

7645 BARRANCAS AVE BOKEELIA, FL 33922

COUNTY: LEE

GEOGRAPHIC COORDINATES:

LATITUDE: 26.693027 LONGITUDE: -82.151578 GROUND ELEVATION: 4' AMSL

ZONING INFORMATION:

JURISDICTION: LEE

APN: 31-43-22-00-00012.004H

ZONING CODE: AG-2

SKYWAY TOWERS SITE NUMBER:

FL-01052

SKYWAY TOWERS SITE NAME:

BOKEELIA N

SITE ADDRESS 7645 BARRANCAS AVE BOKEELIA, FL 33922





SKYWAY TOWERS SITE NUMBER: FL-01052

BIRMINGHAM, AL 35244 TEL: 205-252-6985 www.smweng.c

SKYWAY TOWERS SITE NAME:

BOKEELIA N SITE ADDRESS

7645 BARRANCAS AVE BOKEELIA, FL 33922

	1001155 505		
	ISSUED FOR:		
REV	DESCRIPTION	BY	DATE
Α	PRELIM	KMM	01/17/25

SEAL:

PRELIMINARY DRAWING

(NOT VALID UNLESS STAMPED AND SIGNED)

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TITLE SHEET

T-1

PROJECT NOTES **VICINITY MAP LOCATION MAP** SHEET INDEX REV SHEET NO DESCRIPTION: THE FACILITY IS UNMANNED. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A T-1 TITLE SHEET MONTH FOR ROUTINE INSPECTION AND MAINTENANCE. 3 THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND T-2 CONSTRUCTION NOTES DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE. SURVEY NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED. C-1 PARCEL PLAN Α 5. HANDICAP ACCESS IS NOT REQUIRED. C-2 AERIAL PLAN Α C-3 PROPOSED SITE PLAN Α C-4 TOWER ELEVATION D-1 **DETAILS** Α SITE LOCATION > DETAILS Α E-1 ELECTRICAL NOTES & ONE-LINE DIAGRAM - METER CENTER ONLY Α E-2 OVERALL UTILITY SITE PLAN Α UTILITY COMPANY POWER DESIGN E-3 Α **UTILITY COMPANIES** DETAILS E-4 Α E-5 DETAIL Α POWER COMPANY: TBD PROPOSED COMPOUND GROUNDING PLAN PHONE: TBD G-1 GROUNDING DETAILS TELEPHONE COMPANY: TBD G-2 Α PHONE: TBD G-3 **GROUNDING DETAILS** Α PROJECT SUMMARY PROJECT DESCRIPTION PROJECT LOCATION DIRECTIONS FROM ORLANDO, FL SITE ADDRESS: INSTALL 150' MONOPOLE TOWER, (1) 5' LIGHTNING ROD. INSTALL METER BANK AND TAKE FL-884 / COLONIAL BLVD WEST.KEEP STRAIGHT TO GET ONTO VETERANS MEMORIAL PKWY / COUNTY HWY-884 KEEP STRAIGHT TO GET ONTO VETERANS SKYWAY TOWERS EQUIPMENT PER PLAN.

ENGINEER:

JEREMY SHARIT

jsharit@smweng.com

SMW ENGINEERING GROUP INC.

158 BUSINESS CENTER DR.

BIRMINGHAM, AL. 35242

COMPLIANCE CODE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE

WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE

2023 FLORIDA BUILDING CODE, ENERGY CONSERVATION, 8TH EDITION (IECC 2021 W/ AWND) 2023 FLORIDA FIRE PREVENTION CODE, 8TH EDITION (NFPA 1, 2021 W/ AMND) 2023 FLORIDA BUILDING CODE, EXISTING BUILDING, 8TH EDITION (IEBC 2021 W/

2023 FLORIDA BUILDING CODE, FUEL GAS, 8TH EDITION (IFGC 2018 W/ AMND)

LOCAL GOVERNMENT AUTHORITIES. NOTHING IN THESE PLANS IS TO BE

CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

NATIONAL ELECTRICAL CODE (NFPA 70, NEC 2020)

AMND) 8TH ED (2023) FLORIDA BUILDING CODE

MEMORIAL PKWY / COUNTY HWY-884. TURN LEFT ONTO FL-78 / SW PINE ISLAND RD.

BEAR RIGHT ONTO PINE ISLAND RD NW BEAR RIGHT ONTO STRINGFELLOW RD / COUNTY HWY-767. TURN LEFT ONTO BARRANCAS AVE. ARRIVE AT BARRANCAS AVE.
ON THE LEFT, THE LAST INTERSECTION BEFORE YOUR DESTINATION IS

STRINGFELLOW RD / COUNTY HWY-767. IF YOU REACH QUAIL TRAIL, YOU'VE GONE

TOO FAR. 7645 BARRANCAS AVE, BOKEELIA, FL 33922

PROJECT TEAM

APPLICANT:

SKYWARD TOWERS, LLC

3637 MADACA LANE

TAMPA, FL 33618

PROPERTY OWNER: MPW PINE ISLAND LLC

5017 TAMPA W BLVD

TAMPA FL 33634

GENERAL CONSTRUCTION NOTES:

- OWNER FURNISHED MATERIALS, VERIZON "THE COMPANY" WILL PROVIDE AND THE
- BTS EQUIPMENT FRAME (PLATFORM) AND ICEBRIDGE SHELTER (GROUND
 - BUILD/CO-LOCATE ONLY) AC/TELCO INTERFACE BOX (PPC)
 - ICE BRIDGE (CABLE TRAY WITH COVER) (GROUND BUILD/CO-LOCATE ONLY, GC TO FURNISH AND INSTALL FOR ROOFTOP INSTALLATION)
 - TOWERS, MONOPOLES
 - TOWER LIGHTING
 - GENERATORS & LIQUID PROPANE TANK
 - ANTENNA STANDARD BRACKETS, FRAMES AND PIPES FOR MOUNTING
 - ANTENNAS (INSTALLED BY OTHERS)
 - TRANSMISSION LINE
 - TRANSMISSION LINE JUMPERS
 - TRANSMISSION LINE CONNECTORS WITH WEATHERPROOFING KITS
 - TRANSMISSION LINE GROUND KITS

 - HOISTING GRIPS
 - BTS EQUIPMENT
- 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 ROD(S), BUSS BARS, TRANSFORMERS AND DISCONNECT SWITCHES WHERE APPLICABLE, TEMPORARY ELECTRICAL POWER, CONDUIT, LANDSCAPING COMPOUND STONE, CRANES, CORE DRILLING, 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 VERIZON TO APPLY FOR PERMITTING AND CONTRACTOR RESPONSIBLE FOR PICKUP AND PAYMENT OF REQUIRED
- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL STATE, AND LOCAL CODES, INCLUDING ANSI/EIA/TIA-222, AND COMPLY WITH CITY SWITCH CONSTRUCT
- CONTRACTOR SHALL CONTACT LOCAL 811 FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED
- 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.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS
- 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
- CONTRACTOR SHALL DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC, BEFORE COMMENCING WORK,
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISEITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE VERIZON REP PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE VERIZON, REP PRIOR TO PROCEEDING
- EACH CONTRACTOR SHALL COOPERATE WITH THE VERIZON REP, AND COORDINATE HIS
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION. OF THE VERIZON 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 VERIZON REP AND ENGINEER OF RECO
- AND CURRENT SET OF DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT
- CONTRACTOR SHALL REMOVE ALL RUBBISH AND DEBRIS FROM THE SITE AT THE END OF
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH CITY SWITCH AND TAKE PRECAUTIONS TO MINIMIZE IMPACT AND DISRUPTION OF OTHER OCCUPANTS OF THE
- CONTRACTOR SHALL FURNISH VERIZON AND CITY SWITCH WITH A PDF MARKED UP AS-BUILT SET OF DRAWINGS UPON COMPLETION OF WORK.
- PRIOR TO SUBMISSION OF BID. CONTRACTOR SHALL COORDINATE WITH VERIZON, 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

- 22. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH SKYWAY TOWERS REP TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY CONTRACTOR. ALL REQUIRED PERMITS NOT OBTAINED BY SKYWAY TOWERS MUST BE OBTAINED, AND PAID FOR, BY THE CONTRACTOR
- 23. CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH SKYWAY
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO SKYWAY TOWERS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND LOCATED ACCORDING TO SKYWAY TOWERS SPECIFICATIONS, AND AS SHOWN IN THESE PLANS.
- 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.
- CONTRACTOR SHALL NOTIFY SKYWAY TOWERS 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 AND APPROVAL
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE WITH ENGINEER, AND SKYWAY TOWERS PROJECT MANAGER IN WRITING 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.
- 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 R THE WORK OF ANY OTHER CONTRACTOR, SHALL BE REPAIRED AT HIS EXPENSE TO THE OWNER'S SATISFACTION
- 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 SKYWAY TOWERS REP. ANY WORK FOUND BY THE SKYWAY TOWERS 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 SKYWAY TOWERS FURNISHED FOUIPMENT SHALL BE PICKED-LIP AT THE SKYWAY TOWERS 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.
- SKYWAY TOWERS OR HIS ARCHITECT/ENGINEER RESERVES THE RIGHT TO REJECT ANY EQLIPMENT 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 SKYWAY TOWERS OR THEIR

