip) | Uplift (kip) | Horizontal (kip) |
| 546.72 | 459.51 | 57.94 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

Analysis Parameters

| | | | |
|---------------------|--------------------|-------------------------|-------|
| Location: | Harnett County, NC | Height (ft): | 300 |
| Code: | ANSI/TIA-222-G | Base Elevation (ft): | 0.00 |
| Shape: | Triangle | Bottom Face Width (ft): | 36.63 |
| Tower Manufacturer: | Rohn | Top Face Width (ft): | 6.58 |
| Tower Type: | Self Support | Anchor Bolt Detail Type | c |
| Kd: | | | |
| Ke: | | | |

Ice & Wind Parameters

| | | | |
|-----------------------|------|-------------------------------|---------|
| Structure Class: | II | Design Windspeed Without Ice: | 90 mph |
| Exposure Category: | C | Design Windspeed With Ice: | 30 mph |
| Topographic Category: | 1 | Operational Windspeed: | 60 mph |
| Crest Height: | 0 ft | Design Ice Thickness: | 0.75 in |

Seismic Parameters

| | | | | | |
|--|--|------------|-------|----------------|-------|
| Analysis Method: | Equivalent Modal Analysis & Equivalent Lateral Force Methods | | | | |
| Site Class: | D - Stiff Soil | | | | |
| Period Based on Rayleigh Method (sec): | 1.33 | | | | |
| T_L (sec): | 8 | p: | 1.3 | C_S : | 0.034 |
| S_S : | 0.175 | S_1 : | 0.084 | $C_{S, Max}$: | 0.034 |
| F_a : | 1.600 | F_v : | 2.400 | $C_{S, Min}$: | 0.030 |
| S_{ds} : | 0.187 | S_{d1} : | 0.134 | | |

Load Cases

| | |
|--------------------------------|--|
| 1.2D + 1.6W Normal | 89.9000015258789 mph Normal with No Ice |
| 1.2D + 1.6W 60 deg | 89.9000015258789 mph 60 degree with No Ice |
| 1.2D + 1.6W 90 deg | 89.9000015258789 mph 90 degree with No Ice |
| 0.9D + 1.6W Normal | 89.9000015258789 mph Normal with No Ice (Reduced DL) |
| 0.9D + 1.6W 60 deg | 89.9000015258789 mph 60 deg with No Ice (Reduced DL) |
| 0.9D + 1.6W 90 deg | 89.9000015258789 mph 90 deg with No Ice (Reduced DL) |
| 1.2D + 1.0Di + 1.0Wi Normal | 30 mph Normal with 0.75 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 60 deg | 30 mph 60 deg with 0.75 in Radial Ice |
| 1.2D + 1.0Di + 1.0Wi 90 deg | 30 mph 90 deg with 0.75 in Radial Ice |
| (1.2 + 0.2Sds) * DL + E Normal | Seismic Normal |
| (1.2 + 0.2Sds) * DL + E 60 deg | Seismic 60 deg |
| (1.2 + 0.2Sds) * DL + E 90 deg | Seismic 90 deg |
| (0.9 - 0.2Sds) * DL + E Normal | Seismic (Reduced DL) Normal |
| (0.9 - 0.2Sds) * DL + E 60 deg | Seismic (Reduced DL) 60 deg |
| (0.9 - 0.2Sds) * DL + E 90 deg | Seismic (Reduced DL) 90 deg |
| 1.0D + 1.0W Service Normal | Serviceability - 60 mph Wind Normal |
| 1.0D + 1.0W Service 60 deg | Serviceability - 60 mph Wind 60 deg |
| 1.0D + 1.0W Service 90 deg | Serviceability - 60 mph Wind 90 deg |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.6W

| Elevation (ft) | Description | Qty | Wt. (lb) | EPA (sf) | Length (ft) | Width (in) | Depth (in) | K _a | Orient. Factor | Vert. Ecc.(ft) | M _u (lb-ft) | Q _z (psf) | F _a (WL) (lb) | P _a (DL) (lb) |
|----------------|---------------------|------------|--------------|--------------|-------------|------------|------------|----------------|----------------|----------------|------------------------|----------------------|--------------------------|--------------------------|
| 302.3 | Raycap DC6-48-60- | 2 | 16 | 4.8 | 2.6 | 18.3 | 10.2 | 0.80 | 0.50 | 0.0 | 0.0 | 28.09 | 146 | 38 |
| 302.3 | Raycap DC6-48-60- | 1 | 33 | 1.5 | 2.0 | 11.0 | 11.0 | 0.80 | 0.50 | 0.0 | 0.0 | 28.09 | 22 | 39 |
| 298.0 | Commscope NNH4- | 3 | 102 | 17.1 | 8.0 | 19.6 | 7.8 | 0.80 | 0.64 | 0.6 | 599.6 | 28.02 | 999 | 368 |
| 298.0 | Commscope | 1 | 86 | 13.4 | 8.3 | 13.7 | 8.2 | 0.80 | 1.00 | 0.0 | 0.0 | 28.01 | 407 | 103 |
| 298.0 | Commscope SBNHH- | 1 | 41 | 8.1 | 6.0 | 11.9 | 7.1 | 0.80 | 0.69 | 0.3 | 51.0 | 28.02 | 170 | 49 |
| 298.0 | Commscope SBNHH- | 1 | 50 | 11.4 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.6 | 146.5 | 28.02 | 244 | 60 |
| 298.0 | Ericsson RRUS 4415 | 3 | 46 | 1.8 | 1.4 | 13.4 | 5.9 | 0.80 | 0.50 | 2.0 | 168.6 | 28.05 | 84 | 166 |
| 298.0 | Ericsson RRUS 4478 | 3 | 60 | 1.8 | 1.4 | 13.4 | 7.7 | 0.80 | 0.50 | 2.0 | 168.6 | 28.05 | 84 | 216 |
| 298.0 | Ericsson RRUS 8843 | 3 | 72 | 1.6 | 1.2 | 13.2 | 10.9 | 0.80 | 0.50 | 2.7 | 202.7 | 28.06 | 75 | 259 |
| 298.0 | Ericsson RRUS-11 | 3 | 54 | 2.5 | 1.4 | 17.8 | 9.2 | 0.80 | 0.50 | 2.7 | 311.9 | 28.06 | 116 | 194 |
| 298.0 | Kathrein Scala 742 | 6 | 22 | 5.1 | 6.4 | 6.1 | 2.7 | 0.80 | 0.50 | 0.1 | 47.0 | 28.01 | 470 | 158 |
| 298.0 | RFS ATM192012-0 | 6 | 11 | 1.0 | 0.8 | 11.5 | 6.0 | 0.80 | 0.50 | 2.8 | 245.7 | 28.07 | 88 | 79 |
| 297.0 | Kenwood | 3 | 509 | 20.2 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 27.99 | 1157 | 1833 |
| 285.0 | Alcatel-Lucent 1900 | 3 | 60 | 2.3 | 2.1 | 11.1 | 10.7 | 0.80 | 0.50 | -2.8 | 293.8 | 27.69 | 105 | 216 |
| 285.0 | Alcatel-Lucent 800 | 3 | 64 | 2.1 | 1.6 | 13.0 | 12.2 | 0.80 | 0.50 | 0.1 | 9.3 | 27.75 | 93 | 230 |
| 285.0 | Alcatel-Lucent TD- | 3 | 70 | 4.0 | 2.2 | 18.6 | 6.7 | 0.80 | 0.50 | 0.9 | 165.0 | 27.77 | 183 | 252 |
| 285.0 | RFS APXVSP18-C- | 3 | 57 | 8.0 | 6.0 | 11.8 | 7.0 | 0.80 | 0.69 | -1.1 | 551.1 | 27.73 | 501 | 205 |
| 285.0 | RFS APXVTM14-C-I20 | 3 | 53 | 6.3 | 4.7 | 12.6 | 6.3 | 0.80 | 0.66 | -1.9 | 719.3 | 27.71 | 379 | 190 |
| 285.0 | Round Sector | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.75 | 0.0 | 0.0 | 27.75 | 917 | 1080 |
| 277.5 | Ericsson 8843 Rev 2 | 6 | 75 | 1.6 | 1.3 | 13.2 | 11.1 | 0.80 | 0.50 | 0.0 | 0.0 | 27.59 | 149 | 540 |
| 277.5 | Ericsson Radio 4449 | 6 | 70 | 1.6 | 1.3 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 27.59 | 149 | 504 |
| 276.7 | Raycap RRFDC-3315- | 2 | 32 | 2.8 | 2.4 | 11.7 | 10.3 | 0.80 | 0.50 | 0.0 | 0.0 | 27.58 | 84 | 77 |
| 274.1 | Commscope NHH- | 6 | 52 | 11.4 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.0 | 0.0 | 27.52 | 1432 | 372 |
| 270.0 | Antel BXA-70063- | 3 | 24 | 10.7 | 7.9 | 11.2 | 5.2 | 0.80 | 0.67 | 3.7 | 2375.1 | 27.51 | 642 | 86 |
| 270.0 | Raycap RCMDC- | 3 | 32 | 4.1 | 2.5 | 16.5 | 12.6 | 0.80 | 0.50 | 0.0 | 0.0 | 27.43 | 182 | 115 |
| 270.0 | Round Sector Frame | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 27.43 | 810 | 1080 |
| 264.0 | Ericsson KRY 112 | 3 | 15 | 0.6 | 0.9 | 6.1 | 3.9 | 0.80 | 0.50 | 2.5 | 62.4 | 27.36 | 25 | 55 |
| 264.0 | Ericsson Radio 4449 | 3 | 74 | 1.6 | 1.2 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 27.30 | 73 | 266 |
| 264.0 | RFS APXV18- | 3 | 19 | 3.6 | 4.4 | 6.9 | 3.2 | 0.80 | 0.67 | 3.7 | 802.1 | 27.38 | 217 | 67 |
| 264.0 | RFS | 3 | 128 | 20.2 | 8.0 | 24.0 | 8.7 | 0.80 | 0.63 | 0.0 | 0.0 | 27.30 | 1137 | 460 |
| 260.0 | Round Sector | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 27.22 | 804 | 1080 |
| 251.1 | Decibel DB848H90E- | 9 | 28 | 8.4 | 8.0 | 6.5 | 8.0 | 0.80 | 0.74 | 0.0 | 0.0 | 27.02 | 1636 | 302 |
| 250.0 | Flat Light Sector | 3 | 400 | 17.9 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 26.99 | 991 | 1440 |
| 235.0 | Andrew VHLP3-11W | 2 | 53 | 10.7 | 3.3 | 39.4 | 24.3 | 1.00 | 1.00 | 0.0 | 0.0 | 26.64 | 774 | 127 |
| 235.0 | Aviat Networks WTM | 2 | 24 | 1.0 | 1.0 | 10.6 | 3.7 | 1.00 | 0.50 | 0.0 | 0.0 | 26.64 | 37 | 58 |
| 235.0 | Telrad 300794 | 4 | 6 | 2.2 | 2.0 | 11.1 | 3.6 | 1.00 | 0.67 | 0.0 | 0.0 | 26.64 | 210 | 26 |
| 235.0 | Telrad | 4 | 18 | 1.0 | 1.0 | 9.5 | 6.5 | 1.00 | 0.50 | 0.0 | 0.0 | 26.64 | 70 | 86 |
| Totals | | 122 | 10400 | 794.6 | | | | | | | | | 15661 | 12480 |

Discrete Appurtenance Properties 0.9D + 1.6W

| Elevation (ft) | Description | Qty | Wt. (lb) | EPA (sf) | Length (ft) | Width (in) | Depth (in) | K _a | Orient. Factor | Vert. Ecc.(ft) | M _u (lb-ft) | Q _z (psf) | F _a (WL) (lb) | P _a (DL) (lb) |
|----------------|--------------------|-----|----------|----------|-------------|------------|------------|----------------|----------------|----------------|------------------------|----------------------|--------------------------|--------------------------|
| 302.3 | Raycap DC6-48-60- | 2 | 16 | 4.8 | 2.6 | 18.3 | 10.2 | 0.80 | 0.50 | 0.0 | 0.0 | 28.09 | 146 | 29 |
| 302.3 | Raycap DC6-48-60- | 1 | 33 | 1.5 | 2.0 | 11.0 | 11.0 | 0.80 | 0.50 | 0.0 | 0.0 | 28.09 | 22 | 30 |
| 298.0 | Commscope NNH4- | 3 | 102 | 17.1 | 8.0 | 19.6 | 7.8 | 0.80 | 0.64 | 0.6 | 599.6 | 28.02 | 999 | 276 |
| 298.0 | Commscope | 1 | 86 | 13.4 | 8.3 | 13.7 | 8.2 | 0.80 | 1.00 | 0.0 | 0.0 | 28.01 | 407 | 77 |
| 298.0 | Commscope SBNHH- | 1 | 41 | 8.1 | 6.0 | 11.9 | 7.1 | 0.80 | 0.69 | 0.3 | 51.0 | 28.02 | 170 | 37 |
| 298.0 | Commscope SBNHH- | 1 | 50 | 11.4 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.6 | 146.5 | 28.02 | 244 | 45 |
| 298.0 | Ericsson RRUS 4415 | 3 | 46 | 1.8 | 1.4 | 13.4 | 5.9 | 0.80 | 0.50 | 2.0 | 168.6 | 28.05 | 84 | 124 |
| 298.0 | Ericsson RRUS 4478 | 3 | 60 | 1.8 | 1.4 | 13.4 | 7.7 | 0.80 | 0.50 | 2.0 | 168.6 | 28.05 | 84 | 162 |
| 298.0 | Ericsson RRUS 8843 | 3 | 72 | 1.6 | 1.2 | 13.2 | 10.9 | 0.80 | 0.50 | 2.7 | 202.7 | 28.06 | 75 | 194 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Tower Loading

| | | | | | | | | | | | | | | |
|---------------|---------------------|------------|--------------|--------------|-----|------|------|------|------|------|--------|-------|--------------|-------------|
| 298.0 | Ericsson RRUS-11 | 3 | 54 | 2.5 | 1.4 | 17.8 | 9.2 | 0.80 | 0.50 | 2.7 | 311.9 | 28.06 | 116 | 146 |
| 298.0 | Kathrein Scala 742 | 6 | 22 | 5.1 | 6.4 | 6.1 | 2.7 | 0.80 | 0.50 | 0.1 | 47.0 | 28.01 | 470 | 119 |
| 298.0 | RFS ATM192012-0 | 6 | 11 | 1.0 | 0.8 | 11.5 | 6.0 | 0.80 | 0.50 | 2.8 | 245.7 | 28.07 | 88 | 59 |
| 297.0 | Kenwood | 3 | 509 | 20.2 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 27.99 | 1157 | 1375 |
| 285.0 | Alcatel-Lucent 1900 | 3 | 60 | 2.3 | 2.1 | 11.1 | 10.7 | 0.80 | 0.50 | -2.8 | 293.8 | 27.69 | 105 | 162 |
| 285.0 | Alcatel-Lucent 800 | 3 | 64 | 2.1 | 1.6 | 13.0 | 12.2 | 0.80 | 0.50 | 0.1 | 9.3 | 27.75 | 93 | 173 |
| 285.0 | Alcatel-Lucent TD- | 3 | 70 | 4.0 | 2.2 | 18.6 | 6.7 | 0.80 | 0.50 | 0.9 | 165.0 | 27.77 | 183 | 189 |
| 285.0 | RFS APXVSP18-C- | 3 | 57 | 8.0 | 6.0 | 11.8 | 7.0 | 0.80 | 0.69 | -1.1 | 551.1 | 27.73 | 501 | 154 |
| 285.0 | RFS APXVTM14-C-I20 | 3 | 53 | 6.3 | 4.7 | 12.6 | 6.3 | 0.80 | 0.66 | -1.9 | 719.3 | 27.71 | 379 | 143 |
| 285.0 | Round Sector | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.75 | 0.0 | 0.0 | 27.75 | 917 | 810 |
| 277.5 | Ericsson 8843 Rev 2 | 6 | 75 | 1.6 | 1.3 | 13.2 | 11.1 | 0.80 | 0.50 | 0.0 | 0.0 | 27.59 | 149 | 405 |
| 277.5 | Ericsson Radio 4449 | 6 | 70 | 1.6 | 1.3 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 27.59 | 149 | 378 |
| 276.7 | Raycap RRFDC-3315- | 2 | 32 | 2.8 | 2.4 | 11.7 | 10.3 | 0.80 | 0.50 | 0.0 | 0.0 | 27.58 | 84 | 58 |
| 274.1 | Commscope NHH- | 6 | 52 | 11.4 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.0 | 0.0 | 27.52 | 1432 | 279 |
| 270.0 | Antel BXA-70063- | 3 | 24 | 10.7 | 7.9 | 11.2 | 5.2 | 0.80 | 0.67 | 3.7 | 2375.1 | 27.51 | 642 | 65 |
| 270.0 | Raycap RCMDC- | 3 | 32 | 4.1 | 2.5 | 16.5 | 12.6 | 0.80 | 0.50 | 0.0 | 0.0 | 27.43 | 182 | 86 |
| 270.0 | Round Sector Frame | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 27.43 | 810 | 810 |
| 264.0 | Ericsson KRY 112 | 3 | 15 | 0.6 | 0.9 | 6.1 | 3.9 | 0.80 | 0.50 | 2.5 | 62.4 | 27.36 | 25 | 42 |
| 264.0 | Ericsson Radio 4449 | 3 | 74 | 1.6 | 1.2 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 27.30 | 73 | 200 |
| 264.0 | RFS APXV18- | 3 | 19 | 3.6 | 4.4 | 6.9 | 3.2 | 0.80 | 0.67 | 3.7 | 802.1 | 27.38 | 217 | 50 |
| 264.0 | RFS | 3 | 128 | 20.2 | 8.0 | 24.0 | 8.7 | 0.80 | 0.63 | 0.0 | 0.0 | 27.30 | 1137 | 345 |
| 260.0 | Round Sector | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 27.22 | 804 | 810 |
| 251.1 | Decibel DB848H90E- | 9 | 28 | 8.4 | 8.0 | 6.5 | 8.0 | 0.80 | 0.74 | 0.0 | 0.0 | 27.02 | 1636 | 227 |
| 250.0 | Flat Light Sector | 3 | 400 | 17.9 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 26.99 | 991 | 1080 |
| 235.0 | Andrew VHLP3-11W | 2 | 53 | 10.7 | 3.3 | 39.4 | 24.3 | 1.00 | 1.00 | 0.0 | 0.0 | 26.64 | 774 | 95 |
| 235.0 | Aviat Networks WTM | 2 | 24 | 1.0 | 1.0 | 10.6 | 3.7 | 1.00 | 0.50 | 0.0 | 0.0 | 26.64 | 37 | 44 |
| 235.0 | Telrad 300794 | 4 | 6 | 2.2 | 2.0 | 11.1 | 3.6 | 1.00 | 0.67 | 0.0 | 0.0 | 26.64 | 210 | 20 |
| 235.0 | Telrad | 4 | 18 | 1.0 | 1.0 | 9.5 | 6.5 | 1.00 | 0.50 | 0.0 | 0.0 | 26.64 | 70 | 65 |
| Totals | | 122 | 10400 | 794.6 | | | | | | | | | 15661 | 9360 |

