



AMERICAN TOWER®

ATC SITE NAME: SHOEHORN NC

ATC SITE NUMBER: 280848

AT&T PACE NUMBER: MRCAR033520

AT&T SITE ID: ECL05406 AT&T FA CODE:12682237 AT&T SITE NAME: 368-540 SITE ADDRESS: 9316 NC 42

HOLLY SPRINGS, NC 27540



LOCATION MAP

SHEET INDEX

AT&T MOBILITY **COLOCATION PLAN**

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

- 1. 2018 NORTH CAROLINA BUILDING CODE (NCBC)
- 2. 2017 NATIONAL ELECTRIC CODE (NEC) WITH NC **AMENDMENTS**
- 3. LOCAL BUILDING CODE
- 4. CITY/COUNTY ORDINANCES





UTILITY COMPANIES

POWER COMPANY: DUKE ENERGY PHONE: (800) 777-9898

TELEPHONE COMPANY: AT&T PHONE: (800) 331-0500



HOLLY SPRINGS, NC 27540 COUNTY: HARNETT

GEOGRAPHIC COORDINATES: LATITUDE: 35.558333

PROJECT SUMMARY

SITE ADDRESS:

9316 NC 42

LONGITUDE: -78.915586 GROUND ELEVATION: 402' AMSL

PROJECT TEAM

TOWER OWNER:

AMERICAN TOWER 10 PRESIDENTIAL WAY WOBURN, MA 01801

ENGINEER:

ATC TOWER SERVICES, LLC 3500 REGENCY PKWY STE 100 CARY, NC 27518

PROPERTY OWNER:

SAMMIE FRANCIS AUSTIN HOLLY SPRINGS, NC 27540

APPLICANT: AT&T MOBILITY

GENERATO **EXISTING** 1. THE FAC 2. A TECHN A MONT 3. THE PRO NO SANI DISPOSA 5. HANDICA PRO FROM MAIN ACCESS

PROJECT DESCRIPTION	SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
	G-001	TITLE SHEET	0	11/24/20	MG
PROPOSED PROJECT INCLUDES INSTALLING JIPMENT CABINETS IN A PROPOSED WIC AND	G-002	APPENDIX B	0	11/24/20	MG
FOR INSIDE A 15' X 24' GROUND SPACE WITHIN THE G COMPOUND, AND INSTALLING NEW EQUIPMENT	G-003	APPENDIX B	0	11/24/20	MG
AND MOUNTS ON THE EXISTING TOWER.	G-004	APPENDIX B	0	11/24/20	MG
	G-005	APPENDIX B	0	11/24/20	MG
	G-006	APPENDIX B	0	11/24/20	MG
	G-007	GENERAL NOTES	0	11/24/20	MG
PROJECT NOTES	1 OF 2	SITE SURVEY			
TROSECT NOTES	2 OF 2	LEGAL DESCRIPTION			
ACILITY IS UNMANNED.	C-101	DETAILED SITE PLAN	0	11/24/20	MG
HNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE ITH FOR ROUTINE INSPECTION AND MAINTENANCE.	C-102	DETAILED EQUIPMENT LAYOUT	0	11/24/20	MG
ROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND	C-201	DETAILED SITE PLAN & TOWER ELEVATION	0	11/24/20	MG
RBANCE OR EFFECT OF STORM WATER DRAINAGE.	C-401	ANTENNA INFORMATION & SCHEDULE	0	11/24/20	MG
NITARY SEWER, POTABLE WATER OR TRASH SAL IS REQUIRED.	C-501	CONSTRUCTION DETAILS	0	11/24/20	MG
CAP ACCESS IS NOT REQUIRED.	C-502	CONSTRUCTION DETAILS	0	11/24/20	MG
	C-503	CONSTRUCTION DETAILS	0	11/24/20	MG
OJECT LOCATION DIRECTIONS	C-504	CONSTRUCTION DETAILS	0	11/24/20	MG
OJECT ECCATION DIRECTIONS	E-101	GROUNDING PLAN	0	11/24/20	MG
	E-102	ELECTRICAL ONE-LINE & PANEL SCHEDULE	0	11/24/20	MG
	E-501	GROUNDING DETAILS	0	11/24/20	MG
N STREET FUQUAY-VARINA, NC TAKE 42 WEST 7.1 MI., IS ROAD TO THE TOWER IS ON THE LEFT WITH AN	E-502	GROUNDING DETAILS	0	11/24/20	MG
ACCESS GATE.	R-601	SUPPLEMENTAL			
	R-602	SUPPLEMENTAL			

SUPPLEMENTAL

R-603



A.T. ENGINEERING SERVICE, PLLC 3500 REGENCY PARKWAY

SUITE 100 **CARY, NC 27518** PHONE: (919) 468-0112 COA: P-1177

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIEV ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES, ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

ı	REV.	DESCRIPTION	BY	DATE
ı	\triangle	FOR CONSTRUCTION	MG	11/24/20
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ı				

ATC SITE NUMBER:

280848

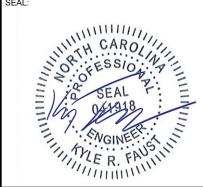
ATC SITE NAME:

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AT&T MOBILITY SITE NAME:

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SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540





DATE DRAWN:	11/24/20
ATC JOB NO:	13247756_G4
CUSTOMER ID:	ECL05406
CUSTOMER #:	12682237

TITLE SHEET

SHEET NUMBER:

REVISION G-001

2018 APPENDIX B **BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS**

(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project:	AT&T MOBILITY UPGRADE P	ROJECT - SITE ID ECL	05406		
Address: 9316 N	C 42 HOLLY SPRINGS, NC 27540			Zip Co	ode <u>27540</u>
Owner/Authorize	ed Agent: AMERICAN TOWER, LLC	Phone # (919_	_) _4680112	E-Mai	1 AE@AMERICANTOWER.COM
Owned By:	☐ Cit	y/County	X Private	☐ St	ate
Code Enforceme	nt Jurisdiction: Cit	у	X County HA	RNETT St	ate
CONTACT:					
DESIGNER Architectural	FIRM	NAME	LICENSE#	TELEPHONE #	E-MAIL
Civil	AMERICAN TOWER, LLC	KYLE FAUST, PE	041918	(919) 466-5028	KYLE.FAUST@AMERICANTOWER.COM
Electrical				_ ()	
Fire Alarm Plumbing				_ ()	
Mechanical					
	pipe			()	
Structural Retaining Walls	>5' High			. ()	
Other					
("Other" should	include firms and individu	als such as truss, j	precast, pre-engir	neered, interior des	igners, etc.)
CONSTRU RENOVAT	possib	ole additional process : EXISTING:	Prescriptive	Repair Level II certy Ch. 3):	ition jurisdiction for Chapter 14 Level III Change of Use
BASIC BUILDI Construction Ty (check all that ap Sprinklers: Standpipes: Fire District: Special Inspecti	ype:	ood Hazard . Yes (Contact t	☐ III ☐ W Area: ☐ No	☐ IV FPA 13R ☐ NF et ☐ Dry D ☐ Yes on jurisdiction for a nts.)	
2018 NC Adminis	strative Code and Policies				

P	F ()	Gross Building Area Table	Comp. Thomas
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3 rd Floor			
2 nd Floor			
Mezzanine			
1st Floor			
Basement			
TOTAL			
		ALLOWABLE AREA	
Primary Occupa	•		<u>Select one</u> <u>Select one</u> <u>Select one</u>
Assembly	\square A-1 \square A-2 \square A	A-3	
Business			
Educational			
Factory	☐ F-1 Moderate ☐ F-	-2 Low	
Hazardous	H-1 Detonate H	-2 Deflagrate H-3 Combust	☐ H-4 Health ☐ H-5 HPM
Institutional	☐ I-1 Condition ☐ 1	\square_2	
	☐ I-2 Condition ☐ 1	\square 2	
	☐ I-3 Condition ☐ 1		5
			_
Mercantile			
Residential	\square R-1 \square R-2 \square I	$R-3$ $\square R-4$	>
Storage		S-2 Low	
******	Parking Garage	Open / P O C	farage
-	Miscellaneous	Open A IIII G	
•	pancy Classification(s):	R-3 R-4 S-2 Low Open Bull DIN G	
Incidental Uses	(Table 509):	\ V /	
Special Uses (Cl	hapter 4 – List Co	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	
Special Provisio	ns: (Chapter 5	♦	
Mixed Occupan	cy: No	separation: Hr.	Exception:
☐ Non	-Separated Use (5)		
☐ Sepa	be su		ch story, the area of the occupancy shall e actual floor area of each use divided b hall not exceed 1.
	al Area of Occupancy A ole Area of Occupancy A	+ <u>Actual Area of Occupan</u> Allowable Area of Occupa	
		+	<u> </u>

2018 NC Administrative Code and Policies



AMERICAN TOWER® A.T. ENGINEERING SERVICE, PLLC

3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: P-1177

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280848

ATC SITE NAME:

SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540



П	DATE DRAWN:	11/24/20
П	ATC JOB NO:	13247756_G4
П	CUSTOMER ID:	ECL05406
П	CUSTOMER #:	12682237

APPENDIX B

SHEET NUMBER:

REVISION:

G-002

STORY	DESCRIPTION AND	(A)	(B)	(C)	(D)
NO.	USE	BLDG AREA PER	TABLE 506.2 ⁴	AREA FOR FRONTAGE	ALLOWABLE AREA PER
		STORY (ACTUAL)	AREA	INCREASE ^{1,5}	STORY OR UNLIMITED ^{2,3}
·					

¹ Frontage area increases from Section 506.2 are computed thus:

a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____(F)

b. Total Building Perimeter = _____(P)

c. Ratio (F/P) = _____(F/P)

2018 NC Administrative Code and Policies

d. $W = Minimum width of public way = ____(W)$

e. Percent of frontage increase $I_f = 100[F/P - 0.25] \times W/30 =$ ______(%)

² Unlimited area applicable under conditions of Section 507.

³ Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).

⁴ The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.

⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEID ALLOWABLE HEID Building Height in Feet (Table 504.3) Building Height in Stories (Table 504.4) Provide code reference if the "Shown on Plans" quantity is provide to the "Shown on P

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE	REQ'D	RATING PROVIDED (W/*	DETAIL # AND SHEET #	DESIGN# FOR RATED	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED
	(FEET)		REDUCTION)		ASSEMBLY		JOINTS
Structural Frame,							
including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East						·	
West						·	
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North				^			
East							
West							
South					l		
Interior walls and partitions				(,	$\overline{}$		
Floor Construction	•		abla				
Including supporting beams			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
and joists			$\langle V, A \rangle$	·/			
Floor Ceiling Assembly		7	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				
Columns Supporting Floors							
Roof Construction, including supporting beams and joists		,	ABUID				
Roof Ceiling Assembly		\sim					
Columns Supporting Roof	<u> </u>	\mathcal{O}					
Shaft Enclosures - Exit	_/ ,	~/					
Shaft Enclosures - Other							
Corridor Separation						,	
Occupancy/Fire Barrier Separat	ion						
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

^{*} Indicate section number permitting reduction

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	CUSTOMER #:	12682237

APPENDIX B

SHEET NUMBER:

REVISION:

G-003

PERCENTAGE OF WALL OPENING CALCULATIONS

rty lines (705.8)

tion (Table 1004.1.2)

each exit door can accommodate based on egress width (1005.3)

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	Degree of openings Protection (Table 705.8)	Allowable area (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY	SYSTEM	REQUIREMENT
□ No □ Yes		

Emergency Lighting:	☐ No	☐ Ye
Exit Signs:	☐ No	☐ Ye
Fire Alarm:	☐ No	☐ Ye

☐ No ☐ Yes ☐ Partial _ Smoke Detection Systems:

Carbon Monoxide Detection: ☐ No ☐ Yes

									_		
I	JFE	SA	FET	ΓY	PL_{ν}	AN	RE	$\Omega \Pi$	E N	ME	VTS

Liic	Jaiety I lan Sheet II.
	Fire and/or smoke rated wall locations (Chapter 7)
	Assumed and real property line locations (if not
	Exterior wall opening area with respect to dis
	Occupancy Use for each area as it relates

Occupant loads for each area

☐ Exit access travel distances (1017 Common path of travel distance

Life Safety Plan Sheet #

Dead end lengths (1020.4)