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
- 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
- ASTM A-36 ALL OTHER ROLLED SHAPES, PLATES AND BARS UNLESS NOTED
- 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 CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A COMPLETE FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
 - ALL FIELD CUT SURFACES, FIELD DRILLED HOLES AND GROUND SURFACES WHERE EXISTING PAINT OR GALVANIZATION REMOVAL WAS REQUIRED SHALL BE REPAIRED WITH (2) USHED 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

 - 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
 - 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

- INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR
- 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
- ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNLESS NOTED OTHERWISE
- MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS. UNLESS NOTED OTHERWISE
- PRIOR TO FIFLD WELDING GALVANIZING MATERIAL CONTRACTOR SHALL GRIND OFF GAL VANIZING 1/4" 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.
- 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

CONCRETE AND REINFORCING STEEL NOTES:

- DESIGN AND CONSTRUCTION OF ALL CONCRETE FLEMENTS 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 SKYWAY TOWERS 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 4500 PSI UNLESS OTHERWISE NOTED.
- 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

ASTM C 94/C 94M WATER: WELDED WIRE FABRIC: ASTM A185

ADMIXTURES

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

-RETARDING:

ASTM C 260/C 260M ASTM C494. TYPE F OR TYPE G 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 CITY SWITCH ENGINEER WHEN DRILLING HOLES IN CONCRETE.
- ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED
- 9. 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."
- 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).
- ALL SLAB CONSTRUCTION SHALL BE CAST MONOLITHICALLY WITHOUT HORIZONTAL CONSTRUCTION JOINTS, UNLESS SHOWN IN THE CONTRACT DRAWINGS
- 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
- 19. 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.
- 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"

ELECTRICAL NOTES:

- 1. ELECTRICAL WORK SHALL BE PERFORMED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL ENSURE THAT ALL WORK COMPLIES WITH ALL APPLICABLE LOCAL AND STATE CODES AND NATIONAL ELECTRICAL CODE.
- ALL SUGGESTED ELECTRICAL ELEMENTS (SUCH AS BREAKER SIZES, WIRE SIZES, CONDUITS SIZES) ARE FOR ZONING 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 CITY SWITCH. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- CONTRACTOR SHALL FIELD LOCATE ALL BELOW GRADE GROUNDING CABLES AND UTILITY LINES PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RELOCATION OF ALL UTILITIES AND GROUNDING LINES THAT MAY BECOME DISTURBED OR CONFLICTING IN THE

SKYWAY TOWERS



158 BUSINESS CENTER DRIVE

BIRMINGHAM, AL 35244 TEL: 205-252-6985 www.smweng.co

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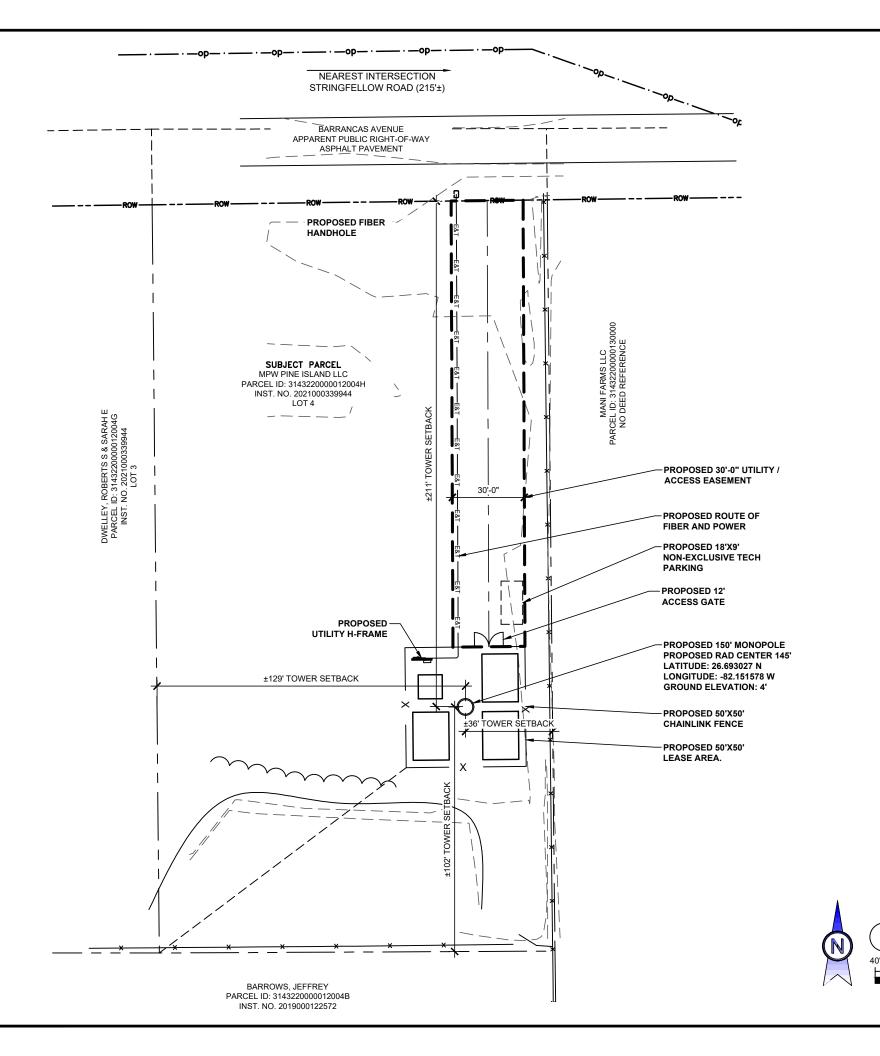
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CONSTRUCTION NOTES

SHEET NUMBER

T-2

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



SUBJECT PROPERTY IS LOCATED IN PANEL #12071C0210G, DATED 11/17/2022 AND IS IN THE BASE FLOOD ZONE "AE" AND IS IN A FLOOD ZONE. PER FEMA, THE BFE IS 7" AMSL

LATITUDE: 26.693027° NORTH LONGITUDE: -82.151578° WEST COORDINATES FROM 1-A CERTIFICATION DATED: FEBRUARY 17, 2023

NOTES:

- CONTRACTOR IS SOLELY RESPONSIBLE TO LOCATE ALL EXISTING UNDERGROUND UTILITIES. NO EXISTING UTILITIES OR GROUNDING SHALL BE DISTURBED WITHOUT THE WRITTEN APPROVAL OF SKYWAY TOWER CONSTRUCTION MANAGER.
- AFTER INSTALLATION OF ALL GROUNDING, UTILITY WORK, WAVEGUIDE SUPPORTS AND FOUNDATIONS IS COMPLETE, THEN ALL DISTURBED AREAS SHALL BE COVERED WITH MIRAFI 500X FABRIC AND CRUSHED STONE MATCHING THE EXISTING COMPOUND SURFACE. MINIMUM STONE THICKNESS SHALL BE 4". (SEE DETAIL B/C3)
- ALL MATERIAL USED FOR FILL WITHIN THE COMPOUND AREA SHALL BE APPROVED BY THE OWNER'S MATERIALS LABORATORY. APPROVED MATERIAL USED AS FILL SHALL BE PLACED IN HORIZONTAL LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF NINE (9) INCHES. EACH LIFT SHALL BE COMPACTED TO MAXIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION PROCEDURES (ASTM D 1557). ADDITIONALLY. COMPACTION TESTS SHALL BE TAKEN ON EVERY OTHER LIFT.
- 4. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL EROSION CONTROL MEASURES.

CONTRACTOR NOTES:

PARCEL PLAN

SCALE: 1"=20' (22X34) 1"=40' (11X17)

- ALL TREES WITHIN THE CONSTRUCTION ENVELOPE TO BE REMOVED AND DISPOSED OF PROPERLY.
- 2. INSTALL BIRD DIVERTERS ON GUY WIRES (TYPICAL ALL GUY WIRES)

CONTRACTOR TO VERIFY ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIAL OR DOING ANY WORK

THIS DRAWING 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.





