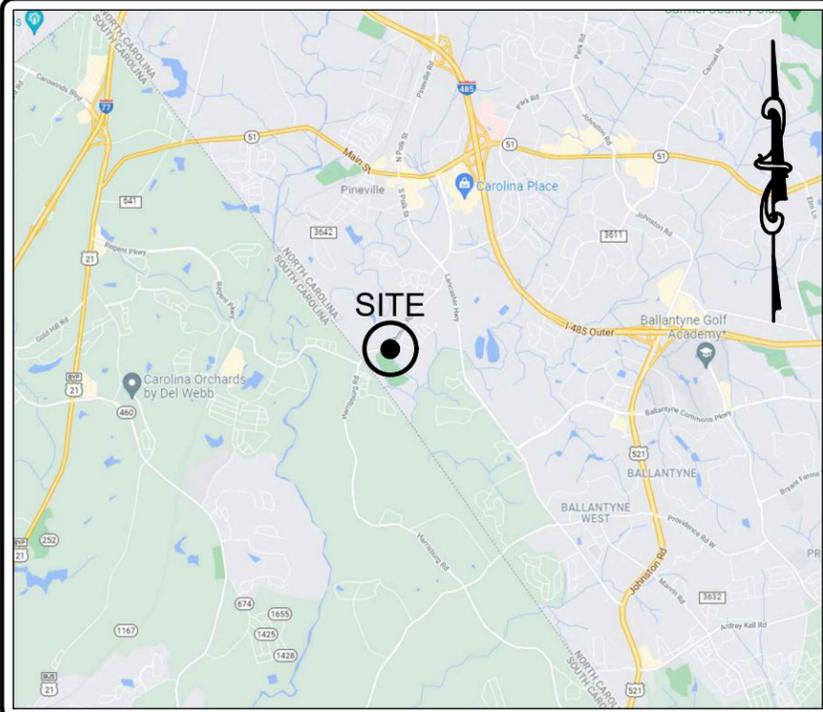


# LOCATION MAP



# DIRECTIONS

FROM CHARLOTTE DOUGLAS INTERNATIONAL AIRPORT  
 GET ON I-485 OUTER FROM OLD DOWD ROAD AND US-29 SOUTH/US-74/WILKINSON BLVD. FOLLOW I-485 OUTER TO PINEVILLE ROAD. TAKE EXIT 65B FROM I-485 OUTER. TAKE NORTH POLK STREET AND DORMAN ROAD. THE DESTINATION WILL BE ON THE LEFT.

# CODE BLOCK

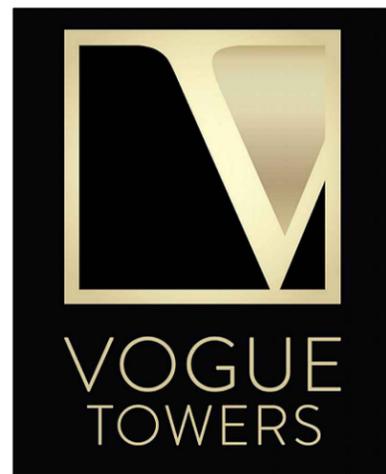
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- INTERNATIONAL BUILDING CODE, 2018 EDITION
- INTERNATIONAL PLUMBING CODE, 2018 EDITION
- INTERNATIONAL MECHANICAL CODE, 2018 EDITION
- INTERNATIONAL FIRE CODE, 2018 EDITION
- NATIONAL ELECTRIC CODE, 2017 EDITION
- INTERNATIONAL ENERGY CONSERVATION CODE, 2018 EDITION
- ICC ANSI 117.1 ACCESSIBILITY CODE, 2010 EDITION

**ACCESSIBILITY REQUIREMENTS:**  
 FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2018 IBC BUILDING CODE.



CALL NORTH CAROLINA  
 ONE CALL  
 (800) 632-4949  
 CALL 3 WORKING DAYS  
 BEFORE YOU DIG!



**VOGUE  
TOWERS**

SITE NAME:

**SUGAR CREEK**

SITE NUMBER:

**NC-091**

SITE ADDRESS:

**DORMAN ROAD  
 PINEVILLE, NC 28134**

# PROJECT SUMMARY

THE PROPOSED PROJECT SCOPE WILL CONSIST OF CONSTRUCTING A NEW UNMANNED TELECOMMUNICATIONS FACILITY.

SITE NAME: SUGAR CREEK  
 SITE NUMBER: NC-091  
 SITE ADDRESS: DORMAN ROAD PINEVILLE, NC 28134 28134  
 SITE COORDINATES: LATITUDE: 35° 03' 34.8"N LONGITUDE: 80° 53' 09.4"W  
 COUNTY: MECKLENBURG COUNTY  
 JURISDICTION: PINEVILLE TOWNSHIP  
 ZONING: RESIDENTIAL MIX-USE (RMX)  
 PROPERTY OWNER: CAROLINA SPORTSPLEX, LLC

TOWER TYPE: MONOPOLE  
 HEIGHT: 180' FT  
 ACREAGE: .34±  
 GROUND ELEVATION: TBD FEET AMSL

APPLICANT: VOGUE TOWER PARTNERS VII, LLC  
 430 CHESTNUT STREET  
 SUITE 101-B  
 CHATTANOOGA, TN 37402

# PROJECT CONSULTANTS

**ENGINEERING CONSULTANT:**  
 FRENCH & PARRELLO ASSOCIATES  
 100 NORTH POINT CENTER E  
 ALPHARETTA, GA 30022  
 CONTACT: EMAD BADIIE  
 PHONE: 470.318.6119  
 EMAIL: EMAD.BADIIE@FPAENGINEERS.COM  
 FPA JOB NO: 15228.035

**CLIENT CONTACT:**  
 VOGUE TOWERS  
 430 CHESTNUT STREET, SUITE 101-B  
 CHATTANOOGA, TN 37402

**CONSTRUCTION MANAGER:**  
 TBD

**POWER:**  
 DUKE POWER COMPANY  
 (800)-777-9898

**TELCO:**  
 AT&T  
 (844)-723-0252



CELLCO PARTNERSHIP D/B/A  
 VERIZON WIRELESS  
 (HEREINAFTER REFERRED TO AS "LESSEE")

# SHEET INDEX

SHEET	DESCRIPTION
T-1	COVER SHEET
	SITE SURVEY SHEETS
GN-1	GENERAL NOTES
C-1	OVERALL SITE LAYOUT
C-2	COMPOUND LAYOUT
C-2.1	ENLARGED COMPOUND LAYOUT
C-3	TOWER ELEVATION, ANTENNA LAYOUT, AND SCHEDULE
C-4	ANTENNA AND RRU DETAILS
C-5	FENCE DETAILS
C-6	SITE DETAILS



**VOGUE  
TOWERS**

430 CHESTNUT STREET  
 SUITE 101-B  
 CHATTANOOGA, TN 37402

ENGINEER:



100 N Point Center E, Suite 251, Alpharetta, GA 30022  
 470.318.6119

REV	DATE	RECORD OF ISSUE	BY
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B	05/03/2022	SITE SKETCH	KC / EB
C	08/15/2022	ZONING	YH / EB

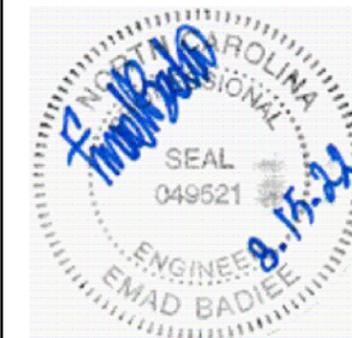
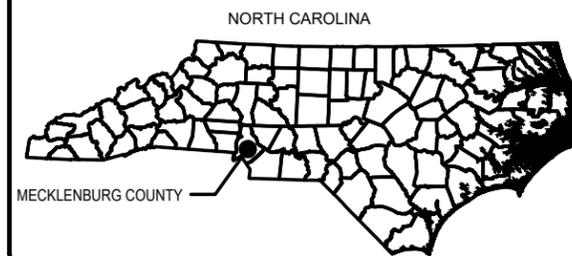
# APPROVALS

LAND / TOWER OWNER
SITE ACQUISITION
ZONING / PERMITTING
A&E MANAGER
CONSTRUCTION MANAGER
RF MANAGER

# STRUCTURAL REVIEW

CONTRACTOR SHALL ATTAIN AND VERIFY STRUCTURAL EVALUATION REPORT OF EXISTING TOWER FOR EXACT PLACEMENT OF ANTENNAS AND COAX CABLES. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE STRUCTURAL EVALUATION REPORT AND NOTIFY VERIZON'S CONSTRUCTION MANAGER IN THE CASE OF ANY DISCREPANCIES. ANY STRUCTURAL MODIFICATION, IF REQUIRED, SHALL BE DONE PRIOR TO THE INSTALLATION OF ANTENNAS.

