ATTACHMENT D

CITY OF TALLAHASSEE

City of Tallahassee
Your Own Utilities

ENERGY SMART PLUS
SAVE ENERGY SAVE WATER SAVE MONEY

Electric Utility | 2602 Jackson Bluff Rd. Tallahassee, Fl 32304 | 850.891.4YOU (4968)

December 13, 2016

Mr. Chad Caudill
Network Real Estate Permitting Manager
FL Network Transport, LLC
Interstate Transport and Broadband, LLC
925B Peachtree Street, N.E., Suite 710
Atlanta, Georgia 30309

RE: Submissions to the City of Tallahassee

Dear Mr. Caudill:

The City is in receipt of fourteen (14) submittals or inquiries ("submissions') from Mobilitie, LLC ("Mobilitie") relating to the placement and installation of wireless communications facilities within the City's rights-of-way.

At the City Commission meeting on December 14, 2016, City staff intends to recommend that the Commission adopt a resolution imposing a moratorium on the further review, processing, or acceptance of applications to install wireless communications facilities in the City's rights-of-ways. Such moratorium would be in effect until the City Commission rescinds the moratorium, the City Commission enacts applicable amendments to the City of Tallahassee Code, or June 30, 2017, whichever occurs first. In light of the anticipated moratorium, please be advised the current submissions relating to use of the City rights-of-way will not be processed at this time.

Further, we have learned that Mobilitie has filed recently a Petition with the Federal Communications Commission addressing use of public rights-of-way for its proposed facilities. While the FCC has not yet published the Petition, we understand that it may impact the City's authority with respect to any applications that Mobilitie may file to use the public rights-of-way. This provides a further basis for imposition of the moratorium.

During the moratorium, City staff will be reviewing current ordinances, rules, and regulations relating to use of City rights-of-way and developing appropriate amendments to more specifically address issues relating to the placement and installation of wireless communications facilities within the City's rights-of-way. As a part of that process, City staff will be providing opportunities to receive comments and input from Mobilitie and other parties as we develop these ordinance amendments, rules and regulations.

Sincerely,

for Rob McGarrah

Robert E. McGarrah
General Manager
Electric Utility

You will need to start the process with the Growth Management department. Please contact Greg Harden at (850)891-7166.

From: Chad Caudill [mailto:chad.caudill@mobilitie.com]
Sent: Tuesday, October 18, 2016 4:13 PM
To: Harrison, Tyler <Tyler.Harrison@talgov.com>
Subject: Mobilitie Additional Sites Tallahassee FL

Tyler,

Good Afternoon. I wanted to follow up with you on our previously submitted applications to see where we stood?

In addition, the below are additional site locations that we are interested in proceeding with that includes site number, height of structure, and location / coordinates. Before we submit the application package I wanted to see if you thought there were any glaring issues or not? I they look OK to you we will provide the plans for your further review. Also, If you would like, I can populate these locations on google maps if you want but I figured you have a program you would prefer. Let me know.

JA90XS032C	JA90XS032	9FLB003345	40'	30.439367	-84.25417	Governors Park Ln
JA90XS333F	JA90XS333	9FLB003436	75'	30.42356	-84.28354	Barbourville
JA90XS025E	JA90XS025	9FLB003338	75'	30.425406	-84.28973	Wahnish W
JA90XS495F	JA90XS495	9FLB003484	75'	30.445734	-84.34406	Merchants &
JA90XSRKDB	JA90XSRKD	9FLB003699	40'	30.46477	-84.18152	Oaks Edge R
JA90XS767B	JA90XS767	9FLB003547	65.62'	30.429156	JA90XS767B	Gamble & P

Thank you Sir,

Chad Caudill | Sr. NRE Permitting Manager
chad.caudill@mobilitie.com

Jacksonville, Florida
904-437-7377
www.mobilitie.com

CONFIDENTIALITY NOTICE | This email message contains confidential and proprietary information, including all attachments (if any) to this email even if such attachments are not separately marked as confidential and/or proprietary. Such information is exclusively for the addressee(s) and no others, unless and to the extent expressly stated above to the contrary. If the recipient of this email is not the addressee, such recipient is prohibited from reading or using this message in any way. If you have received this message by mistake, please call us immediately and destroy the email message and all attachments.

TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Information

Project Name: Utility Pole ID: 9FLB003364

Location Address: 3678-3726 Shamrock Street West

Intersecting Streets: Shamrock ST W & Longchamp CIR (30.517108, -84.225163)

Point of commencement: Shamrock Street

Point of completion: Shamrock Street

Length of Installation: N/A

Project Description: Install 75' utility pole in the ROW.

Applicant Information

Applicant Name: Mobilitie, LLC

Contact Person: Megan Sikes Title: NRE Manager

Mailing Address: 3475 Piedmont Rd. Atlanta, GA 30214

Phone Number: (404) 989-8380 Cell Number:

Email Address: megan.sikes@mobilitie.com

Contractor Information

Contractors License No.: CGC1522704

Contractor/Company: TTS

Contact Person: Jason Gillis Title:

Mailing Address: 9335 Industrial Trace, Alpharetta, GA 30004

Phone Number: (770) 521-9137 Cell Number:

24 hour Emergency Contact Person: Cell Number:

Email Address:

Agent Information

Agent Name:

Contact Person:

Mailing Address:

Phone Number: Cell Number:

Email Address:

CITY OF TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Type and Construction Method, Circle all that apply

Cable:	Cut	Bore	Overhead	TBD
Electric:	Cut	Bore	Overhead	
Telephone:	Cut	Bore	Overhead	
Gas:	Cut	Bore		
Sewer:	Cut	Bore		
Water:	Cut	Bore		
Curb:	Demo	Construct		
Asphalt:	Demo	Construct		
Sidewalk:	Demo	Construct		
Driveway:	New	Reconstruct		
Drainage:	Connection			
Sign:	Permanent	Temporary	illuminated, electric permit no:_____	

Fiber Optics

1. Does the installation provide local Connectivity? Yes No
   a. If YES, Is a Franchise Agreement in place with the City? Yes No
   b. If YES, Provide the date of the agreement._____
   c. If NO, Describe the purpose of the installation, so a determination can be made if a Franchise agreement is required._____

Boring

Boring type:_____

How many bore crossings:

_____Underground Electric
_____Gas
_____Potable Water
_____Sanitary Sewer Mains & Laterals
_____Storm Sewer
_____Roads
_____Driveways
_____Sidewalks

Submit preconstruction videos of sanitary sewer mains and laterals and storm sewer lines crossing the bore.

I (print name) Megan Sikes do herby make application to the City of Tallahassee for a permit to perform the above noted construction in, on, or under the public streets of the City of Tallahassee. By my signature, I certify that I have verified the existence and location of all existing utilities within the proposed construction area with the appropriate utility or service provider in compliance with the "Specification for Construction within the City of Tallahassee Right of Way" and sound engineering practices. (Copies of the noted specifications may be obtained from the City Streets and Drainage Division)

Signature of Applicant: Megan Sikes Date:_____

1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
info@pointtopointsurvey.com
www.P2PLS.com

FAA 1-A SURVEY CERTIFICATION

Applicant: **Mobilitie, LLC**
660 Newport Center Drive
Suite 200
Newport Beach, CA 92660

Site Name: **"JA90XS051A"**

Horizontal Datum Source:
☒ Ground survey ☐ GPS survey

Vertical Datum Source:
☒ NAVD 88 ☐ NGVD 29 ☐ GPS survey

Structure Type:
☒ New Pole ☐ Existing Tower ☐ Roof Top ☐ Water Tank ☐ Smokestack

CENTER OF PROPOSED POLE:

Latitude: 30°31'01.59" NAD 83
Longitude: -84°13'30.59" NAD 83
Ground Elevation: 209.7 feet AMSL NAVD 88

CERTIFICATION: I certify that the latitude of 30°31'01.59" and the longitude of -84°13'30.59" are accurate to within +/- 20 feet horizontally, and that the site elevation of 209.7 feet AMSL is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are based on the North American Datum of 1983 (NAD 83) and are expressed in degrees, minutes and seconds to the nearest hundredth of a second. The vertical datum (heights) are based on the North American Vertical Datum of 1988 (NAVD 88) and are determined to the nearest tenth of a foot.

Surveyor Signature/Seal: _____
Printed Name: G. Darrell Taylor
Professional Surveyor #: 6904
Company: Point to Point Land Surveyors, Inc
Phone: 678-565-4440
Date: July 22, 2016

G. DARRELL TAYLOR
License Number
6904
STATE OF FLORIDA
Professional Surveyor and Mapper

E:\Dropbox (Point To Point)\P2P Current Jobs\2016\0160385-JA90XS051A\G160385 1A.doc

SITE INFORMATION

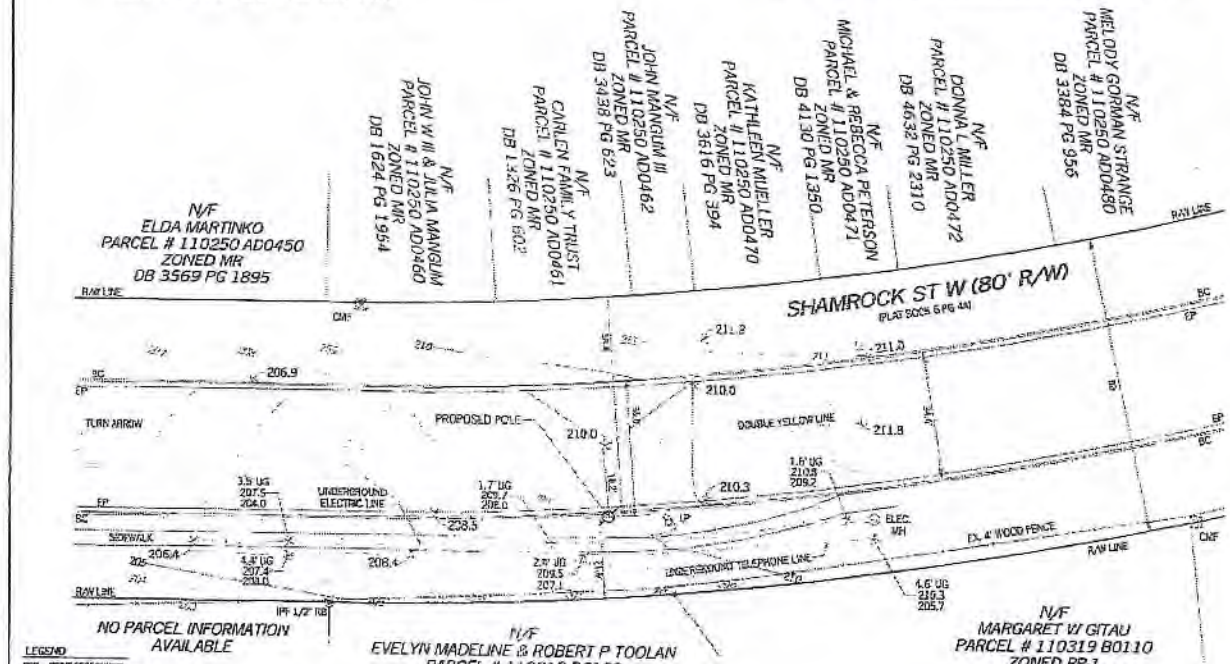
LATITUDE = 30°31'01.59" (NAD 83)
LONGITUDE = -84°13'30.52" (NAD 83)
AT CENTER PROPOSED POLE

ELEVATION AT CENTER OF PROPOSED POLE = 209.7' A.M.S.L.

I HEREBY CERTIFY THAT THIS MAP IS CORRECT AND WAS DRAWN UNDER MY DIRECT SUPERVISION. ANY VISIBLE ENCROACHMENTS ARE SHOWN HEREON.

G. DARRELL TAYLOR, FLORIDA REGISTERED LAND SURVEYOR #5904 — DATE: 7/22/16

THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS. THIS MAP IS ONLY INTENDED FOR THE PARTIES AND PURPOSES SHOWN. THIS MAP IS NOT FOR RECORDATION. NO TITLE REPORT PROVIDED.



VICINITY MAP

NOT TO SCALE

GENERAL NOTES

THIS SPECIFIC PURPOSE SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY. THIS SPECIFIC PURPOSE SURVEY WAS PREPARED FOR THE DEC USE OF MOBILITIE, LLC AND EXCLUSIVELY FOR THE TRANSFERAL OF THE PROPOSED LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AGAIN EXCEPT ON INSURANCE TO THE FEE SIMPLE TRANSFERAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREIN. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND DEED DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

THIS SPECIFIC PURPOSE SURVEY WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT WHICH MAY REVEAL ADDITIONAL CONVEYANCES, EASEMENTS, OR RIGHTS-OF-WAY NOT SHOWN HEREON.

THE FIELD DATA UPON WHICH THIS SPECIFIC PURPOSE SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 20,000+ FEET AND AN ANGULAR ERROR OF 5.0" PER ANGLE POINT AND WAS ADJUSTED USING LEAST SQUARES.

EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 ROBOTIC & SOKKIA ZEBRA. DATE OF LAST FIELD VISIT: 7/19/16

THE 1' CONTOURS AND SPOT ELEVATIONS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE ADJUSTED TO NAVD 88 DATUM (COMPUTED USING GEOID 12B) AND HAVE A VERTICAL ACCURACY OF ± 1'. CONTOURS OUTSIDE THE IMMEDIATE AREA ARE APPROXIMATE.

BEARINGS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE BASED ON GRID NORTH (NAD 83) FLORIDA NORTH ZONE.

BENCHMARKS USED: DM2412, 925016, D00907

THE PROPOSED POLE IS NOT LOCATED IN A SPECIAL FLOOD AREA AS PER F.I.R.M. COMMUNITY PANEL NO. 12073C0130F DATED AUGUST 18, 2009.

NO WETLAND AREAS HAVE BEEN INVESTIGATED BY THIS SPECIFIC PURPOSE SURVEY.

ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS.

ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ABOVE GROUND FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT ANY UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ANY UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ANY UNDERGROUND UTILITIES.

ADDITIONS OR DELETIONS TO THIS SURVEY MAP BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY.

ORIGINAL SURVEY IS KEPT ON FILE IN THE SURVEYORS OFFICE.

LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IPF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
UP	UTILITY POLE
LP	LIGHT POLE
FP	FLAG POLE
SSMH	SANITARY SEWER MANHOLE
DMH	STORM DRAIN MANHOLE
WV	WATER
FH	FIRE HYDRANT
BP	BASE OF PARKWAY
TC	TOP OF CURB
BC	BASE OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
OH	OVERHEAD UTILITY
UG	UNDERGROUND UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
CIP	CAST IRON PIPE
TR	TRANSFORMER
JB	JUNCTION BOX
SHCB	SINGLE HORZ CATCH BASIN
DHCB	DOUBLE HORZ CATCH BASIN
CLF	CHAIN LINK FENCE
WV	WATER VALVE
WM	WATER METER
CO	SEWER CLEANOUT
GV	GAS VALVE
RR	RAILROAD CROSSING
IB	ICE BREAKER
BP	ICE BREAKER POLE

GRID NORTH
(NAD 83 FLORIDA NORTH)

UTILITY OWNERS IN THE AREA:

1. CITY OF TALLAHASSEE (ELECTRIC)
2. CENTURYLINK (FIELD)

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'

STATE OF FLORIDA
G. DARRELL TAYLOR
LICENSE NUMBER 5904
PROFESSIONAL SURVEYOR AND MAPPER

NO.	DATE	REVISION

SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT LAND SURVEYORS
1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

mobilitie

660 NEWPORT CENTER DRIVE
SUITE 200
NEWPORT BEACH, CA 92660

"JA90XS051A"

SECTION 3 TOWNSHIP 1 NORTH,
RANGE 1 EAST
CITY OF TALLAHASSEE,
LEON COUNTY, FLORIDA

DRAWN BY: EAL
CHECKED BY: JR
APPROVED: C. LINER
DATE: JULY 22, 2016
P2P JOB #: 6163183

SHEET: 1 OF 1

SITE ID: 9FLB003364
JA90XS051A
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE INFORMATION

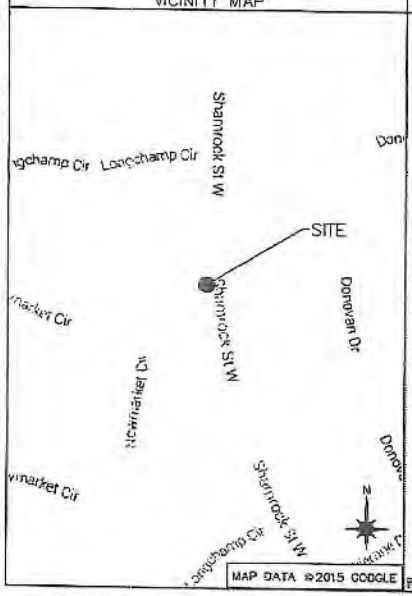
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS ST:	SHAMROCK ST W & LONGCHAMP CIR
APPLICANT:	MOBILITIE, LLC
APPLICANT ADDRESS:	3475 Piedmont Rd. NE, Suite 1000 Atlanta, GA 30305
LATITUDE:	30° 31' 1.59" N (30.517108)
LONGITUDE:	84° 13' 30.59" W (-84.225163)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 210' AMSL
COUNTY:	LEON COUNTY
JURISDICTION:	CITY OF TALLAHASSEE

BEFORE SCALING:

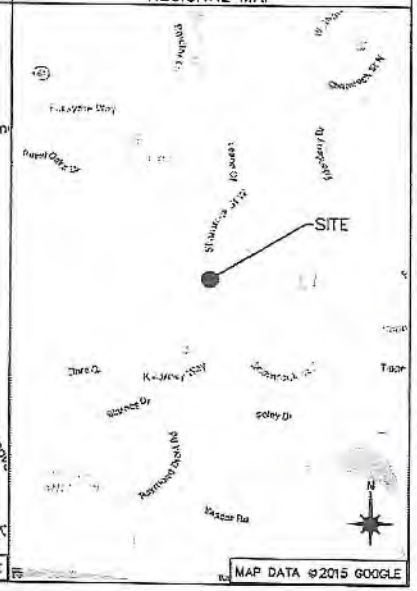
CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



DIG ALERT

811 Know what's below. Call before you dig.

TWO WORKING DAYS BEFORE YOU DIG

PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON A PROPOSED WOOD UTILITY POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON A PROPOSED WOOD UTILITY POLE

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX

SHEET NO:	SHEET TITLE
0.0	TITLE SHEET
1.0	SITE PLAN & EXHIBIT PHOTO
2.0	POLE ELEVATIONS
2.1	POLE ELEVATIONS
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	ANTENNA & EQUIPMENT DETAILS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
6.0	TRAFFIC CONTROL PLAN
6.1	TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

ARCHITECT/ENGINEER

JACOBS ENGINEERING GROUP, INC.
5449 BELLS FERRY ROAD
ACWORTH, GA 30102
CONTACT: KARL KRATINA
PROJECT MANAGER
TEL: (678) 460-1416
FAX: (770) 701-2501

mobilitie

PROJECT NO:	ER000201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	06/14/15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JA90XS051A
9FLB003364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

TITLE SHEET

SHEET NUMBER

0.0

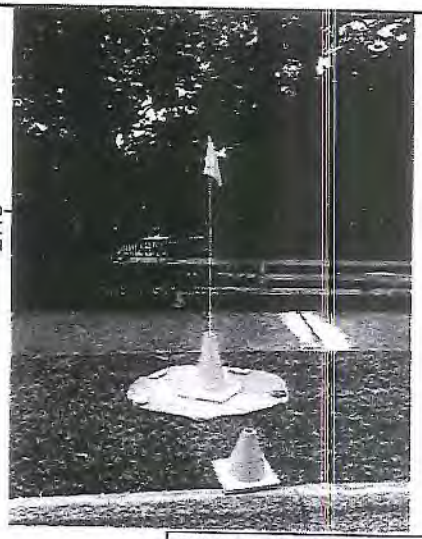


EXHIBIT PHOTO

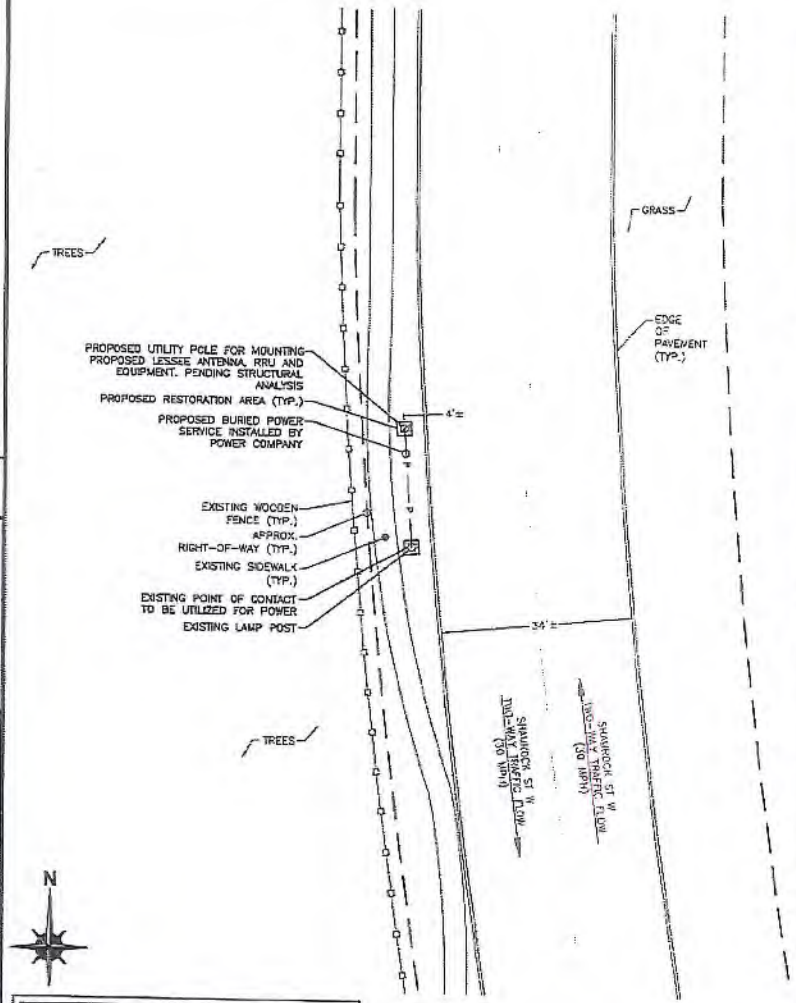
SCALE: NOT TO SCALE

1

AERIAL SITE LOCATION

SCALE: NOT TO SCALE

2



NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

ENLARGED SITE PLAN

SCALE: 1"=20'-0" (1"=10'-0" ON 22"x34" SHEET)

3

mobilitie

PROJECT NO:	ER500201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	06.11.15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

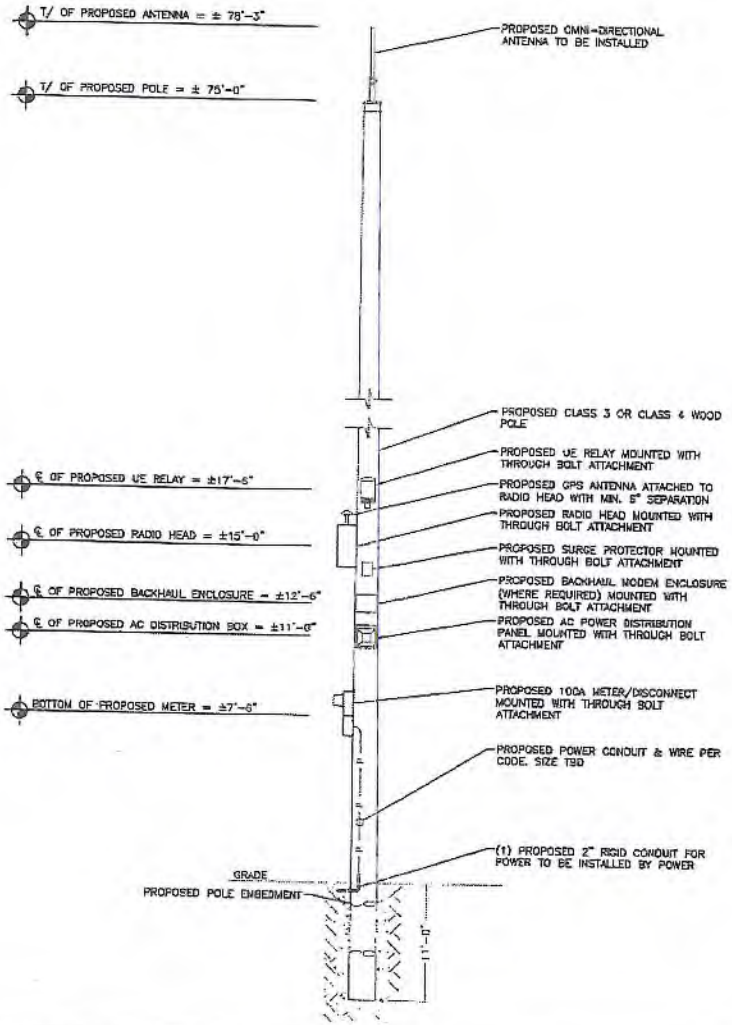
JAB0XS051A'
9FLB003364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

SITE PLAN & EXHIBIT PHOTO

SHEET NUMBER

1.0



NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 6" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	29.1" X 2" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.81"	14 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.44" X 4.69" X 3.5"	TBD

PROPOSED FRONT POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie

PROJECT NO:	ER860201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	08.14.18	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

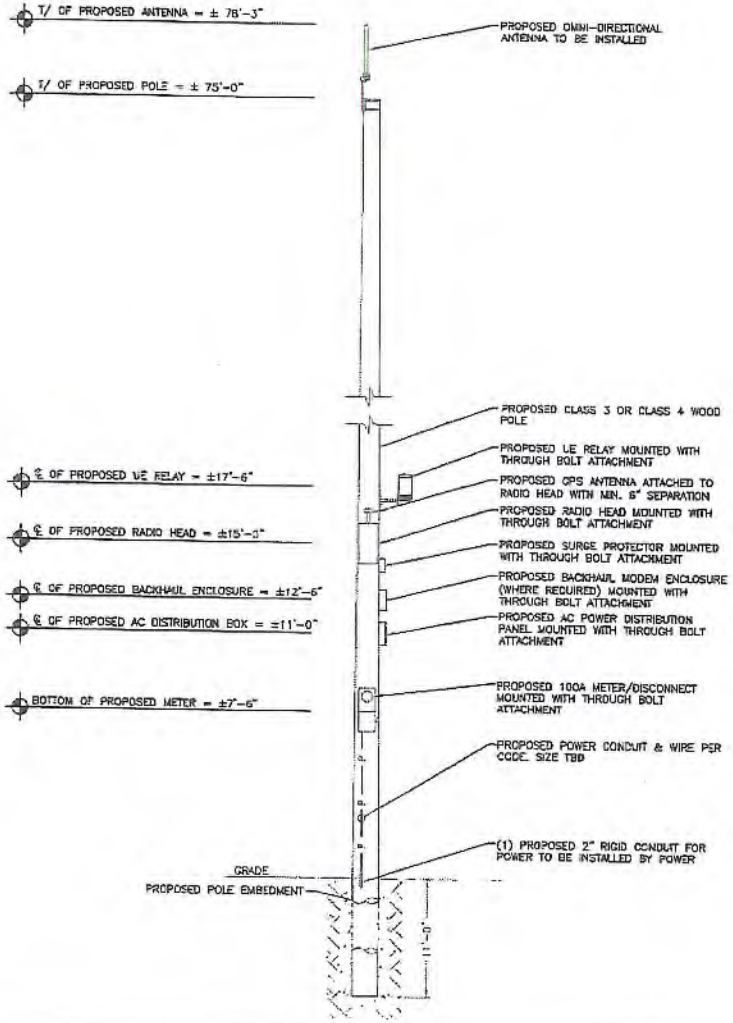
JA90X5051A
9FL8083364
SHAMROCK ST W S
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.0



NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	23.1" X 2" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.81"	14 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.44" X 4.69" X 3.5"	TBD

PROPOSED SIDE POLE ELEVATION

SCALE: 1" = 5'

1

mobilitie

PROJECT NO:	ER600201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. MANNA

A	05.14.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

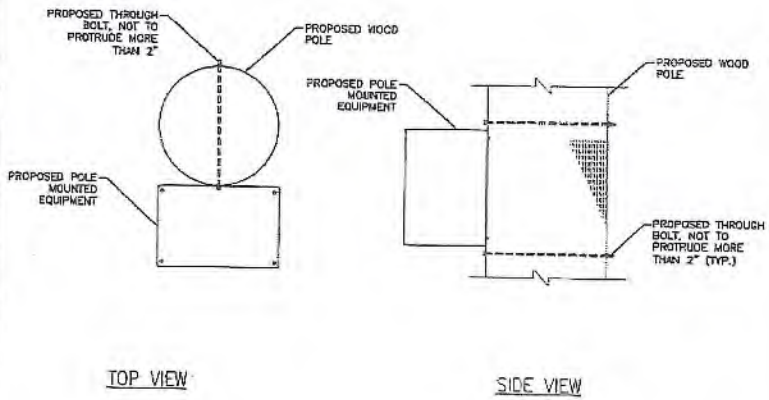
JA90XS051A
SFLB003364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

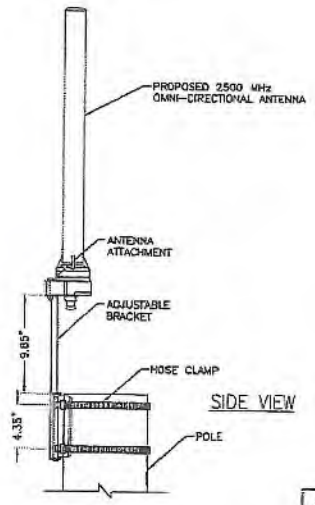
2.1



EQUIPMENT MOUNTING DETAIL

SCALE: NOT TO SCALE

1



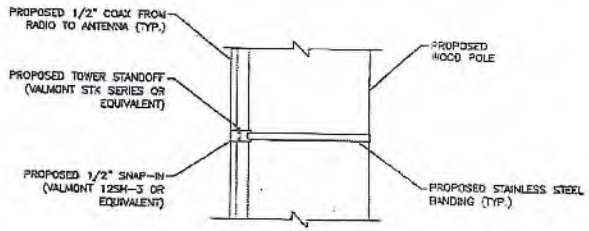
NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 3" TO 10" DIAMETER.
2. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3



NOTE:
SPACE SNAP-INS PER CABLE MANUFACTURER'S SPECIFICATIONS

CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE

2

ANTENNA SIGNAGE:
ON WOOD POLES – SIGN ON ALUMINUM WITH SS SCREW TO THE POLE
ON METAL POLES – ADHESIVE VINYL OR PLACARD STRAPPED WITH SS TIES
ON CONCRETE / COMPOSITE – PLACARD STRAPPED WITH SS TIES
SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3–4' BELOW THE COMMERCIAL RF ANTENNA(S)
SIZE APPROX. 8" x 5.5"

OWNER / OPERATOR NOTE:
SITE ID LABEL TO BE AFFIXED WITH 7ES241 LABELING TAPE OR EQUIVALENT BLACK ON WHITE LABELING TAPE OF AT LEAST 18mm WIDTH WITH EXTRA-STRENGTH ADHESIVE. USE ANY COMPATIBLE P-TOUCH LABEL MAKER. TEXT SHOULD BE PRINTED IN ALL CAPS WITH A MINIMUM HEIGHT OF 1/2".

POLE MOUNTED SIGNS

SCALE: NOT TO SCALE

4

mobilitie

PROJECT NO:	ER5001201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	2014.10	FOR REVIEW

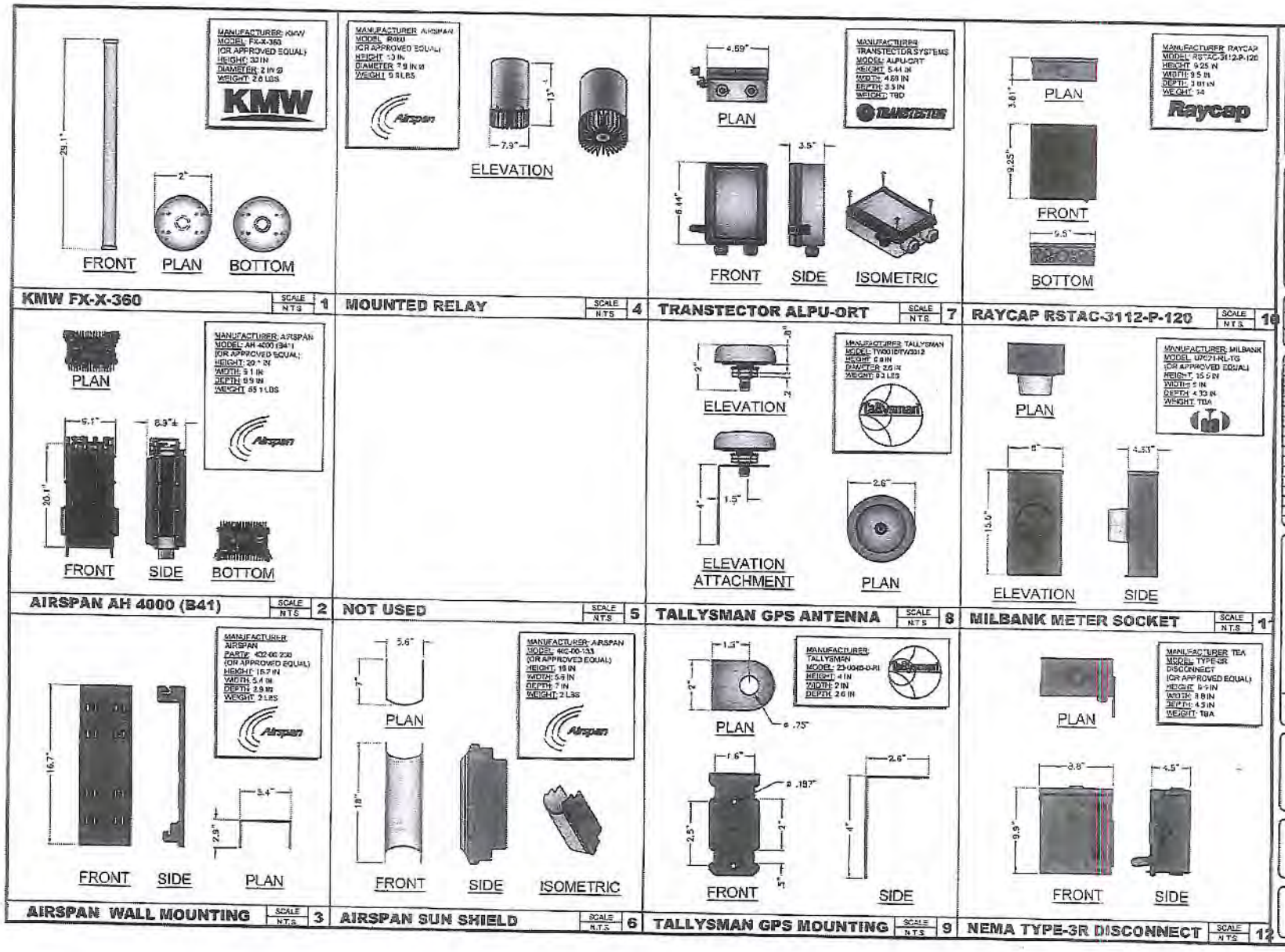
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAB0XS051A
SFL6003364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE
ANTENNA & EQUIPMENT MOUNTING DETAILS

SHEET NUMBER
3.0



mobilitie

PROJECT NO:	ER603201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	08.14.18	75% REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JA90XS051A
SFL3003364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

ANTENNA & EQUIPMENT DETAILS

SHEET NUMBER

3.1

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS UTILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT.
5. ALL CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
6. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:
   - N.E.C. NATIONAL ELECTRICAL CODE
   - A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
   - I.E.E.E. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   - A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS
   - N.E.M.A. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
   - U.L. UNDERWRITERS LABORATORIES, INC.
   - N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

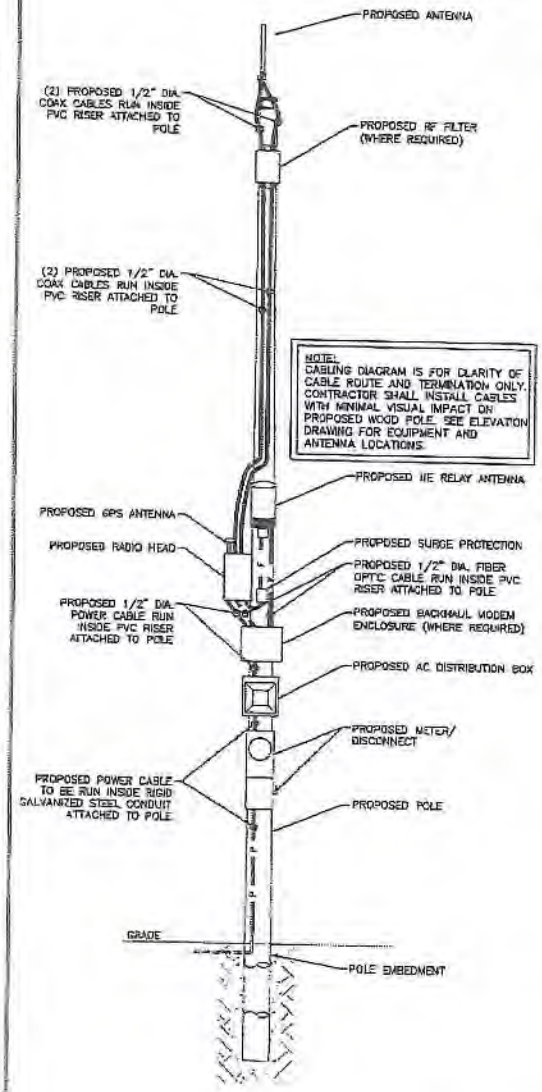
1. WIRING OF EVERY KIND MUST BY INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL, AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ARCHITECT/ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY.