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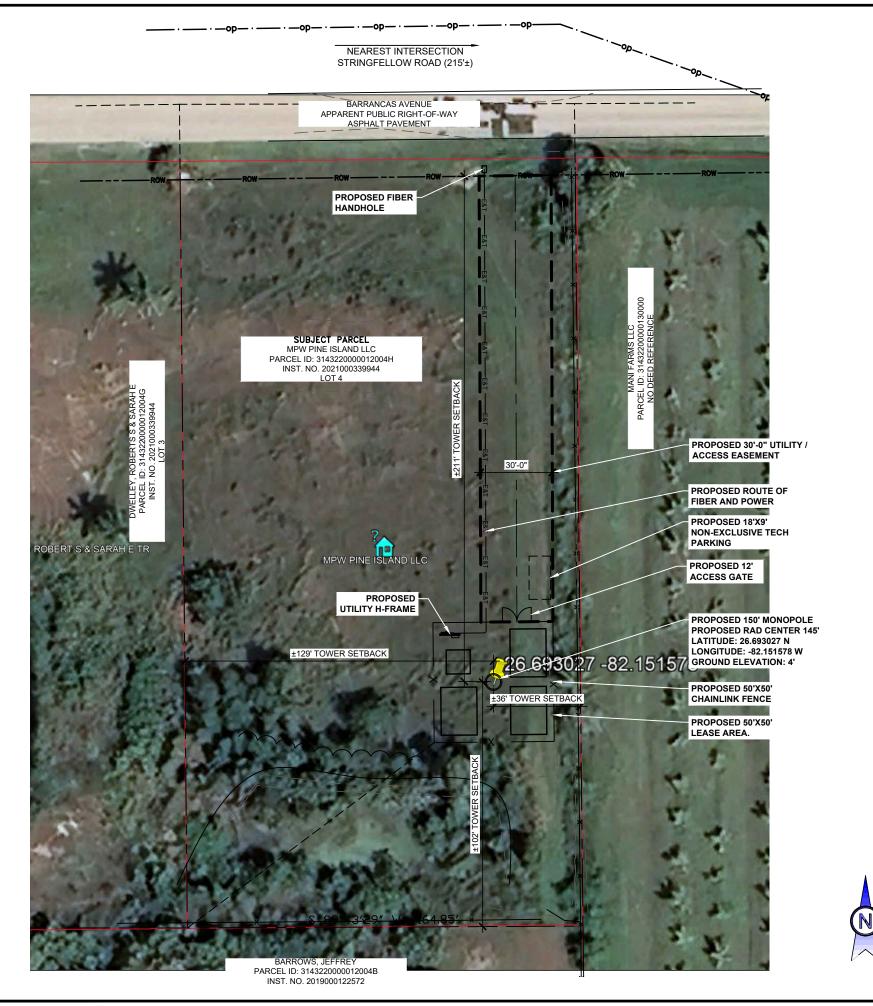
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NOTES:

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 GROUNDING SHALL BE DISTURBED
 WITHOUT THE WRITTEN APPROVAL OF
 SKYWAY TOWER CONSTRUCTION
 MANAGER.
- AFTER INSTALLATION OF ALL GROUNDING, UTILITY WORK, WAVEGUIDE SUPPORTS AND FOUNDATIONS IS COMPLETE, THEN ALL DISTURBED AREAS SHALL BE COVERED WITH MIRAFI 500X FABRIC AND CRUSHED STONE MATCHING THE EXISTING COMPOUND SURFACE. MINIMUM STONE THICKNESS SHALL BE 4". (SEE DETAIL B/C3)
- ALL MATERIAL USED FOR FILL WITHIN THE COMPOUND AREA SHALL BE APPROVED BY THE OWNER'S MATERIALS LABORATORY. APPROVED MATERIAL USED AS FILL SHALL BE PLACED IN HORIZONTAL LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF NINE (9) INCHES. EACH LIFT SHALL BE COMPACTED TO MAXIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION PROCEDURES (ASTM D 1557). ADDITIONALLY. COMPACTION TESTS SHALL BE TAKEN ON EVERY OTHER LIFT.
- 4. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL EROSION CONTROL MEASURES.

CONTRACTOR NOTES:

- ALL TREES WITHIN THE CONSTRUCTION ENVELOPE TO BE REMOVED AND DISPOSED OF PROPERLY.
- 2. INSTALL BIRD DIVERTERS ON GUY WIRES (TYPICAL ALL GUY WIRES)

CONTRACTOR TO VERIFY ALL MEASUREMENTS AT THE SITE BEFORE ORDERING MATERIAL OR DOING ANY WORK

THIS DRAWING 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.





158 BUSINESS CENTER DRIVE BIRMINGHAM, AL 35244 TEL: 205-252-6985 www.smweng.com

SKYWAY TOWERS SITE NUMBER:

FL-01052

SKYWAY TOWERS SITE NAME: BOKEELIA N

SITE ADDRESS 7645 BARRANCAS AVE BOKEELIA, FL 33922

	ISSUED FOR:		
REV	DESCRIPTION	BY	DATE
Α	PRELIM	КММ	01/17/25

SEAL:

PRELIMINARY DRAWING

(NOT VALID UNLESS STAMPED AND SIGNED)

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AERIAL PLAN

SHEET NUMBER:

C-2

AERIAL PLAN

40' 20' 0 40

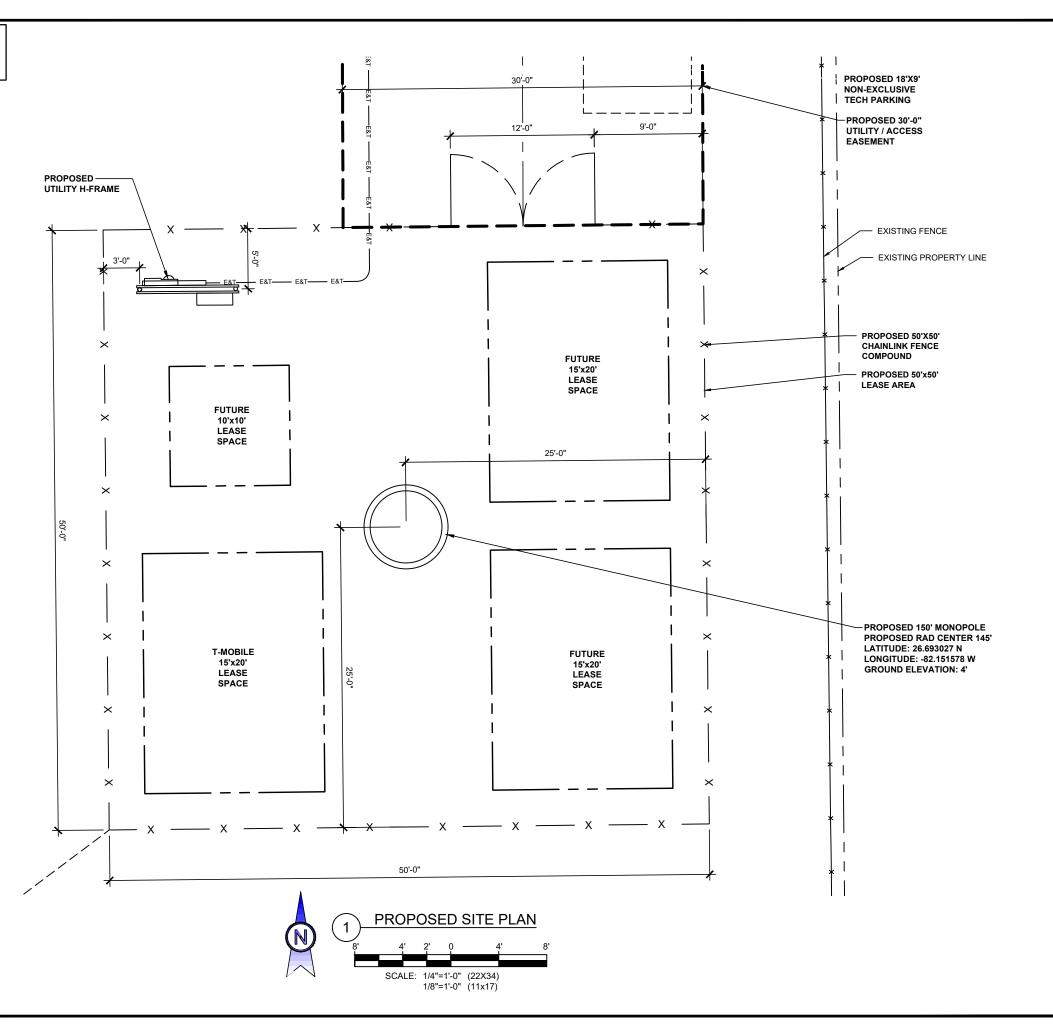
SCALE: 1"=20' (22X34)
1"=40' (11X17)

SUBJECT PROPERTY IS LOCATED IN PANEL #12071C0210G, DATED 11/17/2022 AND IS IN THE BASE FLOOD ZONE "AE" AND IS IN A FLOOD ZONE. PER FEMA, THE BFE IS 7" AMSL

LATITUDE: 26.693027° NORTH LONGITUDE: -82.151578° WEST COORDINATES FROM 1-A CERTIFICATION DATED: FEBRUARY 17, 2023

CONTRACTOR NOTES:

1. CONTRACTOR IS TO APPLY FOR AN ACCESS DRIVEWAY PERMIT PRIOR TO CONSTRUCTION.







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	ISSUED FOR:		
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SEAL:

