

VERIZON SITE NUMBER: 5000965682

PROJECT DESCRIPTION: TELECOMMUNICATIONS
COLOCATION

TOWER TYPE: 250' SELF-SUPPORT

SITE ADDRESS: 4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

JURISDICTION: COLUMBIA COUNTY

AREA OF CONSTRUCTION: 360± SQ. FT. (LEASE AREA)

CURRENT ZONING: RURAL RESIDENTIAL

PARCEL #: 20-4S-16-03077-008

PROJECT INFORMATION

LATITUDE: N 30° 07' 33.91" (NAD 83)*
LONGITUDE: W 82° 43' 58.78" (NAD 83)*

GROUND ELEVATION: 104' AMSL (NAVD 88)*

*INFORMATION PROVIDED BY VERIZON

1-A CERTIFICATION

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431
(561) 995-5539



8051 CONGRESS AVE
BOCA RATON, FL 33487
(800) 487-7483

SBA SITE ID: FL10961-A
SBA SITE NAME: BASS

VZW SITE #: 5000965682
VZW SITE NAME: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

SCOPE OF WORK

- VERIZON WIRELESS WILL PERFORM THE FOLLOWING ON 250'-0" TALL CELL TOWER OWNED BY SBA TOWERS LLC:
- INSTALL 4x10' CONCRETE GENERATOR PAD
 - INSTALL 8x10' CONCRETE EQUIPMENT PAD
 - INSTALL 2' WIDE ICE BRIDGE
 - INSTALL 10' WIDE H-FRAME WITH ILC, RRUS, AND FIBER BOX
 - INSTALL EQUIPMENT CABINET & BATTERY CABINET
 - INSTALL (2) HYBRID CABLES
 - INSTALL (6) JMA WIRELESS ANTENNAS
 - INSTALL (3) ERICSSON AIR6419 ANTENNAS
 - INSTALL (1) 12 OVP RAYCAP
 - INSTALL (3) ERICSSON 4490 RRUS
 - INSTALL (3) ERICSSON 4890 RRUS

LESSEE:

NAME: VERIZON WIRELESS
ADDRESS: 4700 EXCHANGE COURT, SUITE 100
CITY, STATE, ZIP: BOCA RATON, FL 33431
CONTACT: JUSTIN DANAHY
PHONE: (561) 995-5539

TOWER OWNER:

NAME: SBA
ADDRESS: 8051 CONGRESS AVENUE
CITY, STATE, ZIP: BOCA RATON, FL 33487
CONTACT: CUSTOMER SERVICE
PHONE: (800) 487-7483
SITE ID: FL10961-A
SITE NAME: BASS

CIVIL ENGINEER:

NAME: TEP OPCO, LLC
ADDRESS: 326 TRYON ROAD
CITY, STATE, ZIP: RALEIGH, NC 27603-3530
CONTACT: JOSHUA H. GARDEN, P.E.
PHONE: (919) 661-6351

ELECTRICAL ENGINEER:

NAME: TEP OPCO, LLC
ADDRESS: 326 TRYON ROAD
CITY, STATE, ZIP: RALEIGH, NC 27603-3530
CONTACT: JOSHUA H. GARDEN, P.E.
PHONE: (919) 661-6351

PROPERTY OWNER:

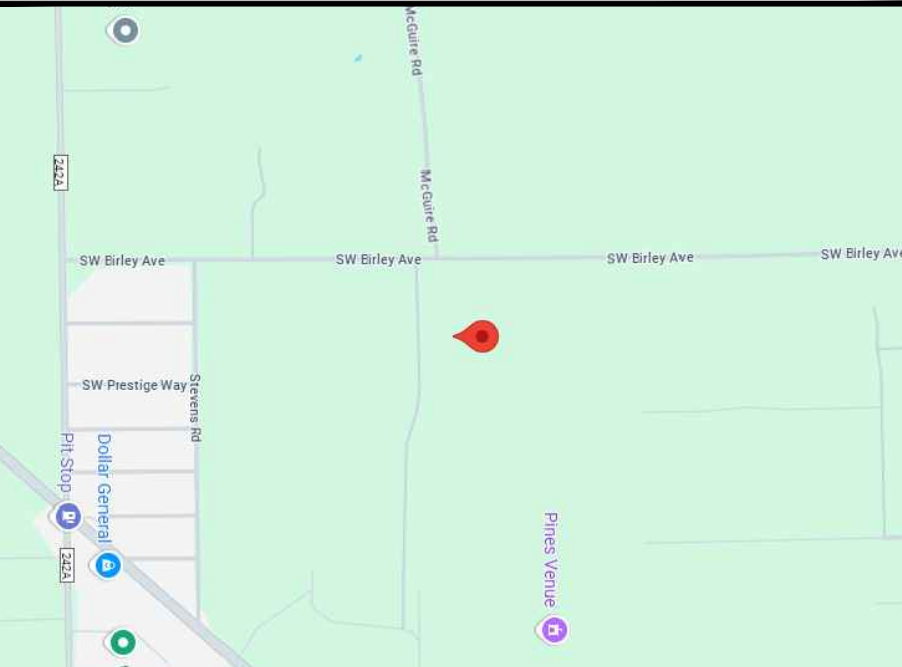
NAME: DURRANCE WILLIAM DAVID JR,
ADDRESS: DURRANCE CLARE D
CITY, STATE, ZIP: 4601 SW BIRLEY AVENUE
LAKE CITY, FL 32024

SURVEYOR:

NAME: BROOKS & BROOKS, INC
ADDRESS: 720 ENERGY CENTER BOULEVARD,
CITY, STATE, ZIP: SUITE 503
NORTHPORT, ALABAMA 36473
CONTACT: CORPORATE OFFICE
PHONE: (205) 762-5033

CONTACT INFORMATION

LOCATION MAP



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

1. 2023 FLORIDA BUILDING CODE, 8TH EDITION
2. LOCAL BUILDING CODE
3. ANSI/TIA-222-H-2017
4. 2020 NATIONAL ELECTRIC CODE
5. CITY/COUNTY ORDINANCES

CODE COMPLIANCE

INFORMATION FOR DESIGN CRITERIA TAKEN BY MOUNT ANALYSIS REPORT BY VERIZON, DATED NOVEMBER 10, 2024:

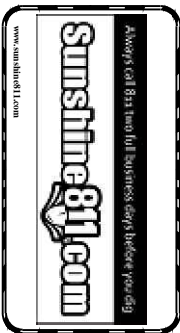
1. WIND SPEED = 118 M.P.H.
2. EXPOSURE CATEGORY = C
3. RISK CATEGORY = II
4. TOPOGRAPHIC CATEGORY = 1

WIND SPEED CRITERIA

UTILITIES:

POWER COMPANY: UNKNOWN
CONTACT: UNKNOWN
PHONE: UNKNOWN
POLE # NEAR SITE: UNKNOWN

TELEPHONE COMPANY: UNKNOWN
CONTACT: UNKNOWN
PHONE: UNKNOWN
PEDESTAL # NEAR SITE: UNKNOWN



PMI ACCESSED AT: <https://pmi.vzwsmart.com>

SMART TOOL VENDOR: 10264108
PROJECT NUMBER:

VZW MDG NUMBER: 5000965682

*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

CONTRACTOR PMI REQUIREMENTS

MOUNT MODIFICATION REQUIRED IN

VZW APPROVED SMART

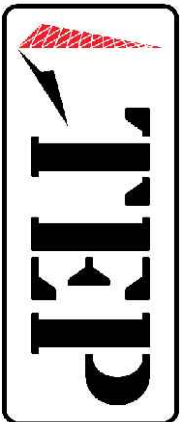
KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VZW SMART KIT APPROVED VENDORS

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PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net

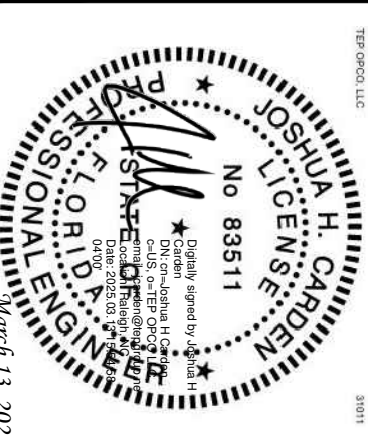
FL COA # 31011

2	03-13-25	CONSTRUCTION
1	02-11-25	CONSTRUCTION
0	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: P/W/ CHECKED BY: DAO

DIGITAL SEAL:

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JOSHUA H. GARDEN, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



SHEET NUMBER: T-1 REVISION: 2

T-1

TEP#274573.101 2037

GENERAL NOTES:

1. ALL REFERENCES MADE TO LESSEE IN THESE DOCUMENTS SHALL BE CONSIDERED VERIZON WIRELESS OR ITS DESIGNATED REPRESENTATIVE.
2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING TO HAVE SUFFICIENT EXPERIENCE AND ABILITY, IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF FLORIDA.
3. WORK SHALL BE COMPLETED IN ACCORDANCE WITH ANSI/TIA 222-H-2-2017 STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES AND THE 2023 FLORIDA BUILDING CODE, 8TH EDITION.
4. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
5. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
6. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR THE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
7. THE LESSEE SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING THE PROPOSAL. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS (LATEST REVISION) SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LESSEE AND THE LESSEE'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION, THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE LESSEE AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.
8. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE LESSEE AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
9. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. SAFETY, CARE OF ADJACENT PROPERTIES, AND COMPLIANCE WITH LOCAL, PROVINCIAL AND FEDERAL REGULATIONS REGARDING SAFETY SHALL BE THE CONTRACTOR'S RESPONSIBILITY. AND THIS, PER THE INTERNATIONAL CODE – REGULATORS RESPECTING OCCUPATIONAL SAFETY & HEALTH THE SUCCESSFUL CONTRACTOR WILL SUBMIT HIS SAFETY MANUAL AT THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
10. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE LESSEE'S PROJECT MANAGER.
11. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/LESSEE. CONTRACTOR/LESSEE SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
12. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REMOVED OR REPLACED.
13. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE LESSEE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
14. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.
15. ANY BUILDINGS ON THIS SITE ARE INTENDED TO SHELTER EQUIPMENT WHICH WILL ONLY BE PERIODICALLY MAINTAINED, AND ARE NOT INTENDED FOR HUMAN OCCUPANCY.
16. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
17. RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
18. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO PRIOR TO THE START OF THE WORK ON THE PROJECT.

19. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING. CONTRACTOR WILL BE RESPONSIBLE TO ASSIST IN COORDINATING AND OBTAINING PRIMARY POWER TO THE SITE PRIOR TO TOWER ERECTION BEFORE PROJECT COMPLETION. (ON SITE VISITS WITH UTILITY COMPANY REPRESENTATIVES AS NECESSARY, ETC...)
20. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF HOLDBACK.
21. AWARDED CONTRACTOR WILL BE REQUIRED TO SIGN AND RETURN A COPY OF AN AWARD LETTER FOR THE LESSEE'S FILE.
22. CONTRACTOR WILL BE REQUIRED TO PROVIDE PROOF OF LICENSE TO PERFORM WORK IN JURISDICTION AT TIME OF BID AWARD.
23. CONTRACTOR WILL PROVIDE A CONSTRUCTION SCHEDULE PRIOR TO CONSTRUCTION STARTING AND WILL PROVIDE UPDATE/CHANGES (WITH EXPLANATIONS) TO THAT SCHEDULE WHEN/IF ITEMS ARE DELAYED OR PUSHED OUT.
24. CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE PROJECT MANAGERS WITH PHOTOS OF THE MAJOR CONSTRUCTION MILESTONES AS THEY OCCUR.
25. CONTRACTOR SHOULD BE PREPARED FOR RANDOM SAFETY INSPECTIONS AT ALL TIMES.
26. CONTRACTOR IS EXPECTED TO MAINTAIN PROPER WORKING CONDITIONS AND PROCEDURES PER LOCAL AND FEDERAL STANDARDS AT ALL TIMES.
27. CONTRACTOR WILL BE REQUIRED TO OBTAIN THE NECESSARY ELECTRICAL PERMITS AND INSPECTIONS AS REQUIRED BY JURISDICTION.
28. CONTRACTOR IS RESPONSIBLE FOR CONCRETE COMPRESSION TESTING.
29. CONTRACTOR IS RESPONSIBLE FOR GROUND MEG TESTING AND PROVIDING PROOF OF RESULT.
30. WHEN REQUESTED, PROVIDE 3 COPIES OF FABRICATION AND ERECTION DRAWINGS PRIOR TO FABRICATION, ALLOW UP TO 1 WEEK FOR REVIEW BY CONSULTANT.
31. IN ADDITION TO CONTRACTOR'S QUALITY CONTROL PROGRAM, INDEPENDENT TESTING AND INSPECTION MAY BE PERFORMED BY LESSEE OR LESSEE'S REPRESENTATIVE.
32. SUBMIT RED-LINES COPY OF CONSTRUCTION DRAWINGS UPON COMPLETION OF CONSTRUCTION HIGHLIGHTING CHANGES IN THE STAMPED AND SIGNED AS-BUILT CONDITION FROM SHOWN ON THE DRAWINGS.
33. CONTRACTOR WILL BE RESPONSIBLE FOR ALL GRADING AND FILL COMPACTION TESTING REQUIRED AS SET FORTH IN THE GEO TECHNOLOGICAL REPORT PROVIDED BY LESSEE.

CONCRETE:

1. ALL CONCRETE AND CONCRETE MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE 2023 FLORIDA BUILDING CODE, 8TH EDITION.
2. THE CONTRACTOR SHALL TAKE SAMPLES OF THE CONCRETE POURED UNDER THE CONDITIONS OUTLINED IN THE THE 2023 FLORIDA BUILDING CODE, 8TH EDITION.
3. ANY FAILURE OF A CONCRETE TEST CYLINDER TO MEET THE SPECIFIED STRENGTH REQUIREMENTS MUST BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY. CORRECTIVE ACTION MUST BE APPROVED BY THE ENGINEER AND ALL RELATED COSTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
4. THE MINIMUM 28-DAY COMPRESSIVE STRENGTH OF THE CONCRETE SHALL BE A MINIMUM OF 4,000 PSI (21 MPa). EXCEPT AS NOTED OR DIRECTED IN THE SOIL REPORT, THE CONCRETE, WHEN POURED, SHALL CONTAIN 7% AIR ENTRAINMENT WITH AN ALLOWABLE VARIATION OF +2%.
5. CONTRACTOR MUST TAKE SLUMP TEST AT LEAST ONCE FROM EACH TRANSIT MIXER AFTER A MINIMUM OF 5% CONCRETE LOAD HAD BEEN DISCHARGED. SLUMP, UNLESS NOTED OTHERWISE ON THE DRAWINGS, SHALL BE 75 MM (2.95 INCHES).
6. MIXED CONCRETE ON SITE (REMOTE AREAS) WITH THE CORRECT PROPORTION OF CEMENT, SAND, GRAVEL, AND AIR-ENTRAINING AGENT ALREADY ADDED, THE DRY PREMIX IS TO BE MIXED IN A CONCRETE BATCHER IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. BEFORE POURING CONCRETE, THE TRANSPORTING EQUIPMENT AND FORMS SHALL BE CLEANED AND ALL DEBRIS AND ICE SHALL BE REMOVED FROM PLACES TO BE OCCUPIED BY THE CONCRETE. ANY WATER THAT HAS ACCUMALATED IN THE FORMS SHALL BE REMOVED.
8. ALL CONCRETE SHALL BE VIBRATED AND WORKED AROUND THE REINFORCEMENTS, EMBEDDED FIXTURES AND INTO THE CORNERS OF THE FORMS. ANY EXCESS WATER THAT ACCUMALATES WHILE THE CONCRETE IS BEING POURED SHALL BE REMOVED.

PLANS PREPARED FOR:



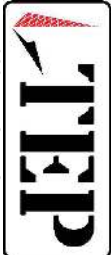
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

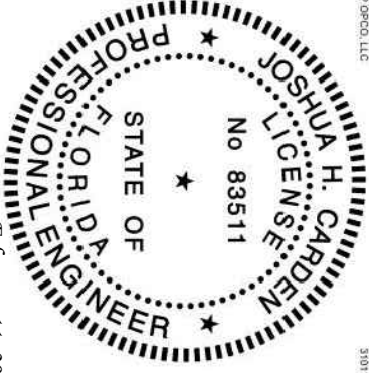
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PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3630
OFFICE: (919) 661-6361
www.tepgroup.net
FL COA # 31011

SEAL:
TEP OPCL, LLC



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SEALED BY JOSHUA H. CARDEN, P.E. ON THE
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I	02-11-25	CONSTRUCTION
O	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PWW CHECKED BY: DAO

SHEET TITLE:

GENERAL
NOTES

SHEET NUMBER:

N-1

REVISION:

1

TEP#:274573.101 2037

CONCRETE (CONTINUED):

- THE DESIGN ENGINEER SHALL RECEIVE A MINIMUM OF 24 HOURS NOTICE OF EVERY POUR.
- THE CONCRETE IN FOUNDATIONS MUST BE POURED IN CONTINUOUS POURS BETWEEN CONSTRUCTION JOINTS. NO CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON SITE SPECIFIC DRAWINGS WILL BE PERMITTED. THE CONTRACTOR SHALL PROVIDE EFFICIENT EQUIPMENT TO COMPLETE THE POURING OF EACH SECTION IN ONE CONTINUOUS POUR.
- ALL FRAMEWORK SHALL BE BUILT IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE SHALL BE THOROUGHLY BRACED AND PLUMBED SO THAT THE FINISHED CONCRETE WILL CONFORM TO THE SHAPES, LINES, GRADES, AND DIMENSIONS INDICATED ON THE SITE DRAWINGS.
- FORMS AND SHORING SHALL NOT BE REMOVED UNTIL THE CONCRETE IS ADEQUATELY SET. THEIR REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO ENSURE THE COMPLETE SAFETY OF THE STRUCTURE.
- FORMS WHICH SUPPORT THE WEIGHT OF THE CONCRETE, OR OF SUPERIMPOSED LOADS, SHALL NOT BE REMOVED UNTIL THE CONCRETE IS STRONG ENOUGH TO CARRY ITS OWN WEIGHT, AND SUCH SUPERIMPOSED LOADS AS MAY BE PLACED UPON IT.
- THE CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR AT LEAST 5 DAYS AFTER IT HAS BEEN POURED.
- ALL SURFACES WHICH ARE NOT PROTECTED BY FORMS OR A SEALED WATERPROOF COATING SHALL BE KEPT MOST BY CONTINUOUS SPRINKLING, OR OTHER MEANS SUCH AS COVERING WITH MOIST SAND, SAWDUST, OR BURLAP.
- WHERE NECESSARY, THE CONCRETE SHALL BE PROTECTED AGAINST THE WEATHER BY A FRAMED HOUSING, TARPULINS, OR OTHER SUITABLE COVERING.

REINFORCING STEEL (REBAR):

- REINFORCING STEEL SHALL MEET CODE AND BE PLACED ACCORDING TO THE APPLICABLE DRAWINGS. THE MINIMUM THICKNESS OF CONCRETE OVER THE STEEL SHALL BE AT LEAST 3".
- ALL REINFORCEMENTS THAT ARE REQUIRED FOR A DAYS POUR ON CONCRETE SHALL BE SECURELY FIXED IN PLACE IN SUFFICIENT TIME TO PERMIT INSPECTION BEFORE CONCRETING BEGINS.
- THE DESIGN ENGINEER SHALL BE GIVEN 24 HOURS NOTICE BEFORE THE CONCRETE IS TO BE POURED. FAILURE TO COMPLY MAY NECESSITATE, BUT NOT BE LIMITED TO, THE REMOVAL OF THE POURED CONCRETE AT THE CONTRACTOR'S EXPENSE.

GROUTING:

- WHERE GROUT IS INDICATED ON THE DRAWINGS UNDER STRUCTURAL BASE PLATES, THIS SHALL BE A NON-SHRINK, NON-FERROUS TYPE. METHODS OF MIXING AND PLACING MUST BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

COLD WEATHER CONCRETING:

- THE CONTRACTOR SHALL PROVIDE AND HAVE ON THE SITE READY FOR USE, ADEQUATE EQUIPMENT FOR HEATING CONCRETE MATERIALS AND PROTECTING FRESH CONCRETE DURING FREEZING OR NEAR FREEZING WEATHER CONDITIONS, ACCORDING TO THE FLORIDA UNIFORM STATEWIDE BUILDING CODE.
- ALL CONCRETE MATERIALS, REBAR, FORMS, FILLERS, AND THE EARTH WITH WHICH THE CONCRETE IS TO COME INTO CONTACT WITH, SHALL BE FREE FROM FROST AND ICE.
- WHENEVER THE SURROUNDING TEMPERATURE IS BELOW 39°F, ALL CONCRETE POURED IN THE FORMS SHALL HAVE A TEMPERATURE OF 68°F FOR 4 DAYS.
- THE HOUSING, COVERING, OR OTHER PROTECTION USED FOR THE CURING SHALL REMAIN IN PLACE AND INTACT FOR AT LEAST 24 HOURS AFTER THE ARTIFICIAL HEATING IS DISCONTINUED.
- SALT, CALCIUM CHLORIDE, OR OTHER CHEMICALS SHALL NOT BE USED IN THE CONCRETE MIX TO PREVENT THE WATER CONTENT FROM FREEZING.

GRADING:

- THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC...) ALL MATERIAL NOT SUITABLE FOR SUB GRADE IN ITS PRESENT STATE. IF THE MATERIAL, AFTER REWORKING, REMAINS UNSUITABLE THEN THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL AT HIS EXPENSE. ALL SUB GRADES SHALL BE PROOF ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REMORKED OR REPLACED.
- THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTABLE BY THE LESSEE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURES IN OPERABLE CONDITION.
- ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE (1) YEAR FROM DATE OF ACCEPTANCE.

UTILITIES:

- CONTRACTOR SHALL CONTACT A SUBSURFACE UTILITY LOCATOR FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. LOCATION OF EXISTING SEWER, WATER LINES, GAS LINES, CONDUTITS OR OTHER STRUCTURES ACROSS, UNDERNEATH, OR OTHERWISE ALONG THE LINE OF PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS, AND IF SHOWN ARE ONLY APPROXIMATELY CORRECT. CONTRACTOR ASSUMES SOLE RESPONSIBILITY FOR VERIFYING LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES (INCLUDING TEST PITS BY HAND IF NECESSARY) IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OF ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLANS, OR IF THERE APPEARS TO BE A CONFLICT.
- CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH APPROPRIATE UTILITY LESSEES AND CONSTRUCTION MANAGER.
- DAMAGE BY THE CONTRACTOR TO UTILITIES OR PROPERTY OF OTHERS, INCLUDING EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE LESSEE. FOR GRASSES AREAS, SEED AND MULCH SHALL BE ACCEPTABLE.
- THE CONTRACTOR SHALL COORDINATE WITH THE LESSEE THE REQUIREMENTS FOR AND LIMITS OF OVERHEAD AND/OR UNDERGROUND ELECTRICAL SERVICE.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF NEW UNDERGROUND TELEPHONE SERVICE WITH THE TELEPHONE UTILITY AND THE LESSEE'S REQUIREMENTS.
- ALL UNDERGROUND UTILITIES SHALL BE INSTALLED AND TESTED SATISFACTORY PRIOR TO COMMENCING ANY PAVING OPERATIONS WHERE SUCH UTILITIES ARE WITHIN THE LIMITS OF PAVEMENT.

PLANS PREPARED FOR:



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

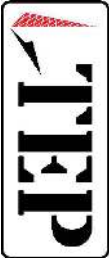
VZW SITE #: 5000965682

SITE NAME #: BIRLEY

AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

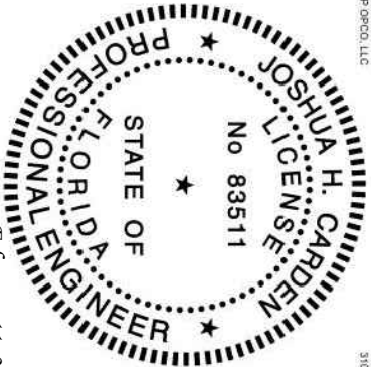
PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3630
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:
TEP OPCL, LLC

31011



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I	02-11-25	CONSTRUCTION
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O	12-31-24	PRELIMINARY
---	----------	-------------

REV	DATE	ISSUED FOR:
-----	------	-------------

DRAWN BY:	PVW	CHECKED BY:	DAO
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SHEET TITLE:

GENERAL
NOTES

SHEET NUMBER: REVISION:

N-2

1

TEP#:274573.101 2037

SW Birley Avenue

Public – Asphalt Pavement

William David Durrance, Jr.
and wife, Claire D. Durrance
Book 827, Page 1653

Book 1214, Page 673
Access & Utility
Easement
 9,657 Square Feet

Easement Agreement
Recorded in
Book 1214, Page 673
Premises
237,583 Square Feet
5.4542 Acres

Tract 2
Schedule A
VESTED IN:
Claire Durrance
Book 1182, Page 1
APN: 20-4S-16-03077-008

SYMBOL LEGEND

- Right-of-Way
- Property Line
- Place/Point of Commencement
- Place/Point of Beginning
- Monumentation Found as Noted
- Utility Pole
- Guy Wire
- Fence (As Noted)
- Overhead Utilities
- Shaded Easement Area



AS-BUILT SURVEY

4741 SW Birley Avenue
Lake City, Florida 32024

SITE ID#: FL10961-A
SITE NAME: Bass



SBA Network Services, LLC
8051 Congress Avenue
Boca Raton, FL 33487-1307

Note: This survey does not represent a boundary survey of the parent parcel.