Discrete Appurtenance Properties 1.2D + 1.0Di + 1.0Wi

| Elevation (ft) | Description | Qty | Ice Wt (lb) | Ice EPA (sf) | Length (ft) | Width (in) | Depth (in) | K _a | Orient. Factor | Vert. Ecc.(ft) | M _u (lb-ft) | Q _z (psf) | F _a (WL) (lb) | P _a (DL) (lb) |
|----------------|---------------------|-----|-------------|--------------|-------------|------------|------------|----------------|----------------|----------------|------------------------|----------------------|--------------------------|--------------------------|
| 302.3 | Raycap DC6-48-60- | 2 | 154 | 6.4 | 2.6 | 18.3 | 10.2 | 0.80 | 0.50 | 0.0 | 0.0 | 3.13 | 14 | 315 |
| 302.3 | Raycap DC6-48-60- | 1 | 99 | 2.2 | 2.0 | 11.0 | 11.0 | 0.80 | 0.50 | 0.0 | 0.0 | 3.13 | 2 | 106 |
| 298.0 | Commscope NNH4- | 3 | 454 | 21.0 | 8.0 | 19.6 | 7.8 | 0.80 | 0.64 | 0.6 | 51.4 | 3.12 | 86 | 1423 |
| 298.0 | Commscope | 1 | 380 | 17.2 | 8.3 | 13.7 | 8.2 | 0.80 | 1.00 | 0.0 | 0.0 | 3.12 | 37 | 397 |
| 298.0 | Commscope SBNHH- | 1 | 228 | 11.1 | 6.0 | 11.9 | 7.1 | 0.80 | 0.69 | 0.3 | 4.9 | 3.12 | 16 | 236 |
| 298.0 | Commscope SBNHH- | 1 | 296 | 14.9 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.6 | 13.3 | 3.12 | 22 | 306 |
| 298.0 | Ericsson RRUS 4415 | 3 | 99 | 2.8 | 1.4 | 13.4 | 5.9 | 0.80 | 0.50 | 2.0 | 17.9 | 3.12 | 9 | 323 |
| 298.0 | Ericsson RRUS 4478 | 3 | 119 | 2.8 | 1.4 | 13.4 | 7.7 | 0.80 | 0.50 | 2.0 | 17.9 | 3.12 | 9 | 393 |
| 298.0 | Ericsson RRUS 8843 | 3 | 138 | 2.5 | 1.2 | 13.2 | 10.9 | 0.80 | 0.50 | 2.7 | 21.9 | 3.13 | 8 | 456 |
| 298.0 | Ericsson RRUS-11 | 3 | 135 | 3.6 | 1.4 | 17.8 | 9.2 | 0.80 | 0.50 | 2.7 | 31.3 | 3.13 | 12 | 437 |
| 298.0 | Kathrein Scala 742 | 6 | 146 | 6.5 | 6.4 | 6.1 | 2.7 | 0.80 | 0.50 | 0.1 | 4.1 | 3.12 | 41 | 901 |
| 298.0 | RFS ATM192012-0 | 6 | 44 | 1.7 | 0.8 | 11.5 | 6.0 | 0.80 | 0.50 | 2.8 | 29.6 | 3.13 | 11 | 277 |
| 297.0 | Kenwood | 3 | 920 | 38.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 3.12 | 153 | 3065 |
| 285.0 | Alcatel-Lucent 1900 | 3 | 146 | 3.5 | 2.1 | 11.1 | 10.7 | 0.80 | 0.50 | -2.8 | 30.6 | 3.08 | 11 | 474 |
| 285.0 | Alcatel-Lucent 800 | 3 | 146 | 3.1 | 1.6 | 13.0 | 12.2 | 0.80 | 0.50 | 0.1 | 1.0 | 3.09 | 10 | 477 |
| 285.0 | Alcatel-Lucent TD- | 3 | 171 | 5.5 | 2.2 | 18.6 | 6.7 | 0.80 | 0.50 | 0.9 | 15.5 | 3.09 | 17 | 554 |
| 285.0 | RFS APXVSP18-C- | 3 | 241 | 11.0 | 6.0 | 11.8 | 7.0 | 0.80 | 0.69 | -1.1 | 52.6 | 3.09 | 48 | 757 |
| 285.0 | RFS APXVTM14-C-I20 | 3 | 200 | 8.7 | 4.7 | 12.6 | 6.3 | 0.80 | 0.66 | -1.9 | 68.4 | 3.09 | 36 | 631 |
| 285.0 | Round Sector | 3 | 692 | 32.1 | 0.0 | 0.0 | 0.0 | 0.75 | 0.75 | 0.0 | 0.0 | 3.09 | 142 | 2257 |
| 277.5 | Ericsson 8843 Rev 2 | 6 | 141 | 2.6 | 1.3 | 13.2 | 11.1 | 0.80 | 0.50 | 0.0 | 0.0 | 3.07 | 16 | 937 |
| 277.5 | Ericsson Radio 4449 | 6 | 130 | 2.6 | 1.3 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 3.07 | 16 | 864 |
| 276.7 | Raycap RRFDC-3315- | 2 | 129 | 4.1 | 2.4 | 11.7 | 10.3 | 0.80 | 0.50 | 0.0 | 0.0 | 3.07 | 9 | 270 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Tower Loading

| | | | | | | | | | | | | | | |
|---------------|---------------------|------------|--------------|---------------|-----|------|------|------|------|-----|-------|------|-------------|--------------|
| 274.1 | Commscope NHH- | 6 | 295 | 14.8 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.0 | 0.0 | 3.06 | 130 | 1834 |
| 270.0 | Antel BXA-70063- | 3 | 230 | 14.0 | 7.9 | 11.2 | 5.2 | 0.80 | 0.67 | 3.7 | 217.2 | 3.06 | 59 | 704 |
| 270.0 | Raycap RCMDC- | 3 | 167 | 5.5 | 2.5 | 16.5 | 12.6 | 0.80 | 0.50 | 0.0 | 0.0 | 3.06 | 17 | 519 |
| 270.0 | Round Sector Frame | 3 | 689 | 31.9 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 3.06 | 125 | 2248 |
| 264.0 | Ericsson KRY 112 | 3 | 34 | 1.1 | 0.9 | 6.1 | 3.9 | 0.80 | 0.50 | 2.5 | 8.7 | 3.05 | 3 | 112 |
| 264.0 | Ericsson Radio 4449 | 3 | 133 | 2.5 | 1.2 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 3.04 | 8 | 444 |
| 264.0 | RFS APXV18- | 3 | 93 | 5.6 | 4.4 | 6.9 | 3.2 | 0.80 | 0.67 | 3.7 | 86.2 | 3.05 | 23 | 289 |
| 264.0 | RFS | 3 | 544 | 24.2 | 8.0 | 24.0 | 8.7 | 0.80 | 0.63 | 0.0 | 0.0 | 3.04 | 94 | 1707 |
| 260.0 | Round Sector | 3 | 689 | 31.9 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 3.03 | 124 | 2248 |
| 251.1 | Decibel DB848H90E- | 9 | 251 | 8.8 | 8.0 | 6.5 | 8.0 | 0.80 | 0.74 | 0.0 | 0.0 | 3.01 | 120 | 2309 |
| 250.0 | Flat Light Sector | 3 | 716 | 33.7 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 3.01 | 130 | 2388 |
| 235.0 | Andrew VHLP3-11W | 2 | 281 | 12.7 | 3.3 | 39.4 | 24.3 | 1.00 | 1.00 | 0.0 | 0.0 | 2.97 | 64 | 583 |
| 235.0 | Aviat Networks WTM | 2 | 52 | 1.7 | 1.0 | 10.6 | 3.7 | 1.00 | 0.50 | 0.0 | 0.0 | 2.97 | 4 | 114 |
| 235.0 | Telrad 300794 | 4 | 56 | 3.2 | 2.0 | 11.1 | 3.6 | 1.00 | 0.67 | 0.0 | 0.0 | 2.97 | 22 | 227 |
| 235.0 | Telrad | 4 | 52 | 1.7 | 1.0 | 9.5 | 6.5 | 1.00 | 0.50 | 0.0 | 0.0 | 2.97 | 8 | 222 |
| Totals | | 122 | 29726 | 1219.1 | | | | | | | | | 1656 | 31806 |

Discrete Appurtenance Properties 1.0D + 1.0W Service

| Elevation (ft) | Description | Qty | Wt. (lb) | EPA (sf) | Length (ft) | Width (in) | Depth (in) | K _a | Orient. Factor | Vert. Ecc.(ft) | M _u (lb-ft) | Q _z (psf) | F _a (WL) (lb) | P _a (DL) (lb) |
|----------------|---------------------|-----|----------|----------|-------------|------------|------------|----------------|----------------|----------------|------------------------|----------------------|--------------------------|--------------------------|
| 302.3 | Raycap DC6-48-60- | 2 | 16 | 4.8 | 2.6 | 18.3 | 10.2 | 0.80 | 0.50 | 0.0 | 0.0 | 12.51 | 41 | 32 |
| 302.3 | Raycap DC6-48-60- | 1 | 33 | 1.5 | 2.0 | 11.0 | 11.0 | 0.80 | 0.50 | 0.0 | 0.0 | 12.51 | 6 | 33 |
| 298.0 | Commscope NNH4- | 3 | 102 | 17.1 | 8.0 | 19.6 | 7.8 | 0.80 | 0.64 | 0.6 | 166.9 | 12.48 | 278 | 306 |
| 298.0 | Commscope | 1 | 86 | 13.4 | 8.3 | 13.7 | 8.2 | 0.80 | 1.00 | 0.0 | 0.0 | 12.48 | 113 | 86 |
| 298.0 | Commscope SBNHH- | 1 | 41 | 8.1 | 6.0 | 11.9 | 7.1 | 0.80 | 0.69 | 0.3 | 14.2 | 12.48 | 47 | 41 |
| 298.0 | Commscope SBNHH- | 1 | 50 | 11.4 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.6 | 40.8 | 12.48 | 68 | 50 |
| 298.0 | Ericsson RRUS 4415 | 3 | 46 | 1.8 | 1.4 | 13.4 | 5.9 | 0.80 | 0.50 | 2.0 | 46.9 | 12.49 | 23 | 138 |
| 298.0 | Ericsson RRUS 4478 | 3 | 60 | 1.8 | 1.4 | 13.4 | 7.7 | 0.80 | 0.50 | 2.0 | 46.9 | 12.49 | 23 | 180 |
| 298.0 | Ericsson RRUS 8843 | 3 | 72 | 1.6 | 1.2 | 13.2 | 10.9 | 0.80 | 0.50 | 2.7 | 56.4 | 12.50 | 21 | 216 |
| 298.0 | Ericsson RRUS-11 | 3 | 54 | 2.5 | 1.4 | 17.8 | 9.2 | 0.80 | 0.50 | 2.7 | 86.8 | 12.50 | 32 | 162 |
| 298.0 | Kathrein Scala 742 | 6 | 22 | 5.1 | 6.4 | 6.1 | 2.7 | 0.80 | 0.50 | 0.1 | 13.1 | 12.48 | 131 | 132 |
| 298.0 | RFS ATM192012-0 | 6 | 11 | 1.0 | 0.8 | 11.5 | 6.0 | 0.80 | 0.50 | 2.8 | 68.4 | 12.50 | 24 | 66 |
| 297.0 | Kenwood | 3 | 509 | 20.2 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 12.47 | 322 | 1527 |
| 285.0 | Alcatel-Lucent 1900 | 3 | 60 | 2.3 | 2.1 | 11.1 | 10.7 | 0.80 | 0.50 | -2.8 | 81.8 | 12.33 | 29 | 180 |
| 285.0 | Alcatel-Lucent 800 | 3 | 64 | 2.1 | 1.6 | 13.0 | 12.2 | 0.80 | 0.50 | 0.1 | 2.6 | 12.36 | 26 | 192 |
| 285.0 | Alcatel-Lucent TD- | 3 | 70 | 4.0 | 2.2 | 18.6 | 6.7 | 0.80 | 0.50 | 0.9 | 45.9 | 12.37 | 51 | 210 |
| 285.0 | RFS APXVSP18-C- | 3 | 57 | 8.0 | 6.0 | 11.8 | 7.0 | 0.80 | 0.69 | -1.1 | 153.4 | 12.35 | 139 | 171 |
| 285.0 | RFS APXVTM14-C-I20 | 3 | 53 | 6.3 | 4.7 | 12.6 | 6.3 | 0.80 | 0.66 | -1.9 | 200.2 | 12.34 | 105 | 159 |
| 285.0 | Round Sector | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.75 | 0.0 | 0.0 | 12.36 | 255 | 900 |
| 277.5 | Ericsson 8843 Rev 2 | 6 | 75 | 1.6 | 1.3 | 13.2 | 11.1 | 0.80 | 0.50 | 0.0 | 0.0 | 12.29 | 41 | 450 |
| 277.5 | Ericsson Radio 4449 | 6 | 70 | 1.6 | 1.3 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 12.29 | 41 | 420 |
| 276.7 | Raycap RRFDC-3315- | 2 | 32 | 2.8 | 2.4 | 11.7 | 10.3 | 0.80 | 0.50 | 0.0 | 0.0 | 12.28 | 23 | 64 |
| 274.1 | Commscope NHH- | 6 | 52 | 11.4 | 8.0 | 11.9 | 7.1 | 0.80 | 0.70 | 0.0 | 0.0 | 12.26 | 399 | 310 |
| 270.0 | Antel BXA-70063- | 3 | 24 | 10.7 | 7.9 | 11.2 | 5.2 | 0.80 | 0.67 | 3.7 | 661.2 | 12.26 | 179 | 72 |
| 270.0 | Raycap RCMDC- | 3 | 32 | 4.1 | 2.5 | 16.5 | 12.6 | 0.80 | 0.50 | 0.0 | 0.0 | 12.22 | 51 | 96 |
| 270.0 | Round Sector Frame | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 12.22 | 225 | 900 |
| 264.0 | Ericsson KRY 112 | 3 | 15 | 0.6 | 0.9 | 6.1 | 3.9 | 0.80 | 0.50 | 2.5 | 17.4 | 12.19 | 7 | 46 |
| 264.0 | Ericsson Radio 4449 | 3 | 74 | 1.6 | 1.2 | 13.2 | 9.3 | 0.80 | 0.50 | 0.0 | 0.0 | 12.16 | 20 | 222 |
| 264.0 | RFS APXV18- | 3 | 19 | 3.6 | 4.4 | 6.9 | 3.2 | 0.80 | 0.67 | 3.7 | 223.3 | 12.20 | 60 | 56 |
| 264.0 | RFS | 3 | 128 | 20.2 | 8.0 | 24.0 | 8.7 | 0.80 | 0.63 | 0.0 | 0.0 | 12.16 | 316 | 384 |
| 260.0 | Round Sector | 3 | 300 | 14.4 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 12.12 | 224 | 900 |
| 251.1 | Decibel DB848H90E- | 9 | 28 | 8.4 | 8.0 | 6.5 | 8.0 | 0.80 | 0.74 | 0.0 | 0.0 | 12.03 | 455 | 252 |
| 250.0 | Flat Light Sector | 3 | 400 | 17.9 | 0.0 | 0.0 | 0.0 | 0.75 | 0.67 | 0.0 | 0.0 | 12.02 | 276 | 1200 |
| 235.0 | Andrew VHLP3-11W | 2 | 53 | 10.7 | 3.3 | 39.4 | 24.3 | 1.00 | 1.00 | 0.0 | 0.0 | 11.87 | 215 | 106 |
| 235.0 | Aviat Networks WTM | 2 | 24 | 1.0 | 1.0 | 10.6 | 3.7 | 1.00 | 0.50 | 0.0 | 0.0 | 11.87 | 10 | 49 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Tower Loading

| | | | | | | | | | | | | | |
|---------------------|-----|-------|-------|-----|------|-----|------|------|-----|-----|-------|------|-------|
| 235.0 Telrad 300794 | 4 | 6 | 2.2 | 2.0 | 11.1 | 3.6 | 1.00 | 0.67 | 0.0 | 0.0 | 11.87 | 59 | 22 |
| 235.0 Telrad | 4 | 18 | 1.0 | 1.0 | 9.5 | 6.5 | 1.00 | 0.50 | 0.0 | 0.0 | 11.87 | 19 | 72 |
| Totals | 122 | 10400 | 794.6 | | | | | | | | | 4360 | 10400 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Tower Loading