☐ Clear exit widths for each ☐ Maximum calculated of

Actual occupant load for ea ☐ A separate schematic plan indi

where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation

Location of doors with panic hardware (1010.1.10)

Location of doors with delayed egress locks and the amount of delay (1010.1.9.7) Location of doors with electromagnetic egress locks (1010.1.9.9)

Location of doors equipped with hold-open devices

Location of emergency escape windows (1030)

☐ The square footage of each fire area (202)

☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)

Note any code exceptions or table notes that may have been utilized regarding the items above

2018 NC Administrative Code and Policies

ACCESSIBLE DWELLING UNITS

(SECTION 1107)

TOTAL	ACCESSIBLE	ACCESSIBLE	TYPE A	Түре А	Түре В	Түре В	TOTAL
Units	Units	Units	Units	Units	Units	Units	ACCESSIBLE UNITS
	Required	PROVIDED	Required	Provided	Required	Provided	PROVIDED
			·				

ACCESSIBLE PARKING

(SECTION 1106)

LOT OR PARKING	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL#
AREA	REQUIRED	PROVIDED	REGULAR WITH	VAN SPACES WITH		ACCESSIBLE
			5' ACCESS AISLE	132" ACCESS	8' ACCESS	PROVIDED
				AISLE	AISLE	
					·	
TOTAL						

PLUMBING FIXTURE B (TABLE)

WATERCLOSETS SHOWERS DRINKING FOUNTAINS /TUBS REGULAR ACCESSIBLE MALE FEMALE UNISEX EXIST'G REQ'D

APPROVALS

Special approval: (Local Jurisd nt of Insurance, OSC, DPI, DHHS, etc., describe below)

2018 NC Administrative Code and Policies



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	CUSTOMER #:	12682237

APPENDIX B

SHEET NUMBER:

REVISION:

G-004

2018 NC Administrative Code and Policies

slab heated:

Horizontal/vertical requirement:

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN

(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:	
Importance Factors:	Snow (I _S) Seismic (I _E)
Live Loads:	Roof psf Mezzanine psf Floor psf
Ground Snow Load:	psf
	sic Wind Speed mph (ASCE-7) posure Category
Provide the following Seismic De Risk Category (Table 1 Spectral Response Acco Site Classification (ASC Data So Basic structural system	Sign Parameters:
Analysis Procedure: Architectural, Mechan	Equivalent Lateral Force Dynamic
LATERAL DESIGN CONTA	Wind [
Field Test (provide copy Presumptive Bearing cap Pile size, type, and capac	of test eport) psf acity psf

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APPENDIX B

SHEET NUMBER:

REVISION:

G-005

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone	
winter dry bulb:	
Interior design conditions	
winter dry bulb: summer dry bulb: relative humidity:	
Building heating load:	
Building cooling load:	
Mechanical Spacing Conditioning System	
Unitary	
description of unit:	
heating efficiency:	
size category of unit	
Boiler	
Size category son.:	_
Chiller	
Size cate de reason.:	_
List equipment efficience	

2018 NC Administrative Code and Policies

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN

(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code Performance Prescriptive
ASHRAE 90.1 Performance Prescriptive
Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole wilding or space by space)
total exterior wattage specified vs. allowed
Additional Efficiency Package Options
(When using the 2018 NCECC; not required f
(When using the 2018 NCECC; not required C406.2 More Efficient HVAC F C406.3 Reduced Lighting Por C406.4 Enhanced Digital C406.5 On-Site Renew C406.6 Dedicated Or
C406.3 Reduced Lighting Poy
C406.4 Enhanced Digital
C406.5 On-Site Renews
C406.6 Dedicated O
C406.7 Reduced Vater Heating
.01/
\ _ _

2018 NC Administrative Code and Policies



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APPENDIX B

SHEET NUMBER:

REVISION:

G-006

GENERAL CONSTRUCTION NOTES:

- OWNER FURNISHED MATERIALS, AT&T MOBILITY "THE COMPANY" WILL PROVIDE AND THE 22. CONTRACTOR WILL INSTALL
- A. BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND BUILD/ICO-LOCATE ONLY)
- B. AC/TELCO INTERFACE BOX (PPC)
- C. ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
- D. TOWERS, MONOPOLES
- E. TOWER LIGHTING
- F. GENERATORS & LIQUID PROPANE TANK
- G. ANTENNA STANDARD BRACKETS. FRAMES AND PIPES FOR MOUNTING
- H. ANTENNAS (INSTALLED BY OTHERS)
- I. TRANSMISSION LINE
- J. TRANSMISSION LINE JUMPERS
- K. TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
- L. TRANSMISSION LINE GROUND KITS
- M. HANGERS
- N. HOISTING GRIPS
- O. BTS EQUIPMENT
- 2. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL OTHER MATERIALS FOR THE COMPLETE INSTALLATION OF THE SITE INCLUDING, BUT NOT LIMITED TO, SUCH MATERIALS AS FENCING, STRUCTURAL STEEL SUPPORTING SUB-FRAME FOR PLATFORM ROOFING LABOR AND MATERIALS, GROUNDING RINGS, GROUNDING WIRES, COPPER-CLAD OR XIT CHEMICAL GROUND ROOJ(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORD EDILLING, SLEEPERS AND RUBBER MATTING, REBAR, CONCRETE CAISSONS, PADS AND/OR AUGER MOUNTS, MISCELLANEOUS FASTENERS, CABLE TRAYS, NON-STANDARD ANTENNA FRAMES AND ALL OTHER MATERIAL AND LABOR REQUIRED TO COMPLETE THE JOB ACCORDING TO THE DRAWINGS AND SPECIFICATIONS. IT IS THE POSITION OF AT&T MOBILITY TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED PERMITS.
- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING ANS/IEIA/TIA-222, AND COMPLY WITH ATC CONSTRUCTION SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- 7. DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS
 OTHERWISE NOTED.
 32.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR ROL IS. FTC.
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- 12. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE AT&T MOBILITY REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE AT&T MOBILITY REP PRIOR TO
- 13. EACH CONTRACTOR SHALL COOPERATE WITH THE AT&T MOBILITY REP, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- 14. CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T MOBILITY CONSTRUCTION MANAGER.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR SHALL NOTIFY THE AT&T MOBILITY REP AND ENGINEER OF RECORD IMMEDIATELY.
- 17. CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- 18. CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF FACH DAY
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH AMERICAN TOWER CORPORATION (ATC), AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- 20. CONTRACTOR SHALL FURNISH AT&T MOBILITY AND AMERICAN TOWER CORPORATION (ATC) WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WARPER.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED. ALL ITEMS NOT PROVIDED SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL

- ALL ITEMS PROVIDED.
- 22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T MOBILITY REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MOBILITY MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR.
- 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T MOBILITY SPECIFICATIONS AND REQUIREMENTS.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO AT&T MOBILITY FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- 25. ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO AT&T MOBILITY SPECIFICATIONS, AND AS SHOWN IN THESE PI ANS.
- 26. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT
- 27. CONTRACTOR SHALL NOTIFY AT&T MOBILITY REP A MINIMUM OF 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING ANY UNDERGROUND UTILITIES, FOUNDATIONS OR SEALING ANY WALL, FLOOR OR ROOF PENETRATIONS FOR ENGINEERING REVIEW
- 28. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ALL APPLICABLE OSHA STANDARDS AND RECOMMENDATIONS AND SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE AND PPM AND CONSTRUCTION DEVICES SUCH AS WELDING AND FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
- 29. THE CONTRACTOR SHALL PROTECT AT HIS OWN EXPENSE, ALL EXISTING FACILITIES AND SUCH OF HIS NEW WORK LIABLE TO INJURY DURING THE CONSTRUCTION PERIOD. ANY DAMAGE CAUSED BY NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, OR BY THE ELEMENTS DUE TO NEGLECT ON THE PART OF THIS CONTRACTOR OR HIS REPRESENTATIVES, EITHER TO THE EXISTING WORK, OR TO HIS WORK OR THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION.
- 30. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. THE QUALITY OF WORKMANSHIP SHALL BE SUBJECT TO THE APPROVAL OF THE ATRA MOBILITY REP. ANY WORK FOUND BY THE AT&T MOBILITY REP TO BE OF INFERIOR QUALITY AND/OR WORKMANSHIP SHALL BE REPLACED AND/OR REWORKED AT CONTRACTOR EXPENSE UNTIL APPROVAL IS OBTAINED.
- 31. IN ORDER TO ESTABLISH STANDARDS OF QUALITY AND PERFORMANCE, ALL TYPES OF MATERIALS LISTED HEREINAFTER BY MANUFACTURER'S NAMES AND/OR MANUFACTURER'S CATALOG NUMBER SHALL BE PROVIDED BY THESE MANUFACTURERS AS SPECIFIED.
- 32. AT&T MOBILITY FURNISHED EQUIPMENT SHALL BE PICKED-UP AT THE AT&T MOBILITY WAREHOUSE, NO LATER THAN 48HR AFTER BEING NOTIFIED INSURED, STORED, UNCRATE, PROTECTED AND INSTALLED BY THE CONTRACTOR WITH ALL APPURTENANCES REQUIRED TO PLACE THE EQUIPMENT IN OPERATION, READY FOR USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE EQUIPMENT AFTER PICKING IT UP.
- 33. AT&T MOBILITY OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQUIPMENT OR MATERIALS WHICH, IN HIS OWN OPINION ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS, EITHER BEFORE OR AFTER INSTALLATION AND THE EQUIPMENT SHALL BE REPLACED WITH EQUIPMENT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE CONTRACTOR AT NO COST TO AT&T MOBILITY OR THEIR ARCHITECT/ENGINEER.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
 - A. ASTM A-572, GRADE 50 ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE
 - B. $\,$ ASTM A-36 ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED OTHERWISE.
 - C. ASTM A-500, GRADE B HSS SECTION (SQUARE, RECTANGULAR, AND ROUND)
 - D. ASTM A-325, TYPE SC OR N ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS
 - E. ASTM F-1554 07 ALL ANCHOR BOLTS, UNLESS NOTED OTHERWISE
- ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
 ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A153 OR B695.
- 4. ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) BRUSHED COATS OF ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
- . CONNECTIONS:

- A. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
- B. ALL WELDS SHALL BE INSPECTED VISUALLY, 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. REPAIR ALL WELDS AS NECESSARY.
- C. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
- D. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE BURNING/WELDING PERMITS AS REQUIRED BY LOCAL GOVERNING AUTHORITY AND IF REQUIRED SHALL HAVE FIRE DEPARTMENT DETAIL FOR ANY WELDING ACTIVITY.
- E. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE.
- F. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE
- G. PRIOR TO FIELD WELDING GALVANIZING MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING ½" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVILITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS RECOMMENDATIONS.
- H. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE REQUIRED DURING CONSTRUCTION UNTIL ALL CONNECTIONS ARE COMPLETE.
- ANY FIELD CHANGES OR SUBSTITUTIONS SHALL HAVE PRIOR APPROVAL FROM THE ENGINEER. AND T- MOBILE PROJECT MANAGER IN WRITING

SPECIAL CONSTRUCTION ANTENNA INSTALLATION NOTES:

- 1 WORK INCLUDE
 - A. ANTENNA AND COAXIAL CABLES ARE FURNISHED BY AT&T MOBILITY UNDER A SEPARATE CONTRACT. THE CONTRACTOR SHALL ASSIST ANTENNA INSTALLATION CONTRACTOR IN TERMS OD COORDINATION AND SITE ACCESS. ERECTION SUBCONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PERSONNEL AND
 - B. INSTALL ANTENNA AS INDICATE ON DRAWINGS AND AT&T MOBILITY SPECIFICATIONS.
 - C. INSTALL GALVANIZED STEEL ANTENNA MOUNTS AS INDICATED ON DRAWINGS
 - D. INSTALL FURNISHED GALVANIZED STEEL OR ALUMINUM WAVEGUIDE AND PROVIDE PRINTOUT OF THAT TEST.
 - E. CONTRACTOR SHALL PROVIDE FOUR (4) SETS OF SWEEP TESTS USING ANRITZU-PACKARD 8713B RF SCALAR NETWORK ANALYZER. SUBMIT FREQUENCY DOMAIN REFLECTOMETER(FDR) TESTS RESULTS TO THE PROJECT MANAGER. SWEEP TESTS SHALL BE AS PER ATTACHED RFS "MINIMUM FIELD TESTING RECOMMENDED FOR ANTENNA AND HELIAX COAXIAL CABLE SYSTEMS" DATED 10/5/93. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING SERVICE AND BE BOUND AND SUBMITTED WITHIN ONE WEEK OF WORK COMPLETION.
 - F. INSTALL COAXIAL CABLES AND TERMINATING BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. WEATHERPROOF ALL CONNECTIONS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE (3) FEET IN EXCESS OF ENTRY PORT LOCATION UNLESS OTHERWISE STATED.
 - G. ANTENNA AND COAXIAL CABLE GROUNDING:
- ALL EXTERIOR #6 GREED GROUND WIRE "DAISY CHAIN" CONNECTIONS ARE TO BE WEATHER SEALED WITH RFS CONNECTORS/SPLICE WEATHERPROOFING KIT #221213 OR FOLIAM
- ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)