CERTA TOWER
SERVICES LLC

2926 State Road, #135
Cuyahoga Falls, OH 44223-1244
330.295.3673
orders@certasite.com
www.certasite.com

BM LAND, LLC

1721 COUNTY ROAD 617
ENTERPRISE, AL 36330
(334) 389-1817
MATHEWS8880@GMAIL.COM
#LB8113

Drawn By: DLV	Scale: None
Date: 01.08.25	Sheet: 3 of 5
Certa Project No. 2619	

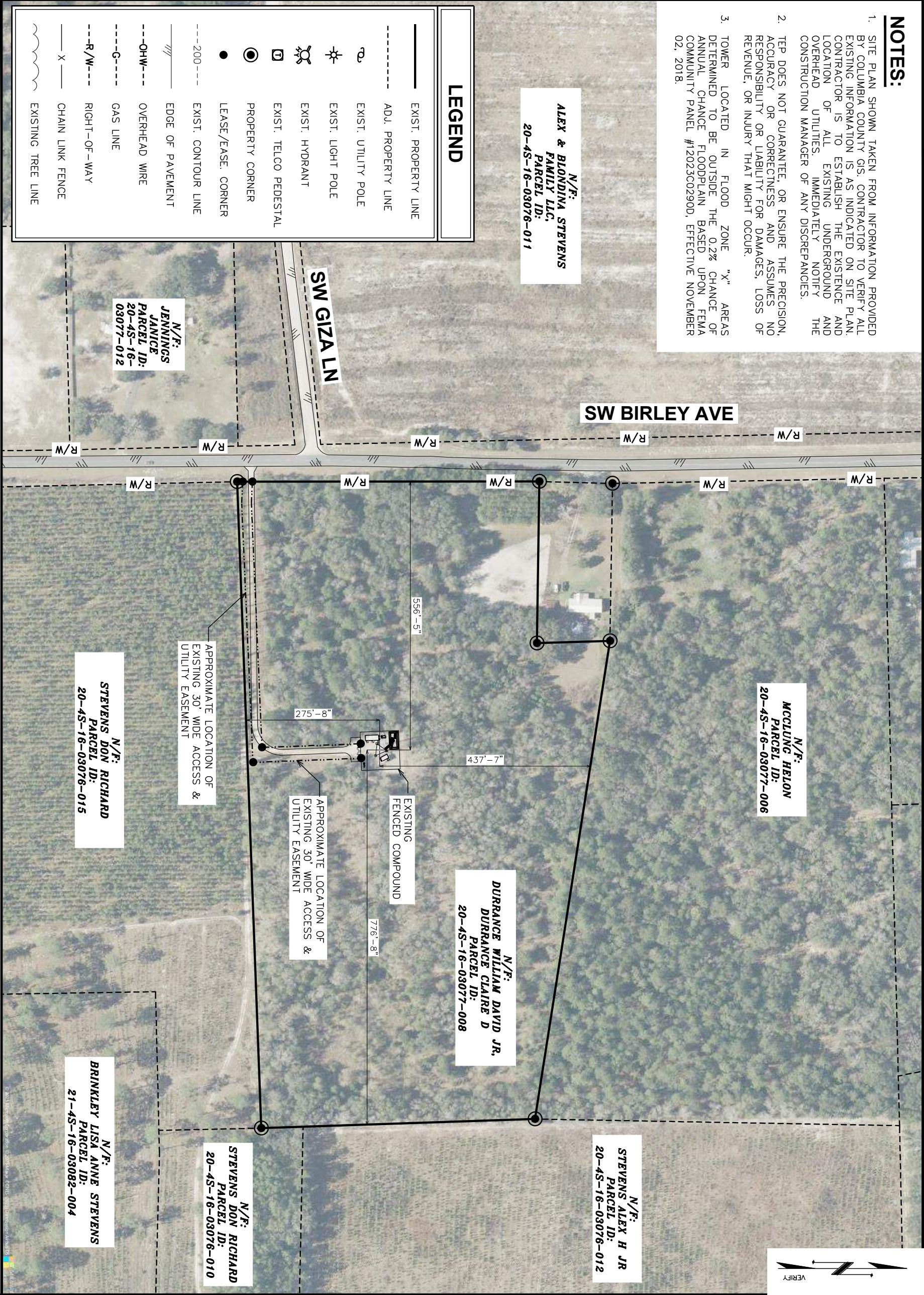
NOTES:

1. SITE PLAN SHOWN TAKEN FROM INFORMATION PROVIDED BY COLUMBIA COUNTY GIS. CONTRACTOR TO VERIFY ALL EXISTING INFORMATION IS AS INDICATED ON SITE PLAN. CONTRACTOR IS TO ESTABLISH THE EXISTENCE AND LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES. IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES.
2. TEP DOES NOT GUARANTEE, OR ENSURE THE PRECISION, ACCURACY OR CORRECTNESS AND ASSUMES NO RESPONSIBILITY OR LIABILITY FOR DAMAGES, LOSS OF REVENUE, OR INJURY THAT MIGHT OCCUR.
3. TOWER LOCATED IN FLOOD ZONE "X". AREAS DETERMINED TO BE OUTSIDE THE 0.2% CHANCE OF ANNUAL CHANCE FLOODPLAIN BASED UPON FEMA COMMUNITY PANEL #12023C02900, EFFECTIVE NOVEMBER 02, 2018.

N/F:
ALEX & BLONDINA STEVENS
FAMILY LLC,
PARCEL ID:
20-4S-16-03076-011

LEGEND

	EXIST. PROPERTY LINE
	ADJ. PROPERTY LINE
	EXIST. UTILITY POLE
	EXIST. LIGHT POLE
	EXIST. HYDRANT
	EXIST. TELCO PEDESTAL
	PROPERTY CORNER
	LEASE/EASE. CORNER
	EXIST. CONTOUR LINE
	EDGE OF PAVEMENT
	OVERHEAD WIRE
	GAS LINE
	RIGHT-OF-WAY
	CHAIN LINK FENCE
	EXISTING TREE LINE



PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

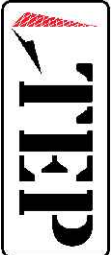
PROJECT INFORMATION:

VZW SITE #: 5000965682

SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

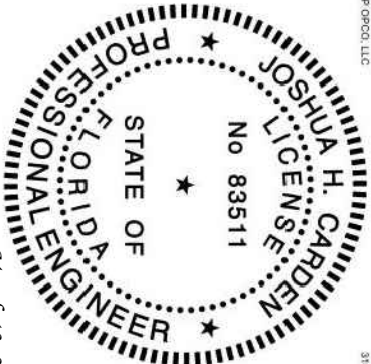


326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:

TEP OP.CO, LLC

31011



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1 02-11-25 CONSTRUCTION

2 03-13-25 CONSTRUCTION

REV DATE ISSUED FOR:

DRAWN BY: P/VW CHECKED BY: DAO

SHEET TITLE:

SITE PLAN

SHEET NUMBER: REVISION:

C-1 2

TEP#:274573.101 2037

SITE PLAN

SCALE: 1" = 200'



SCALE IN FEET

PLANS PREPARED FOR:

SBA



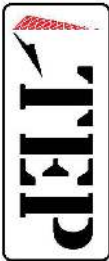
8051 CONGRESS AVENUE
BOCA RATON, FL 33487

verizon

4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

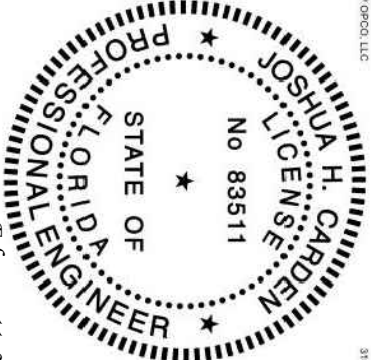
PROJECT INFORMATION:
VZW SITE #: 5000965682
SITE NAME #: BIRLEY
AVE
4741 SW BIRLEY AVENUE
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(COLUMBIA COUNTY)

PLANS PREPARED BY:



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REV	DATE	ISSUED FOR:
DRAWN BY:	PJW	CHECKED BY: DAO

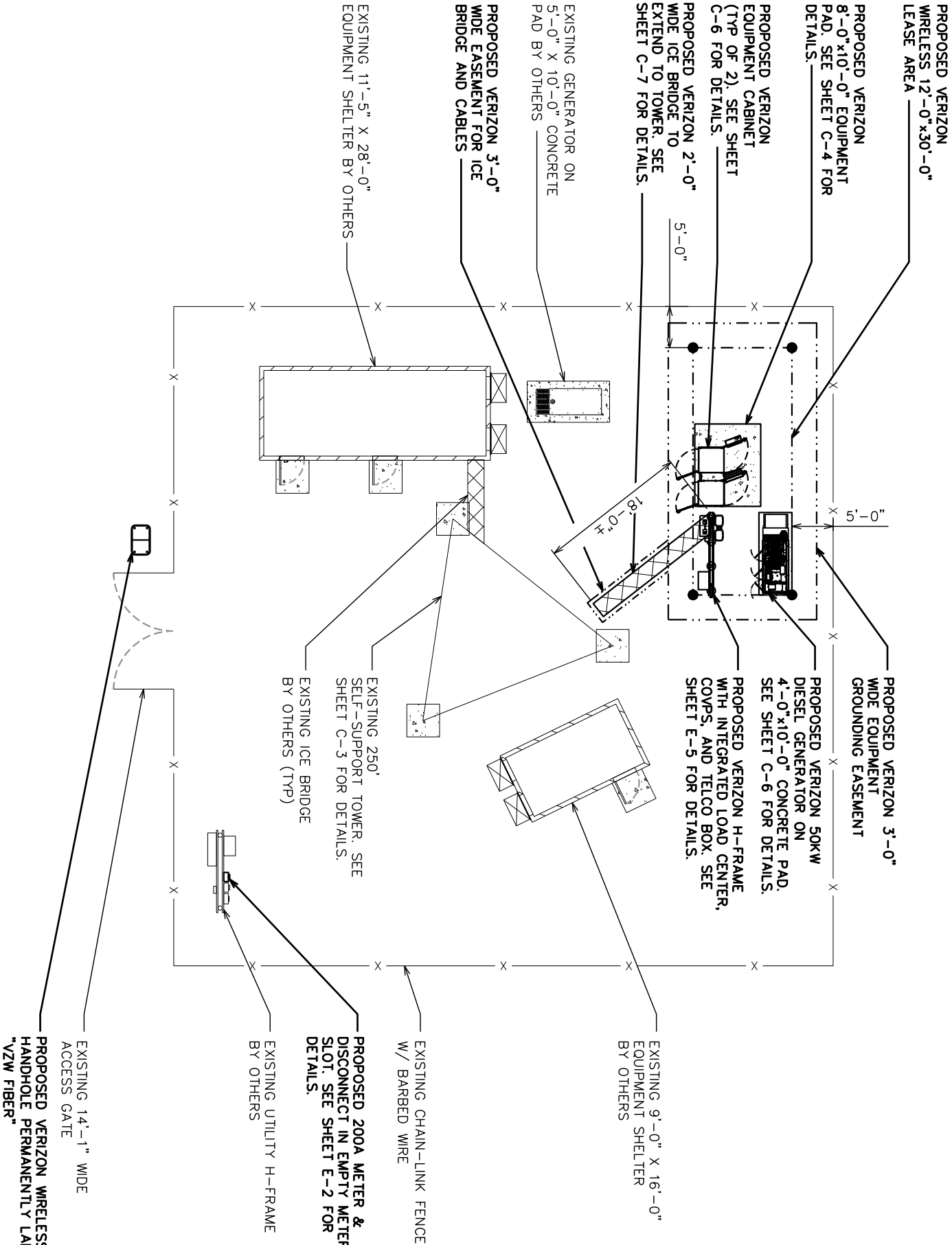
SHEET TITLE:

**COMPOUND
DETAIL**

SHEET NUMBER: C-2

REVISION: 1

TEP#274573.101 2037



COMPOUND DETAIL

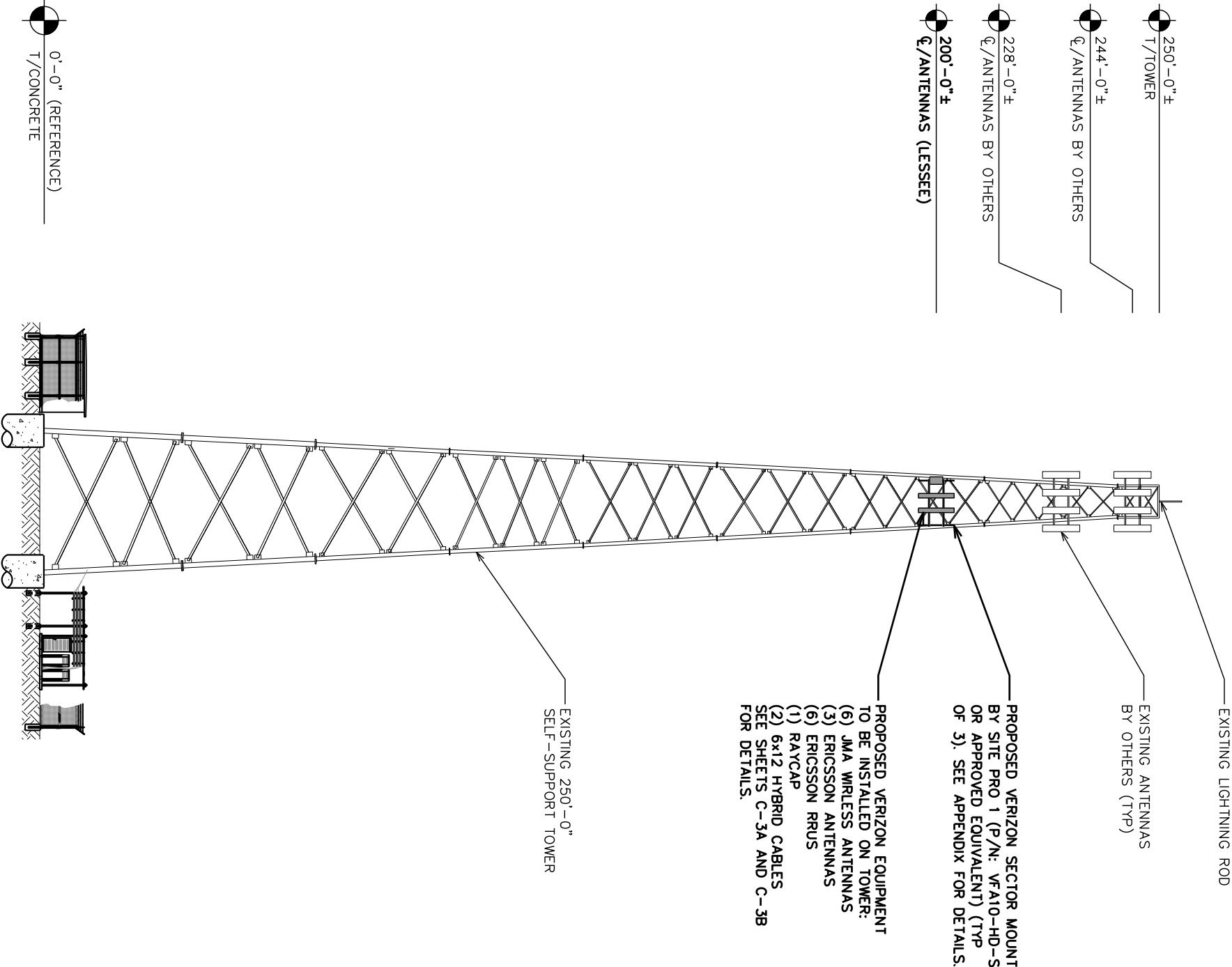
SCALE: 1/8" = 1'-0"



SCALE IN FEET

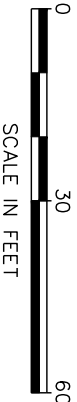
NOTES:

1. PROPOSED CABLES TO BE RUN AS PER SPECIFICATIONS OF PASSING STRUCTURAL ANALYSIS.
2. TOWER ELEVATION SHOWN FOR REFERENCE ONLY. VERIFY ACTUAL TOWER DESIGN & LOADING WITH TOWER DRAWINGS FROM MANUFACTURER AND/OR PASSING STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION.



TOWER ELEVATION

SCALE: 1" = 30'



SCALE IN FEET

PLANS PREPARED FOR:



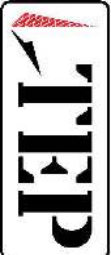
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

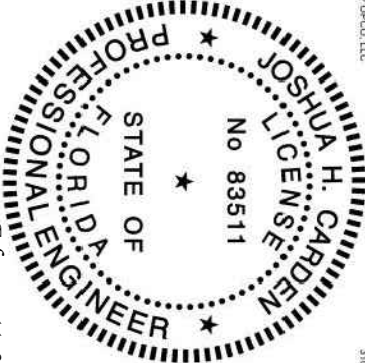
4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:
TEP OP&CO, LLC



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O	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

TOWER ELEVATION

SHEET NUMBER: REVISION:

C-3 1

TEP #274573.1012037

NOTES:

- 1. THE ANTENNA LAYOUT ON SHEET C-3B IS A SCHEMATIC. THE CONTRACTOR SHALL VERIFY TOWER ORIENTATION AND FIELD COORDINATE REQUIRED ADJUSTMENTS TO ACHIEVE THE DESIRED ANTENNA AZIMUTHS.
- 2. ANTENNA CENTERLINE HEIGHT BASED ON TOP OF GRADE.
- 3. ALL ANTENNAS, CABLES, AND MOUNTS SHALL BE INSTALLED IN ACCORDANCE WITH THE STRUCTURAL ENGINEER'S RECOMMENDATIONS IN A MANNER CONSISTENT WITH THE PASSING STRUCTURAL ANALYSIS REPORT.
- 4. ALL INFORMATION ON THIS SHEET TO BE CONFIRMED WITH VERIZON RF DESIGN PRIOR TO INSTALLATION.
- 5. TEP DID NOT PERFORM A STRUCTURAL ANALYSIS ON THE MOUNT. IT IS THE CARRIER'S RESPONSIBILITY TO ENSURE MOUNT CAN SUPPORT PROPOSED LOADS.

PROPOSED ANTENNA & COAX SCHEDULE

POS.	SECTOR	USE	MANUFACTURER (MODEL #)	RAD CENTER	CABLE SIZE	AZIMUTH (TN)	CABLE LENGTH	MECH. D-TILT	ELEC. D-TILT	EQUIPMENT [MODEL #]	J-BOX (TOWER)
1	ALPHA	-	-	-	-	-	-	-	-	-	-
2	ALPHA	700/850/1900 AWS/AWS3	JMA MX06FHG865-HG	℄ @ 200'-0"±	45°	**	**	**	**	ERICSSON 4490 RRU	-
3	ALPHA	700/850/1900 AWS/AWS3	JMA MX06FHG865-HG	℄ @ 200'-0"±	45°	**	**	**	**	ERICSSON 4890 RRU	-
4	ALPHA	L-SUB6 5G	ERICSSON AIR6419	℄ @ 200'-0"±	45°	**	**	**	**	ERICSSON AIR6419	-
5	BETA	-	-	-	-	-	-	-	-	-	-
6	BETA	700/850/1900 AWS/AWS3	JMA MX06FHG865-HG	℄ @ 200'-0"±	160°	**	**	**	**	ERICSSON 4490 RRU	(1) RAYCAP [12 OVP]
7	BETA	700/850/1900 AWS/AWS3	JMA MX06FHG865-HG	℄ @ 200'-0"±	160°	**	**	**	**	ERICSSON 4890 RRU	-
8	BETA	L-SUB6 5G	ERICSSON AIR6419	℄ @ 200'-0"±	160°	**	**	**	**	ERICSSON AIR6419	-
9	GAMMA	-	-	-	-	-	-	-	-	-	-
10	GAMMA	700/850/1900 AWS/AWS3	JMA MX06FHG865-HG	℄ @ 200'-0"±	290°	**	**	**	**	ERICSSON 4490 RRU	-
11	GAMMA	700/850/1900 AWS/AWS3	JMA MX06FHG865-HG	℄ @ 200'-0"±	290°	**	**	**	**	ERICSSON 4890 RRU	-
12	GAMMA	L-SUB6 5G	ERICSSON AIR6419	℄ @ 200'-0"±	290°	**	**	**	**	ERICSSON AIR6419	-

* CONTRACTOR TO VERIFY COAX/CABLE LENGTHS PRIOR TO CONSTRUCTION
** CONTRACTOR TO REFERENCE VERIZON ISSUED RFDS FOR MECH./ELEC. D-TILTS

ANTENNA & COAX SCHEDULE

SCALE: N.T.S.

PLANS PREPARED FOR:



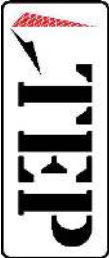
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

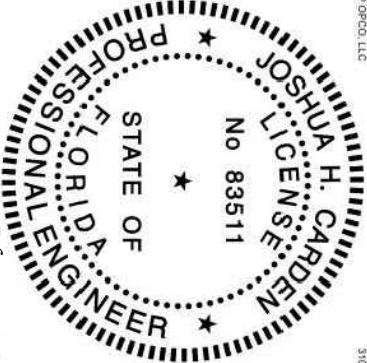
4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3630
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:
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O	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: FVW CHECKED BY: DAO

SHEET TITLE:

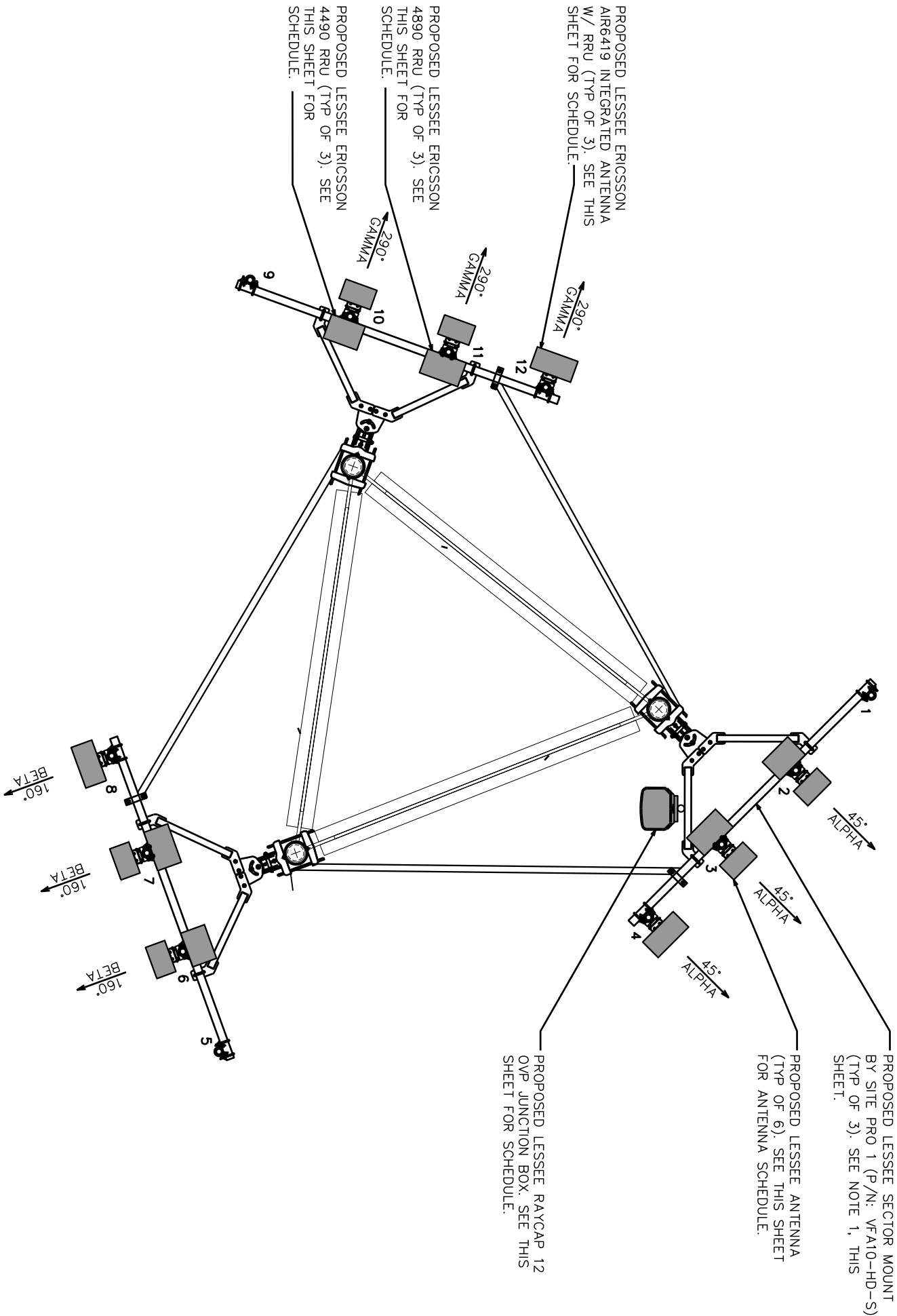
ANTENNA &
COAX SCHEDULE

SHEET NUMBER: REVISION:

C-3A 1 TEP#274573.101 2037

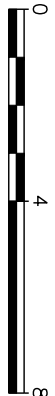
NOTES:

- 1. TEP DID NOT ANALYZE MOUNT TO DETERMINE ADEQUATE STRUCTURAL CAPACITY FOR ANY VERIZON LOADING.
- 2. SEE SHEET C-3A FOR PROPOSED ANTENNA SCHEDULE.
- 3. CONTRACTOR TO VERIFY PROPOSED LOADING WITH TOWER STRUCTURAL ANALYSIS PRIOR TO CONSTRUCTION.



PROPOSED ANTENNA LAYOUT

SCALE: 1/4" = 1'-0"



SCALE IN FEET

PLANS PREPARED FOR:



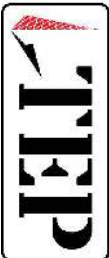
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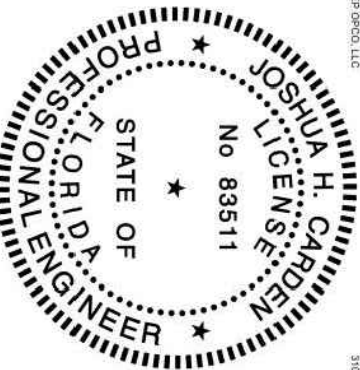
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REV	DATE	ISSUED FOR:

DRAWN BY: PWW CHECKED BY: DAO

SHEET TITLE:

PROPOSED ANTENNA LAYOUT

SHEET NUMBER: REVISION:

C-3B 1 TEP#274573.101 2037

ROUTING NOTES:

- REFER TO THE SITE PLAN FOR EQUIPMENT PAD LOCATIONS AND ORIENTATION.
- RUN 2" FLEX TELCO CONDUIT FROM BOTTOM OF TELCO BOX TO SIDE OF RF CABINET WITH CHASE NIPPLE THROUGH FACTORY KNOCKOUT.
- RUN 2" FLEX POWER CONDUIT AND 1" FLEX ALARM CONDUIT FROM BOTTOM OF ILC TO SIDE OF RF CABINET WITH CHASE NIPPLES THROUGH FACTORY KNOCKOUTS.
- RUN 2" FLEX FIBER CONDUIT FROM BOTTOM OF OVP TO SIDE OF RF CABINET WITH CHASE NIPPLE THROUGH FACTORY KNOCKOUT.
- RUN (1) 1½" FLEX POWER CONDUIT FOR EVERY (6) RRU CIRCUITS FROM BOTTOM OF OVP TO SIDE OF RF CABINET WITH CHASE NIPPLE THROUGH FACTORY KNOCKOUT.