Linear Appurtenance Properties

| Elev From (ft) | Elev To (ft) | Description | Qty | Width (in) | Weight (lb/ft) | Pct In Block | Spread On Faces | Bundling Arrangement | Cluster Dia (in) | Out Of Zone | Spacing (in) | Orientation Factor | Ka Override |
|----------------|--------------|---------------------|-----|------------|----------------|--------------|-----------------|----------------------|------------------|-------------|--------------|--------------------|-------------|
| 0.00 | 298.0 | 0.28" (7.1mm) Fiber | 1 | 0.28 | 0.03 | 100 | 2 | Individual | 0.00 | N | 1.00 | 1.00 | 0.01 |
| 0.00 | 298.0 | 0.28" (7mm) Fiber | 1 | 0.28 | 0.04 | 100 | 2 | Individual | 0.00 | N | 1.00 | 1.00 | 0.01 |
| 0.00 | 298.0 | 0.78" (19.7mm) 8 | 5 | 0.78 | 0.59 | 60 | 2 | Block | 0.00 | N | 1.00 | 1.00 | 0.43 |
| 0.00 | 298.0 | 2 1/4" Coax | 12 | 2.38 | 1.22 | 50 | 2 | Block | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 298.0 | 3/8" (0.38"- | 1 | 0.38 | 0.23 | 100 | 2 | Individual | 0.00 | N | 1.00 | 1.00 | 0.01 |
| 0.00 | 297.0 | Waveguide | 1 | 1.25 | 6.90 | 100 | 2 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 285.0 | 1 1/4" Hybriflex | 4 | 1.54 | 1.00 | 100 | 2 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 285.0 | Waveguide | 1 | 1.25 | 6.90 | 100 | 2 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 270.0 | 1 5/8" Coax | 6 | 1.98 | 0.82 | 50 | 1 | Block | 0.00 | N | 1.00 | 1.00 | 0.43 |
| 0.00 | 270.0 | 1 5/8" Hybriflex | 8 | 1.98 | 1.30 | 50 | 1 | Block | 0.00 | N | 1.00 | 1.00 | 0.35 |
| 0.00 | 270.0 | Waveguide | 1 | 1.25 | 6.90 | 100 | 1 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 264.0 | 1 5/8" (1.63"- | 1 | 1.63 | 1.61 | 100 | 1 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 264.0 | 1 5/8" Coax | 6 | 1.98 | 0.82 | 50 | 1 | Block | 0.00 | N | 1.00 | 1.00 | 0.43 |
| 0.00 | 260.0 | Waveguide | 1 | 1.25 | 6.90 | 100 | 1 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 235.0 | 0.34" (8.6mm) | 4 | 0.34 | 0.06 | 100 | 3 | Cluster | 0.68 | N | 1.00 | 1.00 | 0.00 |
| 0.00 | 235.0 | 0.36" (9.1mm) Cat | 12 | 0.36 | 0.06 | 100 | 3 | Cluster | 1.44 | N | 1.00 | 1.00 | 0.22 |
| 0.00 | 235.0 | Waveguide | 1 | 1.25 | 6.00 | 100 | 3 | Individual | 0.00 | N | 1.00 | 1.00 | 0.00 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Equivalent Lateral Force Method

(Based on ASCE7-10 Chapters 11, 12 & 15)

| | |
|--|---------|
| Spectral Response Acceleration for Short Period (S_g): | 0.17 |
| Spectral Response Acceleration at 1.0 Second Period (S_1): | 0.08 |
| Long-Period Transition Period (T_L - Seconds): | 8 |
| Importance Factor (I_e): | 1.00 |
| Site Coefficient F_a : | 1.60 |
| Site Coefficient F_v : | 2.40 |
| Response Modification Coefficient (R): | 3.00 |
| Design Spectral Response Acceleration at Short Period (S_{ds}): | 0.19 |
| Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}): | 0.13 |
| Seismic Response Coefficient (C_s): | 0.03 |
| Upper Limit C_s : | 0.03 |
| Lower Limit C_s : | 0.03 |
| Period based on Rayleigh Method (sec): | 1.33 |
| Redundancy Factor (ρ): | 1.30 |
| Seismic Force Distribution Exponent (k): | 1.42 |
| Total Unfactored Dead Load: | 87.16 k |
| Seismic Base Shear (E): | 3.81 k |

LoadCase (1.2 + 0.2Sds) * DL + E

Seismic

| Section | Height Above Base (ft) | Weight (lb) | W_z (lb-ft) | C_{vx} | Horizontal Force (lb) | Vertical Force (lb) |
|-----------------------------------|------------------------------|----------------|------------------|----------|-----------------------------|---------------------------|
| 15 | 295.00 | 622 | 1,945,36 | 0.019 | 72 | 769 |
| 14 | 280.00 | 1,602 | 4,656,33 | 0.045 | 171 | 1,982 |
| 13 | 260.00 | 2,600 | 6,805,94 | 0.066 | 250 | 3,218 |
| 12 | 240.00 | 3,006 | 7,024,66 | 0.068 | 258 | 3,719 |
| 11 | 220.00 | 3,456 | 7,140,04 | 0.069 | 263 | 4,276 |
| 10 | 200.00 | 4,160 | 7,509,83 | 0.072 | 276 | 5,147 |
| 9 | 180.00 | 4,773 | 7,422,83 | 0.072 | 273 | 5,905 |
| 8 | 160.00 | 5,289 | 6,963,04 | 0.067 | 256 | 6,544 |
| 7 | 140.00 | 5,745 | 6,260,54 | 0.060 | 230 | 7,108 |
| 6 | 120.00 | 6,393 | 5,601,67 | 0.054 | 206 | 7,910 |
| 5 | 100.00 | 8,060 | 5,455,66 | 0.053 | 201 | 9,972 |
| 4 | 80.00 | 6,486 | 3,201,60 | 0.031 | 118 | 8,025 |
| 3 | 60.00 | 6,629 | 2,177,85 | 0.021 | 80 | 8,203 |
| 2 | 40.00 | 7,415 | 1,372,35 | 0.013 | 50 | 9,175 |
| 1 | 15.00 | 10,521 | 485,878 | 0.005 | 18 | 13,018 |
| Raycap DC6-48-60-18-8C-EV | 300.00 | 32 | 102,552 | 0.001 | 4 | 40 |
| Raycap DC6-48-60-18-8F(32.8 lbs) | 300.00 | 33 | 105,116 | 0.001 | 4 | 41 |
| Commscope NNH4-65C-R6 (102.1 lbs) | 298.00 | 306 | 972,363 | 0.009 | 36 | 379 |
| Commscope RV4PX310R-V2 (86 lb) | 298.00 | 86 | 273,011 | 0.003 | 10 | 106 |
| Commscope SBNHH-1D65B (40.6 lbs) | 298.00 | 41 | 128,887 | 0.001 | 5 | 50 |
| Commscope SBNHH-1D65C | 298.00 | 50 | 157,457 | 0.002 | 6 | 61 |
| Ericsson RRUS 4415 B30 | 298.00 | 138 | 438,087 | 0.004 | 16 | 171 |
| Ericsson RRUS 4478 B14 | 298.00 | 180 | 570,466 | 0.005 | 21 | 222 |
| Ericsson RRUS 8843 B2, B66A | 298.00 | 216 | 685,702 | 0.007 | 25 | 267 |
| Ericsson RRUS-11 800 MHz | 298.00 | 162 | 514,276 | 0.005 | 19 | 200 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Equivalent Lateral Force Method

| | | | | | | |
|---------------------------------------|--------|--------|------------|-------|-------|---------|
| Kathrein Scala 742 213 | 298.00 | 132 | 419,040 | 0.004 | 15 | 163 |
| RFS ATM192012-0 | 298.00 | 66 | 209,520 | 0.002 | 8 | 82 |
| Kenwood T1672KT12 SF | 297.00 | 1,527 | 4,825,47 | 0.047 | 177 | 1,890 |
| Alcatel-Lucent 1900 MHz 4X45 RRH | 285.00 | 180 | 536,461 | 0.005 | 20 | 223 |
| Alcatel-Lucent 800 MHz 2X50W RRH w/ | 285.00 | 192 | 572,225 | 0.006 | 21 | 238 |
| Alcatel-Lucent TD-RRH8x20-25 w/ Solar | 285.00 | 210 | 625,871 | 0.006 | 23 | 260 |
| RFS APXVSP18-C-A20 | 285.00 | 171 | 509,638 | 0.005 | 19 | 212 |
| RFS APXVTM14-C-I20 | 285.00 | 159 | 472,980 | 0.005 | 17 | 196 |
| Round Sector Frames | 285.00 | 900 | 2,682,30 | 0.026 | 99 | 1,114 |
| Ericsson 8843 Rev 2 | 277.50 | 450 | 1,291,47 | 0.012 | 47 | 557 |
| Ericsson Radio 4449 - B13&B5 | 277.50 | 420 | 1,205,37 | 0.012 | 44 | 520 |
| Raycap RRFDC-3315-PF-48 (32lbs) | 276.70 | 64 | 182,928 | 0.002 | 7 | 79 |
| Commscope NHH-65C-R2B | 274.10 | 310 | 873,169 | 0.008 | 32 | 383 |
| Antel BXA-70063-8CF-EDIN-2 | 270.00 | 72 | 198,777 | 0.002 | 7 | 89 |
| Raycap RCMD-6627-PF-48 | 270.00 | 96 | 265,036 | 0.003 | 10 | 119 |
| Round Sector Frame | 270.00 | 900 | 2,484,71 | 0.024 | 91 | 1,114 |
| Ericsson KRY 112 489/2 | 264.00 | 46 | 123,556 | 0.001 | 5 | 57 |
| Ericsson Radio 4449 B12,B71 | 264.00 | 222 | 593,709 | 0.006 | 22 | 275 |
| RFS APXV18-206516S-C-A20 | 264.00 | 56 | 150,032 | 0.001 | 6 | 69 |
| RFS APXVAARR24_43-U-NA20 | 264.00 | 384 | 1,026,15 | 0.010 | 38 | 475 |
| Round Sector Frames | 260.00 | 900 | 2,355,48 | 0.023 | 87 | 1,114 |
| Decibel DB848H90E-XY | 251.10 | 252 | 627,811 | 0.006 | 23 | 312 |
| Flat Light Sector Frames | 250.00 | 1,200 | 2,971,06 | 0.029 | 109 | 1,485 |
| Andrew VHLP3-11W | 235.00 | 106 | 240,439 | 0.002 | 9 | 131 |
| Aviat Networks WTM 4200 | 235.00 | 49 | 110,239 | 0.001 | 4 | 60 |
| Telrad 300794 | 235.00 | 22 | 49,902 | 0.000 | 2 | 27 |
| Telrad BreezeCOMPACT 1000 | 235.00 | 72 | 163,317 | 0.002 | 6 | 89 |
| | | 87,156 | 103,738,26 | 1.000 | 3,815 | 107,841 |

LoadCase (0.9 - 0.2Sds) * DL + E

Seismic (Reduced DL)

| Section | Height Above Base (ft) | Weight (lb) | W _z (lb-ft) | C _{vx} | Horizontal Force (lb) | Vertical Force (lb) |
|-----------------------------------|------------------------|-------------|------------------------|-----------------|-----------------------|---------------------|
| 15 | 295.00 | 622 | 1,945,36 | 0.019 | 72 | 536 |
| 14 | 280.00 | 1,602 | 4,656,34 | 0.045 | 171 | 1,382 |
| 13 | 260.00 | 2,600 | 6,805,94 | 0.066 | 250 | 2,243 |
| 12 | 240.00 | 3,006 | 7,024,65 | 0.068 | 258 | 2,593 |
| 11 | 220.00 | 3,456 | 7,140,04 | 0.069 | 263 | 2,981 |
| 10 | 200.00 | 4,160 | 7,509,83 | 0.072 | 276 | 3,588 |
| 9 | 180.00 | 4,773 | 7,422,83 | 0.072 | 273 | 4,117 |
| 8 | 160.00 | 5,289 | 6,963,04 | 0.067 | 256 | 4,563 |
| 7 | 140.00 | 5,745 | 6,260,54 | 0.060 | 230 | 4,956 |
| 6 | 120.00 | 6,393 | 5,601,67 | 0.054 | 206 | 5,515 |
| 5 | 100.00 | 8,060 | 5,455,66 | 0.053 | 201 | 6,953 |
| 4 | 80.00 | 6,486 | 3,201,60 | 0.031 | 118 | 5,595 |
| 3 | 60.00 | 6,629 | 2,177,85 | 0.021 | 80 | 5,719 |
| 2 | 40.00 | 7,415 | 1,372,35 | 0.013 | 50 | 6,397 |
| 1 | 15.00 | 10,521 | 485,878 | 0.005 | 18 | 9,076 |
| Raycap DC6-48-60-18-8C-EV | 300.00 | 32 | 102,552 | 0.001 | 4 | 28 |
| Raycap DC6-48-60-18-8F(32.8 lbs) | 300.00 | 33 | 105,116 | 0.001 | 4 | 28 |
| Commscope NNH4-65C-R6 (102.1 lbs) | 298.00 | 306 | 972,363 | 0.009 | 36 | 264 |
| Commscope RV4PX310R-V2 (86 lb) | 298.00 | 86 | 273,011 | 0.003 | 10 | 74 |
| Commscope SBNHH-1D65B (40.6 lbs) | 298.00 | 41 | 128,887 | 0.001 | 5 | 35 |
| Commscope SBNHH-1D65C | 298.00 | 50 | 157,457 | 0.002 | 6 | 43 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

Equivalent Lateral Force Method

| | | | | | | |
|---------------------------------------|--------|--------|------------|-------|-------|--------|
| Ericsson RRUS 4415 B30 | 298.00 | 138 | 438,087 | 0.004 | 16 | 119 |
| Ericsson RRUS 4478 B14 | 298.00 | 180 | 570,466 | 0.005 | 21 | 155 |
| Ericsson RRUS 8843 B2, B66A | 298.00 | 216 | 685,702 | 0.007 | 25 | 186 |
| Ericsson RRUS-11 800 MHz | 298.00 | 162 | 514,276 | 0.005 | 19 | 140 |
| Kathrein Scala 742 213 | 298.00 | 132 | 419,040 | 0.004 | 15 | 114 |
| RFS ATM192012-0 | 298.00 | 66 | 209,520 | 0.002 | 8 | 57 |
| Kenwood T1672KT12 SF | 297.00 | 1,527 | 4,825,47 | 0.047 | 177 | 1,318 |
| Alcatel-Lucent 1900 MHz 4X45 RRH | 285.00 | 180 | 536,461 | 0.005 | 20 | 155 |
| Alcatel-Lucent 800 MHz 2X50W RRH w/ | 285.00 | 192 | 572,225 | 0.006 | 21 | 166 |
| Alcatel-Lucent TD-RRH8x20-25 w/ Solar | 285.00 | 210 | 625,871 | 0.006 | 23 | 181 |
| RFS APXVSP18-C-A20 | 285.00 | 171 | 509,638 | 0.005 | 19 | 148 |
| RFS APXVTM14-C-I20 | 285.00 | 159 | 472,980 | 0.005 | 17 | 137 |
| Round Sector Frames | 285.00 | 900 | 2,682,30 | 0.026 | 99 | 776 |
| Ericsson 8843 Rev 2 | 277.50 | 450 | 1,291,47 | 0.012 | 47 | 388 |
| Ericsson Radio 4449 - B13&B5 | 277.50 | 420 | 1,205,37 | 0.012 | 44 | 362 |
| Raycap RRFDC-3315-PF-48 (32lbs) | 276.70 | 64 | 182,928 | 0.002 | 7 | 55 |
| Commscope NHH-65C-R2B | 274.10 | 310 | 873,169 | 0.008 | 32 | 267 |
| Antel BXA-70063-8CF-EDIN-2 | 270.00 | 72 | 198,777 | 0.002 | 7 | 62 |
| Raycap RCMDC-6627-PF-48 | 270.00 | 96 | 265,036 | 0.003 | 10 | 83 |
| Round Sector Frame | 270.00 | 900 | 2,484,71 | 0.024 | 91 | 776 |
| Ericsson KRY 112 489/2 | 264.00 | 46 | 123,556 | 0.001 | 5 | 40 |
| Ericsson Radio 4449 B12,B71 | 264.00 | 222 | 593,709 | 0.006 | 22 | 192 |
| RFS APXV18-206516S-C-A20 | 264.00 | 56 | 150,032 | 0.001 | 6 | 48 |
| RFS APXVAARR24_43-U-NA20 | 264.00 | 384 | 1,026,15 | 0.010 | 38 | 331 |
| Round Sector Frames | 260.00 | 900 | 2,355,48 | 0.023 | 87 | 776 |
| Decibel DB848H90E-XY | 251.10 | 252 | 627,811 | 0.006 | 23 | 217 |
| Flat Light Sector Frames | 250.00 | 1,200 | 2,971,06 | 0.029 | 109 | 1,035 |
| Andrew VHLP3-11W | 235.00 | 106 | 240,439 | 0.002 | 9 | 91 |
| Aviat Networks WTM 4200 | 235.00 | 49 | 110,239 | 0.001 | 4 | 42 |
| Telrad 300794 | 235.00 | 22 | 49,902 | 0.000 | 2 | 19 |
| Telrad BreezeCOMPACT 1000 | 235.00 | 72 | 163,317 | 0.002 | 6 | 62 |
| | | 87,156 | 103,738,26 | 1.000 | 3,815 | 75,186 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