PRELIMINARY DRAWING

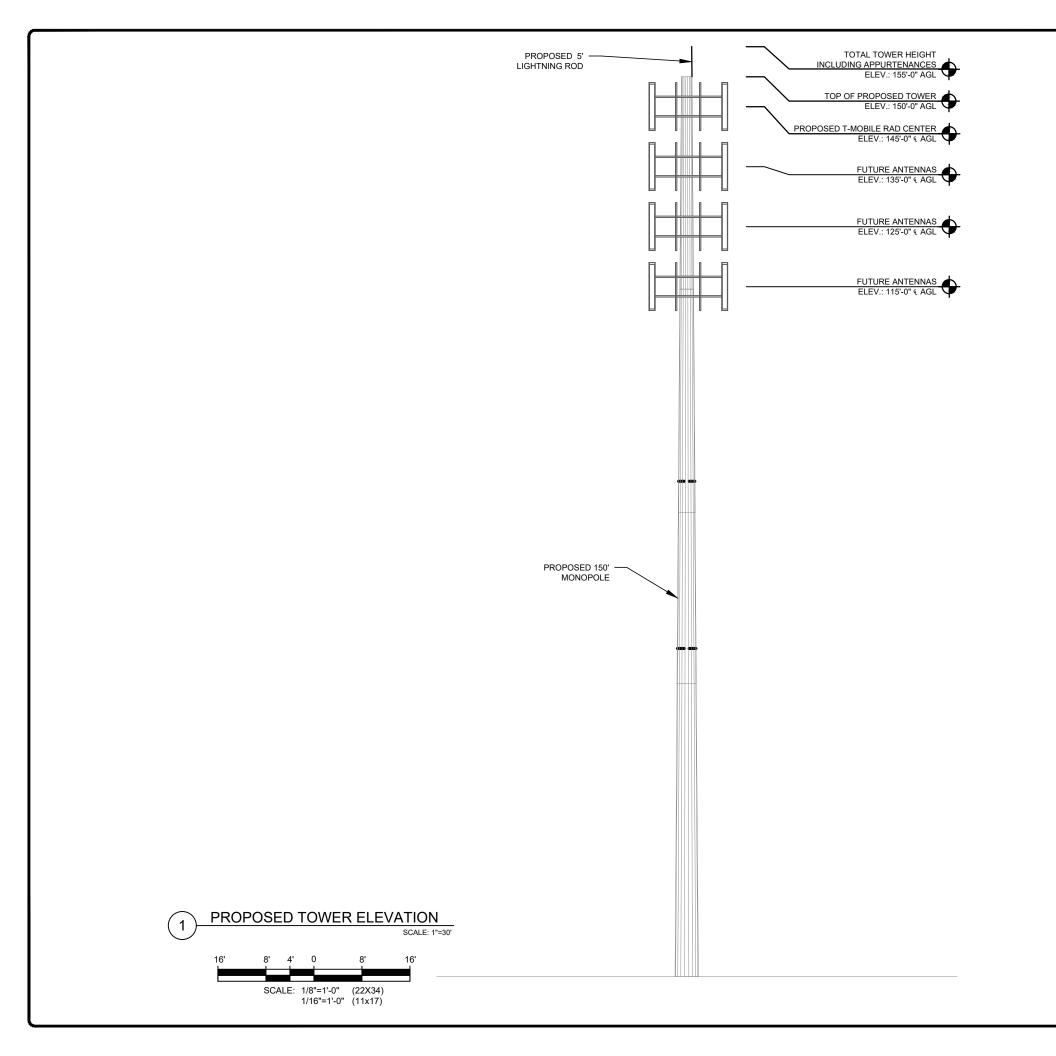
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PROPOSED SITE PLAN

SHEET NUMBER

C-3







158 BUSINESS CENTER DRIVE

BIRMINGHAM, AL 35244
TEL: 205-252-6985 www.smweng.com

SKYWAY TOWERS SITE NUMBER:

FL-01052 SKYWAY TOWERS SITE NAME:

BOKEELIA N SITE ADDRESS 7645 BARRANCAS AVE BOKEELIA, FL 33922

	ISSUED FOR:		
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CEAL

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TOWER ELEVATION

SHEET NUMBER:

C-4

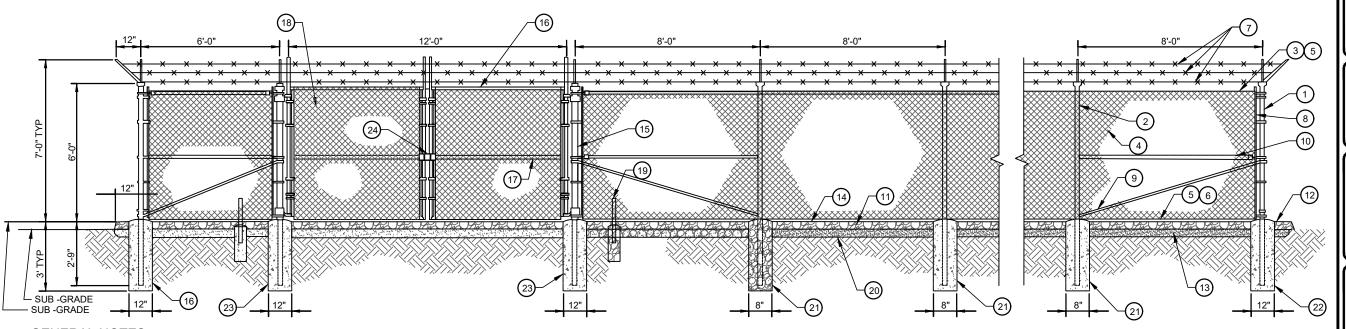
TOWER NOTES

- FOR DETAILED TOWER INFORMATION REFER
 TO TOWER ERECTION DRAWINGS BY
 OTHERS. THE TOWER ON THIS SHEET IS
 SHOWN FOR GENERAL CONFIGURATION
 PURPOSES ONLY.
- VERIFY ANTENNA HEIGHT, DOWN TILT, AND AZIMUTH WITH PROJECT MANAGER PRIOR TO CONSTRUCTION.
- TO CONSTRUCTION.
 3. ANTENNA CONFIGURATION IS SUBJECT TO CHANGE.

NOTE:

PRIOR TO ANY CONSTRUCTION
VERIFY ALL DATA & ANTENNA
ORIENTATION. CONTRACTOR IS
SOLELY RESPONSIBLE FOR PROPER
LOCATION & ORIENTATION.

STRUCTURE SHOWN IS SCHEMATIC IN NATURE ONLY. THE CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION MANAGER FOR FINAL STRUCTURE DESIGN AND SPECIFICATIONS.



SKYWAY TOWERS



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Α	PRELIM	KMM	01/17/25
			J

SEAL:

PRELIMINARY DRAWING

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DETAILS

SHEET NUMBER

D-1

GENERAL NOTES:

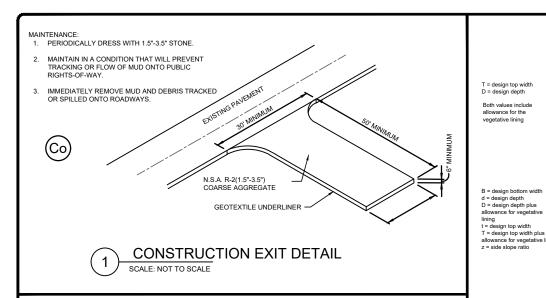
- 1. INSTALL FENCING PER ASTM F-567
- 2. INSTALL SWING GATES PER ASTM-900
- 3. LOCAL ORDINANCE OF BARBED WIRE PERMIT REQUIREMENT SHALL BE COMPLIED IF REQUIRED
- 4. POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS. ALL PIPE TO BE 1 1/2" GALV. (HOT DIP, ASTM A120 GRADE "A" STEEL) ALL GATE FRAMES SHALL BE WELDED, ALL WELDING SHALL BE COATED WITH (3) COATS OF COLD GALV, (OR EQUAL)
- 5. ALL OPEN POSTS SHALL HAVE END-CAPS
- 6. USE GALVANIZED HOG-RING WORE TO MOUNT ALL SIGNS
- 7. ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC
- 8. USE COMMERCIAL GRADE MATERIALS ONLY

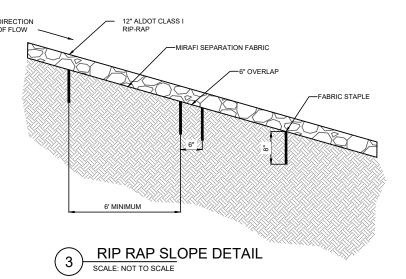
REFERENCE NOTES:

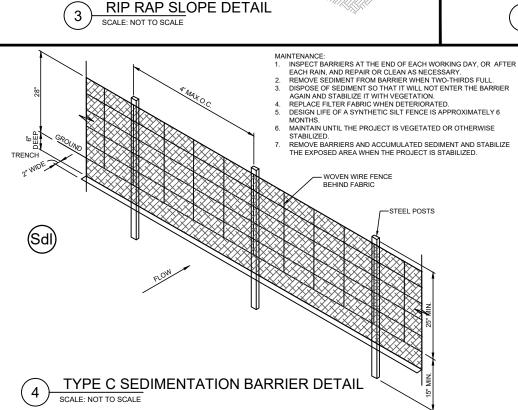
- CORNER END OR PULL POST 3" NOMINAL SCHEDULE 40
- 2 LINE POST: 2 1/2"SCHEDULE 40 PIPE, PER ASTM-F1083. LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 8'-0" O.C.
- (3) TOP RAIL & BRACE RAIL: 1 1/2" PIPE, PER ASTM-F1083
- 4 FABRIC" 9GA CORE WIRE SIZE 2' MESH, CONFORMING TO
- (5) TIE WIRE: MINIMUM II GA GALVANIZED STEEL AT POSTS AND RAILS A SINGLE WRAP OF FABRIC TIE END AT TENSIONS WIRE BU HOG RINGS SPACED AX. AT 24" O.C.
- (6) TENSION WIRE: 9GA GALVANIZE STEEL
- 7 BARBED WIRE: DOUBLE STRAND 12 1/2" OD TWISTED WIRE TO MATCH WITH FABRIC 14GA, 4PT. BARBS SPACE ON APPROX.5" CENTERS
- (8) STRETCHER BAR
- 9 3/8" DIAGONAL ROD WITH GALVANIZED STEEL TURNBUCKLE OR DIAGONAL THREADED ROD
- (10) FENCE CORNER POST BRACE: 1 5/8" DIAZ. EACH CORNER EACH WAY
- (11) 1 1/2" MAXIMUM CLEARANCE FROM GRADE

- (12) 2" FINISH OR AS DETERMINED BY CONSTRUCTION MANAGER DURING BID WALK
- 4" COMPACTED 95% BASE MATERIAL OR AS DETERMINED BY CONSTRUCTION MANAGER DURING BID WALK.
- 14) FINISH GRADE SHALL BE UNIFORM AND LEVEL
- (15) GATE POST 4" SCHEDULE 40 PIPE. FOR GATE WIDTHS UP THRU 7 FEET OR 4 FEET FOR DOUBLE SWING GATE, PER ASTM-F1083
- (16) GATE FRAME: 1 1/2" PIPE, PER ASTM-F1083
- (17) GATE FRAME: 1 5/8" PIPE, PER ASTM-F1083
- (18) GATE DIAGONAL GALVANIZED STEEL 1 1/2" PIPE
- DUCK BILL OPEN GATE HOLDER. VERIFY LOCATION IN FIELD PRIOR TO INSTALLATION
- (20) GEOMETRIES FABRIC
- (21) LINE POST: CONCRETE FOUNDATION (2000 PSI)
- (22) CORNER POST: CONCRETE FOUNDATION (2000 PSI
- GATE POST" CONCRETE FOUNDATION (2000 PSI)
- (24) STYMIE LOCK OR EQUIVALENT

CHAINLINK FENCE DETAILS

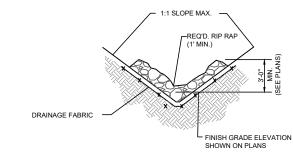






- 0.5T - 0.75T -- Transzoidal Cross-Section D = design deptin plus allowance for vegetative lining t = design top width T = design top width plus allowance for vegetative lining z = side slope ratio Triangular Cross-Section

> **GRASS-LINED DITCH DETAIL** SCALE: NOT TO SCALE



d=design depth
D = design depth plus

TYPICAL RIP RAP DITCH DETAIL

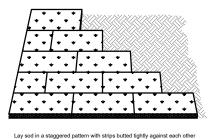
CONSTRUCTION EXIT - TO REDUCE OR ELIMINATE THE TRANSPORT OF MUD FROM THE CONSTRUCTION AREA ONTO PUBLIC RIGHT-OF-WAYS, STREETS, ALLEYS, SIDEWALKS, OR PARKING AREAS

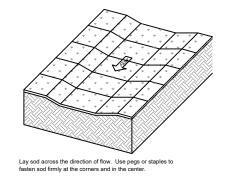
TYPE C SEDIMENT BARRIER - TO PREVENT ANY SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE & ENTERING NATURAL DRAINAGE AREAS OR STORM DRAINAGE SYSTEMS.

DISTURBED AREA STABILIZATION (TEMPORARY) - TO ESTABLISH A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDS ON DISTURBED AREAS.

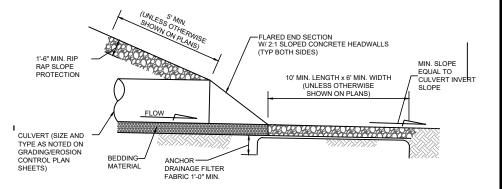
DISTURBED AREA STABILIZATION (PERMANENT) - TO ESTABLISH A PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD, OR LEGUMES ON

DISTURBED AREA DUST CONTROL - TO CONTROL THE SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITES, ROADWAYS, AND SIMILAR SITES.

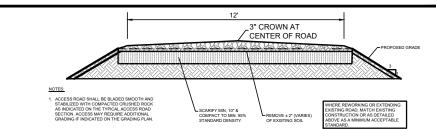




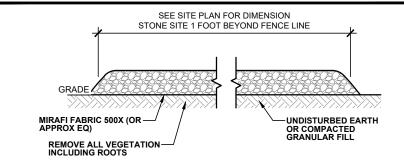




TYPICAL CULVERT OUTFALL DETAIL IF REQUIRED.



TYPICAL SECTION ACCESS ROAD



PROPOSED EQUIPMENT AREA INSIDE THE FENCED COMPOUND SHALL BE SURFACED AS FOLLOWS:

• 6" BASE ROCK AND 4" OF 1/2" TO 3/4" CHICO STONE COMPACTED

MIRAFI 500X (OR EQUIVALENT) GEOFABRIC

SITE COMPOUND DETAIL SCALE: NOT TO SCALE



ENGINEERING GROUP, INC. eterr planning a better to

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SKYWAY TOWERS SITE NUMBER: FL-01052

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ISSUED FOR: DESCRIPTION BY DATE KMM 01/17/25 PRELIM

SEAL:

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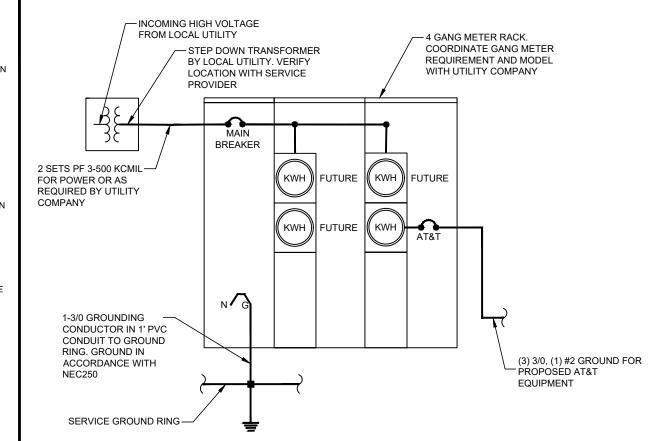
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DETAIL

D-2

ELECTRICAL INSTALLATION NOTES

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- 2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- 3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA
- 4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- 5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- 6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
- 7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR CAPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- 8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LARELS
- 9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED. LINI ESS OTHERWISE SPECIFIED.
- 11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 ° C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- 13. ALL POWER AND POWER GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75 ° C (90 ° C IF AVAILABLE).
- 14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- 16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- 17. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- 18. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- 19. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 20. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- 21. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 22. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- 23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS
- 24. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 25. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.
- 28. THE SUBCONTRACTOR SHALL LABEL THE METER BASE PER LOCAL UTILITY REQUIREMENTS.







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ELECTRICAL NOTES & ONE LINE DIAGRAM

SHEET NUMBER:

E-'



PROVIDE PULLSTRING IN ALL EMPTY CONDUITS.