# STATE COUNTY MAP



SITE NAME:

**SUGAR CREEK**

SITE NUMBER:

**NC-091**

SITE ADDRESS:

**DORMAN ROAD  
 PINEVILLE, NC 28134**

**COVER  
SHEET**

DRAWN BY:	KC
CHECKED BY:	EB
PROJECT MANAGER:	MS
SHEET NUMBER:	T-1

## PINEVILLE TOWNSHIP GENERAL NOTES

1. THESE CONSTRUCTION/SITE PLANS ARE PROVIDED TO THE PINEVILLE TOWNSHIP'S PUBLIC WORKS DEPARTMENT FOR ROADWAY/PARKING LOT/DRIVE AISLES, GRADING AND DRAINAGE PLAN REVIEW AND APPROVAL. UTILITIES SHOWN WITHIN ARE PROVIDED FOR INFORMATION ONLY. CONTACT THE APPROPRIATE UTILITY AGENCY FOR UTILITY PLAN APPROVAL.
2. EROSION CONTROL PLANS AND DETAILS ARE PROVIDED FOR INFORMATION ONLY. PRIOR TO ANY GRADING ACTIVITIES A LAND DISTURBANCE PERMIT MUST BE OBTAINED. CONTACT CHIP HILL, PUBLIC WORKS DIRECTOR, AT (704) 651-3339 (CHILL@PINEVILLENC.GOV) IN THE PUBLIC WORKS DEPARTMENT TO OBTAIN A PERMIT APPLICATION.
3. ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE PINEVILLE TOWNSHIPS SUBDIVISION REGULATIONS.
4. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO ADVISE FUTURE BUILDERS AND/OR LOT OWNER'S THAT ALL DRIVEWAYS, SIDEWALKS, AND ACCESSIBLE RAMPS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH ALL FEDERAL REGULATIONS, TDOT SPECIFICATIONS, AND PINEVILLE TOWNSHIP'S SUBDIVISION REGULATIONS AND ZONING ORDINANCES.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PINEVILLE TOWNSHIP, DEPARTMENT OF PUBLIC WORKS, A MINIMUM OF 48 HOURS IN ADVANCE OF ANY REQUIRED INSPECTIONS. INSPECTIONS ARE REQUIRED BEFORE STORM WATER PIPES ARE BACKFILLED OR ANY CONCRETE IS POURED, INCLUDING INSPECTION OF SIDEWALK FORMS. CALL THE PINEVILLE TOWNSHIP, DEPARTMENT OF PUBLIC WORKS AT (704) 651-3339 TO ARRANGE INSPECTION TIMES.
6. PRIOR TO THE ISSUANCE OF A FINAL USE AND OCCUPANCY PERMIT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL MAINTENANCE, RESHAPING AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS.
7. DEVELOPER IS RESPONSIBLE FOR PROVIDING STREET LIGHTING:
  - a. STREET LIGHTS ARE TO BE INSTALLED PER NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, AND LOCAL ELECTRIC

- UTILITY DISTRICT SPECIFICATIONS.
- b. STREET LIGHT FIXTURES AND POLE TYPES SHALL BE APPROVED BY THE PINEVILLE TOWNSHIP.
8. SIDEWALK NOTES:
    - a. FOR ALL PUBLIC SIDEWALKS, THE STREET SIDE OF THE SIDEWALK SHALL BE 1" ABOVE THE CURB AND SHALL MAINTAIN A MAXIMUM CROSS SLOPE OF 2 PERCENT. IF SIDEWALKS CANNOT BE CONSTRUCTED WITHIN THESE PARAMETERS, CONTACT THE PUBLIC WORKS DEPARTMENT.
    - b. WHERE DRIVEWAYS AND/OR PEDESTRIAN WAYS MEET THE SIDEWALK, THE SIDEWALK SHALL REMAIN CONTINUOUS AND CONSISTENT WITH BROOM FINISHED CONCRETE.
    - c. EXPANSION JOINTS SHALL BE INSTALLED ON THE FOUR SIDES OF THE SIDEWALK WHERE IT PASSES THROUGH DRIVEWAYS AND/OR PEDESTRIAN WAYS.
    - d. SIDEWALKS AND CURB RAMPS SHALL BE ADA COMPLIANT.
  9. ALL TRAFFIC CONTROL SIGNS ARE TO BE HIGH INTENSITY GRADE.
  10. FOR ALL RETAINING WALLS WITH A HEIGHT OF 3 FOOT ABOVE GRADE OR MORE, SUBMIT A DESIGN STAMPED BY A LICENSED NORTH CAROLINA ENGINEER TO THE PINEVILLE TOWNSHIP PUBLIC WORKS DEPARTMENT, IF NOT ALREADY INCLUDED IN THIS PLAN SET.
  11. DRIVEWAY NOTES:
    - a. DRIVEWAYS SHALL BE PLACED TO AVOID CONFLICT WITH DRAINAGE STRUCTURES UNLESS APPROVED BY THE CITY ENGINEER.
    - b. DRIVEWAYS SHOULD HAVE A MAXIMUM SLOPE OF 8% FOR THE FIRST 15' FROM THE BACK OF SIDEWALK AND SHALL NEVER EXCEED 10% IN THE FIRST 15' FROM THE STREET.

## GENERAL NOTES

1. THE GENERAL CONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE STARTING WORK. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
3. THE CONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THIS SCOPE OF WORK.
4. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
5. GROUNDING SYSTEM MODIFICATION SHALL COMPLY WITH CARRIER'S GROUNDING STANDARDS, LATEST EDITION, AND COMPLY WITH TOWER OWNER'S GROUNDING REQUIREMENTS, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE INSTALLED AND READY FOR CONNECTIONS PRIOR TO NEW EQUIPMENT BEING INSTALLED ON SITE.
6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE LOCATED AS REQUIRED PRIOR TO EXCAVATION.
7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER, ENGINEER, CONSTRUCTION MANAGER, OR OWNER.
9. THE CONTRACTOR SHALL CONTACT UTILITIES AND LOCATOR SERVICE A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION. (CALL BEFORE YOU DIG 811).
10. CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES.
12. CONTRACTOR SHALL MAINTAIN 20' HORIZONTAL CLEARANCE FROM CENTERLINE OF EXISTING POWER LINES OR AS REQUESTED BY THE POWER COMPANY.
13. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES.
14. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE GRADING.
15. PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
16. CONTRACTOR TO PROVIDE RED LINE AS BUILT CONSTRUCTION DRAWINGS TO TOWER OWNER AT COMPLETION OF JOB.
17. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITIES. WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED AT THE COST OF THE CONTRACTOR.
18. ALL ELECTRICAL WORK SHALL BE DONE IN STRICT ACCORDANCE AND IN COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, ALL STATE AND LOCAL LAWS AND ORDINANCES, THE REGULATIONS OF THE STATE AND LOCAL AUTHORITIES HAVING JURISDICTION, AND ALL REQUIREMENTS OF THE CARRIER'S SPECIFICATIONS AND PRACTICES.
19. ALL ELECTRICAL EQUIPMENT, MATERIALS, AND DEVICES SHALL BE NEW, STANDARD FIRST GRADE THROUGHOUT AND CONFORM TO THE LATEST APPLICABLE STANDARDS ESTABLISHED BY IEEE, ANSI, ASTM, ETC. ELECTRICAL EQUIPMENT SHALL MEET STANDARDS OF UNDERWRITER'S LABORATORIES, INC., AND SHALL BE SO LABELED.
20. ALL WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT A NEAT AND MECHANICAL APPEARANCE UPON COMPLETION.
21. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, HARDWARE, LABOR AND SERVICES REQUIRED FOR THE INSTALLATION OF COMPLETE AND PROPERLY WORKING INSTALLATIONS AS SHOWN ON THE DRAWINGS AND DESCRIBED HEREIN.
22. CONTRACTOR SHALL VERIFY EXACT TYPE OF EQUIPMENT TO BE INSTALLED AND THE DIMENSIONS WHICH MAY EFFECT THE EXACT PLACEMENT OF ELECTRICAL WORK.
23. ALL RIGID GALVANIZED STEEL (RGS) CONDUIT COUPLINGS AND CONNECTORS SHALL BE STANDARD THREADED TYPE. FLEXIBLE METAL CONDUIT SHALL BE SEALTIGHT, CONSISTING OF FLEXIBLE GALVANIZED STEEL TUBING WITH A LIQUIDTIGHT JACKET OF PVC.
24. WHERE RIGID CONDUITS ENTER BOXES THEY SHALL BE SECURED IN PLACE BY APPROVED LOCKNUTS AND BUSHINGS AND SHALL BE PROVIDED WITH A BURNDY GROUNDING CLAMP OR EQUAL. ALL CONDUIT CONNECTIONS TO SHEET METAL BY USE OF CABINETS OR ENCLOSURES SUBJECT TO THE ELEMENTS SHALL TERMINATE WITH RAIN-TIGHT HUBS.
25. ALL PVC CONDUIT SHALL BE MINIMUM SCHEDULE 40.
26. ALL CONDUCTOR INSULATION SHALL BE MINIMUM 600 VOLT RATED. ALL CABLE SHALL BE NYLON JACKETED, TYPE THHN/THWN UNLESS NOTED OTHERWISE.