Equivalent Modal Analysis Method

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

| | |
|--|------|
| Spectral Response Acceleration for Short Period (S_s): | 0.17 |
| Spectral Response Acceleration at 1.0 Second Period (S_1): | 0.08 |
| Importance Factor (I_p): | 1.00 |
| Site Coefficient F_a : | 1.60 |
| Site Coefficient F_v : | 2.40 |
| Response Modification Coefficient (R): | 3.00 |
| Design Spectral Response Acceleration at Short Period (S_{ds}): | 0.19 |
| Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}): | 0.13 |
| Period Based on Rayleigh Method (sec): | 1.33 |
| Redundancy Factor (ρ): | 1.30 |

LoadCase (1.2 + 0.2Sds) * DL + E

Seismic

| Section | Height Above Base (ft) | Weight (lb) | a | b | c | S_{az} | Horizontal Force (lb) | Vertical Force (lb) |
|----------------------------------|------------------------------|----------------|-------|--------|-------|----------|-----------------------------|---------------------------|
| 15 | 295.00 | 622 | 1.828 | 1.667 | 1.025 | 0.358 | 96 | 769 |
| 14 | 280.00 | 1,602 | 1.646 | 0.929 | 0.735 | 0.260 | 180 | 1,982 |
| 13 | 260.00 | 2,600 | 1.420 | 0.322 | 0.452 | 0.160 | 180 | 3,218 |
| 12 | 240.00 | 3,006 | 1.210 | 0.014 | 0.262 | 0.092 | 120 | 3,719 |
| 11 | 220.00 | 3,456 | 1.016 | -0.105 | 0.140 | 0.055 | 82 | 4,276 |
| 10 | 200.00 | 4,160 | 0.840 | -0.118 | 0.066 | 0.040 | 72 | 5,147 |
| 9 | 180.00 | 4,773 | 0.680 | -0.081 | 0.026 | 0.039 | 81 | 5,905 |
| 8 | 160.00 | 5,289 | 0.538 | -0.030 | 0.009 | 0.043 | 99 | 6,544 |
| 7 | 140.00 | 5,745 | 0.412 | 0.014 | 0.006 | 0.046 | 115 | 7,108 |
| 6 | 120.00 | 6,393 | 0.302 | 0.045 | 0.012 | 0.045 | 125 | 7,910 |
| 5 | 100.00 | 8,060 | 0.210 | 0.061 | 0.022 | 0.041 | 143 | 9,972 |
| 4 | 80.00 | 6,486 | 0.134 | 0.069 | 0.032 | 0.035 | 100 | 8,025 |
| 3 | 60.00 | 6,629 | 0.076 | 0.072 | 0.040 | 0.030 | 87 | 8,203 |
| 2 | 40.00 | 7,415 | 0.034 | 0.069 | 0.041 | 0.025 | 82 | 9,175 |
| 1 | 15.00 | 10,521 | 0.005 | 0.044 | 0.025 | 0.015 | 68 | 13,018 |
| Raycap DC6-48-60-18-8C-EV | 300.00 | 32 | 1.890 | 1.980 | 1.140 | 0.395 | 5 | 40 |
| Raycap DC6-48-60-18-8F(32.8 lbs) | 300.00 | 33 | 1.890 | 1.980 | 1.140 | 0.395 | 6 | 41 |
| Commscope NNH4-65C-R6 | 298.00 | 306 | 1.865 | 1.850 | 1.093 | 0.380 | 50 | 379 |
| Commscope RV4PX310R-V2 (86 | 298.00 | 86 | 1.865 | 1.850 | 1.093 | 0.380 | 14 | 106 |
| Commscope SBNHH-1D65B (40.6 | 298.00 | 41 | 1.865 | 1.850 | 1.093 | 0.380 | 7 | 50 |
| Commscope SBNHH-1D65C | 298.00 | 50 | 1.865 | 1.850 | 1.093 | 0.380 | 8 | 61 |
| Ericsson RRUS 4415 B30 | 298.00 | 138 | 1.865 | 1.850 | 1.093 | 0.380 | 23 | 171 |
| Ericsson RRUS 4478 B14 | 298.00 | 180 | 1.865 | 1.850 | 1.093 | 0.380 | 30 | 222 |
| Ericsson RRUS 8843 B2, B66A | 298.00 | 216 | 1.865 | 1.850 | 1.093 | 0.380 | 36 | 267 |
| Ericsson RRUS-11 800 MHz | 298.00 | 162 | 1.865 | 1.850 | 1.093 | 0.380 | 27 | 200 |
| Kathrein Scala 742 213 | 298.00 | 132 | 1.865 | 1.850 | 1.093 | 0.380 | 22 | 163 |
| RFS ATM192012-0 | 298.00 | 66 | 1.865 | 1.850 | 1.093 | 0.380 | 11 | 82 |
| Kenwood T1672KT12 SF | 297.00 | 1,527 | 1.852 | 1.787 | 1.070 | 0.373 | 247 | 1,890 |
| Alcatel-Lucent 1900 MHz 4X45 | 285.00 | 180 | 1.706 | 1.144 | 0.823 | 0.290 | 23 | 223 |
| Alcatel-Lucent 800 MHz 2X50W | 285.00 | 192 | 1.706 | 1.144 | 0.823 | 0.290 | 24 | 238 |
| Alcatel-Lucent TD-RRH8x20-25 | 285.00 | 210 | 1.706 | 1.144 | 0.823 | 0.290 | 26 | 260 |
| RFS APXVSP18-C-A20 | 285.00 | 171 | 1.706 | 1.144 | 0.823 | 0.290 | 22 | 212 |
| RFS APXVTM14-C-I20 | 285.00 | 159 | 1.706 | 1.144 | 0.823 | 0.290 | 20 | 196 |
| Round Sector Frames | 285.00 | 900 | 1.706 | 1.144 | 0.823 | 0.290 | 113 | 1,114 |
| Ericsson 8843 Rev 2 | 277.50 | 450 | 1.617 | 0.832 | 0.694 | 0.245 | 48 | 557 |
| Ericsson Radio 4449 - B13&B5 | 277.50 | 420 | 1.617 | 0.832 | 0.694 | 0.245 | 45 | 520 |
| Raycap RRFDC-3315-PF-48 (32lbs) | 276.70 | 64 | 1.608 | 0.803 | 0.681 | 0.241 | 7 | 79 |
| Commscope NHH-65C-R2B | 274.10 | 310 | 1.578 | 0.711 | 0.640 | 0.227 | 30 | 383 |
| Antel BXA-70063-8CF-EDIN-2 | 270.00 | 72 | 1.531 | 0.580 | 0.580 | 0.205 | 6 | 89 |
| Raycap RCMDC-6627-PF-48 | 270.00 | 96 | 1.531 | 0.580 | 0.580 | 0.205 | 9 | 119 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

Equivalent Modal Analysis Method

| | | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|-------|---------|
| Round Sector Frame | 270.00 | 900 | 1.531 | 0.580 | 0.580 | 0.205 | 80 | 1,114 |
| Ericsson KRY 112 489/2 | 264.00 | 46 | 1.464 | 0.415 | 0.501 | 0.177 | 4 | 57 |
| Ericsson Radio 4449 B12,B71 | 264.00 | 222 | 1.464 | 0.415 | 0.501 | 0.177 | 17 | 275 |
| RFS APXV18-206516S-C-A20 | 264.00 | 56 | 1.464 | 0.415 | 0.501 | 0.177 | 4 | 69 |
| RFS APXVAARR24_43-U-NA20 | 264.00 | 384 | 1.464 | 0.415 | 0.501 | 0.177 | 29 | 475 |
| Round Sector Frames | 260.00 | 900 | 1.420 | 0.322 | 0.452 | 0.160 | 62 | 1,114 |
| Decibel DB848H90E-XY | 251.10 | 252 | 1.324 | 0.155 | 0.358 | 0.126 | 14 | 312 |
| Flat Light Sector Frames | 250.00 | 1,200 | 1.312 | 0.138 | 0.347 | 0.122 | 63 | 1,485 |
| Andrew VHLP3-11W | 235.00 | 106 | 1.160 | -0.030 | 0.226 | 0.080 | 4 | 131 |
| Aviat Networks WTM 4200 | 235.00 | 49 | 1.160 | -0.030 | 0.226 | 0.080 | 2 | 60 |
| Telrad 300794 | 235.00 | 22 | 1.160 | -0.030 | 0.226 | 0.080 | 1 | 27 |
| Telrad BreezeCOMPACT 1000 | 235.00 | 72 | 1.160 | -0.030 | 0.226 | 0.080 | 3 | 89 |
| | | 87,156 | 70.427 | 41.162 | 30.626 | 11.000 | 2,769 | 107,841 |

LoadCase (0.9 - 0.2Sds) * DL + E

Seismic (Reduced DL)

| Section | Height Above Base (ft) | Weight (lb) | a | b | c | S _{az} | Horizontal Force (lb) | Vertical Force (lb) |
|----------------------------------|------------------------------|----------------|-------|--------|-------|-----------------|-----------------------------|---------------------------|
| 15 | 295.00 | 622 | 1.828 | 1.667 | 1.025 | 0.358 | 96 | 536 |
| 14 | 280.00 | 1,602 | 1.646 | 0.929 | 0.735 | 0.260 | 180 | 1,382 |
| 13 | 260.00 | 2,600 | 1.420 | 0.322 | 0.452 | 0.160 | 180 | 2,243 |
| 12 | 240.00 | 3,006 | 1.210 | 0.014 | 0.262 | 0.092 | 120 | 2,593 |
| 11 | 220.00 | 3,456 | 1.016 | -0.105 | 0.140 | 0.055 | 82 | 2,981 |
| 10 | 200.00 | 4,160 | 0.840 | -0.118 | 0.066 | 0.040 | 72 | 3,588 |
| 9 | 180.00 | 4,773 | 0.680 | -0.081 | 0.026 | 0.039 | 81 | 4,117 |
| 8 | 160.00 | 5,289 | 0.538 | -0.030 | 0.009 | 0.043 | 99 | 4,563 |
| 7 | 140.00 | 5,745 | 0.412 | 0.014 | 0.006 | 0.046 | 115 | 4,956 |
| 6 | 120.00 | 6,393 | 0.302 | 0.045 | 0.012 | 0.045 | 125 | 5,515 |
| 5 | 100.00 | 8,060 | 0.210 | 0.061 | 0.022 | 0.041 | 143 | 6,953 |
| 4 | 80.00 | 6,486 | 0.134 | 0.069 | 0.032 | 0.035 | 100 | 5,595 |
| 3 | 60.00 | 6,629 | 0.076 | 0.072 | 0.040 | 0.030 | 87 | 5,719 |
| 2 | 40.00 | 7,415 | 0.034 | 0.069 | 0.041 | 0.025 | 82 | 6,397 |
| 1 | 15.00 | 10,521 | 0.005 | 0.044 | 0.025 | 0.015 | 68 | 9,076 |
| Raycap DC6-48-60-18-8C-EV | 300.00 | 32 | 1.890 | 1.980 | 1.140 | 0.395 | 5 | 28 |
| Raycap DC6-48-60-18-8F(32.8 lbs) | 300.00 | 33 | 1.890 | 1.980 | 1.140 | 0.395 | 6 | 28 |
| Commscope NNH4-65C-R6 | 298.00 | 306 | 1.865 | 1.850 | 1.093 | 0.380 | 50 | 264 |
| Commscope RV4PX310R-V2 (86 | 298.00 | 86 | 1.865 | 1.850 | 1.093 | 0.380 | 14 | 74 |
| Commscope SBNHH-1D65B (40.6 | 298.00 | 41 | 1.865 | 1.850 | 1.093 | 0.380 | 7 | 35 |
| Commscope SBNHH-1D65C | 298.00 | 50 | 1.865 | 1.850 | 1.093 | 0.380 | 8 | 43 |
| Ericsson RRUS 4415 B30 | 298.00 | 138 | 1.865 | 1.850 | 1.093 | 0.380 | 23 | 119 |
| Ericsson RRUS 4478 B14 | 298.00 | 180 | 1.865 | 1.850 | 1.093 | 0.380 | 30 | 155 |
| Ericsson RRUS 8843 B2, B66A | 298.00 | 216 | 1.865 | 1.850 | 1.093 | 0.380 | 36 | 186 |
| Ericsson RRUS-11 800 MHz | 298.00 | 162 | 1.865 | 1.850 | 1.093 | 0.380 | 27 | 140 |
| Kathrein Scala 742 213 | 298.00 | 132 | 1.865 | 1.850 | 1.093 | 0.380 | 22 | 114 |
| RFS ATM192012-0 | 298.00 | 66 | 1.865 | 1.850 | 1.093 | 0.380 | 11 | 57 |
| Kenwood T1672KT12 SF | 297.00 | 1,527 | 1.852 | 1.787 | 1.070 | 0.373 | 247 | 1,318 |
| Alcatel-Lucent 1900 MHz 4X45 | 285.00 | 180 | 1.706 | 1.144 | 0.823 | 0.290 | 23 | 155 |
| Alcatel-Lucent 800 MHz 2X50W | 285.00 | 192 | 1.706 | 1.144 | 0.823 | 0.290 | 24 | 166 |
| Alcatel-Lucent TD-RRH8x20-25 | 285.00 | 210 | 1.706 | 1.144 | 0.823 | 0.290 | 26 | 181 |
| RFS APXVSP18-C-A20 | 285.00 | 171 | 1.706 | 1.144 | 0.823 | 0.290 | 22 | 148 |
| RFS APXVTM14-C-I20 | 285.00 | 159 | 1.706 | 1.144 | 0.823 | 0.290 | 20 | 137 |
| Round Sector Frames | 285.00 | 900 | 1.706 | 1.144 | 0.823 | 0.290 | 113 | 776 |
| Ericsson 8843 Rev 2 | 277.50 | 450 | 1.617 | 0.832 | 0.694 | 0.245 | 48 | 388 |
| Ericsson Radio 4449 - B13&B5 | 277.50 | 420 | 1.617 | 0.832 | 0.694 | 0.245 | 45 | 362 |
| Raycap RRFD-3315-PF-48 (32lbs) | 276.70 | 64 | 1.608 | 0.803 | 0.681 | 0.241 | 7 | 55 |
| Commscope NHH-65C-R2B | 274.10 | 310 | 1.578 | 0.711 | 0.640 | 0.227 | 30 | 267 |
| Antel BXA-70063-8CF-EDIN-2 | 270.00 | 72 | 1.531 | 0.580 | 0.580 | 0.205 | 6 | 62 |
| Raycap RCMD-6627-PF-48 | 270.00 | 96 | 1.531 | 0.580 | 0.580 | 0.205 | 9 | 83 |
| Round Sector Frame | 270.00 | 900 | 1.531 | 0.580 | 0.580 | 0.205 | 80 | 776 |
| Ericsson KRY 112 489/2 | 264.00 | 46 | 1.464 | 0.415 | 0.501 | 0.177 | 4 | 40 |
| Ericsson Radio 4449 B12,B71 | 264.00 | 222 | 1.464 | 0.415 | 0.501 | 0.177 | 17 | 192 |
| RFS APXV18-206516S-C-A20 | 264.00 | 56 | 1.464 | 0.415 | 0.501 | 0.177 | 4 | 48 |
| RFS APXVAARR24_43-U-NA20 | 264.00 | 384 | 1.464 | 0.415 | 0.501 | 0.177 | 29 | 331 |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Equivalent Modal Analysis Method