ELECTRICAL KEY NOTES

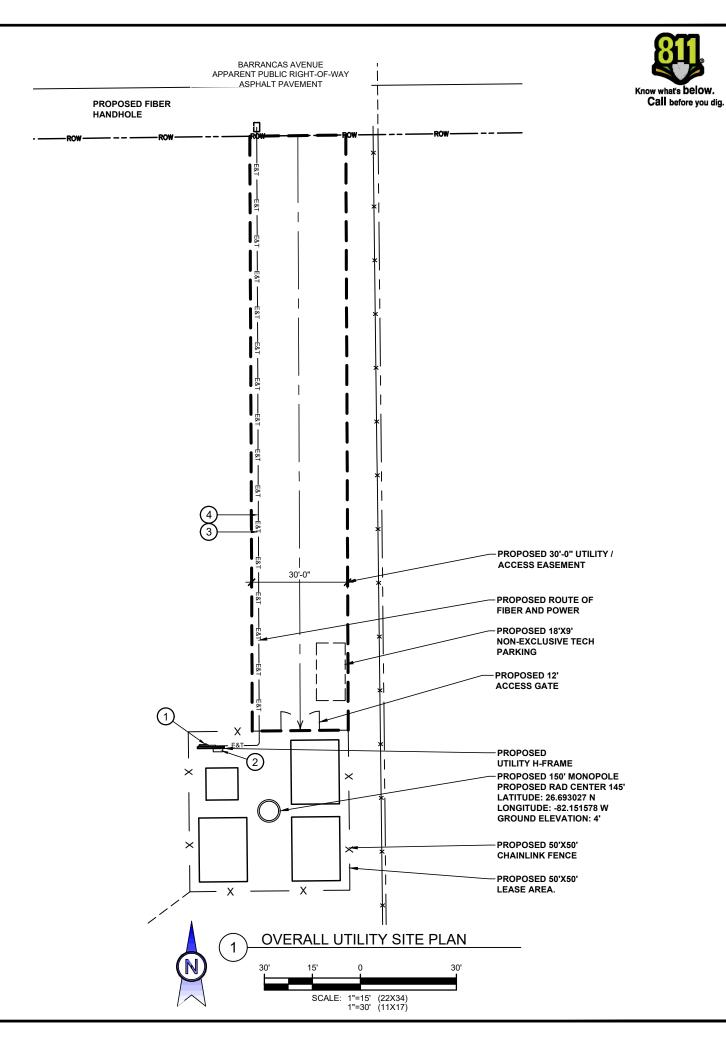
- PROPOSED 4 GANG METER PANEL. SEE SHEET E-5 FOR MOUNTING DETAILS. SEE SHEET E-2 FOR ELECTRICAL ONE-LINE DIAGRAM ELECTRICAL KEY NOTES
- PROPOSED COMMUNITY TELCO BOX WITH GROUND BAR, 4'X4' BACK BOARD, AND DUPLEX RECEPTACLE 15AMP 120V
- PROPOSED (1) 3" PVC CONDUIT FOR POWER SERVICE FROM PROPOSED. HANDHOLE TO PROPOSED METER MOUNTED TO PROPOSED COMMUNITY H-FRAME. SEE POWER DESIGN SHEET C-3 FOR WIRE SIZE
- PROPOSED (1) 4" PVC CONDUIT W/ 3 INNERDUCTS FOR TELCO SERVICE FROM PROPOSED HANDHOLE. TO PROPOSED CABINET MOUNTED TO PROPOSED COMMUNITY H-FRAME.

GENERAL NOTES:

- ELECTRICAL CONTRACTOR MUST COORDINATE NEW POWER SERVICE WITH AT&T CM AND UTILITY PROVIDER. ROUTING, SIZES AND INSTALLATION REQUIREMENTS AS REQUIRED BY UTILITY PROVIDER
- 2. VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. HAND EXCAVATE AROUND EXISTING UNDERGROUND UTILITIES.
- 3. REFER TO DELTA DRAWINGS AND SPECIFICATIONS FOR CONFIGURATION OF EQUIPMENT INSIDE WUC.

THE ELECTRICAL CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT INFORMATION ON EXACT LOCATIONS OF UNDERGROUND SERVICES. INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO AT&T WIRELESS.

FIBER ROUTE TO BE DETERMINED AT LATER DATE, UTILIZING NEARBY FIBER MEET-ME-POINTS.









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158 BUSINESS CENTER DRIVE

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OVERALL UTILITY SITE PLAN

SHEET NUMBER:

E-2

UTILITY COORDINATION TO BE PROVIDED

UTILITY COMPANY POWER DESIGN





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UTILITY COMPANY POWER DESIGN

SHEET NUMBER:

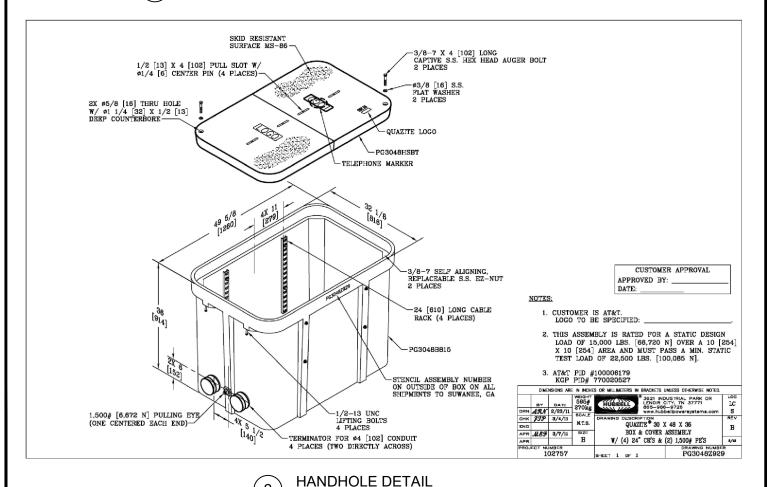
E-3

THE ELECTRICAL CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT INFORMATION ON EXACT LOCATIONS OF UNDERGROUND SERVICES. INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO AT&T WIRELESS.

TRENCH NOTES:

- IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL. IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL.
- 2. 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.
- 4. 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

POWER/TELCO CONDUIT TRENCH DETAILS SCALE: NOT TO SCALE



SCALE: NOT TO SCALE





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FL-01052

SKYWAY TOWERS SITE NAME: BOKEELIA N

SITE ADDRESS 7645 BARRANCAS AVE BOKEELIA, FL 33922

	ISSUED FOR:		
REV	DESCRIPTION	BY	DATE
Α	PRELIM	KMM	01/17/25

SEAL:

PRELIMINARY DRAWING

(NOT VALID UNLESS STAMPED AND SIGNED)

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DETAILS

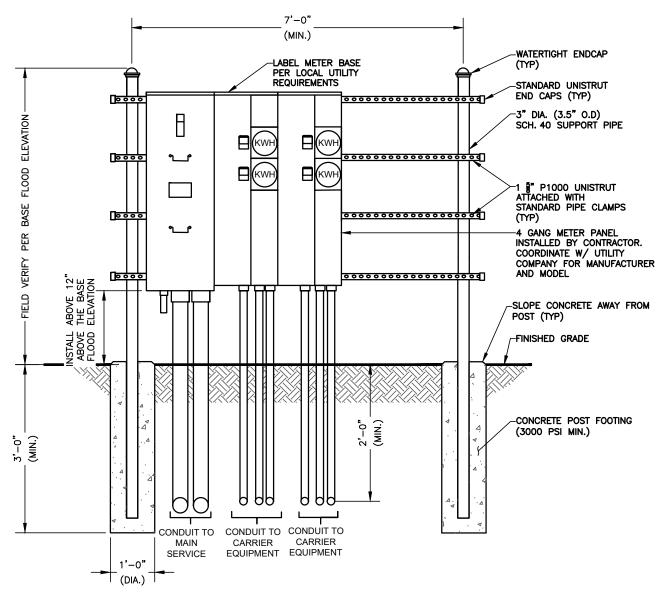
SHEET NUMBER:

E-4

NOTES:

- CONTRACTOR SHALL FIELD LOCATE THE METER PEDESTAL AS SHOWN ON SITE PLAN.
 INSTALL THE METER PEDESTAL NEAR THE PERIMETER OF THE FENCED COMPOUND WITH THE METERS FACING AS SHOWN.
- 2. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY FOR THE CONDUIT RUN TO THE MAIN SERVICE CONNECTION OR TRANSFORMER.
- 3. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANY FOR GROUND ROD REQUIREMENTS. IF REQUIRED, THE CONTRACTOR SHALL ORDER AND PAY FOR NECESSARY GROUND TESTS.
- 4. SUPPORT POST AND UNISTRUT SHALL BE GALVANIZED. PIPE CLAMPS AND HARDWARE SHALL BE GALVANIZED OR STAINLESS STEEL.
- 5. TELCO CABINET SHALL BE 48"x48"x12" HOFFMAN OR EQUIVALENT. PROVIDE 3/4" PLYWOOD BACKBOARD INSIDE THE MULTI-TENANT TELCO CABINET.
- ADJUSTMENTS TO THE METER PEDESTAL DESIGN MAY BE REQUIRED DEPENDING ON THE EXACT METER PANEL INSTALLED. CONTRACTOR SHALL FIELD COORDINATE ADJUSTMENTS AND INFORM THE ENGINEER IF ANY UNUSUAL CONDITIONS ARE FOUND TO EXIST.

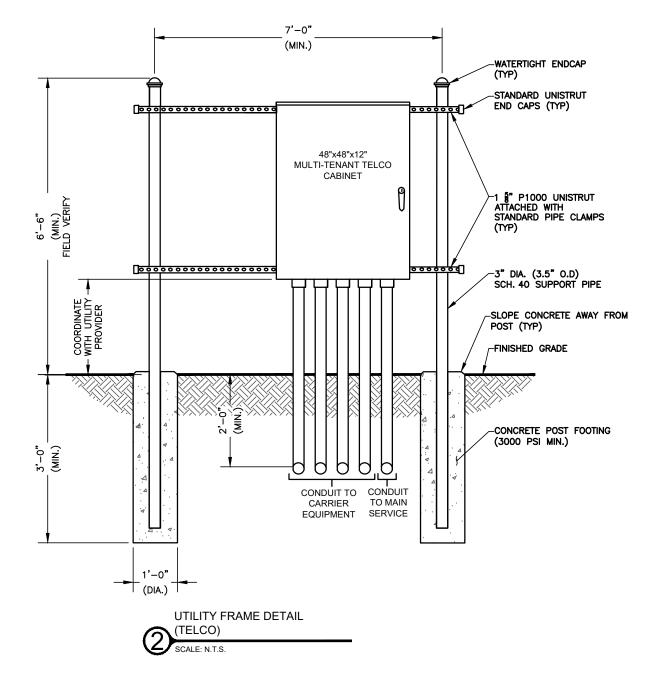
SUBJECT PROPERTY IS LOCATED IN PANEL #12071C0210G, DATED 11/17/2022 IN THE BASE FLOOD ZONE "AE" AND IS IN A SPECIAL FLOOD HAZARD AREA.