CONCRETE AND REINFORCING STEEL NOTES:

- DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF ALL APPLICABLE CODES INCLUDING: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 117 "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS", AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
- MIX DESIGN SHALL BE APPROVED BY AT&T MOBILITY REP PRIOR TO PLACING CONCRETE.
- CONCRETE SHALL BE NORMAL WEIGHT, 6 % AIR ENTRAINED (+/- 1.5%) WITH A SLUMP RANGE OF 3-6" AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI UNLESS OTHERWISE NOTED.
- 4. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT: ASTM C150, TYPE 2

REINFORCEMENT: ASTM A185, PLAIN STEEL WELDED WIRE FABRIC REINFORCEMENT BARS: ASTM A615, GRADE 60, DEFORMED

NORMAL WEIGHT AGGREGATE: ASTM C33
WATER: ASTM C 94/C 94/W
WELDED WIRE FABRIC: ASTM A185

ADMIXTURES:

-WATER-REDUCING AGENT: ASTM C 494/C 494M, TYPE A -AIR-ENTERING AGENT: ASTM C 260/C 260M

-SUPERPLASTICIZER: ASTM C 200/C 200/M
-SUPERPLASTICIZER: ASTM C 494, TYPE F OR TYPE G

-SUPERPLASTICIZER: ASTM C494, TYPE F OR TYPE G
-RETARDING: ASTM C 494/C 494M, TYPE B

- . MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE NO LESS THAN 3".
- A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE IN ACCORDANCE WITH ACI 301 SECTION 4.2.4, UNLESS NOTED OTHERWISE.
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL, OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR APPROVAL FROM AN ATC ENGINEER WHEN DRILLING HOLES IN CONCRETE.
- ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN "METHOD 1" OF ACI 301.
- DO NOT WELD OR TACK WELD REINFORCING STEEL.
- ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
- 11. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- 12. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
- FOR COLD-WEATHER (ACI 306) AND HOT-WEATHER (ACI 301M) CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS, MINIMUM.
- 14. ALL CONCRETE SHALL HAVE A "SMOOTH FORM FINISH."
- 15. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY (CLASS A) IN ACCORDANCE WITH ACI 318.
- 16. DETAILING OF REINFORCING STEEL SHALL CONFORM TO "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" (ACI 315).
- 17. ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS.
- 18. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCEPTANCE OF THE ENGINEER. DRAWINGS SHOWING LOCATION OF DETAILS OF THE PROPOSED CONSTRUCTION JOINTS SHALL BE SUBMITTED WITH REINFORCING STEEL PLACEMENT DRAWINGS.
- SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 6".
- 20. BAR SUPPORTS SHALL BE ALL-GALVANIZED METAL WITH PLASTIC TIPS
- 21. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE OF SUFFICIENT STRENGTH FOR INTENDED PURPOSE, BUT NOT LESS THAN NO. 18 GAUGE.
- 22. SLAB ON GROUND: COMPACT STRUCTURAL FILL TO 95% DENSITY AND THEN PLACE 6" GRAVEL BENEATH SLAB.

ELECTRICAL NOTES:

- ELECTRICAL DESIGN SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR.
 STRUCTURAL DESIGN SHALL BE PERFORMED BY GENERAL CONTRACTOR. ELECTRICAL
 CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH ALL APPLICABLE LOCAL
 AND STATE CODES AND NATIONAL ELECTRICAL CODE.
- 2. ALL SUGGESTED ELECTRICAL ELEMENTS (SUCH AS BREAKER SIZES, WIRE SIZES, CONDUITS SIZES ARE FOR ZONINIR PURPOSES ONLY. IT IS THE RESPONSIBILITY TO OF THE ELECTRICAL CONTRACTOR TO CONFIRM COMPLIANCE WITH LOCAL ELECTRICAL CODES AND PASS ALL APPLICABLE AND NECESSARY INSPECTIONS. IN SOME EVENTS, IT MAY BE NECESSARY TO PERFORM AN ELECTRICAL LOAD STUDY TO VERIFY THE CAPACITY OF THE EXISTING SERVICE. THIS IS NOT THE RESPONSIBILITY OF CONCORDIA IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- CONTRACTOR SHALL FIELD LOCATE ALL BELOW GRADE GROUND LINES AND UTILITY LINES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RELOCATION OF ALL UTILITIES AND GROUND LINES THAT MAY BECOME DISTURBED OR CONFLICTION THE COURSE OF CONSTRUCTION.

ALL DISCREPANCIES FROM WHAT IS SHOWN ON THESE CONSTRUCTION DRAWINGS SHALL BE COMMUNICATED TO ATC ENGINEERING IMMEDIATELY FOR CORRECTION OR RE-DESIGN. FAILURE TO COMMUNICATE DIRECTLY WITH ATC ENGINEERING OR ANY CHANGES FROM THE DESIGN CONDUCTED WITHOUT PRIOR APPROVAL FROM ATC ENGINEERING SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.



AMERICAN TOWER®

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SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

COA: P-1177

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIFY ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
\triangle _	FOR CONSTRUCTION	MG	11/24/20
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-			

ATC SITE NUMBER:

280848

ATC SITE NAME

SHOEHORN NC AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540

SEAL:





DATE DRAWN: 11/24/20
ATC JOB NO: 13247756_G4
CUSTOMER ID: ECL05406
CUSTOMER #: 12682237

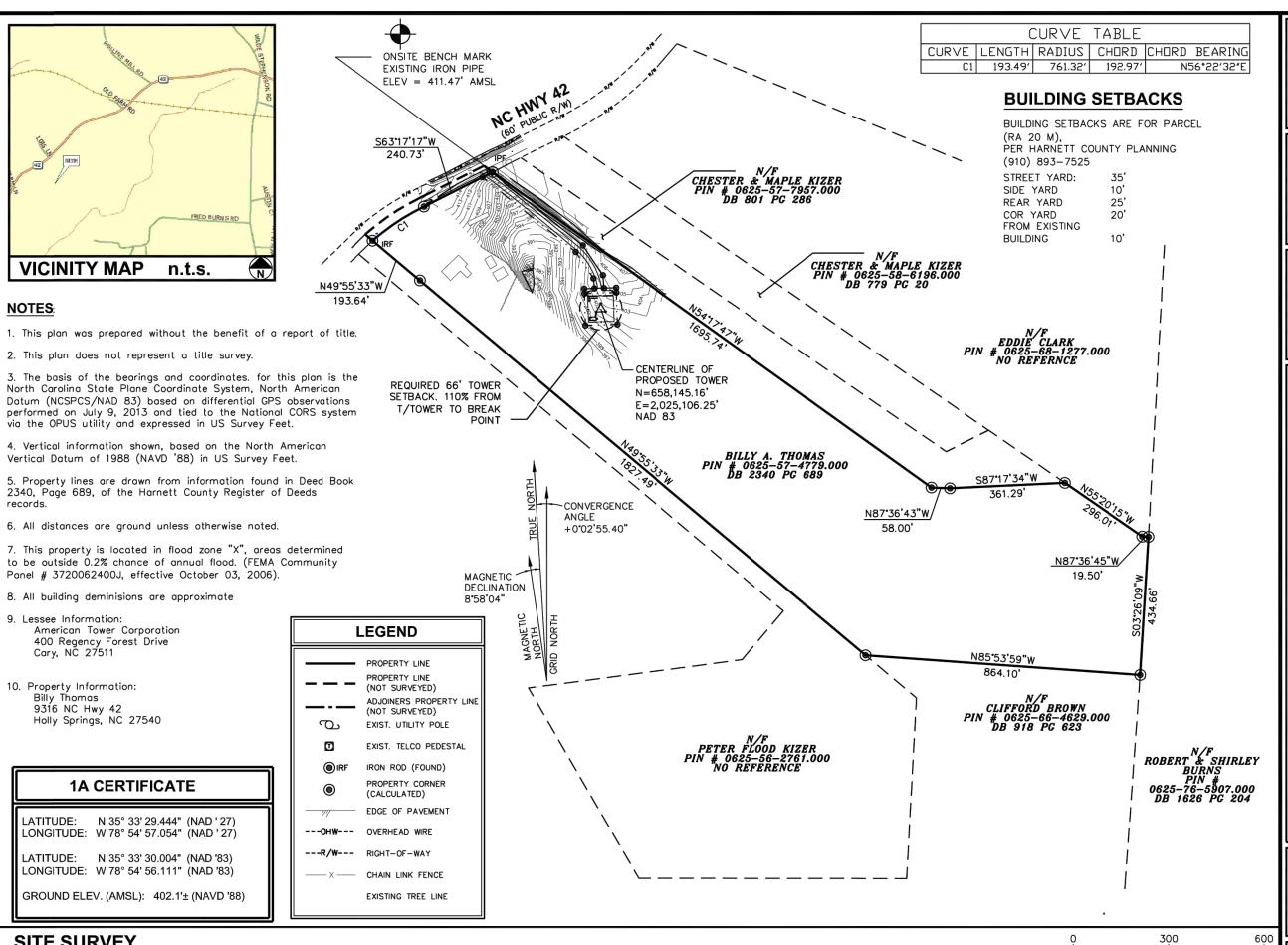
GENERAL NOTES

SHEET NUMBER

REVISION

G-007

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PREPARED FOR:



MERICAN TOWER

CORPORATION 400 REGENCY FOREST DR. CARY, NC 27511

PROJECT INFORMATION:

AT&T SITE # 368-540 ATC SITE # 280848 SHOEHORN

9316 NC HWY 42 HOLLY SPRINGS, NC 27540 (HARNETT COUNTY)

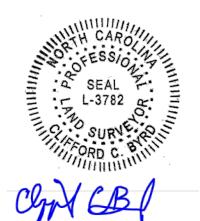
PREPARED BY:

TOWER ENGINEERING PROFESSIONALS

3703 JUNCTION BOULEVARD RALEIGH, NC 27603-5263 (919) 661-6351 NC LICENSE NO. C-1794

SURVEYOR CERTIFICATE

I, CLIFFORD BYRD, CERTIFY THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY BY ME OR UNDER MY DIRECT SUPERVISION, (DEED DESCRIPTION RECORDED IN BOOK AND PAGE AS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS BROKEN LINES, DRAWN FROM INFORMATION FOUND IN BOOK AND PAGE AS REFERENCED HEREON; THAT RATIO OF PRECISION AS CALCULATED IS 1: 10,000 OR GREATER; THAT THE AREA IS COMPUTED BY COORDINATE METHOD: THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S.47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL, THIS 28 DAY OF AUGUST, 2013.



NORTH CAROLINA PLS # L-3782 CLIFFORD C. BYRD

SHEET TITLE:

SCALE IN FEET

SITE SURVEY

DATE: 08/28/2013 REVISION: 0 TEP #: SHEET #: 1 OF 2 4730

SITE SURVEY

SCALE: 1" = 300'

LEGAL DESCRIPTION OF LEASE AREA PARCEL"A"

ALL THAT CERTAIN LEASE AREA PARCEL OF LAND. SITUATE. LYING AND BEING IN HARNETT COUNTY, NORTH CAROLINA, BEING A PORTION OF THE LANDS DESCRIBED IN DEED BOOK 2340 AT PAGE 689 OF THE HARNETT COUNTY REGISTER OF DEEDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT EXISTING IRON ON THE SOUTHERN RIGHT OF WAY OF NC HIGHWAY 42, SAID IRON BEING THE NORTHEAST CORNER OF THE PARCEL DESCRIBED IN DEED BOOK 2340 AT PAGE 689, SAID IRON HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTHING = 658,574.34', AND EASTING = 2,024,766.09'; THENCE FROM THE POINT OF COMMENCEMENT, SOUTH 3115'28" EAST, A DISTANCE OF 562.47 FT. TO A POINT ON THE NORTHWEST CORNER OF THE DESCRIBED 100' X 100' LEASE AREA, SAID POINT BEING THE TRUE POINT OF BEGINNING, AND HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTHING = 658,093.52', AND EASTING = 2,025,057.94' THENCE FROM THE POINT OF BEGINNING NORTH 88'05'25" EAST, A DISTANCE OF 100.00 FT. TO A POINT; THENCE SOUTH 01°54'35" EAST FOR A DISTANCE OF 100.00 FT. TO A POINT; THENCE SOUTH 88'05'25" WEST FOR A DISTANCE OF 100.00 FT. TO A POINT. THENCE NORTH 01°54'35" WEST FOR A DISTANCE OF 100.00 FT. TO THE POINT OF BEGINNING. SAID LEASE AREA CONTAINING 10,000 SQ. FT. OR 0.23 ACRES MORE OR LESS.