PROPOSED ICE BRIDGE TO EXTEND TO TOWER
PROPOSED 6x12 HYBRID CABLE (TYP OF 2)
WAVEGUIDE POST FOUNDATION

PROPOSED 2" POWER CONDUIT FOR RECTIFIERS & GFCI (TYP OF 2)
PROPOSED 1" ALARM CONDUIT

PROPOSED 2" POWER CONDUIT
PROPOSED H-FRAME POST FOUNDATION (TYP)
PROPOSED VERIZON H-FRAME. SEE SHEET E-5 FOR DETAILS.

PROPOSED CHARLES TELCO CUBE BOX

PROPOSED GENERATOR KILL SWITCH (SEE SHEET C-6 FOR DETAILS)

PROPOSED GPS ANTENNA (TYP OF 2). SEE NOTE 9.

3'-0" NEC WORK CLEARANCE

CONDUITS TO BE EMBEDDED IN CONCRETE PAD & STUB UP 6" MINIMUM FROM TOP OF PAD. TERMINATE WITH MALE FITTING AND THREADED BUSHING

PROPOSED GENERATOR ON 4'-0"x10'-0" CONCRETE PAD. SEE SHEETS C-5 & C-6 FOR DETAILS.

PROPOSED GENERATOR MOUNTING HOLES (TYP OF 10). VERIFY LOCATION WITH MANUFACTURER INSTALLATION DRAWINGS.

- SUPPORT FLEX CONDUIT ON HORIZONTAL H-FRAME RAILS OR ON VERTICAL SITE STRUT SNT10 RAILS ADDED TO H-FRAME FOR CONDUIT/CABLE MANAGEMENT.

- RUN HYBRID CABLE FOR TOWER MOUNTED RRU'S OVERHEAD ON TRAPEZE SUSPENDED FROM WAVE GUIDE BRIDGE. SWEEP DOWN ONTO H-FRAME RAILS. THEN LOOP UNDER OVP AND CONNECT TO BOTTOM OF OVP. ATTACH GROUND KITS TO HYBRID CABLE BEFORE LOOPING UNDER OVP, AND BOND TO TDSGA GROUND BAR AT BASE OF H-FRAME.

- RUN COAX CABLE FOR GROUND MOUNTED RRU'S (IF USED) OVERHEAD ON TRAPEZE SUSPENDED FROM WAVE GUIDE BRIDGE. TERMINATE COAX ON ICE BRIDGE AND TRANSITION TO JUMPEES JUST BEFORE REACHING H-FRAME. ATTACH GROUND KITS TO COAX CABLE ON TOWER SIDE OF LAST ICE BRIDGE POST AND BOND TO TDSGA GROUND BAR NEAR TOP OF POST.

- GPS ANTENNA TO BE MOUNTED TO STANDARD HEIGHT POST WITH EXTENDED MOUNTING PIPE, USING COMMSCOPE GPS-U MOUNTING KIT. MOUNT AS NEAR AS AS PRACTICAL TO RBA84 CABINET.

- BOLT CABINETS TO SLAB USING ½"x3¾" KWIK BOLT 3 BY HILTI OR APPROVED EQUIVALENT.

- BOLT GENERATOR TO SLAB PER MANUFACTURERS SPECIFICATIONS.

PROPOSED GFCI
10'-0"
9'-3"
2"
1'-0"
1'-3"
3'-0"
3'-0"
6"
9"

PROPOSED 8'x10' EQUIPMENT PAD WITH CONCRETE FINISH. SEE SHEET C-5 FOR SECTION DETAIL.

PROPOSED EQUIPMENT CABINET. SEE SHEET C-6 FOR CABINET DETAILS.

PROPOSED VERIZON 12'-0"x30'-0" LICENSE AREA

VERIZON EQUIPMENT LAYOUT

SCALE: ⅜" = 1'-0"



SCALE IN FEET

PLANS PREPARED FOR:



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



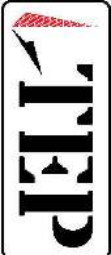
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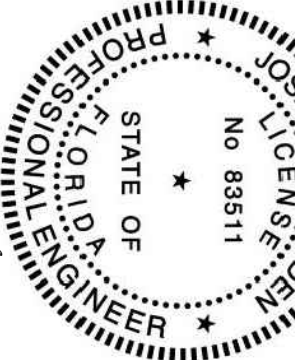
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31011



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February 11, 2025

1 02-11-25 CONSTRUCTION

0 12-31-24 PRELIMINARY

REV DATE ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

EQUIPMENT LAYOUT

SHEET NUMBER: REVISION:

C-4

1

TEP #274573.1.01 2037

FOUNDATION NOTES:

1. FOUNDATION DESIGN BASED ON 2,000 PSF SOIL BEARING CAPACITY.

2. CONCRETE SHALL BE MIN. 4,000 PSI AFTER 28 DAYS.

3. REINFORCING STEEL Fy = 60,000 PSI

4. ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% DENSITY USING THE MODIFIED PROCTOR METHOD.

5. SURFACE OF FINISHED SLAB SHALL BE LEVEL AND FLAT WITHIN 1/4".

6. CONTRACTOR SHALL VERIFY WITH MANUFACTURER ACTUAL DIMENSIONS OF CABINET PRIOR TO LAYING OUT FOUNDATION.

7. MAXIMUM SIZE OF CONCRETE AGGREGATE SHALL NOT EXCEED 1 INCH; SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED; OR ONE-THIRD CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING.

8. REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60 UNLESS OTHERWISE NOTED.

9. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.
10. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3 INCHES UNLESS OTHERWISE NOTED.

11. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL BE 3 INCHES MINIMUM.

12. FOUNDATION DESIGN ASSUMES FIELD INSPECTIONS WILL BE PERFORMED TO VERIFY THAT CONSTRUCTION MATERIALS, INSTALLATION METHODS, AND ASSUMED DESIGN PARAMETERS ARE ACCEPTABLE BASED ON CONDITIONS EXISTING AT THE SITE.

13. FOUNDATION DESIGN ASSUMED CONTINUOUS CONCRETE PLACEMENT WITHOUT CONSTRUCTION JOINTS.

14. WELDED WIRE FABRIC SHALL BE SUPPLIED IN FLAT SHEETS. (NOT ROLLED).

15. TEST CYLINDERS SHALL BE MOLDED AND LABORATORY CURED IN ACCORDANCE WITH ASTM C31. THREE CYLINDERS SHALL BE TAKEN FROM EACH DAY'S CONCRETE PLACEMENT. CYLINDERS SHALL BE TESTED IN ACCORDANCE WITH ASTM C39.

16. TOPS OF CONCRETE FOUNDATION MUST BE WITHIN 0.02" OF ELEVATION SPECIFIED BY THE CUSTOMER.

FOUNDATION NOTES

SCALE: N.T.S.

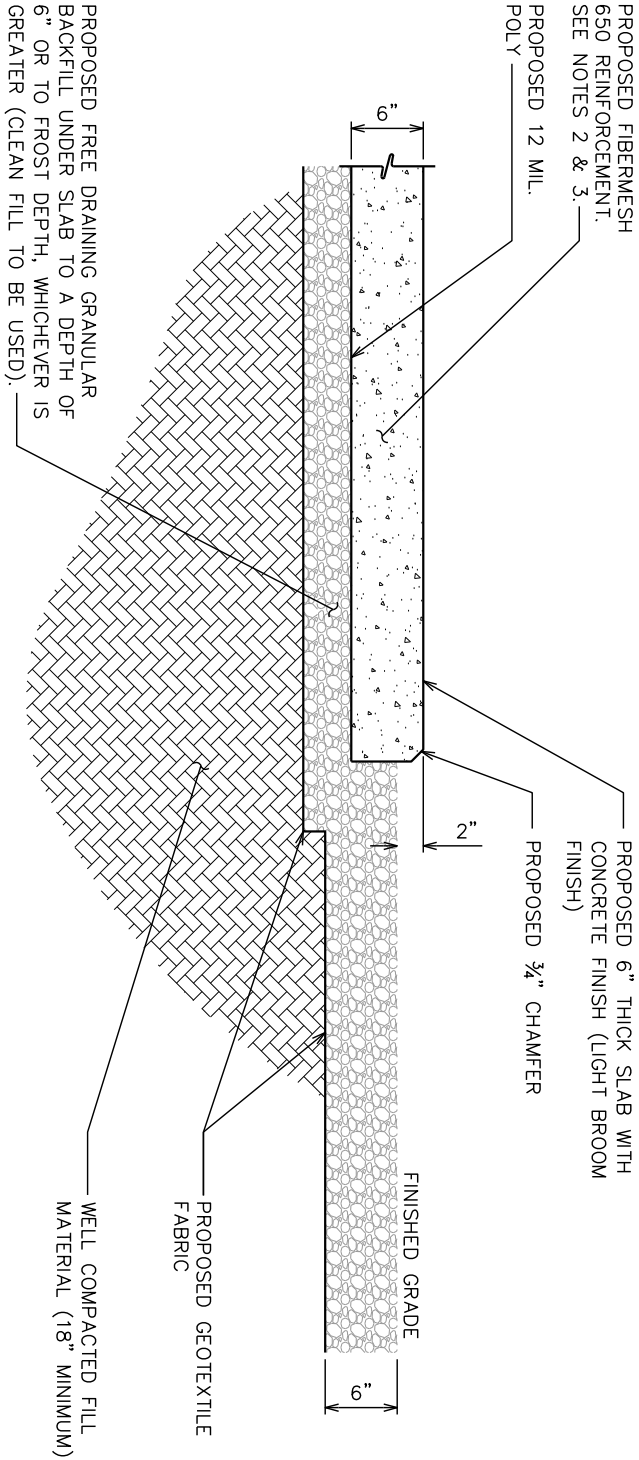
NOTES:

1. FROST DEPTH FOR COLUMBIA COUNTY IS 0 INCHES.
2. APPLICATION RATE OF FIBERS SHALL BE DETERMINED BY THE READY MIX CONCRETE SUPPLIER.
3. THE CONCRETE SUPPLIER SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR FIBERMESH APPLICATION INCLUDING THE MINIMUM APPLICATION RATE OF 3 LBS/YD³.

GENERAL STRUCTURAL NOTES:

SPECIFICATIONS / CODES:

1. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
2. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI), "MANUAL OF STANDARD PRACTICE".



EQUIPMENT FOUNDATION SECTION VIEW

SCALE: N.T.S.

PLANS PREPARED FOR:



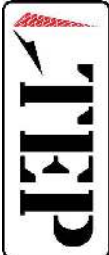
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY

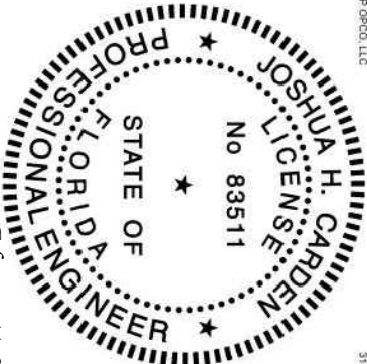
AVE
4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3630
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:
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I	02-11-25	CONSTRUCTION
O	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PWW CHECKED BY: DAO

SHEET TITLE:

FOUNDATION
NOTES & DETAILS

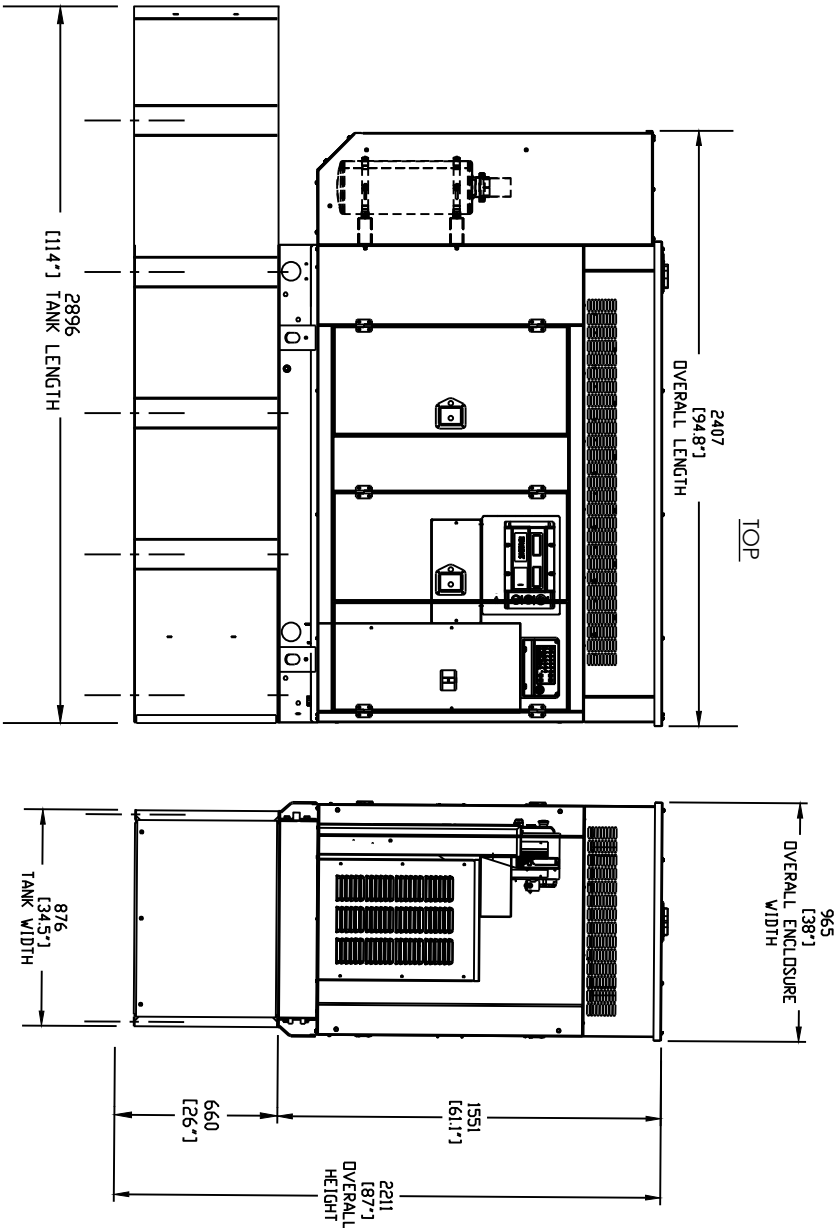
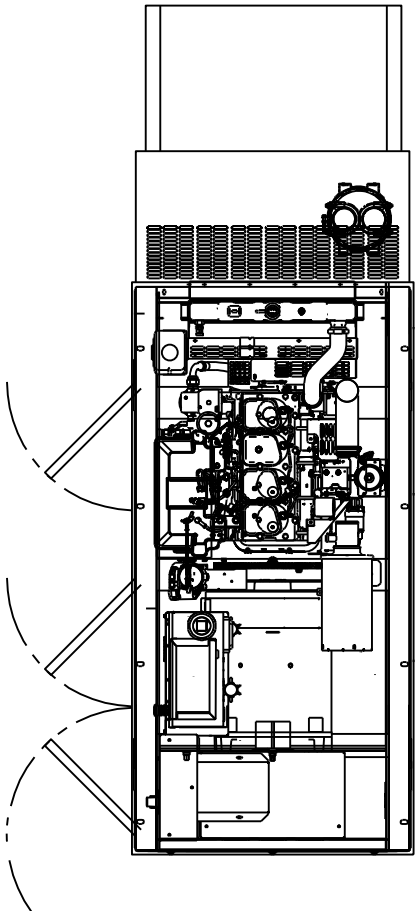
SHEET NUMBER: REVISION:

C-5 1

TEP#274573.101 2037

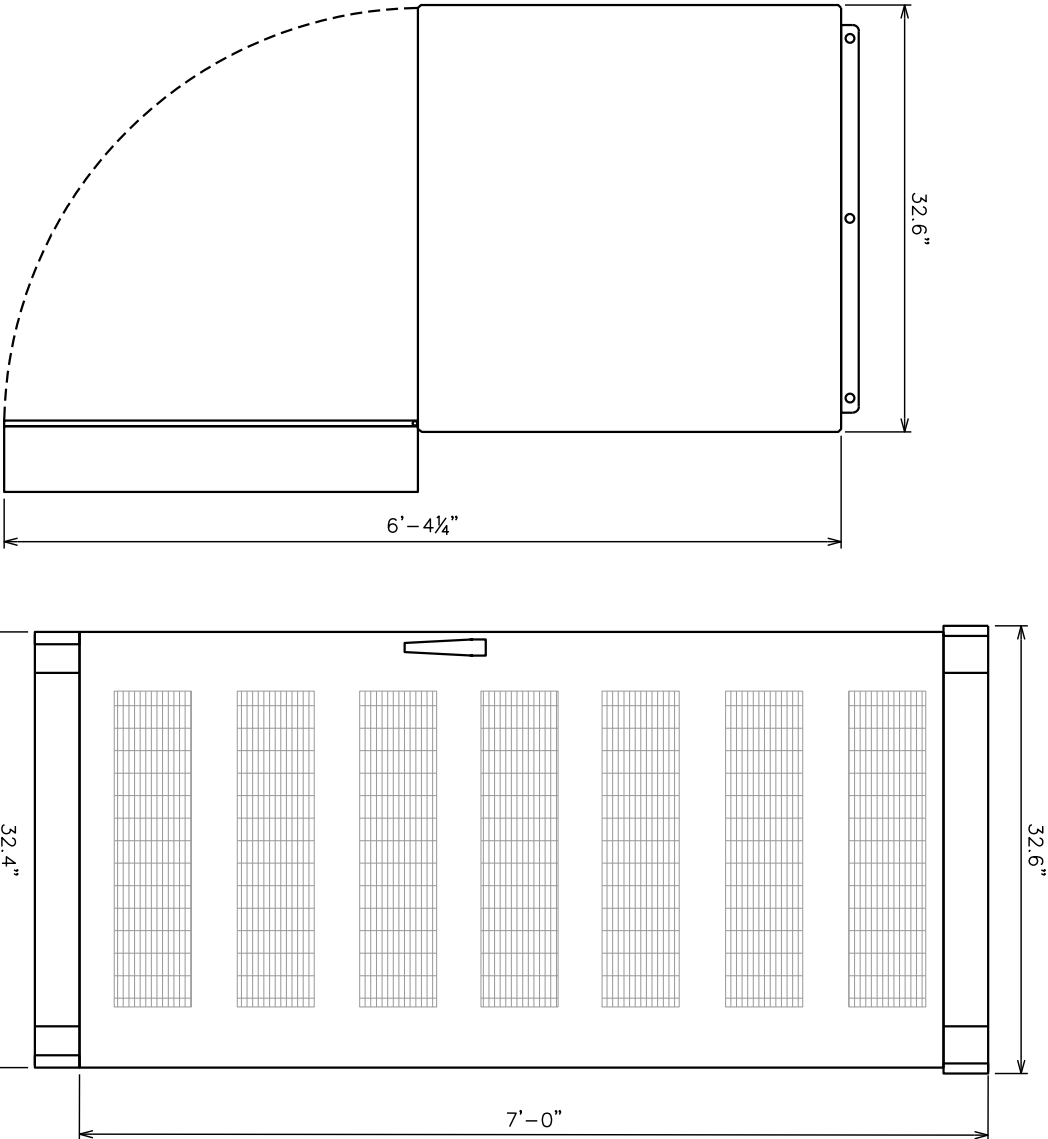
NOTES:

- 1. 50KW INDUSTRIAL DIESEL GENERATOR BY GENERAC CO. CONTRACTOR TO VERIFY DIMENSIONS WITH MANUFACTURER.
- 2. ANCHOR GENERATOR FUEL TANK TO CONCRETE PAD PER MANUFACTURER'S SPECIFICATION.
- 3. BASE TANK SIZE SHALL BE 210 GALLON. CONTRACTOR TO VERIFY SIZE WITH CONSTRUCTION MANAGER BEFORE ORDERING OR INSTALLING THE GENERATOR.



NOTES:

- 1. MOUNT USING 1/2"x3 3/4" KWIK BOLT 3 BY HILTI OR APPROVED EQUIVALENT.
- 2. DIMENSIONS SHOWN INCLUDE OUTDOOR ENCLOSURE.
- 3. CABINET WILL BE MOUNTED ON A 12" PLINTH FOR A TOTAL HEIGHT OF 8'-0".



PLANS PREPARED FOR:



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



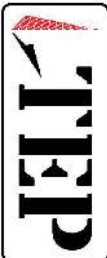
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

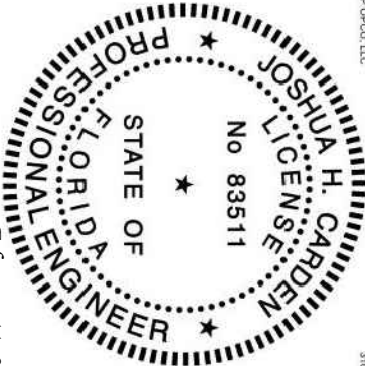


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RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:

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REV	DATE	ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

GENERATOR &
EQUIPMENT CABINET
DETAILS

SHEET NUMBER:

C-6

REVISION:

1

TEP #274573.1012037

GENERATOR DETAILS

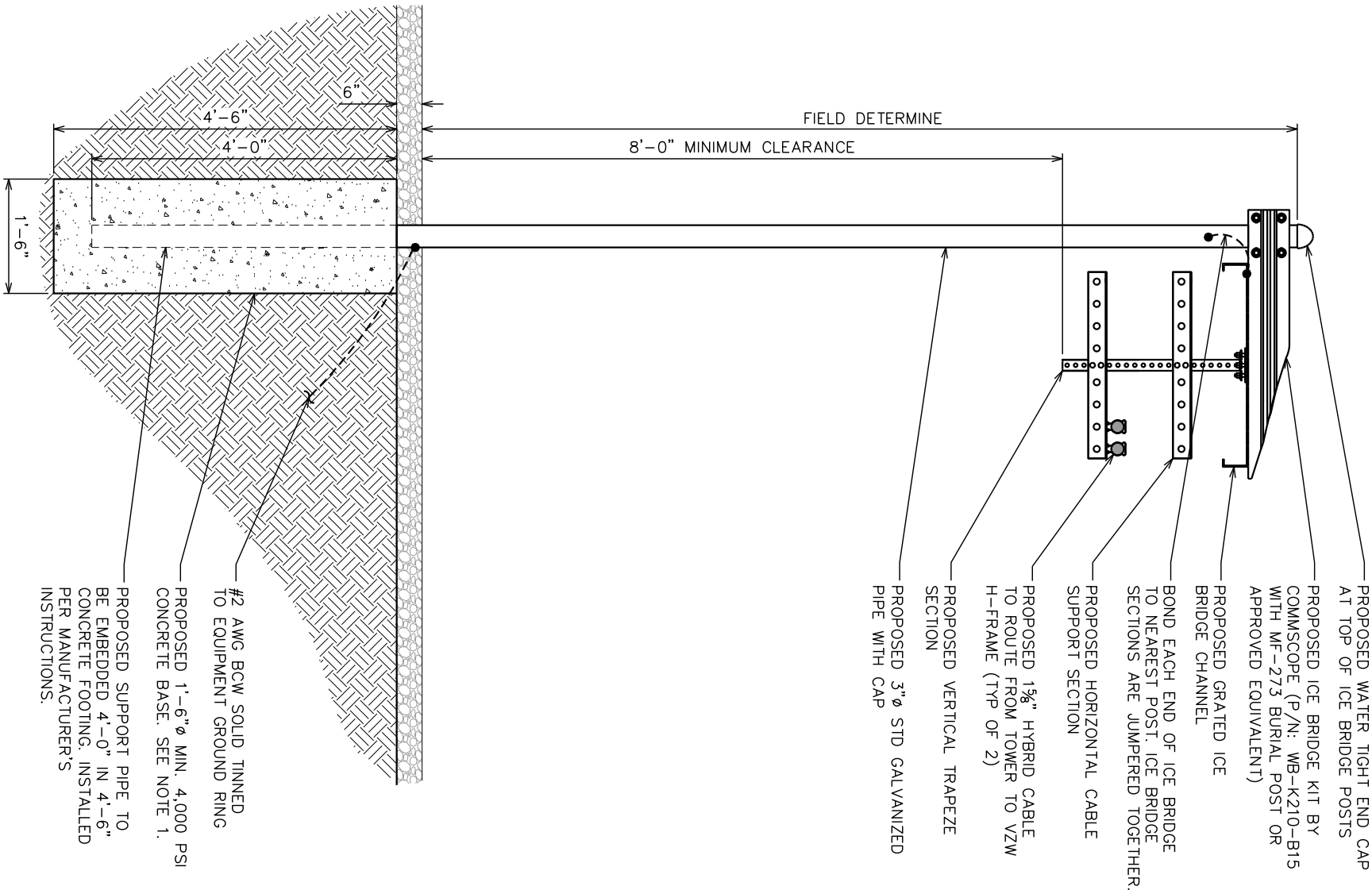
SCALE: N.T.S.

RBA84 DETAILS

SCALE: N.T.S.

NOTES:

- 1. TOP OF ICE BRIDGE POST FOUNDATION SHALL BE SET 6" BELOW TOP OF GRAVEL.
- 2. ADJUST POST FOOTING DEPTH WITHIN 15' OF TOWER TO ACCOMMODATE EXISTING TOWER FOUNDATION.
- 3. HEIGHT TO TOP OF ICE BRIDGE WILL BE FIELD DETERMINE, BUT WILL BE MAXIMUM 10'-10" ABOVE TOP OF GRAVEL.
- 4. ALL MATERIALS FURNISHED BY CONTRACTOR UNLESS OTHERWISE NOTED.