| | | | | | | | | |
|---------------------------|--------|--------|--------|--------|--------|--------|-------|--------|
| Round Sector Frames | 260.00 | 900 | 1.420 | 0.322 | 0.452 | 0.160 | 62 | 776 |
| Decibel DB848H90E-XY | 251.10 | 252 | 1.324 | 0.155 | 0.358 | 0.126 | 14 | 217 |
| Flat Light Sector Frames | 250.00 | 1,200 | 1.312 | 0.138 | 0.347 | 0.122 | 63 | 1,035 |
| Andrew VHLP3-11W | 235.00 | 106 | 1.160 | -0.030 | 0.226 | 0.080 | 4 | 91 |
| Aviat Networks WTM 4200 | 235.00 | 49 | 1.160 | -0.030 | 0.226 | 0.080 | 2 | 42 |
| Telrad 300794 | 235.00 | 22 | 1.160 | -0.030 | 0.226 | 0.080 | 1 | 19 |
| Telrad BreezeCOMPACT 1000 | 235.00 | 72 | 1.160 | -0.030 | 0.226 | 0.080 | 3 | 62 |
| | | 87,156 | 70.427 | 41.162 | 30.626 | 11.000 | 2,769 | 75,186 |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 1 | | Section 1 | | Bot Elev (ft): 0.00 | | | | Height (ft): 30.000 | | | | | | | |
|-------------------------------|-------------------|-----------|--------------------|---------------------|--------------|------------|--------------|---------------------|--------------------|------------------|-------------------------|--------------------|------------------|-------|-------------|
| | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic (kip) | Pn Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| Max Compression Member | | | | | | | | | | | | | | | |
| LEG | PX - 10" DIA PIPE | -505.79 | 1.2D + 1.6W Normal | 30.07 | 33 | 33 | 33 | 32.8 | 50.0 | 669.67 | 0 | 0 | 0.00 | 0.00 | 75 Member X |
| HORIZ | PST - 3" DIA PIPE | -12.66 | 0.9D + 1.6W 90 deg | 16.48 | 100 | 100 | 100 | 170.5 | 50.0 | 17.32 | 2 | 0 | 0.00 | 0.00 | 73 Member X |
| DIAG | PST - 3" DIA PIPE | -26.32 | 1.2D + 1.6W 90 deg | 35.16 | 33 | 33 | 33 | 120.0 | 50.0 | 34.96 | 3 | 0 | 0.00 | 0.00 | 75 Member X |
| Max Tension Member | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit (kip) | Pn Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls | | |
| LEG | PX - 10" DIA PIPE | 425.52 | 0.9D + 1.6W 60 deg | 50 | 65 | 724.50 | 0 | 0 | 0.00 | 0.00 | | 58 | Member | | |
| HORIZ | PST - 3" DIA PIPE | 12.84 | 1.2D + 1.6W 90 deg | 50 | 65 | 100.35 | 2 | 0 | 0.00 | 34.15 | 0.00 | 37 | Bolt Bear | | |
| DIAG | PST - 3" DIA PIPE | 24.90 | 0.9D + 1.6W 90 deg | 50 | 65 | 100.35 | 3 | 0 | 0.00 | 63.50 | 0.00 | 39 | Bolt Bear | | |
| Max Splice Forces | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | |
| | Top Tension | 424.19 | 0.9D + 1.6W 60 deg | | 0.00 | 0 | 0 | | | | | | | | |
| | Top Compression | 504.32 | 1.2D + 1.6W Normal | | 0.00 | 0 | | | | | | | | | |
| | Bot Tension | 462.96 | 0.9D + 1.6W 60 deg | | 726.89 | 76 | 12 | 1" A354-BC | | | | | | | |
| | Bot Compression | 547.99 | 1.2D + 1.6W Normal | | 0.00 | 0 | | | | | | | | | |

| Section: 2 | | Section 2 | | Bot Elev (ft): 30.00 | | | | Height (ft): 20.000 | | | | | | | |
|-------------------------------|-------------------|-----------|--------------------|----------------------|--------------|------------|--------------|---------------------|--------------------|------------------|-------------------------|--------------------|------------------|-------|-------------|
| | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic (kip) | Pn Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| Max Compression Member | | | | | | | | | | | | | | | |
| LEG | PX - 10" DIA PIPE | -477.56 | 1.2D + 1.6W Normal | 20.06 | 50 | 50 | 50 | 33.2 | 50.0 | 668.54 | 0 | 0 | 0.00 | 0.00 | 71 Member X |
| HORIZ | PST - 3" DIA PIPE | -10.88 | 1.2D + 1.6W 90 deg | 15.15 | 100 | 100 | 100 | 156.7 | 50.0 | 20.51 | 2 | 0 | 0.00 | 0.00 | 53 Member X |
| DIAG | PST - 3" DIA PIPE | -19.19 | 1.2D + 1.6W 90 deg | 25.93 | 50 | 50 | 50 | 134.1 | 50.0 | 28.01 | 3 | 0 | 0.00 | 0.00 | 68 Member X |
| Max Tension Member | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit (kip) | Pn Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls | | |
| LEG | PX - 10" DIA PIPE | 403.86 | 0.9D + 1.6W 60 deg | 50 | 65 | 724.50 | 0 | 0 | 0.00 | 0.00 | | 55 | Member | | |
| HORIZ | PST - 3" DIA PIPE | 10.76 | 1.2D + 1.6W 90 deg | 50 | 65 | 100.35 | 2 | 0 | 0.00 | 34.15 | 0.00 | 31 | Bolt Bear | | |
| DIAG | PST - 3" DIA PIPE | 17.51 | 0.9D + 1.6W 90 deg | 50 | 65 | 100.35 | 3 | 0 | 0.00 | 54.37 | 0.00 | 32 | Bolt Bear | | |
| Max Splice Forces | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | |
| | Top Tension | 402.69 | 0.9D + 1.6W 60 deg | | 0.00 | 0 | 0 | | | | | | | | |
| | Top Compression | 476.32 | 1.2D + 1.6W Normal | | 0.00 | 0 | | | | | | | | | |
| | Bot Tension | 424.19 | 0.9D + 1.6W 60 deg | | 654.20 | 65 | 12 | 1 A325 | | | | | | | |
| | Bot Compression | 0.00 | | | 0.00 | 0 | | | | | | | | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 3 | | Section 3 | | Bot Elev (ft): 50.00 | | | | Height (ft): 20.000 | | | | | | | |
|-------------------------------|----------------------|-----------|--------------------|----------------------|-----------|---------------|-----------|---------------------|--------------------|------------------|-------------------------|--------------------|------------------|-----------|-------------|
| | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| Max Compression Member | | | | | | | | | | | | | | | |
| LEG | PSP - 8.75" OD x 0.5 | -445.35 | 1.2D + 1.6W Normal | 20.05 | 50 | 50 | 50 | 41.2 | 50.0 | 515.17 | 0 | 0 | 0.00 | 0.00 | 86 Member X |
| HORIZ | PST - 3" DIA PIPE | -11.50 | 0.9D + 1.6W 90 deg | 13.90 | 100 | 100 | 100 | 143.8 | 50.0 | 24.36 | 2 | 0 | 0.00 | 0.00 | 47 Member X |
| DIAG | PST - 3" DIA PIPE | -20.92 | 1.2D + 1.6W 90 deg | 25.10 | 50 | 50 | 50 | 129.8 | 50.0 | 29.89 | 3 | 0 | 0.00 | 0.00 | 69 Member X |
| Max Tension Member | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls | | |
| LEG | PSP - 8.75" OD x 0.5 | 377.52 | 0.9D + 1.6W 60 deg | 50 | 65 | 583.15 | 0 | 0 | 0.00 | 0.00 | | | 64 | Member | |
| HORIZ | PST - 3" DIA PIPE | 11.28 | 1.2D + 1.6W 90 deg | 50 | 65 | 100.35 | 2 | 0 | 0.00 | 34.15 | 0.00 | | 33 | Bolt Bear | |
| DIAG | PST - 3" DIA PIPE | 19.23 | 1.2D + 1.6W 90 deg | 50 | 65 | 100.35 | 3 | 0 | 0.00 | 54.37 | 0.00 | | 35 | Bolt Bear | |
| Max Splice Forces | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | | |
| Top Tension | | 377.32 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | | | | | | | | | |
| Top Compression | | 444.06 | 1.2D + 1.6W Normal | 0.00 | 0 | | | | | | | | | | |
| Bot Tension | | 402.69 | 0.9D + 1.6W 60 deg | 654.20 | 62 | 12 | 1 A325 | | | | | | | | |
| Bot Compression | | 0.00 | | 0.00 | 0 | | | | | | | | | | |

| Section: 4 | | Section 4 | | Bot Elev (ft): 70.00 | | | | Height (ft): 20.000 | | | | | | | |
|-------------------------------|----------------------|-----------|--------------------|----------------------|-----------|---------------|-----------|---------------------|--------------------|------------------|-------------------------|--------------------|------------------|-----------|-------------|
| | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| Max Compression Member | | | | | | | | | | | | | | | |
| LEG | PSP - 8.75" OD x 0.5 | -412.91 | 1.2D + 1.6W Normal | 20.06 | 50 | 50 | 50 | 41.2 | 50.0 | 515.15 | 0 | 0 | 0.00 | 0.00 | 80 Member X |
| HORIZ | PST - 3" DIA PIPE | -10.85 | 1.2D + 1.6W 90 deg | 12.61 | 100 | 100 | 100 | 130.5 | 50.0 | 29.60 | 2 | 0 | 0.00 | 0.00 | 36 Member X |
| DIAG | PST - 3" DIA PIPE | -20.62 | 1.2D + 1.6W 90 deg | 24.36 | 50 | 50 | 50 | 126.0 | 50.0 | 31.71 | 3 | 0 | 0.00 | 0.00 | 65 Member X |
| Max Tension Member | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls | | |
| LEG | PSP - 8.75" OD x 0.5 | 352.83 | 0.9D + 1.6W 60 deg | 50 | 65 | 583.15 | 0 | 0 | 0.00 | 0.00 | | | 60 | Member | |
| HORIZ | PST - 3" DIA PIPE | 10.13 | 1.2D + 1.6W 90 deg | 50 | 65 | 100.35 | 2 | 0 | 0.00 | 34.15 | 0.00 | | 29 | Bolt Bear | |
| DIAG | PST - 3" DIA PIPE | 19.23 | 0.9D + 1.6W 90 deg | 50 | 65 | 100.35 | 3 | 0 | 0.00 | 54.37 | 0.00 | | 35 | Bolt Bear | |
| Max Splice Forces | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | | |
| Top Tension | | 351.69 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | | | | | | | | | |
| Top Compression | | 411.76 | 1.2D + 1.6W Normal | 0.00 | 0 | | | | | | | | | | |
| Bot Tension | | 377.32 | 0.9D + 1.6W 60 deg | 436.14 | 87 | 8 | 1 A325 | | | | | | | | |
| Bot Compression | | 0.00 | | 0.00 | 0 | | | | | | | | | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 5 | | Section 5 | | Bot Elev (ft): 90.00 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|----------------------|-----------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|---------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PSP - 8.75" OD x 0.5 | -401.40 | 1.2D + 1.6W Normal | 9.77 | 100 | 100 | 100 | 40.1 | 50.0 | 518.41 | 0 | 0 | 0.00 | 0.00 | 77 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 5X5X0.375 | -12.84 | 1.2D + 1.6W 90 deg | 26.52 | 50 | 50 | 50 | 160.8 | 36.0 | 31.56 | 1 | 1 | 24.35 | 36.54 | 52 Bolt Shear |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|----------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|------------|
| LEG | PSP - 8.75" OD x 0.5 | 350.04 | 1.2D + 1.6W 60 deg | 50 | 65 | 583.15 | 0 | 0 | 0.00 | 0.00 | | 60 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 5X5X0.375 | 12.67 | 1.2D + 1.6W 90 deg | 36 | 58 | 105.54 | 1 | 1 | 24.35 | 25.29 | 33.35 | 52 | Bolt Shear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-----------|
| Top Tension | | 324.12 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 375.10 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 351.69 | 0.9D + 1.6W 60 deg | 436.14 | 81 | 8 | 1 A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

| Section: 6 | | Section 6 | | Bot Elev (ft): 110.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|------------------|-----------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|---------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PSP - ROHN 8 EHS | -362.27 | 1.2D + 1.6W Normal | 9.76 | 100 | 100 | 100 | 40.1 | 50.0 | 388.81 | 0 | 0 | 0.00 | 0.00 | 93 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 4X4X0.375 | -13.33 | 1.2D + 1.6W 90 deg | 24.57 | 50 | 50 | 50 | 189.3 | 50.0 | 18.03 | 1 | 1 | 17.89 | 35.10 | 74 Bolt Shear |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|------------|
| LEG | PSP - ROHN 8 EHS | 324.57 | 0.9D + 1.6W 60 deg | 50 | 65 | 437.40 | 0 | 0 | 0.00 | 0.00 | | 74 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 4X4X0.375 | 12.95 | 1.2D + 1.6W 90 deg | 50 | 65 | 92.57 | 1 | 1 | 17.89 | 24.19 | 28.36 | 72 | Bolt Shear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-----------|
| Top Tension | | 290.05 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 333.67 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 324.12 | 0.9D + 1.6W 60 deg | 436.14 | 74 | 8 | 1 A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 7 | | Section 7 | | Bot Elev (ft): 130.0 | | | | Height (ft): 20.000 | | | | | | | |
|-------------------------------|------------------|-----------|--------------------|----------------------|--------------|--------|-----------|---------------------|---------------|-----------|-----------|--------------------|------------------|---------------|-------------|
| | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| Max Compression Member | | | | | | | | | | | | | | | |
| LEG | PSP - ROHN 8 EHS | -323.39 | 1.2D + 1.6W Normal | 9.77 | 100 | 100 | 100 | 40.2 | 50.0 | 388.76 | 0 | 0 | 0.00 | 0.00 | 83 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 4X4X0.3125 | -10.70 | 1.2D + 1.6W 90 deg | 22.75 | 50 | 50 | 50 | 174.8 | 50.0 | 17.75 | 1 | 1 | 17.89 | 29.25 | 60 Member Z |
| Max Tension Member | | | | | | | | | | | | | | | |
| LEG | PSP - ROHN 8 EHS | 290.63 | 0.9D + 1.6W 60 deg | 50 | 65 | 437.40 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 66 Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 4X4X0.3125 | 10.50 | 1.2D + 1.6W 90 deg | 50 | 65 | 77.75 | 1 | 1 | 17.89 | 20.16 | 1 | 1 | 23.64 | 58 Bolt Shear | |
| Max Splice Forces | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | |
| | Top Tension | 260.13 | 0.9D + 1.6W 60 deg | | 0.00 | 0 | 0 | | | | | | | | |
| | Top Compression | 297.48 | 1.2D + 1.6W Normal | | 0.00 | 0 | | | | | | | | | |
| | Bot Tension | 290.05 | 0.9D + 1.6W 60 deg | | 436.14 | 67 | 8 | 1 A325 | | | | | | | |
| | Bot Compression | 0.00 | | | 0.00 | 0 | | | | | | | | | |

| Section: 8 | | Section 8 | | Bot Elev (ft): 150.0 | | | | Height (ft): 20.000 | | | | | | | |
|-------------------------------|------------------|-----------|--------------------|----------------------|--------------|--------|-----------|---------------------|---------------|-----------|-----------|--------------------|------------------|---------------|---------------|
| | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| Max Compression Member | | | | | | | | | | | | | | | |
| LEG | PX - 6" DIA PIPE | -285.87 | 1.2D + 1.6W Normal | 9.77 | 100 | 100 | 100 | 53.4 | 50.0 | 306.89 | 0 | 0 | 0.00 | 0.00 | 93 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 4X4X0.3125 | -11.27 | 1.2D + 1.6W 90 deg | 19.96 | 50 | 50 | 50 | 153.4 | 50.0 | 23.04 | 1 | 1 | 17.89 | 29.25 | 62 Bolt Shear |
| Max Tension Member | | | | | | | | | | | | | | | |
| LEG | PX - 6" DIA PIPE | 257.70 | 1.2D + 1.6W 60 deg | 50 | 65 | 378.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 68 Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 4X4X0.3125 | 11.00 | 1.2D + 1.6W 90 deg | 50 | 65 | 77.75 | 1 | 1 | 17.89 | 20.16 | 1 | 1 | 23.64 | 61 Bolt Shear | |
| Max Splice Forces | | | | | | | | | | | | | | | |
| | | Pu (kip) | Load Case | | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | |
| | Top Tension | 225.60 | 0.9D + 1.6W 60 deg | | 0.00 | 0 | 0 | | | | | | | | |
| | Top Compression | 257.00 | 1.2D + 1.6W Normal | | 0.00 | 0 | | | | | | | | | |
| | Bot Tension | 260.13 | 0.9D + 1.6W 60 deg | | 436.14 | 60 | 8 | 1 A325 | | | | | | | |
| | Bot Compression | 0.00 | | | 0.00 | 0 | | | | | | | | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 9 | | Section 9 | | Bot Elev (ft): 170.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|------------------|-----------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|---------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PSP - ROHN 6 EHS | -246.20 | 1.2D + 1.6W Normal | 9.77 | 100 | 100 | 100 | 52.7 | 50.0 | 246.50 | 0 | 0 | 0.00 | 0.00 | 99 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 4X4X0.3125 | -10.13 | 1.2D + 1.6W 90 deg | 18.20 | 50 | 50 | 50 | 139.8 | 50.0 | 27.73 | 1 | 1 | 17.89 | 29.25 | 56 Bolt Shear |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|------------|
| LEG | PSP - ROHN 6 EHS | 223.78 | 1.2D + 1.6W 60 deg | 50 | 65 | 301.95 | 0 | 0 | 0.00 | 0.00 | | 74 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 4X4X0.3125 | 9.66 | 1.2D + 1.6W 90 deg | 50 | 65 | 77.75 | 1 | 1 | 17.89 | 20.16 | 23.64 | 54 | Bolt Shear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-----------|
| Top Tension | | 191.86 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 217.93 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 225.60 | 0.9D + 1.6W 60 deg | 327.10 | 69 | 6 | 1 A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

| Section: 10 | | Section 10 | | Bot Elev (ft): 190.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|-----------------|------------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|---------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PSP - ROHN 5 EH | -210.14 | 1.2D + 1.6W Normal | 6.51 | 100 | 100 | 100 | 42.5 | 50.0 | 240.98 | 0 | 0 | 0.00 | 0.00 | 87 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 3X3X0.25 | -8.75 | 1.2D + 1.6W 90 deg | 14.63 | 50 | 50 | 50 | 148.3 | 50.0 | 14.79 | 1 | 1 | 12.43 | 19.50 | 70 Bolt Shear |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|-----------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|------------|
| LEG | PSP - ROHN 5 EH | 190.36 | 1.2D + 1.6W 60 deg | 50 | 65 | 274.95 | 0 | 0 | 0.00 | 0.00 | | 69 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 3X3X0.25 | 8.54 | 1.2D + 1.6W 90 deg | 50 | 65 | 45.79 | 1 | 1 | 12.43 | 13.36 | 15.55 | 68 | Bolt Shear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-----------|
| Top Tension | | 156.68 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 177.93 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 191.86 | 0.9D + 1.6W 60 deg | 327.10 | 59 | 6 | 1 A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 11 | | Section 11 | | Bot Elev (ft): 210.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|--------------------|------------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|--------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PX - 4" DIA PIPE | -169.90 | 1.2D + 1.6W Normal | 6.51 | 100 | 100 | 100 | 52.8 | 50.0 | 161.86 | 0 | 0 | 0.00 | 0.00 | 104 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 2.5X2.5X0.25 | -7.96 | 1.2D + 1.6W 90 deg | 13.98 | 50 | 50 | 50 | 170.9 | 36.0 | 9.20 | 1 | 1 | 12.43 | 17.40 | 86 Member Z |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|--------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|-----------|
| LEG | PX - 4" DIA PIPE | 156.89 | 0.9D + 1.6W 60 deg | 50 | 65 | 198.45 | 0 | 0 | 0.00 | 0.00 | | 79 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 2.5X2.5X0.25 | 8.20 | 1.2D + 1.6W 90 deg | 36 | 58 | 32.71 | 1 | 1 | 12.43 | 11.92 | 12.38 | 68 | Bolt Bear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-----------|
| Top Tension | | 118.17 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 135.43 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 156.68 | 0.9D + 1.6W 60 deg | 218.07 | 72 | 4 | 1 A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