UTILITY FRAME DETAIL (GANG METER)
SCALE: N.T.S.

STEEL NOTES:

- ALL STEEL ITEMS SHALL BE HOT-DIP GALVANIZED IN CONFORMANCE WITH ASTM A153
- 2. SPRAY ALL WELDS WITH Z.R.C. (ZINC RICH PAINT)
- ALL STEEL CONNECTIONS SHALL BE "STANDARD CONNECTIONS" UNLESS OTHERWISE INDICATED.







BIRMINGHAM, AL 35244 TEL: 205-252-6985 www.smweng.com

158 BUSINESS CENTER DRIVE

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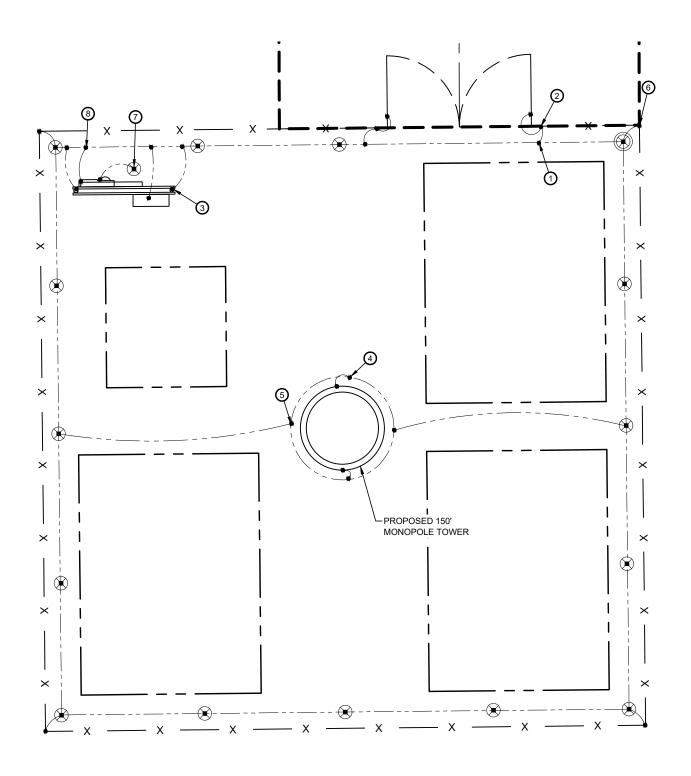
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DETAILS

SHEET NUMBER

E-5



GROUNDING KEYED NOTES:

- (1) #2 AWG BARE TINNED SOLID COPPER GROUND RING BURIED 30" BELOW GRADE (TYP)
- ② BOND FENCE & GATE POSTS TO GROUND RING WITH CADWELD CONNECTION (TYP)
- (3) BOND ALL H-FRAME POSTS TO GROUND RING
- BOND TOWER BASE PLATE TO TOWER GROUND RING PER TOWER
 OWNER SPECIFICATIONS
- #2 AWG COPPER GROUND WIRE TO TOWER GROUND RING (TYP x2)
- (6) BOND PROPOSED GROUND RING TO FENCE
 - SERVICE ENTRANCE GROUND ROD.
- BOND EQUIPMENT H-FRAME POST TO GROUND RING. (TYP.)





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PROPOSED COMPOUND GROUNDING PLAN

SHEET NUMBER:

G-1

GROUND ROD WITH ACCESS

GROUND ROD

EXOTHERMIC CONNECTION

MECHANICAL CONNECTION

R-56 GROUNDING NOTE:

AND BEST PRACTICES.

GROUNDING SYMBOLS LEGEND

CONTRACTOR TO VERIFY THAT ALL PROPOSED EQUIPMENT TO COMPLY WITH R56 GROUNDING STANDARDS

▲ COMPRESSION CONNECTION

GROUND BAR

GROUND WIRE
TINNED COPPE

TINNED COPPER GROUND BAR 1/4"X4"X12" OR 1/4"X4"X20"

CGB COLLECTOR GROUND BAR

MGB MAIN GROUND BAR

PROPOSED COMPOUND GROUNDING PLAN

20' 10' 0 20'

SCALE: 1"=10' (22X34)
1"=20' (11X17)

GROUNDING NOTES:

- 1. GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL
- 2. ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR
- 3. ALL WIRES SHALL BE AWG THHN/THWN COPPER UNLESS NOTED OTHERWISE.
- 4. GROUNDING CONNECTIONS TO GROUND RODS, GROUND RING WIRE, TOWER BASE AND FENCE POSTS SHALL BE EXOTHERMIC ("CADWELDS") UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL. WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES, SPRAY CADWELD WITH
- 5. GROUNDING CONNECTIONS TO GROUND BARS ARE TO BE TWO-HOLE BRASS. MECHANICAL CONNECTORS WITH STAINLESS STEEL HARDWARE (INCLUDING SCREW SET) CLEAN GROUND BAR TO SHINY METAL. AFTER MECHANICAL CONNECTION, TREAT WITH PROTECTIVE ANTIOXIDANT COATING.
- 6. GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURER'S
- . ROUTE GROUNDING CONDUCTORS THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 12" RADIUS
- 8. INSTALL #2 AWG GREEN-INSULATED STRANDED WIRE FOR ABOVE GRADE GROUNDING AND #2 BARE TINNED COPPER WIRE FOR BELOW GRADE GROUNDING UNLESS OTHERWISE NOTED.
- REFER TO GROUNDING PLAN FOR GROUND BAR LOCATIONS. GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE ("CADWELDS") TO ANTENNA MOUNTS AND GROUND RING REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO-HOLE LUGS.
- 10 THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF DRIVEN GROUND RODS POSITION ACCORDING TO GROUNDING PLAN. THE GROUND RODS SHALL BE 5/8"X10'-0" COPPER CLAD STEEL INTERCONNECTED WITH #2 BARE TINNED COPPER WIRE BURIED 36 ELOW GRADE. BURY GROUND RODS A MAXIMUM OF 15' APART, AND
- 11.IF ROCK IS ENCOUNTERED GROUND RODS SHALL BE PLACED AT AN OBLIQUE ANGLE NOT TO EXCEED 45°
- 12.EXOTHERMIC WELDS SHALL BE MADE IN ACCORDANCE WITH ERICO
- 13. CONSTRUCTION OF GROUND RING AND CONNECTIONS TO EXISTING GROUND RING SYSTEM SHALL BE DOCUMENTED WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE. PROVIDE PHOTOS TO THE VERIZON WIRELESS CONSTRUCTION MANAGER.
- 14. ALL GROUND LEADS EXCEPT THOSE TO THE EQUIPMENT ARE TO BE #2 BARE TINNED COPPER WIRE. ALL EXTERIOR GROUND BARS TINNED
- 15. PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUBE INC.). PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR
- 16 ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT IMPEDANCE DOES NOT EXCEED FIVE OHMS TO GROUND BY MEANS OF "FALL OF POTENTIAL TEST". TEST SHALL BE WITNESSED BY A AT&T REPRESENTATIVE, AND RECORDED ON THE "GROUND" RESISTANCE TEST" FORM.
- 17. WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING, INSTALL WIRE IN 3/4" PVC SLEEVE, FROM 1' BELOW GRADE AND SEAL TOP WITH SILICONE
- 18. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION
- 19. ANY SITE WHERE THE EQUIPMENT (BTS, CABLE BRIDGE, PPC, GENERATOR ETC.) IS LOCATED WITHIN 6 FEET OF METAL FENCING THE GROUND RING SHALL BE BONDED TO THE NEAREST FENCE POST USING (3) RUNS OF #2 BARE TINNED COPPER WIRE.