ICE BRIDGE DETAIL

SCALE: 1/2" = 1'-0"

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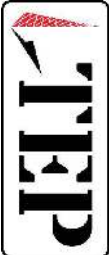
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BOCA RATON, FL 33431

PROJECT INFORMATION:

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SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

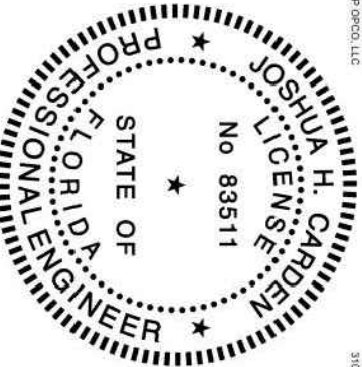


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SHEET TITLE:

ICE BRIDGE DETAILS

SHEET NUMBER: REVISION:

C-7 1

TEP#274573.101 2037

ELECTRICAL NOTES:

SCOPE:

- 1. PROVIDE LABOR, MATERIALS, INSPECTION, AND TESTING TO PROVIDE CODE COMPLIANCE FOR ELECTRIC, TELEPHONE, AND GROUNDING/LIGHTNING SYSTEMS.

CODES:

- 1. THE INSTALLATION SHALL COMPLY WITH APPLICABLE LAWS AND CODES. THESE INCLUDE BUT ARE NOT LIMITED TO THE LATEST ADOPTED EDITIONS OF:
 - A. THE NATIONAL ELECTRICAL SAFETY CODE
 - B. THE NATIONAL ELECTRIC CODE – NFPA-70
 - C. REGULATIONS OF THE SERVING UTILITY COMPANY
 - D. LOCAL AND STATE AMENDMENTS
 - E. THE INTERNATIONAL ELECTRIC CODE – IEC (WHERE APPLICABLE)
- 2. PERMITS REQUIRED SHALL BE OBTAINED BY THE CONTRACTOR.
- 3. AFTER COMPLETION AND FINAL INSPECTION OF THE WORK, THE OWNER SHALL BE FURNISHED A CERTIFICATE OF COMPLETION AND APPROVAL.

TESTING:

- 1. UPON COMPLETION OF THE INSTALLATION, OPERATE AND ADJUST THE EQUIPMENT AND SYSTEMS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS. THE TESTING SHALL BE DONE BY QUALIFIED PERSONNEL.

GUARANTEE:

- 1. IN ADDITION TO THE GUARANTEE OF THE EQUIPMENT BY THE MANUFACTURER, EACH PIECE OF EQUIPMENT SPECIFIED HEREIN SHALL ALSO BE GUARANTEED FOR DEFECTS OF MATERIAL OR WORKMANSHIP OCCURRING DURING A PERIOD OF ONE (1) YEAR FROM FINAL ACCEPTANCE OF THE WORK BY THE OWNER AND WITHOUT EXPENSE TO THE OWNER.
- 2. THE WARRANTY CERTIFICATES & GUARANTEES FURNISHED BY THE MANUFACTURERS SHALL BE TURNED OVER TO THE OWNER.

UTILITY CO-ORDINATION:

- 1. CONTRACTOR SHALL COORDINATE WORK WITH THE POWER AND TELEPHONE COMPANIES AND SHALL COMPLY WITH THE SERVICE REQUIREMENTS OF EACH UTILITY COMPANY.

EXAMINATION OF SITE:

- 1. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VISIT THE SITE OF THE JOB AND SHALL FAMILIARIZE HIMSELF WITH THE CONDITIONS AFFECTING THE PROPOSED ELECTRICAL INSTALLATION AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. FAILURE TO COMPLY WITH THE INTENT OF THIS SECTION WILL IN NO WAY RELIEVE THE CONTRACTOR OF PERFORMING THE WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM OR SYSTEMS.

CUTTING, PATCHING AND EXCAVATION:

- 1. COORDINATION OF SLEEVES, CHASES, ETC., BETWEEN SUBCONTRACTORS WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
- 2. NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE ELECTRICAL WORK SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING.
- 3. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS, ETC., WITH APPROVED METHOD AS LISTED BY UL.

RACEWAYS / CONDUITS GENERAL:

- 1. CONDUCTORS SHALL BE INSTALLED IN LISTED RACEWAYS. CONDUIT SHALL BE RIGID STEEL, EMT, SCH40 PVC, OR SCH80PVC AS INDICATED ON THE DRAWINGS. THE RACEWAY SYSTEM SHALL BE COMPLETE BEFORE INSTALLING CONDUCTORS.
- 2. EXTERIOR RACEWAYS AND GROUNDING SLEEVES SHALL BE SEALED AT POINTS OF ENTRANCE AND EXIT. THE RACEWAY SYSTEM SHALL BE BONDED PER NEC.

EXTERIOR CONDUIT:

- 1. EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.
- 2. THE CONDUIT SHALL BE RIGID STEEL AT GRADE TRANSITIONS OR WHERE EXPOSED TO DAMAGE.
- 3. UNDERGROUND CONDUITS SHALL BE RIGID STEEL, SCH40 PVC, OR SCH80 PVC AS INDICATED ON THE DRAWINGS.
- 4. BURIAL DEPTH OF CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION, BUT SHALL NOT BE LESS THAN THE FROST DEPTH AT THE SITE.
- 5. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY ROUTES BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND/OR BUILDING OWNER.

INTERIOR CONDUIT:

- 1. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT OR PVC.
- 2. CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
- 3. PROVIDE SUPPORTS FOR CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.

EQUIPMENT:

- 1. DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.
- 2. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK. CONTRACTOR WILL VERIFY THAT EXISTING CIRCUIT BREAKERS ARE RATED FOR MORE THAN AVAILABLE FAULT CURRENT AND REPLACE AS NECESSARY.
- 3. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY.

CONDUCTORS:

- 1. FURNISH AND INSTALL CONDUCTORS SPECIFIED IN THE DRAWINGS. CONDUCTORS SHALL BE COPPER AND SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.
- 2. THE USE OF ALUMINUM CONDUCTORS SHALL BE LIMITED TO THE SERVICE FEEDERS INSTALLED BY THE UTILITY.
- 3. CONDUCTORS SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
 - A. MINIMUM WIRE SIZE SHALL BE #12 AWG.
 - B. CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND #12 MAY BE SOLID OR STRANDED.
 - C. CONNECTION FOR #10 AWG, #12 AWG SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
 - D. CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.

- 3. CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.

UL COMPLIANCE:

- 1. ELECTRICAL MATERIALS, DEVICES, CONDUCTORS, APPLANCES, AND EQUIPMENT SHALL BE LABELED/LISTED BY UL OR ACCEPTED BY JURISDICTION (I.E., LOCAL COUNTY OR STATE) APPROVED THIRD PARTY TESTING AGENCY.

GROUNDING:

- 1. ELECTRICAL NEUTRALS, RACEWAYS AND NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT AND ASSOCIATED ENCLOSURES SHALL BE GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE NEUTRAL CONDUCTORS, CONDUITS, SUPPORTS, CABINETS, BOXES, GROUND BUSSES, ETC. THE NEUTRAL CONDUCTOR FOR EACH SYSTEM SHALL BE GROUNDED AT A SINGLE POINT.
- 2. PROVIDE GROUND CONDUCTOR IN RACEWAYS PER NEC.
- 3. PROVIDE BONDING AND GROUND TO MEET NFPA 780 – "LIGHTNING PROTECTION" AS A MINIMUM.
- 4. PROVIDE GROUNDING SYSTEM AS INDICATED ON THE DRAWINGS, AS REQUIRED BY THE NATIONAL ELECTRIC CODE, RADIO EQUIPMENT MANUFACTURERS, AND MOTOROLA R36 (AS APPLICABLE).

ABBREVIATIONS AND LEGEND

A	-	AMPERE	PNLBD	-	PANELBOARD
AFG	-	ABOVE FINISHED GRADE	PVC	-	RIGID NON-METALLIC CONDUIT
ATS	-	AUTOMATIC TRANSFER SWITCH	RGS	-	RIGID GALVANIZED STEEL CONDUIT
AWG	-	AMERICAN WIRE GAUGE	SW	-	SWITCH
BCW	-	BARE COPPER WIRE	TGB	-	TOWER GROUND BAR
BFG	-	BELOW FINISHED GRADE	UL	-	UNDERWRITERS LABORATORIES
BKR	-	BREAKER	V	-	VOLTAGE
C	-	CONDUIT	W	-	WATTS
CKT	-	CIRCUIT	XFMR	-	TRANSFORMER
DISC	-	DISCONNECT	XMTR	-	TRANSMITTER
EGR	-	EXTERNAL GROUND RING			
EMT	-	ELECTRIC METALLIC TUBING			
FSC	-	FLEXIBLE STEEL CONDUIT			
GEN	-	GENERATOR			
GPS	-	GLOBAL POSITIONING SYSTEM			
GRD	-	GROUND			
IGB	-	ISOLATED GROUND BAR			
IGR	-	INTERIOR GROUND RING (HALO)			
KW	-	KILOWATTS			
NEC	-	NATIONAL ELECTRIC CODE			
PCS	-	PERSONAL COMMUNICATION SYSTEM			
PH	-	PHASE			
PNL	-	PANEL			

-----E-----	UNDERGROUND ELECTRICAL CONDUIT
-----T-----	UNDERGROUND TELEPHONE CONDUIT
	KILOWATT-HOUR METER
-----	UNDERGROUND BONDING AND GROUNDING CONDUCTOR
Ø	GROUND ROD
●	CADWELD
☒	GROUND ROD WITH INSPECTION WELL

PLANS PREPARED FOR:



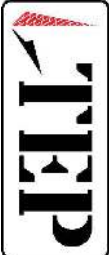
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

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SITE NAME #: BIRLEY AVE

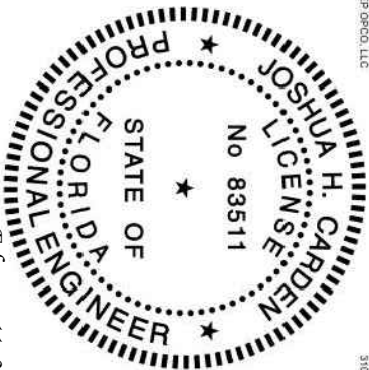
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(COLUMBIA COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3630
OFFICE: (919) 661-6361
www.tepgroup.net
FL COA # 31011

SEAL:
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February 11, 2025
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REV	DATE	ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

ELECTRICAL NOTES

SHEET NUMBER: REVISION:

E-1 1

TEP # 274573.101 2037

NOTES:

- 1. ALL CONDUCTORS ARE TYPE THWN (75°C) COPPER.
- 2. MAXMUM LENGTH OF RUN FOR RECTIFIER CIRCUITS IS 50-FT.
- 3. INTERSECT/GENERAC INTEGRATED LOAD CENTER INCLUDES 200A MAIN DISCONNECT AND TRANSFER SWITCH FOR PORTABLE OR PERMANENT GENERATOR.
- 4. RECTIFIER LOADS ARE CONSIDERED TO BE NON-CONTINUOUS.
- 5. IF ADDITIONAL FUTURE LOADS ARE ADDED WHICH CAUSE TOTAL DEMAND TO EXCEED GENERATOR BREAKER SIZE, BACKUP POWER SYSTEM SHALL BE EVALUATED AND UPGRADED AS NECESSARY.

200A 120/240V 1Ø 3W VERIZON POWER PANEL SCHEDULE														
DEMAND FACTOR	LOAD SERVED	UNCOMPENSATED VOLT AMPERES		TRIP	CKT #	PHASE		CKT #	TRIP	UNCOMPENSATED VOLT AMPERES		LOAD SERVED	DEMAND FACTOR	
		L1 (VA)	L2 (VA)							L1 (VA)	L2 (VA)			
100%	RECTIFIER #1	2204	2204	30A	1	A		2	-	-		SPARE	-	
					3	B		4	-	-		SPARE	-	
100%	RECTIFIER #2	2204	2204	30A	5	A		6	-	-		SPARE	-	
					7	B		8	-	-		SPARE	-	
100%	RECTIFIER #3	2204	2204	30A	9	A		10	-	-		SPARE	-	
					11	B		12	-	-		SPARE	-	
100%	RECTIFIER #4	2204	2204	30A	13	A		14	-	-		SPARE	-	
					15	B		16	-	-		SPARE	-	
100%	RECTIFIER #5	2204	2204	30A	17	A		18	-	-		SPARE	-	
					19	B		20	-	-		SPARE	-	
125%	GFCI REC. (VZW)/AREA LIGHTS	1200	2204	20A	21	A		22	-	-		SPARE	-	
125%	GEN. BLOCK HEATER		1200	20A	23	B		24	-	-		SPARE	-	
125%	GEN. BATTERY CHARGER	500*		20A	25	A		26	-	-		SPARE	-	
-	SPARE		-	-	27	B		28	-	-		SPARE	-	
-	SPARE	-	-	-	29	A		30	-	-		SPARE	-	
VOLT AMPS		12720	12220							-	-	VOLT AMPS		
L1 DEMAND VOLT AMPERES (INCLUDES DEMAND FACTOR)		L1 VOLT AMPERES		12720	12220		L2 VOLT AMPERES		L2 DEMAND VOLT AMPERES (INCLUDES DEMAND FACTOR)					
				13145	12520				L2 DEMAND VOLT AMPERES (INCLUDES DEMAND FACTOR)					
L1 DEMAND AMPS				109.54	104.33				L2 DEMAND AMPS					
				109.54				MAX DEMAND AMPS						
CONNECTED GENERATOR LOAD														
VOLT AMPS		12220	12220			12220		12220		L2 VOLT AMPERES		VOLT AMPS		
L1 DEMAND VOLT AMPERES (INCLUDES DEMAND FACTOR)		L1 VOLT AMPERES		12220	12220		L2 DEMAND VOLT AMPERES (INCLUDES DEMAND FACTOR)		L2 VOLT AMPERES		VOLT AMPS			
				12520	12520		L2 DEMAND VOLT AMPERES (INCLUDES DEMAND FACTOR)		L2 VOLT AMPERES		VOLT AMPS			
L1 DEMAND AMPS				104.33	104.33		L2 DEMAND AMPS		L2 VOLT AMPERES		VOLT AMPS			
				104.33				MAX DEMAND AMPS		L2 DEMAND AMPS		VOLT AMPS		

*GEN. BATTERY CHARGER LOAD IS 0 VA DURING GENERATOR OPERATION.

POWER PANEL SCHEDULE

SCALE: N.T.S.

PLANS PREPARED FOR:



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

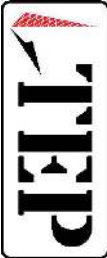
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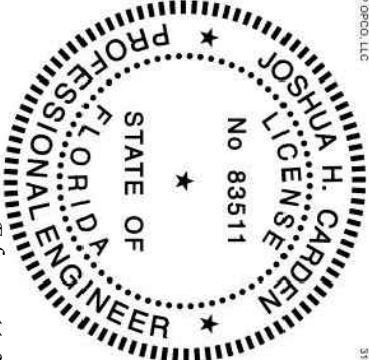
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SHEET TITLE:

POWER PANEL SCHEDULE

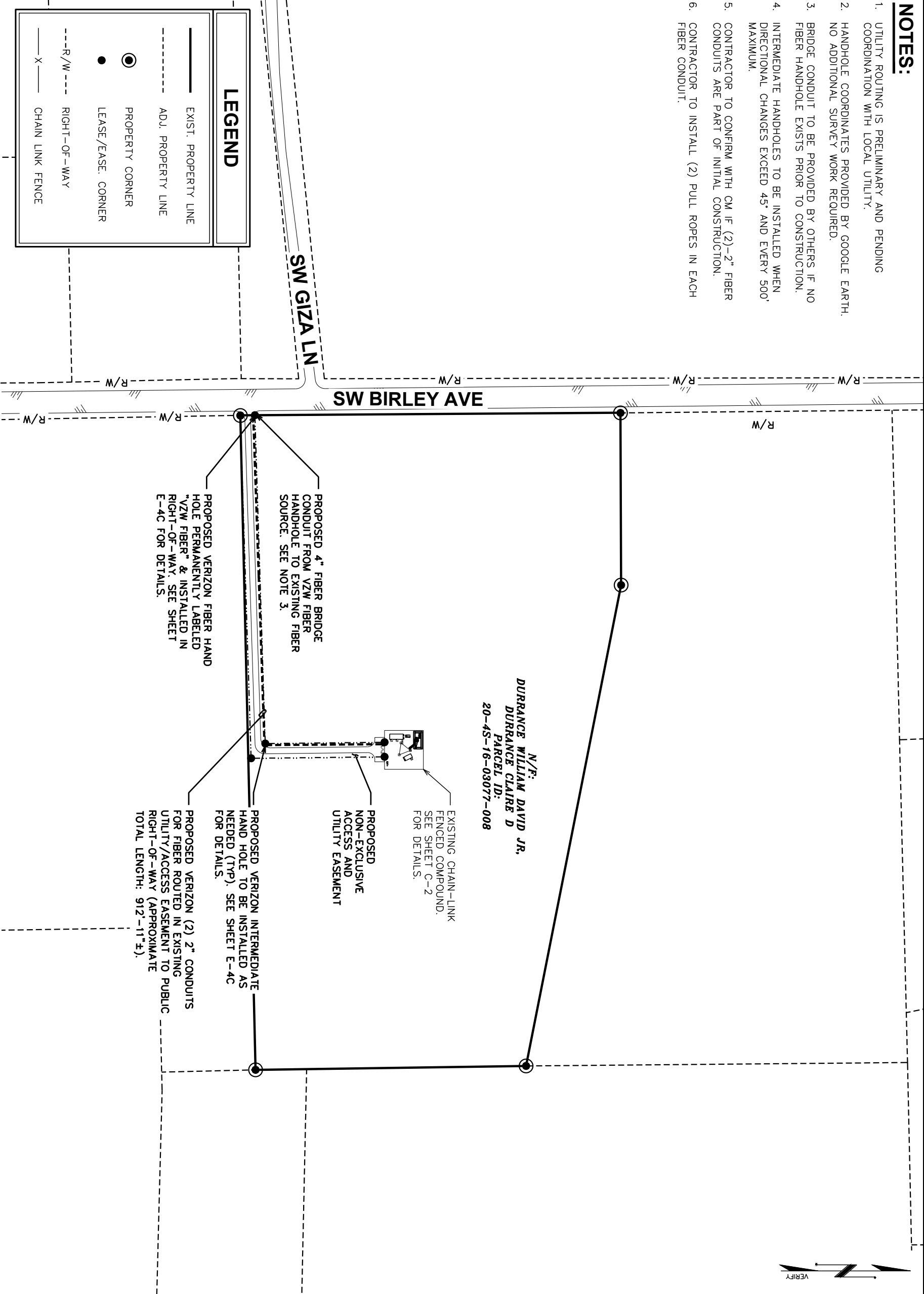
SHEET NUMBER: REVISION:

E-2 1

TEP#:274573.101 2037

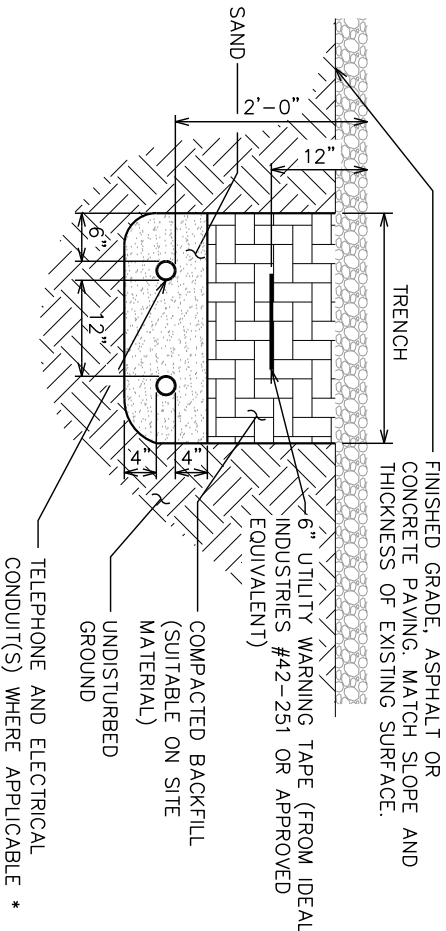
NOTES:

- 1. UTILITY ROUTING IS PRELIMINARY AND PENDING COORDINATION WITH LOCAL UTILITY.
- 2. HANDHOLE COORDINATES PROVIDED BY GOOGLE EARTH. NO ADDITIONAL SURVEY WORK REQUIRED.
- 3. BRIDGE CONDUIT TO BE PROVIDED BY OTHERS IF NO FIBER HANDHOLE EXISTS PRIOR TO CONSTRUCTION.
- 4. INTERMEDIATE HANDHOLES TO BE INSTALLED WHEN DIRECTIONAL CHANGES EXCEED 45° AND EVERY 500' MAXIMUM.
- 5. CONTRACTOR TO CONFIRM WITH CM IF (2)-(2)" FIBER CONDUITS ARE PART OF INITIAL CONSTRUCTION.
- 6. CONTRACTOR TO INSTALL (2) PULL ROPES IN EACH FIBER CONDUIT.



NOTES:

- 1. ACTUAL SEPARATION OF CONDUITS TO BE DETERMINED BY SITE SPECIFIC REQUIREMENTS.
- 2. PROVIDE SCH40 PVC CONDUIT BELOW GRADE UNLESS OTHERWISE NOTED.
- 3. PROVIDE SCH80 PVC CONDUIT FOR INSTALLATIONS BELOW VEHICULAR TRAFFIC AREAS



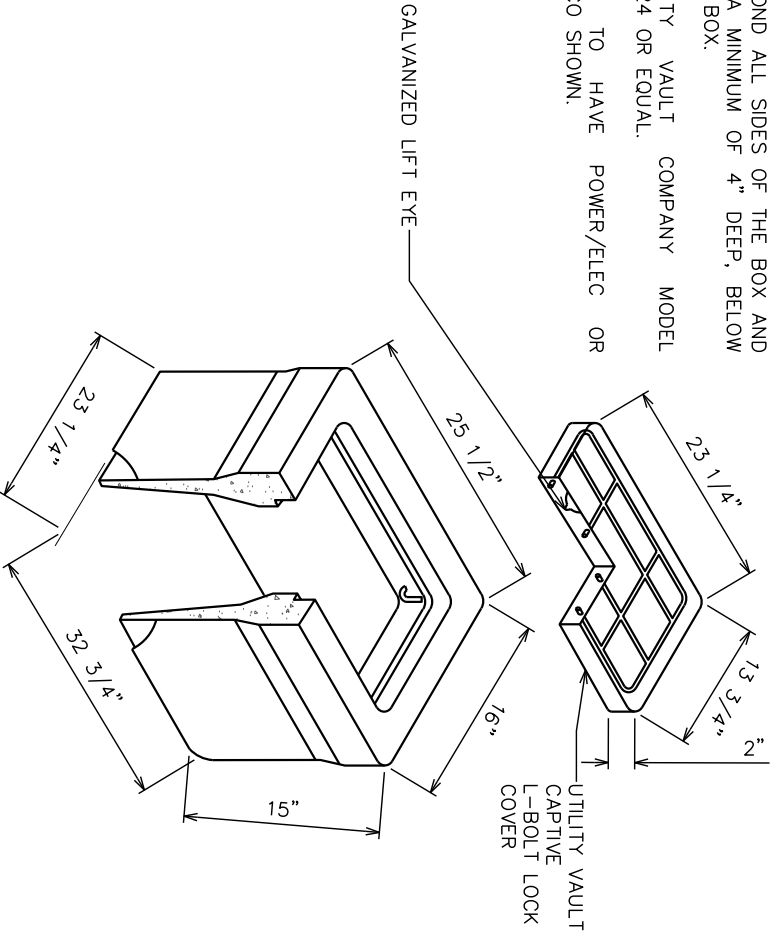
* SEPARATION DIMENSIONS TO BE VERIFIED WITH LOCAL UTILITY COMPANY REQUIREMENTS.

UNDERGROUND CONDUIT(S) TRENCH DETAIL

SCALE: N.T.S.

NOTES:

- 1. INSTALL ON 3/4" AGGREGATE WHICH SHALL EXTEND A MINIMUM OF 6" BEYOND ALL SIDES OF THE BOX AND BE A MINIMUM OF 4" DEEP, BELOW THE BOX.
- 2. UTILITY VAULT COMPANY MODEL #1324 OR EQUAL.
- 3. CAP TO HAVE POWER/ELEC OR TELCO SHOWN.



TYPICAL PULL BOX

SCALE: N.T.S.