LEGAL DESCRIPTION OF 30' ACCESS AND UTILITY EASEMENT PARCEL "B"

ALL THAT CERTAIN EASEMENT PARCEL OF LAND, SITUATE, LYING AN BEING IN HARNETT COUNTY, NORTH CAROLINA, BEING A PORTION OF LANDS DESCRIBED IN DEED BOOK 2340 AT PAGE 689 OF THE HARN COUNTY REGISTER OF DEEDS AND BEING MORE PARTICULARLY DESCRI

AS FOLLOWS: COMMENCING AT EXISTING IRON ON THE SOUTHERN RIGHT OF WAY OF HIGHWAY 42, SAID IRON BEING THE NORTHEAST CORNER OF THE PAI DESCRIBED IN DEED BOOK 2340 AT PAGE 689, SAID IRON HAVING NO CAROLINA STATE PLANE COORDINATES OF NORTHING =658,574.34 ', EASTING =2,024,766.09 '; THENCE FROM THE POINT OF COMMENCEM SOUTH 63"17'17" WEST A DISTANCE OF 2.92 FT. TO A POINT ON THE SOUTHERN RIGHT OF WAY OF NC HIGHWAY 42. SAID POINT BEING TH TRUE POINT OF BEGINNING OF A DESCRIBED 30' ACCESS AND UTILITY EASEMENT, AND HAVING NORTH CAROLINA STATE PLANE COORDINATE OF: NORTHING= 658,573.03'; AND EASTING=2,024,763.48'; THENCE THE POINT OF BEGINNING, AND LEAVING SAID RIGHT OF WAY, SOUTH 51°25'18" EAST A DISTANCE OF 366.45 FT. TO A POINT: THENCE SO 33'49'20" EAST A DISTANCE OF 112.40 FT. TO A POINT; THENCE SO 04°44'24" EAST A DISTANCE OF 40.76 FT. TO A POINT; THENCE NOR 88°05'25" EAST FOR A DISTANCE OF 38.20 FT. TO A POINT; THENCE SOUTH 01°54'35" EAST A DISTANCE OF 15.00 FT. TO A POINT ON TH NORTHERN LIMITS OF DESCRIBED 100' X 100' FT. LEASE AREA PARCI THENCE WITH SAID NORTHERN LIMITS, SOUTH 88°05'25" WEST A DISTANCE OF 100.00 FT. TO A POINT ON SAID SOUTHERN LIMITS; TH LEAVING SAID SOUTHERN LIMITS, NORTH 01°54'35" WEST A DISTANCE 15.00 FT. TO A POINT; THENCE NORTH 88'05'25" EAST A DISTANCE 31.77 FT. TO A POINT; THENCE NORTH 04°44'24" WEST A DISTANCE 31.50 FT. TO A POINT; THENCE NORTH 33*49'20" WEST A DISTANCE 99.97 FT. TO A POINT; THENCE NORTH 51°25'18" WEST FOR A DISTA OF 375.61 TO A POINT ON THE SOUTHERN RIGHT OF WAY OF NC HIGHWAY 42; THENCE WITH SAID RIGHT OF WAY, NORTH 63'17'17" EA A DISTANCE OF 33.02 FT. TO THE POINT OF BEGINNING. SAID EASEMENT AREA CONTAINING 16,897 SQ. FT. OR 0.39 ACRES N OR LESS.

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	LINE	LENGTH	BEARING		CURVE LENGT		ORD CHORD I	BEARING	/ &	.
	L1	40.76′	S04°44′24″E		C1 193.4			5.55,35,E	<i>'</i>	II
	L2	15.00° 15.00°	S01°54′35″E N01°54′35″W						, ,	II
	L3	31.50	N01°54°35 W							II
	L5	33.02′	N63°17′17 ″ E			POINT OF	/			
	L6(TIE)	2.92′	S63°17′17″W			/ COMMENCE				PRO
					/	/ 100' X 100' AREA PARC	LEASE CEL "A", AND			/
	<u> </u>					30' ACCESS	S & UTILITY	11/1		II
	HTRON CONA					N=658,574		۲۱`		II
		ERGENCE	POINT OF 30' ACCESS	BEGINNING		E=2,024,76				II
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MAGNETIC DECLINATION					L6(TIE)			`\		
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OF NC ARCEL	/ IRF					\n'\0;			30' ACCESS &	COOF PREF
NORTH			EXISTING DWELLING	~	Adapata.	المراجعة المراجعة			UTILITY EASEMENT PARCEL "B"	AMEN REGI
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THENCE		PIN # 0	REFERENCE	1.	PIN	BILLY A. THOMA # 0625-57-477		100.00	0.4.3	II
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MERICAN TOWER

CORPORATION 400 REGENCY FOREST DR. CARY, NC 27511

ROJECT INFORMATION:

AT&T SITE # 368-540 **ATC SITE # 280848 SHOEHORN**

9316 NC HWY 42 HOLLY SPRINGS, NC 27540 (HARNETT COUNTY)

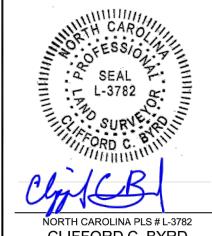
REPARED BY:

TOWER ENGINEERING PROFESSIONALS

3703 JUNCTION BOULEVARD RALEIGH, NC 27603-5263 (919) 661-6351 NC LICENSE NO. C-1794

URVEYOR CERTIFICATE

CLIFFORD BYRD, CERTIFY THIS PLAT WAS RAWN UNDER MY SUPERVISION FROM AN CTUAL SURVEY BY ME OR UNDER MY DIRECT UPERVISION, (DEED DESCRIPTION RECORDED IN OOK AND PAGE AS REFERENCED HEREON); HAT THE BOUNDARIES NOT SURVEYED ARE LEARLY INDICATED AS BROKEN LINES, DRAWN ROM INFORMATION FOUND IN BOOK AND PAGE REFERENCED HEREON; THAT RATIO OF RECISION AS CALCULATED IS 1: 10,000 OR REATER: THAT THE AREA IS COMPUTED BY OORDINATE METHOD: THAT THIS PLAT WAS REPARED IN ACCORDANCE WITH G.S.47-30 AS MENDED, WITNESS MY ORIGINAL SIGNATURE. EGISTRATION NUMBER AND SEAL, THIS 28 DAY AUGUST, 2013.



CLIFFORD C. BYRD

HEET TITLE:

EGAL DESCRIPTIONS

REVISION: 0 ATE: 08/28/2013 SHEET #: TEP #: 2 OF 2 4730

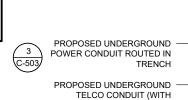
LEGAL DESCRIPTIONS

SCALE: 1" = 100'

SITE PLAN NOTES:

- THIS SITE PLAN REPRESENTS THE BEST PRESENT KNOWLEDGE AVAILABLE TO THE ENGINEER AT THE TIME OF THIS DESIGN. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION AND VERIFY ALL EXISTING CONDITIONS RELATED TO THE SCOPE OF WORK FOR THIS PROJECT.
- ICE BRIDGE, CABLE LADDER, COAX PORT, AND COAX CABLE ARE SHOWN FOR REFERENCE ONLY, CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF ALL PROPOSED AND EXISTING EQUIPMENT AND STRUCTURES DEPICTED ON THIS PLAN. BEFORE UTILIZING EXISTING CABLE SUPPORTS, COAX PORTS, INSTALLING NEW PORTS OR ANY OTHER EQUIPMENT, CONTRACTOR SHALL VERIFY ALL ASPECTS OF THE COMPONENTS MEET THE ATC SPECIFICATIONS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE AT&T MOBILITY REPRESENTATIVE AND LOCAL UTILITY COMPANY FOR THE INSTALLATION OF CONDUITS, CONDUCTORS, BREAKERS, DISCONNECTS, OR ANY OTHER EQUIPMENT REQUIRED FOR ELECTRICAL SERVICE. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE STATE AND NATIONAL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS PROJECT.

LEGEND GROUNDING TEST WELL AUTOMATIC TRANSFER SWITCH ATS **BOLLARD** CSC **CELL SITE CABINET** D DISCONNECT ELECTRICAL **FIBER** GEN GENERATOR GENERATOR RECEPTACAL HH, V HAND HOLE, VAULT ΙB ICE BRIDGE KENTROX BOX LC LIGHTING CONTROL M METER PB PULL BOX PΡ POWER POLE TELCO TRN TRANSFORMER CHAINLINK FENCE

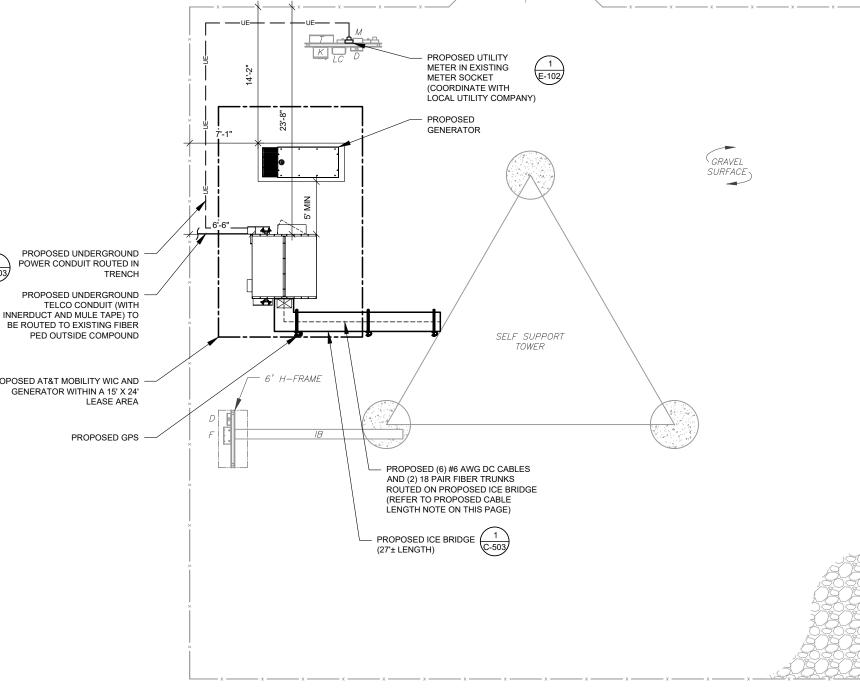


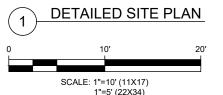


PROPOSED AT&T MOBILITY WIC AND GENERATOR WITHIN A 15' X 24'

PROPOSED CABLE LENGTH:

- ESTIMATED LENGTH OF PROPOSED CABLE IS <u>360'</u>. ESTIMATED LENGTH OF CABLE WAS PROVIDED BY CUSTOMER OR CALCULATED BY ADDING THE RAD CENTER AND THE DISTANCE FROM THE SHELTER ENTRY PLATE TO THE TOWER (ALONG THE ICE BRIDGE) AND A SAFETY FACTOR MEASUREMENT OF 15% (OF THE TWO PREVIOUS VALUES), CDS DEFER TO GREATEST CABLE LENGTH.
- ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. WHERE POSSIBLE UTILIZE EXISTING CABLE SUPPORT STRUCTURES AS PROVIDED FOR CARRIER TO ADEQUATELY SECURE CABLES. USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER. OTHERWISE, ATTACH CABLES TO HORIZONTAL OR DIAGONAL TOWER MEMBERS USING PROPOSED STAINLESS STEEL ADAPTERS (DO NOT ATTACH TO TOWER LEG).