**VOGUE  
TOWERS**

430 CHESTNUT STREET  
SUITE 101-B  
CHATTANOOGA, TN 37402

ENGINEER:



100 N Point Center E, Suite 251, Alpharetta, GA 30022  
470.318.6119

REV	DATE	RECORD OF ISSUE	BY	CHK
A	10/08/2021	ZONING	KC	EB
B	05/03/2022	SITE SKETCH	KC	EB
C	08/15/2022	ZONING	YH	EB



**SITE NAME:**

SUGAR CREEK

**SITE NUMBER:**

NC-091

**SITE ADDRESS:**

DORMAN ROAD  
PINEVILLE, NC 28134

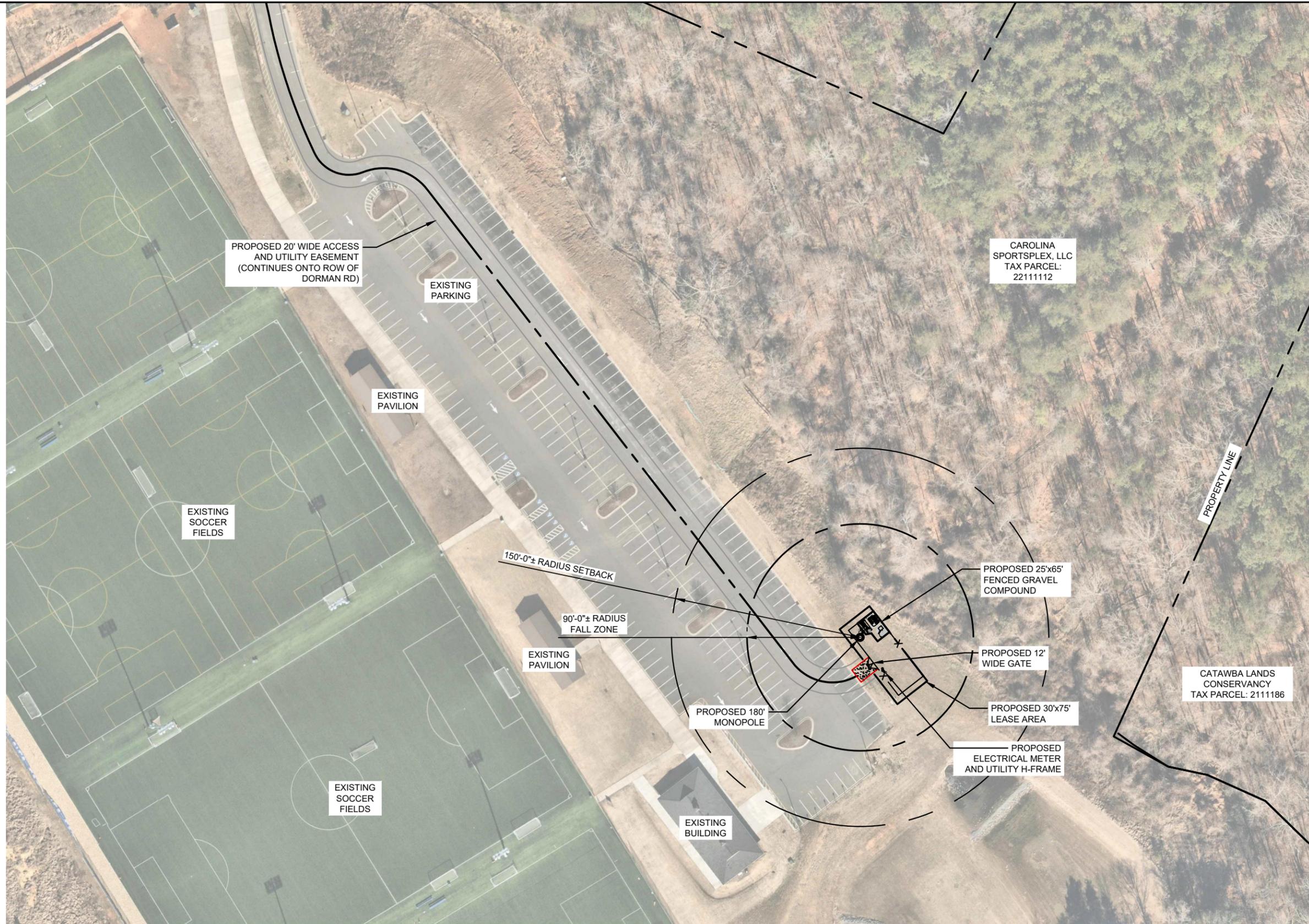
**GENERAL  
NOTES**

**DRAWN BY:** KC

**CHECKED BY:** EB

**PROJECT MANAGER:** MS

**SHEET NUMBER:** GN-1



**VOGUE TOWERS**

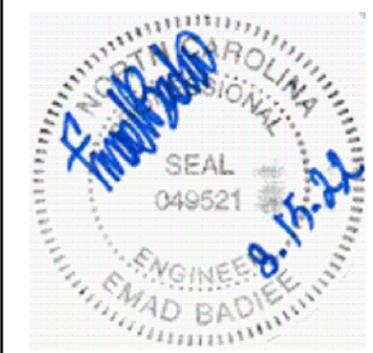
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**SITE NAME:**