PLANS PREPARED FOR:

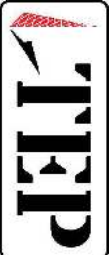


4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:
VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

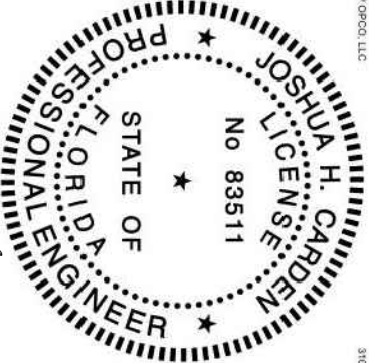


326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
FL COA # 31011

SEAL:

TEP OP.CO, LLC

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I	02-11-25	CONSTRUCTION
O	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

POWER & TELCO
ROUTING DETAILS

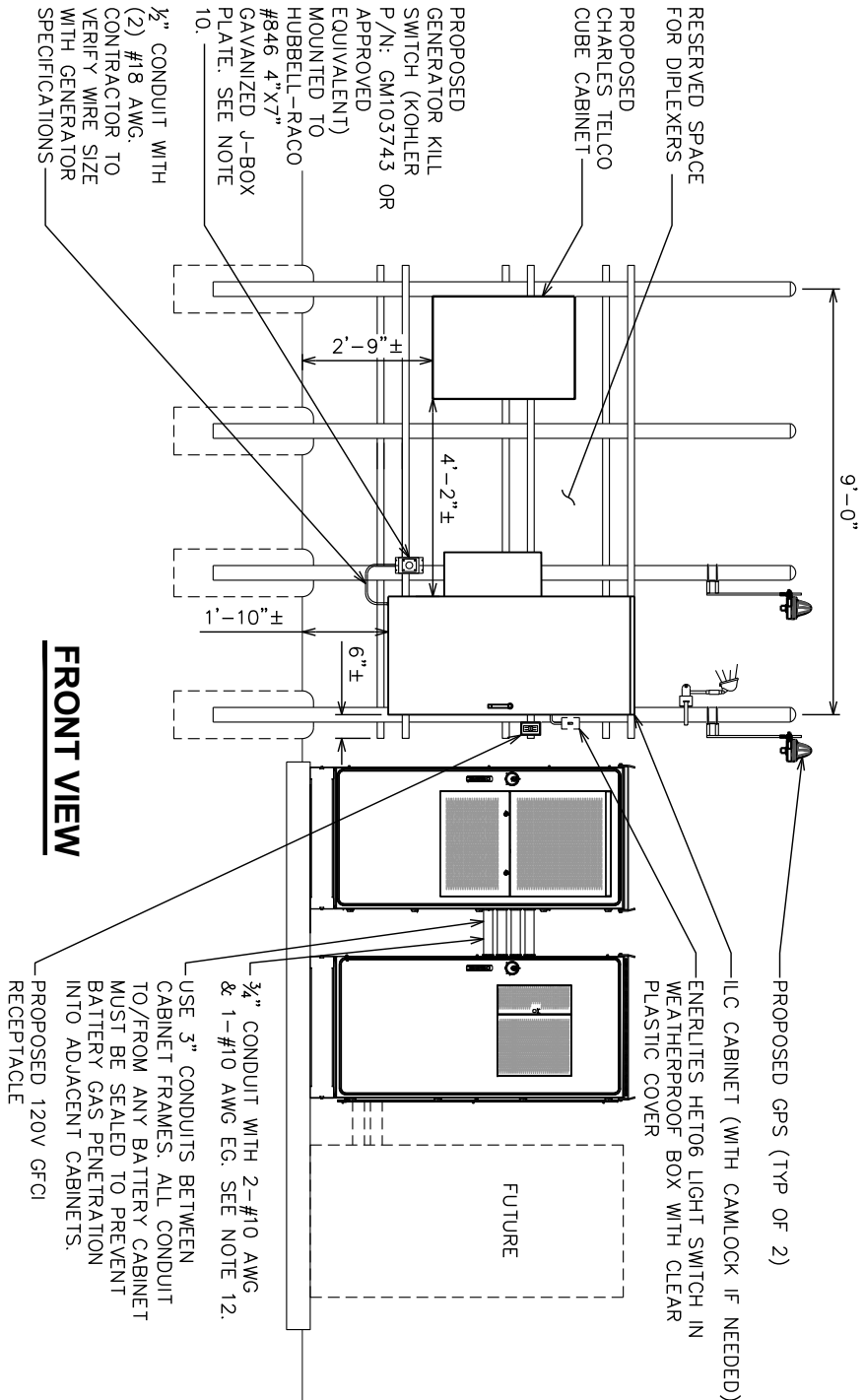
SHEET NUMBER: REVISION:

E-4C 1

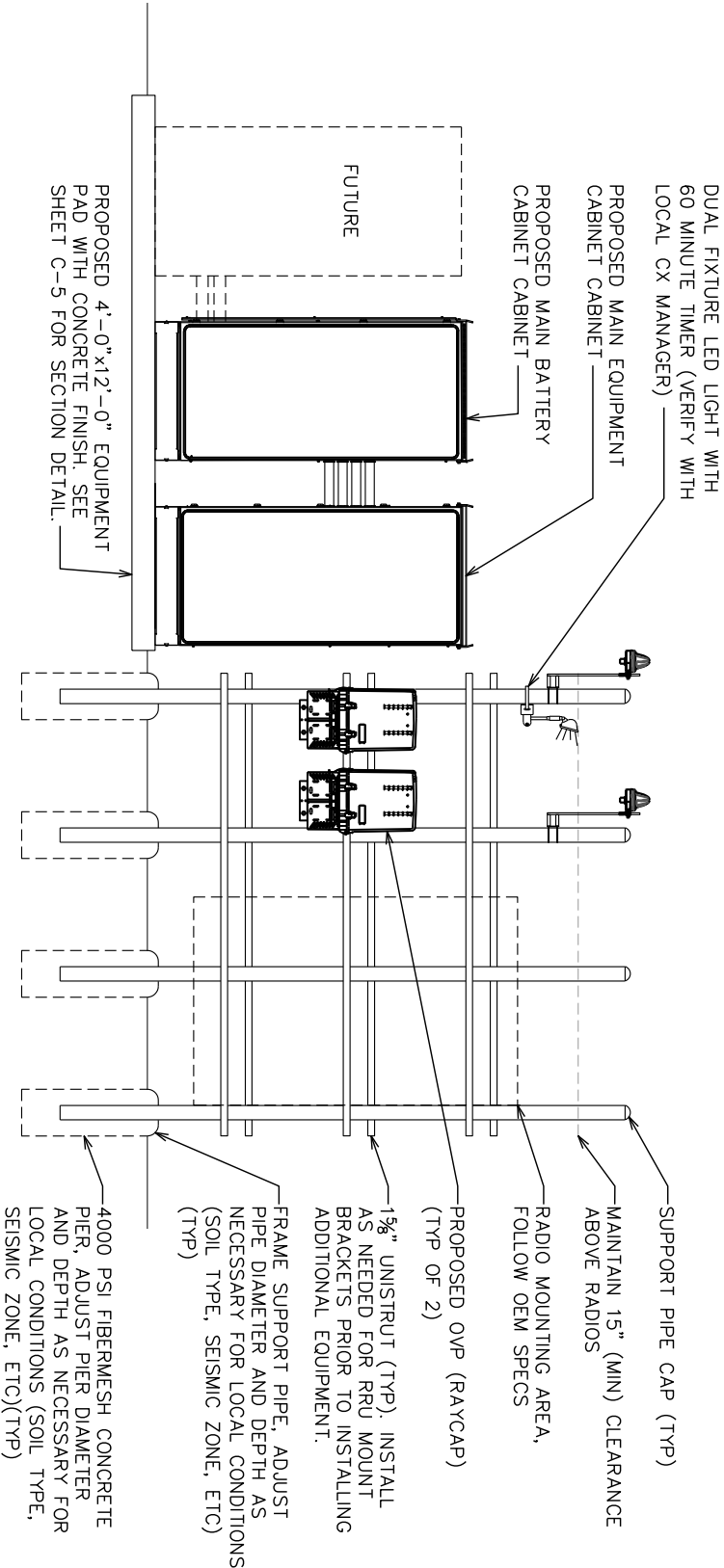
TEP #: 274573.1 01 2037

NOTES:

- ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE, STATE BUILDING CODES AND THE LOCAL BUILDING CODES. ALL COMPONENTS SHALL BE U.L. LISTED.
- REFER TO SHEET C-4 FOR EQUIPMENT LAYOUT AND EXACT LOCATION OF VERIZON H-FRAME.
- CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANY FOR INSTALLATION OF NEW METER IN UTILITY H-FRAME.
- COORDINATE EXACT LOCATION OF UNDERGROUND FEEDERS AND CIRCUITRY WITH THE OWNER.
- CONTRACTOR SHALL COORDINATE EFFORTS WITH (LOCAL, ELECTRICAL) AUTHORITY HAVING JURISDICTION (AHJ) AND OTHER TRADES TO DETERMINE "FROST" LINE, AND TYPES OF RACEWAYS REQUIRED FOR INSTALLATION.
- BOND ALL ELECTRICAL EQUIPMENT TO RACK.
- DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE ALTERED IN THE FIELD AS APPROVED BY OWNER TO BETTER SUIT ACTUAL CONDITIONS OR EQUIPMENT RECEIVED.
- FOR ANY METAL CONDUIT ENTERING AN ENCLOSURE WHERE A PRE-PUNCHED CONCENTRIC OR ECCENTRIC KNOCKOUT IS USED, THE CONTRACTOR SHALL ENSURE ADEQUATE BONDING BETWEEN THE METAL CONDUIT AND ENCLOSURE BY INSTALLING A BONDING JUMPER AROUND THE CONCENTRIC OR ECCENTRIC KNOCKOUT.
- CONTRACTOR SHALL INSURE THAT NO OPERABLE DEVICE SHALL EXCEED 6'-6" TO CENTER LINE OF DEVICE.
- GENERATOR STOP SWITCH TO BE FURNISHED BY LESSEE AND INSTALLED BY GC.
- ILC TO BE FURNISHED BY VZW AND INSTALLED BY GC.
- BREAKER AND CONDUCTOR SIZES BASED ON TYPICAL CONFIGURATIONS. CONTRACTOR WILL VERIFY WITH MANUFACTURER SPECIFICATIONS BEFORE ORDERING OR INSTALLING PARTS.



FRONT VIEW



REAR VIEW

VERIZON H-FRAME DETAILS

SCALE: N.T.S.

PLANS PREPARED FOR:



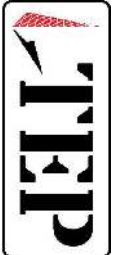
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

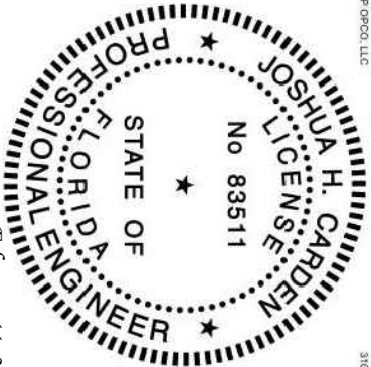
4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



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RALEIGH, NC 27603-3630
OFFICE: (919) 661-6351
www.tepgroup.net
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SEAL:
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0	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PWW CHECKED BY: DAO

SHEET TITLE:

VERIZON
H-FRAME DETAILS

SHEET NUMBER: REVISION:

E-5 1

TEP#274573.1012037

VERIZON GROUNDING NOTES:

1. THE GROUND RING SHALL CONSIST OF #2 AWG BARE SOLID TINNED COPPER (STC) CONDUCTOR, UNLESS NOTED OTHERWISE, BURIED AT 30" BELOW FINISHED GRADE (OR BELOW FROST LINE). LOCATE 24" MINIMUM AND 36" MAXIMUM FROM EQUIPMENT AREA. ALL CONNECTIONS SHALL BE MADE USING A PARALLEL TYPE EXOTHERMIC WELD, UNLESS NOTED OTHERWISE. WHERE THE GROUND RING DISTURBS EXISTING SITE GROUNDING, CONNECT GROUND RING TO EXISTING SITE CONDUCTORS SO AS TO MAINTAIN THE CONTINUITY OF THE EXISTING GROUND SYSTEM.
2. INSTALL GROUND RODS AS SHOWN AND AS REQUIRED. GROUND RODS TO BE COPPER CLAD STEEL, 5/8" DIAMETER AND 10FT IN LENGTH. SPACING BETWEEN GROUND RODS SHALL BE 10FT MINIMUM AND 15FT MAXIMUM. TOP OF GROUND ROD TO BE 30" MINIMUM BELOW GRADE (OR BELOW FROST LINE). BOND TOP OF GROUND ROD TO GROUND WIRE WITH EXOTHERMIC WELD. DO NOT EXOTHERMICALLY WELD ANYTHING TO GROUND ROD EXCEPT GROUND WIRE WHICH PASSES OVER TOP OF GROUND ROD.
3. EQUIPMENT AREA GROUND RING SHALL HAVE A MINIMUM OF 4 GROUND RODS, INSTALLED AT THE CORNERS OF THE GROUND RING PLUS ADDITIONAL RODS AS REQUIRED TO COMPLY WITH THE SPACING REQUIREMENTS.
4. EQUIPMENT AREA GROUND RING AND TOWER GROUND RING SHALL BE BONDED TOGETHER WITH TWO #2 STC GROUND LEADS, TYPICALLY ONE ON EACH SIDE OF ICE BRIDGE.
5. MINIMUM BEND RADIUS FOR #2 AWG GROUND WIRE IS 12", EXCEPT USE 24" FOR EQUIPMENT AREA GROUND RINGS.
6. GROUND ALL EXTERIOR EXPOSED METAL OBJECTS TO BURIED GROUND SYSTEM WITH #2 STC MECHANICALLY ATTACHED OR EXOTHERMICALLY WELDED TO OBJECTS AND EXOTHERMICALLY WELDED TO GROUND RING. USE TWO HOLE LUGS FOR CONNECTION TO FLAT METAL SURFACES. USE ONLY STAINLESS STEEL HARDWARE ON ALL MECHANICAL CONNECTIONS. CLEAN ALL SURFACES (AND STRIP PAINTED SURFACES) TO BARE BRIGHT METAL PRIOR TO MAKING GROUND CONNECTIONS. APPLY ANTI-OXIDE COMPOUND TO ALL MECHANICAL CONNECTIONS. APPLY ZINC RICH PAINT (COLD GALV.) TO ALL EXOTHERMIC WELDS, AND TO ANY METAL EXPOSED BY CLEANING, STRIPPING, GRINDING, CUTTING OR DRILLING.
7. ALL GROUNDING CONDUCTORS ABOVE GRADE SHALL BE RUN IN 3/4" FLEXIBLE PVC CONDUIT. CONDUIT SHALL BEGIN WITHIN 3/4" OF ABOVE GROUND CONNECTION POINT, SHALL EXTEND 24" BELOW GRADE MINIMUM, AND SHALL BE FILLED WITH SEALANT AT ABOVE GROUND CONNECTION POINT. SECURE CONDUIT EVERY 24" ON VERTICAL RUNS AND EVERY 36" ELSEWHERE WITH NON-METALLIC TIES.
- 8A. ON GUYED AND SELF SUPPORT TOWERS, MOUNT TOWER BOTTOM GROUND BAR ON DEDICATED POST DIRECTLY BELOW COAX CABLES COMING OFF TOWER. POST TO BE 3.5" OD GALVANIZED SCHEDULE 40 PIPE WITH GALVANIZED PIPE CAP. TOP OF POST TO BE 78" ABOVE GRADE. EMBED POST 30" MINIMUM IN 12" DIAMETER BY 36" DEEP MINIMUM CONCRETE FOOTING WITH TOP OF FOOTING 6" BELOW GRADE. IF TOWER FOUNDATION OBSTRUCTS AUGERED FOOTING, USE POST WITH 10" SQUARE GALVANIZED STEEL FLANGE PLATE WELDED TO BOTTOM AND BOLT FLANGE TO TOP OF CONCRETE TOWER FOOTING.
- 8B. ON MONOPOLE TOWERS, CLAMP TOWER BOTTOM GROUND BAR DIRECTLY TO TOWER. IF RUNNING COAX INSIDE MONOPOLE, CLAMP ONTO BOTTOM LIP OF EXIT PORT. IF BANDING COAX TO OUTSIDE OF TOWER, CLAMP ONTO STEEL ANGLE WHICH IS Banded TO TOWER. BOND GROUND BAR TO TOWER GROUND RING WITH TWO #2 STC LEADS LUGGED TO GROUND BAR AND EXOTHERMICALLY WELDED TO GROUND RING.

9. AT EQUIPMENT AREA, INSTALL EXTERIOR GROUND BAR (THRU-BOLTED STYLE) AT BASE OF (2) INTERIOR H-FRAME POSTS AND AT TOP OF ICE BRIDGE POST WHICH IS NEAREST TO (BUT CLOSER TO TOWER THAN) THE COAX CABLE TERMINATION. MOUNT GROUND BAR TO H-FRAME POSTS AT 6" ABOVE GRAVEL AND TO ICE BRIDGE POST AT 6FT ABOVE GRAVEL.
10. ALL ICE BRIDGE SECTIONS ARE TO BE JUMPERED TOGETHER WITH #2 WIRE. EITHER BARE TINNED COPPER OR GREEN INSULATED STRANDED ICE BRIDGE SHALL BE GROUND ED AT EACH END WITH #2 STC WIRE LUGGED TO ICE BRIDGE AND EXOTHERMICALLY WELDED TO UPPER PORTION OF NEAREST ICE BRIDGE POST. ICE BRIDGE SECTIONS ABOVE H-FRAME SHALL BE BONDED TO EACH OTHER WITH JUMPERS AT EACH END – THIS ASSEMBLY WILL BE CONSIDERED AS A SINGLE ICE BRIDGE SECTION FOR GROUNDING PURPOSES.
11. BOND EACH ICE BRIDGE POST, H-FRAME POST OR DEDICATED GROUNDING POST TO BURIED GROUNDING SYSTEM WITH #2 STC LEAD EXOTHERMICALLY WELDED TO POST BELOW TOP OF GRAVEL AND EXOTHERMICALLY WELDED TO GROUND RING. EACH POST TO HAVE SEPARATE GROUND LEAD DIRECTLY TO GROUND RING – DO NOT DAISY CHAIN POSTS TOGETHER.
12. BOND EACH RF CABINET TO EQUIPMENT GROUND RING WITH #2 AWG TINNED SOLID BARE COPPER CONDUCTOR LUGGED TO CABINET BODY AND EXOTHERMICALLY WELDED TO GROUND RING. LUG TO CABINET BODY USING LOCATION AT WHICH STUDS ON CABINET CHASSIS HAVE DIRECT GROUND WIRE CONNECTION TO CABINET INTERNAL GROUND BAR. RUN CONDUIT AND CONDUCTOR ACROSS BACK OF CABINET (DO NOT RUN TOWARDS NEAREST CORNER OF CABINET AND THEN BEND GROUND WIRE SHARPLY). TAKE SHORTEST PATH ACROSS CONCRETE PAD, THEN DOWN INTO GRAVEL AREA.
13. BOND EACH BATTERY CABINET (WHERE USED) TO GROUND RING WITH #2 AWG TINNED SOLID BARE COPPER CONDUCTOR LUGGED TO CABINET BODY AND EXOTHERMICALLY WELDED TO GROUND RING. RUN GROUND LEAD IN FLEX CONDUIT ALONG BACK OF CABINET. TAKE SHORTEST PATHACROSS CONCRETE PAD, THEN DOWN INTO GRAVEL AREA. CONNECT TWO HOLE LUG TO BACK OF CABINET AT FACTORY PROVIDED GROUNDING STUDS.
14. BOND GENERATOR TO GROUND RING WITH #2 STC MECHANICALLY FASTENED TO GENERATOR AND EXOTHERMICALLY WELDED TO GROUND RING. LOCATE GROUND LEADS AT TWO DIAGONALLY OPPOSITE CORNERS OF GENERATOR BY DRILLING AND BOLTING TWO HOLE LUG TO FINS ON GENERATOR BASE STRUCTURE. GROUND LEADS SHOULD TAKE SHORTEST PATH ACROSS CONCRETE PAD TO GRAVEL AREA, THEN CONTINUE TO GROUND RING.
15. WHERE PROPANE TANK IS INSTALLED TO FUEL GENERATOR, BOND PROPANE TANK TO GROUND RING WITH A SINGLE #2 STC CLAMPED TO FILLER PIPE OF PROPANE TANK AND EXOTHERMICALLY WELDED TO GROUND RING. GROUND LEAD SHOULD RUN TO TANK SUPPORT AND TAKE SHORTEST PATH ACROSS CONCRETE PAD TO GRAVEL AREA, THEN CONTINUE TO GROUND RING. IF PROPANE TANK FUEL LINE IS METALLIC AND CROSSES EQUIPMENT GROUND RING, BOND FUEL LINE TO EQUIPMENT GROUND RING WHERE THE TWO LINES CROSS WITH A SINGLE #2 STC CLAMPED TO FUEL LINE AND EXOTHERMICALLY WELDED TO GROUND RING.
16. BOND GPS ANTENNA AND GPS ANTENNA MOUNT TO TSDGA GROUND BAR AT BOTTOM OF H-FRAME POST WITH #2 GREEN INSULATED STRANDED GROUND WIRE. RUN GROUND WIRE DOWN ICE BRIDGE POST AND SECURE TO POST WITH NON-METALLIC TIES.

17. ANY METAL FENCE POST WITHIN 6FT OF A GROUND ED METAL OBJECT SHALL BE BONDED TO THE EQUIPMENT GROUND RING WITH #2 STC CLAMPED OR EXOTHERMICALLY WELDED TO THE POST AND EXOTHERMICALLY WELDED TO GROUND RING. ANY FENCE WITH METAL LINE POSTS WITHIN 6FT OF THE GROUND RING SHALL HAVE THE LINE POSTS BONDED TO THE GROUND RING WITH #2 STC WITH #2 STC CLAMPED OR EXOTHERMICALLY WELDED TO THE POST AND EXOTHERMICALLY WELDED TO GROUND RING AT 20FT MAXIMUM INTERVALS AS MEASURED ALONG THE LENGTH OF THE FENCE.
18. WHERE GROUND BASED RRU'S, RAYCAP OVP'S OR DIPLEXERS ARE INSTALLED AT THE EQUIPMENT AREA, BOND EACH COMPONENT TO NEAREST TDSGA GROUND BAR BELOW THE COMPONENT WITH #2 GREEN INSULATED STRANDED GROUND WIRE. SINGLE HOLE LUG OR RING TYPE CONNECTOR IS SUITABLE FOR CONNECTION TO GROUNDING STUD ON EACH COMPONENT.
19. NOTIFY VZW CM TO INSPECT GROUND RING BEFORE BACKFILLING. CONTRACTOR SHALL HIRE A 3RD PARTY TO PERFORM AN IEEE81 FALL OF POTENTIAL METHOD GROUND TEST. MAXIMUM ALLOWABLE RESISTANCE TO GROUND IS 5 OHMS. PROVIDE ADDITIONAL GROUND SYSTEM COMPONENTS AS REQUIRED TO ACHIEVE THIS VALUE.
20. REFER TO TOWER GROUNDING DIAGRAM AND NOTES FOR GROUND SYSTEM REQUIREMENTS ON THE TOWER.
21. GROUNDING OF ALL ELECTRICAL EQUIPMENT SHALL BE AS PER NEC, MUNICIPAL AND UTILITY COMPANY REQUIREMENTS.

PLANS PREPARED FOR:



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

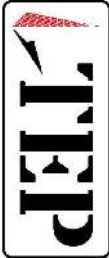
VZW SITE #: 5000965682

SITE NAME #: BIRLEY

AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD

RALEIGH, NC 27603-3630

OFFICE: (919) 661-6351

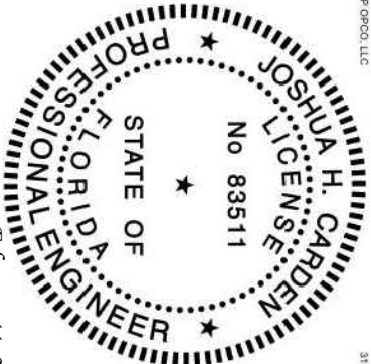
www.tepgroup.net

FL COA # 31011

SEAL:

TEP GROUP, LLC

31011



February 11, 2025
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REV	DATE	ISSUED FOR:

DRAWN BY: P/VW CHECKED BY: DAO

SHEET TITLE:

GROUNDING
NOTES

SHEET NUMBER:

REVISION:

E-6

1

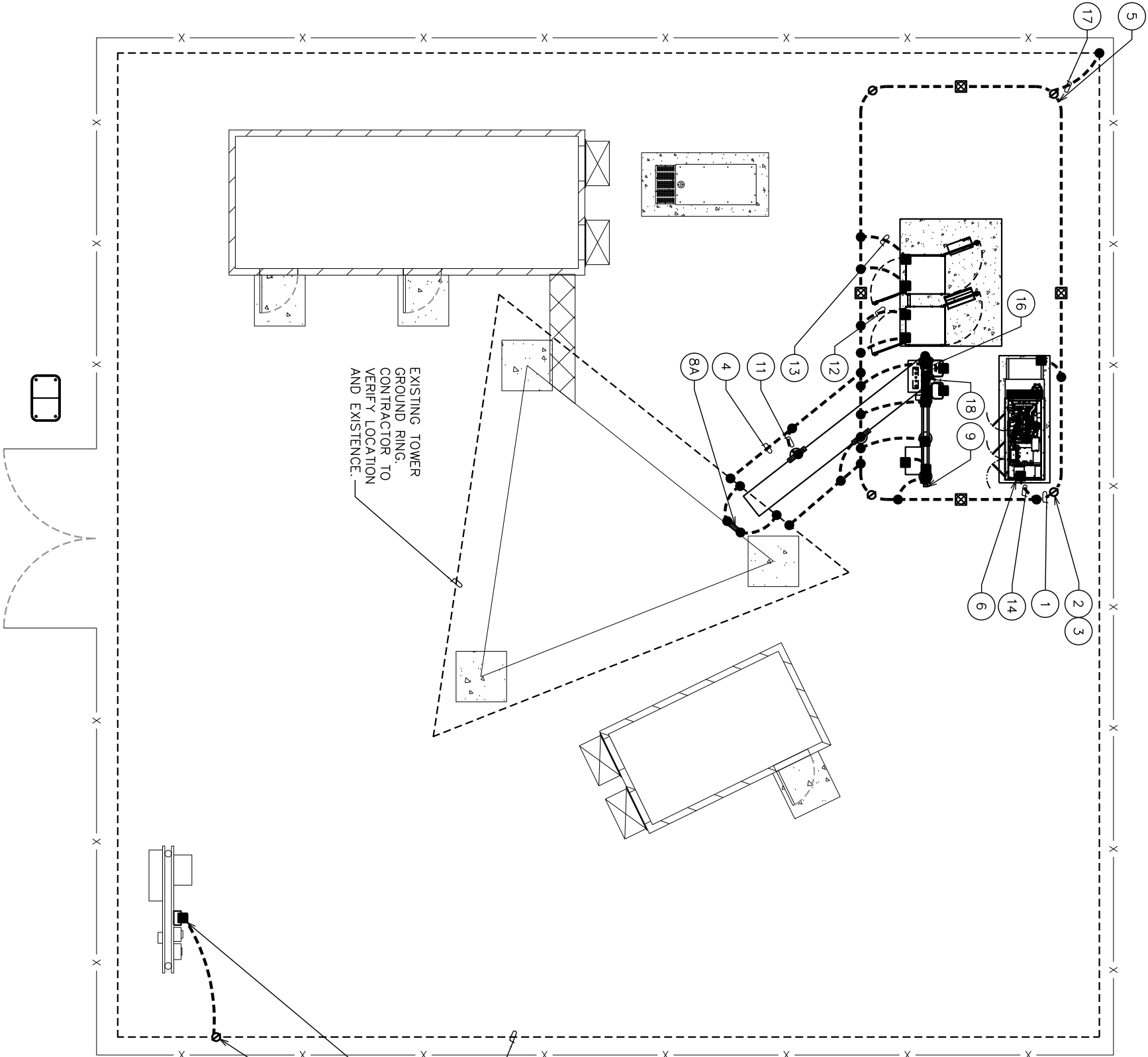
TEP#:274573.101 2037

SCALE: N.T.S.