A.T. ENGINEERING SERVICE, PLLC 3500 REGENCY PARKWAY

SUITE 100 **CARY, NC 27518** PHONE: (919) 468-0112 COA: P-1177

THE USE AND PUBLICATION OF THESE DRAWINGS SHALL BE RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY ARE PREPARED. ANY USE OR DISCLOSURE OTHER THAN THAT WHICH RELATES TO AMERICAN TOWER OR THE SPECIFIED CARRIER IS STRICTLY PROHIBITED. NEITHER THE ARCHITECT NOR THE ENGINEER WILL BE PROVIDING ON-SITE CONSTRUCTION REVIEW OF THIS PROJECT. CONTRACTOR(S) MUST VERIEV ALL DIMENSIONS AND ADVISE AMERICAN TOWER OR THE SPECIFIED CARRIER OF ANY DISCREPANCIES. ANY PRIOR ISSUANCE OF THIS DRAWING IS SUPERSEDED BY THE LATEST VERSION.

REV.	DESCRIPTION	BY	DATE
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ATC SITE NUMBER:

280848

ATC SITE NAME:

SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540





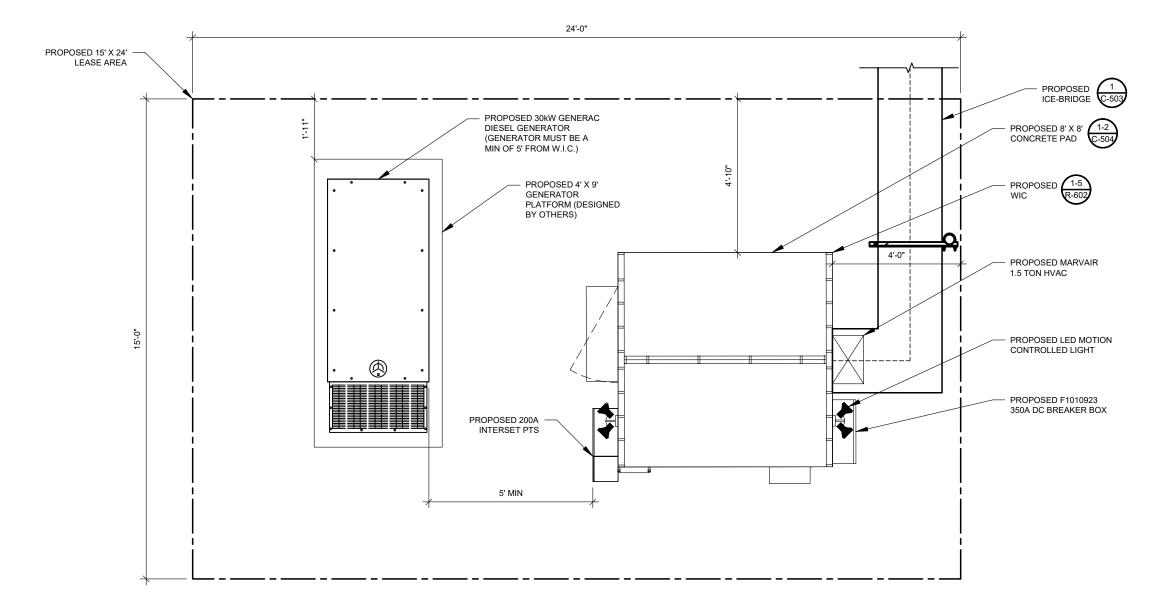
	П	DATE DRAWN:	11/24/20
	П	ATC JOB NO:	13247756_G4
	П	CUSTOMER ID:	ECL05406
	П	CUSTOMER #:	12682237

DETAILED SITE PLAN

SHEET NUMBER:

REVISION

C-101



DETAILED EQUIPMENT LAYOUT
SCALE: NOT TO SCALE



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280848

ATC SITE NAME:

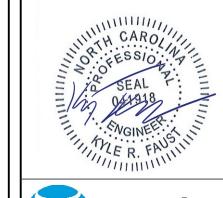
SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540

SEAL





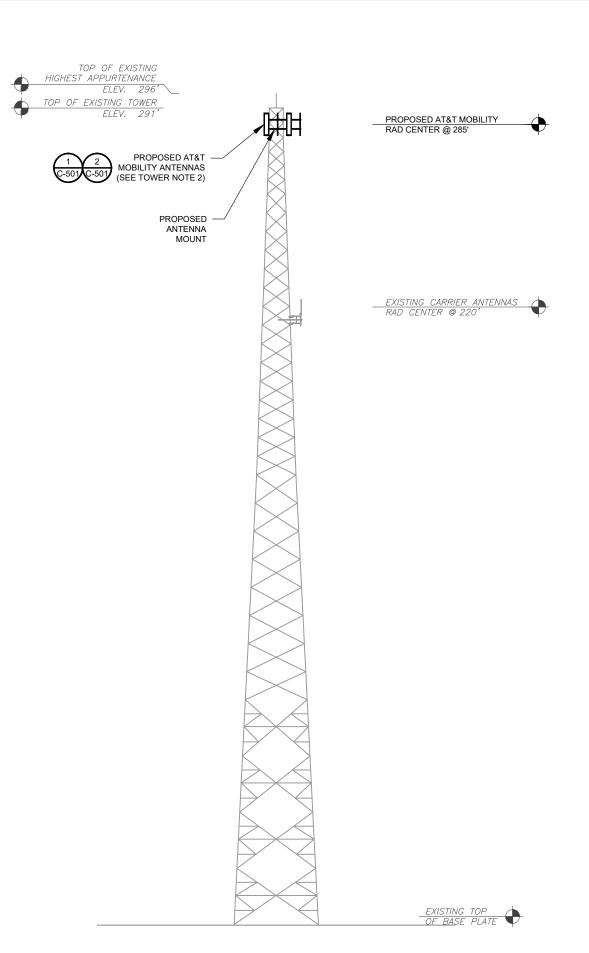
	DATE DRAWN:	11/24/20
	ATC JOB NO:	13247756_G4
	CUSTOMER ID:	ECL05406
	CUSTOMER #:	12682237

DETAILED EQUIPMENT LAYOUT

SHEET NUMBER:

REVISION:

C-102



PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED 09/30/20, THE **EXISTING MOUNT CAN ADEQUATELY SUPPORT** THE PROPOSED LOADING

- TOWER NOTE:

 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM WITH THE AMERICAN TOWER CONSTRUCTION MANAGER THAT THEY HAVE THE MOST RECENT VERSION OF THE STRUCTURAL ANALYSIS BEFORE COMMENCING WORK. EXISTING AND PROPOSED TOWER APPURTENANCES, MOUNTS, AND ANTENNAS ARE SHOWN BASED ON THE STRUCTURAL ANALYSIS.
- 2. ROUTE PROPOSED CABLES ALONG SAME PATH AS EXISTING CABLES AND IN ACCORDANCE WITH STRUCTURAL ANALYSIS. IF ADEQUATE SPACE EXISTS, ROUTE CABLES THROUGH ENTRY PORT HOLE, UP INSIDE OF MONOPOLE, AND THROUGH EXIT PORT HOLE. IF ROUTING OUTSIDE THE MONOPOLE, ATTACH CABLES USING STAND-OFF ADAPTERS MOUNTED TO TOWER USING STAINLESS STEEL BANDING, ADEQUATELY SECURE CABLES USING EITHER APPROPRIATELY SIZED STAINLESS STEEL SNAP-INS OR MOUNTING HARDWARE AND BRACKETS AS SPECIFIED BY CABLE MANUFACTURER.
- TOWER ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE TO MATCH STRUCTURAL ANALYSIS. ELEVATIONS DO NOT REFLECT TRUE ABOVE GROUND LEVEL (A.G.L.)

AMERICAN TOWER®

A.T. ENGINEERING SERVICE, PLLC

3500 REGENCY PARKWAY SUITE 100 **CARY, NC 27518** PHONE: (919) 468-0112 COA: P-1177

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ATC SITE NUMBER:

280848

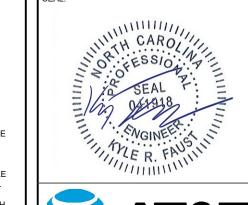
ATC SITE NAME:

SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540





DATE DRAWN:	11/24/20
ATC JOB NO:	13247756_G4
CUSTOMER ID:	ECL05406
CUSTOMER #:	12682237

DETAILED SITE PLAN & TOWER ELEVATION

SHEET NUMBER:

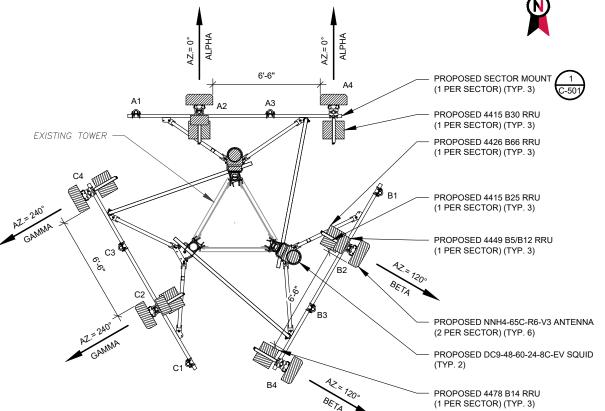
REVISION

C-201

TOWER ELEVATION SCALE: N.T.S.



PER MOUNT ANALYSIS COMPLETED BY AMERICAN TOWER CORPORATION, DATED 09/30/20, THE EXISTING MOUNT CAN ADEQUATELY SUPPORT THE PROPOSED LOADING



FINAL ANTENNA PLAN SCALE: N.T.S.

					FINAL ANTENNA SCHE	DULE					
LOCATION		ANTENNA SUMMARY NON ANTENNA SI			NON ANTENNA SUMM	ARY					
SECTOR RAD AZ		POS	ANTENNA	BAND	MECH/ELEC D-TILT	STATUS	ADDITIONAL TOWER MOUNTED EQUIPMENT	STATUS			
ALPHA			A1	-	-	-	-	-	-		
	285'	0°	A2	NNH4-65C-R6-V3	700/1900/AWS LTE	-	ADD	4449 B5/B12 4415 B25 4426 B66	ADD		
			A3	-	-	-	-	-	-		
			A4	NNH4-65C-R6-V3	700/WCS LTE	-	ADD	4478 B14 4415 B30	ADD		
	285' 120			B1	-	-	-	-	-	-	
BETA		285'	285'	85' 120°	285' 120°	B2	NNH4-65C-R6-V3	700/1900/AWS LTE	-	ADD	4449 B5/B12 4415 B25 4426 B66
			ВЗ	-	-	-	-	-	-		
			В4	NNH4-65C-R6-V3	700/WCS LTE	-	ADD	4478 B14 4415 B30	ADD - ADD - ADD		
			C1	-	-	-	-	-	-		
GAMMA	285'	240°	C2	NNH4-65C-R6-V3	NNH4-65C-R6-V3 700/1900/AWS LTE - ADD 4	4449 B5/B12 4415 B25 4426 B66	ADD				
			C3	-	-	-	-	-	-		
			C4	NNH4-65C-R6-V3	700/WCS LTE	-	ADD	4478 B14 4415 B30	ADD		

1. CONFIRM WITH AT&T MOBILITY REP FOR APPLICABLE UPDATES/REVISIONS AND MOST RECENT RFDS FOR NSN CONFIGURATION (CONFIG).

CABLE LENGTHS FOR JUMPERS FIBER DISTRIBUTION/OVP TO RRU: 15' COMBINER TO ANTENNA: 10'



ANTENNA SCHEDULE

PROPOSED FIBER DISTRIBUTION	PROPOSED CABLING SUMMARY			
MODEL NUMBER	STATUS	DC	HYBRID	STATUS
(2) DC9-48-60-24-8C-EV	ADD	(6) #6 AWG	18 PAIR	ADD
-	-	-	-	-



A.T. ENGINEERING SERVICE, PLLC 3500 REGENCY PARKWAY

SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: P-1177

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ATC SITE NUMBER:

280848

ATC SITE NAME:

SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540





П	DATE DRAWN:	11/24/20
П	ATC JOB NO:	13247756_G4
	CUSTOMER ID:	ECL05406
П	CUSTOMER #:	12682237

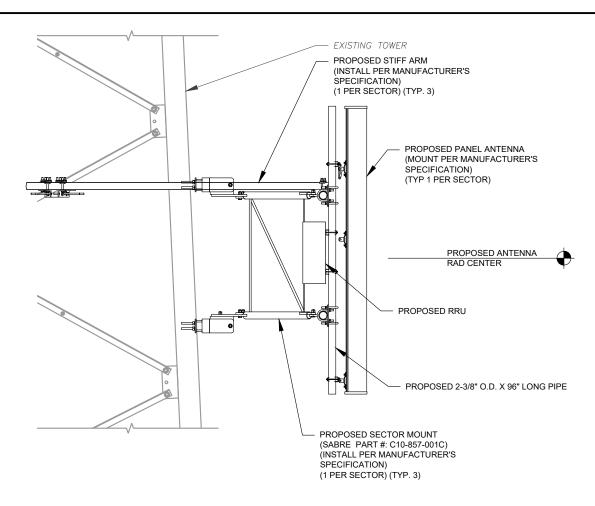
ANTENNA INFORMATION & SCHEDULE

SHEET NUMBER:

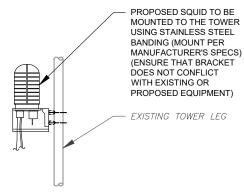
C-401

REVISION: 0

^{2.} CONFIRM SPACING OF PROPOSED EQUIP DOES NOT CAUSE TOWER CONFLICTS NOR IMPEDE TOWER CLIMBING PEGS.