CABLING NOTES:

A) WOOD, CONCRETE AND EXISTING METALLIC POLES

I) FROM GRADE LINE TO 11'-0" ABOVE GRADE, ALL CABLES/CONDUCTORS EXCEPT GROUNDING CONDUCTOR MUST RUN IN RIGID GALVANIZED STEEL CONDUIT (RGS)

II) GROUNDING CONDUCTORS IN EXPOSED LOCATIONS MUST BE INSTALLED IN PVC.

III) IN EARTH INSTALL PVC CONDUIT FOR BACKHAUL AND ELECTRICAL SERVICE. TRANSITION TO RGS AT GRADE LINE.

IV) ABOVE 11'-0" ALL CABLES (POWER, ETHERNET, COAXIAL) MUST RUN IN PVC UTILITY POLE RISER.

(1) AT MAJOR EQUIPMENT, EXTEND UTILITY DUCT IMMEDIATELY ADJACENT TO THE EQUIPMENT. INSTALL CABLES IN THE UTILITY POLE RISER CREATING CABLE DRIP LOOPS NOT LESS THAN THE CABLE BENDING RADIUS.

(2) INSIDE THE UTILITY POLE RISER, UTILIZE 6" COAX BLOCKS WITH LAG SCREWS TO SUPPORT COAX, RADIO AND MW POWER, RF COAX, AND ETHERNET CABLES TO WITHIN 12" OF THE EQUIPMENT BEING SERVED AND ON INTERVALS NOT TO EXCEED 5'.

V) FOR UNDERGROUND HFC/PUBLIC BACKHAUL ROUTE ETHERNET CABLE IN CONDUIT UP THE POLE AND ENTER THE UTILITY POLE RISER. SEAL EXPOSED END OF CONDUIT WITH A CABLE TERMINATION FITTING.

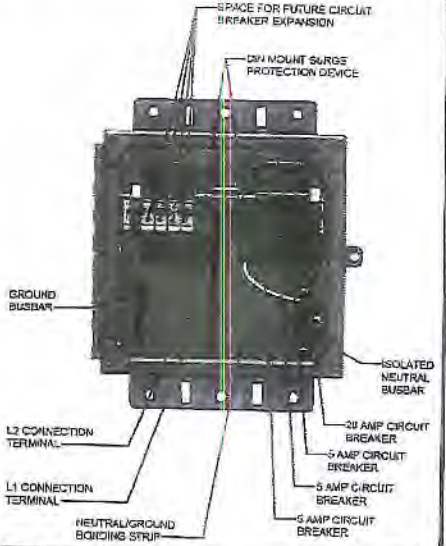
VI) BY APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX. EXAMPLE: UTILITY-REQUIRED DISCONNECT ON POLE W/ AC DISTRIBUTION BOX ON OPPOSITE SIDE OF POLE.

B) NEW METALLIC POLES

I) PROCURE NEW POLES WITH SUITABLE HAND HOLES SUCH THAT HAND HOLES EXIST AT ALL EQUIPMENT LOCATIONS.

(1) WITH CLIENT APPROVAL, IN SELECT CASES TO FACILITATE IMPROVED APPEARANCE, ½" COAXIAL CABLES MAY BE "SUPERFLEX" IN LIEU OF LDF-4.

II) WHERE POSSIBLE, INSTALL POLE BASE SUCH THAT THE ELECTRICAL FEED AND BACKHAUL (IF UNDERGROUND) CIRCUIT ENTER THE POLE THROUGH THE POLE BASE. IF A DISCONNECTING MEANS SEPARATE FROM THE AC DISTRIBUTION BOX IS REQUIRED BY JURISDICTION OR UTILITY, WITH APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX.



CABLING DIAGRAM 1

SCALE: NOT TO SCALE

mobilitie

PROJECT NO:	EN000001
DRAWN BY:	L. TAPUBAL
CHECKED BY:	N. HANNA

A	08/14/16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DRAWING.

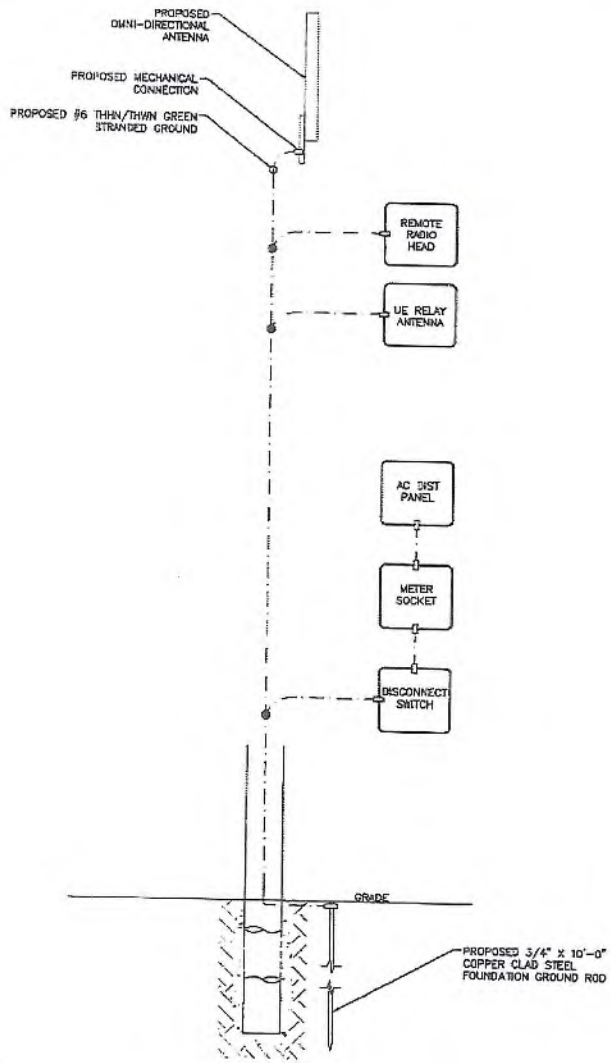
JAS0XS091A
SFL8003364
SHAMROCK ST W &
LONGCHAMP DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

4.0



LEGEND:
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	ER600281
DRAWN BY:	L. TARUSAL
CHECKED BY:	N. HANNA

1	05.14.15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS051A
9FLB003364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

5.0

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL REQUIREMENTS

PART 1 – GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH-UP PAINTING, TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 – FINAL CLEANING

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.
   - A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREA, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
   - B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE.
   - C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
   - D. CLEAN EXPOSED EXTERIOR HARD SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
   - E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING MANHOLES, MANHOLES, AND SIMILAR SPACES.
   - F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.
   - G. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CANNOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
   - H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.
   - I. DUST OFF ALL EQUIPMENT AND ITEMS WITHIN EQUIPMENT ENCLOSURE.
2. REMOVAL OF PROTECTION: REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

SITE WORK

PART 1 – GENERAL

1. WORK INCLUDED: SEE SITE PLAN.
2. DESCRIPTIONS: IF APPLICABLE, LEASE AREA, AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
3. QUALITY ASSURANCE
   - A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
   - B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
   - C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
4. SEQUENCING
   - A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
   - B. CONSTRUCT TEMPORARY CONSTRUCTION AREA, DESIGNATED AREA TO BE APPROVED BY CONSTRUCTION MANAGER AND LOCAL AUTHORITIES.
   - C. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.
   - D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
   - E. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.
5. SUBMITTALS
   - A. BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD.
   - B. AFTER CONSTRUCTION
     1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
     2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
     3. LANDSCAPING WARRANTY STATEMENT
6. WARRANTY
   - A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.
   - B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
   - C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
   - D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

PART 2 – PRODUCTS

1. MATERIALS
   - A. SOIL STERILIZER SHALL BE EPA-REGISTERED, PRE-EMERGENCE LIQUID:

TOTAL KILL PRODUCT 910 EPA 10292-7 (313) 563-8000	PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48128
AMBUSH HERBICIDE EPA REGISTERED (800) 525-4924	FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVE. UNION, NJ 07083

   - B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) – ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
   - C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 500X.

PART 3 – EXECUTION

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION
2. PREPARATION
   - A. CLEAR BRUSH AND DEBRIS FROM LEASE AREA AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
   - B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
   - C. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
   - D. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
   - A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
   - B. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
   - C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
   - D. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
   - E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
   - F. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREA, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
   - A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.
   - B. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

mobilitie

PROJECT NO:	EA510201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	08/04/16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAX0XS051A
9FLB003354
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

ELECTRICAL

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
2. ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.)
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "U.L." WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "U.L." LISTED.
5. ALL CONDUIT SHALL HAVE A PULL CORD.
6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
7. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IDC, NEC AND ALL APPLICABLE CODES.
9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
10. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SERVICE AND DISTRIBUTION

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED.
2. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
3. CONDUIT:
   A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
   B. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
   C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE DIGGING.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FOURTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
7. GROUNDING ELECTRODE SYSTEM
   A. PREPARATION
      1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
      2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
   B. EXTERNAL CONNECTIONS
      1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
      2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD). MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
   C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
   D. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
   E. LUGS
      1. LUGS SHALL BE 2-HOLE, LONG BARREL STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #54____BE OR EQUIVALENT

A.	535 MCM OLD	54880BE
B.	262 MCM OLD	54872BE
C.	#1/0 OLD	54852BE
D.	#4/0 THWN AND BARE	54896BE
E.	#2/0 THWN	54862BE
F.	#2 THHN	54207BE
G.	#6 OLD	54205BE

      2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

8. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

POLES, POSTS, AND STANDARDS
(SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL
   A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
   B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE.

TELECOMMUNICATIONS WIRING COMPONENTS
(COAXIAL ANTENNA CABLE)

1. GENERAL
   A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
   B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
   A. COAXIAL CABLE:
      1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
      2. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
3. ANTENNA AND COAXIAL CABLE GROUNDING
   A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
4. COAXIAL CABLE IDENTIFICATION
   A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
      1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
      2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
   B. USE ANDREW CABLE TIES (PT.# 27290) TO SECURE IDENTIFICATION TAGS.
      1. TESTING: LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER/QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

mobilitie

PROJECT NO:	BR600201
DRAWN BY:	L. TARUDAL
CHECKED BY:	N. HANNA

A	08.14.18	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90X3031A
9FLB003364
SHAMROCK ST W &
LONGCHAMP DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

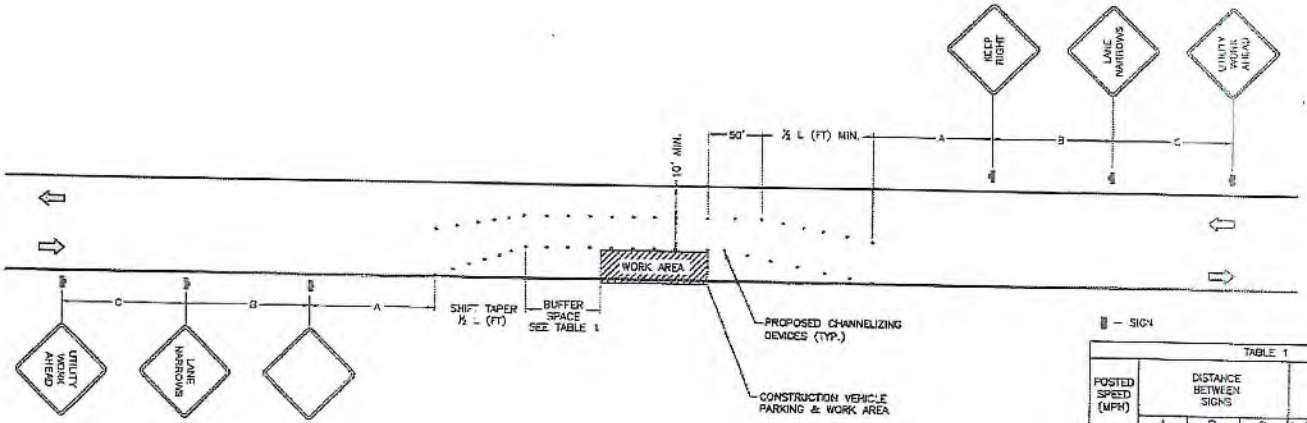
GENERAL NOTES

SHEET NUMBER

GN-2

PLAN NOTES:

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.



▮ – SIGN

TABLE 1

POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER
	A	B	C	L (SEE NOTE)	
15	100'	100'	100'	45'	100'
20	100'	100'	100'	80'	115'
25	100'	100'	100'	125'	155'
30	200'	200'	200'	180'	200'
35	200'	200'	200'	245'	250'
40	350'	350'	350'	320'	305'
45	350'	350'	350'	540'	360'
50	500'	500'	500'	600'	425'
55	500'	500'	500'	660'	495'
60	500'	500'	500'	720'	570'
65	500'	500'	500'	780'	645'

NOTES:

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET 6.1.
E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH. SEE NOTE 18, SHEET 6.1.

TRAFFIC CONTROL PLAN - LANE SHIFT

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	ER000201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

A	01.14.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA80XS051A
9FL8C03354
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

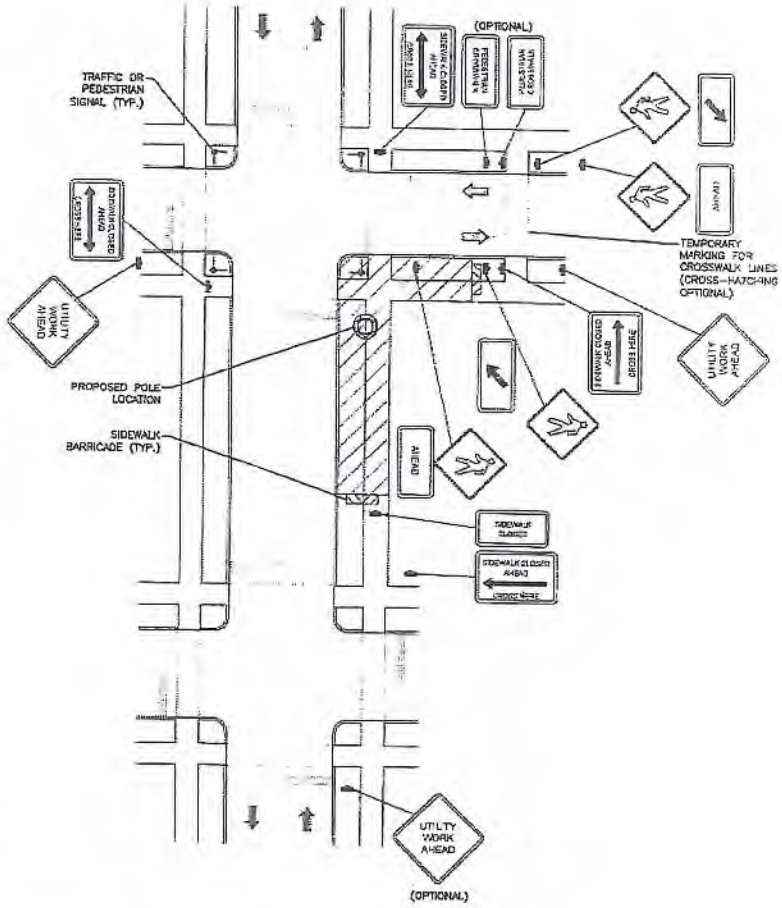
TRAFFIC CONTROL PLAN

SHEET NUMBER

6.0

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) – PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY AND FOR ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
8. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6H:1V SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
$L = WS^2/60$ (40 MPH AND HIGHER) OR $L2 = WS$ (OVER 40 MPH).
WHERE W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).



TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	[illegible]
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. HANNA

4	[illegible]	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAS0XS051A
9FLB803364
SHAMROCK ST W &
LONGCHAMP CIR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SHEET NUMBER

6.1

TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Information

Project Name: Utility Pole ID: 9FLB003376

Location Address: 3611-3641 Shamrock Street West (30.517108, -84.225163)

Intersecting Streets: Shamrock ST W & Cavan DR

Point of commencement: Shamrock Street

Point of completion: Shamrock Street

Length of Installation: N/A

Project Description: Install 25' utility pole in the ROW.

Applicant Information

Applicant Name: Mobilitie, LLC

Contact Person: Megan Sikes Title: NRE Manager

Mailing Address: 3475 Piedmont Rd. Atlanta, GA 30214

Phone Number: (404) 989-8380 Cell Number:

Email Address: megan.sikes@mobilitie.com

Contractor Information

Contractors License No.: CGC1522704

Contractor/Company: TTS

Contact Person: Jason Gillis Title:

Mailing Address: 9335 Industrial Trace, Alpharetta, GA 30004

Phone Number: (770) 521-9137 Cell Number:

24 hour Emergency Contact Person: Cell Number:

Email Address:

Agent Information

Agent Name:

Contact Person:

Mailing Address:

Phone Number: Cell Number:

Email Address:

CITY OF TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Type and Construction Method, Circle all that apply

Cable:	Cut	Bore	Overhead
Electric:	Cut	Bore	Overhead
Telephone:	Cut	Bore	Overhead
Gas:	Cut	Bore	
Sewer:	Cut	Bore	
Water:	Cut	Bore	
Curb:	Demo	Construct	
Asphalt:	Demo	Construct	
Sidewalk:	Demo	Construct	
Driveway:	New	Reconstruct	
Drainage:	Connection		
Sign:	Permanent	Temporary	illuminated, electric permit no:_____

Fiber Optics

1. Does the installation provide local Connectivity? Yes No
   a. If YES, Is a Franchise Agreement in place with the City? Yes No
   b. If YES, Provide the date of the agreement. _____
   c. If NO, Describe the purpose of the installation, so a determination can be made if a Franchise agreement is required._____

Boring

Boring type: Directional

How many bore crossings:

TBD Underground Electric
_____Gas
_____Potable Water
_____Sanitary Sewer Mains & Laterals
_____Storm Sewer
_____Roads
_____Driveways
_____Sidewalks

Submit preconstruction videos of sanitary sewer mains and laterals and storm sewer lines crossing the bore.

I (print name) Megan Sikes do herby make application to the City of Tallahassee for a permit to perform the above noted construction in, on, or under the public streets of the City of Tallahassee. By my signature, I certify that I have verified the existence and location of all existing utilities within the proposed construction area with the appropriate utility or service provider in compliance with the "Specification for Construction within the City of Tallahassee Right of Way" and sound engineering practices. (Copies of the noted specifications may be obtained from the City Streets and Drainage Division)

Signature of Applicant: Megan Sikes Date:_____

1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
info@pointtopointsurvey.com
www.P2PLS.com

FAA 1-A SURVEY CERTIFICATION

Applicant: **MOBILITIE, LLC**
660 NEWPORT CENTER DRIVE
SUITE 200
NEWPORT BEACH, CA 92660

Site Name: **"JA90XS125A"**

Horizontal Datum Source:
☒ Ground survey ☐ GPS survey

Vertical Datum Source:
☒ NAVD 88 ☐ NGVD 29 ☐ GPS survey

Structure Type:
☒ New Pole ☐ Existing Tower ☐ Roof Top ☐ Water Tank ☐ Smokestack

CENTER OF PROPOSED POLE:

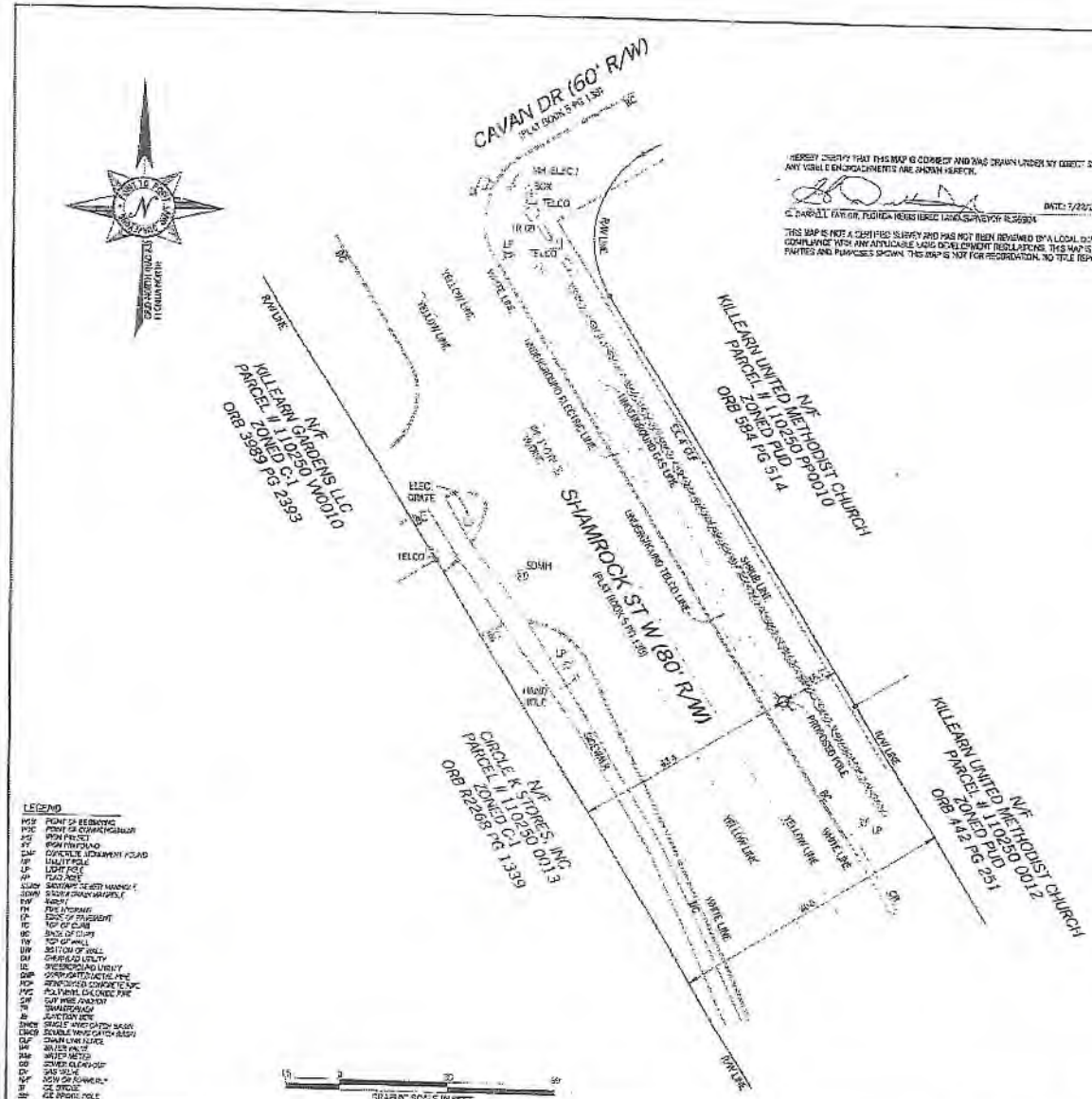
Latitude: 30°30'51.74" NAD 83
Longitude: -84°13'24.71" NAD 83
Ground Elevation: 203.6 feet AMSL NAVD 88

CERTIFICATION: I certify that the latitude of 30°30'51.74" and the longitude of -84°13'24.71" are accurate to within +/- 20 feet horizontally, and that the site elevation of 203.6 feet AMSL is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are based on the North American Datum of 1983 (NAD 83) and are expressed in degrees, minutes and seconds to the nearest hundredth of a second. The vertical datum (heights) are based on the North American Vertical Datum of 1988 (NAVD 88) and are determined to the nearest tenth of a foot.

Surveyor Signature/Seal: _____ **(SEAL)**
Printed Name: G. Darrell Taylor
Professional Surveyor #: 6904
Company: Point to Point Land Surveyors, Inc
Phone: 678-565-4440
Date: July 22, 2016

G. DARRELL TAYLOR
LICENSED SURVEYOR
6904
STATE OF FLORIDA

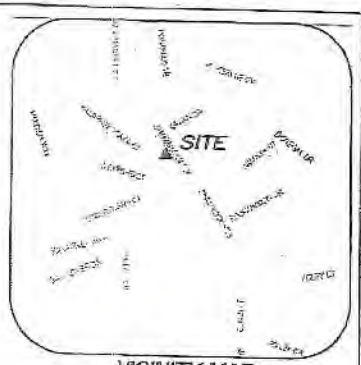
E:\Dropbox (Point To Point)\P2P Current Jobs\2016\G160386-JA90XS125A\G160386 1A.dwg



I HEREBY CERTIFY THAT THIS MAP IS CORRECT AND WAS DRAWN UNDER MY DIRECT SUPERVISION. ANY VISIBLE ENCROACHMENTS ARE SHOWN HEREON.

C. DARRELL TAYLOR, FLORIDA REGISTERED LAND SURVEYOR #LS6904 DATE: 7/22/2016

THIS MAP IS NOT A CERTIFIED SURVEY AND HAS NOT BEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LOCAL DEVELOPMENT REGULATIONS. THIS MAP IS ONLY INTENDED FOR THE PARTIES AND PURPOSES SHOWN. THIS MAP IS NOT FOR RECORDATION. NO TITLE REPORT PROVIDED



VICINITY MAP

NOT TO SCALE

GENERAL NOTES

1. THIS SPECIFIC PURPOSE SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY. THIS SPECIFIC PURPOSE SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF MOBILITIE, LLC AND EXCLUSIVELY FOR THE TRANSFERRAL OF THE PROPOSED LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AS AN EXHIBIT OR EVIDENCE IN THE FEE SIMPLE TRANSFERRAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREOF. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND DEED DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

THIS SPECIFIC PURPOSE SURVEY WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT WHICH MAY REVEAL ADDITIONAL CONVEYANCES, EASEMENTS, OR RIGHTS OF WAY NOT SHOWN HEREON.

THE FIELD DATA UPON WHICH THIS SPECIFIC PURPOSE SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 20,000+ FEET AND AN ANGULAR ERROR OF 5.0" PER ANGLE POINT AND WAS ADJUSTED USING LEAST SQUARES.

EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 ROBOTIC & BEGINNING WITH SERIAL# OF LAST FIELD VISIT: 7/19/2016

THE 1' CONTOURS AND SPOT ELEVATIONS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE ADJUSTED TO NAVD 88 DATUM COMPUTED USING GEOID 12B AND HAVE A VERTICAL ACCURACY OF ± 1'. CONTOURS OUTSIDE THE IMMEDIATE SITE AREA ARE APPROXIMATE.

BEARINGS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE BASED ON GRID NORTH NAD 83 FLORIDA NORTH.

THE PROPOSED POLE IS NOT LOCATED IN A SPECIAL FLOOD AREA AS PER F.I.R.M. COMMUNITY PANEL NO. 12073C0113F DATED AUGUST 18, 2009.

BENCHMARKS USED: DE0016, DE0026, DG0907

NO WETLAND AREAS HAVE BEEN INVESTIGATED ON THIS SPECIFIC PURPOSE SURVEY.

ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS.

ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ABOVE GROUND FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT ANY UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ANY UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ANY UNDERGROUND UTILITIES.

ADDITIONS OR DELETIONS TO THIS SURVEY MAP BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE ORIGINAL PARTY.

ORIGINAL SURVEY IS KEPT ON FILE IN THE SURVEYOR'S OFFICE.

LEGEND

PCS	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IF	IRON PIN FOUND
CONC	CONCRETE MONUMENT FOUND
UP	UTILITY POLE
LP	LIGHT POLE
FP	FLAG POLE
SCMW	SANITARY SEWER MANHOLE
SDMH	STORM DRAIN MANHOLE
FW	HYDRANT
FH	FIRE HYDRANT
EP	EDGE OF PAVEMENT
TC	TOP OF CURB
BC	BACK OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
OH	OVERHEAD UTILITY
UE	UNDERGROUND UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
SW	SAN WISE ANCHOR
TR	TRANSFORMER
JB	JUNCTION BOX
SWGC	SINGLE WHEEL GATE VALVE
DWGC	DOUBLE WHEEL GATE VALVE
CLF	CHAIN LINK FENCE
WM	WATER METER
WV	WATER VALVE
CO	SEWER CLEAN OUT
GV	GAS VALVE
NF	NON OF FOUND
SI	CE SPIKE
SP	CE PAINTED POLE

SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT LAND SURVEYORS
1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

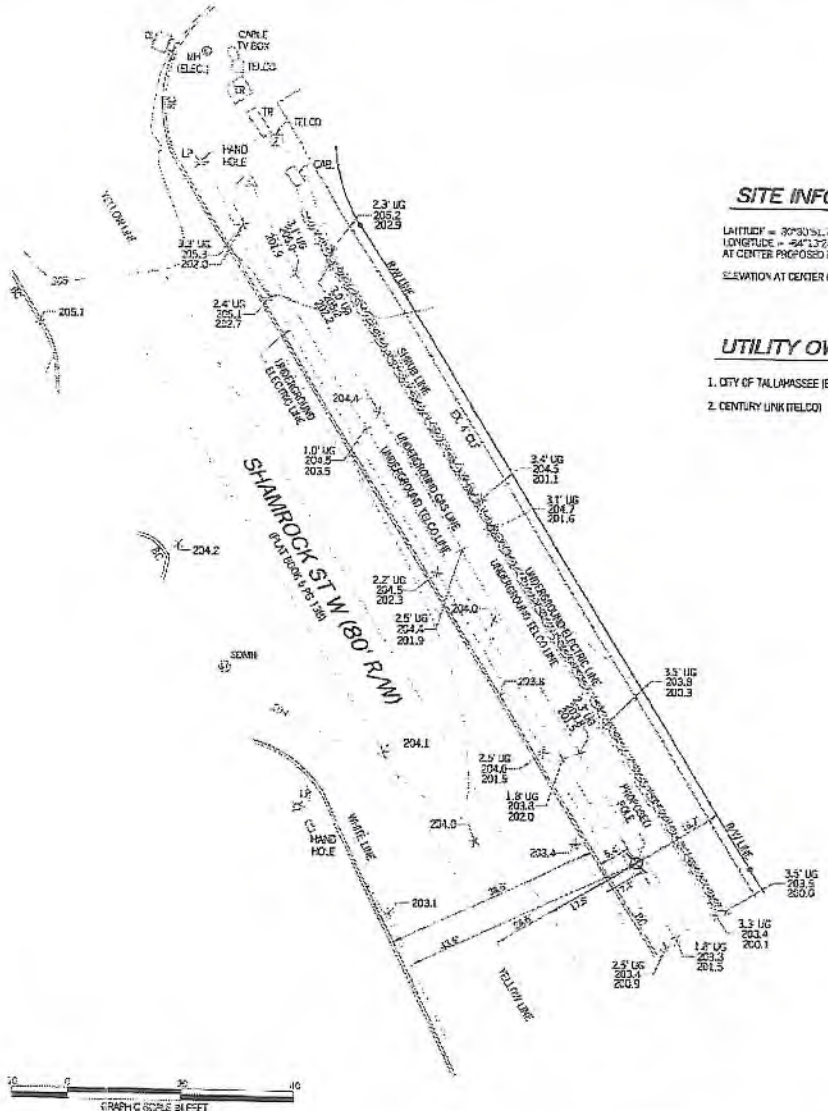
mobilitie
660 NEWPORT CENTER DRIVE
SUITE 200
NEWPORT BEACH, CA 92660

"JA90XS125A"

SECTION 3 TOWNSHIP 1 NORTH
RANGE 1 EAST
CITY OF TALLAHASSEE,
LEON COUNTY, FLORIDA

DRAWN BY: SAL	SHEET:
CHECKED BY: BC	1
APPROVED: C. HER	
DATE: JULY 22, 2016	OF 2
PSP JOB #: 0190356	

NO.	DATE	REVISION



SITE INFORMATION

LATITUDE = 30°30'51.74" (NAD 83)
LONGITUDE = -84°13'24.71" (NAD 83)
AT CENTER PROPOSED POLE

ELEVATION AT CENTER OF PROPOSED POLE = 203.6' A.M.S.L.