CABLE COLOR CODING NOTES:

- SECTOR ORIENTATION/AZIMI ITH WILL VARY FROM REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
- 2 THE ANTENNA SYSTEM CABLES SHALL BE LABELED WITH VINYL TAPE EXCEPT IN LOCATIONS WHERE ENVIRONMENTAL CONDITIONS CAUSE PHYSICAL DAMAGE, THEN PHYSICAL TAGS ARE PREFERRED.
- THE STANDARD IS BASED ON EIGHT COLORED TAPES RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE & VIOLET. THESE TAPES MUST BE $3/4^\circ$ WIDE & UV RESISTANT SUCH AS SCOTCH 35 VINYL ELECTRICAL COLOR CODING TAPE AND SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN
- LISING COLOR BANDS ON THE CABLES, MARK ALL RE CABLES BY SECTOR
- WHEN AN EXISTING COAXIAL LINE THAT IS INTENDED TO BE A SHARED LINE BETWEEN GSM/3G AND IS-136 TOMA IS ENCOUNTERED, THE SUBCONTRACTOR SHALL REMOVE THE EXISTING COLOR CODING SCHEME AND REPLACE IT WITH THE COLOR CODING AND TAGGING STANDARD THAT IS OUTLINED IN THE CURRENT VERSION OF ND-0027. IN THE ABSENCE OF AN EXISTING COLOR CODING TAGGING SCHEME, OR WHEN INSTALLING PROPOSED COAXIAL CABLES, THIS GUIDELINE SHALL BE IMPLEMENTED AT THAT SITE REGARDLESS OF TECHNOLOGY
- ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE A MINIMUM OR (3) WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
- ALL COLOR BANDS INSTALLED AT THE TOP OF TOWER SHALL BE A MINIMUM OF 3" WIDE AND SHALL HAVE A MINIMUM OF 3/4" OF SPACE IN BETWEEN EACH COLOR.
- 8. ALL COLOR CODES SHALL BE INSTALLED AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE TO SIDE.
- 9. IF EXISTING CABLES AT THE SITE ALREADY HAVE A COLOR CODING SCHEME AND THEY ARE NOT INTENDED TO BE REUSED OR SHARED WITH THE GSM. TECHNOLOGY, THE EXISTING COLOR CODING SCHEME SHALL REMAIN

CABLE MARKING TAGS:

WHEN USING THE ALTERNATIVE LABELING METHOD, EACH RF CABLE SHALL BE IDENTIFIED WITH A METAL ID TAG MADE OF STAINLESS STEEL OR BRASS. THE TAG SHALL BE 1-1/2" IN DIAMETER WITH 1/4" STAMPED LETTERS AND NUMBERS INDICATION THE SECTOR, ANTENNA POSITION AND CABLE NUMBER. ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE AT THE SAME LOCATION AS DEFINED ABOVE. THE TAG SHOULD BE LABELED AS

	CABLE MARKING LOCATIONS TABLE		
NO.	LOCATIONS		
(1)	EACH JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.		
2	EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS AT THE TOP JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS PRIOR TO ENTERING THE BTS OR SHELTER.		
3	CABLE ENTRY PORT ON THE INTERIOR OF SHELTER.		
4	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF $3/4^{\circ}$ WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.		
5	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.		

ROUNDING

GROUNDING

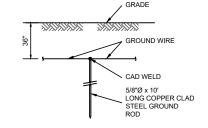
FIGURE 6

GROUNDING STRAP WEATHERPROOFING DETAIL

LUG

9/16" HEX-

FIGURE 5



GROUNDING ROD DETAIL

COPPER BUSS

S/S FLAT WASHER

ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES.

COAT ALL SURFACES WITH ANTI-OXIDATION COMPOUND BEFORE MATING.

FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH ANTI-OXIDATION

COAT ALL BARRELS WITH ANTI-OXIDATION COMPOUND BEFORE CRIMPING

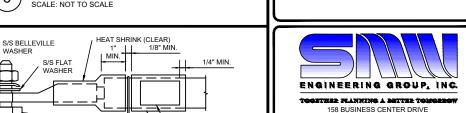
WASHER

声音

S/S BOLT

(1 OF 2

NOTES:



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SKYWAY TOWERS

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GENERAL LUG DETAIL SCALE: NOT TO SCALE

HEAT SHRINK (CLEAR)

"DO NOT DISCONNECT" TAG ON

ALL GROUND BAR INTERCONNECTS

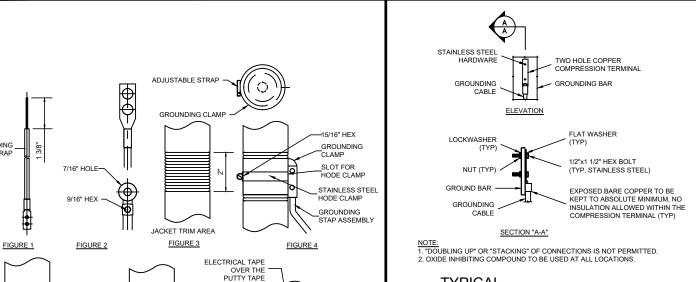


FIGURE 7

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GROUND BAR CONNECTION DETAIL SCALE: NOT TO SCALE

DESCRIPTION BY DATE KMM 01/17/25 PRELIM

ISSUED FOR:

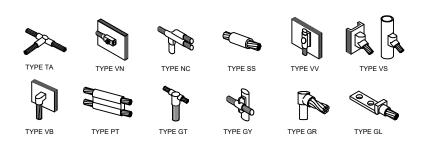
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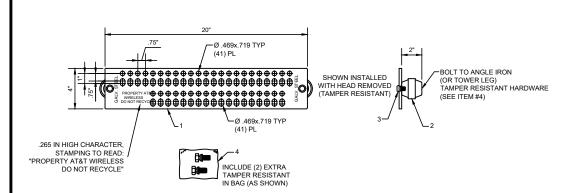
G-2



CADWELL GROUNDING CONNECTION DETAILS

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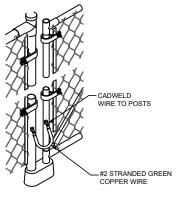




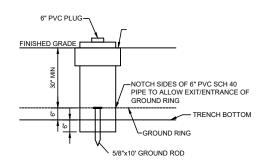
4	02-009-0663-000 (SUB ASSEMBLY)	3/8-16x5/8" TORQUE SHEAR HEAD BOLT IN A STANDARD 4x6 BAG INCLUDES: (2) 3/8-16x5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRSEAL; STAINLESS STEEL (303) P/N 02-009-0603-000 (1) STANDARD 4"x6" BAG (P/N 03-009-0209-00)	1
3	02-009-0633-000	3/8-16x5/8" TORQUE SHEAR HEAD BOLT (NON- REMOVABLE) WITH VIBRSEAL; STAINLESS STEEL (303)	2
2	03-009-0118-000	2"x2" INSULATOR; FIBERGLASS	2
1	02-009-0672-000	20" GROUND BAR; STEEL; GALVANIZED	1
ITEM	PART NO.	DESCRIPTION	REQ

CELECTRIC MOTION CO., INC. PART #EM SGM420-BI-NR

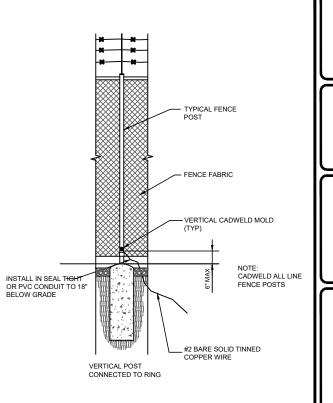




GATE GROUNDING DETAIL SCALE: NOT TO SCALE



INSPECTION WELL DETAIL SCALE: NOT TO SCALE



TYPICAL FENCE POST GROUNDING

INSTALLATION

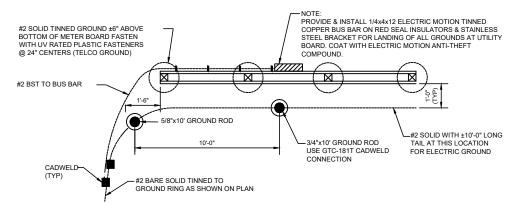
1. THE TAPE SHALL BE LAID DIRECTLY ABOVE THE CABLE OR CONDUIT UNDER RIGID TYPE AND OIL MAT PAVEMENTS, AND DIRECTLY ON TOP OF THE COMPACTED EARTH SUBGRADE IMMEDIATELY BEFORE RESTORING THE PAVEMENT.

- IN OPEN AREAS, THE TAPE SHALL BE LAID DURING THE BACKFILLING OPERATION ON SMOOTH, COMPACTED BACKFILL AT A DISTANCE OF 8" BELOW THE SURFACE OF THE
- 3. THE ENDS OF THE TAPE SHALL BE LAPPED APPROXIMATELY SIX (6) INCHES.
- 4. TAPE SHALL BE THE COLOR AS INDICATED AND HAVE THE FOLLOWING MARKINGS:

RED	CAUTION	CAUTION	CAUTION	
	BURIED ELECTR	IC LINE BELOW		
0041105	CAUTION	CAUTION	CAUTION	
ORANGE	DUDIED TELEDI	ONE LINE BELOW		

TOP OF COMPOUND STONE GEOTEXTILE FABRIC DIRECT BURIAL CABLE OR CONDUIT (POWER, CONTROL, TELEPHONE, TELEMETERING, ETC)

STANDARD MARKER TAPE DETAIL



METER BOARD UTILITY GROUNDING DETAIL SCALE: NOT TO SCALE





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G-3