PROPOSED ANTENNA MOUNTING DETAIL (ELEVATION)



PROPOSED SQUID MOUNTING



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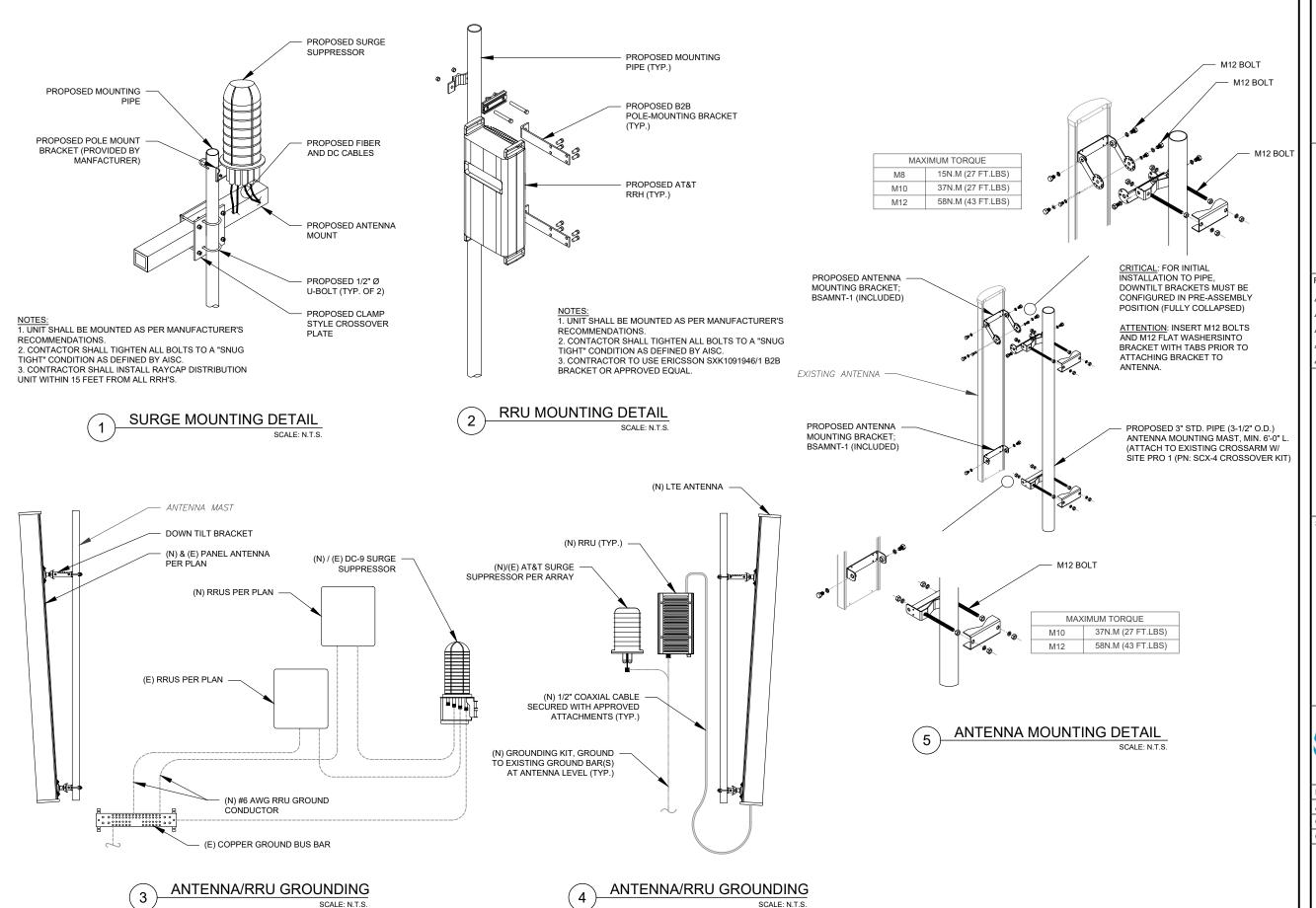
CONSTRUCTION **DETAILS**

SHEET NUMBER:

C-501

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REVISION:





AMERICAN TOWER®A.T. ENGINEERING SERVICE, PLLC

3500 REGENCY PARKWAY SUITE 100 CARY, NC 27518 PHONE: (919) 468-0112 COA: P-1177

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SEAL:





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ı	DATE DRAWN:	11/24/20
ı	ATC JOB NO:	13247756_G4
	CUSTOMER ID:	ECL05406
ı	CUSTOMER #:	12682237

CONSTRUCTION DETAILS

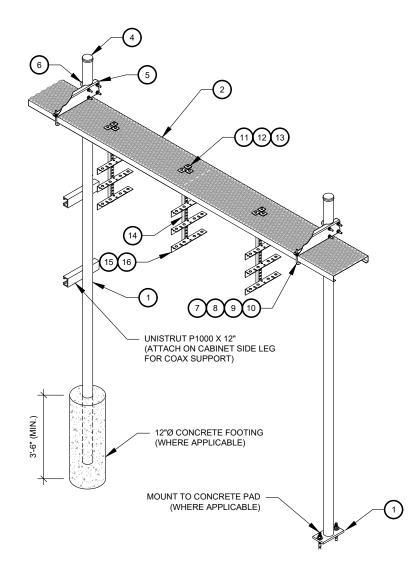
SHEET NUMBER:

C-502

REVISION

CONSTRUCTION NOTE:

 INSTALL ICE BRIDGE TO ALLOW 7 FEET CLEARANCE ABOVE GRADE TO LOWEST APPURTENANCE.

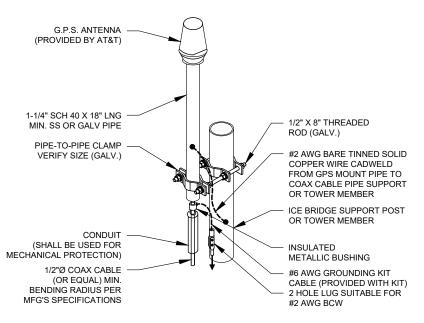


WB-K210-B WAVEGUIDE BRIDGE KIT - BILL OF MATERIALS (INCLUDED WITH KIT UNLESS NOTED OTHERWISE)							
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION		
1	MF126.01 MF-130	10'-4" COLUMN & BASE SHOE* 13'-4" PIPE COLUMN	9	GWL-04	1/2" GALV LOCK WASHER		
2	WB-CY210	SAFETY GRATING 24" X 10'	10	GN-04	1/2" GALV HEX NUT		
3	WBK110BHK	HARDWARE KIT (ITEMS 4-16)	11	GB-03205	3/8" X 2" GALV BOLT KIT		
4	PC-034	PIPE CAP 3-1/2"	12	MT-387	SQUARE WASHER, 1-1/2" X 1-1/2" W/ 7/16" HOLE		
5	WBLB243.08	24" WAVEGUIDE BRIDGE SUPPORT BRACKET	13	GWF-03	3/8" GALV FLAT WASHER		
6	GUB-4356	1/2" X 3-5/8" X 6" GALV U-BOLT	14	WBT243.01	VERTICAL TRAPEZE SECTION		
7	WB-JB-6	1/2" J-BOLT	15	GB-03105	3/8" X 1" GALV BOLT KIT		
8	GWF-04	1/2" GALV FLAT WASHER	16	WBT243.02	HORIZONTAL TRAPEZE SECTION		

CONTRACTOR SHALL USE PARTS MANUFACTURED BY COMMSCOPE OR APPROVED EQUIVALENT. *BASE SHOE NOT INCLUDED IN WB-K210-B KIT, ORDER COLUMN SEPARATELY OR KIT WB-K210-S.

WAVEGUIDE BRIDGE KIT

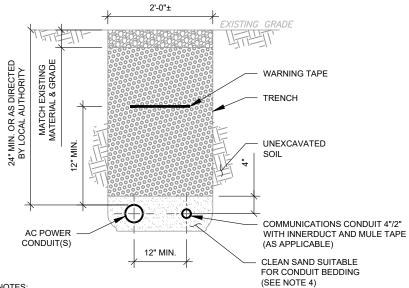
SCALE: NOT TO SCALE



NOTE

- 1. GPS SHALL BE PLACED WITH CLEAR SIGHT LINE TO THE SOUTHERN SKY.
- 2. CONTRACTOR TO SUPPLY COAX FOR GPS UNIT.





TRENCH NOTES

- IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL.
- COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR
 TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
- IF CURRENT AS-BUILT DRAWINGS ARE NOT AVAILABLE CONTRACTOR SHALL HAND DIG U/G TRENCHING.
- USE COMMUNICATIONS ONLY TRENCH FOR COMMUNICATIONS CONDUIT UNLESS TRAVELING UNDER PATH OF VEHICLE TRAVEL, THEN CONDUIT MUST BE 24" MIN. BELOW GRADE.
- 5. CONFIRM SPACING AND DEPTH WITH NEC OR LOCAL CODE REQUIREMENTS

3 POWER/TELCO CONDUIT TRENCH DETAILS

SCALE: N.T.:



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REV.	DESCRIPTION	BY	DATE
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ATC SITE NUMBER:

280848

ATC SITE NAME:

SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540

SEAL





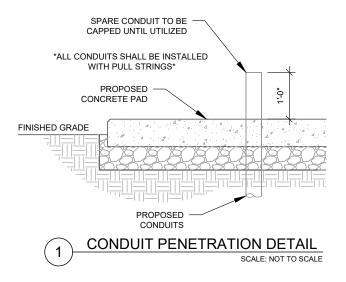
	DATE DRAWN:	11/24/20
П	ATC JOB NO:	13247756_G4
П	CUSTOMER ID:	ECL05406
П	CUSTOMER #:	12682237

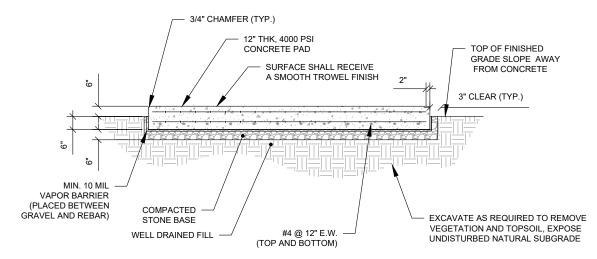
CONSTRUCTION DETAILS

SHEET NUMBER:

C-503

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2 CONCRETE PAD DETAIL

SCALE: NOT TO SCALE



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ATC SITE NAME:

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AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540

SEAL:





	DATE DRAWN:	11/24/20
	ATC JOB NO:	13247756_G4
	CUSTOMER ID:	ECL05406
	CUSTOMER #:	12682237

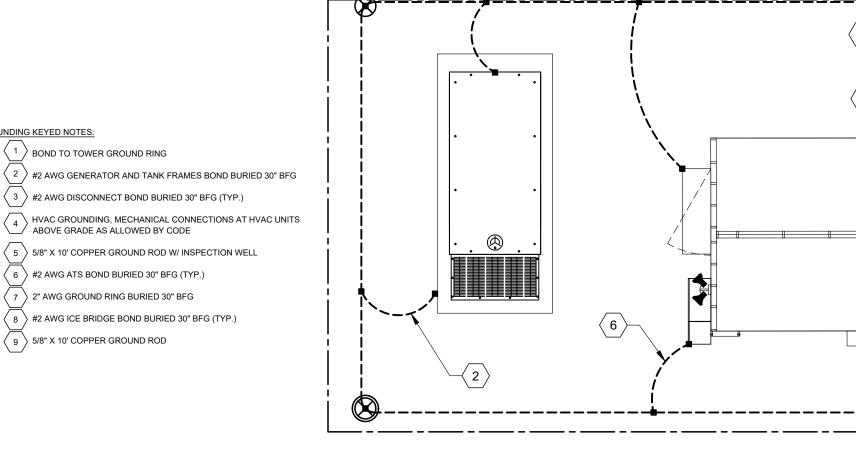
CONSTRUCTION DETAILS

SHEET NUMBER:

C-504

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REVISION:



GROUNDING KEYED NOTES:

 $\langle \ ^1 \ \rangle$ BOND TO TOWER GROUND RING

#2 AWG DISCONNECT BOND BURIED 30" BFG (TYP.)