UTILITY OWNERS IN AREA

1. CITY OF TALLAHASSEE (ELECTRIC & GAS)
2. CENTURY LINK (TELCO)

LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IFS	IRON PIN SET
IFF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
UP	UTILITY POLE
LP	LIGHT POLE
FP	FLAG POLE
SSMH	SANITARY SEWER MANHOLE
SDMH	STORM DRAIN MANHOLE
WM	WATER
FH	FIRE HYDRANT
EP	EDGE OF PAVEMENT
TC	TOP OF CURB
BC	BACK OF CURB
TW	TOP OF WALL
BW	BOTTOM OF WALL
OU	OVERHEAD UTILITY
UE	UNDERGROUND UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
ERP	GUY WIRE ANCHOR
TR	TRANSFORMER
JB	JUNCTION BOX
SWCB	SINGLE WING CATCH BASIN
DWCB	DOUBLE WING CATCH BASIN
C.F	CHAIN LINK FENCE
WV	WATER VALVE
WM	WATER METER
CO	SEWER CLEANOUT
GV	GAS VALVE
N/F	NOW/OR FORMERLY
IR	ICE RACK
IRP	ICE RACK POLE

SURVEY TOP WILD WINNINE SHEET 1 OF 2

STATE OF FLORIDA
Licensed Number 6804
Professional Surveyor and Mapper

NO.	DATE	REVISION

SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT LAND SURVEYORS
1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

mobilitie

660 NEWPORT CENTER DRIVE
SUITE 200
NEWPORT BEACH, CA 92660

"JA90XS125A"

SECTION 3 TOWNSHIP 1 NORTH
RANGE 1 EAST
CITY OF TALLAHASSEE
LEON COUNTY, FLORIDA

DRAWN BY: EAL
CHECKED BY: JAL
APPROVED: C. INER
DATE: JULY 22, 2016
P2P JOB #: G160386

SHEET: 2 OF 2

SITE ID: 9FLB003376
JA90XS125A
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE INFORMATION

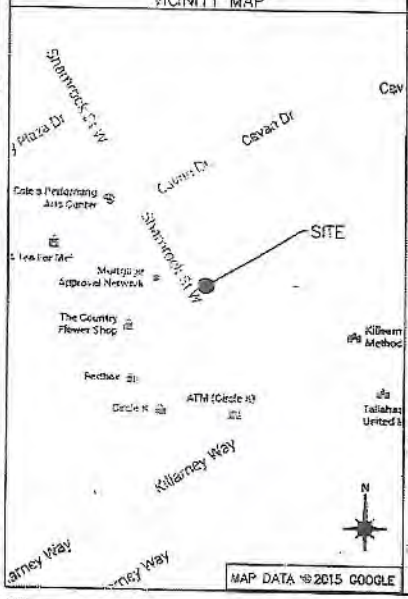
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS ST:	SHAMROCK ST W & CAVAN DR
APPLICANT:	MOBILITIE, LLC
APPLICANT ADDRESS:	9258 PEACHTREE ST. NE, SUITE 710 ATLANTA, GA 30309 PHONE: (312) 638-5400
LATITUDE:	30° 30' 51.74" N (30.514372)
LONGITUDE:	84° 13' 24.71" W (-84.223531)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 204' AMSL
COUNTY:	LEON COUNTY
JURISDICTION:	CITY OF TALLAHASSEE

BEFORE SCALING:

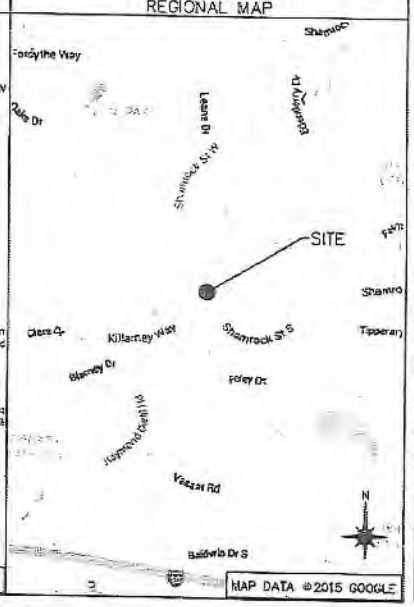
CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



DIG ALERT

811 Know what's below. Call before you dig.

TWO WORKING DAYS BEFORE YOU DIG

PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON A NEW WOOD UTILITY POLE WITHIN ANN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

-INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON A NEW UTILITY POLE.

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX

SHEET NO:	SHEET TITLE
0.0	TITLE SHEET
1.0	SITE PLAN & EXHIBIT PHOTO
2.0	POLE ELEVATIONS
2.1	POLE ELEVATIONS
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	ANTENNA & EQUIPMENT DETAILS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
6.0	TRAFFIC CONTROL PLAN
6.1	TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

ARCHITECT/ENGINEER

JACOBS ENGINEERING GROUP, INC.
5449 BELLS FERRY ROAD
ACWORTH, GA 30102
CONTACT: KARL KRATINA
PROJECT MANAGER
TEL: (678) 460-1418
FAX: (770) 701-2501

mobilitie
9258 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER[illegible]
DRAWN BY:	L. TARUBAL
CHECKED BY:	[illegible]

A	06.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS125A
9FLB003376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

TITLE SHEET

SHEET NUMBER

0.0

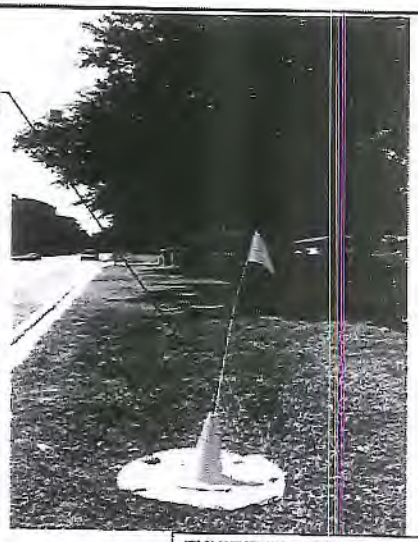
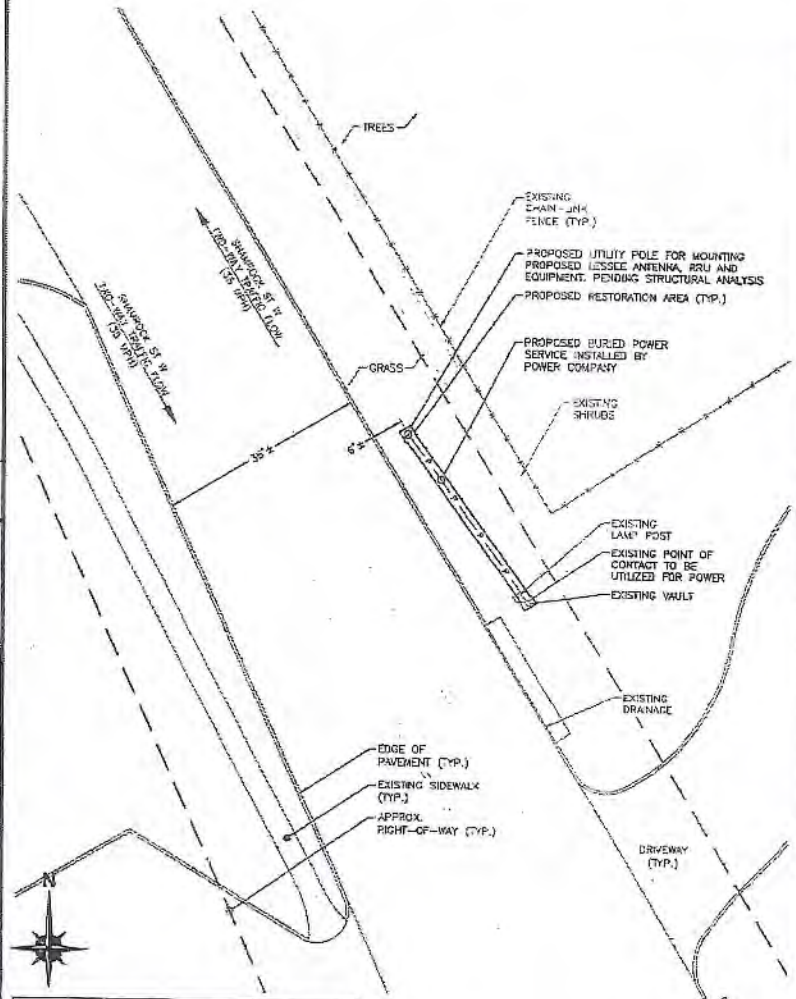


EXHIBIT PHOTO 1

SCALE: NOT TO SCALE

AERIAL SITE LOCATION 2

SCALE: NOT TO SCALE



NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

ENLARGED SITE PLAN 3

SCALE: 5"=20'-0" (1"=10'-0" ON 22"x34" SHEET)

mobilitie
9259 PEACHTREE ST. NE.
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER500281
DRAWN BY:	L. TARVIDAL
CHECKED BY:	S. BO

A	06.05.16	FOR REVIEW

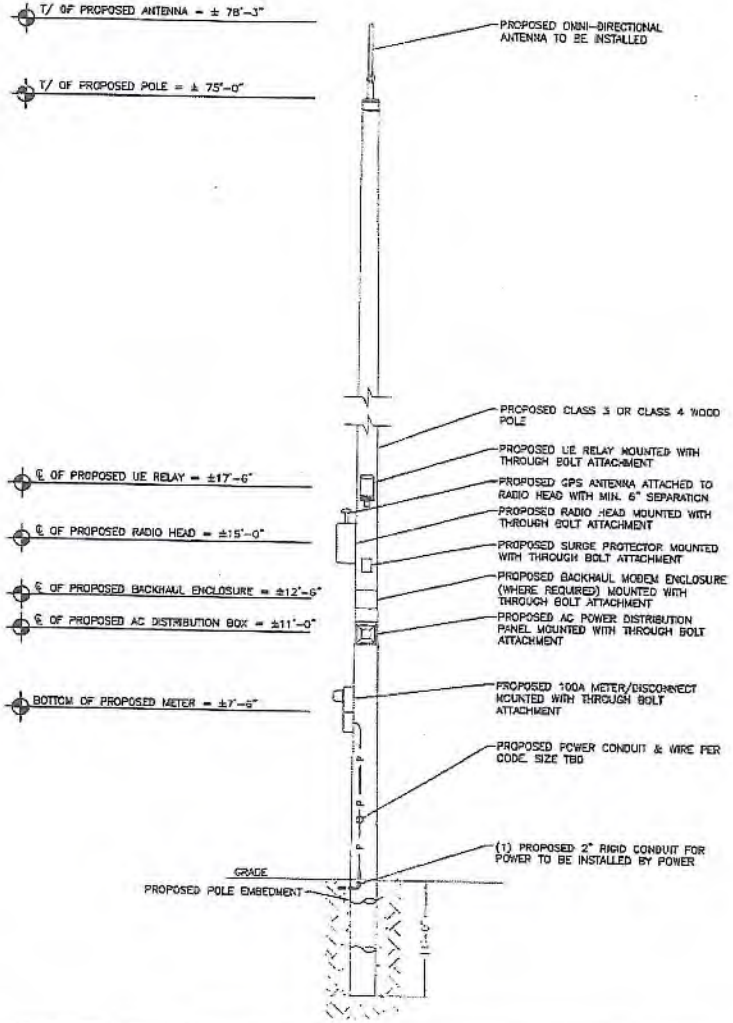
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JA90XS125A
9FL8003376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE
SITE PLAN & EXHIBIT PHOTO

SHEET NUMBER
1.0



NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	29.1" X 2" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.61"	14 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.44" X 4.69" X 3.5"	TBD

PROPOSED FRONT POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie
9258 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 938-5400

PROJECT NO:	SRS003201
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. DO

A	06.15.18	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

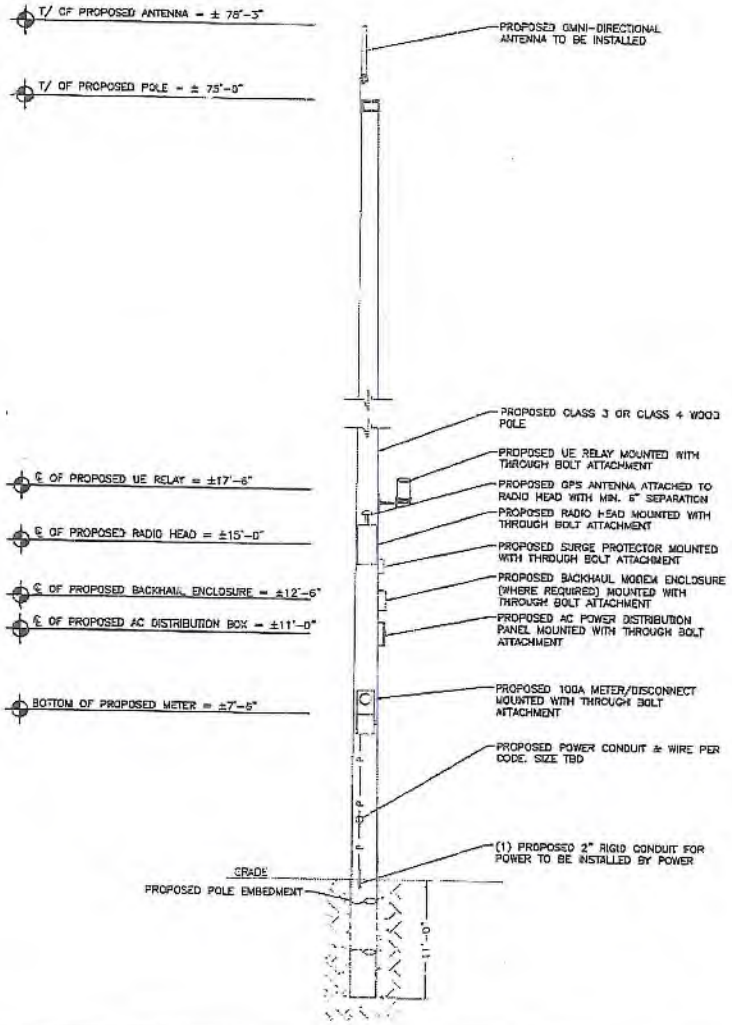
JA90XS125A
3FLB003376
SHAMROCK ST W S
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.0



NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	29.1" X 2" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.81"	14 LBS
1	MOUNTED RELAY	13.0" X 7.0" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.44" X 4.69" X 3.5"	TBD

PROPOSED SIDE POLE ELEVATION

SCALE: 1" = 5'

1

mobilitie
9259 PEACHTREE ST. NE.
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER803201
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	08.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

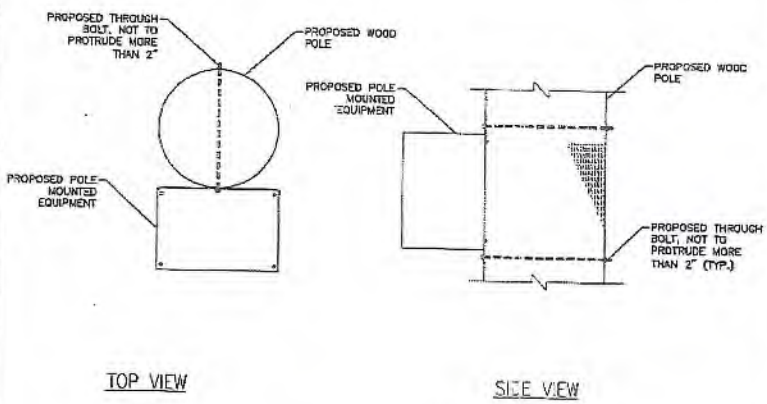
JASOXS125A
9FLB003376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

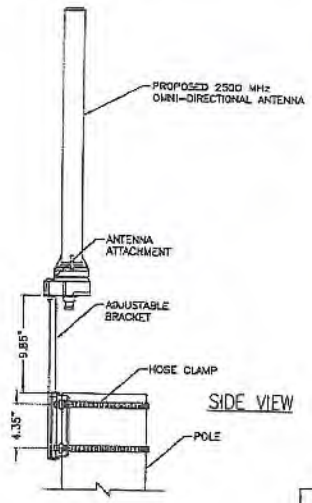
2.1



EQUIPMENT MOUNTING DETAIL

SCALE: NOT TO SCALE

1



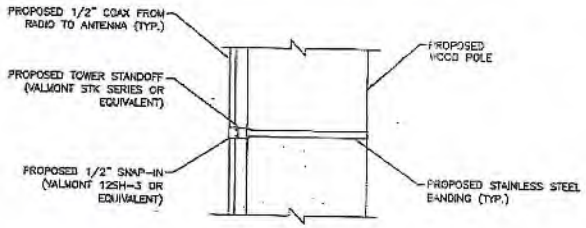
NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 3" TO 10" DIAMETER.
2. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION.

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3



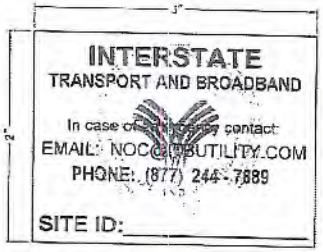
NOTE:
SPACE SNAP-INS PER CABLE MANUFACTURER'S SPECIFICATIONS

CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE

2

ANTENNA SIGNAGE:
ON WOOD POLES – SIGN ON ALUMINUM WITH SS SCREW TO THE POLE
ON METAL POLES – ADHESIVE VINYL OR PLACARD STRAPPED WITH SS TIES
ON CONCRETE / COMPOSITE – PLACARD STRAPPED WITH SS TIES
SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3–4' BELOW THE COMMERCIAL RF ANTENNA(S)
SIZE APPROX. 8" x 5.5"



OWNER / OPERATOR NOTE:
SITE ID LABEL TO BE AFFIXED WITH TZeS241 LABELING TAPE OR EQUIVALENT BLACK ON WHITE LABELING TAPE OF AT LEAST 18mm WIDTH WITH EXTRA-STRENGTH ADHESIVE. USE ANY COMPATIBLE P-TOUCH LABEL MAKER. TEXT SHOULD BE PRINTED IN ALL CAPS WITH A MINIMUM HEIGHT OF 1/2".

POLE MOUNTED SIGNS

SCALE: NOT TO SCALE

4

mobilitie
9258 PEACHTREE ST. NE
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER480201
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	08.15.16	FOR REVIEW

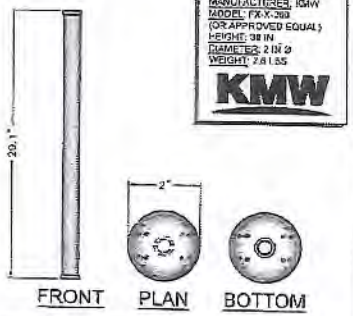
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

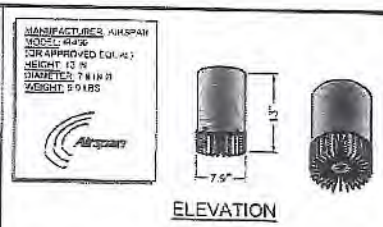
JAS0XS125A
9FLB00337S
SHAMROCK ST W S
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE
ANTENNA & EQUIPMENT MOUNTING DETAILS

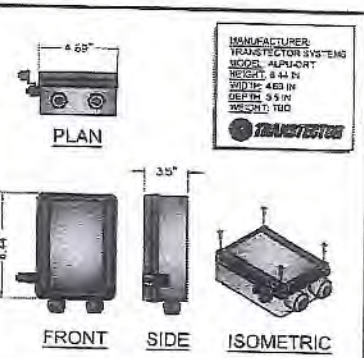
SHEET NUMBER
3.0



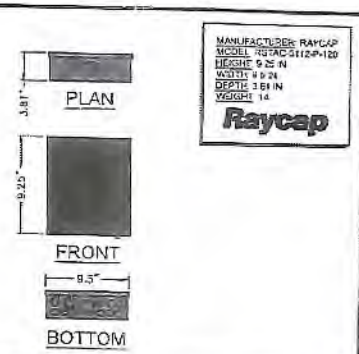
KMW FX-X-360 SCALE N.T.S 1



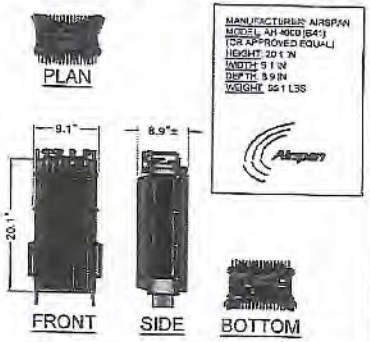
MOUNTED RELAY SCALE N.T.S 4



TRANSTECTOR ALPU-ORT SCALE N.T.S 7

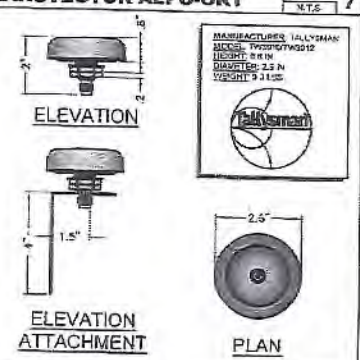


RAYCAP RSTAC-3112-P-120 SCALE N.T.S 10

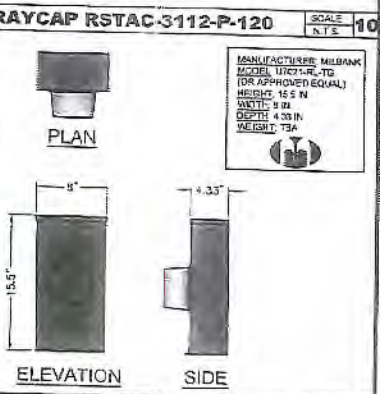


AIRSPAN AH 4000 (B41) SCALE N.T.S 2

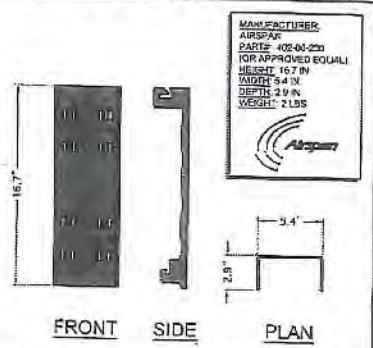
NOT USED SCALE N.T.S 5



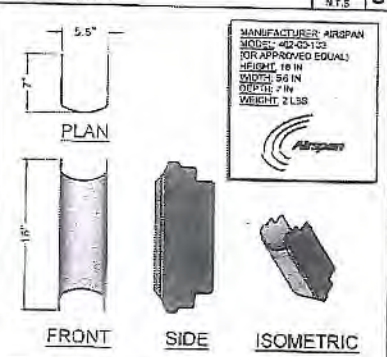
TALLYSMAN GPS ANTENNA SCALE N.T.S 8



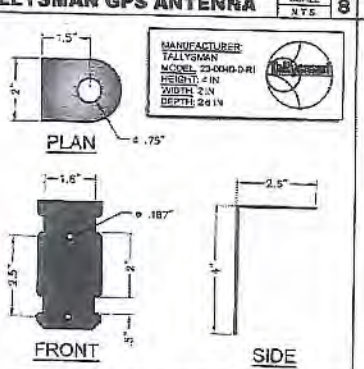
MILBANK METER SOCKET SCALE N.T.S 11



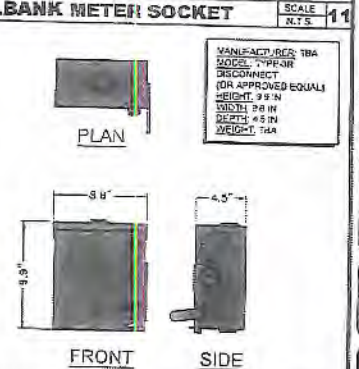
AIRSPAN WALL MOUNTING SCALE N.T.S 3



AIRSPAN SUN SHIELD SCALE N.T.S 6



TALLYSMAN GPS MOUNTING SCALE N.T.S 9



NEMA TYPE-3R DISCONNECT SCALE N.T.S 12

mobilitie
9258 PEACHTREE ST. NE.
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO.:	BR600201
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BD

A	06.15.18	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAS0XS125A
9FLB003375
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE
ANTENNA & EQUIPMENT DETAILS

SHEET NUMBER
3.1

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS UTILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT.
5. ALL CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
6. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:

N.E.C.	NATIONAL ELECTRICAL CODE
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.E.E.	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS
N.E.M.A.	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
U.L.	UNDERWRITERS LABORATORIES, INC.
N.F.P.A.	NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

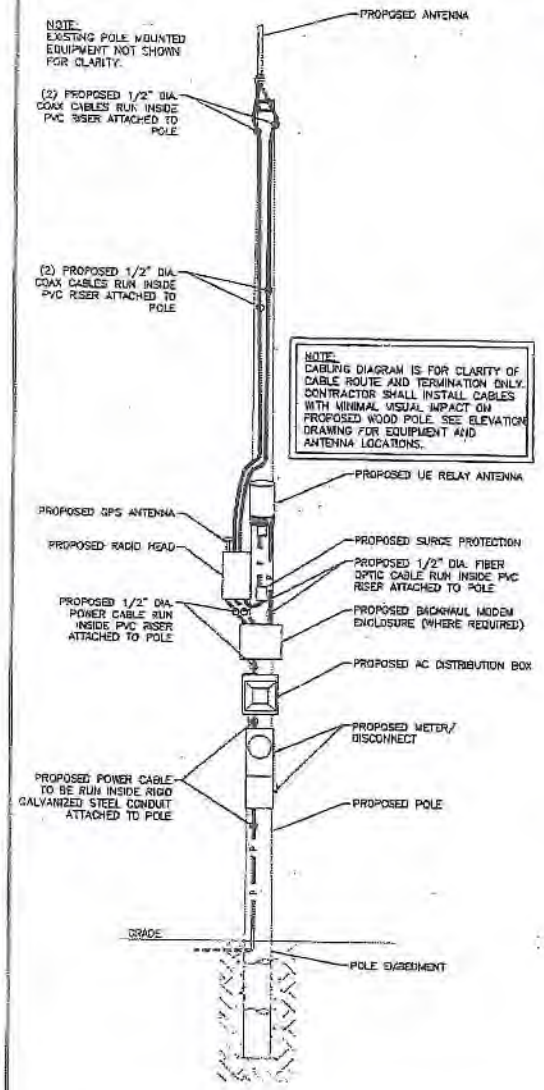
1. WIRING OF EVERY KIND MUST BY INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULL BOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL, AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ARCHITECT/ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY.



CABLING NOTES:

A) WOOD, CONCRETE AND EXISTING METALLIC POLES:

i) FROM GRADE LINE TO 11'-0" ABOVE GRADE, ALL CABLES/CONDUCTORS EXCEPT GROUNDING CONDUCTOR MUST RUN IN RIGID GALVANIZED STEEL CONDUIT (RGS)

1) GROUNDING CONDUCTORS IN EXPOSED LOCATIONS MUST BE INSTALLED IN PVC.

(2) IN EARTH INSTALL PVC CONDUIT FOR BACKHAUL AND ELECTRICAL SERVICE. TRANSITION TO RGS AT GRADE LINE.

iv) ABOVE 11'-0" ALL CABLES (POWER, ETHERNET, COAXIAL) MUST RUN IN PVC UTILITY POLE RISER.

(1) AT MAJOR EQUIPMENT, EXTEND UTILITY DUCT IMMEDIATELY ADJACENT TO THE EQUIPMENT. INSTALL CABLES IN THE UTILITY POLE RISER CREATING CABLE DRIP LOOPS NOT LESS THAN THE CABLE BENDING RADIUS.

(2) INSIDE THE UTILITY POLE RISER, UTILIZE ½" COAX BLOCKS WITH LAG SCREWS TO SUPPORT COAX, RADIO AND HW POWER, RF COAX, AND ETHERNET CABLES TO WITHIN 12" OF THE EQUIPMENT BEING SERVED AND ON INTERVALS NOT TO EXCEED 6'.

v) FOR UNDERGROUND HFC/PUBLIC BACKHAUL, ROUTE ETHERNET CABLE IN CONDUIT UP THE POLE AND ENTER THE UTILITY POLE RISER. SEAL EXPOSED END OF CONDUIT WITH A CABLE TERMINATION FITTING.

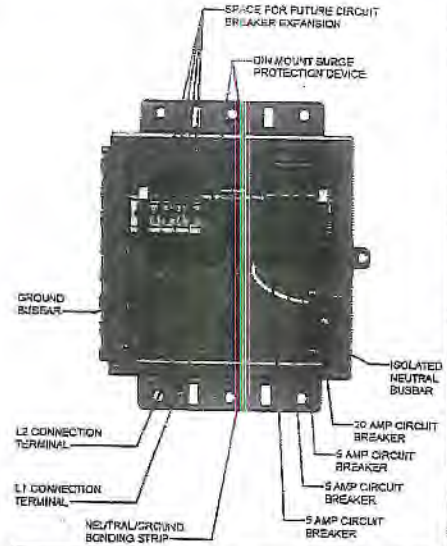
vi) BY APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX. EXAMPLE: UTILITY-REQUIRED DISCONNECT ON POLE W/ AC DISTRIBUTION BOX ON OPPOSITE SIDE OF POLE.

B) NEW METALLIC POLES

i) PROCURE NEW POLES WITH SUITABLE HAND HOLES SUCH THAT HAND HOLES EXIST AT ALL EQUIPMENT LOCATIONS.

(1) WITH CLIENT APPROVAL IN SELECT CASES TO FACILITATE IMPROVED APPEARANCE, ½" COAXIAL CABLES MAY BE "SUPERFLEX" IN LIEU OF LDF-4.

ii) WHERE POSSIBLE, INSTALL POLE BASE SUCH THAT THE ELECTRICAL FEED AND BACKHAUL (IF UNDERGROUND) CIRCUIT ENTER THE POLE THROUGH THE POLE BASE. IF A DISCONNECTING MEANS SEPARATE FROM THE AC DISTRIBUTION BOX IS REQUIRED BY JURISDICTION OR UTILITY, WITH APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX.



CABLING DIAGRAM

SCALE: NOT TO SCALE

1

mobilitie

9258 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	[illegible]
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	[illegible]	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

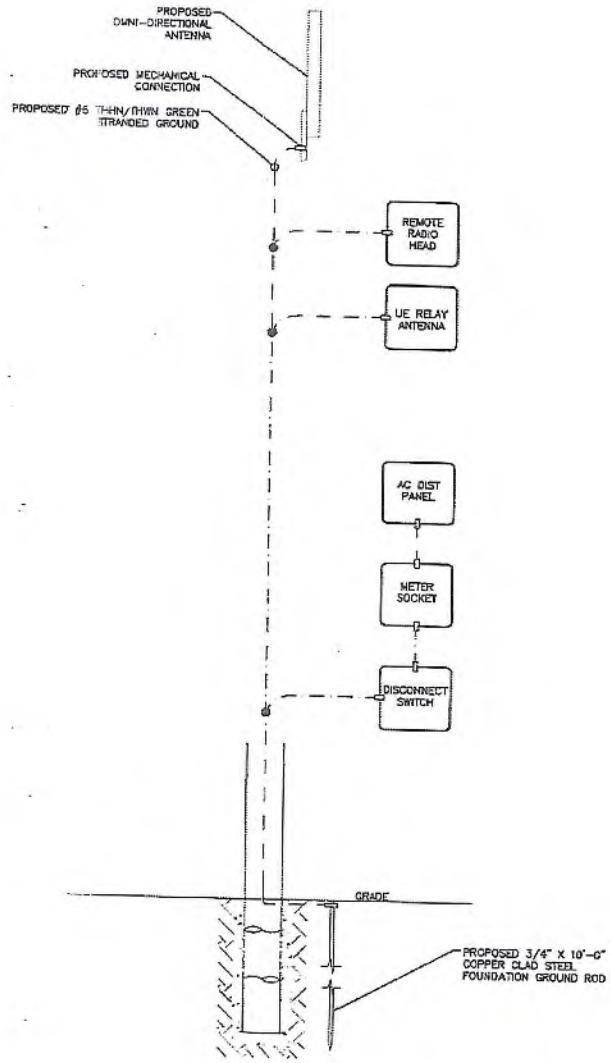
JAB0XS125A
9FL3000375
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

4.0



LEGEND
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

1

mobilitie
9258 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 938-5400

PROJECT NO:	ER500281
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	06.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS125A
97L3003376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
5.0

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL REQUIREMENTS

PART 1 – GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH-UP PAINTING. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 – FINAL CLEANING

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.
   - A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREA, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
   - B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE.
   - C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
   - D. CLEAN EXPOSED EXTERIOR HARD SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
   - E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING HANDHOLES, MANHOLES, AND SIMILAR SPACES.
   - F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.
   - G. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CANNOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
   - H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.
   - I. DUST OFF ALL EQUIPMENT AND ITEMS WITHIN EQUIPMENT ENCLOSURE.
2. REMOVAL OF PROTECTION: REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

SITE WORK

PART 1 – GENERAL

1. WORK INCLUDED: SEE SITE PLAN.
2. DESCRIPTIONS: IF APPLICABLE, LEASE AREA, AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
3. QUALITY ASSURANCE
   - A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
   - B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
   - C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
4. SEQUENCING
   - A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
   - B. CONSTRUCT TEMPORARY CONSTRUCTION AREA, DESIGNATED AREA TO BE APPROVED BY CONSTRUCTION MANAGER AND LOCAL AUTHORITIES.
   - C. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.
   - D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
   - E. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.
5. SUBMITTALS
   - A. BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD.
   - B. AFTER CONSTRUCTION
     1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
     2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
     3. LANDSCAPING WARRANTY STATEMENT
6. WARRANTY
   - A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.
   - B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
   - C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
   - D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

PART 2 – PRODUCTS

1. MATERIALS
   - A. SOIL STERILIZER SHALL BE EPA-REGISTERED, PRE-EMERGENCE LIQUID:

TOTAL KILL PRODUCT 310 EPA 10292-7 (313) 563-8000	PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48128
AMBUSH HERBICIDE EPA REGISTERED (800) 526-4924	FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVE. UNION, NJ 07083

   - B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) – ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
   - C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 500X.

PART 3 – EXECUTION

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION
2. PREPARATION
   - A. CLEAR BRUSH AND DEBRIS FROM LEASE AREA AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
   - B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
   - C. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
   - D. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
   - A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
   - B. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
   - C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
   - D. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
   - E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
   - F. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREA, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
   - A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES. STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.
   - B. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

mobilitie

9259 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER800201
DRAWN BY:	L. TURCIUS
CHECKED BY:	S. BO

A	06.15.15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA80XS125A
9FLBC03376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32303
UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

ELECTRICAL

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
2. ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.)
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "U.L." WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "U.L." LISTED
5. ALL CONDUIT SHALL HAVE A PULL CORD.
6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
7. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 13,000 A.I.C.
8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IBC, NEC AND ALL APPLICABLE CODES.
9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
10. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SERVICE AND DISTRIBUTION

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED.
2. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
3. CONDUIT:
   A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
   B. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "SAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
   C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE DIGGING.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FOURTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
7. GROUNDING ELECTRODE SYSTEM
   A. PREPARATION
      1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
      2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
   B. EXTERNAL CONNECTIONS
      1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEES, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
      2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD). MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
   C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
   D. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
   E. LUGS
      1. LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #54____BE OR EQUIVALENT

A.	535 MCM DLO	54880BE
B.	262 MCM DLO	54872BE
C.	#1/0 DLO	54862BE
D.	#4/0 THWN AND BARE	54866BE
E.	#2/0 THWN	54862BE
F.	#2 THHN	54207BE
G.	#6 DLO	54305BE

      2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

8. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

POLES, POSTS, AND STANDARDS
(SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL
   A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
   B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE.