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**OVERALL SITE LAYOUT**

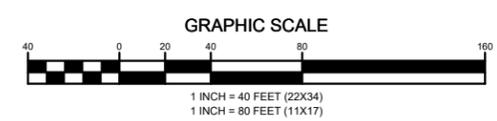
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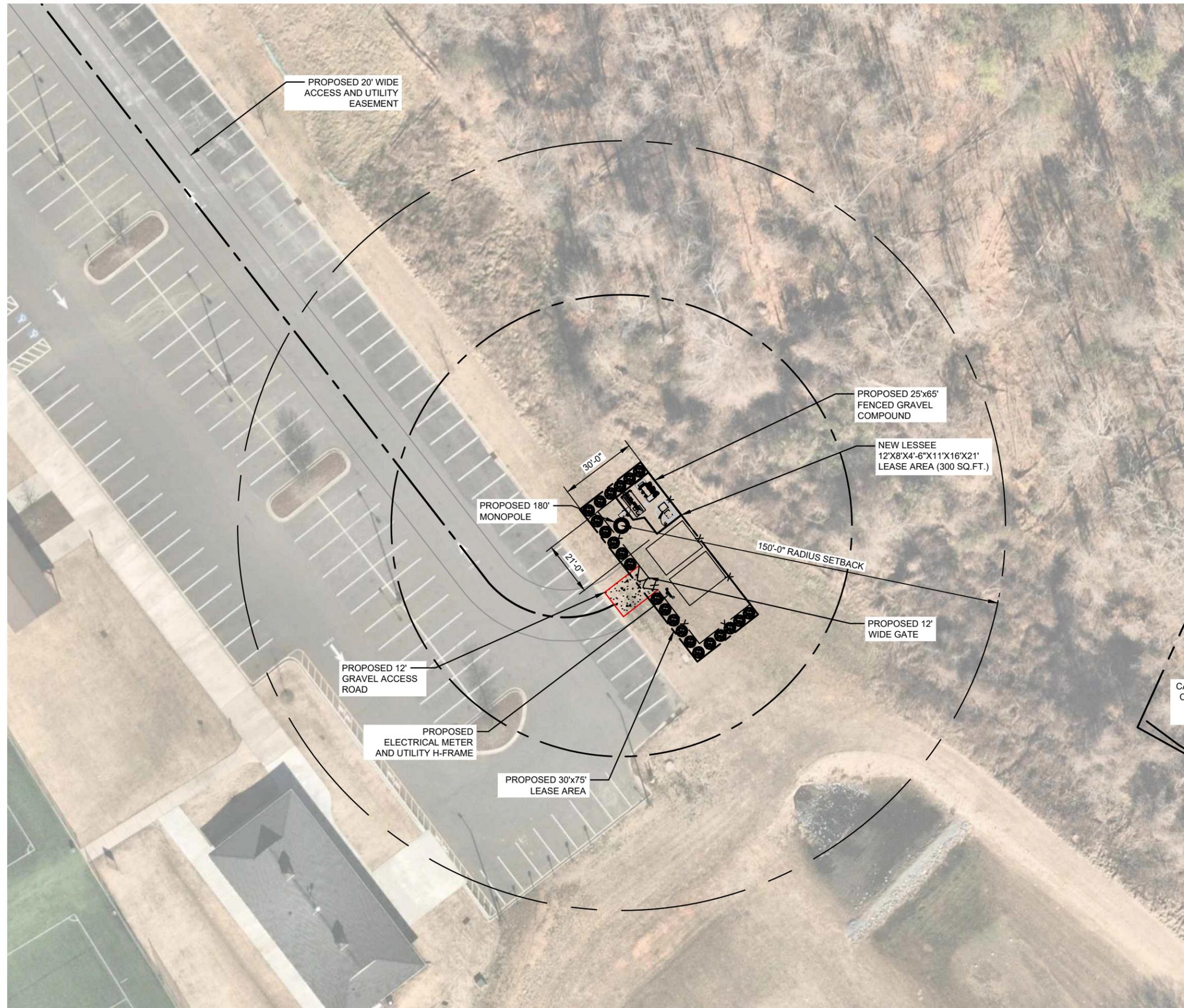
**CHECKED BY:** EB

**PROJECT MANAGER:** MS

**SHEET NUMBER:** C-1

**1 OVERALL SITE LAYOUT**  
SCALE: 1" = 40' (22X34)  
SCALE: 1" = 80' (11X17)





CATAWBA LANDS  
CONVERVANCY  
TAX PARCEL:  
2111114



**VOGUE  
TOWERS**

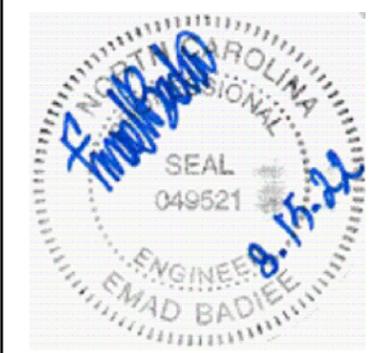
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**COMPOUND  
LAYOUT**

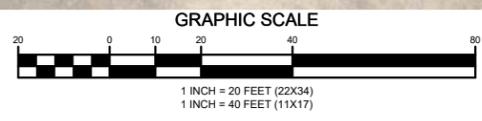
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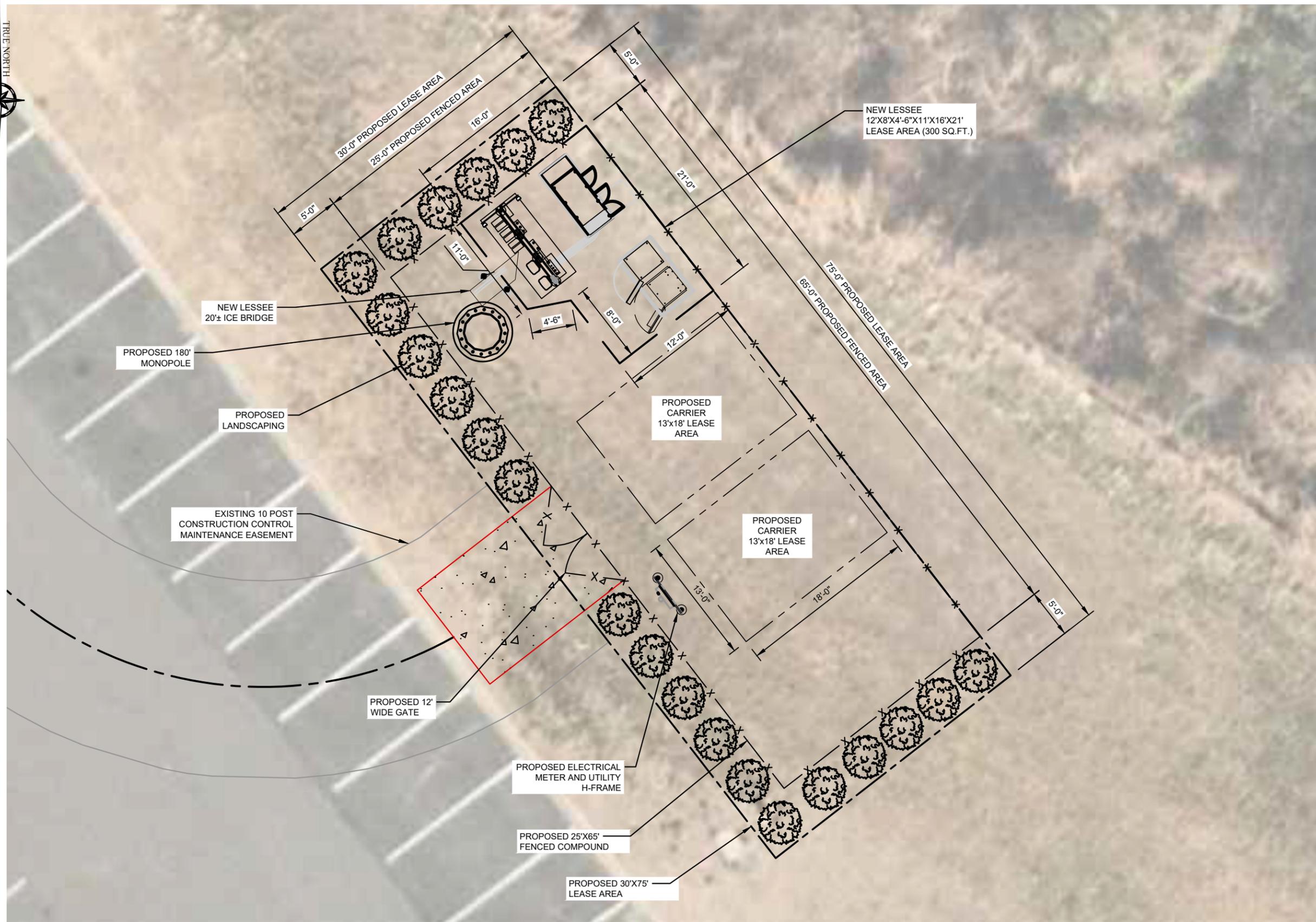
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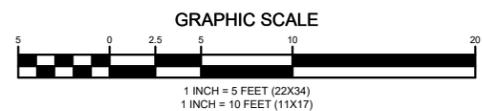
SHEET NUMBER: C-2

**1** COMPOUND LAYOUT  
C-2  
SCALE: 1" = 20' (22X34)  
SCALE: 1" = 40' (11X17)





1 ENLARGED COMPOUND LAYOUT  
 C-2.1 SCALE: 1" = 5' (22X34)  
 SCALE: 1" = 10' (11X17)



**VOGUE  
TOWERS**  
 430 CHESTNUT STREET  
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 CHATTANOOGA, TN 37402

ENGINEER:



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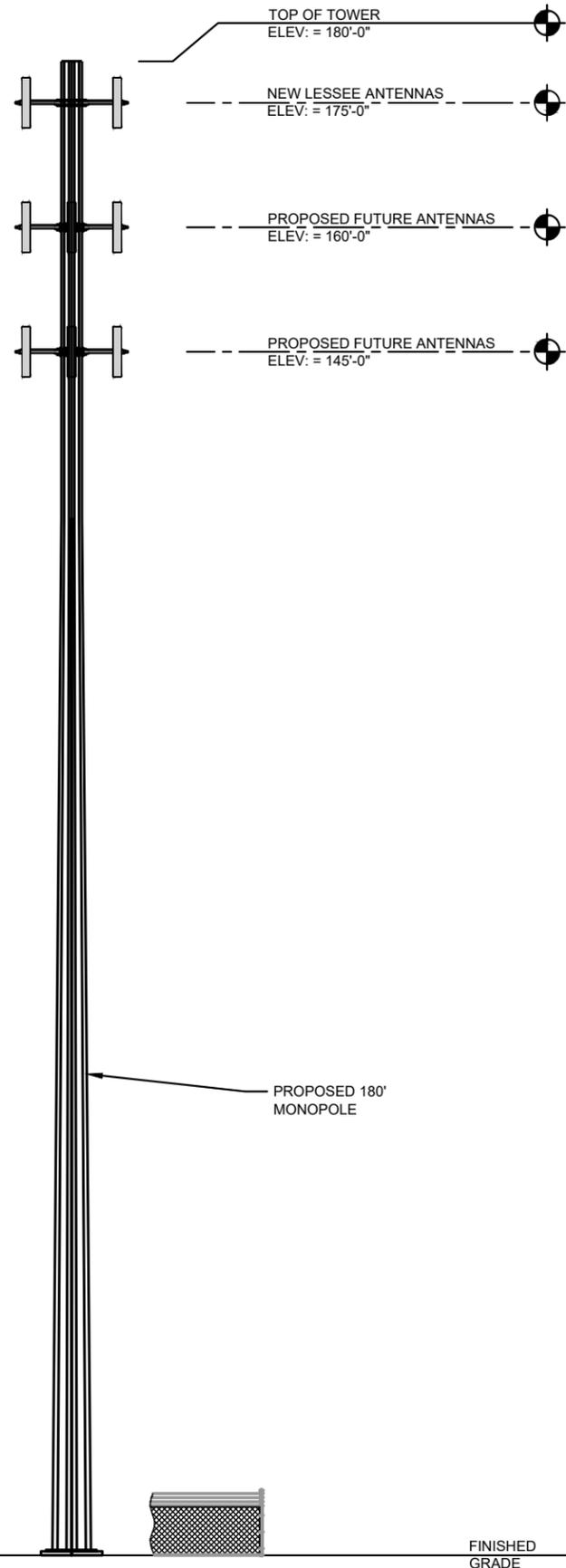
**ENLARGED  
COMPOUND  
LAYOUT**

DRAWN BY: KC

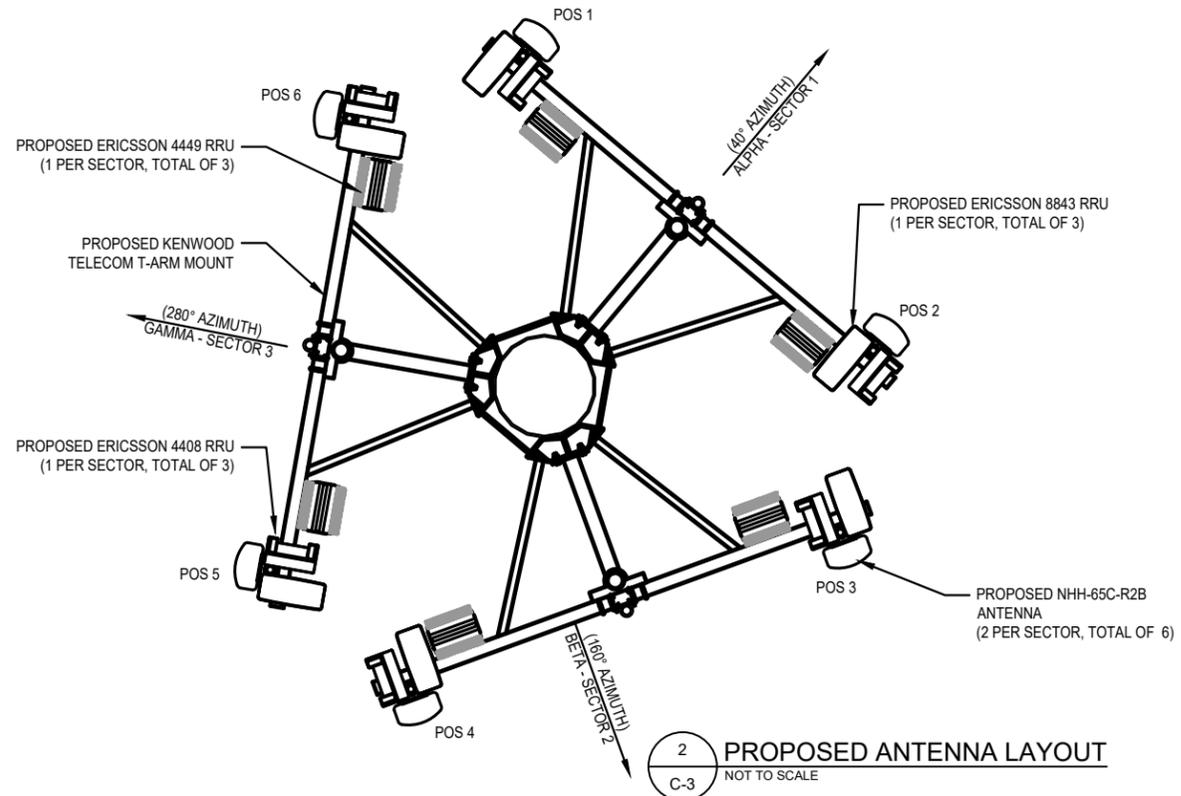
CHECKED BY: EB

PROJECT MANAGER: MS

SHEET NUMBER: C-2.1



1 PROPOSED TOWER ELEVATION  
C-3 NOT TO SCALE



ANTENNAS - Proposed Configuration					
	Sector 1	Sector 2	Sector 3	Sector 4	Other*
Desired Rad Center (ft AGU)	185'	185'	185'		
Antenna Type	Multiband / Sector	Multiband / Sector	Multiband / Sector		
Antenna Quantity	2	2	2		
TX, RX or Both	Both	Both	Both		
Antenna Manufacturer	Commscope	Commscope	Commscope		
Antenna Model (Attach Spec Sheet)	NHH-65C-R2B	NHH-65C-R2B	NHH-65C-R2B		
Weight (lbs per antenna)	52 lbs	52 lbs	52 lbs		
Antenna Dimensions (HxWxD) (in)	95.984 x 11.85 x 7.087	95.984 x 11.85 x 7.087	95.984 x 11.85 x 7.087		
ERP (watts)	See Comments	See Comments	See Comments		
Antenna Gain (dB)	16 - 18.2	16 - 18.2	16 - 18.2		
Orientation/Azimuth (degrees)	40	160	280		
Mechanical Tilt / Electrical Tilt	0 / 2	0 / 2	0 / 2		
RRU Quantity	3	3	3		
RRU Manufacturer & Model (Attach Spec Sheet)	Ericsson 4408	Ericsson 4408	Ericsson 4408		
RRU Dimensions (HxWxD) (in)	8.4 x 7.9 x 4.2	8.4 x 7.9 x 4.2	8.4 x 7.9 x 4.2		
RRU Weight	10.2 lbs	10.2 lbs	10.2 lbs		
RRU Quantity	3	3	3		
RRU Manufacturer & Model (Attach Spec Sheet)	Ericsson 4449	Ericsson 4449	Ericsson 4449		
RRU Dimensions (HxWxD) (in)	15 x 13.2 x 9.3	15 x 13.2 x 9.3	15 x 13.2 x 9.3		
RRU Weight	70 lbs.	70 lbs.	70 lbs.		
RRU Quantity	3	3	3		
RRU Manufacturer & Model (Attach Spec Sheet)	Ericsson 8843	Ericsson 8843	Ericsson 8843		
RRU Dimensions (HxWxD) (in)	15 x 13.2 x 11.1	15 x 13.2 x 11.1	15 x 13.2 x 11.1		
RRU Weight	75 lbs	75 lbs	75 lbs		
TMA Quantity	N/A	N/A	N/A		
TMA Manufacturer & Model	N/A	N/A	N/A		
TMA Dimensions (HxWxD)	N/A	N/A	N/A		
TMA RAD Center	N/A	N/A	N/A		
Mount (Mfg. and Model (Attach Spec Sheet)	Kenwood Z2016KTA	Kenwood Z2016KTA	Kenwood Z2016KTA		
Tower Mount Mounting Height (on tower)	185'	185'	185'		
Transmit Frequency (MHz)	880.0-890.0 891.5-894.0 1975.0-1990.0 776.0-787.0 2145-2155 2120-2130	880.0-890.0 891.5-894.0 1975.0-1990.0 776.0-787.0 2145-2155 2120-2130	880.0-890.0 891.5-894.0 1975.0-1990.0 776.0-787.0 2145-2155 2120-2130		
Receive Frequency (MHz)	835.0-845.0 846.5-849.0 1895.0-1910.0 1745-1755, 1720-1730, 746.0-757.0; 3550-3700	835.0-845.0 846.5-849.0 1895.0-1910.0 1745-1755, 1720-1730, 746.0-757.0; 3550-3700	835.0-845.0 846.5-849.0 1895.0-1910.0 1745-1755, 1720-1730, 746.0-757.0; 3550-3700		
Number of Coax Cables (per antenna)	2 Hybrid	0	0		
Diameter of Coax Cables (in)	2"	N/A	N/A		
Type of Service (i.e. CDMA, iDEN, GSM, TDMA)	Various technologies				