5 > 5/8" X 10' COPPER GROUND ROD W/ INSPECTION WELL

#2 AWG ICE BRIDGE BOND BURIED 30" BFG (TYP.)

#2 AWG ATS BOND BURIED 30" BFG (TYP.)

2" AWG GROUND RING BURIED 30" BFG

5/8" X 10' COPPER GROUND ROD

DETAILED GROUNDING LAYOUT

 $\langle 9 \rangle$



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	FOR CONSTRUCTION	MG	11/24/20
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368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540





	DATE DRAWN:	11/24/20
	ATC JOB NO:	13247756_G4
	CUSTOMER ID:	ECL05406
	CUSTOMER #:	12682237

GROUNDING PLAN

SHEET NUMBER:

REVISION:

E-101

ELECTRICAL NOTES: TO UTILITY TRANSFORMER NOTE: POWER TRANSFER LOAD CENTER (PTLC) INCLUDES A CAM-LOC GENERATOR CONNECTION PANEL, AND ATS, A ALL EQUIPMENTS' SHORT-CIRCUIT CURRENT RATING SHALL MECHANICALLY INTERLOCKED TRANSFER SWITCH, A 200A 42 CIRCUIT PANEL AND SURGE SUPPRESSION. METER SOCKET WITH EXCEED AVAILABLE FAULT CURRENT PER UTILITY TENANT CIRCUIT BREAKER CONTRACTOR SHALL FURNISH AND INSTALL POWER CONDUCTORS (3#3/0, #6 G IN 2"C) FROM METER CENTER TO SHELTER. SERVICE ENTRANCE RATED. 2. CONTRACTOR TO INSTALL HANDHOLES AT EVERY 3RD 90° TURN METER WILL BE FURNISHED AND INSTALLED BY LOCAL UTILITY COMPANY. KWH CONTRACTOR SHALL PROVIDE AND INSTALL CIRCUIT BREAKER IN METER CENTER TO FEED AT&T SHELTER. CIRCUIT BREAKER SHALL BE 200A, 240V, 1PH, 3W TYP AND AIC RATING SHALL MATCH EXISTING. 200A/2P CONTRACTOR SHALL PROVIDE AND INSTALL NAMEPLATE ON METER TO INDICATE "AT&T". NAMEPLATES SHALL BE PHENOLIC, WHITE LETTERS ON BLACK BACKGROUND. SHELTER DISCONNECT IS FURNISHED WITH SHELTER. ON SITES WHERE SERVICE IS OBTAINED FROM AN EXISTING SOURCE (METER CENTER), OR SERVICE DISCONNECT IS LOCATED ON EQUIPMENT RACK, SHELTER DISCONNECT MAY BE OMITTED. BELOW GRADE PVC CONDUIT SHALL TRANSITION TO RMC PRIOR TO RISING ABOVE GRADE, ALL BENDS SHALL HAVE A MINIMUM 24" RADIUS. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. VERIFY CONDUIT TYPE WITH LOCAL CONSTRUCTION MANAGER AND ADJUST IF NECESSARY. ALL CONDUIT SHALL MEET NEC, STATE, AND LOCAL CODE REQUIREMENTS AS REQUIRED. ALL EQUIPMENT SHALL BE GROUNDED PER NEC (MIN #2 SBTC) AND AT&T STANDARDS. CR-N 200A/2P CONDUCTOR SIZES AND DISTANCES HAVE BEEN SIZED FOR 3% MAX VOLTAGE DROP. (TOTAL SYSTEM VOLTAGE DROP ON CAM-LOC CB-E1 BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST DEMAND SHALL NOT EXCEED 5%) GEN PANEL 200A/2P INTEGRATED AUTOMATIC G TRANSFER SWITCH CB-E2 CONDUIT NOTES: 200A. 2P. 240V 200A/2P (1) (3) #1/0, 1#6G - 2"C FOR POWER 1"Ø CONDUIT FOR START/STOP SIGNAL PROPOSED 1"Ø CONDUIT FOR BLOCK HEATER AND 200A/2P PROPOSED 1"Ø CONDUIT FOR BATTERY CHARGER. 20A/1F PROPOSED 1"Ø CONDUIT FOR EMERGENCY SHUT-OFF SWITCH. ้ 3 ` INTEGRATED LOAD CENTER

PANEL			TYPE:	LIC	SHTING & APPL	IANCE	_	SYSTEM	l:	_	120/240V, 3W,	42 CKT	LOCATION:	AT&T LEA	SE AREA	
DESIGNAT	ΓΙΟN:	AT&T	MOUNTI	ING:	SURFACE			MAIN BR	EAKER	(MB):	200A					
			ENCLOS	SURE			-	MAIN BU	IS RATIN	IG: -	200A		PANEL NOTES:	WIC INTEGRA	ATED PANEL	
							-	MIN. A.I.	C. RATIN	1G: _	65K		_			
CONNEC	TED			FEE	DER OR BRAN	CH CIRC	UIT			FEEDE	R OR BRANCH	CIRCUIT			CONN	ECTED
LOAD (k)	VA)	BRIEF DESCRIF	PTION	В	REAKER	POLE	CIRC.	1	CIRC.	POLE	BRE	AKER	BRIEF DE	SCRIPTION	LOAD	(kVA)
Α	В			AMPS	POLES	NO.	NOTES		NOTES	NO.	POLES	AMPS			Α	В
2.00		RECTIFIER #	44	30	2	1			•	2	1	20	EXT. GFC	OUTLETS	0.18	
:	2.00	RECTIFIER #	<i>‡</i> 1	30	2	3				4	2	30	DECTI	EIED #2		2.00
2.00		RECTIFIER #	¥3	30	2	5			•	6	2	30	RECTIFIER #2		2.00	
	2.00	TREOTH IEIC F	~	- 50		7				8	2	30	RECTI	FIER #4		2.00
2.00		RECTIFIER #	# 5	30	2	9				10			112011		2.00	
	2.00				_	11				12	2	30	RECTI	FIER #6		2.00
0.00		SPACE				13				14					2.00	_
	0.00	SPACE				15				16				ACE		0.00
0.68		SPACE				17				18			SP	ACE	0.00	
	0.00	SPACE				19				20			SP	ACE		0.00
0.00		SPACE				21				22			SP	ACE	0.00	
	0.00	SPACE				23				24			SP	ACE		0.00
3.50		1.5 TON AC U	NUT	20	2	25				26			SP	ACE	0.00	
:	3.50	1.5 TON AC U	INIT	20	4	27				28	1	20	GFI RECE	PT / LIGHT		0.70
0.48		FIBER BOX OU	TLET	20	1	29				30	1	20	GEN BLO	CK HEATER	1.92	

40

42

CONNECTED LOAD (kVA)

36.9 DEMAND LOAD (kVA)

TOTAL

36.9

SPACE

SPACE

SPACE

SPACE

SPACE

0.00

0.00

0.00

10.7 9.5

1. ALL CONDUCTORS ARE TYPE THWN (75°C) COPPER.

18.8 18.1

33

2. MAXIMUM LENGTH OF RUN FOR RECTIFIER CIRCUITS IS 50 FT.

18.1

PANEL SCHEDULE



OUTLINE OF "WIC" SHELTER

0.00

0.00

8.1 8.6

195 AMPS

0.00

0.00

BATTERY CHARGER

SPACE

SPACE

SPACE

SPACE

DERATING FACTOR (80%)

DEMANDLOAD SIZING:



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ATC SITE NUMBER:

280848

ATC SITE NAME:

SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540

AT&T 30KW AC GENERATOR WITH

150A/2P MAIN CIRCUIT BREAKER

BATTERY CHARGER

EMERGENCY SHUT-OFF SWITCH





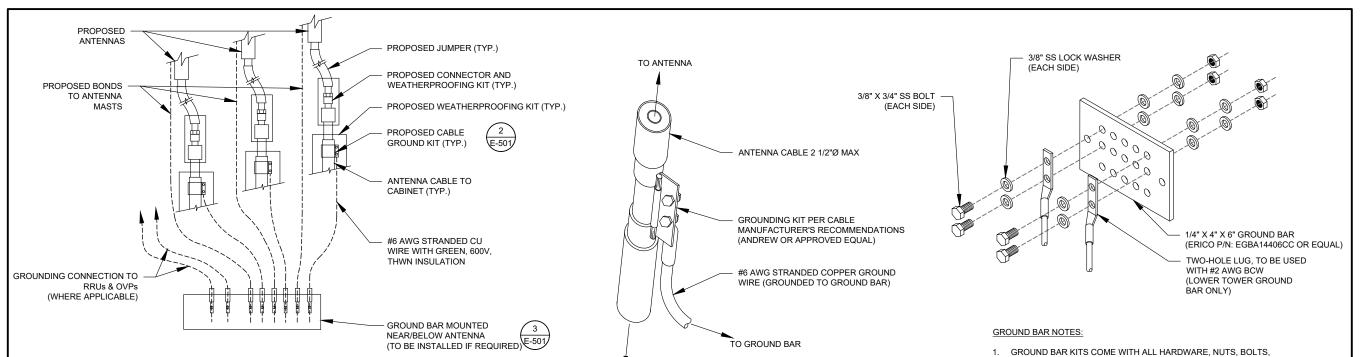
П	DATE DRAWN:	11/24/20
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П	CUSTOMER ID:	ECL05406
П	CUSTOMER #:	12682237

ELECTRICAL ONE-LINE & PANEL SCHEDULE

SHEET NUMBER:

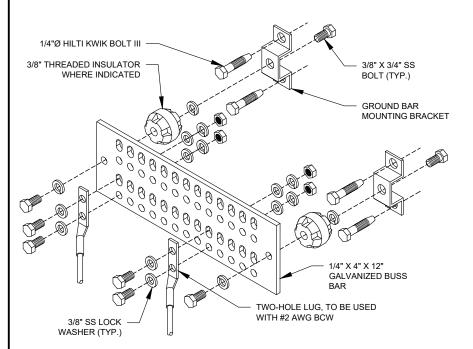
E-102

REVISION 0



- 1. THIS DETAIL IS INTENDED TO SHOW THE GENERAL GROUNDING REQUIREMENTS. SLIGHT ADJUSTMENTS MAY BE REQUIRED BASED ON EXISTING SITE CONDITIONS. THE CONTRACTOR SHALL MAKE FIELD ADJUSTMENTS AS NEEDED AND INFORM THE CONSTRUCTION MANAGER OF ANY CONFLICTS.
- 2. SITE GROUNDING SHALL COMPLY WITH AT&T GROUNDING STANDARDS, LATEST EDITION AND COMPLY WITH AT&T GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

TYPICAL ANTENNA GROUNDING DIAGRAM



GROUND BAR NOTES

- GROUND KITS COME WITH ALL HARDWARE, NUTS, BOLTS, WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).
- 2. GROUND BAR SHALL BE BOLTED TO STRUCTURAL MEMBER OR ANCHORED TO CONCRETE SLAB W/ HILTI KWIK BOLT III.