TELECOMMUNICATIONS WIRING COMPONENTS
(COAXIAL ANTENNA CABLE)

1. GENERAL
   A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
   B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
   A. COAXIAL CABLE:
      1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
      2. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
3. ANTENNA AND COAXIAL CABLE GROUNDING
   A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
4. COAXIAL CABLE IDENTIFICATION
   A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING. PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
      1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
      2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
   B. USE ANDREW CABLE TIES (PT.# 27290) TO SECURE IDENTIFICATION TAGS.
      1. TESTING: LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL-SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER/QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

mobilitie
9258 PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 538-5400

PROJECT NO.:	E2080391
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	08.15.18	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JASCX5125A
BFL30003375
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

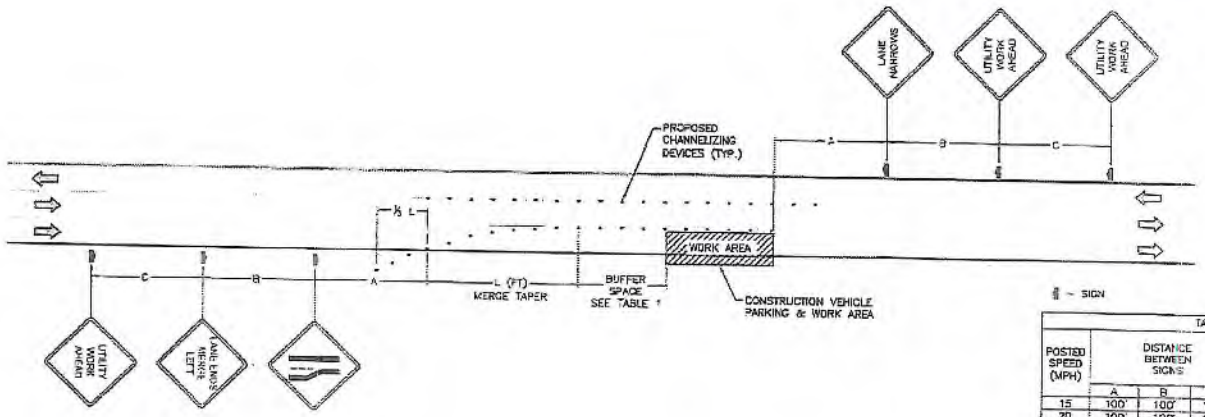
GENERAL NOTES

SHEET NUMBER

GN-2

PLAN NOTES:

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
5. "A", "B", AND "C" SHOULD BE IN EXCESS OF 500' FOR ROAD SPEEDS 45 MPH OR HIGHER



⌀ - SIGN

TABLE 1

POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER
	A	B	C	L (SEE NOTE)	
15	100'	100'	100'	45'	100'
20	100'	100'	100'	80'	115'
25	100'	100'	100'	125'	155'
30	200'	200'	200'	180'	200'
35	200'	200'	200'	245'	250'
40	350'	350'	350'	320'	305'
45	350'	350'	350'	540'	360'
50	500'	500'	500'	600'	425'
55	500'	500'	500'	660'	495'
60	500'	500'	500'	720'	570'
65	500'	500'	500'	780'	645'

NOTES:

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET 6.1.
E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH. SEE NOTE 1B, SHEET 6.1.

TRAFFIC CONTROL PLAN - LANE MERGE

SCALE: NOT TO SCALE

1

mobilitie
925B PEACHTREE ST. NE,
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER600201
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	06.15.19	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS125A
9FLB003376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32309
UTILITY POLE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

6.0

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.

2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.

3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.

4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) – PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.

5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY AND FOR ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.

6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.

7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.

8. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.

9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.

10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 3H:1V SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.

11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.

12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.

13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.

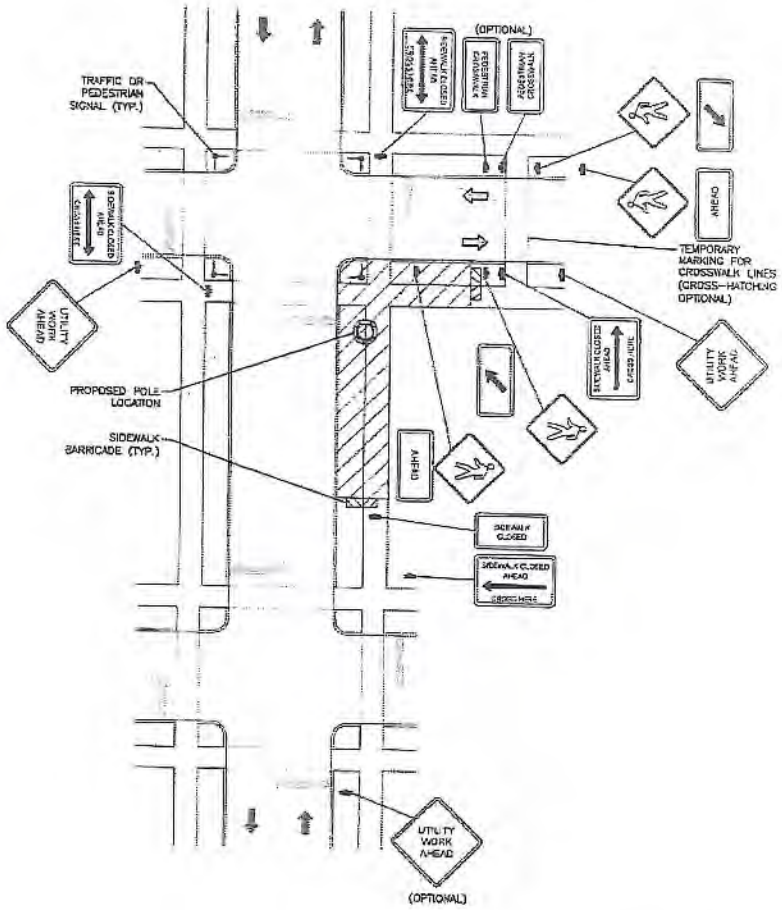
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.

15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.

16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.

17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.

18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
L= WS²/60 (40 MPH AND HIGHER) OR L2= WS (OVER 40 MPH),
WHERE W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).



TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

1

mobilitie
9258 PEACHTREE ST. NE.
SUITE 710
ATLANTA, GA 30309
PHONE: (312) 638-5400

PROJECT NO:	ER900291
DRAWN BY:	L. TARUBAL
CHECKED BY:	S. BO

A	06/15/16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS125A
9FLB003376
SHAMROCK ST W &
CAVAN DR
TALLAHASSEE, FL 32303
UTILITY POLE

SHEET TITLE

TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SHEET NUMBER

6.1

SITE ID-CANDIDATE LETTER/CASCADE ID-CANDIDATE LETTER:
9FLB003484/JA90XS495F

LATITUDE/LONGITUDE:
30.445734/-84.344063

CROSS STREET:
MERCHANTS CT & PROGRESS DR

CITY, STATE, ZIP:
TALLAHASSEE, FL 32304

IF YOU DIG IN ANY STATE DIAL 811 FOR THE LOCAL "ONE CALL CENTER" – IT'S THE LAW

THE UTILITIES SHOWN HEREIN ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER/SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL THE UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE (O) UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS (N).

SITE INFORMATION

SITE ID:	9FLB003484
CASCADE ID:	JA90XS495F
LATITUDE:	30.445734
LONGITUDE:	-84.344063
CROSS STREET:	MERCHANTS CT & PROGRESS DR
CITY, STATE, ZIP:	TALLAHASSEE, FL 32304
COUNTY:	LEON COUNTY
JURISDICTION:	TALLAHASSEE CITY
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
APPLICANT:	MOBILITIE, LLC 3475 PIEDMONT ROAD NE, SUITE 1000 ATLANTA, GEORGIA 30305 PHONE: (312) 638-5400

ENGINEER

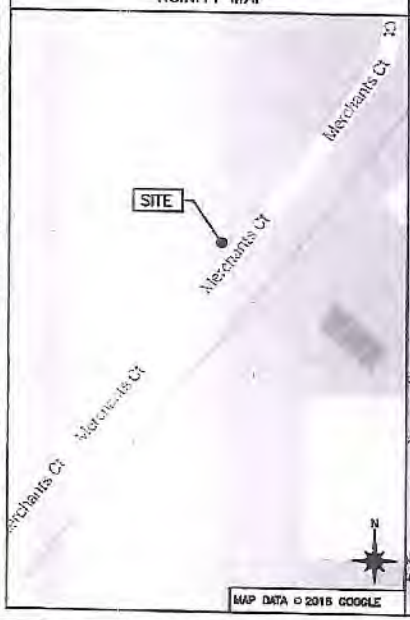
KMB DESIGN GROUP, LLC
1800 ROUTE 34, SUITE 208
WALL, NJ 07719
FOR QUESTIONS EMAIL: DESIGNTEAM@KMBDG.COM
TEL: (732) 280-5623 FAX: (732) 280-3980 www.KMBDG.com

DO NOT SCALE DRAWINGS

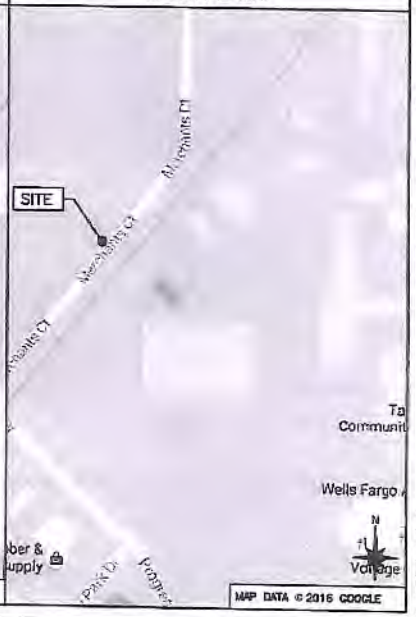
CONTRACTORS SHALL VERIFY ALL PLANS, (E) DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON A NEW WOOD POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL A NEW WOOD UTILITY POLE WITH PROPOSED BACKHAUL TRANSPORT EQUIPMENT

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE
TIA/EIA-222-G-2 OR LATEST EDITION
LOCAL BUILDING/PLANNING CODE

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
SP-1	EXHIBIT PHOTO & SITE PLAN
EV-1	ELEVATIONS
PL-1	PLUMBING & RISER DIAGRAM
EQ-1	EQUIPMENT DETAILS
EQ-2	EQUIPMENT DETAILS
E-1	ELECTRICAL DETAILS
G-1	GROUNDING DETAILS
S-1	EMBEDMENT DETAILS
TC-1	VEHICLE TRAFFIC CONTROL PLAN
TC-2	PEDESTRIAN TRAFFIC CONTROL PLAN
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
GN-3	GENERAL NOTES
CO-1	CLOSE OUT PACKAGE

mobilitie

PROJECT NO:	9FLB003484
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-26-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC
Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 62302 9/26/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
TITLE SHEET

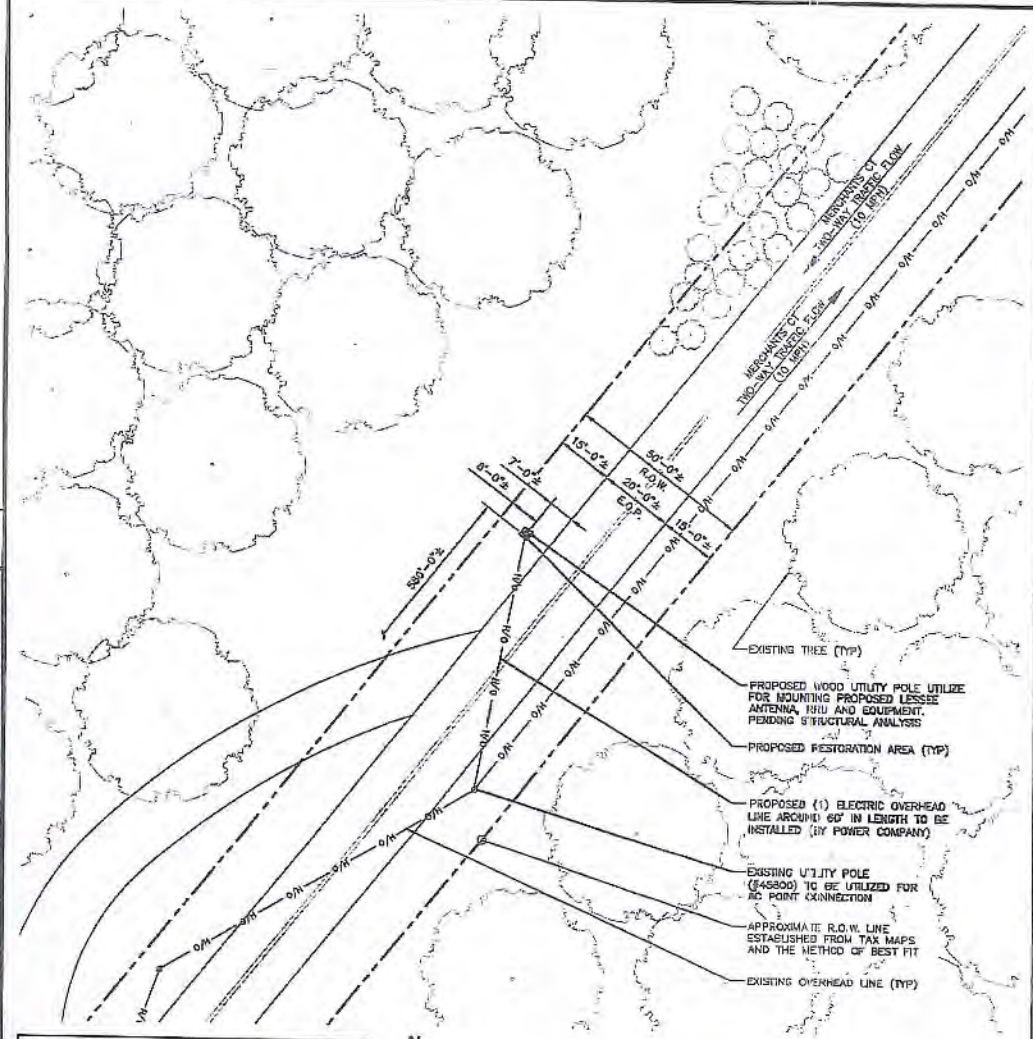
SHEET NUMBER
T-1

EXHIBIT PHOTO 1

SCALE: NOT TO SCALE

AERIAL SITE LOCATION 2

SCALE: NOT TO SCALE



NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, RIGHT-OF-WAYS, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

N

ENLARGED SITE PLAN 3

SCALE: 1" = 30'-0" (1" = 15'-0" ON 22"x34" SHEET)

mobilitie

PROJECT NO:	SFL8005484
DRAWN BY:	RC
CHECKED BY:	SJB

4	09-25-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 66902 9/25/18

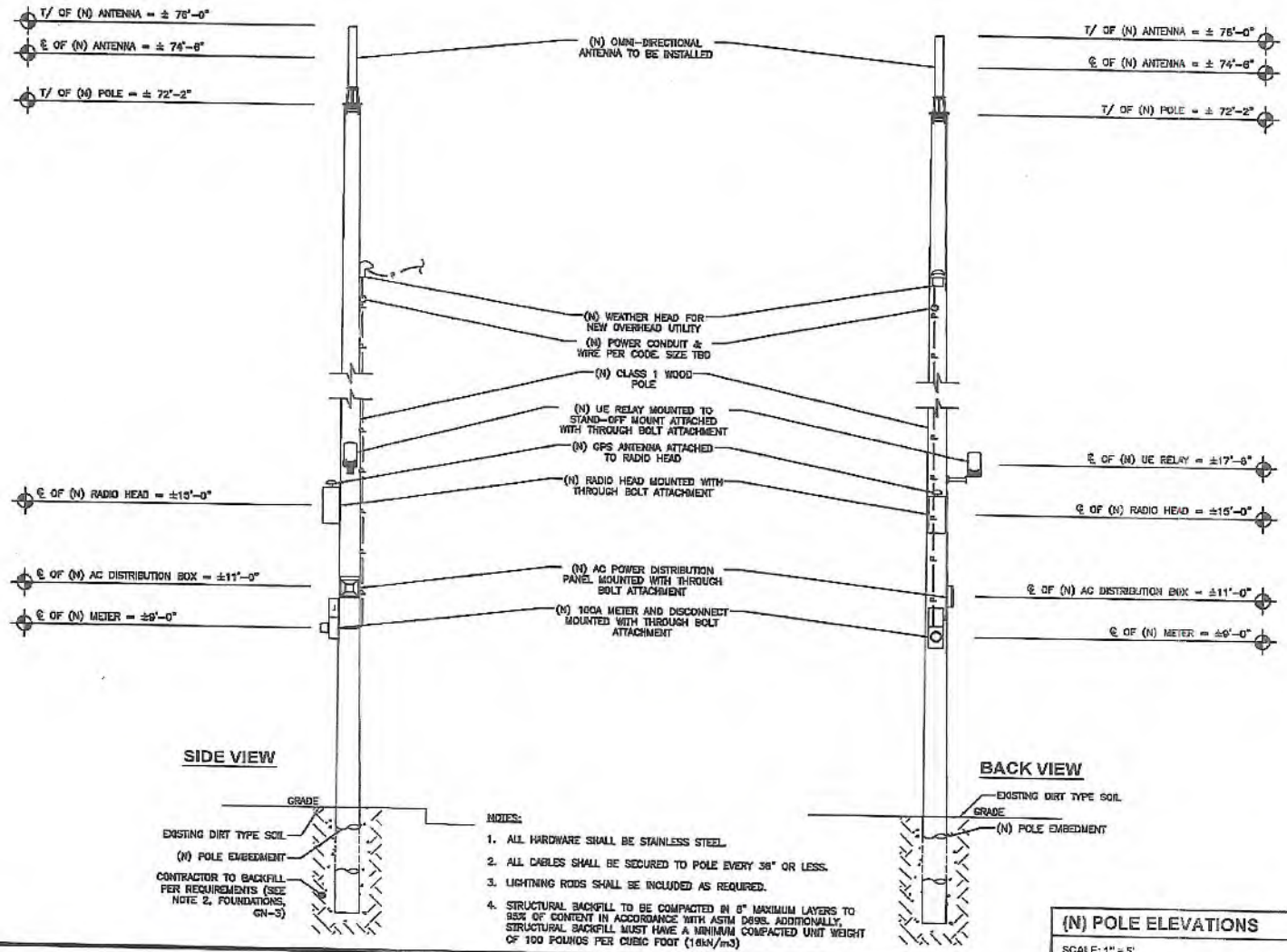
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90X3495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
EXHIBIT PHOTO & SITE PLAN

SHEET NUMBER
SP-1



NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

(N) POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie

PROJECT NO:	9FL6031458
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-29-16	RSI CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 64302 9/28/16

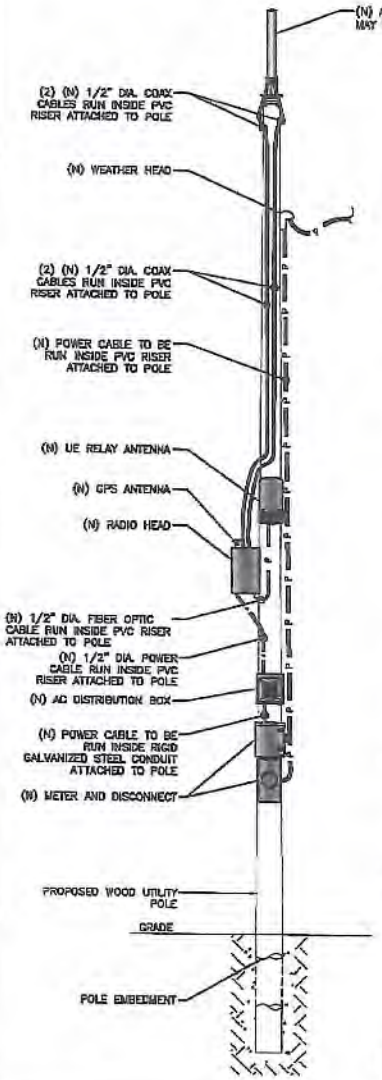
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
POLE ELEVATIONS

SHEET NUMBER
EV-1



NOTE:
CABLING DIAGRAM IS FOR CLARITY OF CABLE ROUTE AND TERMINATION ONLY. CONTRACTOR SHALL INSTALL CABLES WITH MINIMAL VISUAL IMPACT ON PROPOSED WOOD UTILITY POLE. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

CABLING NOTES:

A) WOOD, CONCRETE AND EXISTING METALLIC POLES
I) FROM GRADE LINE TO 11'-0" ABOVE GRADE, ALL CABLES/CONDUCTORS EXCEPT GROUNDING CONDUCTOR MUST RUN IN RIGID GALVANIZED STEEL CONDUIT (RGS)

II) GROUNDING CONDUCTORS IN EXPOSED LOCATIONS MUST BE INSTALLED IN PVC.

III) IN EARTH INSTALL PVC CONDUIT FOR BACKHAUL AND ELECTRICAL SERVICE. TRANSITION TO RGS AT GRADE LINE.

IV) ABOVE 11'-0" ALL CABLES (POWER, ETHERNET, COAXIAL) MUST RUN IN PVC UTILITY POLE RISER.

(1) AT MAJOR EQUIPMENT, EXTEND UTILITY DUCT IMMEDIATELY ADJACENT TO THE EQUIPMENT. INSTALL CABLES IN THE UTILITY POLE RISER CREATING CABLE DRIP LOOPS NOT LESS THAN THE CABLE BENDING RADIUS.

(2) INSIDE THE UTILITY POLE RISER, UTILIZE ½" COAX BLOCKS WITH LAG SCREWS TO SUPPORT COAX, RADIO AND MW POWER, RF COAX, AND ETHERNET CABLES TO WITHIN 12" OF THE EQUIPMENT BEING SERVED AND ON INTERVALS NOT TO EXCEED 6'.

V) FOR UNDERGROUND NFC/PUBLIC BACKHAUL, ROUTE ETHERNET CABLE IN CONDUIT UP THE POLE AND ENTER THE UTILITY POLE RISER. SEAL EXPOSED END OF CONDUIT WITH A CABLE TERMINATION FITTING.

VI) BY APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX. EXAMPLE: UTILITY-REQUIRED DISCONNECT ON POLE W/ AC DISTRIBUTION BOX ON OPPOSITE SIDE OF POLE.

B) NEW METALLIC POLES

I) PROCURE NEW POLES WITH SUITABLE HAND HOLES SUCH THAT HAND HOLES EXIST AT ALL EQUIPMENT LOCATIONS.

(1) WITH CLIENT APPROVAL IN SELECT CASES TO FACILITATE IMPROVED APPEARANCE, ½" COAXIAL CABLES MAY BE "SUPERFLEX" IN LIEU OF LDF-4.

II) WHERE POSSIBLE, INSTALL POLE BASE SUCH THAT THE ELECTRICAL FEED AND BACKHAUL (IF UNDERGROUND) CIRCUIT ENTER THE POLE THROUGH THE POLE BASE. IF A DISCONNECTING MEANS SEPARATE FROM THE AC DISTRIBUTION BOX IS REQUIRED BY JURISDICTION OR UTILITY, WITH APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX.

PLUMBING DIAGRAM

SCALE: NOT TO SCALE

1

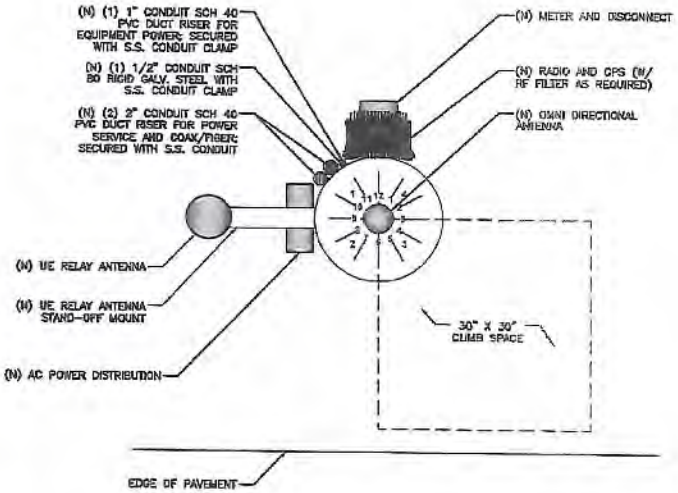
BAND 41 (2500MHz) EQUIPMENT CHART

QTY.	DESCRIPTION	MANUFACTURER	MODEL NUMBER	CABLE LENGTH	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	PLASMA ANTENNAS	LONG SC800		35.4" X 3.9" DIAMETER	11 LBS
1	UE RELAY	AIRSPAN	R460		12.90" X 7.87" DIAMETER	9.9 LBS
1	GPS ANTENNA	TALLYSMAN	TW3012		0.8" X 2.6" DIAMETER	0.3 LBS
1	RADIO (W/ FILTER AS REQUIRED)	AIRSPAN	AH4000		20" X 9" X 7"	42 LBS
1	AC DISTRIBUTION	RAYCAP	RSTAC-3111-P-120		13.13" X 11.38" X 4.38"	14 LBS
1	DISCONNECT	TBD	TYPE-3R		9.8" X 8.8" X 4.5"	TBD
1	METER	MILBANK	U7021-RL-TO		15.5" X 8" X 4.33"	TBD

BILL OF MATERIALS

SCALE: NOT TO SCALE

2



RISER DIAGRAM

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	SFLB063464
DRAWN BY:	NC
CHECKED BY:	SJB

A	08-26-15	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 63592 8/26/15

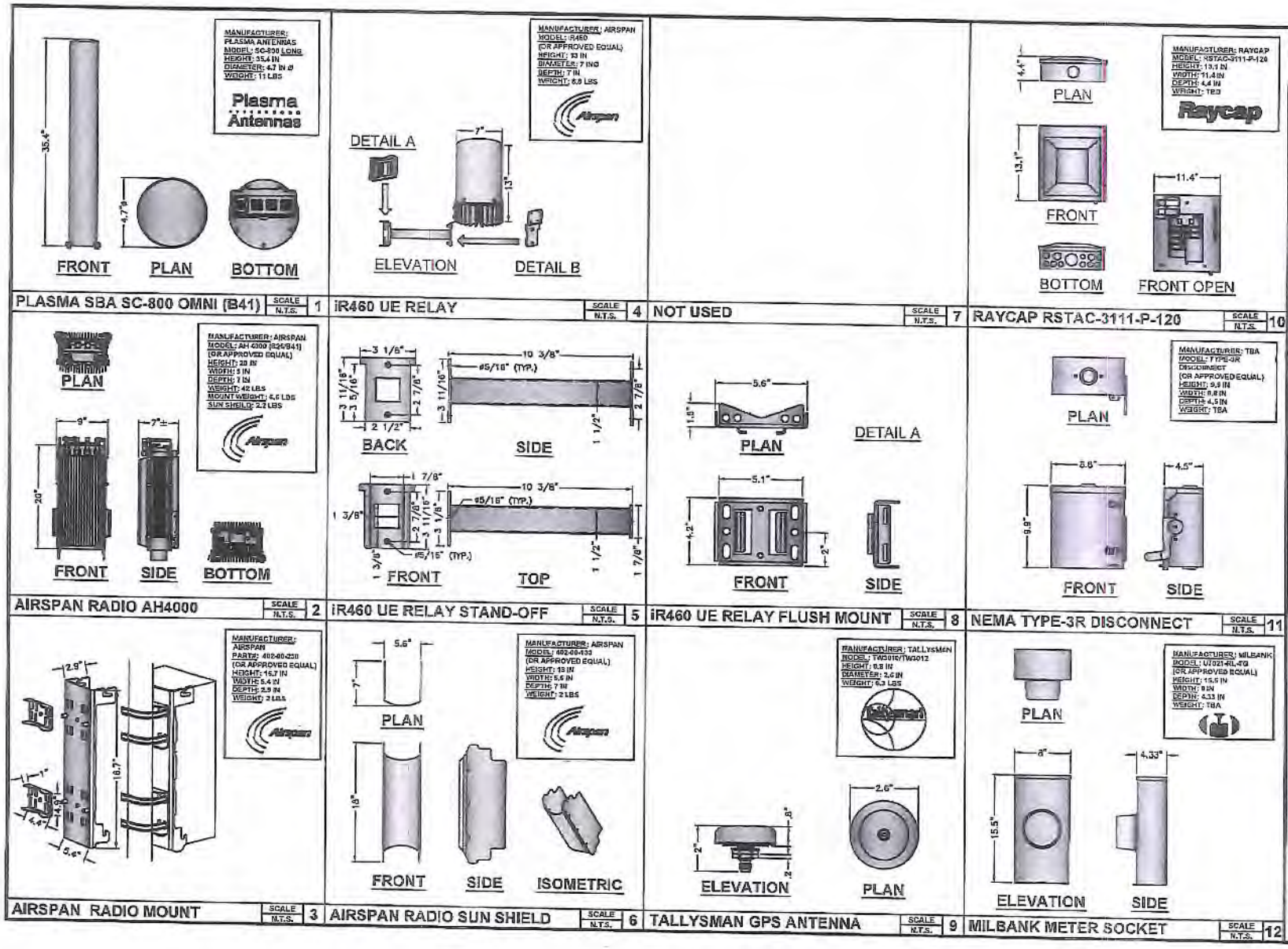
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
PLUMBING & RISER DIAGRAM

SHEET NUMBER
PL-1



mobilitie

PROJECT NO:	SFL 0803484
DRAWN BY:	RG
CHECKED BY:	SAB

A	09-25-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 68902 9/28/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

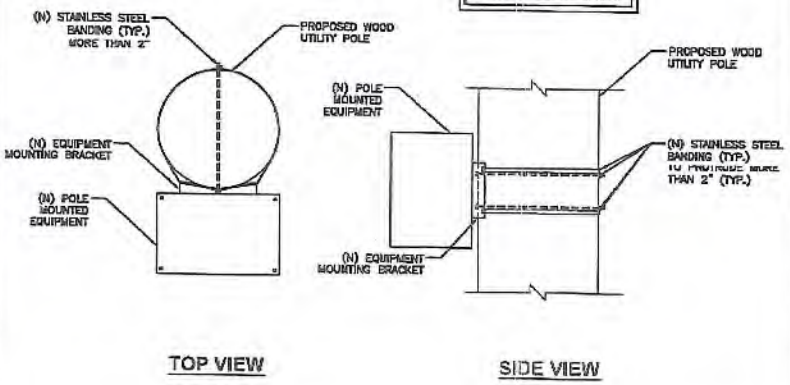
PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
EQ-1

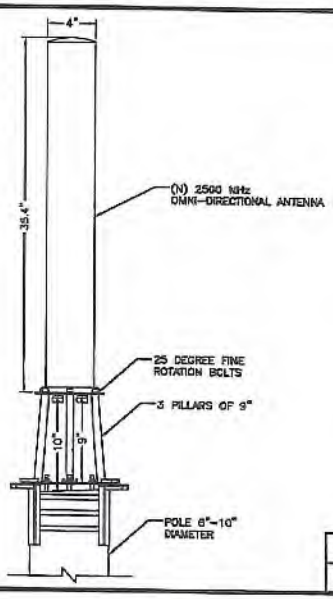
NOTE:
INSTALL BRACKETS WITH STAINLESS STEEL BANDING.



EQUIPMENT MOUNTING DETAIL

SCALE: NOT TO SCALE

1



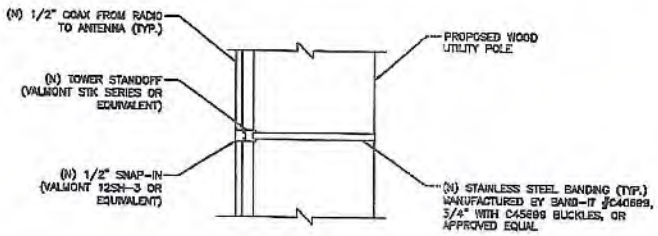
NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 3" TO 10" DIAMETER.
2. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION.

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3



NOTE:
SPACE SNAP-INS PER CABLE MANUFACTURER'S SPECIFICATIONS

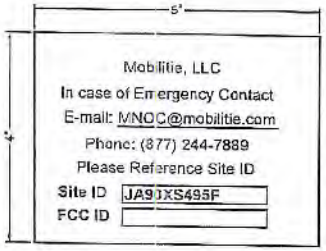
CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE

2

ANTENNA SIGNAGE:
ON WOOD POLES – SIGN ON ALUMINUM WITH SS SCREW TO THE POLE
ON METAL POLES – ADHESIVE VINYL OR PLACARD STRAPPED WITH SS TIES
ON CONCRETE / COMPOSITE – PLACARD STRAPPED WITH SS TIES
SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3–4' BELOW THE COMMERCIAL RF ANTENNA(S)
SIZE APPROX. 8" x 5"

ANTENNA SIGNAGE



OWNER / OPERATOR NOTE:
SITE ID LABEL TO BE AFFIXED AT OR NEAR THE POINT OF POWER CONNECTION WITH TZeS241 LABELING TAPE OR EQUIVALENT BLACK ON WHITE LABELING TAPE OF AT LEAST 18mm WIDTH WITH EXTRA-STRENGTH ADHESIVE. USE ANY COMPATIBLE P-TOUCH LABEL MAKER. TEXT SHOULD BE PRINTED IN ALL CAPS WITH A MINIMUM HEIGHT OF 1/2".