| Section: 12 | | Section 12 | | Bot Elev (ft): 230.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|----------------------|------------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|-------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PX - 4" DIA PIPE | -126.84 | 1.2D + 1.6W Normal | 6.51 | 100 | 100 | 100 | 52.8 | 50.0 | 161.86 | 0 | 0 | 0.00 | 0.00 | 78 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 2.5X2.5X0.1875 | -7.70 | 1.2D + 1.6W 90 deg | 12.21 | 50 | 50 | 50 | 148.0 | 36.0 | 9.30 | 1 | 1 | 12.43 | 13.05 | 82 Member Z |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|----------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|-----------|
| LEG | PX - 4" DIA PIPE | 117.09 | 1.2D + 1.6W 60 deg | 50 | 65 | 198.45 | 0 | 0 | 0.00 | 0.00 | | 59 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 2.5X2.5X0.1875 | 7.63 | 1.2D + 1.6W 90 deg | 36 | 58 | 24.84 | 1 | 1 | 12.43 | 8.94 | 9.29 | 85 | Bolt Bear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-------------|
| Top Tension | | 76.23 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 89.95 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 118.17 | 0.9D + 1.6W 60 deg | 166.22 | 71 | 4 | 0.875" A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 13 | | Section 13 | | Bot Elev (ft): 250.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|----------------------|------------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|-------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PX - 3-1/2" DIA PIPE | -83.18 | 1.2D + 1.6W Normal | 4.88 | 100 | 100 | 100 | 44.7 | 50.0 | 143.06 | 0 | 0 | 0.00 | 0.00 | 58 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 2X2X0.1875 | -5.81 | 1.2D + 1.6W 90 deg | 9.680 | 50 | 50 | 50 | 147.4 | 36.0 | 7.43 | 1 | 1 | 12.43 | 13.05 | 78 Member Z |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|----------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|-----------|
| LEG | PX - 3-1/2" DIA PIPE | 76.69 | 0.9D + 1.6W 60 deg | 50 | 65 | 165.60 | 0 | 0 | 0.00 | 0.00 | | 46 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 2X2X0.1875 | 5.81 | 1.2D + 1.6W 90 deg | 36 | 58 | 18.74 | 1 | 1 | 12.43 | 8.94 | 7.25 | 80 | Blk Shear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-------------|
| Top Tension | | 37.61 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 45.73 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 76.23 | 0.9D + 1.6W 60 deg | 166.22 | 46 | 4 | 0.875" A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

| Section: 14 | | Section 14 | | Bot Elev (ft): 270.0 | | | | Height (ft): 20.000 | | | | | | | |
|------------------------|----------------------|------------|--------------------|----------------------|-----------|-----|-----|---------------------|---------------|-----------|-----------|--------------------|------------------|-------|-------------|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Use % | Controls |
| LEG | PST - 3" DIA PIPE | -44.77 | 1.2D + 1.6W Normal | 0.25 | 100 | 100 | 100 | 2.6 | 50.0 | 100.30 | 0 | 0 | 0.00 | 0.00 | 44 Member X |
| HORIZ | | 0.00 | | 0.000 | 0 | 0 | 0 | 0.0 | 0.0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0 |
| DIAG | SAE - 1.75X1.75X0.18 | -5.00 | 1.2D + 1.6W 90 deg | 7.688 | 50 | 50 | 50 | 134.5 | 36.0 | 7.76 | 1 | 1 | 12.43 | 13.05 | 64 Member Z |

| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit Pn (kip) | Num Bolts | Num Holes | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phit Pn (kip) | Use % | Controls |
|--------------------|----------------------|----------|--------------------|----------|----------|---------------|-----------|-----------|--------------------|------------------|-------------------------|-------|-----------|
| LEG | PST - 3" DIA PIPE | 37.69 | 0.9D + 1.6W 60 deg | 50 | 65 | 100.35 | 0 | 0 | 0.00 | 0.00 | | 37 | Member |
| HORIZ | | 0.00 | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0 | |
| DIAG | SAE - 1.75X1.75X0.18 | 4.88 | 1.2D + 1.6W 90 deg | 36 | 58 | 15.67 | 1 | 1 | 12.43 | 8.94 | 6.23 | 78 | Blk Shear |

| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type |
|-------------------|--|----------|--------------------|--------------|-------|-----------|-------------|
| Top Tension | | 6.06 | 0.9D + 1.6W 60 deg | 0.00 | 0 | 0 | |
| Top Compression | | 9.25 | 1.2D + 1.6W Normal | 0.00 | 0 | | |
| Bot Tension | | 37.61 | 0.9D + 1.6W 60 deg | 166.22 | 23 | 4 | 0.875" A325 |
| Bot Compression | | 0.00 | | 0.00 | 0 | | |

Site Number: 21268

Code: ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Force/Stress Summary

| Section: 15 | | Section 15 | | Bot Elev (ft): 290.0 | | | | Height (ft): 10.000 | | | | | | | | | | |
|------------------------|----------------------|------------|----------------------|----------------------|-----------|------------|------------|---------------------|--------------------|------------------|----------------------|--------------------|------------------|----------------------|-------|----------|--|--|
| Max Compression Member | | Pu (kip) | Load Case | Len (ft) | Bracing % | | | F'y (ksi) | Phic (kip) | Pn (Bolts) | Num (Holes) | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phiT (kip) | Use % | Controls | | |
| LEG | PST - 2-1/2" DIA PIP | -9.16 | 1.2D + 1.6W Normal | 0.25 | 100 | 100 | 100 | 3.2 | 50.0 | 76.62 | 0 | 0 | 0.00 | 0.00 | 11 | Member X | | |
| HORIZ | SAE - 2X2X0.1875 | -0.27 | 1.2D + 1.6W Normal | 6.581 | 100 | 100 | 100 | 200.4 | 36.0 | 4.02 | 1 | 1 | 12.43 | 13.05 | 6 | Member Z | | |
| DIAG | SAE - 1.75X1.75X0.18 | -2.23 | 1.2D + 1.6W 90 deg | 8.190 | 50 | 50 | 50 | 143.3 | 36.0 | 6.84 | 1 | 1 | 12.43 | 13.05 | 32 | Member Z | | |
| Max Tension Member | | Pu (kip) | Load Case | Fy (ksi) | Fu (ksi) | Phit (kip) | Pn (Bolts) | Num (Holes) | Shear phiRnv (kip) | Bear phiRn (kip) | Blk Shear phiT (kip) | Use % | Controls | | | | | |
| LEG | PST - 2-1/2" DIA PIP | 5.80 | 1.2D + 1.6W 60 deg | 50 | 65 | 76.68 | 0 | 0 | 0.00 | 0.00 | | | 7 | Member | | | | |
| HORIZ | SAE - 2X2X0.1875 | 0.53 | 1.2D + 1.6W Normal | 36 | 58 | 18.74 | 1 | 1 | 12.43 | 8.94 | 7.25 | | 7 | Blk Shear | | | | |
| DIAG | SAE - 1.75X1.75X0.18 | 2.22 | 1.2D + 1.6W 90 deg | 36 | 58 | 15.67 | 1 | 1 | 12.43 | 8.94 | 6.23 | | 35 | Blk Shear | | | | |
| Max Splice Forces | | Pu (kip) | Load Case | phiRnt (kip) | Use % | Num Bolts | Bolt Type | | | | | | | | | | | |
| Top Tension | | 0.00 | | 0.00 | 0 | 0 | | | | | | | | | | | | |
| Top Compression | | 2.16 | 1.2D + 1.0Di + 1.0Wi | 0.00 | 0 | | | | | | | | | | | | | |
| Bot Tension | | 6.06 | 0.9D + 1.6W 60 deg | 120.41 | 5 | 4 | 0.75" A325 | | | | | | | | | | | |
| Bot Compression | | 0.00 | | 0.00 | 0 | | | | | | | | | | | | | |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

Detailed Reactions

| Load Case | Radius (ft) | Elevation (ft) | Azimuth (deg) | Node | FX (kip) | FY (kip) | FZ (kip) | (-) = Uplift (+) = Down |
|-----------------------------------|-------------|----------------|---------------|------|----------|----------|----------|-------------------------|
| 1.2D + 1.6W Normal | 21.15 | 00.00 | 0 | 1 | 0.00 | 546.72 | -57.94 | |
| | 21.15 | 00.00 | 120 | 1a | 18.39 | -221.07 | -17.73 | |
| | 21.15 | 00.00 | 240 | 1b | -18.39 | -221.07 | -17.73 | |
| 1.2D + 1.6W 60 deg | 21.15 | 00.00 | 0 | 1 | -5.43 | 278.18 | -29.21 | |
| | 21.15 | 00.00 | 120 | 1a | -28.00 | 278.00 | 9.90 | |
| | 21.15 | 00.00 | 240 | 1b | -43.27 | -451.59 | -24.98 | |
| 1.2D + 1.6W 90 deg | 21.15 | 00.00 | 0 | 1 | -6.59 | 34.86 | -3.04 | |
| | 21.15 | 00.00 | 120 | 1a | -43.82 | 461.55 | 21.73 | |
| | 21.15 | 00.00 | 240 | 1b | -39.37 | -391.83 | -18.69 | |
| 0.9D + 1.6W Normal | 21.15 | 00.00 | 0 | 1 | 0.00 | 537.18 | -57.17 | |
| | 21.15 | 00.00 | 120 | 1a | 19.02 | -229.37 | -18.12 | |
| | 21.15 | 00.00 | 240 | 1b | -19.02 | -229.37 | -18.12 | |
| 0.9D + 1.6W 60 deg | 21.15 | 00.00 | 0 | 1 | -5.44 | 269.07 | -28.44 | |
| | 21.15 | 00.00 | 120 | 1a | -27.35 | 268.89 | 9.51 | |
| | 21.15 | 00.00 | 240 | 1b | -43.91 | -459.51 | -25.35 | |
| 0.9D + 1.6W 90 deg | 21.15 | 00.00 | 0 | 1 | -6.61 | 26.15 | -2.29 | |
| | 21.15 | 00.00 | 120 | 1a | -43.16 | 452.14 | 21.34 | |
| | 21.15 | 00.00 | 240 | 1b | -40.01 | -399.85 | -19.05 | |
| 1.2D + 1.0Di + 1.0Wi Normal | 21.15 | 00.00 | 0 | 1 | 0.00 | 145.41 | -13.65 | |
| | 21.15 | 00.00 | 120 | 1a | -3.48 | 52.59 | 1.18 | |
| | 21.15 | 00.00 | 240 | 1b | 3.48 | 52.59 | 1.18 | |
| 1.2D + 1.0Di + 1.0Wi 60 deg | 21.15 | 00.00 | 0 | 1 | -0.69 | 113.84 | -10.23 | |
| | 21.15 | 00.00 | 120 | 1a | -9.21 | 113.83 | 4.52 | |
| | 21.15 | 00.00 | 240 | 1b | 0.35 | 22.92 | 0.20 | |
| 1.2D + 1.0Di + 1.0Wi 90 deg | 21.15 | 00.00 | 0 | 1 | -0.81 | 83.53 | -6.96 | |
| | 21.15 | 00.00 | 120 | 1a | -11.17 | 136.40 | 5.99 | |
| | 21.15 | 00.00 | 240 | 1b | 0.87 | 30.65 | 0.97 | |
| (1.2 + 0.2Sds) * DL + E Normal M1 | 21.15 | 00.00 | 0 | 1 | 0.00 | 59.50 | -5.44 | |
| | 21.15 | 00.00 | 120 | 1a | -1.78 | 22.00 | 0.84 | |
| | 21.15 | 00.00 | 240 | 1b | 1.78 | 22.00 | 0.84 | |
| (1.2 + 0.2Sds) * DL + E Normal M2 | 21.15 | 00.00 | 0 | 1 | 0.00 | 53.36 | -4.80 | |
| | 21.15 | 00.00 | 120 | 1a | -2.03 | 25.07 | 1.05 | |
| | 21.15 | 00.00 | 240 | 1b | 2.03 | 25.07 | 1.05 | |
| (1.2 + 0.2Sds) * DL + E 60 deg M1 | 21.15 | 00.00 | 0 | 1 | -0.16 | 47.00 | -4.28 | |
| | 21.15 | 00.00 | 120 | 1a | -3.79 | 47.00 | 2.00 | |
| | 21.15 | 00.00 | 240 | 1b | 0.70 | 9.50 | 0.40 | |
| (1.2 + 0.2Sds) * DL + E 60 deg M2 | 21.15 | 00.00 | 0 | 1 | -0.10 | 43.93 | -3.96 | |
| | 21.15 | 00.00 | 120 | 1a | -3.48 | 43.93 | 1.90 | |
| | 21.15 | 00.00 | 240 | 1b | 1.25 | 15.65 | 0.72 | |
| (1.2 + 0.2Sds) * DL + E 90 deg M1 | 21.15 | 00.00 | 0 | 1 | -0.18 | 34.50 | -3.12 | |
| | 21.15 | 00.00 | 120 | 1a | -4.49 | 56.15 | 2.49 | |
| | 21.15 | 00.00 | 240 | 1b | 0.92 | 12.85 | 0.64 | |
| (1.2 + 0.2Sds) * DL + E 90 deg M2 | 21.15 | 00.00 | 0 | 1 | -0.12 | 34.50 | -3.12 | |
| | 21.15 | 00.00 | 120 | 1a | -3.99 | 50.83 | 2.24 | |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

| | | | | | | | |
|-----------------------------------|-------|-------|-----|----|--------|---------|--------|
| | 21.15 | 00.00 | 240 | 1b | 1.41 | 18.17 | 0.88 |
| (0.9 - 0.2Sds) * DL + E Normal M1 | 21.15 | 00.00 | 0 | 1 | 0.00 | 49.01 | -4.49 |
| | 21.15 | 00.00 | 120 | 1a | -0.96 | 11.58 | 0.37 |
| | 21.15 | 00.00 | 240 | 1b | 0.96 | 11.58 | 0.37 |
| (0.9 - 0.2Sds) * DL + E Normal M2 | 21.15 | 00.00 | 0 | 1 | 0.00 | 42.87 | -3.86 |
| | 21.15 | 00.00 | 120 | 1a | -1.21 | 14.65 | 0.58 |
| | 21.15 | 00.00 | 240 | 1b | 1.21 | 14.65 | 0.58 |
| (0.9 - 0.2Sds) * DL + E 60 deg M1 | 21.15 | 00.00 | 0 | 1 | -0.16 | 36.53 | -3.34 |
| | 21.15 | 00.00 | 120 | 1a | -2.97 | 36.53 | 1.53 |
| | 21.15 | 00.00 | 240 | 1b | -0.12 | -0.90 | -0.07 |
| (0.9 - 0.2Sds) * DL + E 60 deg M2 | 21.15 | 00.00 | 0 | 1 | -0.10 | 33.46 | -3.02 |
| | 21.15 | 00.00 | 120 | 1a | -2.66 | 33.46 | 1.42 |
| | 21.15 | 00.00 | 240 | 1b | 0.43 | 5.24 | 0.25 |
| (0.9 - 0.2Sds) * DL + E 90 deg M1 | 21.15 | 00.00 | 0 | 1 | -0.18 | 24.05 | -2.18 |
| | 21.15 | 00.00 | 120 | 1a | -3.67 | 45.66 | 2.01 |
| | 21.15 | 00.00 | 240 | 1b | 0.10 | 2.44 | 0.16 |
| (0.9 - 0.2Sds) * DL + E 90 deg M2 | 21.15 | 00.00 | 0 | 1 | -0.12 | 24.05 | -2.18 |
| | 21.15 | 00.00 | 120 | 1a | -3.18 | 40.35 | 1.77 |
| | 21.15 | 00.00 | 240 | 1b | 0.59 | 7.76 | 0.41 |
| 1.0D + 1.0W Service Normal | 21.15 | 00.00 | 0 | 1 | 0.00 | 173.60 | -18.23 |
| | 21.15 | 00.00 | 120 | 1a | 3.78 | -43.22 | -4.18 |
| | 21.15 | 00.00 | 240 | 1b | -3.78 | -43.22 | -4.18 |
| 1.0D + 1.0W Service 60 deg | 21.15 | 00.00 | 0 | 1 | -1.61 | 97.82 | -9.99 |
| | 21.15 | 00.00 | 120 | 1a | -9.45 | 97.77 | 3.60 |
| | 21.15 | 00.00 | 240 | 1b | -10.79 | -108.43 | -6.23 |
| 1.0D + 1.0W Service 90 deg | 21.15 | 00.00 | 0 | 1 | -1.90 | 29.05 | -2.52 |
| | 21.15 | 00.00 | 120 | 1a | -13.99 | 149.62 | 7.00 |
| | 21.15 | 00.00 | 240 | 1b | -9.68 | -91.52 | -4.47 |

| | | | | | | |
|-------------|--------------|------------------|-------------------|--------------|--------------------|--------------------|
| Max Uplift: | 459.51 (kip) | Moment Ice: | 1,963.16 (kip-ft) | Moment: | 16,237.48 (kip-ft) | 1.2D + 1.6W Normal |
| Max Down: | 546.72 (kip) | Total Down Ice: | 250.59 (kip) | Total Down: | 104.59 (kip) | |
| Max Shear: | 57.94 (kip) | Total Shear Ice: | 11.28 (kip) | Total Shear: | 93.40 (kip) | |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