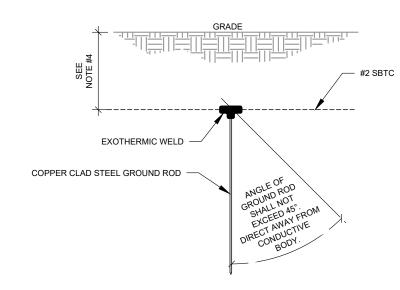
TO EQUIPMENT

- GROUND KIT NOTES:

 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- 2. CONTRACTOR SHALL PROVIDE WEATHERPROOFING KIT (ANDREW PART NUMBER 221213) AND INSTALL/TAPE PER MANUFACTURER'S SPECIFICATIONS

CABLE GROUND KIT CONNECTION DETAIL

- SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY COMPANY
- 2. COORDINATE UTILITY, LOCATE BEFORE DIGGING.
- CONDUIT TRENCHING DEPTHS AT 36" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.
- ALL RING AND RADIAL DEPTHS AT 30" OR 6" BELOW FROST LINE, WHICHEVER IS GREATER.



EXOTHERMIC WELD (THERMOWELD OR EQUIVALENT) PÀRALLEL, NO T-WELDS ALLOWED (NO SLAG OR DEFORMITIES ALLOWED) JUMPER, #2 SBTC GROUNDING EXTERIOR GROUND RING CONDUCTOR #2 SBTC GROUNDING CONDUCTOR

WASHERS, ETC. EXCEPT THE STRUCTURAL MOUNTING MEMBER(S).

TOWER GROUND BAR DETAIL

2. GROUND BAR TO BE BONDED DIRECTLY TO TOWER.

GROUND ROD DETAIL

TIE CONNECTION DETAIL



SUITE 100

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COA: P-1177

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FOR CONSTRUCTION	MG	11/24/20

ATC SITE NUMBER:

280848

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SHOEHORN NC

AT&T MOBILITY SITE NAME:

368-540

SITE ADDRESS: 9316 NC 42 HOLLY SPRINGS, NC 27540

WGINER SALL



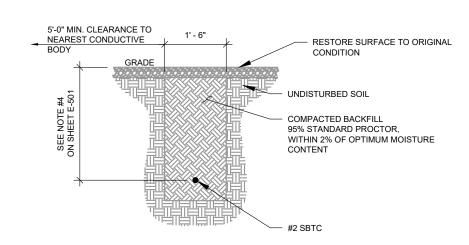
DATE DRAWN:	11/24/20
ATC JOB NO:	13247756_G4
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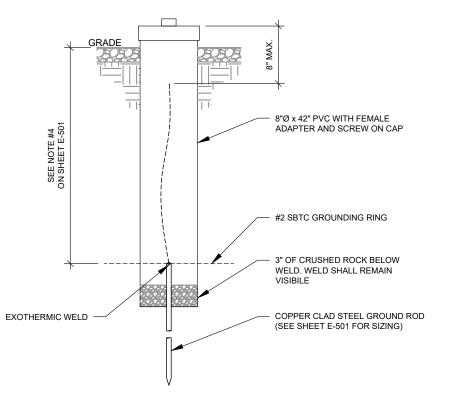
GROUNDING DETAILS

SHEET NUMBER: E-501

REVISION

MAIN GROUND BAR DETAIL SCALE: NOT TO SCALE





1 GROUND CONNECTION TRENCH DETAIL (STD.)

SCALE: NOT TO SCALE

2 TEST WELL DETAIL
SCALE: NOT TO SCALE



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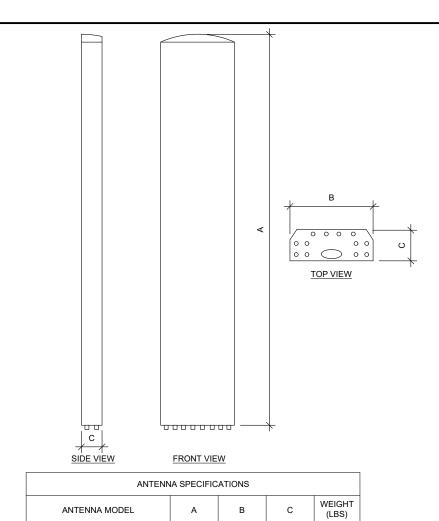
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GROUNDING DETAILS

SHEET NUMBER:

REVISION:

E-502



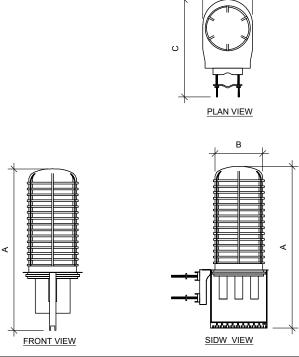
	С		В			
	SIDW VIEW	·	FRONT	VIEW	·	
RRU SPECIFICATIONS						
	RRU MODEL	А	В	С	WEIGHT (LBS)	
	4449 B5/B12	17.9"	13.2"	9.4"	71.0	
	4415 B25	16.5"	13.4"	5.9"	46.0	
	4426 B66	15.0"	13.2"	5.8"	48.4"	
	4478 B14	16.5"	13.4"	7.7"	59.9	

TOP VIEW

ERICSSON

13.4"

46.0



RAYCAP SPECIFICATIONS							
RAYCAP MODEL	А	В	С	WEIGHT (LBS)			
DC9-48-60-24-8C-EV	31.4"	18.3"	10.2"	16.0			

1	ANTENNA SPECIFICATIONS
	NOT TO SCALE

19.6"

7.8"

102.5

NNH4-65C-R6-V3



4415 B30

RAYCAP SPECIFICATIONS

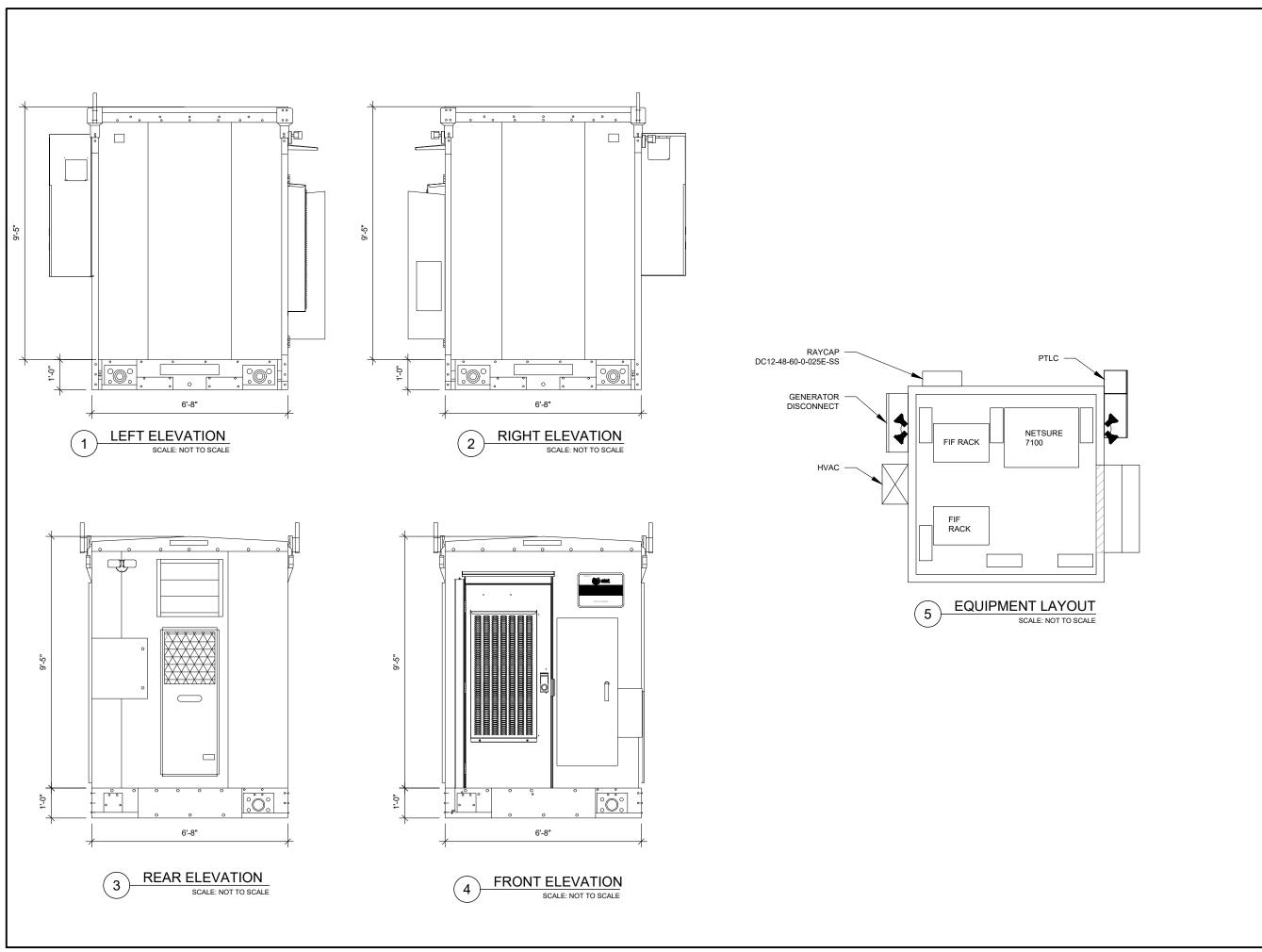
NOT TO SCALE

SUPPLEMENTAL

SHEET NUMBER:

r: REVISION:

R-601



SUPPLEMENTAL SHEET NUMBER: REVISION: R-602 0



Antenna Mount Analysis Report

ATC Site Name : SHOEHORN NC, NC

ATC Site Number : 280848

: 13247756_C8_01 Engineering Number

: 285 ft Mount Elevation

Carrier : AT&T Mobility

Carrier Site Name : MRCAR033520

: 368-540 **Carrier Site Number**

Site Location : 9316 NC 42

Holly Springs, NC 27540-7706

Reviewed By:

35.558333, -78.915586

County : Harnett

: September 30, 2020 Date

Max Usage : 50%

Result : Pass

Prepared By:

Lyle Morin

Structural Engineer

The mi



Authorized by "EOR" 30 Sep 2020 11:47:36 cosign

COA: P-1177

A.T. Engineering Service, PLLC - 3500 Regency Parkway, Suite 100 - Cary, NC 27518 - 919.468.0112 Office - 919.466.5414 Fax - www.americantower.com



Eng. Number 13247756_C8_01 September 30, 2020 Page 1

Introduction

The purpose of this report is to summarize results of the antenna mount analysis performed for AT&T

Supporting Documents

Specifications Sheet	Sabre C10857001C, dated December 22, 2015
Radio Frequency Data Sheet	RFDS ID #368-540, dated June 10, 2020

Analysis

This antenna mount was analyzed using American Tower Corporation's Mount Analysis Program and RISA-3D

Basic Wind Speed:	116 mph (3-Second Gust)
Basic Wind Speed w/ Ice:	30 mph (3-Second Gust) w/ 1 1/2" radial ice concurrent
Codes:	ANSI/TIA-222-H
Exposure Category:	В
Risk Category:	II
Topographic Factor Procedure:	Method 2
Feature:	Flat
Crest Height (H):	0 ft
Crest Length (L):	0 ft
Spectral Response:	Ss = 0.13, S1 = 0.064
Site Class:	D - Stiff Soil
Live Loads:	Lm = 500 lbs, Lv = 250 lbs

Conclusion

Based on the analysis results, the antenna mount meets the requirements per the applicable codes listed above. The mount can support the equipment as described in this report.

- Analysis is based on new Sabre C10857001C Sector Frame

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.

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SUPPLEMENTAL

SHEET NUMBER:

REVISION:

R-603

MOUNT ANALYSIS

WITHOUT EDIT. PLEASE REFERENCE THE MOUNT ANALYSIS REPORT FOR COMPLETE MOUNT ANALYSIS CALCULATIONS AND DETAILS. SUPPLEMENTAL PAGES INCLUDED IN THE CONSTRUCTION DRAWINGS ARE FOR REFERENCE ONLY. GENERAL CONTRACTOR IS TO VERIFY THEY HAVE THE MOST RECENT MOUNT ANALYSIS PRIOR TO CONSTRUCTION.

NOTE: THIS SHEET WAS CREATED BY OTHERS AND PROVIDED AT THE REQUEST OF THE CUSTOMER