EMERGENCY CONTACT SIGN

POLE MOUNTED SIGNS

SCALE: NOT TO SCALE

4

mobilitie

PROJECT NO:	9FL8893484
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-28-10	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC
Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 58902 9/28/10

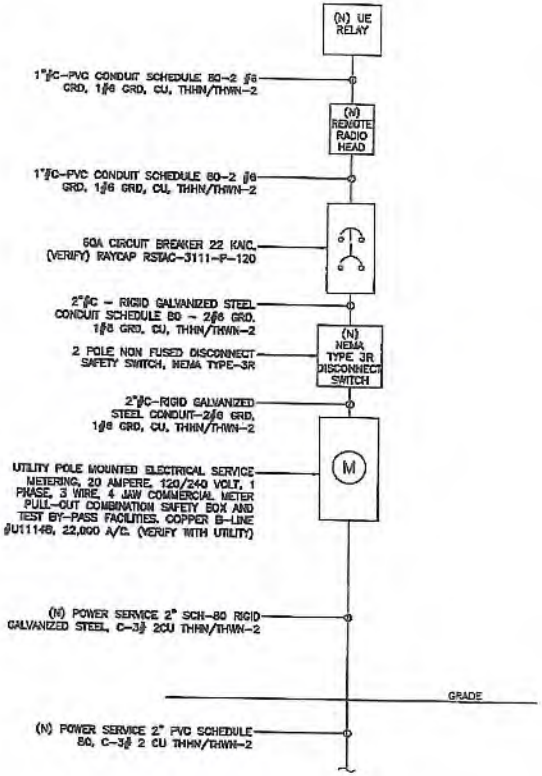
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
EQUIPMENT DETAILS

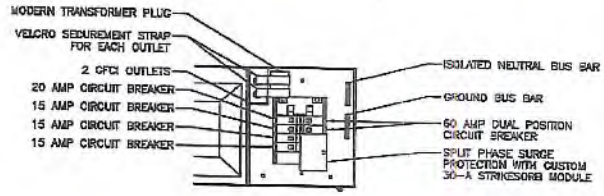
SHEET NUMBER
EQ-2



ONE-LINE DIAGRAM

SCALE: NOT TO SCALE

1



BREAKER SCHEDULE

SCALE: NOT TO SCALE

2

NOTES:

1. NOMINAL POWER IS CALCULATED AS 80% OF OEM DOCUMENTED MAXIMUM POWER.
2. CALCULATIONS FOR UE W/ NOKIA DO NOT NEED TO INCLUDE THE POWER FOR THE UE ANTENNA AS IT IS INCLUDED IN THE MAX POWER FIGURE. CALCULATIONS FOR UE W/ AIRSPAN MUST INLCUDE UE AS IT IS NOT INCLUDED
3. KVA IS CALCULATED FROM THE CONSUMPTION VALUE ASSUMING A PF=1. MAXIMUM POWER WAS USED FOR KVA. WHERE MAXIMUM WAS NOTED BY THE OEM THE QUOTED FIGURE WAS USED. WHERE AVERAGE/NOMINAL POWER WAS NOTED BY THE OEM MAXIMUM POWER WAS CALCULATED BY INCREASING AVERAGE/NOMINAL POWER BY A FACTOR OF 50%
4. COST PER KW PROVIDED BY BRAIN KOOYMAN

AIRSPAN SCENARIO 2 AH4000 HIGH POWER RADIO AND UE BACKHAUL									
UNIT	SUB DESCRIPTION	MAX POWER	NOMINAL POWER	AVERAGE POWER (W)	CONS. (W)	KVA	KWH/YR	$/YR	$/MO
AH4000	B26 & B41	N/A	N/A	340	340	0.51	2978.4	$326.43	$27.20
AIRSPAN UE RELAY	IR460-SPB-ST1-P-0	N/A	N/A	20	20	0.03	175.2	$19.20	$1.60
Total					360	0.54	3153.6	$345.63	$28.80

LOAD CALCULATIONS

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	9FLB005404
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-28-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 69002 9/20/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

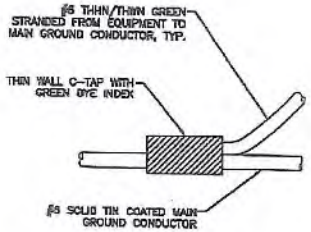
PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E-1

NOTE:
CONTRACTOR TO SURROUND COMPLETED CONNECTION WITH HEAT-SHRINK TUBING TO ENSURE WEATHER PROOF CONNECTION



C-TAP DETAIL

SCALE: NOT TO SCALE

1

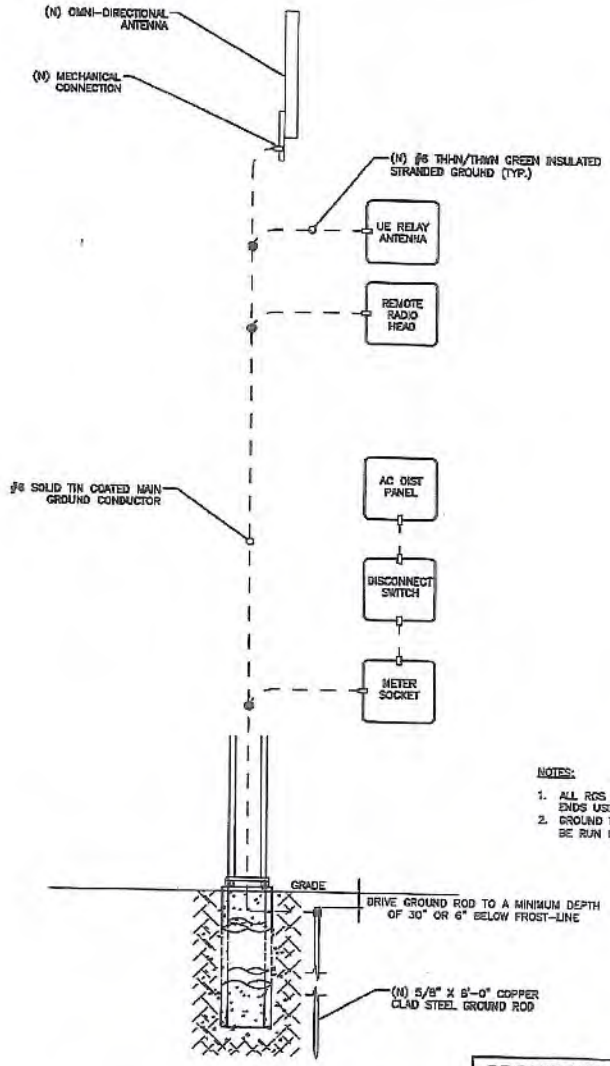
NOTE:

ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.

WELD CONNECTION DETAILS

SCALE: NOT TO SCALE

2



LEGEND
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

NOTES:

1. ALL RGS TO BE GROUNDED AT BOTH ENDS USING GROUNDING BUSHINGS
2. GROUND WIRE BELOW 11' AGL TO BE RUN IN 1/2" SCHEDULE 40 PVC

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	9FLB003484
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-25-19	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 68302 9/26/19

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PRELIMINARY

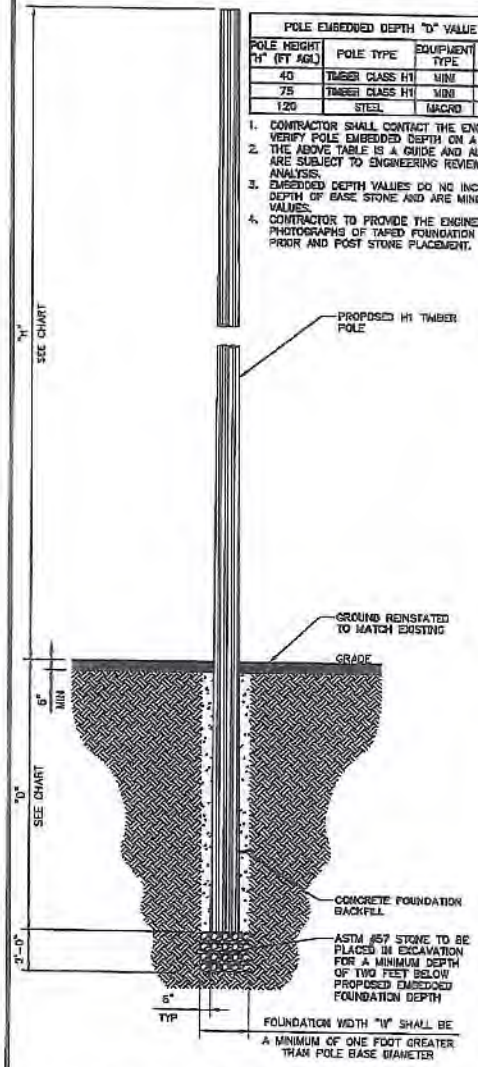
JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-1

POLE EMBEDDED DEPTH "D" VALUE CHART			
POLE HEIGHT "H" (FT AGL)	POLE TYPE	EQUIPMENT TYPE	EMBEDDED DEPTH (FT)
40	TIMBER CLASS H1	MINI	15
75	TIMBER CLASS H1	MINI	20
120	STEEL	MACRO	20

1. CONTRACTOR SHALL CONTACT THE ENGINEER TO VERIFY POLE EMBEDDED DEPTH ON A SITE BASIS.
2. THE ABOVE TABLE IS A GUIDE AND ALL POLES ARE SUBJECT TO ENGINEERING REVIEW AND ANALYSIS.
3. EMBEDDED DEPTH VALUES DO NO INCLUDE THE DEPTH OF BASE STONE AND ARE MINIMUM VALUES.
4. CONTRACTOR TO PROVIDE THE ENGINEER PHOTOGRAPHS OF TAPED FOUNDATION DEPTHS PRIOR AND POST STONE PLACEMENT.



H1 TIMBER POLE FOUNDATION

SCALE: NOT TO SCALE

1

KMB

Foundation Embedded Depth Matrix - Florida

Refer to depth "D" as required

Pole Height (ft AGL)	Wind Speed (mph)	Pole Type	Equipment Type	Power (Aerial/Underground)	Embedded Depth (ft)	Pole Length Required (ft)	Butt Diameter (in)
40	150-160	Western Red Cedar Class H1	Mini	Aerial	15	55	18.34
40	150-160	Western Red Cedar Class H1	Mini	Underground	15	55	18.34
35	150-160	Western Red Cedar Class H1	Mini	Aerial	20	55	19.31
35	150-160	Western Red Cedar Class H1	Mini	Underground	15	50	21.65
35	150-160	Concrete*	Mini	Underground	15	50	25.7
35	150-160	Steel - Mobilitie C-1.90ft	Mini	Aerial	15	50	21.1875
35	150-160	Steel - Mobilitie C-1.90ft	Mini	Underground	15	50	21.1875
40	120-150	Western Red Cedar Class H1	Mini	Aerial	15	55	18.34
40	120-150	Western Red Cedar Class H1	Mini	Underground	15	55	18.34
35	120-150	Western Red Cedar Class H1	Mini	Aerial	15	50	19.31
35	120-150	Western Red Cedar Class H1	Mini	Underground	15	50	21.65
35	120-150	Concrete	Mini	Aerial	15	50	25.7
35	120-150	Concrete	Mini	Underground	15	50	25.7
35	120-150	Steel - Mobilitie C-1.90ft	Mini	Aerial	15	50	21.1875
35	120-150	Steel - Mobilitie C-1.90ft	Mini	Underground	15	50	21.1875
40	90-120	Western Red Cedar Class H1	Mini	Aerial	15	55	18.34
40	90-120	Western Red Cedar Class H1	Mini	Underground	15	55	18.34
35	90-120	Western Red Cedar Class H1	Mini	Aerial	15	50	19.31
35	90-120	Western Red Cedar Class H1	Mini	Underground	15	50	21.65
35	90-120	Concrete	Mini	Aerial	15	50	25.7
35	90-120	Concrete	Mini	Underground	15	50	25.7
35	90-120	Steel - Mobilitie C-1.90ft	Mini	Aerial	15	50	21.1875
35	90-120	Steel - Mobilitie C-1.90ft	Mini	Underground	15	50	21.1875

Notes:
1) Contractor shall contact the engineer to verify pole embedded depth on a site by site basis.
2) The above table is a guide and all poles are subject to engineering review and analysis.
3) Embedded depth values do not include the depth of base stone and are minimum values.
4) Contractor to provide the engineer photographs of taped foundation depths pre and post stone placement.
5) Timber pole dimensions based on ANSI O5.1-2008 as provided by Mobilitie
* Concrete poles are only be used for mainline and power supply - no overhead pole arms/attachments. Pole fails for overhead power at 150-mph wind speed. If this pole is required for aerial attachment, a manufacturer's stamp/seal/PE 155 is required.

FOUNDATION EMBEDDED DEPTH MATRIX - FLORIDA

SCALE: NOT TO SCALE

2

GENERAL NOTES:

1) CONTRACTOR SHALL PROVIDE A DETAILED METHOD OF PROCEDURE (MOP) TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO MOBILIZING TO THE SITE AND COMMENCING ANY CONSTRUCTION ACTIVITIES. THE MOP SHALL ENSURE ALL APPROPRIATE CODES OF PRACTICE ARE FOLLOWED IN ACCORDANCE WITH OSHA FOR ALL ACTIVITIES. FACTORS THAT SHALL BE CONSIDERED INCLUDE BUT ARE NOT LIMITED TO:
   a. TRANSPORTATION OF ALL MATERIALS AND EQUIPMENT
   b. PPE
   c. MATERIALS AND EQUIPMENT STAGING
   d. TRAFFIC CONTROL
   e. CONTAINMENT OF DRILL SLURRY FLUIDS
   f. TEMPORARY WORKS SUPPORT FOR DRILL EQUIPMENT AND POLE
2) CONTRACTOR SHALL ENSURE THAN AN 811 UTILITY MARK OUT HAS BEEN COMPLETED AND THAT ALL BELOW AND ABOVE GROUND UTILITIES ARE DOCUMENTED.
3) THIS DRAWING SUPPLEMENTS THE GENERAL CONSTRUCTION DRAWINGS FOR THE PROJECT AND SHALL BE READ IN CONJUNCTION WITH THE PE SIGNED AND SEALED CONSTRUCTION DRAWINGS BY KMB DESIGN GROUP, LLC REVISED TO STATE "ISSUED FOR CONSTRUCTION"
4) CONTRACTOR SHALL COMPLY WITH ALL RELEVANT SECTIONS OF 2015 INTERNATIONAL BUILDING CODE CHAPTER 18 AND THE USDOT FAA DRILLED SHAFT CONSTRUCTION PROCEDURES.

CONCRETE:

1) DRILLED SHAFTS SHALL BE FILLED WITH CLASS B-2 CONCRETE. AN AIR ENTRAINMENT ADMIXTURE SHALL BE USED. IN ADDITION A HIGH RANGE WATER-REDUCING ADMIXTURE MAY BE USED TO INCREASE THE SLUMP TO A MAXIMUM OF 9 INCHES ± 1 INCH. IF USED, THE WATER-REDUCING ADMIXTURE SHALL BE ADDED ONLY AFTER THE CONCRETE HAS REACHED THE JOB SITE TO REDUCE THE POTENTIAL FOR FLASH SETTING. THE CONCRETE MIX SHALL BE DENSE, HOMOGENEOUS, FLUID AND RESISTANT TO SEGREGATION, AND SHALL CONSOLIDATE UNDER SELF-WEIGHT. THE CONCRETE MIX SHALL HAVE A SET TIME THAT ENSURES THAT FLUIDITY IS MAINTAINED THROUGHOUT THE SHAFT CONCRETE PLACEMENT AND REMOVAL OF TEMPORARY CASING. IF USED, A CONCRETE RETARDER IN ACCORDANCE WITH AASHTO M 194, TYPE B, MAY BE INCORPORATED INTO THE MIX TO RETARD SET APPROXIMATELY TWO HOURS.
2) IN SITUATIONS WITH EXCESSIVE GROUND WATER OR FOUNDATION FLOODING ALL CONCRETE SHALL BE PLACED USING THE TREMIE METHOD. CONCRETE MIX DESIGN SHALL FOLLOW ACI 211.1 GUIDELINES. CONTRACTOR SHALL ENSURE THAT THE DRILLED SHAFT HAS SUFFICIENT WORKING ACCESS FOR CONCRETE PLACEMENT COMMENCING AT THE BASE OF THE SHAFT AND SHALL BE PLACE IN A SLOW AND STEADY RATE. CONCRETE SHALL NOT BE PERMITTED TO FALL INTO THE SHAFT.
3) CONCRETE MIX ALONG WITH APPROVED ACCELERATORS SHALL BE DESIGNED TO PROVIDE AN INITIAL COMPRESSIVE STRENGTH OF 3,000 PSI WITHIN 8HRS AND A 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A DETAILED CONCRETE MIX DESIGN FROM THE CONCRETE PLANT INCLUDING ALL PROPOSED ADDITIVES. A SUITABLE STRENGTH RAPID HARDENING ADMIXTURE IS SIKA RAPID-1. THIS ADDITIVE MIGHT NOT BE SUITABLE FOR ALL CIRCUMSTANCES AND ANY PRODUCT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

GENERAL NOTES

SCALE: NOT TO SCALE

3

FIGURE 26.5-1A BASIC WIND SPEED WITHOUT ICE, V (mph)

BASIC WIND SPEED WITHOUT ICE

SCALE: NOT TO SCALE

4

IF YOU DIG IN ANY STATE DIAL 811 FOR THE LOCAL "ONE CALL CENTER" – IT'S THE LAW

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTOR'S USE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THIS PLANS. THE OWNER/INSPECTOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL THE UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

mobilitie

PROJECT NO:	SFL0003424
DRAWN BY:	SIC
CHECKED BY:	SJB

1	02-25-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 69901 02/25/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

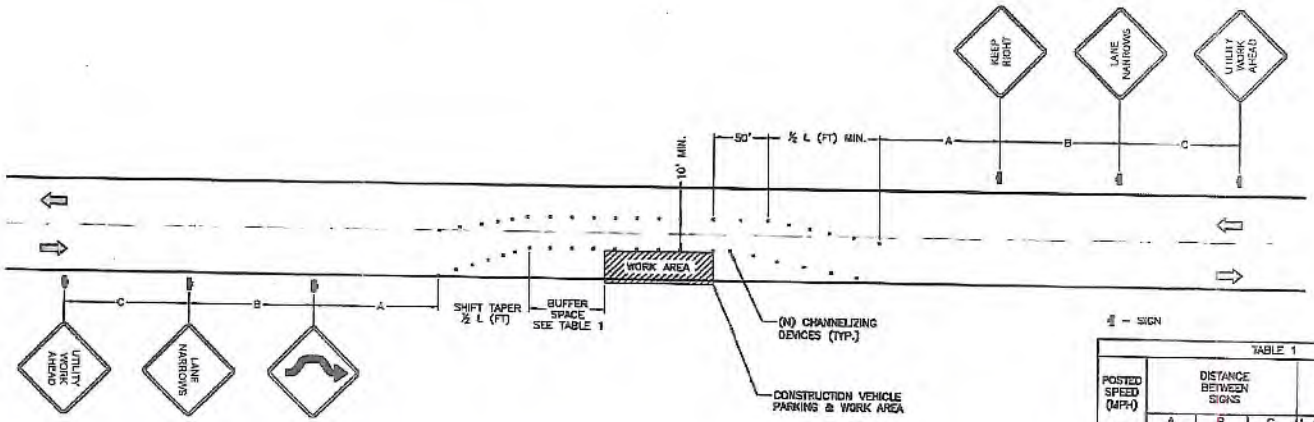
JA90X849SF
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
POLE FOUNDATION DETAILS

SHEET NUMBER
S-1

PLAN NOTES:

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.
6. CONTRACTOR IS REQUIRED TO INPUT ALL LANE CLOSURES ON A STATE HIGHWAY IN THE LANE CLOSURE INFORMATION SYSTEM (HTTPS://LCIS.DOT.STATE.FL.US) 14 DAYS PRIOR TO THE CLOSURE.



⇧ – SIGN

TABLE 1

POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER
	A	B	C	L (SEE NOTE)	
15	100'	100'	100'	45'	100'
20	100'	100'	100'	80'	115'
25	100'	100'	100'	125'	155'
30	200'	200'	200'	180'	200'
35	200'	200'	200'	245'	250'
40	350'	350'	350'	320'	305'
45	350'	350'	350'	540'	380'
50	500'	500'	500'	600'	425'
55	500'	500'	500'	660'	465'
60	500'	500'	500'	720'	570'
65	500'	500'	500'	780'	645'

NOTES:

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
B) CONTRACTOR TO VERIFY (E) SPEED LIMIT.
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET 6.1.
E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH. SEE NOTE 18, SHEET 6.1.

TRAFFIC CONTROL PLAN - LANE SHIFT

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO: 9FLB003464
DRAWN BY: RC
CHECKED BY: SJB

A 09-28-16 FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC
Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 68502 9/28/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

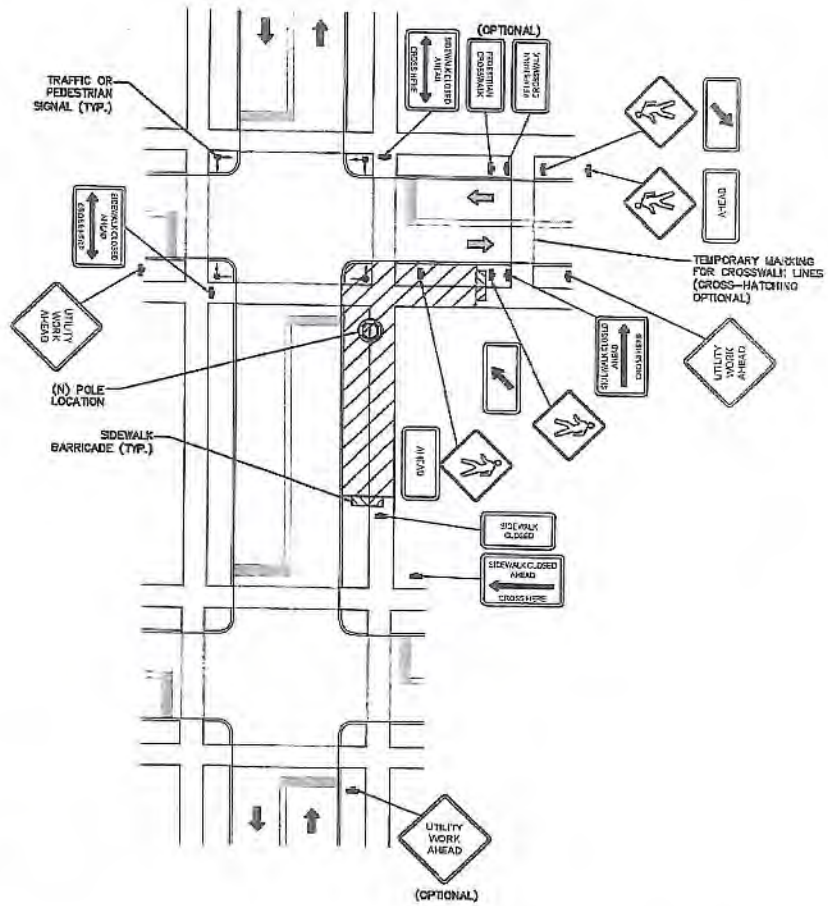
JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
TRAFFIC CONTROL NOTES

SHEET NUMBER
TC-1

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) – PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY AND FOR ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE (E) TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
8. ALL (E) ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE (N) TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6H:1V SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
$L = WS^2/60$ (40 MPH AND HIGHER) OR $L2 = WS$ (OVER 40 MPH),
WHERE W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).



TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	BPLB003444
DRAWN BY:	RC
CHECKED BY:	SJB

A	03-25-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 68302 03/25/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JAS03XS495F

TALLAHASSEE, FL 32304

PROPOSED 72'-2" WOOD POLE

SHEET TITLE

PEDESTRIAN TRAFFIC CONTROL PLAN

SHEET NUMBER

TC-2

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL BUILDING CODE, THE LATEST ADOPTED EDITION AND ALL OTHER APPLICABLE CODES AND ORDINANCES.

2. CONTRACTOR SHALL CONSTRUCT SITE IN ACCORDANCE WITH THESE DRAWINGS AND LATEST MOBILITIE CONSTRUCTION STANDARDS. THE SPECIFICATION IS THE RULING DOCUMENT AND ANY DISCREPANCIES BETWEEN THE SPECIFICATION AND THE CONSTRUCTION DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OR MOBILITIE CM PRIOR TO THE COMMENCEMENT OF WORK.

3. CONTRACTOR SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE (N) WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED, AS SHOWN, PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OR MOBILITIE CM PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OF FIELD CONDITIONS.

4. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. CONTRACTOR IS REQUIRED TO FURNISH AND INSTALL ANY/ALL ITEMS FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM SUBJECT ONLY TO OWNER-SUPPLIED ITEMS. CONTRACTOR SHALL PROVIDE ANY/ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

5. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS. OWNER PROVIDED AND CONTRACTOR INSTALLED MATERIALS WILL INCLUDE THE FOLLOWING, UNLESS NOTED OTHERWISE:

   A) TRANSMITTER
   B) UHF ANTENNA AND MOUNTING BRACKETS, GPS ANTENNAS AND KU ANTENNAS
   C) UHF COAX AND HANGERS
   D) INTEGRATED LOAD CENTER

6. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, (E) CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE ATTENTION OF THE MOBILITIE CM IN WRITING, PRIOR TO THE COMMENCEMENT OF WORK.

7. DETAILS PROVIDED ARE FOR THE PURPOSE OF SHOWING DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR SITE CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

8. CONTRACTOR SHALL PAY FOR APPLICABLE PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO ORDERING MATERIALS AND THE COMMENCEMENT OF WORK.

9. THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.

10. CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

11. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING ACCEPTED INDUSTRY-STANDARD SKILLS AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.

13. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE MOBILITIE CM AND SCHEDULE THEIR ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THEIR WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.

15. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

16. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT (E) SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATE REPAIR, TO NEW CONDITION, ANY DAMAGE THAT OCCURS DURING CONSTRUCTION AT THE SOLE COST OF THE CONTRACTOR.

17. IN DRILLING HOLES, OR CORING, INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., MUST BE CLEARLY UNDERSTOOD THAT REINFORCING STEEL SHALL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES (UNLESS NOTED OTHERWISE). LOCATIONS OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE LOCATED BY THE CONTRACTOR USING APPROPRIATE METHODS AND EQUIPMENT PRIOR TO ANY DRILLING OR CORING OPERATIONS IN (E) CONCRETE.

18. CONTRACTOR SHALL REPAIR, TO NEW CONDITION, ALL (E) WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND IN WITH ADJACENT SURFACES.

19. CONTRACTOR SHALL SEAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES OR MATERIALS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS AND SYSTEMS THAT MEET OR EXCEED THE RATING OF THE ASSEMBLY IN WHICH THE NEW PENETRATION IS PLACED.

20. CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.

21. MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.

22. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO (E) SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH JURISDICTIONAL OR STATE AND LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH LOCAL REGULATORY AUTHORITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ANY EROSION CONTROL MEASURES, RECORD-KEEPING, MONITORING, AND REPORTING TO THE OWNER AND REGULATORY AUTHORITIES.

23. ALL CONSTRUCTION WORK IS TO ADHERE TO APPLICANT'S INTEGRATED CONSTRUCTION STANDARDS UNLESS STATE OR LOCAL CODE IS MORE STRINGENT.

24. THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO PERFORM THE CONSTRUCTION IN ACCORDANCE PER STATE BUILDING STANDARDS CODE AND STATE CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED PLANS AND SPECIFICATIONS WHEREIN THE FINISHED WORK WILL NOT COMPLY PER STATE CODE OF REGULATIONS, A SCOPE OF WORK DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE JURISDICTION BEFORE PROCEEDING WITH THE WORK. A CHANGE ORDER FOR THAT SCOPE SHALL BE SUBMITTED TO THE MOBILITIE CM PRIOR TO PROCEEDING WITH THE WORK.

25. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.

26. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE. ANY CORRECTIVE WORK SHALL BE COMPLETED AT THE SOLE COST OF THE CONTRACTOR.

ELECTRICAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY MOBILITIE CM AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE MOBILITIE CM HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.

2. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL (E) CONDITIONS OF ELECTRICAL EQUIP., ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF THEIR BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC, ALL CODES AND ORDINANCES OF THE LOCAL JURISDICTION, AND POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT ARE NOT BE LIMITED TO:

   A) UL – UNDERWRITERS LABORATORIES
   B) NEC – NATIONAL ELECTRICAL CODE
   C) NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
   D) OSHA – OCCUPATIONAL SAFETY AND HEALTH ACT
   E) SBC – STANDARD BUILDING CODE
   F) NFPA – NATIONAL FIRE PROTECTION AGENCY
   G) ANSI – AMERICAN NATIONAL STANDARDS INSTITUTE
   H) IEEE – INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   I) ASTM – AMERICAN SOCIETY FOR TESTING MATERIALS

4. REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH MOBILITIE CM ANY SIZES AND LOCATIONS WHEN NEEDED.

5. (E) SERVICES: CONTRACTOR SHALL NOT INTERRUPT (E) SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.

6. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC., ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE MOBILITIE CM, PRIOR TO BEGINNING ANY WORK.

7. MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION, UNLESS OTHERWISE NOTED.

8. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.

9. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

10. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTH BY APPLICANT.

11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY FUNCTIONAL AND SHALL BE APPROVED BY THE MOBILITIE CM AND LOCAL JURISDICTION. ANY DEFICIENCIES SHALL BE CORRECTED BY AN ELECTRICAL CONTRACTOR AT THE SOLE COST OF THE CONTRACTOR.

12. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.

mobilitie

PROJECT NO:	SFL003384
DRAWN BY:	RC
CHECKED BY:	SAB

A	10-29-19	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 69502 10/29/19

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA80XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-3" WOOD POLE

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

ELECTRICAL NOTES CONT'D

13. THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED BY THE CONTRACTOR WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.

14. CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.

15. DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO NOTES AND REQUIREMENTS 'EXCAVATION, AND BACKFILLING.

16. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.

17. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURER'S CATALOG INFORMATION OF ANY/ALL EQUIPMENT AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE MOBILITIE CM PRIOR TO INSTALLATION.

18. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE MOBILITIE CM UPON FINAL ACCEPTANCE.

19. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

20. DISCONNECT SWITCHES SHALL BE UL-RATED, H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.

21. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND KNOWN AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED – NO SUBSTITUTIONS.

22. RACEWAYS: CONDUIT SHALL BE SCHEDULE 80 PVC MEETING OR EXCEEDING NEMA TC2 – 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS – 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'COLD GALV'.

23. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.

24. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, UNLESS OTHERWISE NOTED, 600 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWG. USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 8 AWG.

25. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.

26. SERVICE: AS SPECIFIED ON THE DRAWINGS. OWNER OR OWNER'S AGENT WILL APPLY FOR POWER. ALL PROVISIONS FOR TEMPORARY POWER WILL BE OBTAINED BY THE CONTRACTOR.

27. TELEPHONE OR FIBER SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.

28. ELECTRICAL AND TELCO/FIBER RACEWAYS TO BE BURIED A MINIMUM DEPTH OF 30", UNLESS OTHERWISE NOTED.

29. CONTRACTOR SHALL PLACE 6" WIDE DETECTABLE WARNING TAPE AT A DEPTH OF 6" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOMM".

30. ALL BOLTS SHALL BE 3-18 STAINLESS STEEL.

GROUNDING NOTES:

1. ALL HARDWARE SHALL BE 3-18 STAINLESS STEEL, INCLUDING LOCK WASHERS. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND, AS SPECIFIED, BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.

2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.

3. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

4. ALL ELECTRICAL AND GROUNDING AT THE POLE SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER.

5. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.

6. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING #6 GROUND WIRES. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS.

7. ALL GROUND CONNECTIONS SHALL BE #6 AWG, UNLESS OTHERWISE NOTED. ALL WIRES SHALL BE COPPER WITH THHN, UNLESS OTHERWISE NOTED. ALL GROUND WIRE SHALL BE SOLID TIN COATED OR STRANDED GREEN INSULATED WIRE.

8. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE, 10 OHMS MAXIMUM. PROVIDE SUPPLEMENT GROUNDING RODS AS REQUIRED TO ACHIEVE SPECIFIED OHMS READING. GROUNDING AND OTHER OPTIONAL TESTING WILL BE WITNESSED BY THE MOBILITIE CM.

9. NOTIFY ARCHITECT/ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

10. ALL HORIZONTALLY RUN GROUNDING CONDUCTORS SHALL BE INSTALLED A MINIMUM OF 30" BELOW GRADE/ 6" BELOW FROST-LINE IN TRENCH, UNLESS OTHERWISE NOTED.BACK FILL SHALL BE COMPACTED AS REQUIRED BY ARCHITECT/ENGINEER.

11. ALL GROUND CONDUCTORS SHALL BE RUN AS STRAIGHT AND SHORT AS POSSIBLE, WITH A MINIMUM 12" BENDING RADIUS NOT LESS THAN 90 DEGREES.

12. ACCEPTABLE CONNECTIONS FOR GROUNDING SYSTEM SHALL BE:

A. BURNDY, HY-GRADE U.L. LISTED CONNECTORS FOR OUTDOOR USE OR AS APPROVED BY APPLICANT PROJECT MANAGER.
B. CADWELD, EXOTHERMIC WELDS (WELDED CONNECTIONS).
C. ONE (1) HOLE TINNED COPPER COMPRESSION (LONG BARREL) FITTINGS.

13. ALL CRIMPED CONNECTIONS SHALL HAVE EMBOSSED MANUFACTURER'S DIEMARK VISIBLE AT THE CRIMP (RESULTING FROM USE OF PROPER CRIMPING DEVICES) AND WEATHER-PROOFED WITH HEAT SHRINK.

14. ALL CONNECTION HARDWARE SHALL BE TYPE 3-18 STAINLESS STEEL (NOT ATTRACTED TO MAGNETS).

15. ELECTRICAL SERVICE EQUIPMENT GROUNDING SHALL COMPLY WITH NEC, ARTICLE 250-82 AND SHALL BOND ALL (E) AND NEW GROUNDING ELECTRODES. NEW GROUNDING ELECTRODE SHALL INCLUDE BUT NOT LIMITED TO GROUND RODS.

TESTING AND EQUIPMENT TURN UP REQUIREMENTS:

1. RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT TESTING WILL COMPLY WITH CURRENT INDUSTRY STANDARDS AND OR THOSE STANDARDS OF THE EQUIPMENT MANUFACTURER OR PROVIDED TO THE CONTRACTOR PRIOR TO TESTING.

2. CONTRACTOR WILL USE THE APPROPRIATE CALIBRATED TESTING EQUIPMENT IN THE TESTING OF RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT THAT MEET INDUSTRY STANDARDS OF THE MANUFACTURER OR THOSE STANDARDS PROVIDED TO THE CONTRACTOR PRIOR TO TESTING.

3. CONTRACTOR TO VERIFY AND RECORD ALL TEST RESULTS AND PROVIDE THESE RESULTS WITHIN THE FINAL CLOSE OUT PACKAGE.

4. ALL PERSONNEL INVOLVED IN THE TESTING OF RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT WILL BE REQUIRED TO HAVE BEEN TRAINED AND OR CERTIFIED IN THE PROPER TESTING OF RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT.

5. ALL TEST RESULTS SHALL BE TIME STAMPED, RECORDED AND PRESENTED PRIOR TO ENERGIZING AND TURN UP OF ANY EQUIPMENT.

6. GPS EQUIPMENT IS NOT TO BE TESTED OR ATTACHED TO ANY CABLING DURING TESTING, DOING SO WILL DAMAGE THE GPS UNIT.

7. PRIOR TO TESTING IF THE CONTRACTOR HAS ANY QUESTIONS ABOUT THE TESTING PROCEDURES THEY ARE TO CALL AND OBTAIN ASSISTANCE FROM A QUALIFIED DESIGNATED TESTING REPRESENTATIVE.

8. EQUIPMENT IS NOT TO BE ENERGIZED UNTIL ALL TESTING HAS BEEN COMPLETED, APPROVED AND THE APPROPRIATE AUTHORITY HAS BEEN NOTIFIED AND GIVES APPROVAL TO ENERGIZE THE EQUIPMENT.

SITE WORK NOTES:

1. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.

2. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON AS-BUILT DRAWINGS BY GENERAL CONTRACTOR AND ISSUED TO ARCHITECT/ENGINEER AT COMPLETION OF PROJECT.

3. ALL (E) UTILITIES, FACILITIES, CONDITIONS AND THEIR DIMENSIONS SHOWN ON PLANS HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL (E) UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING (E) UTILITIES.

4. CONTRACTOR SHALL VERIFY ALL (E) UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER OR MOBILITIE CM FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT THEIR OWN RISK AND EXPENSE. CONTRACTOR SHALL CALL LOCAL UTILITY LOCATE HOT LINE, SUCH AS 811, FOR UTILITY LOCATIONS A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

5. ALL NEW AND (E) UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK. ANY COST RELATED TO ADJUSTING (E) STRUCTURES SHALL BE BORNE SOLELY BY THE CONTRACTOR.

6. GRADING OF THE SITE WORK AREA IS TO BE SMOOTH AND CONTINUOUS IN SLOPE AND IS TO FEATHER INTO (E) GRADES AT THE GRADING LIMITS.

7. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.

mobilitie

PROJECT NO:	9FLB002484
DRAWN BY:	RC
CHECKED BY:	S-B

A	05-25-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 60902 5/26/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PRELIMINARY

JAS0XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-2

SITE WORK NOTES CONTD

8. STRUCTURAL FILLS SUPPORTING PAVEMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM STANDARD PROCTOR DRY DENSITY, UNLESS OTHERWISE NOTED.