3 PROPOSED ANTENNA SCHEDULE  
C-3 NOT TO SCALE



VOGUE TOWERS

430 CHESTNUT STREET  
SUITE 101-B  
CHATTANOOGA, TN 37402

ENGINEER:



100 N Point Center E, Suite 251, Alpharetta, GA 30022  
470.318.6119

REV	DATE	RECORD OF ISSUE	BY	CHK
A	10/08/2021	ZONING	KC	EB
B	05/03/2022	SITE SKETCH	KC	EB
C	08/15/2022	ZONING	YH	EB



SITE NAME:

SUGAR CREEK

SITE NUMBER:

NC-091

SITE ADDRESS:

DORMAN ROAD  
PINEVILLE, NC 28134

TOWER ELEVATION,  
ANTENNA LAYOUT,  
AND SCHEDULE

DRAWN BY: KC

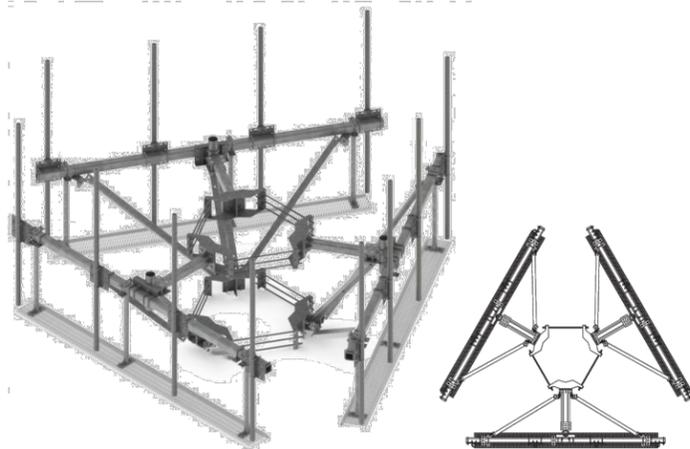
CHECKED BY: EB

PROJECT MANAGER: MS

SHEET NUMBER: C-3

# Heavy Duty Reinforced 3-Sector T-Arm Mount

• VZW Class



\* 2-7/8" Antenna Pipes Sold Separately

SHOWN: Z2016KTA  
T-Arm Mount with Square Tube Face,  
12'6" face width and (12) 96" Antenna Pipes  
& (2) 10"-48" ring mounts

Z2016KTA

### Application Data

Fits Pole: 10" - 60" diameter round or polygon  
Azimuth: Fixed sectors, must be 120 degrees apart

Material: Galvanized Steel

### Wind Loading and Engineering Data

- Structure Height < 400 feet • Structure Class or Risk I or II
- Galvanized Steel, A 123
- Exposed Category B or C
- Topographic Category I
- Maximum 140 mph, 50-year return, 3-second gust basic wind speed
- Maximum 180 mph, ultimate 3-second wind speed based on risk category
- Maximum 1 inch, 50 year return design ice thickness
- Maximum 2 inch, ultimate design ice thickness based on risk category
- Maximum 60 mph basic wind speed occurring simultaneous with ice

Mount Certified for the Following Mount Classes:

- M1400R-4[6]
- M1250R(i)-4[6]

- Factored wind pressure without ice at mounting elevation a (qz) (Gh) ≤ 135 psf
- Factored ice thickness at mounting elevation tiz ≤ 2.75 inches
- Factored wind pressure with ice at mounting elevation a (qz) (Gh) ≤ 15 psf

\*Load Capacity may differ slightly

Part No	Description	UOM	Wt. (lbs)
Z2016KTA	Heavy Duty Reinforced 3-Sector T-Arm Mount	Each	2270.0

Bringing Great Products to the Wireless Industry

MONOPOLE ANTENNA MOUNTS

KENWOOD TELECOMMUNICATIONS

D.9

## NHH-65C-R2B



6-port sector antenna, 2x 698-896 and 4x 1695-2360 MHz, 65° HPBW, 2x RET. Both high bands share the same electrical tilt.

- Interleaved dipole technology providing for attractive, low wind load mechanical package
- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- Separate RS-485 RET input/output for low and high band
- One RET for low band and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO

### Electrical Specifications

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	2300-2360
Gain, dBi	16.0	16.1	17.3	17.7	18.3	18.2
Beamwidth, Horizontal, degrees	65	62	74	66	62	59
Beamwidth, Vertical, degrees	9.0	7.9	5.6	5.2	4.9	4.5
Beam Tilt, degrees	0-11	0-11	0-7	0-7	0-7	0-7
USLS (First Lobe), dB	21	18	19	20	22	18
Front-to-Back Ratio at 180°, dB	35	31	33	29	29	30
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR   Return Loss, dB	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0	1.5   14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port, maximum, watts	400	400	350	350	350	300
Polarization	±45°	±45°	±45°	±45°	±45°	±45°
Impedance	50 ohm					

### Electrical Specifications, BASTA\*

Frequency Band, MHz	698-806	806-896	1695-1880	1850-1990	1920-2200	2300-2360
Gain by all Beam Tilts, average, dBi	15.8	15.9	16.9	17.5	18.0	17.9
Gain by all Beam Tilts Tolerance, dB	±0.4	±0.4	±0.4	±0.3	±0.6	±0.4
Gain by Beam Tilt, average, dBi	0°   15.9 5°   15.9 11°   15.5	0°   15.8 5°   15.6 11°   15.7	0°   16.9 5°   17.0 7°   16.9	0°   17.4 5°   17.5 7°   17.4	0°   17.9 5°   18.0 7°   18.0	0°   17.8 5°   17.9 7°   17.9
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.6	±5.3	±3.4	±6	±3.1
Beamwidth, Vertical Tolerance, degrees	±0.6	±0.4	±0.3	±0.2	±0.2	±0.2
USLS, beampeak to 20° above beampeak, dB	15	14	17	16	17	15
Front-to-Back Total Power at 180° ± 30°, dB	26	24	28	25	25	24
CPR at Boresight, dB	18	26	20	25	20	17
CPR at Sector, dB	15	9	11	10	8	2

\* CommScope® supports NGMN recommendations on Base Station Antenna Standards (BASTA). To learn more about the benefits of BASTA, download the [whitepaper Time to Raise the Bar on BSA](#).