GROUNDING NOTES

DRAWING NOTE:

SEE SHEET E-6 FOR ELECTRICAL
GROUNDING NOTES & REQUIREMENTS.



EXISTING SERVICE ENTRANCE
GROUND RING. CONTRACTOR
TO VERIFY LOCATION AND
EXISTENCE.

EXISTING TOWER
GROUND RING.
CONTRACTOR TO
VERIFY LOCATION
AND EXISTENCE.

EXISTING COMPUND GROUND
RING. CONTRACTOR TO VERIFY
LOCATION AND EXISTENCE.

PROPOSED VERIZON 200A METER
AND BREAKER-STYLE SERVICE
DISCONNECT INSTALLED IN
EXISTING MULTI-GANG METER
BANK

LEGEND

- CADWELL
- GROUND ROD
- LUG FOR EQUIPMENT
GROUNDING
- GROUND RING
- ⊠ GROUND ROD WITH
INSPECTION WELL
- ▨ GROUND BAR

EQUIPMENT GROUNDING PLAN

SCALE: 1" = 10'



SCALE IN FEET

PLANS PREPARED FOR:



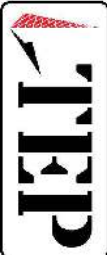
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BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY
AVE

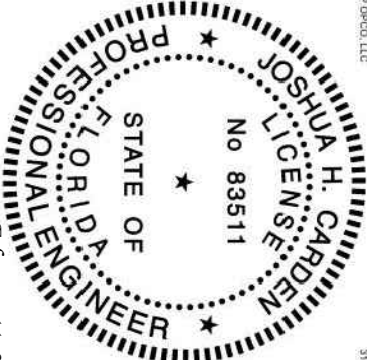
4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



326 TRYON ROAD
RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
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GROUNDING PLAN

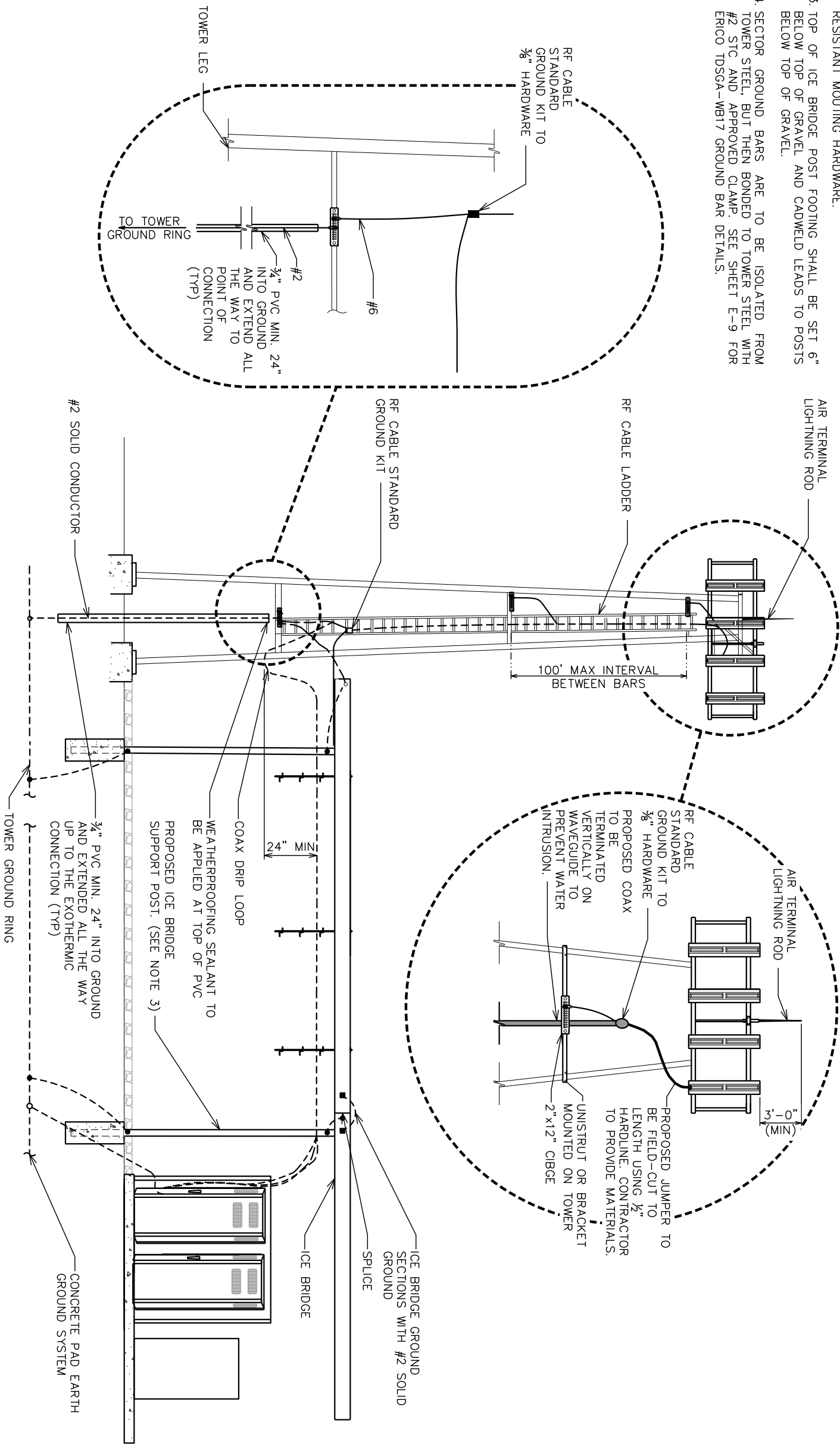
SHEET NUMBER: REVISION:

E-7 1

TEP#274573.1012037

NOTES:

1. MINIMUM BEND RADIUS OF #2 SOLID CONDUCTOR IS 12", EXCEPT MINIMUM FOR 24" FOR BUILDING OR TOWER GROUND RING.
2. ALL GROUND BARS SHALL BE INSTALLED WITH TAMPER RESISTANT MOUTING HARDWARE.
3. TOP OF ICE BRIDGE POST FOOTING SHALL BE SET 6" BELOW TOP OF GRAVEL.
4. SECTOR GROUND BARS ARE TO BE ISOLATED FROM TOWER STEEL, BUT THEN BONDED TO TOWER STEEL WITH #2 STC AND APPROVED CLAMP. SEE SHEET E-9 FOR ERICO TDSGA-WB17 GROUND BAR DETAILS.



ICE BRIDGE, COAX, STANCHION, AND TOWER GROUNDING DETAIL

SCALE: N.T.S.

PLANS PREPARED FOR:



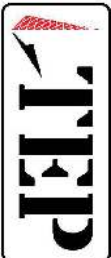
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

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SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

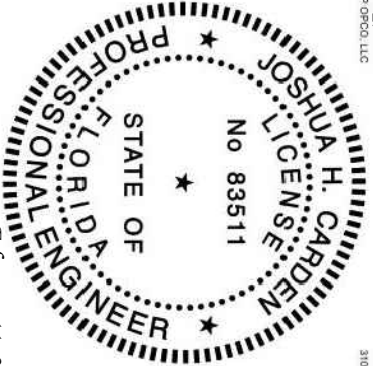


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DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

ICE BRIDGE & TOWER
GROUNDING DETAIL

SHEET NUMBER:

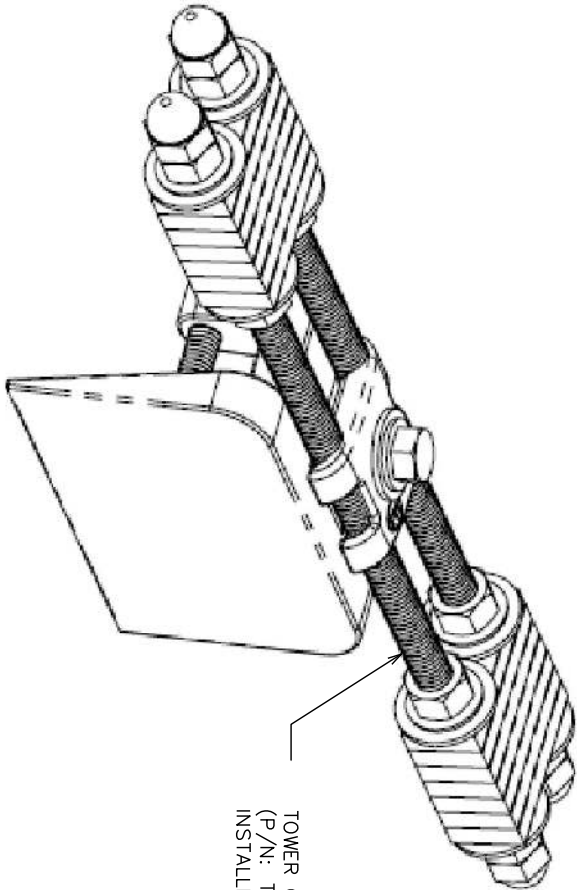
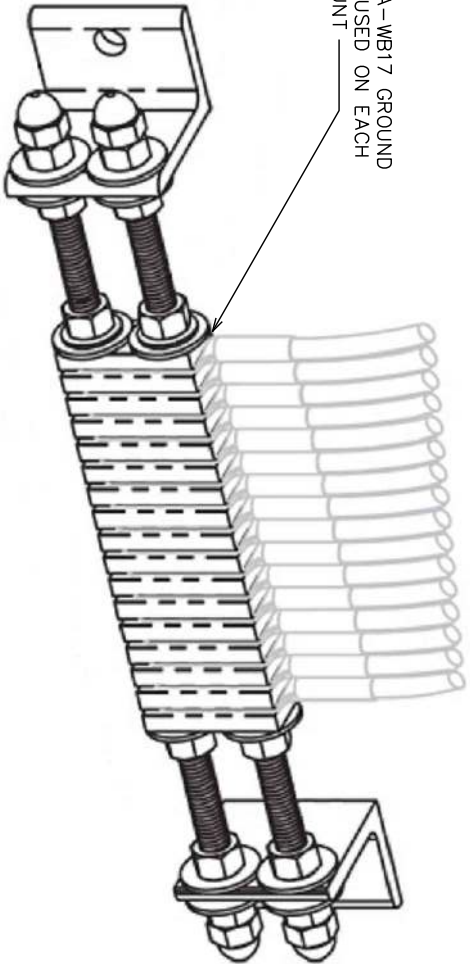
REVISION:

E-8

TEP #274573.1012037

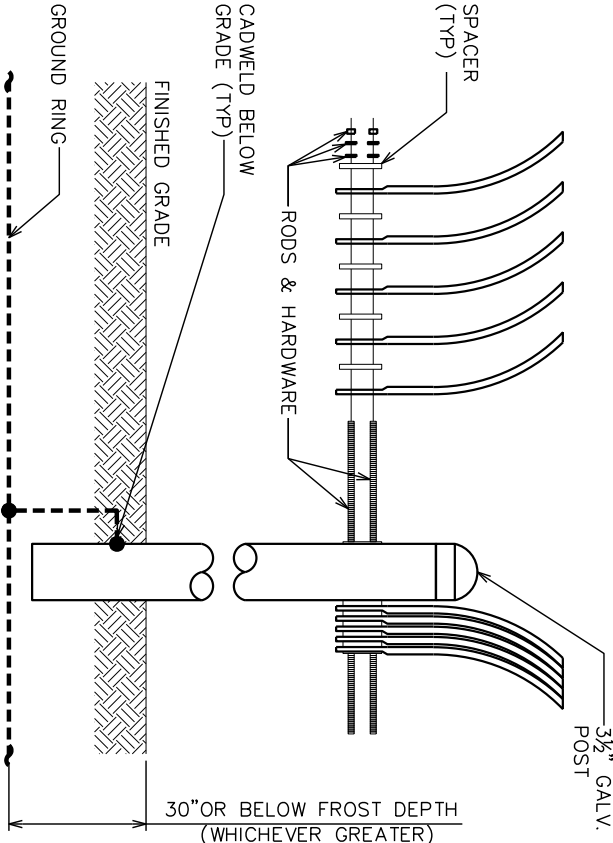
NOTES:

- 1. GROUND BAR SHALL BE SIZED TO ACCOMMODATE ALL GROUNDING CONNECTIONS REQUIRED PLUS PROVIDE 50% SPARE CAPACITY
- 2. ALL GROUND BARS WILL BE ISOLATED FROM THE TOWER EXCEPT TOWER BOTTOM GROUND BAR ON MONOPOLES.
- 3. DRAWINGS SHOWN FOR REFERENCE ONLY AND MAY NOT REPRESENT FINAL CONFIGURATION.



ERICO TDSCA-BC14 GROUND BAR

SCALE: N.T.S.



ERICO TDSCA-WB17 GROUND BAR

SCALE: N.T.S.

ERICO TDSCA-PA14 GROUND BAR

SCALE: N.T.S.

PLANS PREPARED FOR:



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



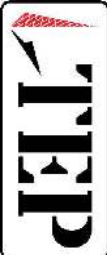
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4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

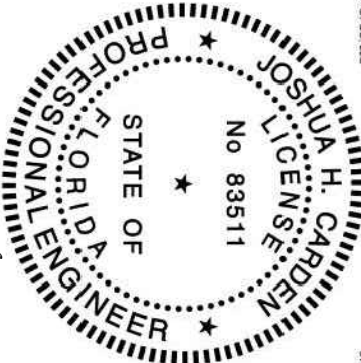


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RALEIGH, NC 27603-3530
OFFICE: (919) 661-6351
www.tepgroup.net
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1 02-11-25 CONSTRUCTION

0 12-31-24 PRELIMINARY

REV DATE ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

GROUND BAR DETAILS

SHEET NUMBER: REVISION:

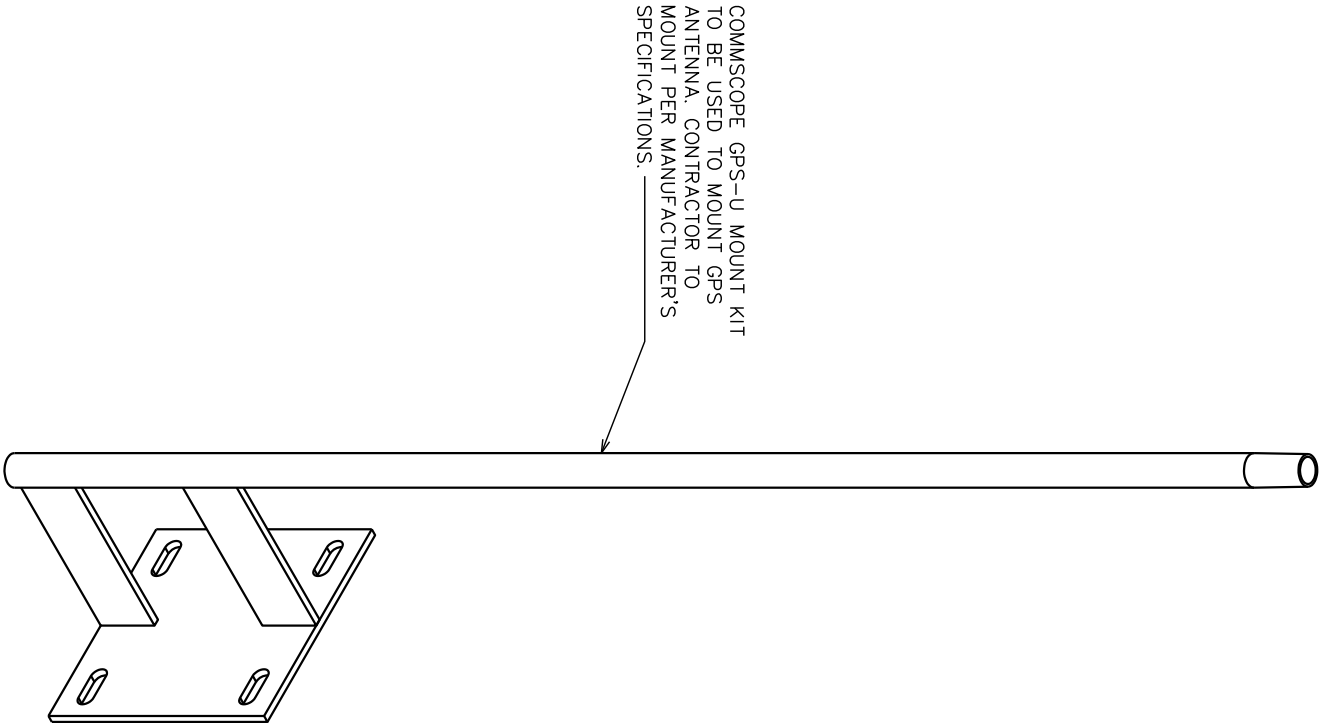
E-9

1

TEP #274573.1012037

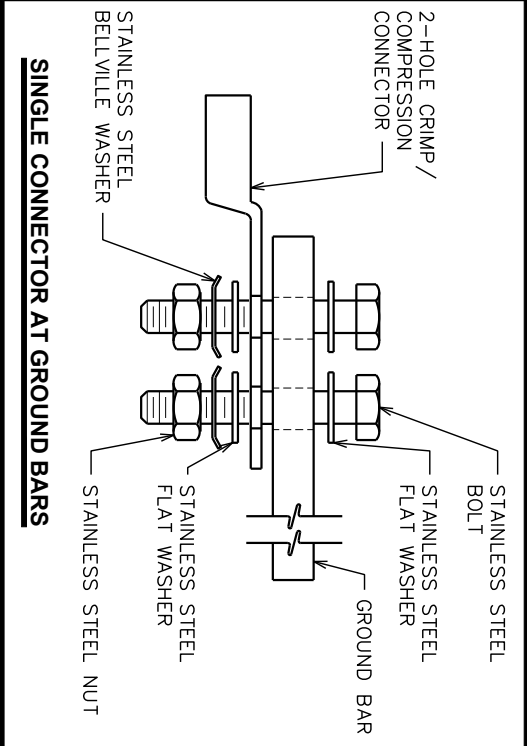
NOTES:

- 1. CONTRACTOR TO USE COMMSCOPE GPS-U MOUNT KIT TO MOUNT GPS ANTENNA. MOUNT PER MANUFACTURER'S SPECIFICATIONS.
- 2. EQUIPMENT INSTALLER IS RESPONSIBLE FOR INSTALLATION OF ANTENNA, MOUNTS, & COAX.
- 3. CONTRACTOR IS RESPONSIBLE FOR GPS MOUNTING PIPE, GROUND AND CLAMP AROUND THE MAST FOR THE GPS.

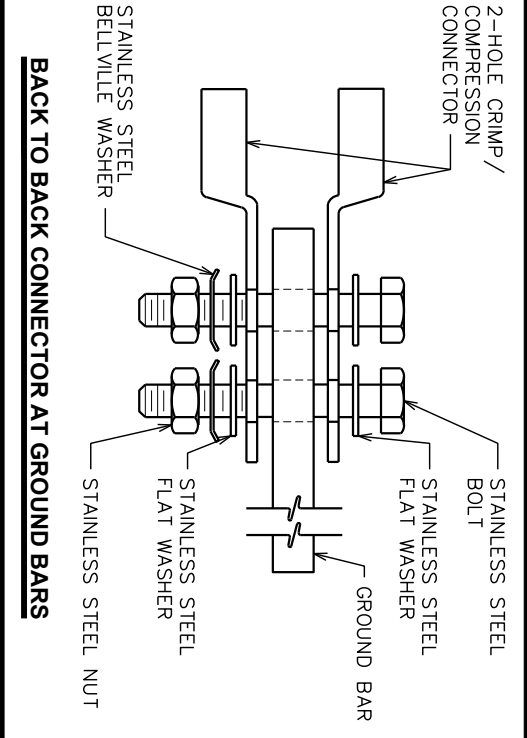


GPS MOUNT DETAIL

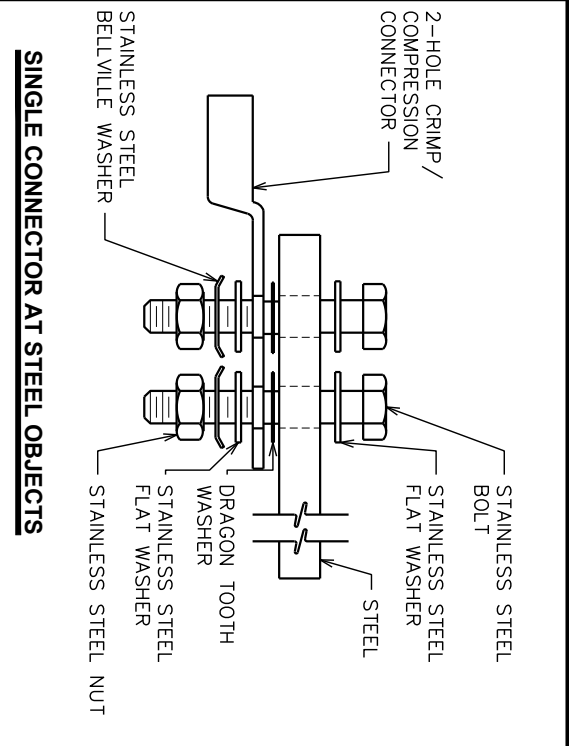
SCALE: N.T.S.



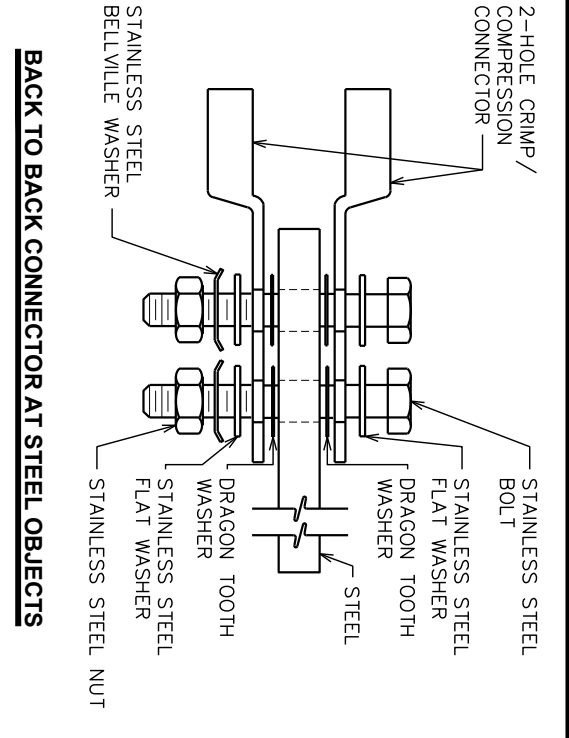
SINGLE CONNECTOR AT GROUND BARS



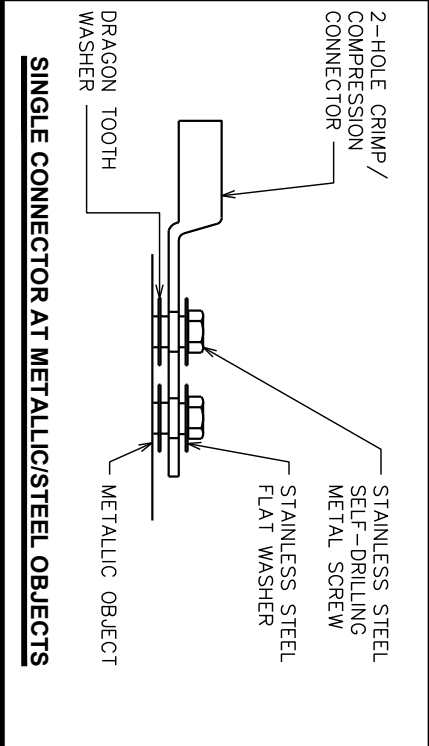
BACK TO BACK CONNECTOR AT GROUND BARS



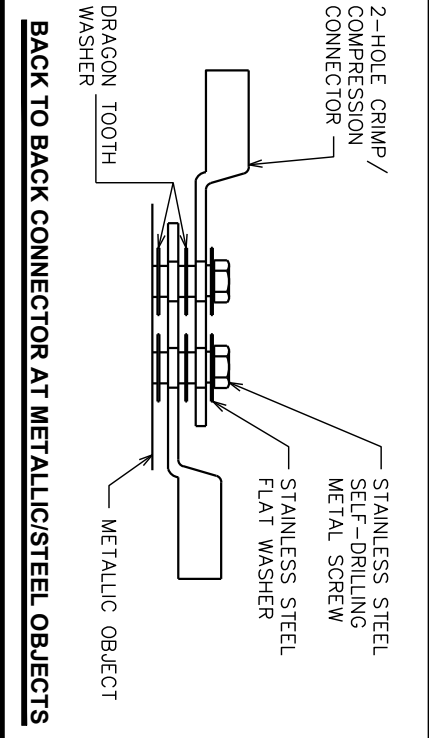
SINGLE CONNECTOR AT STEEL OBJECTS



BACK TO BACK CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS



BACK TO BACK CONNECTOR AT METALLIC/STEEL OBJECTS

NOTES:

- 1. CHOOSE BOLT LENGTH TO ALLOW A MIN. OF TWO THREADS EXPOSED.
- 2. BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF THE CONNECTOR.
- 3. APPLY ANTI-OXIDANT COMPOUND TO MATING SURFACE OF CONNECTOR AND WIPE OFF EXCESS COMPOUND.
- 4. APPLY CLEAR HEAT SHRINK OVER ENTIRE LENGTH OF LABEL FOR PROTECTION. (REFER TO CONDUCTOR LABELS SECTION.)

CONNECTOR AND HARDWARE DETAIL

SCALE: N.T.S.