9. NEW GRADES NOT IN BUILDING AND DRIVEWAY IMPROVEMENT AREA TO BE ACHIEVED BY FILLING WITH APPROVED CLEAN FILL AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY.

10. ALL FILL SHALL BE PLACED IN UNIFORM LIFTS. THE LIFTS THICKNESS SHOULD NOT EXCEED THAT WHICH CAN BE PROPERLY COMPACTED THROUGHOUT ITS ENTIRE DEPTH WITH THE EQUIPMENT AVAILABLE.

11. ANY FILLS PLACED ON (E) SLOPES THAT ARE STEEPER THAN 10 HORIZONTAL TO 1 VERTICAL SHALL BE PROPERLY BENCHED INTO THE (E) SLOPE AS DIRECTED BY A GEOTECHNICAL ENGINEER.

12. CONTRACTOR SHALL CLEAN ENTIRE SITE AFTER CONSTRUCTION SUCH THAT NO DEBRIS, PAPER, TRASH, WEEDS, BRUSH, EXCESS FILL, OR ANY OTHER DEPOSITS WILL REMAIN. ALL MATERIALS COLLECTED DURING CLEANING OPERATIONS SHALL BE DISPOSED OF OFF-SITE BY THE GENERAL CONTRACTOR.

13. ALL TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH THE IMPROVEMENTS SHALL BE PROTECTED BY THE GENERAL CONTRACTOR.

14. ALL SITE WORK SHALL BE CAREFULLY COORDINATED BY GENERAL CONTRACTOR WITH LOCAL UTILITY COMPANY, TELEPHONE COMPANY, AND ANY OTHER UTILITY COMPANIES HAVING JURISDICTION OVER THIS LOCATION.

ENVIRONMENTAL NOTES:

1. ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS. ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE.

3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES AS REQUIRED BY THE LOCAL JURISDICTION WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.

4. NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.

5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES WITH SILT AND EROSION CONTROL MEASURES MAINTAINED ON THE DOWNSTREAM SIDE OF SITE DRAINAGE. ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF EROSION WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY.

7. CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.

8. SEEDING AND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.

9. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE, BUT IS NOT LIMITED TO SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS.

10. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES.

11. GC TO PLACE FILTER MATERIAL AT ALL CATCH BASINS ADJACENT TO CONSTRUCTION SITE TO PREVENT SOLID WASTE CONTAMINATION FROM ENTERING SEWER SYSTEM

FOUNDATION, EXCAVATION AND BACKFILL NOTES:

1. ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL, UNLESS OTHERWISE NOTED.

2. BACKFILL OF POLE SHALL BE PERFORMED IN ONE OF THREE OPTIONS:

   A. PERFERRED: RAINBOW INDUSTRIES POLE SETTING FOAM SHALL BE INSTALLED PER MANUFACTURER SPECS. FOAM SHALL ALWAYS BE USED FOR POOR SOILS.

   B. SECONDARY: CONCRETE (REQUIRES MOBILITIE OR WRITTEN APPROVAL)
   ALLOWABLE SOIL PRESSURE = 2000 PSF (ASSUMED).
   NON-NATIVE SOILS SHALL BE REMOVE FROM BORE AREA AND SHALL NOT BE REUSED FOR BACKFILL

3. ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY HORIZONTAL AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.

10. CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF ADEQUATE BEARING CAPACITY IS NOT ACHIEVED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.

11. ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM, SANDY CLAY, SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2" MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LAYERS.

12. ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED IN MAXIMUM 6" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557.

13. NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HRS PRIOR TO BACK FILLING.

14. FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.

15. NEWLY GRADED GRAVEL SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: TYPAR-3401 AS MANUFACTURED BY TYPAR GEOSYNTHETICS OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE RECURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICH EVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED. I.E. FOOT TYPE NO. 57 FOR FENCED COMPOUND; FOOT TYPE NO. 57 FOR ACCESS DRIVE AREA, UNLESS OTHERWISE NOTED.

16. IN ALL AREAS TO RECEIVE FILL: REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH (E)/PREPARED SOIL SURFACE.

17. WHEN SUB GRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION AND/OR AERATE THE SOILS AND RECOMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OF FILLS.

18. IN AREAS WHICH (E) GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.

19. (E) GRAVEL SURFACING MAY NOT BE REUSED.

20. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUB GRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUB GRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUB GRADE.

21. PROTECT (E) GRAVEL SURFACING AND SUB GRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING 'MATTS' OR OTHER SUITABLE PROTECTION DESIGNED TO SPREAD EQUIPMENT LOADS AS MAY BE NECESSARY. REPAIR ANY DAMAGE TO (E) GRAVEL SURFACING OR SUB GRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTORS OPERATIONS.

22. DAMAGE TO (E) STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/ OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.

23. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

mobilitie

PROJECT NO:	SFL8035804
DRAWN BY:	RC
CHECKED BY:	S.B

A	09-25-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE 65492 9/28/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JAS97XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-3

Contractor		Contractor Lead		Sentinel Site	Complete
#	TYPE	NAME	ITEMS TO IDENTIFY	QUALITY/INSTALL REQUIREMENTS	
1	PIC	PRE-CONSTRUCTION	[illegible]	[illegible]	
2	PIC	FOUNDATION/SOCKET	[illegible]	[illegible]	
3	PIC	POLE VIEW #1	[illegible]	[illegible]	
	PIC	POLE VIEW #2	[illegible]	[illegible]	
4	PIC	GROUND ROD(s)	[illegible]	[illegible]	
5	PIC	[illegible]	[illegible]	[illegible]	
6	PIC	POWER METER	[illegible]	[illegible]	
7	PIC	POWER PANEL #1	[illegible]	[illegible]	
	PIC	POWER PANEL #2	[illegible]	[illegible]	
8	PIC	[illegible]	[illegible]	[illegible]	
9	PIC	[illegible]	[illegible]	[illegible]	
10	PIC	[illegible]	[illegible]	[illegible]	
11	PIC	CABLES (IN)	[illegible]	[illegible]	
12	PIC	CABLES (#)	[illegible]	[illegible]	
13	PIC	[illegible]	[illegible]	[illegible]	
14	PIC	[illegible]	[illegible]	[illegible]	
15	PIC	[illegible]	[illegible]	[illegible]	
16	PIC	RF WARNING SIGN	[illegible]	[illegible]	
17	PIC	POST CONSTRUCTION	[illegible]	[illegible]	
18	PIC	ASSET TRACKING	[illegible]	[illegible]	
#	TYPE	NAME	DESCRIPTION	QUANTITATIVE REQUIREMENTS	
19	SDC	[illegible]	[illegible]	[illegible]	
20	SDC	SWEEP TEST	[illegible]	[illegible]	
21	DOC	[illegible]	[illegible]	[illegible]	

#	TYPE	NAME	DESCRIPTION	QUANTITATIVE REQUIREMENTS
3	PIC	[illegible]	[illegible]	[illegible]
4	DATA	[illegible]	[illegible]	[illegible]
4	DATA	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]

BASIC INSTRUCTION:

1. ALL PHOTOS SHOULD BE TAKEN OF THE EQUIPMENT FINAL CONFIGURATION
2. PHOTO RESOLUTION SHOULD BE 1600X1200
3. GPS TRACKING SHOULD BE TURNED ON.
4. TINY SCAN APP SHOULD BE USED TO CAPTURE DOCUMENTATION REQUIREMENTS.
5. ANY NOT APPLICABLE REQUIREMENTS SHOULD BE N/A. DO NOT LEAVE BLANK DELIVERABLES.
6. ALL PHOTO MUST BE CLEAR.
7. ALL PHOTO MUST HAVE DATE AND TIME STAMPS.
8. MUST BE ABLE TO READ SERIAL NUMBERS FROM PHOTO REQUIREMENTS.
9. COVER PAGE ON CSSA MUST BE FILLED OUT.

mobilitie

PROJECT NO: 3FLB003486
DRAWN BY: RC
CHECKED BY: SJB

A	08-25-15	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 58802 9/28/15

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XS495F
TALLAHASSEE, FL 32304
PROPOSED 72'-2" WOOD POLE

SHEET TITLE
CLOSE-OUT

SHEET NUMBER
CO-1

SITE ID-CANDIDATE LETTER/CASCADE ID-CANDIDATE LETTER:
9FLB003699/JA90XSRKDB

LATITUDE/LONGITUDE:
30.46477/-84.181519

CROSS STREET:
OAKS EDGE RD & SMOKE RISE LN

CITY, STATE, ZIP:
TALLAHASSEE, FL 32317

IF YOU DIG IN ANY STATE DIAL 811 FOR THE LOCAL "ONE CALL CENTER" - IT'S THE LAW

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTORS CONVENIENCE ONLY. THERE MAY BE OTHER UNLISTED NOT SHOWN ON THESE PLANS. THE ENGINEER/SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL THE UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE (E) UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS (N).

SITE INFORMATION

SITE ID:	9FLB003699
CASCADE ID:	JA90XSRKDB
LATITUDE:	30.46477
LONGITUDE:	-84.181519
CROSS STREET:	OAKS EDGE RD & SMOKE RISE LN
CITY, STATE, ZIP:	TALLAHASSEE, FL 32317
COUNTY:	LEON COUNTY
JURISDICTION:	TALLAHASSEE CITY
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
APPLICANT:	MOBILITIE, LLC 3475 PIEDMONT ROAD NE, SUITE 1000 ATLANTA, GEORGIA 30305 PHONE: (312) 838-5400

ENGINEER

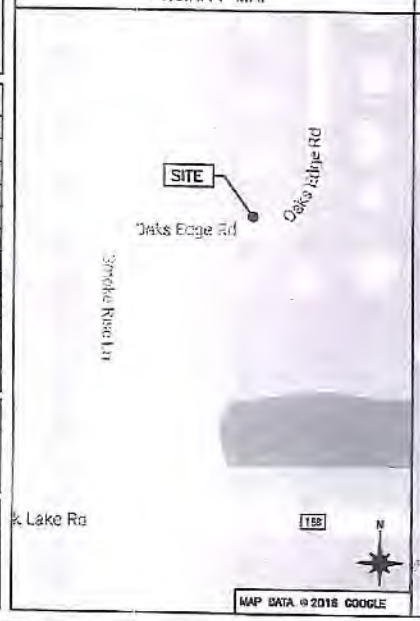
KMB DESIGN GROUP, LLC
1900 ROUTE 34, SUITE 206
WALL, NJ 07719
FOR QUESTIONS EMAIL: DESIGNTEAM@KMBDG.COM
TEL: (732) 280-5623 FAX: (732) 280-3880 www.KMBDG.com

DO NOT SCALE DRAWINGS

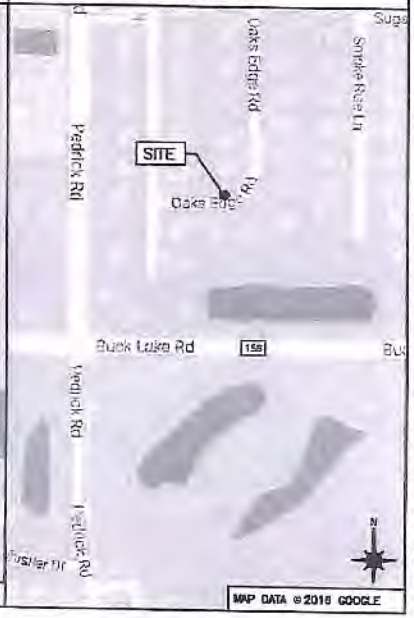
CONTRACTORS SHALL VERIFY ALL PLANS, (E) DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON A NEW WOOD POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL A NEW WOOD UTILITY POLE WITH PROPOSED BACKHAUL TRANSPORT EQUIPMENT

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE
TIA/EIA-222-G-2 OR LATEST EDITION
LOCAL BUILDING/PLANNING CODE

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
SP-1	EXHIBIT PHOTO & SITE PLAN
EV-1	ELEVATIONS
PL-1	PLUMBING & RISER DIAGRAM
EQ-1	EQUIPMENT DETAILS
EQ-2	EQUIPMENT DETAILS
EX-1	EXCAVATION DETAILS
E-1	ELECTRICAL DETAILS
G-1	GROUNDING DETAILS
S-1	EMBEDMENT DETAILS
TC-1	VEHICLE TRAFFIC CONTROL PLAN
TC-2	PEDESTRIAN TRAFFIC CONTROL PLAN
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
GN-3	GENERAL NOTES
CO-1	CLOSE OUT PACKAGE

mobilitie

PROJECT NO:	9FLB003699
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-29-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC
Stephen A. Bray
PROFESSIONAL ENGINEER
FL LICENSE: 65902 9/29/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
TITLE SHEET

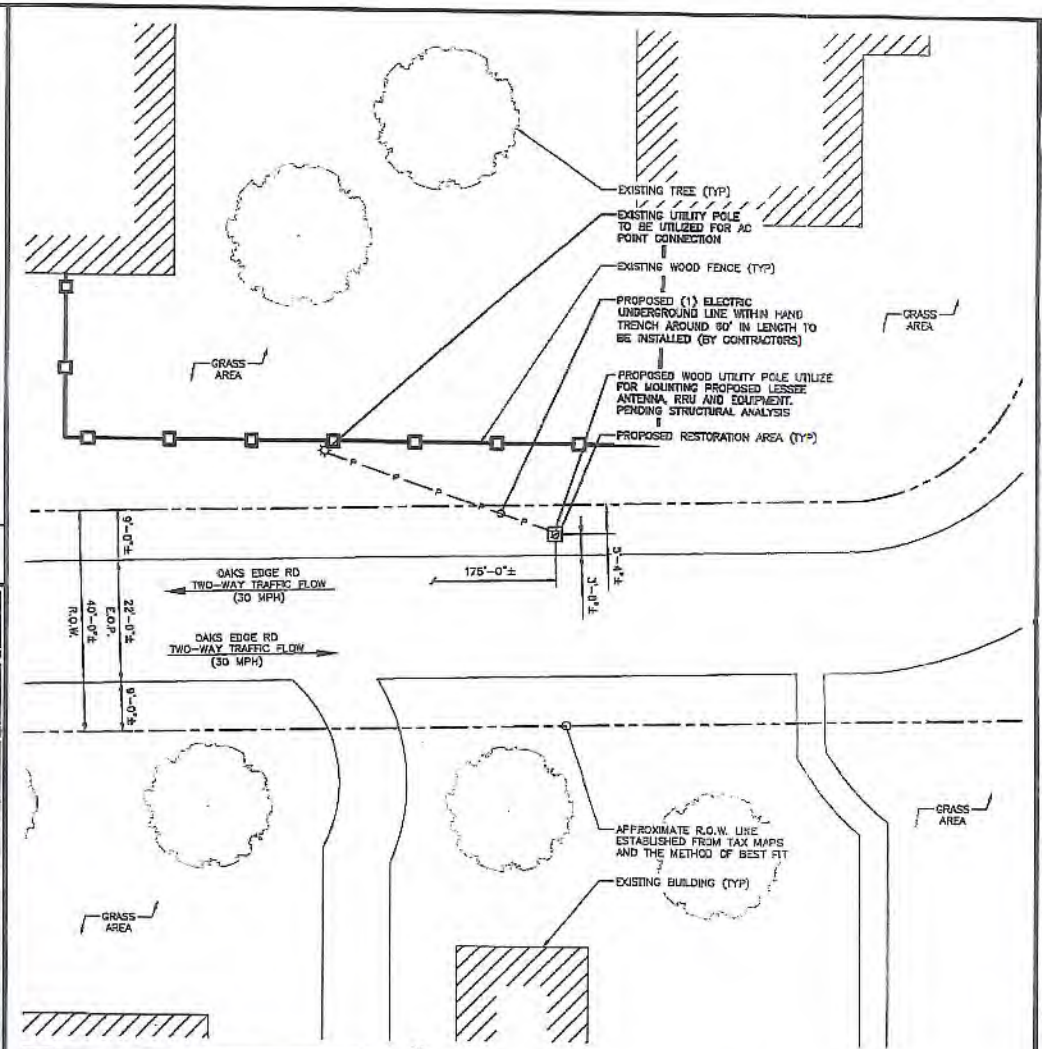
SHEET NUMBER
T-1

EXHIBIT PHOTO 1

SCALE: NOT TO SCALE

AERIAL SITE LOCATION 2

SCALE: NOT TO SCALE



NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, RIGHT-OF-WAYS, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

ENLARGED SITE PLAN 3

SCALE: 1" = 20'-0" (1" = 10'-0" ON 22"x34" SHEET)

mobilitie

PROJECT NO:	SFLD001699
DRAWN BY:	RC
CHECKED BY:	SAB

A	09-28-18	RE CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 69903 9/28/18

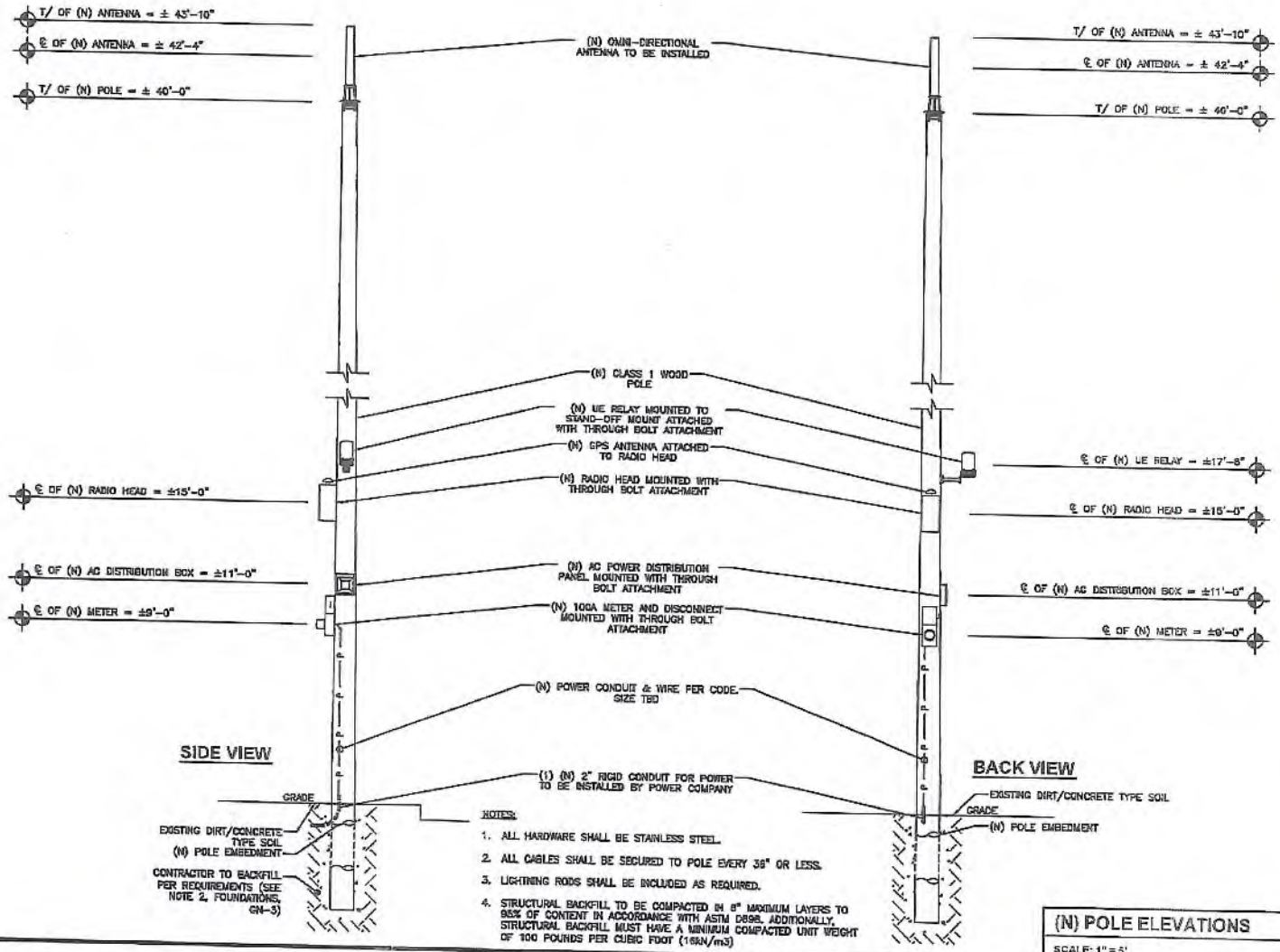
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
EXHIBIT PHOTO & SITE PLAN

SHEET NUMBER
SP-1



NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

(N) POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie

PROJECT NO:	0FLB003659
DRAWN BY:	RC
CHECKED BY:	SJS

A	09-25-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 64002 5/24/18

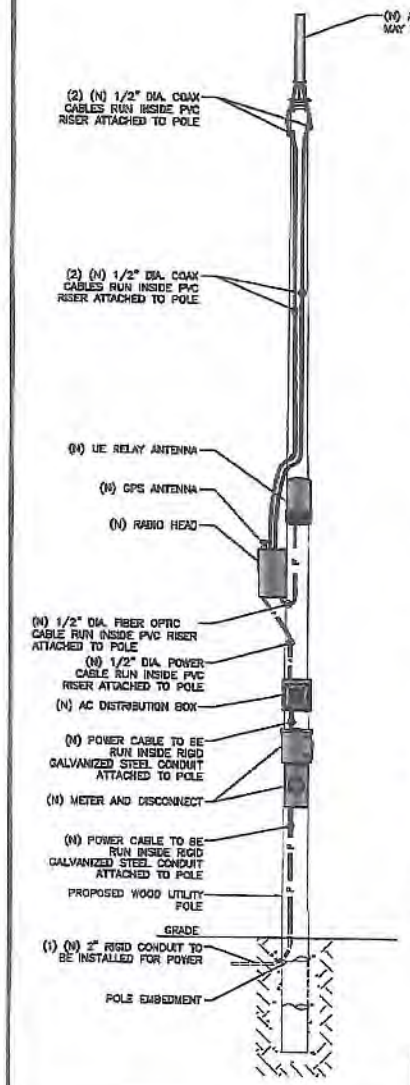
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
POLE ELEVATIONS

SHEET NUMBER
EV-1



NOTE:
CABLING DIAGRAM IS FOR CLARITY OF CABLE ROUTE AND TERMINATION ONLY. CONTRACTOR SHALL INSTALL CABLES WITH MINIMAL VISUAL IMPACT ON PROPOSED WOOD UTILITY POLE. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

CABLING NOTES:

A) WOOD, CONCRETE AND EXISTING METALLIC POLES
I) FROM GRADE LINE TO 11'-0" ABOVE GRADE, ALL CABLES/CONDUCTORS EXCEPT GROUNDING CONDUCTOR MUST RUN IN RIGID GALVANIZED STEEL CONDUIT (RGS)

II) GROUNDING CONDUCTORS IN EXPOSED LOCATIONS MUST BE INSTALLED IN PVC.

III) IN EARTH INSTALL PVC CONDUIT FOR BACKHAUL AND ELECTRICAL SERVICE. TRANSITION TO RGS AT GRADE LINE.

IV) ABOVE 11'-0" ALL CABLES (POWER, ETHERNET, COAXIAL) MUST RUN IN PVC UTILITY POLE RISER.

(1) AT MAJOR EQUIPMENT, EXTEND UTILITY DUCT IMMEDIATELY ADJACENT TO THE EQUIPMENT. INSTALL CABLES IN THE UTILITY POLE RISER CREATING CABLE DRIP LOOPS NOT LESS THAN THE CABLE BENDING RADIUS.

(2) INSIDE THE UTILITY POLE RISER, UTILIZE ½" COAX BLOCKS WITH LAG SCREWS TO SUPPORT COAX, RADIO AND MW POWER, RF COAX, AND ETHERNET CABLES TO WITHIN 12" OF THE EQUIPMENT BEING SERVED AND ON INTERVALS NOT TO EXCEED 6'.

V) FOR UNDERGROUND HFC/PUBLIC BACKHAUL, ROUTE ETHERNET CABLE IN CONDUIT UP THE POLE AND ENTER THE UTILITY POLE RISER. SEAL EXPOSED END OF CONDUIT WITH A CABLE TERMINATION FITTING.

VI) BY APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX. EXAMPLE: UTILITY-REQUIRED DISCONNECT ON POLE W/ AC DISTRIBUTION BOX ON OPPOSITE SIDE OF POLE.

B) NEW METALLIC POLES

I) PROCURE NEW POLES WITH SUITABLE HAND HOLES SUCH THAT HAND HOLES EXIST AT ALL EQUIPMENT LOCATIONS.

(1) WITH CLIENT APPROVAL IN SELECT CASES TO FACILITATE IMPROVED APPEARANCE, ½" COAXIAL CABLES MAY BE "SUPERFLEX" IN LIEU OF LDF-4.

II) WHERE POSSIBLE, INSTALL POLE BASE SUCH THAT THE ELECTRICAL FEED AND BACKHAUL (IF UNDERGROUND) CIRCUIT ENTER THE POLE THROUGH THE POLE BASE. IF A DISCONNECTING MEANS SEPARATE FROM THE AC DISTRIBUTION BOX IS REQUIRED BY JURISDICTION OR UTILITY, WITH APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX.

PLUMBING DIAGRAM

SCALE: NOT TO SCALE

1

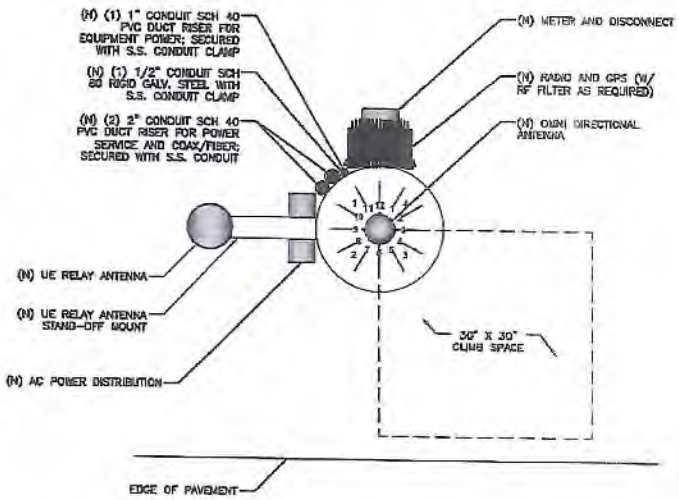
BAND 41 (2500MHz) EQUIPMENT CHART

QTY.	DESCRIPTION	MANUFACTURER	MODEL NUMBER	CABLE LENGTH	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	PLASMA ANTENNAS	LONG SC800		35.4" X 3.9" DIAMETER	11 LBS
1	UE RELAY	AIRSPAN	IR460		12.99" X 7.87" DIAMETER	9.9 LBS
1	GPS ANTENNA	TALLYSMAN	TW3012		0.6" X 2.9" DIAMETER	0.3 LBS
1	RADIO (W/ FILTER AS REQUIRED)	AIRSPAN	AH4000		20" X 9" X 7"	42 LBS
1	AC DISTRIBUTION	RAYCAP	RSTAC-3111-P-120		13.13" X 11.39" X 4.26"	14 LBS
1	DISCONNECT	TBD	TYPE-3R		3.8" X 8.8" X 4.6"	TBD
1	METER	MILBANK	U7021-RL-TG		15.5" X 8" X 4.35"	TBD

BILL OF MATERIALS

SCALE: NOT TO SCALE

2



RISER DIAGRAM

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	SFL0003039
DRAWN BY:	RC
CHECKED BY:	SJB

A	08-31-19	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 68302 8/28/19

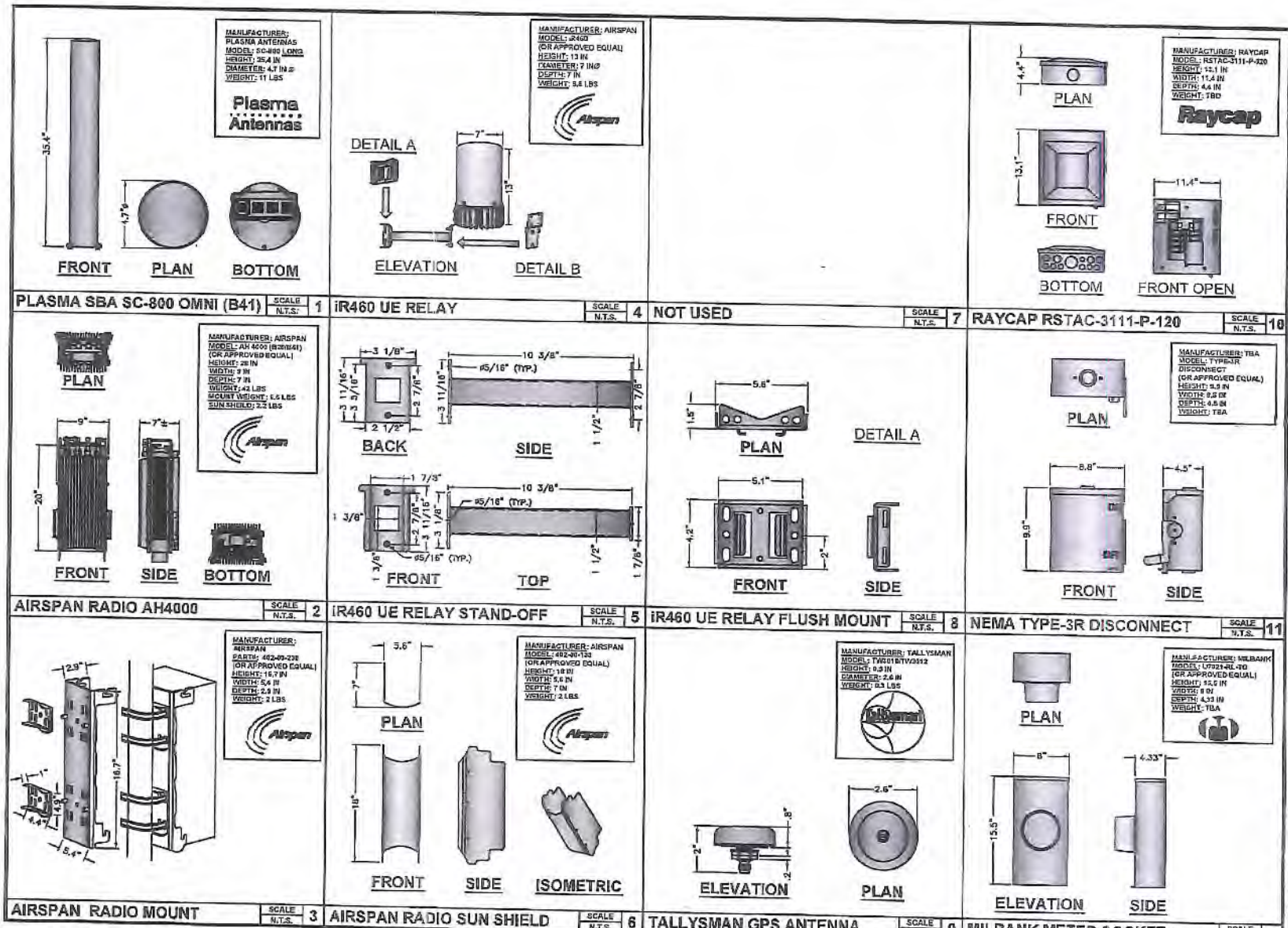
IT IS A VIOLATION OF 5JC LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
PLUMBING & RISER DIAGRAM

SHEET NUMBER
PL-1



mobilitie

PROJECT NO:	SFL8003659
DRAWN BY:	RC
CHECKED BY:	JJS

4	09-29-19	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 68902 9/28/19

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

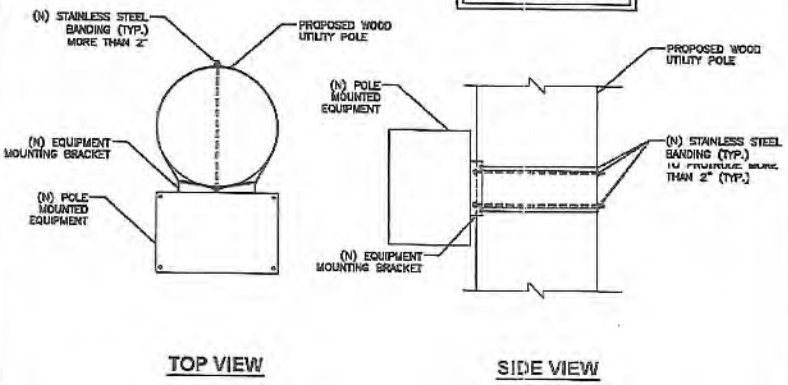
PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
EQ-1

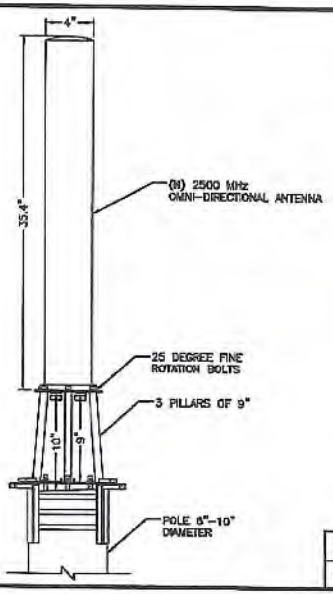
NOTE:
INSTALL BRACKETS WITH STAINLESS STEEL BANDING.



EQUIPMENT MOUNTING DETAIL

SCALE: NOT TO SCALE

1



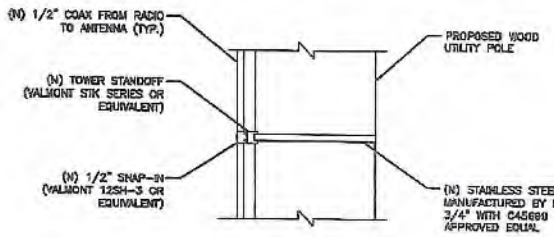
NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 3" TO 10" DIAMETER.
2. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION.

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3



NOTE:
SPACE SNAP-INS PER CABLE MANUFACTURER'S SPECIFICATIONS

CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE

2

ANTENNA SIGNAGE:
ON WOOD POLES – SIGN ON ALUMINUM WITH SS SCREW TO THE POLE
ON METAL POLES – ADHESIVE VINYL OR PLACARD STRAPPED WITH SS TIES
ON CONCRETE / COMPOSITE – PLACARD STRAPPED WITH SS TIES
SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S)
SIZE APPROX. 8" x 5"

ANTENNA SIGNAGE

OWNER / OPERATOR NOTE:
SITE ID LABEL TO BE AFFIXED AT OR NEAR THE POINT OF POWER CONNECTION WITH TZe5241 LABELING TAPE OR EQUIVALENT BLACK ON WHITE LABELING TAPE OF AT LEAST 18mm WIDTH WITH EXTRA-STRENGTH ADHESIVE. USE ANY COMPATIBLE P-TOUCH LABEL MAKER. TEXT SHOULD BE PRINTED IN ALL CAPS WITH A MINIMUM HEIGHT OF 1/2".