### Array Layout

page 1 of 4  
December 5, 2019

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COMMSCOPE®

## 2 PROPOSED ANTENNA DETAIL

C-4 NOT TO SCALE

## RADIO 4408

Same building practice as Radio 2203/2208

Now confirmed max. measurements/ will not exceed

- 4TX/4RX
- Tx Power 4x5W
- Up to 6 LTE carriers, 1BW up to 150 MHz
- ENM dependency (full support 6 carriers in ENM 201Q1)
- 2x 2.5/5/9.8/10.1 Gbps CPR1
- Size and Weight:

Radio 4408 Single Radio	Height	Width	Depth	Weight
w/o integrated antenna	8.4 in (213.5 mm)	7.9 in (200 mm)	4.2 in (105 mm)	10.2 lbs (4.6 Kg)
w/ integrated antenna	8.4 in (213.5 mm)	7.9 in (200 mm)	5.0 in (125 mm)	11.1 lbs (5.0 Kg)

- AC or 48 VDC Support Units, (single new version, compared to 2208; dual SUP support release TBD)
- Integrated (Antenna 6524) or external antenna
- RF Connector: NEX10
- 2 external alarm
- IP 65
- 40 to +55 °C
- Operating Bands: B48/ CBRS



## CONFIGURATIONS AND DIMENSIONS FOR 8843 "REV 2"

### Supported configurations with 8843 "Rev 2" version

- B2 4x40W + B66A 4x40W
- B2 2x60W + B66A 2x80W
- B2 4x40W + B66A 2x80W
- B2 4x20W + B66A 4x60W

### Not to exceed dimensions for 8843:

- Not to exceed Dimensions for "Rev 2" version: 36 liters (H: 380mm, W: 335 mm, D: 282 mm)
- Not to exceed Weight for "Rev 2" version: 75 lbs

Radio 8843 "Rev 2"	Height	Width	Depth (Estimate)	Weight (Estimate)
w/o protruding items	15 in (380 mm)	13.2 in (335 mm)	9.3 in, 11.1 in (235 mm); 282 mm	70 lbs (31.7 kg)
w protruding items	18 in (455 mm)	13.2 in (335 mm)	9.4 in, 11.3 in (240 mm); 287 mm	75 lbs (34.02 kg)

## RADIO 4449 - B13 + B5 (DUAL-BAND)

4TX 4RX PER BAND

- 4 antenna ports, 4TX/4RX for 2 bands with common RF ports
- Up to 320W RF Power shared between 2 bands
- Examples:
  - 4x40W on each band or
  - 2x80W each band on two high-power RF ports
- Carrier Capacity:
  - Up to 24 carrier and up to 10+25 MHz OBW for LTE
- 2x 10Gbps CPR1
- Size and Weight:

Radio 4449 - B13 B5	Height	Width	Depth	Weight
w/o protruding items	15 in (380 mm)	13.2 in (335 mm)	9.3 in (235 mm)	70 lbs (31.75 Kg)

- 48 VDC, 2x20A fuse (2 power connectors, 3 wire)
- AISG TMA & RET support (2 Bias-T, 1 ALD port)
- Type 4.3-10 RF connectors
- 2 external alarms
- IP 65, -40 to +55 °C



## 3 PROPOSED RRU DETAIL

C-4 NOT TO SCALE

## 1 PROPOSED ANTENNA MOUNT DETAIL

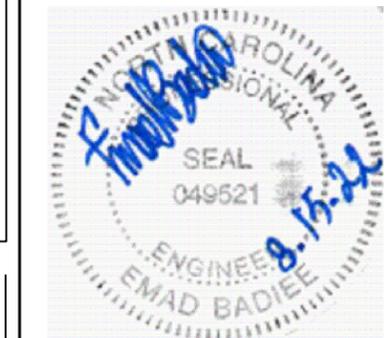
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ENGINEER:

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470.318.6119

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**SITE NAME:**  
SUGAR CREEK

**SITE NUMBER:**  
NC-091

**SITE ADDRESS:**  
DORMAN ROAD  
PINEVILLE, NC 28134

## ANTENNA AND RRU DETAILS

**DRAWN BY:** KC

**CHECKED BY:** EB

**PROJECT MANAGER:** MS

**SHEET NUMBER:** C-4



**VOGUE TOWERS**  
 Site ID:  
 NC-091  
 Sugar Creek  
 FCC#: TBD  
 Contact:  
 423.260.4982



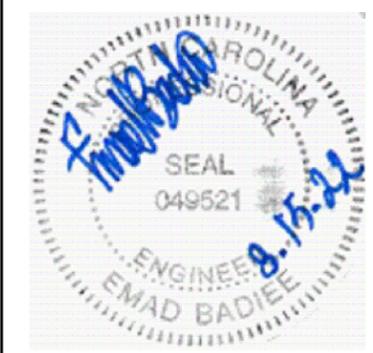
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ENGINEER:



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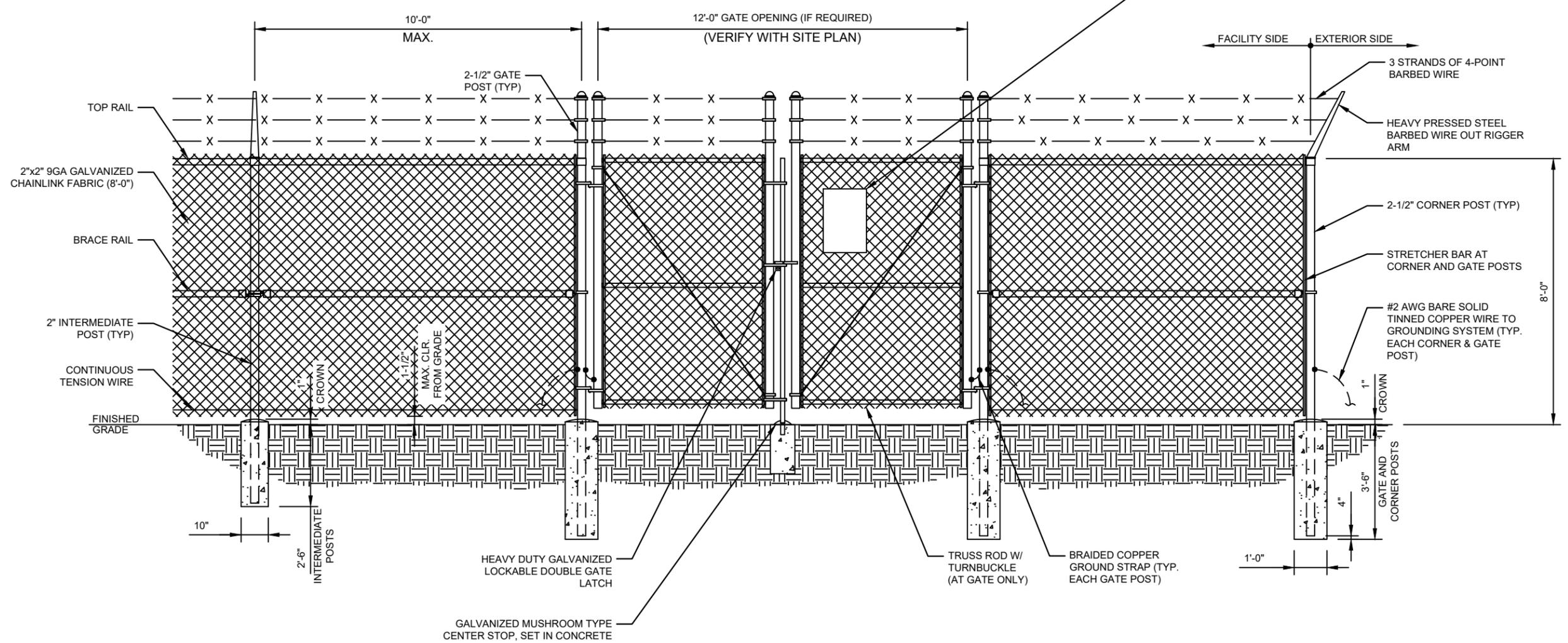
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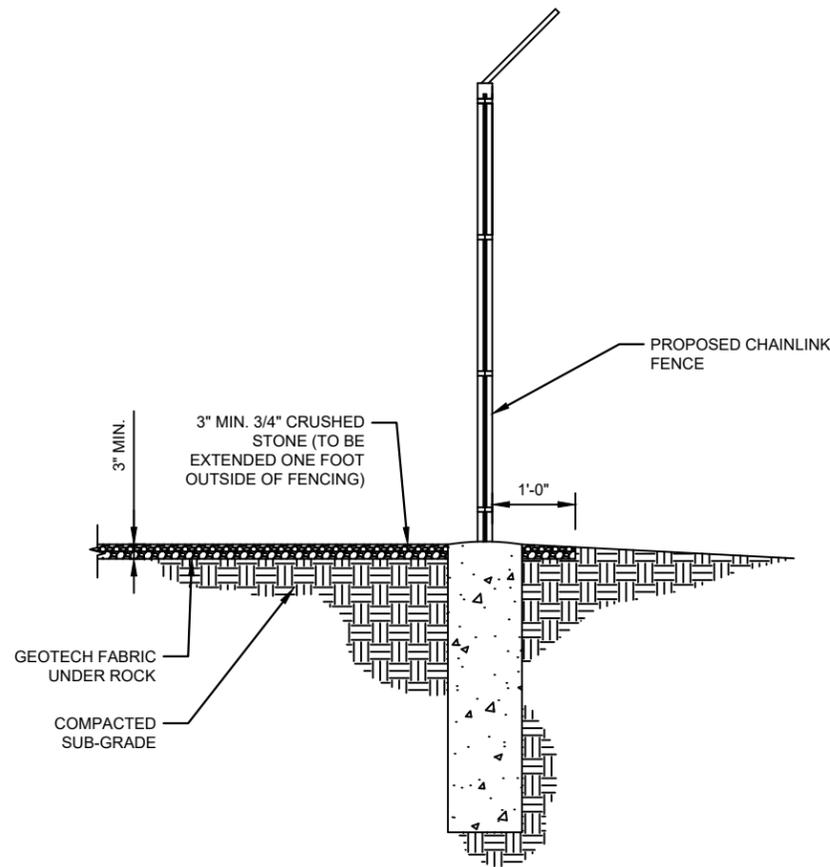
**SITE NAME:**  
 SUGAR CREEK  
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 NC-091  
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**FENCE DETAILS**