PLANS PREPARED FOR:



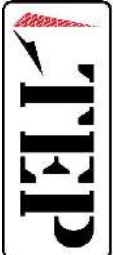
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

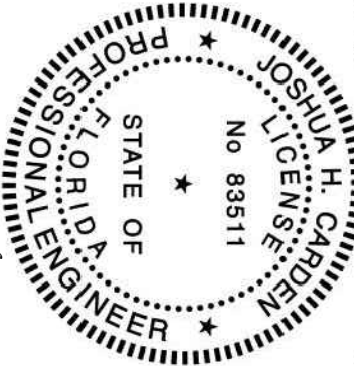
4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:



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1	02-11-25	CONSTRUCTION
0	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

GROUNDING
DETAILS I

SHEET NUMBER: REVISION:

E-10 1

TEP #274573.1012037

PLANS PREPARED FOR:



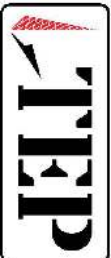
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

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SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

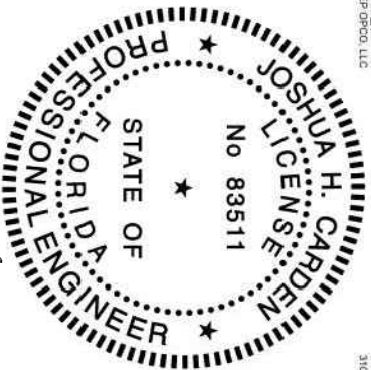
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SHEET TITLE:

GROUNDING
DETAILS II

SHEET NUMBER: | REVISION:

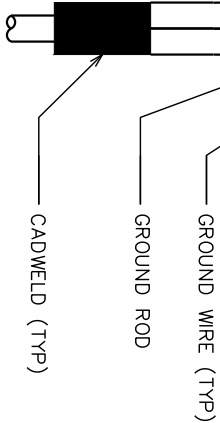
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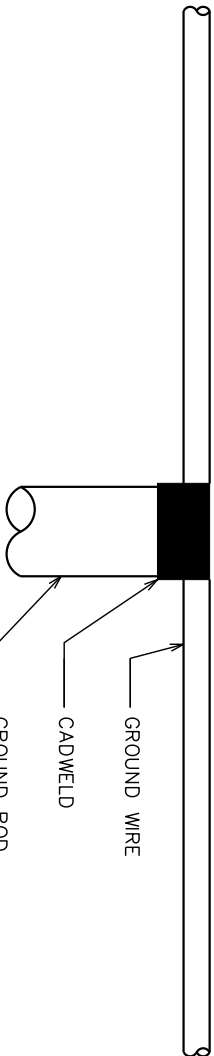
TEP #274573.1012037



NOTE:
MINIMUM SPACING OF 12"
BETWEEN ALL CADWELDS



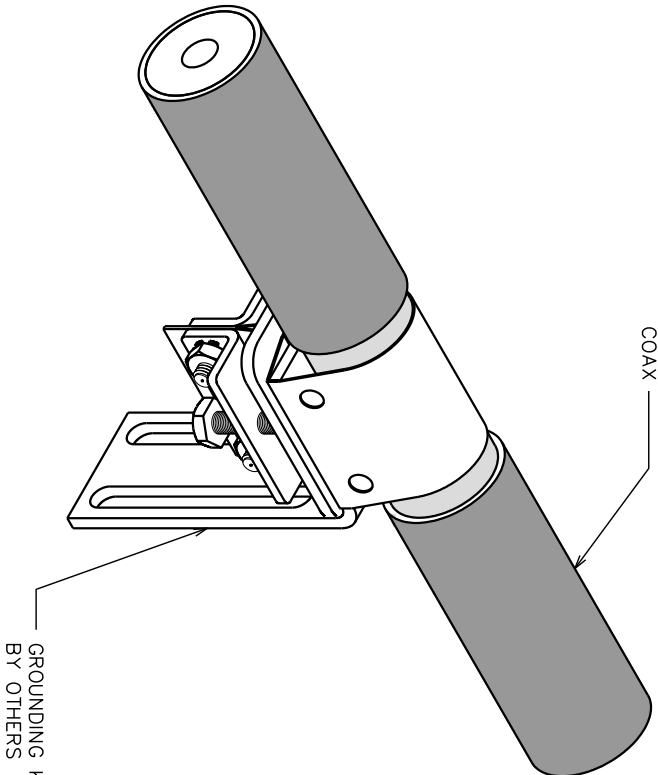
TOP VIEW



SIDE VIEW

CADWELD GROUNDING DETAIL

SCALE: N.T.S.

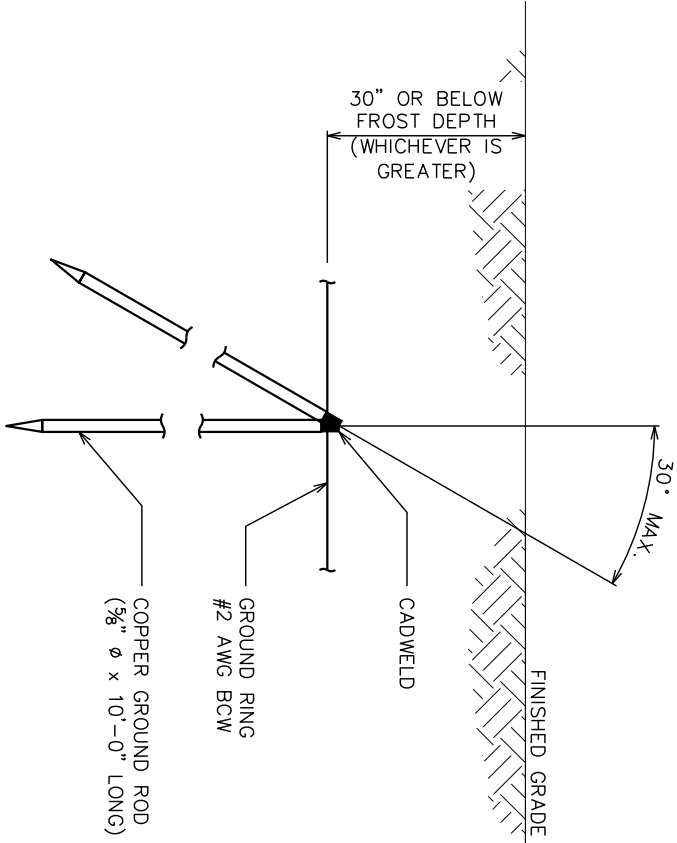
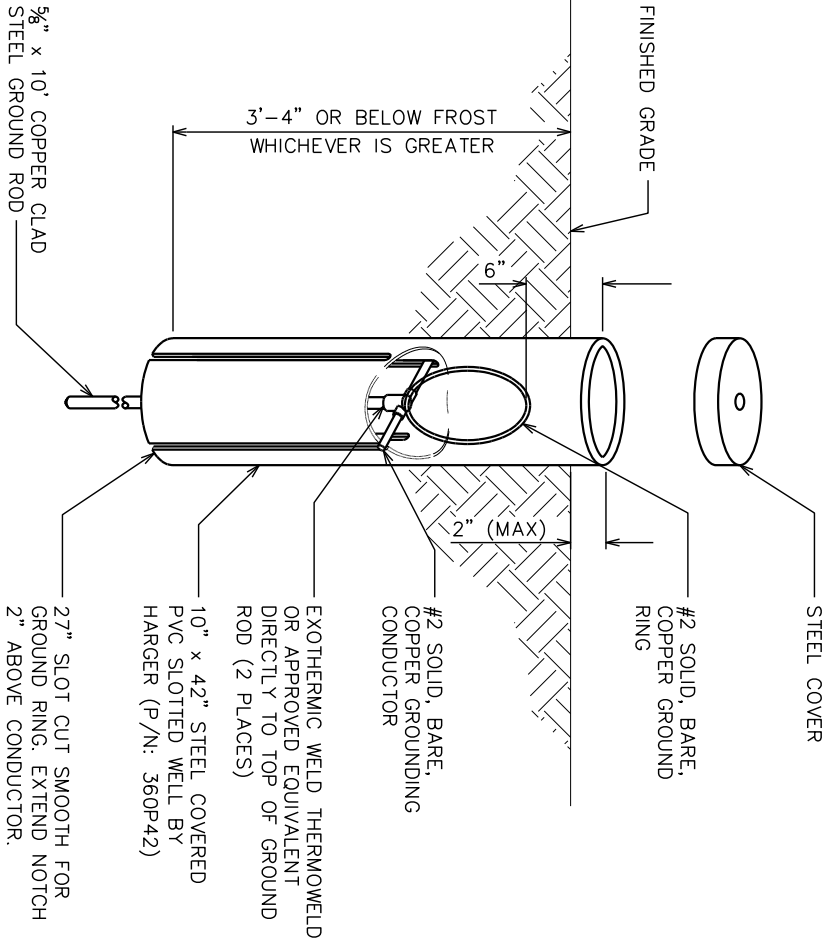


INTERIOR CABLE SHIELD

SCALE: N.T.S.

GROUND ROD WITH INSPECTION WELL

SCALE: N.T.S.

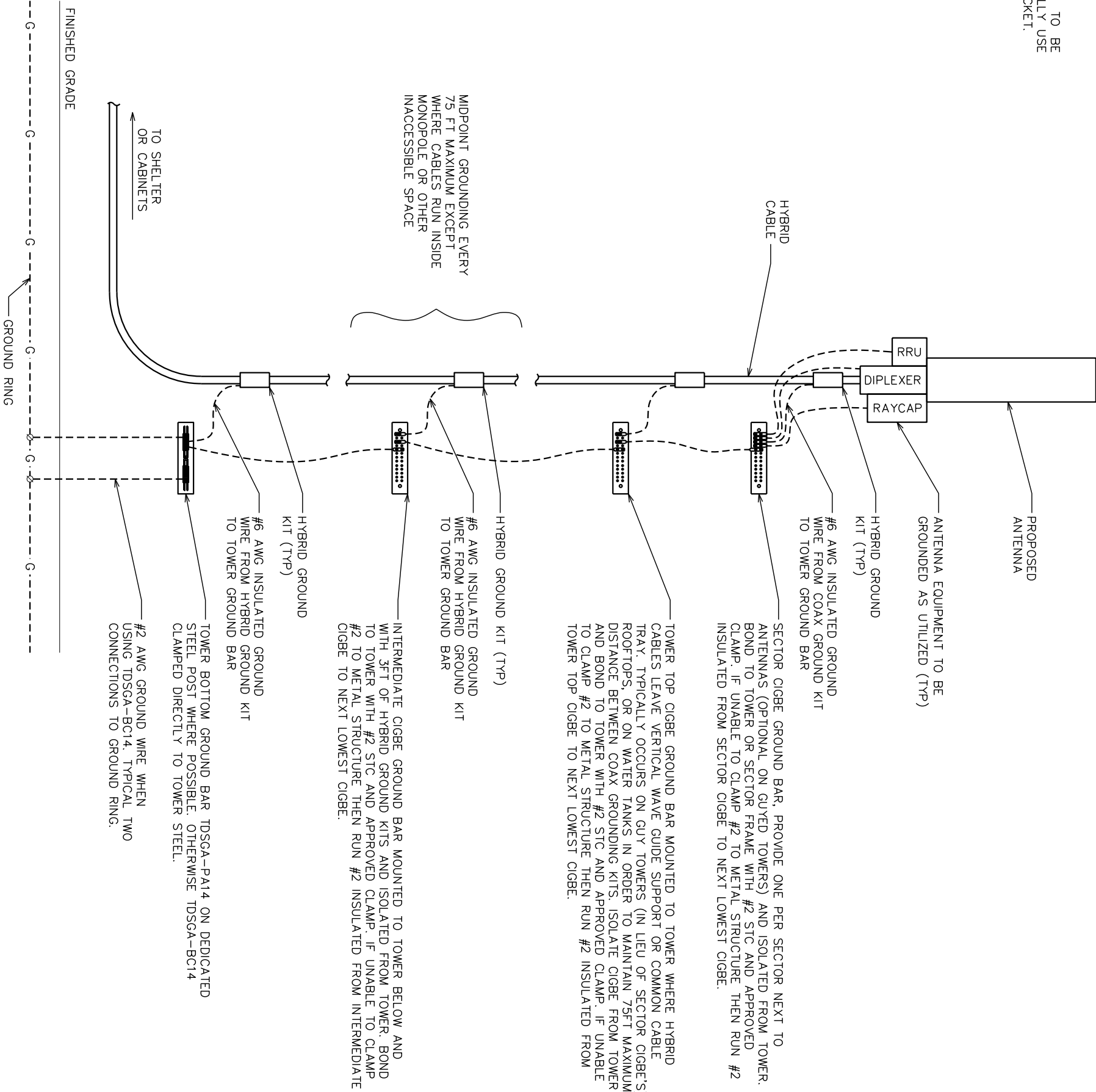


COPPER-CLAD STEEL GROUND ROD

SCALE: N.T.S.

NOTE:

ALL CIGBE GROUND BARS ON TOWER ARE TO BE ERICO TDSGA OR APPROVED EQUAL. TYPICALLY USE TDSGA-WB17 ISOLATED FROM UNISTRUT BRACKET.



CABLE/TOWER GROUNDING SCHEMATIC

SCALE: N.T.S.

PLANS PREPARED FOR:



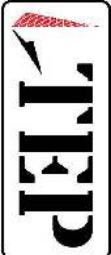
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

VZW SITE #: 5000965682
SITE NAME #: BIRLEY AVE

4741 SW BIRLEY AVENUE
LAKE CITY, FL 32024
(COLUMBIA COUNTY)

PLANS PREPARED BY:

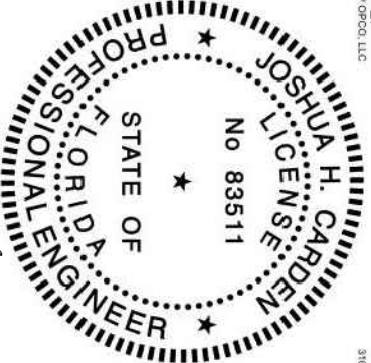


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DRAWN BY: PVW | CHECKED BY: DAO

SHEET TITLE:

CABLE/TOWER
GROUNDING
SCHEMATIC

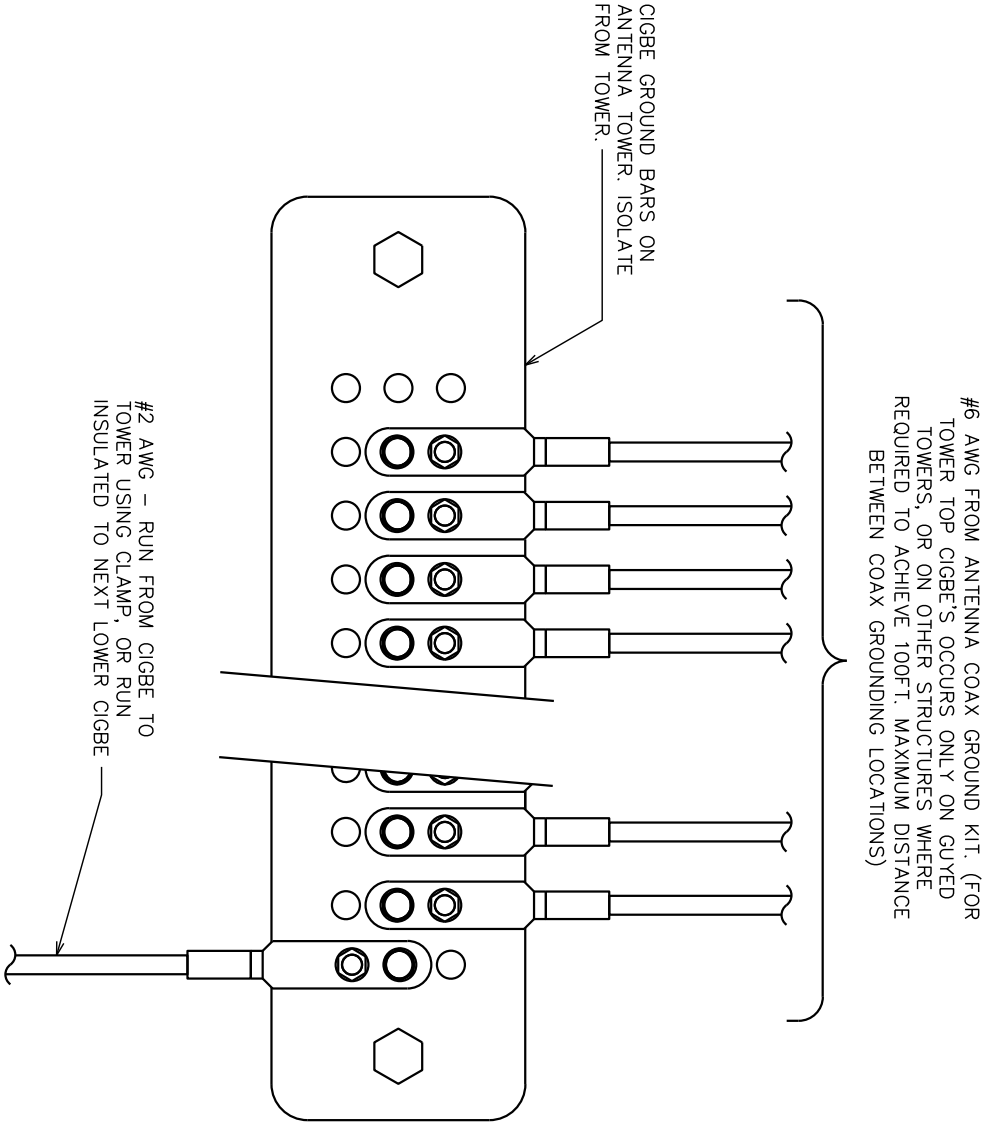
SHEET NUMBER: | REVISION:

E-12 | 1

TEP #274573.1012037

NOTES:

- 1. ALL CIGBE GROUND BARS ON TOWER ARE TO BE ERICO TDSCA. TYPICALLY USE TDSCA-WB17 ISOLATED FROM UNISTRUT BRACKET.
- 2. IF CIGBE CANNOT BE BONDED DIRECTLY TO TOWER AND CANNOT BE CONNECTED TO TOWER WITH #2 AWG. AND CLAMP (OR CADWELD), THEN RUN #2 BLACK INSULATED GROUND LEAD FROM CIGBE DOWN TO NEXT LOWER CIGBE. SECURE GROUND LEAD WITH NON-METALLIC TIES AT SAME SPACING AS COAX SUPPORTS.



ANTENNA GROUND WIRE INSTALLATION

SCALE: N.T.S.

PLANS PREPARED FOR:



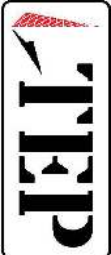
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

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SITE NAME #: BIRLEY AVE

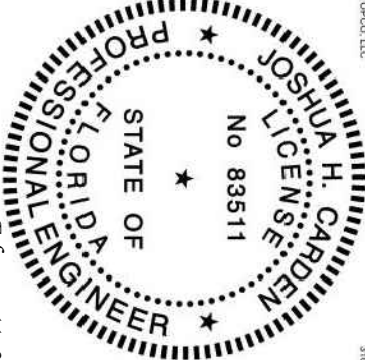
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O	12-31-24	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: PVW | CHECKED BY: DAO

SHEET TITLE:

ANTENNA GROUND WIRE INSTALLATION

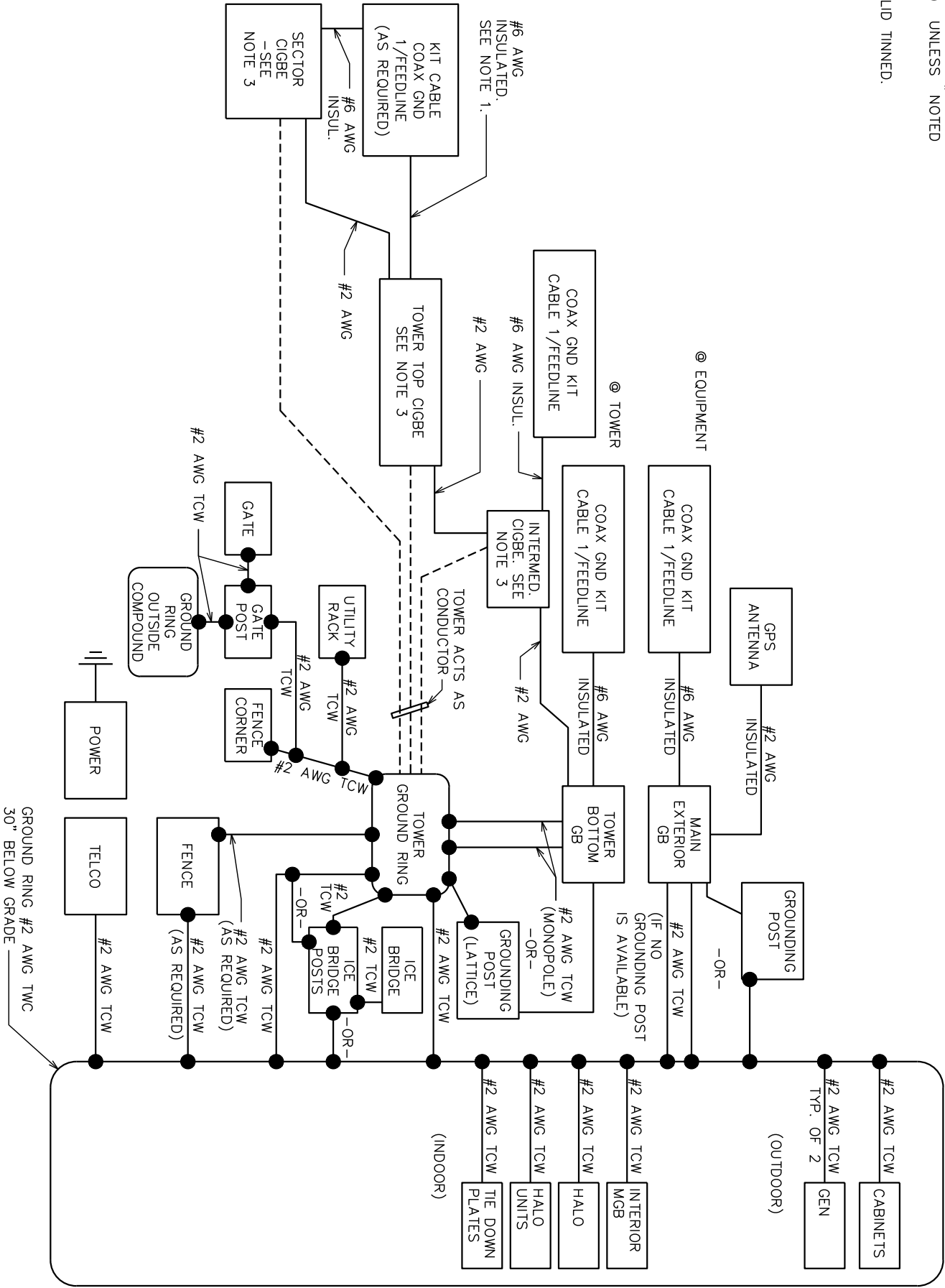
SHEET NUMBER: REVISION:

E-13 1

TEP #274573.1 012037

NOTES:

- 1. CONNECT COAX GROUND KITS DIRECTLY TO TOWER TOP CIGBE ONLY AS NOTED ON ANTENNA GROUND WIRE INSTALLATION ON SHEET E-12.
- 2. FOR GROUNDING CONNECTIONS AND DETAILS, SEE SITE GROUNDING PLAN.
- 3. TOWER GROUND BARS WILL BE ISOLATED FROM TOWERS BUT BONDED TO TOWER WITH #2 STC AND CLAMP (OR CADWELD) UNLESS NOTED OTHERWISE.
- 4. ALL #2 AWG TCW MUST BE SOLID TINNED.



GROUNDING SYSTEM SINGLE LINE DIAGRAM

SCALE: N.T.S.