Deflections and Rotations

| Load Case | Elevation (ft) | Deflection (ft) | Twist (deg) | Sway (deg) | Resultant (deg) |
|--|----------------|-----------------|-------------|------------|-----------------|
| 89.9000015258789 mph Normal with No Ice | 236.75 | 2.098 | 0.0334 | 1.2613 | 1.2618 |
| 89.9000015258789 mph Normal with No Ice | 250.00 | 2.407 | 0.0441 | 1.5073 | 1.5073 |
| 89.9000015258789 mph Normal with No Ice | 250.25 | 2.413 | 0.0449 | 1.5015 | 1.5015 |
| 89.9000015258789 mph Normal with No Ice | 260.00 | 2.655 | 0.0644 | 1.4737 | 1.4737 |
| 89.9000015258789 mph Normal with No Ice | 264.88 | 2.780 | 0.0736 | 1.4810 | 1.4828 |
| 89.9000015258789 mph Normal with No Ice | 270.00 | 2.916 | 0.0755 | 1.6911 | 1.6911 |
| 89.9000015258789 mph Normal with No Ice | 274.15 | 3.028 | 0.0746 | 1.5298 | 1.5317 |
| 89.9000015258789 mph Normal with No Ice | 278.05 | 3.135 | 0.0746 | 1.5844 | 1.5861 |
| 89.9000015258789 mph Normal with No Ice | 285.85 | 3.352 | 0.0741 | 1.5671 | 1.5689 |
| 89.9000015258789 mph Normal with No Ice | 295.13 | 3.614 | 0.0741 | 1.5530 | 1.5548 |
| 89.9000015258789 mph Normal with No Ice | 300.00 | 3.752 | 0.0745 | 1.8011 | 1.8011 |
| 89.9000015258789 mph 60 degree with No Ice | 236.75 | 2.010 | 0.1391 | 1.2088 | 1.2118 |
| 89.9000015258789 mph 60 degree with No Ice | 250.00 | 2.306 | 0.1722 | 1.4519 | 1.4621 |
| 89.9000015258789 mph 60 degree with No Ice | 250.25 | 2.313 | 0.1732 | 1.4458 | 1.4562 |
| 89.9000015258789 mph 60 degree with No Ice | 260.00 | 2.546 | 0.2104 | 1.4195 | 1.4350 |
| 89.9000015258789 mph 60 degree with No Ice | 264.88 | 2.667 | 0.2288 | 1.4139 | 1.4199 |
| 89.9000015258789 mph 60 degree with No Ice | 270.00 | 2.796 | 0.2408 | 1.5749 | 1.5932 |
| 89.9000015258789 mph 60 degree with No Ice | 274.15 | 2.905 | 0.2443 | 1.4868 | 1.4962 |
| 89.9000015258789 mph 60 degree with No Ice | 278.05 | 3.008 | 0.2461 | 1.5263 | 1.5460 |
| 89.9000015258789 mph 60 degree with No Ice | 285.85 | 3.217 | 0.2508 | 1.5519 | 1.5605 |
| 89.9000015258789 mph 60 degree with No Ice | 295.13 | 3.469 | 0.2779 | 1.5672 | 1.5775 |
| 89.9000015258789 mph 60 degree with No Ice | 300.00 | 3.601 | 0.2906 | 1.4964 | 1.5244 |
| 89.9000015258789 mph 90 degree with No Ice | 236.75 | 2.030 | -0.1484 | 1.2170 | 1.2260 |
| 89.9000015258789 mph 90 degree with No Ice | 250.00 | 2.329 | -0.1819 | 1.4471 | 1.4501 |
| 89.9000015258789 mph 90 degree with No Ice | 250.25 | 2.336 | -0.1823 | 1.4414 | 1.4444 |
| 89.9000015258789 mph 90 degree with No Ice | 260.00 | 2.571 | -0.2096 | 1.4258 | 1.4298 |
| 89.9000015258789 mph 90 degree with No Ice | 264.88 | 2.693 | -0.2234 | 1.4228 | 1.4402 |
| 89.9000015258789 mph 90 degree with No Ice | 270.00 | 2.824 | -0.2361 | 1.5491 | 1.5538 |
| 89.9000015258789 mph 90 degree with No Ice | 274.15 | 2.932 | -0.2358 | 1.5056 | 1.5239 |
| 89.9000015258789 mph 90 degree with No Ice | 278.05 | 3.036 | -0.2354 | 1.5370 | 1.5536 |
| 89.9000015258789 mph 90 degree with No Ice | 285.85 | 3.247 | -0.2347 | 1.5822 | 1.5995 |
| 89.9000015258789 mph 90 degree with No Ice | 295.13 | 3.501 | -0.2346 | 1.6080 | 1.6250 |
| 89.9000015258789 mph 90 degree with No Ice | 300.00 | 3.634 | -0.2346 | 1.4051 | 1.4101 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 236.75 | 2.092 | 0.0337 | 1.2571 | 1.2575 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 250.00 | 2.400 | 0.0444 | 1.5021 | 1.5021 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 250.25 | 2.406 | 0.0452 | 1.4963 | 1.4963 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 260.00 | 2.647 | 0.0648 | 1.4682 | 1.4682 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 264.88 | 2.772 | 0.0740 | 1.4756 | 1.4774 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 270.00 | 2.908 | 0.0759 | 1.6849 | 1.6849 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 274.15 | 3.019 | 0.0750 | 1.5242 | 1.5260 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 278.05 | 3.126 | 0.0750 | 1.5783 | 1.5801 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 285.85 | 3.342 | 0.0745 | 1.5610 | 1.5628 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 295.13 | 3.603 | 0.0745 | 1.5469 | 1.5487 |
| 89.9000015258789 mph Normal with No Ice (Reduced DL) | 300.00 | 3.740 | 0.0749 | 1.7951 | 1.7951 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 236.75 | 2.004 | 0.1388 | 1.2046 | 1.2078 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 250.00 | 2.300 | 0.1720 | 1.4464 | 1.4566 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 250.25 | 2.306 | 0.1729 | 1.4404 | 1.4508 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 260.00 | 2.539 | 0.2100 | 1.4144 | 1.4299 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 264.88 | 2.659 | 0.2284 | 1.4088 | 1.4147 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 270.00 | 2.788 | 0.2404 | 1.5686 | 1.5869 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 274.15 | 2.896 | 0.2439 | 1.4812 | 1.4905 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 278.05 | 2.999 | 0.2457 | 1.5203 | 1.5400 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 285.85 | 3.207 | 0.2504 | 1.5462 | 1.5547 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 295.13 | 3.458 | 0.2774 | 1.5614 | 1.5716 |
| 89.9000015258789 mph 60 deg with No Ice (Reduced DL) | 300.00 | 3.590 | 0.2900 | 1.4903 | 1.5182 |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

| | | | | | |
|--|--------|-------|---------|--------|--------|
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 236.75 | 2.025 | -0.1480 | 1.2129 | 1.2219 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 250.00 | 2.323 | -0.1815 | 1.4421 | 1.4451 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 250.25 | 2.329 | -0.1819 | 1.4363 | 1.4394 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 260.00 | 2.564 | -0.2092 | 1.4206 | 1.4246 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 264.88 | 2.685 | -0.2229 | 1.4176 | 1.4350 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 270.00 | 2.815 | -0.2356 | 1.5432 | 1.5480 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 274.15 | 2.924 | -0.2353 | 1.5000 | 1.5183 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 278.05 | 3.027 | -0.2349 | 1.5310 | 1.5478 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 285.85 | 3.237 | -0.2342 | 1.5763 | 1.5936 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 295.13 | 3.490 | -0.2341 | 1.6021 | 1.6191 |
| 89.9000015258789 mph 90 deg with No Ice (Reduced DL) | 300.00 | 3.622 | -0.2341 | 1.3989 | 1.4039 |
| 30 mph Normal with 0.75 in Radial Ice | 236.75 | 0.253 | 0.0012 | 0.1508 | 0.1508 |
| 30 mph Normal with 0.75 in Radial Ice | 250.00 | 0.290 | 0.0017 | 0.1767 | 0.1767 |
| 30 mph Normal with 0.75 in Radial Ice | 250.25 | 0.291 | 0.0018 | 0.1770 | 0.1770 |
| 30 mph Normal with 0.75 in Radial Ice | 260.00 | 0.320 | 0.0035 | 0.1764 | 0.1764 |
| 30 mph Normal with 0.75 in Radial Ice | 264.88 | 0.335 | 0.0042 | 0.1772 | 0.1773 |
| 30 mph Normal with 0.75 in Radial Ice | 270.00 | 0.351 | 0.0040 | 0.1978 | 0.1978 |
| 30 mph Normal with 0.75 in Radial Ice | 274.15 | 0.364 | 0.0040 | 0.1830 | 0.1830 |
| 30 mph Normal with 0.75 in Radial Ice | 278.05 | 0.377 | 0.0039 | 0.1898 | 0.1898 |
| 30 mph Normal with 0.75 in Radial Ice | 285.85 | 0.403 | 0.0038 | 0.1879 | 0.1879 |
| 30 mph Normal with 0.75 in Radial Ice | 295.13 | 0.434 | 0.0038 | 0.1856 | 0.1857 |
| 30 mph Normal with 0.75 in Radial Ice | 300.00 | 0.450 | 0.0038 | 0.2105 | 0.2105 |
| 30 mph 60 deg with 0.75 in Radial Ice | 236.75 | 0.250 | -0.0130 | 0.1486 | 0.1489 |
| 30 mph 60 deg with 0.75 in Radial Ice | 250.00 | 0.286 | -0.0159 | 0.1813 | 0.1815 |
| 30 mph 60 deg with 0.75 in Radial Ice | 250.25 | 0.287 | -0.0160 | 0.1795 | 0.1798 |
| 30 mph 60 deg with 0.75 in Radial Ice | 260.00 | 0.315 | -0.0182 | 0.1732 | 0.1737 |
| 30 mph 60 deg with 0.75 in Radial Ice | 264.88 | 0.330 | -0.0193 | 0.1724 | 0.1729 |
| 30 mph 60 deg with 0.75 in Radial Ice | 270.00 | 0.346 | -0.0204 | 0.1951 | 0.1956 |
| 30 mph 60 deg with 0.75 in Radial Ice | 274.15 | 0.359 | -0.0203 | 0.1821 | 0.1832 |
| 30 mph 60 deg with 0.75 in Radial Ice | 278.05 | 0.372 | -0.0201 | 0.1884 | 0.1889 |
| 30 mph 60 deg with 0.75 in Radial Ice | 285.85 | 0.397 | -0.0199 | 0.1887 | 0.1892 |
| 30 mph 60 deg with 0.75 in Radial Ice | 295.13 | 0.428 | -0.0195 | 0.1897 | 0.1907 |
| 30 mph 60 deg with 0.75 in Radial Ice | 300.00 | 0.444 | -0.0193 | 0.1856 | 0.1861 |
| 30 mph 90 deg with 0.75 in Radial Ice | 236.75 | 0.251 | -0.0162 | 0.1491 | 0.1500 |
| 30 mph 90 deg with 0.75 in Radial Ice | 250.00 | 0.288 | -0.0198 | 0.1796 | 0.1799 |
| 30 mph 90 deg with 0.75 in Radial Ice | 250.25 | 0.288 | -0.0198 | 0.1780 | 0.1783 |
| 30 mph 90 deg with 0.75 in Radial Ice | 260.00 | 0.317 | -0.0227 | 0.1745 | 0.1748 |
| 30 mph 90 deg with 0.75 in Radial Ice | 264.88 | 0.332 | -0.0241 | 0.1736 | 0.1753 |
| 30 mph 90 deg with 0.75 in Radial Ice | 270.00 | 0.348 | -0.0255 | 0.1919 | 0.1923 |
| 30 mph 90 deg with 0.75 in Radial Ice | 274.15 | 0.361 | -0.0255 | 0.1831 | 0.1847 |
| 30 mph 90 deg with 0.75 in Radial Ice | 278.05 | 0.374 | -0.0254 | 0.1890 | 0.1894 |
| 30 mph 90 deg with 0.75 in Radial Ice | 285.85 | 0.399 | -0.0252 | 0.1916 | 0.1932 |
| 30 mph 90 deg with 0.75 in Radial Ice | 295.13 | 0.430 | -0.0252 | 0.1940 | 0.1956 |
| 30 mph 90 deg with 0.75 in Radial Ice | 300.00 | 0.446 | -0.0251 | 0.1763 | 0.1767 |
| Seismic Normal M1 | 236.75 | 0.115 | 0.0026 | 0.0729 | 0.0729 |
| Seismic Normal M1 | 250.00 | 0.133 | 0.0032 | 0.0872 | 0.0872 |
| Seismic Normal M1 | 250.25 | 0.133 | 0.0031 | 0.0871 | 0.0871 |
| Seismic Normal M1 | 260.00 | 0.147 | 0.0032 | 0.0872 | 0.0872 |
| Seismic Normal M1 | 264.88 | 0.155 | 0.0033 | 0.0873 | 0.0874 |
| Seismic Normal M1 | 270.00 | 0.163 | 0.0036 | 0.0982 | 0.0982 |
| Seismic Normal M1 | 274.15 | 0.169 | 0.0035 | 0.0915 | 0.0915 |
| Seismic Normal M1 | 278.05 | 0.176 | 0.0035 | 0.0954 | 0.0954 |
| Seismic Normal M1 | 285.85 | 0.189 | 0.0034 | 0.0955 | 0.0956 |
| Seismic Normal M1 | 295.13 | 0.204 | 0.0034 | 0.0944 | 0.0945 |
| Seismic Normal M1 | 300.00 | 0.212 | 0.0033 | 0.0968 | 0.0969 |
| Seismic Normal M2 | 236.75 | 0.094 | 0.0022 | 0.0663 | 0.0663 |
| Seismic Normal M2 | 250.00 | 0.111 | 0.0026 | 0.0812 | 0.0812 |
| Seismic Normal M2 | 250.25 | 0.111 | 0.0026 | 0.0812 | 0.0812 |
| Seismic Normal M2 | 260.00 | 0.125 | 0.0026 | 0.0830 | 0.0830 |
| Seismic Normal M2 | 264.88 | 0.132 | 0.0026 | 0.0834 | 0.0834 |
| Seismic Normal M2 | 270.00 | 0.139 | 0.0029 | 0.0968 | 0.0968 |
| Seismic Normal M2 | 274.15 | 0.146 | 0.0029 | 0.0890 | 0.0890 |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

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Customer: CLOUDWYZE, INC.