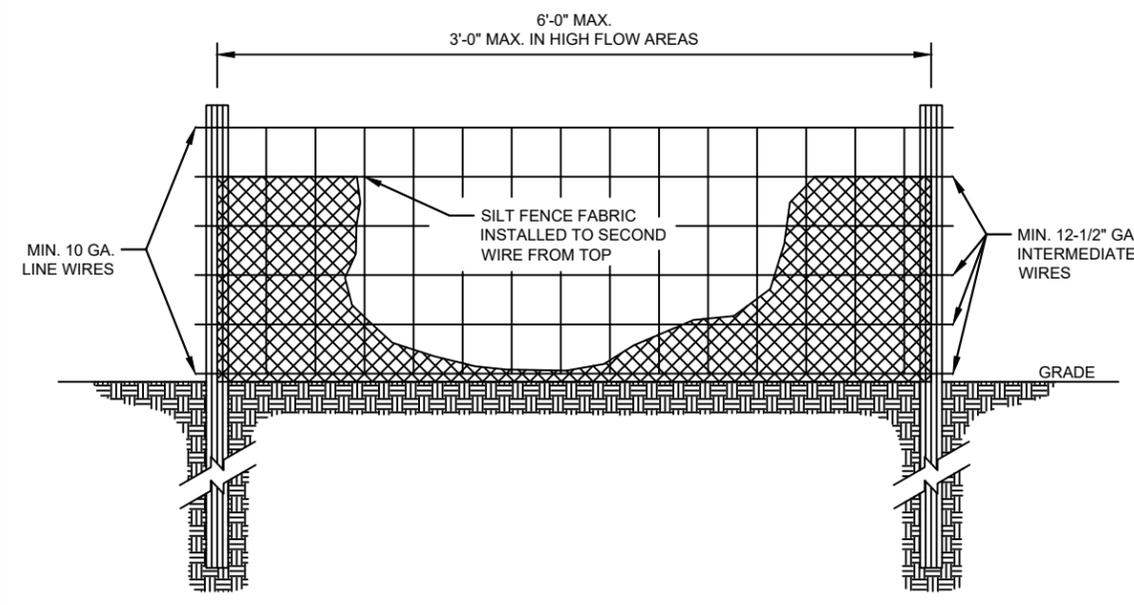
<b>DRAWN BY:</b>	KC
<b>CHECKED BY:</b>	EB
<b>PROJECT MANAGER:</b>	MS
<b>SHEET NUMBER:</b>	C-5



1 FENCE DETAIL  
 C-5 NOT TO SCALE

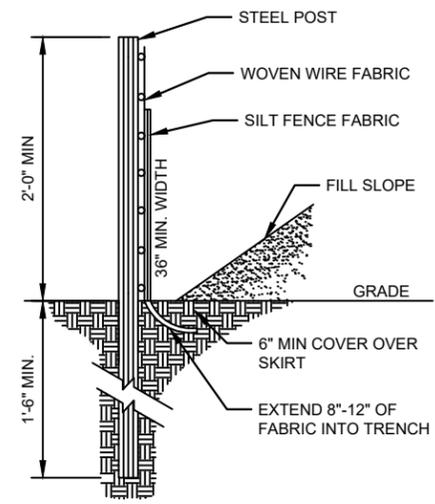


1 COMPOUND SURFACING DETAIL  
NOT TO SCALE  
C-6

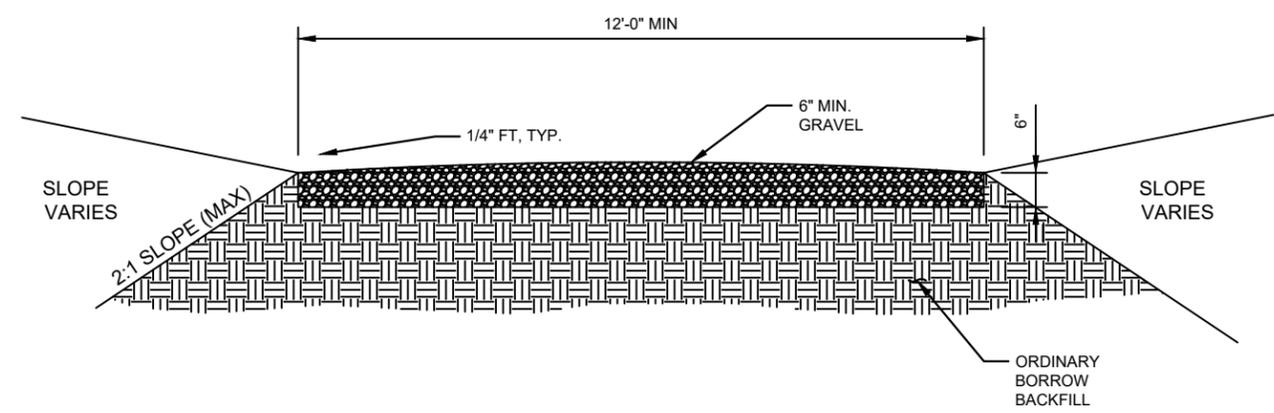


FRONT VIEW

2 SILT FENCE DETAIL  
NOT TO SCALE  
C-6



SIDE VIEW



3 GRAVEL ACCESS ROAD DETAIL  
NOT TO SCALE  
C-6

- ALL SEDIMENT CONTROL STRUCTURES SHALL BE INSTALLED PRIOR TO ANY GRADING AND ARE TO BE MAINTAINED IN PLACE THROUGHOUT THE COURSE OF CONSTRUCTION. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROVIDED ON ALL GRADED AND OR DISTURBED AREAS UNTIL SUCH AREAS HAVE BEEN STABILIZED WITH VEGETATIVE COVER.
- CONTRACTOR SHALL OBTAIN APPLICABLE EROSION AND SEDIMENT CONTROL PERMIT(S) AND COMPLY WITH ALL LOCAL AND STATE LAWS. SEDIMENT SHALL NOT BE ALLOWED TO WASH INTO STORM DRAINS OR ONTO ADJACENT PROPERTIES. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR CLEANUP OF ANY AND ALL DAMAGES RESULTING FROM SILTATION FROM THE CONSTRUCTION SITE.
- SEDIMENT AND EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS ARE CONSIDERED MINIMUM. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING CONTROL AS NECESSARY TO PREVENT EROSION RUNOFF. ADDITIONAL EROSION CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
- IF FINES OR PENALTIES ARE LEVIED AGAINST THE PROPERTY OR PROPERTY OWNER BECAUSE OF LACK OF EROSION AND/OR SEDIMENTATION CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF SUCH FINES OR PENALTIES.

EROSION CONTROL NOTES  
NOT TO SCALE  
C-6



VOGUE TOWERS

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ENGINEER:



FRENCH & PARRELLO ASSOCIATES  
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SITE DETAILS

DRAWN BY: KC

CHECKED BY: EB

PROJECT MANAGER: MS

SHEET NUMBER: C-6