PLANS PREPARED FOR:



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



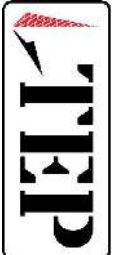
4700 EXCHANGE COURT, SUITE 100
BOCA RATON, FL 33431

PROJECT INFORMATION:

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SITE NAME #: BIRLEY AVE

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LAKE CITY, FL 32024
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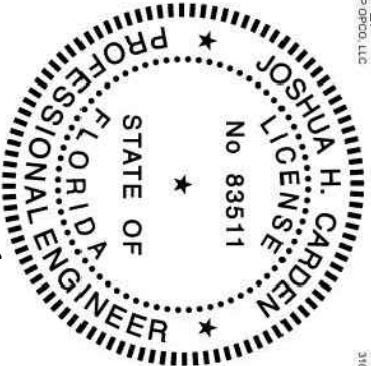
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02-11-25 CONSTRUCTION

12-31-24 PRELIMINARY

DATE ISSUED FOR:

DRAWN BY: PVW CHECKED BY: DAO

SHEET TITLE:

GROUNDING SYSTEM SINGLE LINE DIAGRAM

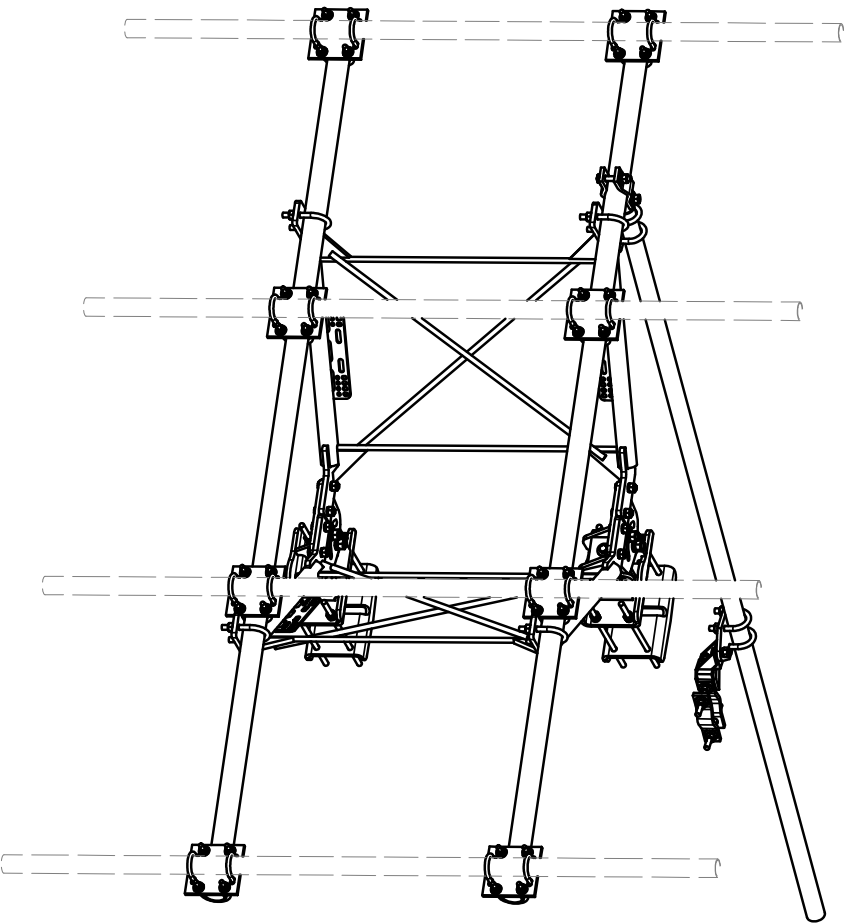
SHEET NUMBER:

E-14

REVISION:

1

TEP#274573.1012037



PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	2	X-VFAW	SUPPORT ARM		71.41	142.81
2	1	X-HDCAMTBW	CLAMP WELDMENT FOR BCAM-HD		33.86	33.86
3	1	X-MHTPHD	MULTI-HOLE TAPER PLATE WELDMENT		36.24	36.24
4	2	X-VFAPL4	VFA-HD PIVOT PLATE	12 in	15.88	31.77
5	2	X-LOBP4	BENT BACKING PLATE	13 in	19.00	38.01
6	1	X-HDCAMSS	ANGLE ADJUSTMENT WELDMENT FOR BCAM-HD		16.39	16.39
7	2	X-SPTB	SLIDING PIPE TIE BACK PLATE	5 1/2 in	5.87	11.74
8	1	X-HDCAMSP	POSITIONING PLATE WELDMENT FOR BCAM-HD		2.58	2.58
9	2	X-TBCA	TIE BACK CLIP ANGLE		2.01	4.01
10	8	SCX2	CROSSOVER PLATE	7 in	4.80	38.37
11	2	MCP	CLAMP HALF 1/2" THICK, 11'-5/8" LONG	12 1/16 in	3.59	7.19
12	4	DCP	1/2" THICK, 5'-3/4" CENTER TO CENTER CLAMP HALF	8 1/8 in	2.36	9.45
13	2	P30126	2-7/8" O.D. X 126" SCH. 40 PIPE	126 in	64.63	129.25
14	1	P2126	2-3/8" X 126" (2" SCH. 40) GALVANIZED PIPE	126 in	40.75	40.75
15	4	A34212	3/4" X 2-1/2" UNC HEX BOLT (A325)	2 1/2 in	0.48	1.92
16	4	G34FW	3/4" HDG USS FLATWASHER		0.06	0.24
17	4	G34LW	3/4" HDG LOCKWASHER		0.04	0.17
18	4	G34NUT	3/4" HDG HEAVY 2H HEX NUT		0.21	0.85
19	8	G58R-18	5/8" x 18" THREADED ROD (HDG.)		1.57	12.54
20	2	G58R-12	5/8" x 12" THREADED ROD (HDG.)		1.05	2.09
21	2	G58R-8	5/8" x 8" THREADED ROD (HDG.)		0.70	1.39
22	4	X-UBS300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	4.60
23	4	X-UBS258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	4.00
24	2	G5807	5/8" x 7" HDG HEX BOLT GR5 FULL THREAD	7 in	0.70	1.41
25	1	G5806	5/8" x 6" HDG HEX BOLT GR5 FULL THREAD	6 in	0.62	0.62
26	4	G5804	5/8" x 4" HDG HEX BOLT GR5		0.44	1.78
27	8	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	2.50
28	2	G5802	5/8" x 2" HDG HEX BOLT GR5		0.27	0.54
29	15	G58FW	5/8" HDG USS FLATWASHER	1/8 in	0.07	1.06
30	50	G58LW	5/8" HDG LOCKWASHER		0.03	1.30
31	53	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	6.88
32	32	X-UB1300	1/2" X 3" X 5" X 2" GALV U-BOLT		0.74	23.64
33	16	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.60	9.56
34	64	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	2.18
35	64	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.89
36	64	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	4.58
TOTAL WT. #						597.04

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.0307)
DRILLED AND GAS CUT HOLES (± 0.0307) - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.0107) - NO CONING OF HOLES
BENDS ARE $\pm 1/2$ DEGREE

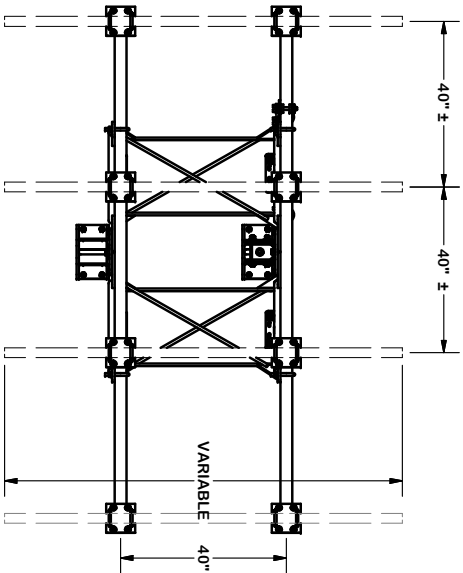
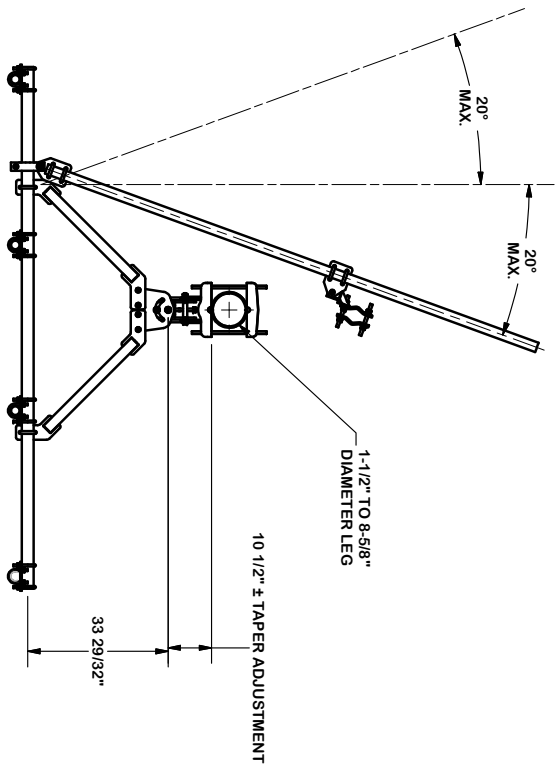
ALL OTHER MACHINING (± 0.0307)

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DESCRIPTION		DRAWING BY		ENG. APPROVAL		PART NO.	
10' 6" HEAVY DUTY V-FRAME ASSEMBLY WITH ONE STIFF ARMS		CEK		7/3/2017		VFA10-HD-S	
CLASS		SUB		CUSTOMER		DWG. NO.	
81		02		BMC		VFA10-HD-S	
DRAWING USAGE		CHECKED BY		DATE		PAGE	
CUSTOMER		12/2/2017		1 OF 4			

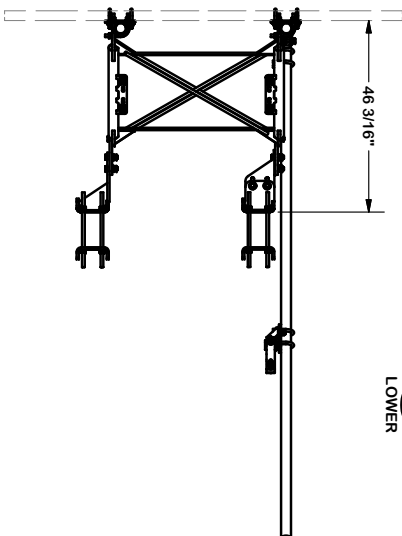
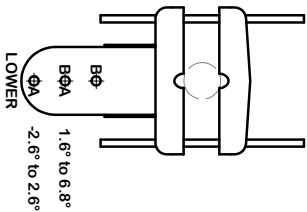
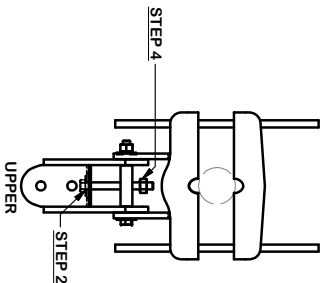
SITE PRO 1

Engineering
Support Team:
1-888-735-7446
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX



ANGLE CALIBRATING PROCEDURE:

1. MEASURE TOWER TAPER AND PICK LOWER BRACKET HOLE:
 - HOLE A = -2.6° TO 2.6°
 - HOLE B = 1.6° TO 6.8°
2. USE CALIBRATING BOLT TO ADJUST FRAME TO DESIRED TAPER
3. TORQUE LOCKING BOLTS TO 100 ft.-lbs.
4. ADVANCE LOCKING NUT TO POSITIONING PLATE, THEN TIGHTEN.



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 SAWED, SHEARED AND GAS CUT EDGES (± 0.0307)
 DRILLED AND GAS CUT HOLES (± 0.0307) - NO CONING OF HOLES
 LASER CUT EDGES AND HOLES (± 0.0107) - NO CONING OF HOLES
 BENDS ARE $\pm 1/2$ DEGREE
 ALL OTHER MACHINING (± 0.0607)
 ALL OTHER ASSEMBLY (± 0.0607)

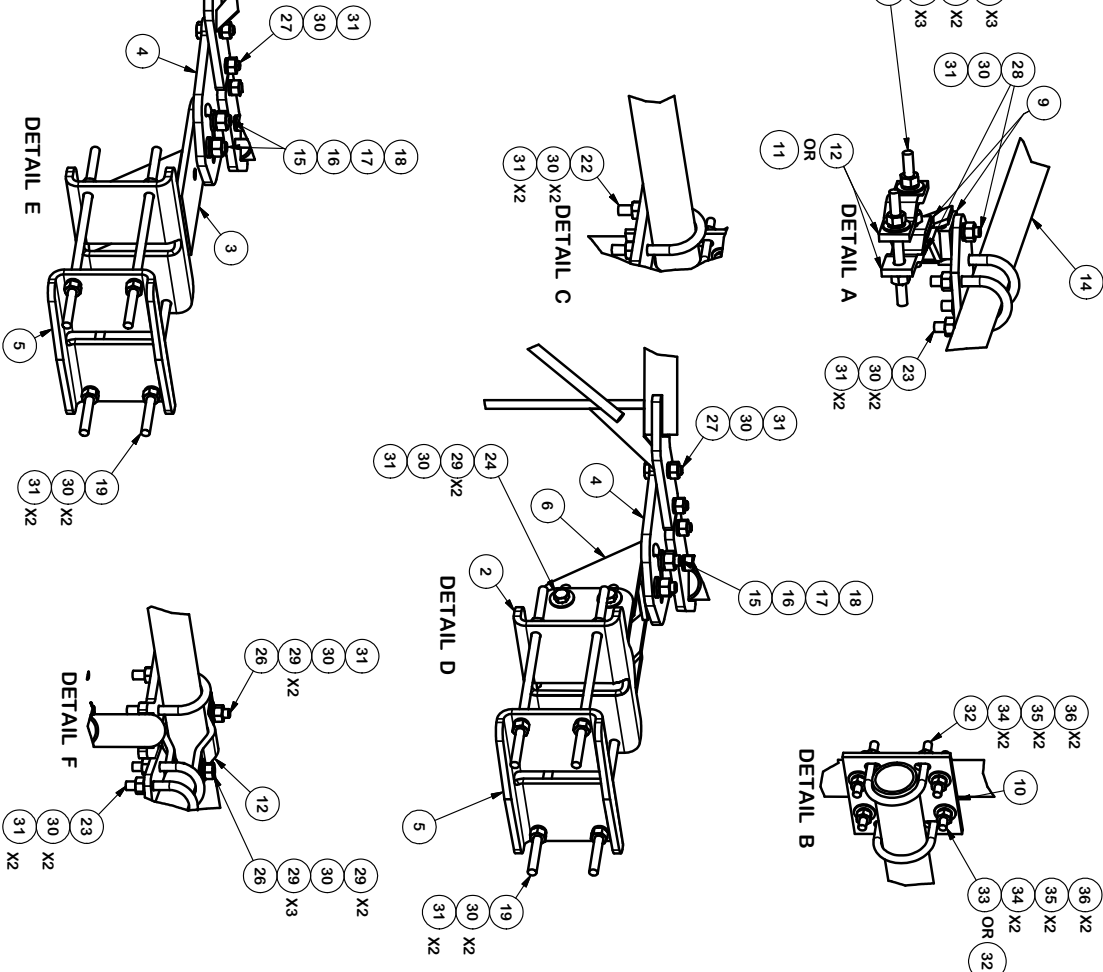
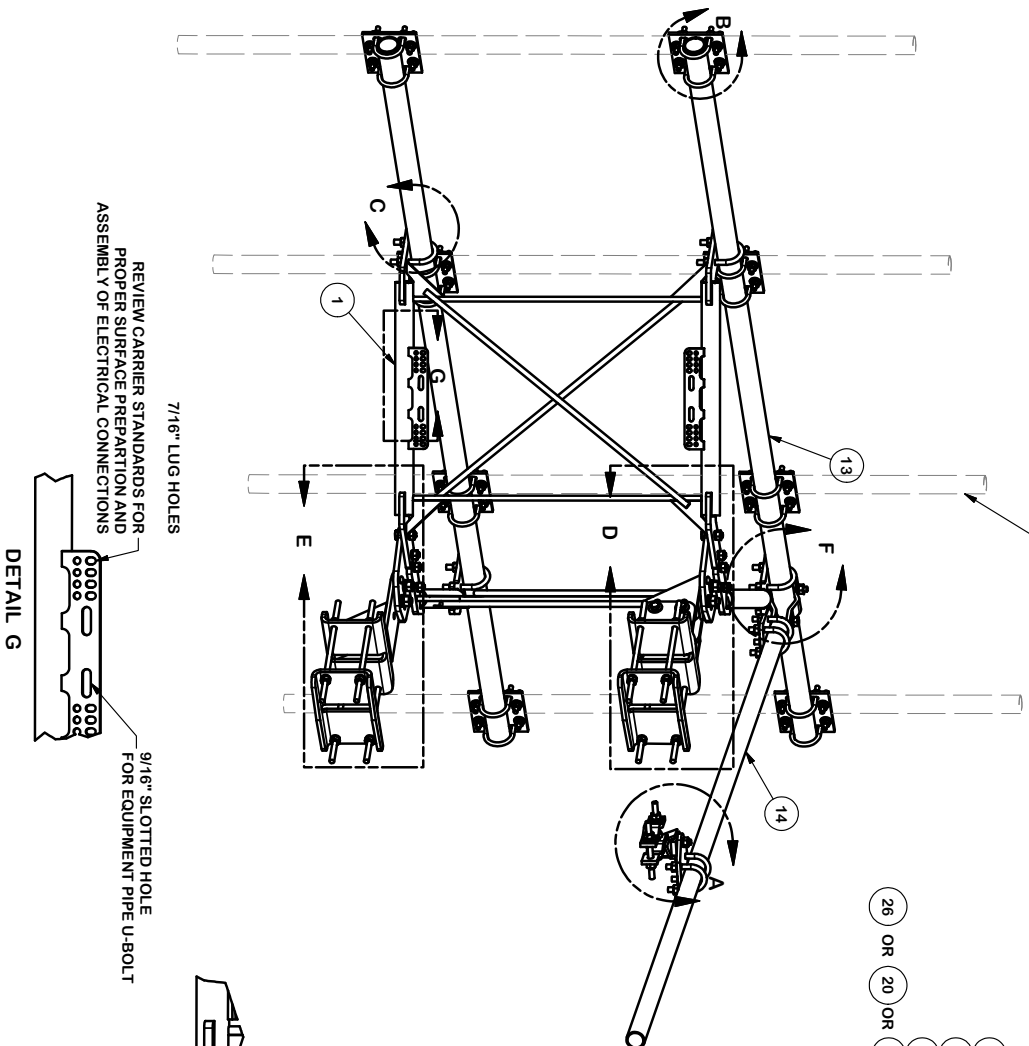
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				TOLERANCE NOTES				TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE: SAWED, SHEARED AND GAS CUT EDGES (± 0.030) DRILLED AND GAS CUT HOLES (± 0.030) - NO CONING OF HOLES LASER CUT EDGES AND HOLES (± 0.010) - NO CONING OF HOLES BENDS ARE $\pm 1/2$ DEGREE ALL OTHER MACHINING (± 0.080) ALL OTHER ASSEMBLY (± 0.060)								
B	UPDATED BCAM VERSION 1 TO BCAM VERSION 2			CEK	6/29/2018			CPD NO.	DRAWN BY			ENG. APPROVAL	PART NO.	VFA10-HD-S		
A	UPDATED ANGLE CALIBRATING PROCEDURE PAGE 2			CEK	12/12/2017			81	SUB			CUSTOMER	BMC	12/12/2017	DWG. NO.	VFA10-HD-S
REV	DESCRIPTION OF REVISIONS			CPD	BY	DATE										
REVISION HISTORY																
PROPERTY NOTE: THIS DATA AND TECHNICAL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED AND IS NOT A TRADE SECRET. IT IS THE PROPERTY OF VALMONT INDUSTRIES AND IS STRICTLY CONFIDENTIAL.				DESCRIPTION 10" 6" HEAVY DUTY V-FRAME ASSEMBLY WITH ONE STIFF ARMS												
THE DATA AND TECHNICAL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED AND IS NOT A TRADE SECRET. IT IS THE PROPERTY OF VALMONT INDUSTRIES AND IS STRICTLY CONFIDENTIAL.				A Valmont  COMPANY												
				Locations: New York, NY Atlanta, GA Houston, TX Dallas, TX Chicago, IL St. Louis, MO Phoenix, AZ San Antonio, TX San Diego, CA San Jose, CA Seattle, WA Portland, OR Denver, CO Salt Lake City, UT Las Vegas, NV Sacramento, CA Fresno, CA Bakersfield, CA Stockton, CA Modesto, CA Merced, CA Yuba City, TX Baytown, TX Houston, TX Dallas, TX Fort Worth, TX Arlington, TX Irving, TX Plano, TX Frisco, TX McAllen, TX Brownsville, TX San Antonio, TX Austin, TX San Marcos, TX San Diego, CA San Jose, CA Fremont, CA Oakland, CA San Francisco, CA Berkeley, CA Albany, NY Buffalo, NY Rochester, NY Syracuse, NY Albany, OR Medford, OR Astoria, OR Seaside, OR Astoria												

DESCRIPTION
 10' 6" HEAVY DUTY
 V-FRAME ASSEMBLY
 WITH ONE STIFF ARMS

SITE PRO 1
 A valmont COMPANY
 Engineering
 Support Team:
 1-888-755-7446
 Locations:
 New York, NY
 Atlanta, GA
 Los Angeles, CA
 Plymouth, IN
 Salem, OR
 Dallas, TX

2-3/8" & 2-7/8" ANTENNA MOUNTING PIPES
(ORDERED SEPARATELY)



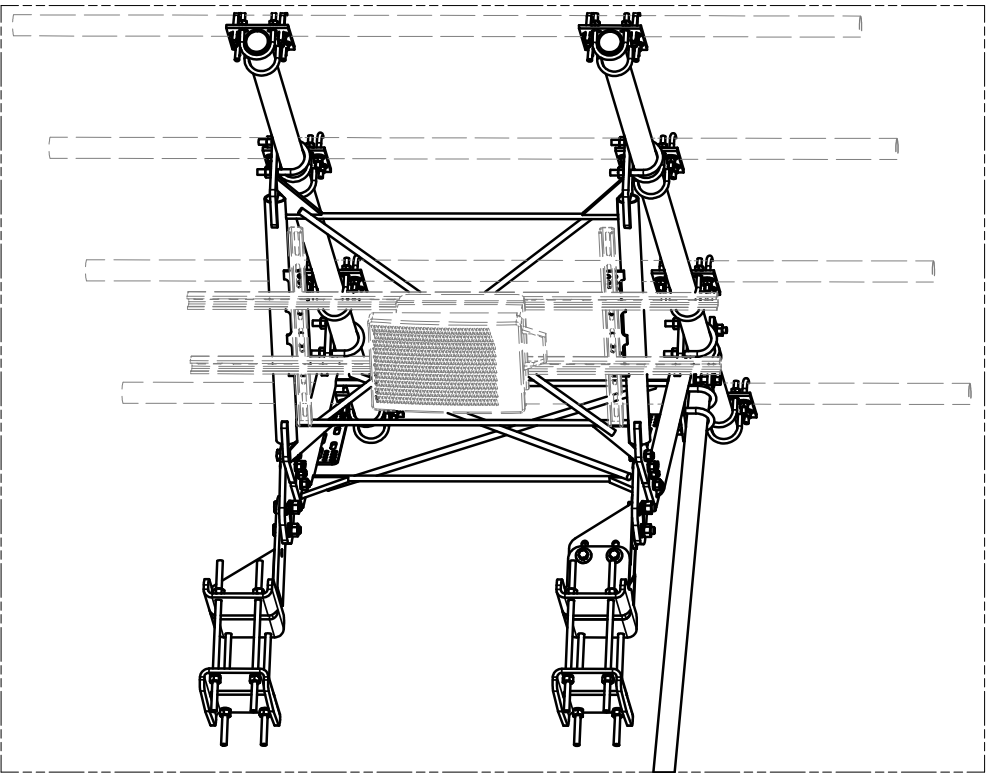
TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.030)
DRILLED AND GAS CUT HOLES (± 0.030) - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.010) - NO CONING OF HOLES
BENDS ARE $\pm 1/2$ DEGREE
ALL OTHER MACHINING (± 0.030)
ALL OTHER ASSEMBLY (± 0.060)

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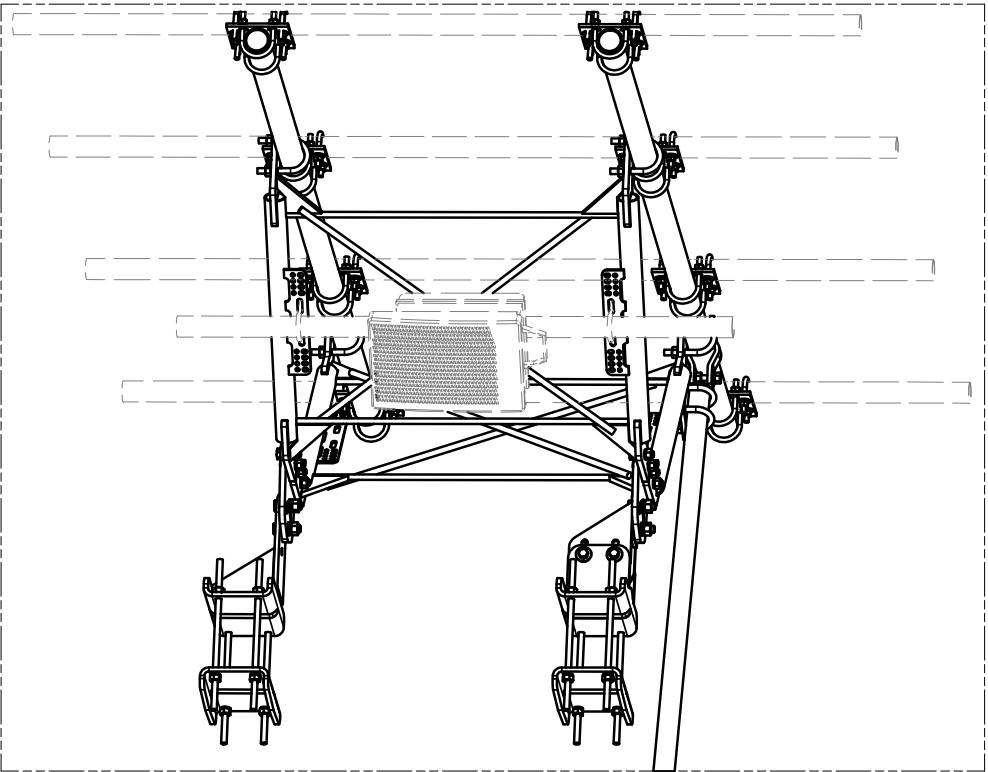
B	UPDATED BCAM VERSION 1 TO BCAM VERSION 2			CEK	6/29/2018
A	UPDATED ANGLE CALIBRATING PROCEDURE PAGE 2			CEK	12/12/2017
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE	
	REVISION HISTORY				

DESCRIPTION		10' 6" HEAVY DUTY V-FRAME ASSEMBLY WITH ONE STIFF ARMS		Locations: New York, NY Atlanta, GA Los Angeles, CA Dallas, TX	
CPD NO.	DRAWN BY CEK	7/3/2017	ENG. APPROVAL	PART NO.	VFA10-HD-S
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.	VFA10-HD-S
81	02	CUSTOMER	BMC	12/12/2017	VFA10-HD-S
				SITE PRO 1 A Valmont COMPANY Engineering Team: 1-888-753-7446	
				3 OF 4	



UNISTRUT AND HARDWARE
SOLD SEPARATELY.

REQUIRES 3/8" HARDWARE



EQUIPMENT PIPE AND HARDWARE
SOLD SEPARATELY.

REQUIRES 1/2" HARDWARE
AND 2-3/8" TO 4-1/2" O.D. PIPE

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.0307)
DRILLED AND GAS CUT HOLES (± 0.0307) - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.0107) - NO CONING OF HOLES
BENDS ARE $\pm 1/2$ DEGREE
ALL OTHER MACHINING (± 0.0307)
ALL OTHER ASSEMBLY (± 0.0307)

PROPRIETARY NOTE:
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DESCRIPTION
10' 6" HEAVY DUTY
V-FRAME ASSEMBLY
WITH ONE STIFF ARMS

PART NO. VFA10-HD-S
Engineering Support Team:
1-888-755-7446
Locations:
New York, NY
Atlanta, GA
Los Angeles, CA
Plymouth, IN
Salem, OR
Dallas, TX

CPD NO. 81
SUB 02
DRAWING USAGE
CUSTOMER
CHECKED BY
BMC 12/12/2017

DWG. NO. VFA10-HD-S
4 OF 4
PAGE

B	UPDATED BCAM VERSION 1 TO BCAM VERSION 2		CEK	6/29/2018
A	UPDATED ANGLE CALIBRATING PROCEDURE PAGE 2		CEK	12/12/2017
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
REVISION HISTORY				