| | | | | | |
|--------------------------------|--------|-------|---------|--------|--------|
| Seismic Normal M2 | 278.05 | 0.152 | 0.0029 | 0.0938 | 0.0939 |
| Seismic Normal M2 | 285.85 | 0.165 | 0.0028 | 0.0942 | 0.0943 |
| Seismic Normal M2 | 295.13 | 0.180 | 0.0028 | 0.0930 | 0.0930 |
| Seismic Normal M2 | 300.00 | 0.188 | 0.0028 | 0.0961 | 0.0962 |
| Seismic 60 deg M1 | 236.75 | 0.115 | 0.0027 | 0.0729 | 0.0730 |
| Seismic 60 deg M1 | 250.00 | 0.132 | 0.0033 | 0.0892 | 0.0892 |
| Seismic 60 deg M1 | 250.25 | 0.133 | 0.0033 | 0.0886 | 0.0886 |
| Seismic 60 deg M1 | 260.00 | 0.147 | 0.0033 | 0.0866 | 0.0866 |
| Seismic 60 deg M1 | 264.88 | 0.154 | 0.0034 | 0.0868 | 0.0868 |
| Seismic 60 deg M1 | 270.00 | 0.163 | 0.0037 | 0.0998 | 0.0998 |
| Seismic 60 deg M1 | 274.15 | 0.169 | 0.0036 | 0.0917 | 0.0918 |
| Seismic 60 deg M1 | 278.05 | 0.176 | 0.0036 | 0.0953 | 0.0953 |
| Seismic 60 deg M1 | 285.85 | 0.188 | 0.0035 | 0.0951 | 0.0951 |
| Seismic 60 deg M1 | 295.13 | 0.204 | 0.0035 | 0.0941 | 0.0941 |
| Seismic 60 deg M1 | 300.00 | 0.212 | 0.0034 | 0.0973 | 0.0973 |
| Seismic 60 deg M2 | 236.75 | 0.094 | 0.0023 | 0.0663 | 0.0664 |
| Seismic 60 deg M2 | 250.00 | 0.111 | 0.0027 | 0.0833 | 0.0833 |
| Seismic 60 deg M2 | 250.25 | 0.111 | 0.0027 | 0.0827 | 0.0827 |
| Seismic 60 deg M2 | 260.00 | 0.125 | 0.0027 | 0.0823 | 0.0823 |
| Seismic 60 deg M2 | 264.88 | 0.132 | 0.0027 | 0.0829 | 0.0829 |
| Seismic 60 deg M2 | 270.00 | 0.139 | 0.0030 | 0.0984 | 0.0984 |
| Seismic 60 deg M2 | 274.15 | 0.146 | 0.0030 | 0.0894 | 0.0894 |
| Seismic 60 deg M2 | 278.05 | 0.152 | 0.0030 | 0.0937 | 0.0937 |
| Seismic 60 deg M2 | 285.85 | 0.165 | 0.0029 | 0.0938 | 0.0938 |
| Seismic 60 deg M2 | 295.13 | 0.180 | 0.0029 | 0.0926 | 0.0927 |
| Seismic 60 deg M2 | 300.00 | 0.188 | 0.0029 | 0.0969 | 0.0969 |
| Seismic 90 deg M1 | 236.75 | 0.115 | -0.0032 | 0.0730 | 0.0731 |
| Seismic 90 deg M1 | 250.00 | 0.133 | -0.0038 | 0.0881 | 0.0881 |
| Seismic 90 deg M1 | 250.25 | 0.133 | -0.0037 | 0.0875 | 0.0876 |
| Seismic 90 deg M1 | 260.00 | 0.147 | -0.0038 | 0.0869 | 0.0869 |
| Seismic 90 deg M1 | 264.88 | 0.155 | -0.0039 | 0.0875 | 0.0876 |
| Seismic 90 deg M1 | 270.00 | 0.163 | -0.0042 | 0.0985 | 0.0985 |
| Seismic 90 deg M1 | 274.15 | 0.169 | -0.0042 | 0.0916 | 0.0916 |
| Seismic 90 deg M1 | 278.05 | 0.176 | -0.0041 | 0.0953 | 0.0954 |
| Seismic 90 deg M1 | 285.85 | 0.189 | -0.0040 | 0.0957 | 0.0958 |
| Seismic 90 deg M1 | 295.13 | 0.204 | -0.0040 | 0.0945 | 0.0946 |
| Seismic 90 deg M1 | 300.00 | 0.212 | -0.0040 | 0.0972 | 0.0972 |
| Seismic 90 deg M2 | 236.75 | 0.094 | -0.0026 | 0.0665 | 0.0665 |
| Seismic 90 deg M2 | 250.00 | 0.111 | -0.0031 | 0.0822 | 0.0822 |
| Seismic 90 deg M2 | 250.25 | 0.111 | -0.0031 | 0.0817 | 0.0817 |
| Seismic 90 deg M2 | 260.00 | 0.125 | -0.0031 | 0.0826 | 0.0826 |
| Seismic 90 deg M2 | 264.88 | 0.132 | -0.0031 | 0.0837 | 0.0838 |
| Seismic 90 deg M2 | 270.00 | 0.139 | -0.0035 | 0.0969 | 0.0969 |
| Seismic 90 deg M2 | 274.15 | 0.146 | -0.0035 | 0.0892 | 0.0893 |
| Seismic 90 deg M2 | 278.05 | 0.152 | -0.0034 | 0.0937 | 0.0938 |
| Seismic 90 deg M2 | 285.85 | 0.165 | -0.0034 | 0.0946 | 0.0947 |
| Seismic 90 deg M2 | 295.13 | 0.180 | -0.0033 | 0.0932 | 0.0932 |
| Seismic 90 deg M2 | 300.00 | 0.188 | -0.0033 | 0.0966 | 0.0967 |
| Seismic (Reduced DL) Normal M1 | 236.75 | 0.114 | 0.0026 | 0.0726 | 0.0726 |
| Seismic (Reduced DL) Normal M1 | 250.00 | 0.132 | 0.0031 | 0.0871 | 0.0871 |
| Seismic (Reduced DL) Normal M1 | 250.25 | 0.132 | 0.0031 | 0.0870 | 0.0870 |
| Seismic (Reduced DL) Normal M1 | 260.00 | 0.147 | 0.0032 | 0.0868 | 0.0868 |
| Seismic (Reduced DL) Normal M1 | 264.88 | 0.154 | 0.0032 | 0.0869 | 0.0869 |
| Seismic (Reduced DL) Normal M1 | 270.00 | 0.162 | 0.0035 | 0.0980 | 0.0980 |
| Seismic (Reduced DL) Normal M1 | 274.15 | 0.169 | 0.0035 | 0.0909 | 0.0909 |
| Seismic (Reduced DL) Normal M1 | 278.05 | 0.175 | 0.0035 | 0.0948 | 0.0949 |
| Seismic (Reduced DL) Normal M1 | 285.85 | 0.188 | 0.0034 | 0.0951 | 0.0951 |
| Seismic (Reduced DL) Normal M1 | 295.13 | 0.203 | 0.0033 | 0.0940 | 0.0940 |
| Seismic (Reduced DL) Normal M1 | 300.00 | 0.212 | 0.0033 | 0.0963 | 0.0964 |
| Seismic (Reduced DL) Normal M2 | 236.75 | 0.094 | 0.0021 | 0.0660 | 0.0661 |
| Seismic (Reduced DL) Normal M2 | 250.00 | 0.110 | 0.0026 | 0.0812 | 0.0812 |
| Seismic (Reduced DL) Normal M2 | 250.25 | 0.111 | 0.0026 | 0.0811 | 0.0811 |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

| | | | | | |
|-------------------------------------|--------|-------|---------|--------|--------|
| Seismic (Reduced DL) Normal M2 | 260.00 | 0.124 | 0.0026 | 0.0825 | 0.0825 |
| Seismic (Reduced DL) Normal M2 | 264.88 | 0.131 | 0.0026 | 0.0830 | 0.0830 |
| Seismic (Reduced DL) Normal M2 | 270.00 | 0.139 | 0.0029 | 0.0966 | 0.0966 |
| Seismic (Reduced DL) Normal M2 | 274.15 | 0.145 | 0.0029 | 0.0885 | 0.0885 |
| Seismic (Reduced DL) Normal M2 | 278.05 | 0.152 | 0.0028 | 0.0933 | 0.0934 |
| Seismic (Reduced DL) Normal M2 | 285.85 | 0.164 | 0.0028 | 0.0938 | 0.0938 |
| Seismic (Reduced DL) Normal M2 | 295.13 | 0.180 | 0.0028 | 0.0925 | 0.0926 |
| Seismic (Reduced DL) Normal M2 | 300.00 | 0.188 | 0.0027 | 0.0957 | 0.0957 |
| Seismic (Reduced DL) 60 deg M1 | 236.75 | 0.114 | 0.0027 | 0.0726 | 0.0727 |
| Seismic (Reduced DL) 60 deg M1 | 250.00 | 0.132 | 0.0032 | 0.0886 | 0.0886 |
| Seismic (Reduced DL) 60 deg M1 | 250.25 | 0.132 | 0.0032 | 0.0880 | 0.0880 |
| Seismic (Reduced DL) 60 deg M1 | 260.00 | 0.147 | 0.0033 | 0.0863 | 0.0863 |
| Seismic (Reduced DL) 60 deg M1 | 264.88 | 0.154 | 0.0033 | 0.0865 | 0.0866 |
| Seismic (Reduced DL) 60 deg M1 | 270.00 | 0.162 | 0.0037 | 0.0991 | 0.0991 |
| Seismic (Reduced DL) 60 deg M1 | 274.15 | 0.169 | 0.0036 | 0.0912 | 0.0913 |
| Seismic (Reduced DL) 60 deg M1 | 278.05 | 0.175 | 0.0036 | 0.0946 | 0.0946 |
| Seismic (Reduced DL) 60 deg M1 | 285.85 | 0.188 | 0.0035 | 0.0947 | 0.0948 |
| Seismic (Reduced DL) 60 deg M1 | 295.13 | 0.203 | 0.0034 | 0.0937 | 0.0938 |
| Seismic (Reduced DL) 60 deg M1 | 300.00 | 0.212 | 0.0034 | 0.0968 | 0.0968 |
| Seismic (Reduced DL) 60 deg M2 | 236.75 | 0.094 | 0.0022 | 0.0661 | 0.0661 |
| Seismic (Reduced DL) 60 deg M2 | 250.00 | 0.110 | 0.0027 | 0.0826 | 0.0826 |
| Seismic (Reduced DL) 60 deg M2 | 250.25 | 0.111 | 0.0027 | 0.0822 | 0.0822 |
| Seismic (Reduced DL) 60 deg M2 | 260.00 | 0.124 | 0.0027 | 0.0821 | 0.0821 |
| Seismic (Reduced DL) 60 deg M2 | 264.88 | 0.131 | 0.0027 | 0.0826 | 0.0827 |
| Seismic (Reduced DL) 60 deg M2 | 270.00 | 0.139 | 0.0030 | 0.0977 | 0.0977 |
| Seismic (Reduced DL) 60 deg M2 | 274.15 | 0.145 | 0.0030 | 0.0889 | 0.0890 |
| Seismic (Reduced DL) 60 deg M2 | 278.05 | 0.152 | 0.0030 | 0.0930 | 0.0930 |
| Seismic (Reduced DL) 60 deg M2 | 285.85 | 0.164 | 0.0029 | 0.0935 | 0.0935 |
| Seismic (Reduced DL) 60 deg M2 | 295.13 | 0.180 | 0.0029 | 0.0923 | 0.0924 |
| Seismic (Reduced DL) 60 deg M2 | 300.00 | 0.188 | 0.0028 | 0.0964 | 0.0964 |
| Seismic (Reduced DL) 90 deg M1 | 236.75 | 0.114 | -0.0031 | 0.0728 | 0.0728 |
| Seismic (Reduced DL) 90 deg M1 | 250.00 | 0.132 | -0.0037 | 0.0875 | 0.0875 |
| Seismic (Reduced DL) 90 deg M1 | 250.25 | 0.132 | -0.0037 | 0.0870 | 0.0870 |
| Seismic (Reduced DL) 90 deg M1 | 260.00 | 0.147 | -0.0038 | 0.0865 | 0.0865 |
| Seismic (Reduced DL) 90 deg M1 | 264.88 | 0.154 | -0.0038 | 0.0872 | 0.0872 |
| Seismic (Reduced DL) 90 deg M1 | 270.00 | 0.162 | -0.0042 | 0.0979 | 0.0979 |
| Seismic (Reduced DL) 90 deg M1 | 274.15 | 0.169 | -0.0041 | 0.0912 | 0.0912 |
| Seismic (Reduced DL) 90 deg M1 | 278.05 | 0.175 | -0.0041 | 0.0947 | 0.0948 |
| Seismic (Reduced DL) 90 deg M1 | 285.85 | 0.188 | -0.0040 | 0.0953 | 0.0954 |
| Seismic (Reduced DL) 90 deg M1 | 295.13 | 0.203 | -0.0040 | 0.0941 | 0.0942 |
| Seismic (Reduced DL) 90 deg M1 | 300.00 | 0.212 | -0.0039 | 0.0967 | 0.0967 |
| Seismic (Reduced DL) 90 deg M2 | 236.75 | 0.094 | -0.0026 | 0.0662 | 0.0663 |
| Seismic (Reduced DL) 90 deg M2 | 250.00 | 0.110 | -0.0031 | 0.0816 | 0.0816 |
| Seismic (Reduced DL) 90 deg M2 | 250.25 | 0.111 | -0.0031 | 0.0812 | 0.0812 |
| Seismic (Reduced DL) 90 deg M2 | 260.00 | 0.124 | -0.0031 | 0.0822 | 0.0822 |
| Seismic (Reduced DL) 90 deg M2 | 264.88 | 0.131 | -0.0031 | 0.0834 | 0.0834 |
| Seismic (Reduced DL) 90 deg M2 | 270.00 | 0.139 | -0.0035 | 0.0963 | 0.0963 |
| Seismic (Reduced DL) 90 deg M2 | 274.15 | 0.145 | -0.0034 | 0.0889 | 0.0890 |
| Seismic (Reduced DL) 90 deg M2 | 278.05 | 0.152 | -0.0034 | 0.0932 | 0.0933 |
| Seismic (Reduced DL) 90 deg M2 | 285.85 | 0.164 | -0.0033 | 0.0942 | 0.0943 |
| Seismic (Reduced DL) 90 deg M2 | 295.13 | 0.180 | -0.0033 | 0.0928 | 0.0929 |
| Seismic (Reduced DL) 90 deg M2 | 300.00 | 0.188 | -0.0033 | 0.0961 | 0.0962 |
| Serviceability - 60 mph Wind Normal | 236.75 | 0.589 | 0.0091 | 0.3527 | 0.3528 |
| Serviceability - 60 mph Wind Normal | 250.00 | 0.675 | 0.0119 | 0.4201 | 0.4201 |
| Serviceability - 60 mph Wind Normal | 250.25 | 0.677 | 0.0121 | 0.4187 | 0.4187 |
| Serviceability - 60 mph Wind Normal | 260.00 | 0.745 | 0.0176 | 0.4118 | 0.4118 |
| Serviceability - 60 mph Wind Normal | 264.88 | 0.780 | 0.0202 | 0.4139 | 0.4144 |
| Serviceability - 60 mph Wind Normal | 270.00 | 0.818 | 0.0204 | 0.4713 | 0.4713 |
| Serviceability - 60 mph Wind Normal | 274.15 | 0.849 | 0.0203 | 0.4271 | 0.4276 |
| Serviceability - 60 mph Wind Normal | 278.05 | 0.879 | 0.0203 | 0.4428 | 0.4433 |
| Serviceability - 60 mph Wind Normal | 285.85 | 0.940 | 0.0202 | 0.4379 | 0.4384 |
| Serviceability - 60 mph Wind Normal | 295.13 | 1.013 | 0.0201 | 0.4339 | 0.4344 |

Site Number: 21268

Code:

ANSI/TIA-222-G

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Site Name: CHALYBEATE SPRINGS NC, NC

Engineering Number: OAA766107_C3_03

5/14/2021 2:58:50 PM

Customer: CLOUDWYZE, INC.

| | | | | | |
|-------------------------------------|--------|-------|---------|--------|--------|
| Serviceability - 60 mph Wind Normal | 300.00 | 1.051 | 0.0202 | 0.5024 | 0.5024 |
| Serviceability - 60 mph Wind 60 deg | 236.75 | 0.564 | -0.0311 | 0.3382 | 0.3390 |
| Serviceability - 60 mph Wind 60 deg | 250.00 | 0.647 | -0.0382 | 0.4067 | 0.4081 |
| Serviceability - 60 mph Wind 60 deg | 250.25 | 0.649 | -0.0382 | 0.4048 | 0.4062 |
| Serviceability - 60 mph Wind 60 deg | 260.00 | 0.714 | -0.0436 | 0.3965 | 0.3986 |
| Serviceability - 60 mph Wind 60 deg | 264.88 | 0.748 | -0.0462 | 0.3952 | 0.3966 |
| Serviceability - 60 mph Wind 60 deg | 270.00 | 0.784 | -0.0489 | 0.4404 | 0.4429 |
| Serviceability - 60 mph Wind 60 deg | 274.15 | 0.814 | -0.0485 | 0.4156 | 0.4184 |
| Serviceability - 60 mph Wind 60 deg | 278.05 | 0.843 | -0.0482 | 0.4267 | 0.4293 |
| Serviceability - 60 mph Wind 60 deg | 285.85 | 0.901 | -0.0476 | 0.4331 | 0.4357 |
| Serviceability - 60 mph Wind 60 deg | 295.13 | 0.972 | 0.0494 | 0.4375 | 0.4399 |
| Serviceability - 60 mph Wind 60 deg | 300.00 | 1.009 | 0.0504 | 0.4178 | 0.4208 |
| Serviceability - 60 mph Wind 90 deg | 236.75 | 0.570 | -0.0412 | 0.3404 | 0.3429 |
| Serviceability - 60 mph Wind 90 deg | 250.00 | 0.654 | -0.0505 | 0.4049 | 0.4057 |
| Serviceability - 60 mph Wind 90 deg | 250.25 | 0.655 | -0.0506 | 0.4030 | 0.4038 |
| Serviceability - 60 mph Wind 90 deg | 260.00 | 0.721 | -0.0582 | 0.3985 | 0.3996 |
| Serviceability - 60 mph Wind 90 deg | 264.88 | 0.755 | -0.0621 | 0.3976 | 0.4024 |
| Serviceability - 60 mph Wind 90 deg | 270.00 | 0.792 | -0.0656 | 0.4332 | 0.4345 |
| Serviceability - 60 mph Wind 90 deg | 274.15 | 0.822 | -0.0655 | 0.4205 | 0.4256 |
| Serviceability - 60 mph Wind 90 deg | 278.05 | 0.851 | -0.0653 | 0.4297 | 0.4339 |
| Serviceability - 60 mph Wind 90 deg | 285.85 | 0.910 | -0.0651 | 0.4419 | 0.4466 |
| Serviceability - 60 mph Wind 90 deg | 295.13 | 0.981 | -0.0651 | 0.4490 | 0.4537 |
| Serviceability - 60 mph Wind 90 deg | 300.00 | 1.018 | -0.0651 | 0.3929 | 0.3943 |

Maximum Reactions Summary

| Anchor Group | Vertical (kip) | | | | Horizontal (kip) | | Moment (kip-ft) | |
|--------------|----------------|----------|--------|-------|------------------|----------|-----------------|----------|
| | DL+WL | DL+WL+IL | UpLift | Shear | DL+WL | DL+WL+IL | DL+WL | DL+WL+IL |
| Base | 104.59 | 250.59 | 546.72 | 57.94 | 93.40 | 11.28 | 16237.48 | 1963.16 |