EMERGENCY CONTACT SIGN

POLE MOUNTED SIGNS

SCALE: NOT TO SCALE

4

mobilitie

PROJECT NO:	SFLB002659
DRAWN BY:	RC
CHECKED BY:	SJB

A	03-20-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC
Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 58002 3/20/18

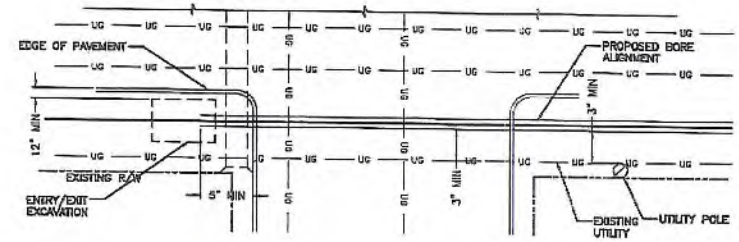
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

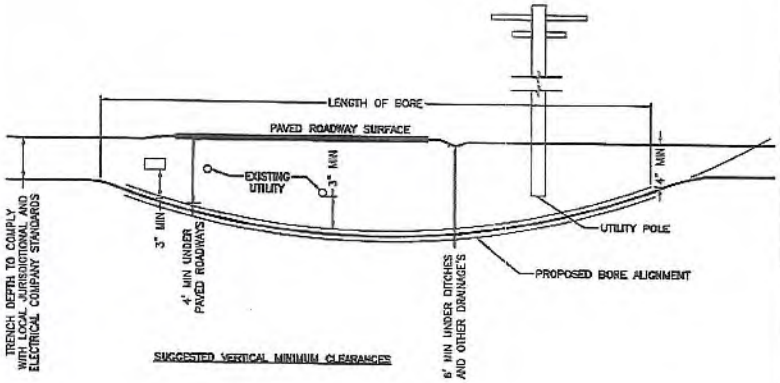
JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
EQ-2



SUGGESTED HORIZONTAL MINIMUM CLEARANCES



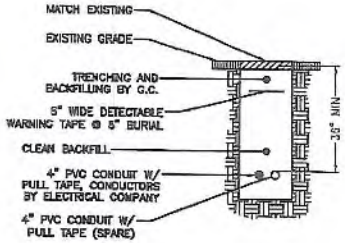
SUGGESTED VERTICAL MINIMUM CLEARANCES

DIRECTIONAL BORING DETAILS

SCALE: NOT TO SCALE

1

NOTE:
TRENCH WIDTH SHALL NOT EXCEED 16" AT ALL ACCESS DRIVE LOCATIONS AND WHEN CROSSING THE COMPOUND GATE OPENING.



TRENCH SECTION DETAIL

SCALE: NOT TO SCALE

2

NOT USED

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	SFL8003599
DRAWN BY:	RC
CHECKED BY:	SJB

A	03-26-19	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 58962 2/28/19

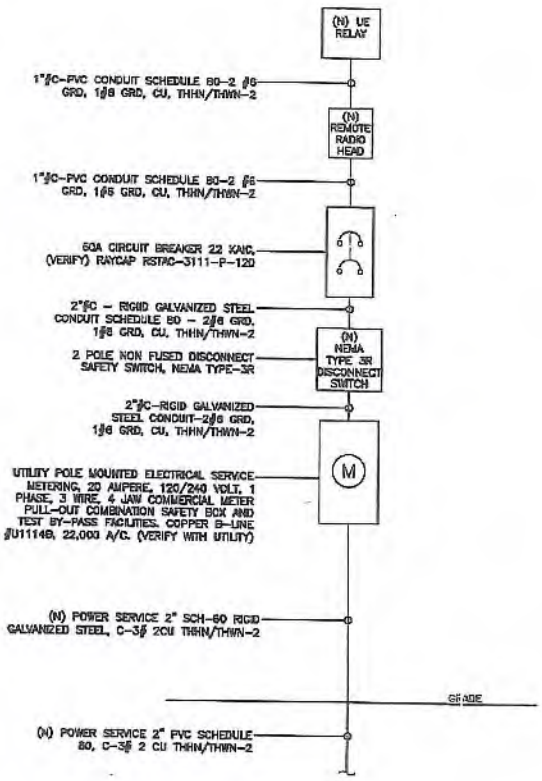
IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
EXCAVATION DETAILS

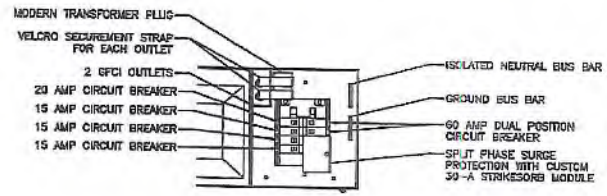
SHEET NUMBER
EX-1



ONE-LINE DIAGRAM

SCALE: NOT TO SCALE

1



BREAKER SCHEDULE

SCALE: NOT TO SCALE

2

NOTES:

1. NOMINAL POWER IS CALCULATED AS 80% OF OEM DOCUMENTED MAXIMUM POWER.
2. CALCULATIONS FOR UE W/ NOKIA DO NOT NEED TO INCLUDE THE POWER FOR THE UE ANTENNA AS IT IS INCLUDED IN THE MAX POWER FIGURE. CALCULATIONS FOR UE W/ AIRSPAN MUST INLCUDE UE AS IT IS NOT INCLUDED
3. KVA IS CALCULATED FROM THE CONSUMPTION VALUE ASSUMING A PF=1. MAXIMUM POWER WAS USED FOR KVA. WHERE MAXIMUM WAS NOTED BY THE OEM THE QUOTED FIGURE WAS USED. WHERE AVERAGE/NOMINAL POWER WAS NOTED BY THE OEM MAXIMUM POWER WAS CALCULATED BY INCREASING AVERAGE/NOMINAL POWER BY A FACTOR OF 50%
4. COST PER KW PROVIDED BY BRAIN KOOYMAN

AIRSPAN SCENARIO 2 AH4000 HIGH POWER RADIO AND UE BACKHAUL

UNIT	SUB DESCRIPTION	MAX POWER	NOMINAL POWER	AVERAGE POWER (W)	CONS. (W)	KVA	KWH/YR	$/YR	$/MO
AH4000	B28 & B41	N/A	N/A	340	340	0.51	2978.4	$326.43	$27.20
AIRSPAN UE RELAY	IR460-SPB-ST1-P-0	N/A	N/A	20	20	0.03	175.2	$19.20	$1.60
Total					360	0.54	3153.6	$345.63	$28.80

LOAD CALCULATIONS

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	9FLB003699
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-28-18	RIR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 65092 9/28/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

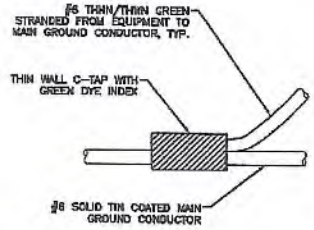
PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E-1

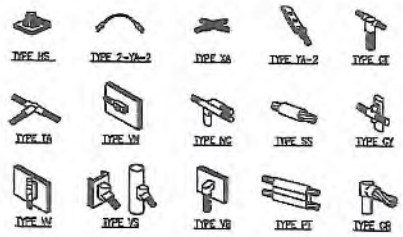
NOTE:
CONTRACTOR TO SURROUND COMPLETED CONNECTION WITH HEAT-SHRINK TUBING TO ENSURE WEATHER PROOF CONNECTION



C-TAP DETAIL

SCALE: NOT TO SCALE

1



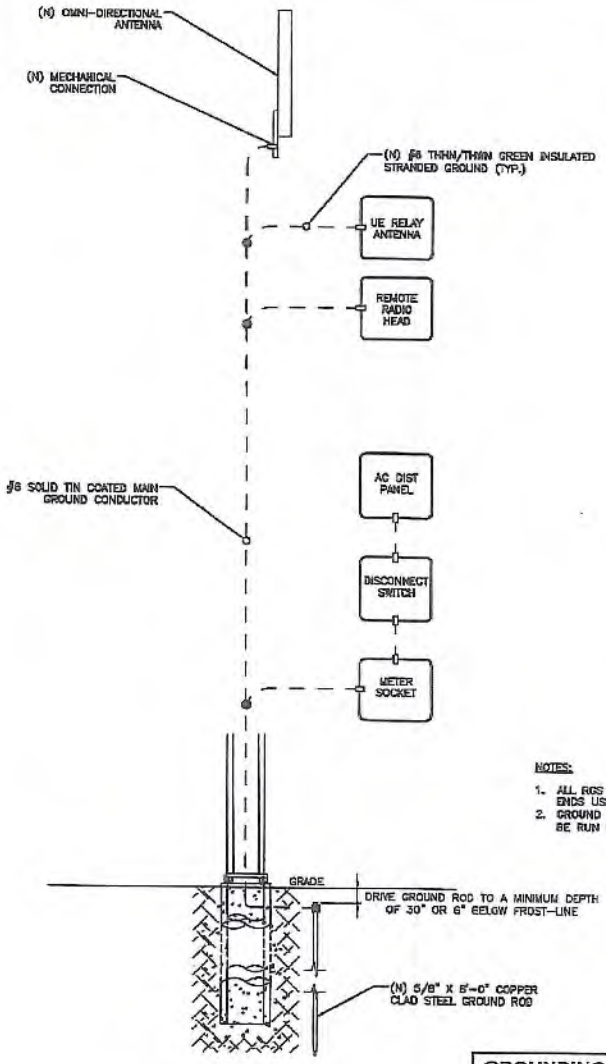
NOTE:

ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.

WELD CONNECTION DETAILS

SCALE: NOT TO SCALE

2



LEGEND
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

NOTES:

1. ALL RGS TO BE GROUNDED AT BOTH ENDS USING GROUNDING BUSHINGS
2. GROUND WIRE BELOW 11' AGL TO BE RUN IN 1/2" SCHEDULE 40 PVC

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

3

mobilitie

PROJECT NO:	9FLB003699
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-28-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 62502 9/28/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

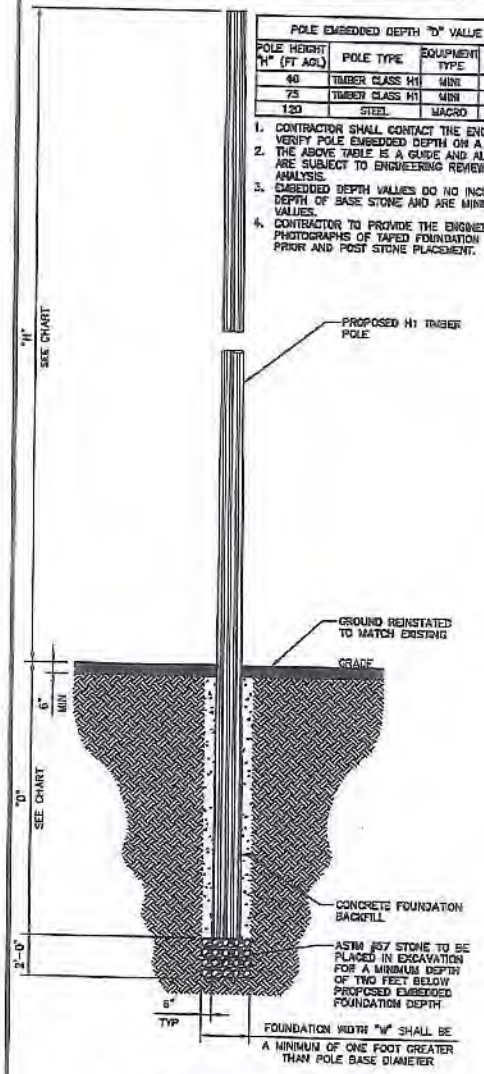
JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-1

POLE EMBEDDED DEPTH "D" VALUE CHART			
POLE HEIGHT "H" (FT AGL)	POLE TYPE	EQUIPMENT TYPE	EMBEDDED DEPTH (FT)
40	TIMBER CLASS H1	MINI	15
75	TIMBER CLASS H1	MINI	20
120	STEEL	MACRO	20

1. CONTRACTOR SHALL CONTACT THE ENGINEER TO VERIFY POLE EMBEDDED DEPTH ON A SITE BASIS.
2. THE ABOVE TABLE IS A GUIDE AND ALL POLES ARE SUBJECT TO ENGINEERING REVIEW AND ANALYSIS.
3. EMBEDDED DEPTH VALUES DO NO INCLUDE THE DEPTH OF BASE STONE AND ARE MINIMUM VALUES.
4. CONTRACTOR TO PROVIDE THE ENGINEER PHOTOGRAPHS OF TAPED FOUNDATION DEPTHS PRIOR AND POST STONE PLACEMENT.



H1 TIMBER POLE FOUNDATION

SCALE: NOT TO SCALE

1

KMB DESIGN GROUP

Foundation Embedded Depth Matrix - Florida

(Refer to depth "D" on above row)

Pole Height (ft AGL)	Wind Speed (mph)	Pole Type	Equipment Type	Power (Aerial/Underground)	Embedded Depth (ft)	Pole Length Remaining (ft)	Base Diameter (in)
40	100-110	Western Red Cedar Class H1	Mini	Aerial	15	25	22.34
40	110-120	Western Red Cedar Class H1	Mini	Underground	15	25	21.94
75	100-110	Western Red Cedar Class H1	Mini	Aerial	20	55	22.73
75	110-120	Western Red Cedar Class H1	Mini	Underground	15	60	21.45
75	100-110	Concrete*	Mini	Underground	15	60	25.7
75	110-120	Steel - Mobilite C-1 100ft	Mini	Aerial	15	60	23.1875
40	120-130	Steel - Mobilite C-1 100ft	Mini	Underground	15	60	23.1875
40	120-130	Western Red Cedar Class H1	Mini	Aerial	15	55	18.54
75	120-130	Western Red Cedar Class H1	Mini	Underground	15	55	18.34
75	120-130	Western Red Cedar Class H1	Mini	Aerial	15	60	21.45
75	120-130	Western Red Cedar Class H1	Mini	Underground	15	60	21.69
75	120-130	Concrete	Mini	Aerial	15	60	25.7
75	120-130	Concrete	Mini	Underground	15	60	25.7
75	120-130	Steel - Mobilite C-1 100ft	Mini	Aerial	15	60	23.1875
75	120-130	Steel - Mobilite C-1 100ft	Mini	Underground	15	60	23.1875
40	130-140	Western Red Cedar Class H1	Mini	Aerial	15	55	18.54
40	130-140	Western Red Cedar Class H1	Mini	Underground	15	55	18.34
75	130-140	Western Red Cedar Class H1	Mini	Aerial	15	60	21.45
75	130-140	Western Red Cedar Class H1	Mini	Underground	15	60	21.69
75	130-140	Concrete	Mini	Aerial	15	60	25.7
75	130-140	Concrete	Mini	Underground	15	60	25.7
75	130-140	Steel - Mobilite C-1 100ft	Mini	Aerial	15	60	23.1875
75	130-140	Steel - Mobilite C-1 100ft	Mini	Underground	15	60	23.1875

Notes:
1) Contractor shall contact the Engineer to verify pole embedded depth on a site by site basis.
2) The above table is a guide and all poles are subject to engineering review and analysis.
3) Embedded depth values do not include the depth of base stone and are minimum values.
4) Contractor to provide the engineer photographs of taped foundation depths prior and post stone placement.
5) Timber pole dimensions based on ANSI O5.1-2002 as provided by Mobilite
* Concrete poles can only be used for underground power supply - an overhead pole power attachment, not a guy for overhead power
± 130 - or wind speed. If this pole is required for aerial attachment, a manufacturer's passing analysis SAS is required

FOUNDATION EMBEDDED DEPTH MATRIX - FLORIDA

SCALE: NOT TO SCALE

2

GENERAL NOTES:

1) CONTRACTOR SHALL PROVIDE A DETAILED METHOD OF PROCEDURE (MOP) TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO MOBILIZING TO THE SITE AND COMMENCING ANY CONSTRUCTION ACTIVITIES. THE MOP SHALL ENSURE ALL APPROPRIATE CODES OF PRACTICE ARE FOLLOWED IN ACCORDANCE WITH OSHA FOR ALL ACTIVITIES. FACTORS THAT SHALL BE CONSIDERED INCLUDE BUT ARE NOT LIMITED TO:
   a. TRANSPORTATION OF ALL MATERIALS AND EQUIPMENT
   b. PPE
   c. MATERIALS AND EQUIPMENT STAGING
   d. TRAFFIC CONTROL
   e. CONTAINMENT OF DRILL SLURRY FLUIDS
   f. TEMPORARY WORKS SUPPORT FOR DRILL EQUIPMENT AND POLE
2) CONTRACTOR SHALL ENSURE THAN AN 811 UTILITY MARK OUT HAS BEEN COMPLETED AND THAT ALL BELOW AND ABOVE GROUND UTILITIES ARE DOCUMENTED.
3) THIS DRAWING SUPPLEMENTS THE GENERAL CONSTRUCTION DRAWINGS FOR THE PROJECT AND SHALL BE READ IN CONJUNCTION WITH THE PE SIGNED AND SEALED CONSTRUCTION DRAWINGS BY KMB DESIGN GROUP, LLC REVISED TO STATE "ISSUED FOR CONSTRUCTION"
4) CONTRACTOR SHALL COMPLY WITH ALL RELEVANT SECTIONS OF 2015 INTERNATIONAL BUILDING CODE CHAPTER 18 AND THE USDOT FAA DRILLED SHAFT CONSTRUCTION PROCEDURES.

CONCRETE

1) DRILLED SHAFTS SHALL BE FILLED WITH CLASS E-2 CONCRETE. AN AIR ENTRAINMENT ADMIXTURE SHALL BE USED. IN ADDITION A HIGH RANGE WATER-REDUCING ADMIXTURE MAY BE USED TO INCREASE THE SLUMP TO A MAXIMUM OF 9 INCHES ± 1 INCH. IF USED, THE WATER-REDUCING ADMIXTURE SHALL BE ADDED ONLY AFTER THE CONCRETE HAS REACHED THE JOB SITE TO REDUCE THE POTENTIAL FOR FLASH SETTING. THE CONCRETE MIX SHALL BE DENSE, HOMOGENEOUS, FLUID AND RESISTANT TO SEGREGATION, AND SHALL CONSOLIDATE UNDER SELF-WEIGHT. THE CONCRETE MIX SHALL HAVE A SET TIME THAT ENSURES THAT FLUIDITY IS MAINTAINED THROUGHOUT THE SHAFT CONCRETE PLACEMENT AND REMOVAL OF TEMPORARY CASING, IF USED. A CONCRETE RETARDER IN ACCORDANCE WITH AASHTO M 194, TYPE B, MAY BE INCORPORATED INTO THE MIX TO RETARD SET APPROXIMATELY TWO HOURS.
2) IN SITUATIONS WITH EXCESSIVE GROUND WATER OR FOUNDATION FLOODING ALL CONCRETE SHALL BE PLACED USING THE TREMIE METHOD. CONCRETE MIX DESIGN SHALL FOLLOW ACI 211.1 GUIDELINES. CONTRACTOR SHALL ENSURE THAT THE DRILLED SHAFT HAS SUFFICIENT WORKING ACCESS FOR CONCRETE PLACEMENT COMMENCING AT THE BASE OF THE SHAFT AND SHALL BE PLACED IN A SLOW AND STEADY RATE. CONCRETE SHALL NOT BE PERMITTED TO FALL INTO THE SHAFT.
3) CONCRETE MIX ALONG WITH APPROVED ACCELERATORS SHALL BE DESIGNED TO PROVIDE AN INITIAL COMPRESSIVE STRENGTH OF 3,000 PSF WITHIN 8HRS AND A 28 DAY COMPRESSIVE STRENGTH OF 5,000 PSI. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A DETAILED CONCRETE MIX DESIGN FROM THE CONCRETE PLANT INCLUDING ALL PROPOSED ADDITIVES. A SUITABLE STRENGTH RAPID HARDENING ADMIXTURE IS SIKA RAPID-1. THIS ADDITIVE MIGHT NOT BE SUITABLE FOR ALL CIRCUMSTANCES AND ANY PRODUCT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

GENERAL NOTES

SCALE: NOT TO SCALE

3

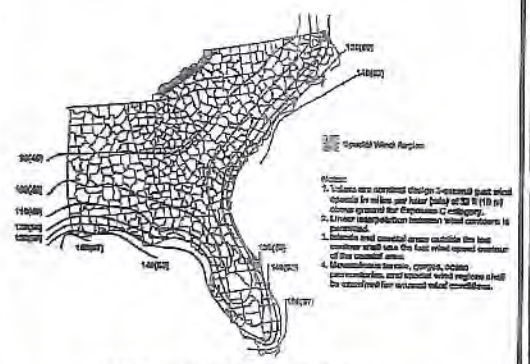


FIGURE A5-16 BASIC WIND SPEED WITHOUT ICE, V mph (mph)

BASIC WIND SPEED WITHOUT ICE

SCALE: NOT TO SCALE

4

IF YOU DIG IN ANY STATE DIAL 811 FOR THE LOCAL "ONE CALL CENTER" – IT'S THE LAW

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THESE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER/ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL THE UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO THE (S) UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

mobilitie

PROJECT NO:	SFL8303897
DRAWN BY:	RC
CHECKED BY:	SJB

A	05-26-16	PER CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 63902 5/26/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

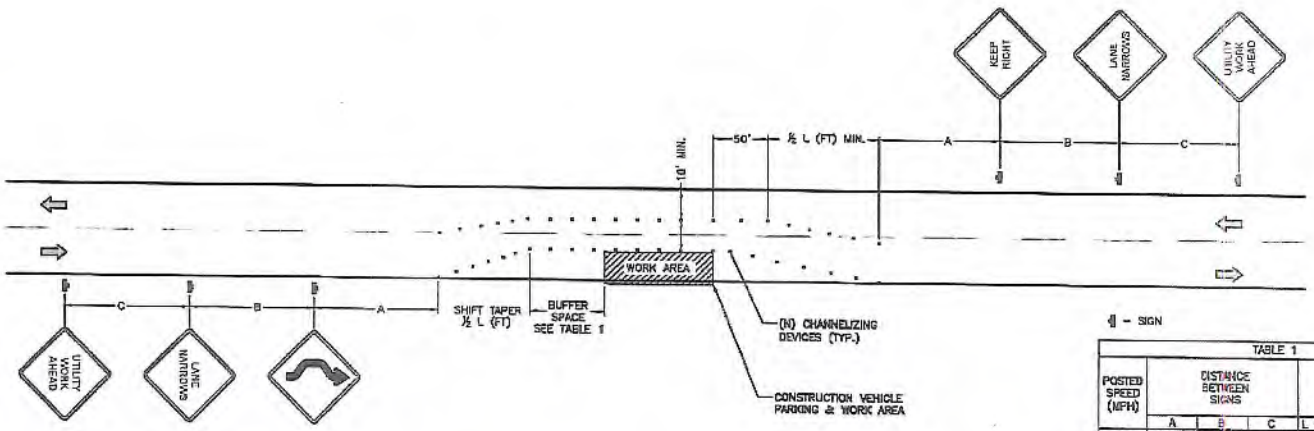
JA90XSRK08
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE:
POLE FOUNDATION DETAILS

SHEET NUMBER
S-1

PLAN NOTES:

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING. DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.
6. CONTRACTOR IS REQUIRED TO INPUT ALL LANE CLOSURES ON A STATE HIGHWAY IN THE LANE CLOSURE INFORMATION SYSTEM (HTTPS://LCIS.DOT.STATE.FL.US) 14 DAYS PRIOR TO THE CLOSURE.



◖ - SIGN

TABLE 1

POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER
	A	B	C	L (SEE NOTE)	
15	100'	100'	100'	45'	100'
20	100'	100'	100'	80'	115'
25	100'	100'	100'	125'	155'
30	200'	200'	200'	180'	200'
35	200'	200'	200'	245'	250'
40	350'	350'	350'	320'	305'
45	350'	350'	350'	540'	360'
50	500'	500'	500'	600'	425'
55	500'	500'	500'	660'	495'
60	500'	500'	500'	720'	570'
65	500'	500'	500'	780'	645'

NOTES:

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
B) CONTRACTOR TO VERIFY (E) SPEED LIMIT.
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET 6.1.
E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH. SEE NOTE 18, SHEET 6.1.

TRAFFIC CONTROL PLAN - LANE SHIFT

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO: 9FLB003699
DRAWN BY: RC
CHECKED BY: SJB

A 09-28-16 FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC
Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 69702 9/28/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

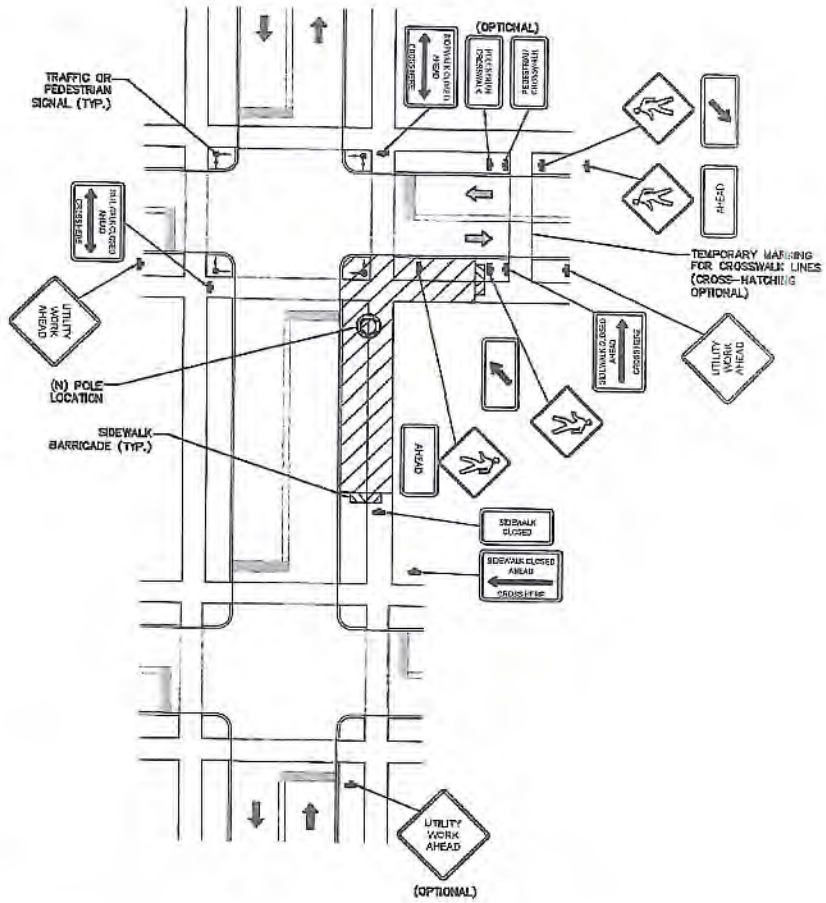
JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
TRAFFIC CONTROL NOTES

SHEET NUMBER
TC-1

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) – PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY AND FOR ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE (E) TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
8. ALL (E) ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE (N) TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 6H:1V SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
$L = WS^2/60$ (40 MPH AND HIGHER) OR $L2 = WS$ (OVER 40 MPH),
WHERE W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).



TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	3FL8003899
DRAWN BY:	RC
CHECKED BY:	SJB

A	05-23-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 68902 5/23/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
PEDESTRIAN TRAFFIC CONTROL PLAN

SHEET NUMBER
TC-2

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LOCAL BUILDING CODE, THE LATEST ADOPTED EDITION AND ALL OTHER APPLICABLE CODES AND ORDINANCES.

2. CONTRACTOR SHALL CONSTRUCT SITE IN ACCORDANCE WITH THESE DRAWINGS AND LATEST MOBILITIE CONSTRUCTION STANDARDS. THE SPECIFICATION IS THE RULING DOCUMENT AND ANY DISCREPANCIES BETWEEN THE SPECIFICATION AND THE CONSTRUCTION DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OR MOBILITE CM PRIOR TO THE COMMENCEMENT OF WORK.

3. CONTRACTOR SHALL VISIT THE JOB SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE (N) WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED, AS SHOWN, PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OR MOBILITE CM PRIOR TO THE COMMENCEMENT OF WORK. NO COMPENSATION WILL BE AWARDED BASED ON CLAIM OF LACK OF KNOWLEDGE OF FIELD CONDITIONS.

4. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. CONTRACTOR IS REQUIRED TO FURNISH AND INSTALL ANY/ALL ITEMS FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM SUBJECT ONLY TO OWNER-SUPPLIED ITEMS. CONTRACTOR SHALL PROVIDE ANY/ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

5. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT AND APPURTENANCES, AND LABOR NECESSARY TO EFFECT ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS. OWNER PROVIDED AND CONTRACTOR INSTALLED MATERIALS WILL INCLUDE THE FOLLOWING, UNLESS NOTED OTHERWISE:

   A) TRANSMITTER
   B) UHF ANTENNA AND MOUNTING BRACKETS, GPS ANTENNAS AND KU ANTENNAS
   C) UHF COAX AND HANGERS
   D) INTEGRATED LOAD CENTER

6. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS. SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, (E) CONDITIONS AND/OR DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE ATTENTION OF THE MOBILITE CM IN WRITING, PRIOR TO THE COMMENCEMENT OF WORK.

7. DETAILS PROVIDED ARE FOR THE PURPOSE OF SHOWING DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR SITE CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.

8. CONTRACTOR SHALL PAY FOR APPLICABLE PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO ORDERING MATERIALS AND THE COMMENCEMENT OF WORK.

9. THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFIATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.

10. CONTRACTOR SHALL RECEIVE CLARIFICATION IN WRITING, AND SHALL RECEIVE IN WRITING AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEMS NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.

11. CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING ACCEPTED INDUSTRY-STANDARD SKILLS AND ATTENTION. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER CONTRACT, UNLESS OTHERWISE NOTED.

12. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS.

13. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE MOBILITE CM AND SCHEDULE THEIR ACTIVITIES AND WORKING HOURS IN ACCORDANCE WITH THE REQUIREMENTS.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THEIR WORK WITH THE WORK OF OTHERS AS IT MAY RELATE TO RADIO EQUIPMENT, ANTENNAS AND ANY OTHER PORTIONS OF THE WORK.

15. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.

16. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT (E) SURFACES, EQUIPMENT, IMPROVEMENTS, PIPING ETC. AND IMMEDIATE REPAIR, TO NEW CONDITION, ANY DAMAGE THAT OCCURS DURING CONSTRUCTION AT THE SOLE COST OF THE CONTRACTOR.

17. IN DRILLING HOLES, OR CORING, INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, PIPE RUNS, ETC., MUST BE CLEARLY UNDERSTOOD THAT REINFORCING STEEL SHALL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES (UNLESS NOTED OTHERWISE). LOCATIONS OF REINFORCING STEEL ARE NOT DEFINITELY KNOWN AND THEREFORE MUST BE LOCATED BY THE CONTRACTOR USING APPROPRIATE METHODS AND EQUIPMENT PRIOR TO ANY DRILLING OR CORING OPERATIONS IN (E) CONCRETE.

18. CONTRACTOR SHALL REPAIR, TO NEW CONDITION, ALL (E) WALL SURFACES DAMAGED DURING CONSTRUCTION SUCH THAT THEY MATCH AND BLEND IN WITH ADJACENT SURFACES.

19. CONTRACTOR SHALL SEAL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES OR MATERIALS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS AND SYSTEMS THAT MEET OR EXCEED THE RATING OF THE ASSEMBLY IN WHICH THE NEW PENETRATION IS PLACED.

20. CONTRACTOR SHALL KEEP CONTRACT AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OF THE OWNER SHALL BE REMOVED. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ITEMS UNTIL COMPLETION OF CONSTRUCTION.

21. MINIMUM BEND RADIUS OF ANTENNA CABLES SHALL BE IN ACCORDANCE WITH CABLE MANUFACTURERS RECOMMENDATIONS.

22. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO (E) SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH JURISDICTIONAL OR STATE AND LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL AND COORDINATED WITH LOCAL REGULATORY AUTHORITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ANY EROSION CONTROL MEASURES, RECORD-KEEPING, MONITORING, AND REPORTING TO THE OWNER AND REGULATORY AUTHORITIES.

23. ALL CONSTRUCTION WORK IS TO ADHERE TO APPLICANT'S INTEGRATED CONSTRUCTION STANDARDS UNLESS STATE OR LOCAL CODE IS MORE STRINGENT.

24. THE INTENT OF THE PLANS AND SPECIFICATIONS IS TO PERFORM THE CONSTRUCTION IN ACCORDANCE PER STATE BUILDING STANDARDS CODE AND STATE CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE APPROVED PLANS AND SPECIFICATIONS WHEREIN THE FINISHED WORK WILL NOT COMPLY PER STATE CODE OF REGULATIONS, A SCOPE OF WORK DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE JURISDICTION BEFORE PROCEEDING WITH THE WORK. A CHANGE ORDER FOR THAT SCOPE SHALL BE SUBMITTED TO THE MOBILITE CM PRIOR TO PROCEEDING WITH THE WORK.

25. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.

26. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE. ANY CORRECTIVE WORK SHALL BE COMPLETED AT THE SOLE COST OF THE CONTRACTOR.

ELECTRICAL NOTES:

1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY MOBILITIE CM AS SOON AS POSSIBLE, AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE MOBILITIE CM HAS DIRECTED THE CORRECTIVE ACTIONS TO BE TAKEN.

2. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. ALL (E) CONDITIONS OF ELECTRICAL EQUIP., ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF THEIR BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM.

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC, ALL CODES AND ORDINANCES OF THE LOCAL JURISDICTION, AND POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT ARE NOT BE LIMITED TO:

   A) UL – UNDERWRITERS LABORATORIES
   B) NEC – NATIONAL ELECTRICAL CODE
   C) NEMA – NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
   D) OSHA – OCCUPATIONAL SAFETY AND HEALTH ACT
   E) SBC – STANDARD BUILDING CODE
   F) NFPA – NATIONAL FIRE PROTECTION AGENCY
   G) ANSI – AMERICAN NATIONAL STANDARDS INSTITUTE
   H) IEEE – INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   I) ASTM – AMERICAN SOCIETY FOR TESTING MATERIALS

4. REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, AND CONFIRM WITH MOBILITE CM ANY SIZES AND LOCATIONS WHEN NEEDED.

5. (E) SERVICES: CONTRACTOR SHALL NOT INTERRUPT (E) SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.

6. CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE MOBILITIE CM, PRIOR TO BEGINNING ANY WORK.

7. MINIMUM WIRE SIZE SHALL BE #12 AWG, NOT INCLUDING CONTROL WIRING, UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION, UNLESS OTHERWISE NOTED.

8. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.

9. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.

10. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTH BY APPLICANT.

11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY FUNCTIONAL AND SHALL BE APPROVED BY THE MOBILITIE CM AND LOCAL JURISDICTION. ANY DEFICIENCIES SHALL BE CORRECTED BY AN ELECTRICAL CONTRACTOR AT THE SOLE COST OF THE CONTRACTOR.

12. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.

mobilitie

PROJECT NO:	SFLB005916
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-25-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 88602 9/26/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90X5RKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

ELECTRICAL NOTES CONT'D

13. THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED BY THE CONTRACTOR WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.

14. CONTRACTOR SHALL PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.

15. DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO NOTES AND REQUIREMENTS 'EXCAVATION, AND BACKFILLING.

16. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.

17. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURER'S CATALOG INFORMATION OF ANY/ALL EQUIPMENT AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE MOBILITE CM PRIOR TO INSTALLATION.

18. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE MOBILITE CM UPON FINAL ACCEPTANCE.

19. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES; ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

20. DISCONNECT SWITCHES SHALL BE UL-RATED, H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.

21. ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND KNOWN AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOSED COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED – NO SUBSTITUTIONS.

22. RACEWAYS: CONDUIT SHALL BE SCHEDULE 80 PVC MEETING OR EXCEEDING NEMA TC2 – 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS – 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'COLD GALV'.

23. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.

24. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THWN INSULATION, UNLESS OTHERWISE NOTED, 600 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 6 AWG. USE STRANDED CONDUCTORS FOR WIRE ABOVE NO. 6 AWG.

25. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 6 AWG AND LARGER.

26. SERVICE: AS SPECIFIED ON THE DRAWINGS. OWNER OR OWNER'S AGENT WILL APPLY FOR POWER. ALL PROVISIONS FOR TEMPORARY POWER WILL BE OBTAINED BY THE CONTRACTOR.

27. TELEPHONE OR FIBER SERVICE: CONTRACTOR SHALL PROVIDE EMPTY CONDUITS WITH PULL STRINGS AS INDICATED ON DRAWINGS.

28. ELECTRICAL AND TELCO/FIBER RACEWAYS TO BE BURIED A MINIMUM DEPTH OF 30", UNLESS OTHERWISE NOTED.

29. CONTRACTOR SHALL PLACE 6" WIDE DETECTABLE WARNING TAPE AT A DEPTH OF 8" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS. CAUTIONS TAPE TO READ "CAUTION BURIED ELECTRIC" OR "BURIED TELECOM".

30. ALL BOLTS SHALL BE 3-18 STAINLESS STEEL.

GROUNDING NOTES:

1. ALL HARDWARE SHALL BE 3-18 STAINLESS STEEL, INCLUDING LOCK WASHERS. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND, AS SPECIFIED, BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.

2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.

3. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

4. ALL ELECTRICAL AND GROUNDING AT THE POLE SITE SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER.

5. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.

6. GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS, AND OTHER METALLIC COMPONENTS USING #6 GROUND WIRES. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS.

7. ALL GROUND CONNECTIONS SHALL BE #6 AWG, UNLESS OTHERWISE NOTED. ALL WIRES SHALL BE COPPER WITH THHN, UNLESS OTHERWISE NOTED. ALL GROUND WIRE SHALL BE SOLID TIN COATED OR STRANDED GREEN INSULATED WIRE.

8. CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE, 10 OHMS MAXIMUM. PROVIDE SUPPLEMENT GROUNDING RODS AS REQUIRED TO ACHIEVE SPECIFIED OHMS READING. GROUNDING AND OTHER OPTIONAL TESTING WILL BE WITNESSED BY THE MOBILITE CM.

9. NOTIFY ARCHITECT/ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

10. ALL HORIZONTALLY RUN GROUNDING CONDUCTORS SHALL BE INSTALLED A MINIMUM OF 30" BELOW GRADE/ 6" BELOW FROST-LINE IN TRENCH, UNLESS OTHERWISE NOTED.BACK FILL SHALL BE COMPACTED AS REQUIRED BY ARCHITECT/ENGINEER.

11. ALL GROUND CONDUCTORS SHALL BE RUN AS STRAIGHT AND SHORT AS POSSIBLE, WITH A MINIMUM 12" BENDING RADIUS NOT LESS THAN 90 DEGREES.

12. ACCEPTABLE CONNECTIONS FOR GROUNDING SYSTEM SHALL BE:

    A. BURNDY, HY-GRADE U.L. LISTED CONNECTORS FOR OUTDOOR USE OR AS APPROVED BY APPLICANT PROJECT MANAGER.
    B. CADWELD, EXOTHERMIC WELDS (WELDED CONNECTIONS).
    C. ONE (1) HOLE TINNED COPPER COMPRESSION (LONG BARREL) FITTINGS.

13. ALL CRIMPED CONNECTIONS SHALL HAVE EMBOSSED MANUFACTURER'S DIEMARK VISIBLE AT THE CRIMP (RESULTING FROM USE OF PROPER CRIMPING DEVICES) AND WEATHER-PROOFED WITH HEAT SHRINK.

14. ALL CONNECTION HARDWARE SHALL BE TYPE 3-18 STAINLESS STEEL (NOT ATTRACTED TO MAGNETS).

15. ELECTRICAL SERVICE EQUIPMENT GROUNDING SHALL COMPLY WITH NEC, ARTICLE 250-82 AND SHALL BOND ALL (E) AND NEW GROUNDING ELECTRODES. NEW GROUNDING ELECTRODE SHALL INCLUDE BUT NOT LIMITED TO GROUND RODS.

TESTING AND EQUIPMENT TURN UP REQUIREMENTS:

1. RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT TESTING WILL COMPLY WITH CURRENT INDUSTRY STANDARDS AND OR THOSE STANDARDS OF THE EQUIPMENT MANUFACTURER OR PROVIDED TO THE CONTRACTOR PRIOR TO TESTING.

2. CONTRACTOR WILL USE THE APPROPRIATE CALIBRATED TESTING EQUIPMENT IN THE TESTING OF RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT THAT MEET INDUSTRY STANDARDS OF THE MANUFACTURER OR THOSE STANDARDS PROVIDED TO THE CONTRACTOR PRIOR TO TESTING.

3. CONTRACTOR TO VERIFY AND RECORD ALL TEST RESULTS AND PROVIDE THESE RESULTS WITHIN THE FINAL CLOSE OUT PACKAGE.

4. ALL PERSONNEL INVOLVED IN THE TESTING OF RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT WILL BE REQUIRED TO HAVE BEEN TRAINED AND OR CERTIFIED IN THE PROPER TESTING OF RF CABLE, DATA CABLE, RADIO EQUIPMENT AND BACK HAUL EQUIPMENT.

5. ALL TEST RESULTS SHALL BE TIME STAMPED, RECORDED AND PRESENTED PRIOR TO ENERGIZING AND TURN UP OF ANY EQUIPMENT.

6. GPS EQUIPMENT IS NOT TO BE TESTED OR ATTACHED TO ANY CABLING DURING TESTING, DOING SO WILL DAMAGE THE GPS UNIT.

7. PRIOR TO TESTING IF THE CONTRACTOR HAS ANY QUESTIONS ABOUT THE TESTING PROCEDURES THEY ARE TO CALL AND OBTAIN ASSISTANCE FROM A QUALIFIED DESIGNATED TESTING REPRESENTATIVE.

8. EQUIPMENT IS NOT TO BE ENERGIZED UNTIL ALL TESTING HAS BEEN COMPLETED, APPROVED AND THE APPROPRIATE AUTHORITY HAS BEEN NOTIFIED AND GIVES APPROVAL TO ENERGIZE THE EQUIPMENT.

SITE WORK NOTES:

1. DO NOT EXCAVATE OR DISTURB BEYOND THE PROPERTY LINES OR LEASE LINES, UNLESS OTHERWISE NOTED.

2. SIZE, LOCATION AND TYPE OF ANY UNDERGROUND UTILITIES OR IMPROVEMENTS SHALL BE ACCURATELY NOTED AND PLACED ON AS-BUILT DRAWINGS BY GENERAL CONTRACTOR AND ISSUED TO ARCHITECT/ENGINEER AT COMPLETION OF PROJECT.

3. ALL (E) UTILITIES, FACILITIES, CONDITIONS AND THEIR DIMENSIONS SHOWN ON PLANS HAVE BEEN PLOTTED FROM AVAILABLE RECORDS. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATSOEVER AS TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS OR THE MANNER OF THEIR REMOVAL OR ADJUSTMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL (E) UTILITIES AND FACILITIES PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL ALSO OBTAIN FROM EACH UTILITY COMPANY DETAILED INFORMATION RELATIVE TO WORKING SCHEDULES AND METHODS OF REMOVING OR ADJUSTING (E) UTILITIES.

4. CONTRACTOR SHALL VERIFY ALL (E) UTILITIES BOTH HORIZONTALLY AND VERTICALLY PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES OR DOUBTS AS TO THE INTERPRETATION OF PLANS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT/ENGINEER OR MOBILITE CM FOR RESOLUTION AND INSTRUCTION, AND NO FURTHER WORK SHALL BE PERFORMED UNTIL THE DISCREPANCY IS CHECKED AND CORRECTED BY THE ARCHITECT/ENGINEER. FAILURE TO SECURE SUCH INSTRUCTION MEANS CONTRACTOR WILL HAVE WORKED AT THEIR OWN RISK AND EXPENSE. CONTRACTOR SHALL CALL LOCAL UTILITY LOCATE HOT LINE, SUCH AS 811, FOR UTILITY LOCATIONS A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

5. ALL NEW AND (E) UTILITY STRUCTURES ON SITE AND IN AREAS TO BE DISTURBED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISH ELEVATIONS PRIOR TO FINAL INSPECTION OF WORK. ANY COST RELATED TO ADJUSTING (E) STRUCTURES SHALL BE BORNE SOLELY BY THE CONTRACTOR.

6. GRADING OF THE SITE WORK AREA IS TO BE SMOOTH AND CONTINUOUS IN SLOPE AND IS TO FEATHER INTO (E) GRADES AT THE GRADING LIMITS.

7. ALL TEMPORARY EXCAVATIONS FOR THE INSTALLATION OF FOUNDATIONS, UTILITIES, ETC., SHALL BE PROPERLY LAID BACK OR BRACED IN ACCORDANCE WITH CORRECT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REQUIREMENTS.

mobilitie

PROJECT NO:	SFL8003509
DRAWN BY:	RC
CHECKED BY:	SJB

A	09-29-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 68903 9/29/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-2

SITE WORK NOTES CONT'D

8. STRUCTURAL FILLS SUPPORTING PAVEMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM STANDARD PROCTOR DRY DENSITY, UNLESS OTHERWISE NOTED.

9. NEW GRADES NOT IN BUILDING AND DRIVEWAY IMPROVEMENT AREA TO BE ACHIEVED BY FILLING WITH APPROVED CLEAN FILL AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY.

10. ALL FILL SHALL BE PLACED IN UNIFORM LIFTS. THE LIFTS THICKNESS SHOULD NOT EXCEED THAT WHICH CAN BE PROPERLY COMPACTED THROUGHOUT ITS ENTIRE DEPTH WITH THE EQUIPMENT AVAILABLE.

11. ANY FILLS PLACED ON (E) SLOPES THAT ARE STEEPER THAN 10 HORIZONTAL TO 1 VERTICAL SHALL BE PROPERLY BENCHED INTO THE (E) SLOPE AS DIRECTED BY A GEOTECHNICAL ENGINEER.

12. CONTRACTOR SHALL CLEAN ENTIRE SITE AFTER CONSTRUCTION SUCH THAT NO DEBRIS, PAPER, TRASH, WEEDS, BRUSH, EXCESS FILL, OR ANY OTHER DEPOSITS WILL REMAIN. ALL MATERIALS COLLECTED DURING CLEANING OPERATIONS SHALL BE DISPOSED OF OFF-SITE BY THE GENERAL CONTRACTOR.

13. ALL TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH THE IMPROVEMENTS SHALL BE PROTECTED BY THE GENERAL CONTRACTOR.

14. ALL SITE WORK SHALL BE CAREFULLY COORDINATED BY GENERAL CONTRACTOR WITH LOCAL UTILITY COMPANY, TELEPHONE COMPANY, AND ANY OTHER UTILITY COMPANIES HAVING JURISDICTION OVER THIS LOCATION.

ENVIRONMENTAL NOTES:

1. ALL WORK PERFORMED SHALL BE DONE IN ACCORDANCE WITH ISSUED PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF FINES AND PROPER CLEAN UP FOR AREAS IN VIOLATION.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION FOR PROTECTION OF ADJACENT PROPERTIES, ROADWAYS AND WATERWAYS. ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED IN PLACE THROUGH FINAL JURISDICTIONAL INSPECTION & RELEASE OF SITE.

3. CONTRACTOR SHALL INSTALL/CONSTRUCT ALL NECESSARY SEDIMENT/SILT CONTROL FENCING AND PROTECTIVE MEASURES AS REQUIRED BY THE LOCAL JURISDICTION WITHIN THE LIMITS OF SITE DISTURBANCE PRIOR TO CONSTRUCTION.

4. NO SEDIMENT SHALL BE ALLOWED TO EXIT THE PROPERTY. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ADEQUATE MEASURES FOR CONTROLLING EROSION. ADDITIONAL SEDIMENT CONTROL FENCING MAY BE REQUIRED IN ANY AREAS SUBJECT TO EROSION.

5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES WITH SILT AND EROSION CONTROL MEASURES MAINTAINED ON THE DOWNSTREAM SIDE OF SITE DRAINAGE. ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF EROSION WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS AND ANY REPAIRS OF ALL SEDIMENT CONTROL MEASURES INCLUDING SEDIMENT REMOVAL AS NECESSARY.

7. CLEARING OF VEGETATION AND TREE REMOVAL SHALL BE ONLY AS PERMITTED AND BE HELD TO A MINIMUM. ONLY TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED.

8. SEEDING AND MULCHING AND/OR SODDING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROJECT FACILITIES AFFECTING LAND DISTURBANCE.

9. CONTRACTOR SHALL PROVIDE ALL EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED BY LOCAL, COUNTY AND STATE CODES AND ORDINANCES TO PROTECT EMBANKMENTS FROM SOIL LOSS AND TO PREVENT ACCUMULATION OF SOIL AND SILT IN STREAMS AND DRAINAGE PATHS LEAVING THE CONSTRUCTION AREA. THIS MAY INCLUDE, BUT IS NOT LIMITED TO SUCH MEASURES AS SILT FENCES, STRAW BALE SEDIMENT BARRIERS, AND CHECK DAMS.

10. RIP RAP OF SIZES INDICATED SHALL CONSIST OF CLEAN, HARD, SOUND, DURABLE, UNIFORM IN QUALITY STONE FREE OF ANY DETRIMENTAL QUANTITY OF SOFT, FRIABLE, THIN, ELONGATED OR LAMINATED PIECES, DISINTEGRATED MATERIAL, ORGANIC MATTER, OIL, ALKALI, OR OTHER DELETERIOUS SUBSTANCES.

11. GC TO PLACE FILTER MATERIAL AT ALL CATCH BASINS ADJACENT TO CONSTRUCTION SITE TO PREVENT SOLID WASTE CONTAMINATION FROM ENTERING SEWER SYSTEM

FOUNDATION, EXCAVATION AND BACKFILL NOTES:

1. ALL FINAL GRADED SLOPES SHALL BE A MAXIMUM OF 3 HORIZONTAL TO 1 VERTICAL, UNLESS OTHERWISE NOTED.

2. BACKFILL OF POLE SHALL BE PERFORMED IN ONE OF THREE OPTIONS:

   A. PERFERRED: RAINBOW INDUSTRIES POLE SETTING FOAM SHALL BE INSTALLED PER MANUFACTURER SPECS. FOAM SHALL ALWAYS BE USED FOR POOR SOILS.

   B. SECONDARY: CONCRETE (REQUIRES MOBILITIE OR WRITTEN APPROVAL) ALLOWABLE SOIL PRESSURE = 2000 PSF (ASSUMED).
   NON-NATIVE SOILS SHALL BE REMOVE FROM BORE AREA AND SHALL NOT BE REUSED FOR BACKFILL

3. ALL EXCAVATIONS PREPARED FOR PLACEMENT OF CONCRETE SHALL BE OF UNDISTURBED SOILS, SUBSTANTIALLY HORIZONTAL AND FREE FROM ANY LOOSE, UNSUITABLE MATERIAL OR FROZEN SOILS, AND WITHOUT THE PRESENCE OF POUNDING WATER. DEWATERING FOR EXCESS GROUND WATER SHALL BE PROVIDED WHEN REQUIRED. COMPACTION OF SOILS UNDER CONCRETE PAD FOUNDATIONS SHALL NOT BE LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR THE SOIL IN ACCORDANCE WITH ASTM D1557.

10. CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC OR UNSUITABLE MATERIAL. IF ADEQUATE BEARING CAPACITY IS NOT ACHIEVED AT THE DESIGNED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION SHALL BE FILLED WITH CONCRETE OF THE SAME TYPE SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. ANY STONE SUB BASE MATERIAL, IF USED, SHALL NOT SUBSTITUTE FOR REQUIRED THICKNESS OF CONCRETE.

11. ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH PRIOR TO BACK FILLING. BACK FILL SHALL CONSIST OF APPROVED MATERIALS SUCH AS EARTH, LOAM, SANDY CLAY, SAND AND GRAVEL, OR SOFT SHALE, FREE FROM CLODS OR LARGE STONES OVER 2 1/2" MAX DIMENSIONS. ALL BACK FILL SHALL BE PLACED IN COMPACTED LATERS.

12. ALL FILL MATERIALS AND FOUNDATION BACK FILL SHALL BE PLACED IN MAXIMUM 8" THICK LIFTS BEFORE COMPACTION. EACH LIFT SHALL BE WETTED IF REQUIRED AND COMPACTED TO NOT LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR SOIL IN ACCORDANCE WITH ASTM D1557.

13. NEWLY PLACED CONCRETE FOUNDATIONS SHALL CURE A MINIMUM OF 72 HRS PRIOR TO BACK FILLING.

14. FINISHED GRADING SHALL BE SLOPED TO PROVIDE POSITIVE DRAINAGE AND PREVENT STANDING WATER. THE FINAL (FINISH) ELEVATION OF SLAB FOUNDATIONS SHALL SLOPE AWAY IN ALL DIRECTIONS FROM THE CENTER. FINISH GRADE OF CONCRETE PADS SHALL BE A MAXIMUM OF 4 INCHES ABOVE FINAL FINISH GRADE ELEVATIONS. PROVIDE SURFACE FILL GRAVEL TO ESTABLISH SPECIFIED ELEVATIONS WHERE REQUIRED.

15. NEWLY GRADED GRAVEL SURFACE AREAS TO RECEIVE GRAVEL SHALL BE COVERED WITH GEOTEXTILE FABRIC TYPE: TYPAR-3401 AS MANUFACTURED BY TYPAR GEOSYNTHETICS OR AN APPROVED EQUIVALENT, SHOWN ON PLANS. THE GEOTEXTILE FABRIC SHALL BE BLACK IN COLOR TO CONTROL THE REOURRENCE OF VEGETATIVE GROWTH AND EXTEND TO WITHIN 1 FOOT OUTSIDE THE SITE FENCING OR ELECTRICAL GROUNDING SYSTEM PERIMETER WHICH EVER IS GREATER. ALL FABRIC SHALL BE COVERED WITH A MINIMUM OF 4" DEEP COMPACTED STONE OR GRAVEL AS SPECIFIED, I.E. FDOT TYPE NO. 57 FOR FENCED COMPOUND; FDOT TYPE NO. 67 FOR ACCESS DRIVE AREA, UNLESS OTHERWISE NOTED.

16. IN ALL AREAS TO RECEIVE FILL: REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SUCH THAT FILL MATERIAL WILL BIND WITH (E)/PREPARED SOIL SURFACE.

17. WHEN SUB GRADE OR PREPARED GROUND SURFACE HAS A DENSITY LESS THAN THAT REQUIRED FOR THE FILL MATERIAL, SCARIFY THE GROUND SURFACE TO DEPTH REQUIRED. PULMERIZE, MOISTURE-CONDITION AND/OR AERATE THE SOILS AND RECOMPACT TO THE REQUIRED DENSITY PRIOR TO PLACEMENT OF FILLS.

18. IN AREAS WHICH (E) GRAVEL SURFACING IS REMOVED OR DISTURBED DURING CONSTRUCTION OPERATIONS, REPLACE GRAVEL SURFACING TO MATCH ADJACENT GRAVEL SURFACING AND RESTORED TO THE SAME THICKNESS AND COMPACTION AS SPECIFIED. ALL RESTORED GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES.

19. (E) GRAVEL SURFACING MAY NOT BE REUSED.

20. GRAVEL SUB SURFACE SHALL BE PREPARED TO REQUIRED COMPACTION AND SUB GRADE ELEVATIONS BEFORE GRAVEL SURFACING IS PLACED AND/OR RESTORED. ANY LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED AND ANY DEPRESSIONS IN THE SUB GRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL SHALL NOT BE USED FOR FILLING DEPRESSIONS IN THE SUB GRADE.

21. PROTECT (E) GRAVEL SURFACING AND SUB GRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING "MATTS" OR OTHER SUITABLE PROTECTION DESIGNED TO SPREAD EQUIPMENT LOADS AS MAY BE NECESSARY. REPAIR ANY DAMAGE TO (E) GRAVEL SURFACING OR SUB GRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTORS OPERATIONS.

22. DAMAGE TO (E) STRUCTURES AND/OR UTILITIES RESULTING FROM CONTRACTORS NEGLIGENCE SHALL BE REPAIRED AND/ OR REPLACED TO THE OWNERS SATISFACTION AT NO ADDITIONAL COST TO THE CONTRACT.

23. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES AT NO ADDITIONAL COST TO THE CONTRACT.

mobilitie

PROJECT NO:	9FLB66669
DRAWN BY:	RC
CHECKED BY:	SJB

A	08-28-15	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray

PROFESSIONAL ENGINEER

FL LICENSE: 69932 3/20/15

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DRAWING

PRELIMINARY

JA90XSRK06

TALLAHASSEE, FL 32317

PROPOSED 40'-0" WOOD POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-3

#	TYPE	NAME	ITEMS TO IDENTIFY	QUALITY/INSTALL REQUIREMENTS	Comment
1	PIC	PRECONSTRUCTION	[illegible]	[illegible]	
2	PIC	FOUNDATION / SOCKET	[illegible]	[illegible]	
3	PIC	POLE VIEW #1	[illegible]	[illegible]	
	PIC	POLE VIEW #2	[illegible]	[illegible]	
4	PIC	GROUND ROD(S)	[illegible]	[illegible]	
5	PIC	COMPONENT GROUNDING	[illegible]	[illegible]	
6	PIC	POWER METER	[illegible]	[illegible]	
7	PIC	POWER PANEL #1	[illegible]	[illegible]	
	PIC	POWER PANEL #2	[illegible]	[illegible]	
8	PIC	EQUIPMENT (MM RADIO)	[illegible]	[illegible]	
9	PIC	EQUIPMENT (RRH)	[illegible]	[illegible]	
10	PIC	EQUIPMENT (DIPLEX)	[illegible]	[illegible]	
11	PIC	CABLES (DC)	[illegible]	[illegible]	
12	PIC	CABLES (RF)	[illegible]	[illegible]	
13	PIC	ANTENNA (GPS)	[illegible]	[illegible]	
14	PIC	ANTENNA (RF)	[illegible]	[illegible]	
15	PIC	ANTENNA (MW)	[illegible]	[illegible]	
16	PIC	RF WARNING SIGN	[illegible]	[illegible]	
17	PIC	POST CONSTRUCTION	[illegible]	[illegible]	
18	PIC	ASSET TRACKING	[illegible]	[illegible]	

#	TYPE	NAME	DESCRIPTION	QUALITY/INSTALL REQUIREMENTS	
19	DOC	TAPE DROP FORM	[illegible]	[illegible]	
20	DOC	SWEEP TEST	[illegible]	[illegible]	
21	DOC	FIBER LIGHT TEST	[illegible]	[illegible]	

#	TYPE	NAME	DESCRIPTION	QUALITY/INSTALL REQUIREMENTS
1	WCS	SAR REQUEST	[illegible]	[illegible]
2	DATA	CIVIL COMPLETE	[illegible]	[illegible]
3	DATA	RM COMPLETE	[illegible]	[illegible]
4	DOC	REDLINES	[illegible]	[illegible]
5	PIC	[illegible]	[illegible]	[illegible]

BASIC INSTRUCTION:

1. ALL PHOTOS SHOULD BE TAKEN OF THE EQUIPMENT FINAL CONFIGURATION
2. PHOTO RESOLUTION SHOULD BE 1600X1200
3. GPS TRACKING SHOULD BE TURNED ON.
4. TINY SCAN APP SHOULD BE USED TO CAPTURE DOCUMENTATION REQUIREMENTS.
5. ANY NOT APPLICABLE REQUIREMENTS SHOULD BE N/A. DO NOT LEAVE BLANK DELIVERABLES.
6. ALL PHOTO MUST BE CLEAR.
7. ALL PHOTO MUST HAVE DATE AND TIME STAMPS.
8. MUST BE ABLE TO READ SERIAL NUMBERS FROM PHOTO REQUIREMENTS.
9. COVER PAGE ON CCSA MUST BE FILLED OUT.

mobilitie

PROJECT NO: 9FLB005539
DRAWN BY: RC
CHECKED BY: SJB

A	10-25-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

FL LICENSE: 58952 3/28/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PRELIMINARY

JA90XSRKDB
TALLAHASSEE, FL 32317
PROPOSED 40'-0" WOOD POLE

SHEET TITLE
CLOSE-OUT

SHEET NUMBER
CO-1

TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Information

Project Name: Utility Pole ID: 9FLB003697

Location Address: ROW of 683 W Virgina Street (30.44572, -84.293236)

Intersecting Streets: W Virginia ST & Raven ST

Point of commencement: W Virginia Street

Point of completion: W Virginia Street

Length of Installation: N/A

Project Description: Install backhaul transport equipment on an existing utility pole in the ROW.

Applicant Information

Applicant Name: Mobilitie, LLC

Contact Person: Megan Sikes Title: NRE Manager

Mailing Address: 3475 Piedmont Rd. Atlanta, GA 30214

Phone Number: (404) 989-8380 Cell Number:

Email Address: megan.sikes@mobilitie.com

Contractor Information

Contractors License No.: CGC1522704

Contractor/Company: TTS

Contact Person: Jason Gillis Title:

Mailing Address: 9335 Industrial Trace, Alpharetta, GA 30004

Phone Number: (770) 521-9137 Cell Number:

24 hour Emergency Contact Person: Cell Number:

Email Address:

Agent Information

Agent Name:

Contact Person:

Mailing Address:

Phone Number: Cell Number:

Email Address:

CITY OF TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Type and Construction Method, Circle all that apply

Cable:	Cut	Bore	Overhead
Electric:	Cut	Bore	Overhead
Telephone:	Cut	Bore	Overhead
Gas:	Cut	Bore	
Sewer:	Cut	Bore	
Water:	Cut	Bore	
Curb:	Demo	Construct	
Asphalt:	Demo	Construct	
Sidewalk:	Demo	Construct	
Driveway:	New	Reconstruct	
Drainage:	Connection		
Sign:	Permanent	Temporary	illuminated, electric permit no:_____

Fiber Optics

1. Does the installation provide local Connectivity? Yes No
   a. If YES, Is a Franchise Agreement in place with the City? Yes No
   b. If YES, Provide the date of the agreement. _____
   c. If NO, Describe the purpose of the installation, so a determination can be made if a Franchise agreement is required._____

Boring

Boring type:_____

How many bore crossings:

_____Underground Electric
_____Gas
_____Potable Water
_____Sanitary Sewer Mains & Laterals
_____Storm Sewer
_____Roads
_____Driveways
_____Sidewalks

Submit preconstruction videos of sanitary sewer mains and laterals and storm sewer lines crossing the bore.

I (print name) Megan Sikes do herby make application to the City of Tallahassee for a permit to perform the above noted construction in, on, or under the public streets of the City of Tallahassee. By my signature, I certify that I have verified the existence and location of all existing utilities within the proposed construction area with the appropriate utility or service provider in compliance with the "Specification for Construction within the City of Tallahassee Right of Way" and sound engineering practices. (Copies of the noted specifications may be obtained from the City Streets and Drainage Division)

Signature of Applicant: Megan Sikes Date:_____

1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
info@pointtopointsurvey.com
www.P2PLS.com

FAA 1-A SURVEY CERTIFICATION

Applicant: **MOBILITIE, LLC**
660 NEWPORT CENTER DRIVE
SUITE 200
NEWPORT BEACH, CA 92660

Site Name: **"JA90XSRKBC"**

Horizontal Datum Source:
☒ Ground survey ☐ GPS survey

Vertical Datum Source:
☒ NAVD 88 ☐ NGVD 29 ☐ GPS survey

Structure Type:
☒ New Pole ☐ Existing Tower ☐ Roof Top ☐ Water Tank ☐ Smokestack

CENTER OF PROPOSED POLE:

Latitude: 30°26'44.59" NAD 83
Longitude: -84°17'35.65" NAD 83
Ground Elevation: 84.3 feet AMSL NAVD 88

CERTIFICATION: I certify that the latitude of 30°26'44.59" and the longitude of -84°17'35.65" are accurate to within +/- 20 feet horizontally, and that the site elevation of 84.3 feet AMSL is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are based on the North American Datum of 1983 (NAD 83) and are expressed in degrees, minutes and seconds to the nearest hundredth of a second. The vertical datum (heights) are based on the North American Vertical Datum of 1988 (NAVD 88) and are determined to the nearest tenth of a foot.

Surveyor Signature/Seal: _____ **(SEAL)**
Printed Name: G. Darrell Taylor
Professional Surveyor #: 6904
Company: Point to Point Land Surveyors, Inc
Phone: 678-565-4440
Date: July 22, 2016

G. DARRELL TAYLOR
License Number
6904
STATE OF FLORIDA
Professional Surveyor and Mapper

E:\Dropbox (Point To Point)\P2P Current Jobs\2015\160388-JA90XSRKBC\160388 1A.doc

SITE INFORMATION

LATITUDE = 30°26'44.59" (NAD 83)
LONGITUDE = -84°17'35.68" (NAD 83)
AT CENTER PROPOSED POLE

ELEVATION AT CENTER OF PROPOSED POLE = 84.3' A.M.S.L.

UTILITY OWNERS IN AREA

1. CITY OF TALLAHASSEE
2. BAI COMMUNICATIONS
3. CITY OF TALLAHASSEE TRAFFIC
4. SOUTHERN LIGHT, LLC
5. CENTURYLINK
6. COMCAST TALLAHASSEE

GENERAL NOTES

THIS SPECIFIC PURPOSE SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY. THIS SPECIFIC PURPOSE SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF MOBILITIE, LLC AND EXCLUSIVELY FOR THE TRANSFERRAL OF THE PROPOSED LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AS AN EXHIBIT OR EVIDENCE IN THE FEE SIMPLE TRANSFERRAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREOF. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND OLD DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

THIS SPECIFIC PURPOSE SURVEY WAS PREPARED WITHOUT BENEFIT OF A TITLE REPORT WHICH MAY REVEAL ADDITIONAL CONVEYANCES, EASEMENTS, OR RESTRICTIONS NOT SHOWN HEREON.

THE FIELD DATA UPON WHICH THIS SPECIFIC PURPOSE SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 25,000+ FEET AND AN ANGULAR ERROR OF 5.0" PER ANGLE POINT AND WAS ADJUSTED USING LEAST SQUARES.

EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 SURVEYING GROWS PRISM (DATE OF LAST FIELD VISIT: 7/18/2016)

SITE CONTOURS AND SPOT ELEVATIONS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE ADJUSTED TO NAVD 88 DATUM COMPUTED USING GEOID 12B AND HAVE A VERTICAL ACCURACY OF ± 0.5'. CONTOURS OUTSIDE THE IMMEDIATE SITE AREA ARE APPROXIMATE.

BEARINGS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE BASED ON GRID NORTH NAD 83 FLORIDA NORTH.

THE PROPOSED POLE IS LOCATED IN A SPECIAL FLOOD AREA ZONE "AE" BFE=88' AS PER F.I.R.M. COMMUNITY PANEL NO. 12073C0283F DATED AUGUST 18, 2009.

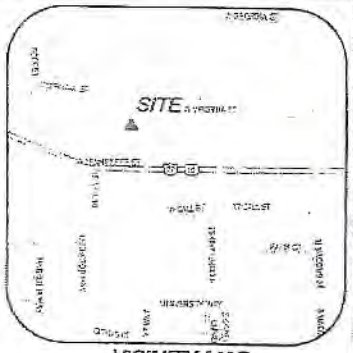
NO WETLAND AREAS HAVE BEEN INVESTIGATED BY THIS SPECIFIC PURPOSE SURVEY.

ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS.

ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ABOVE GROUND FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT ANY UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER PRESENCE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ANY UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ANY UNDERGROUND UTILITIES.

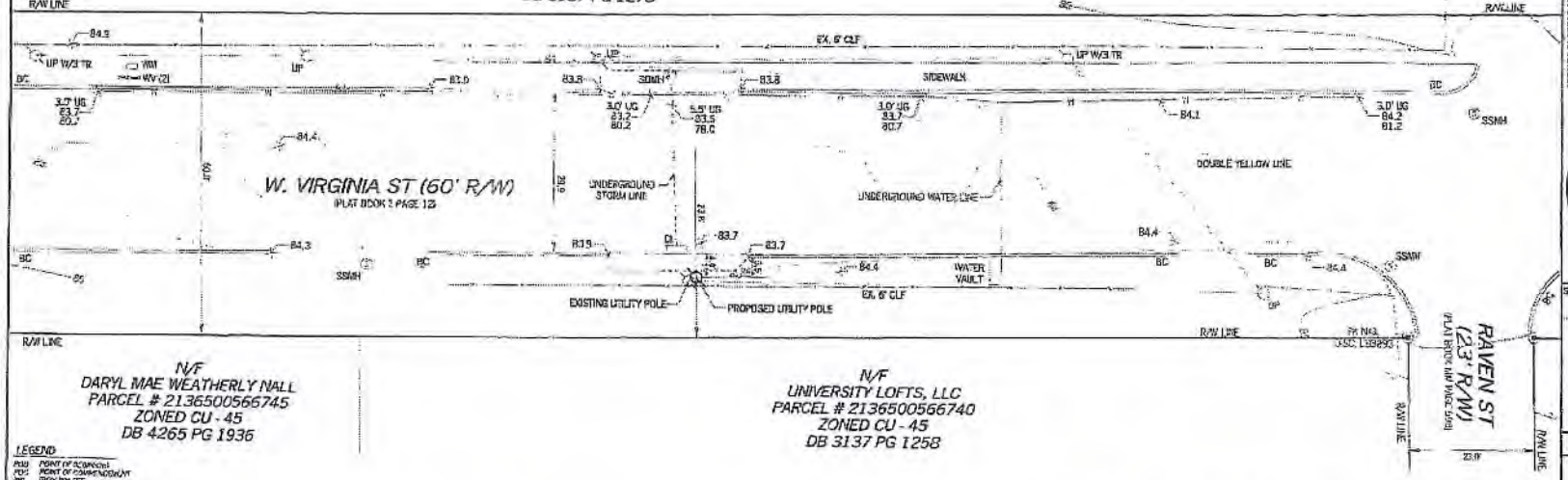
ADDITIONS OR DELETIONS TO THIS SURVEY MAP BY OTHER THAN THE SIGNING PARTY IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY.

ORIGINAL SURVEY IS KEPT ON FILE IN THE SURVEYORS OFFICE.



VICINITY MAP
NOT TO SCALE

NOTE: ENTIRE SITE LOCATED IN ZONE "AE" (BFE = 88) PER F.I.R.M. PANEL 12073C0283F



LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
PKS	PARK NAIL SET
PK	PARK NAIL FOUND
CMF	CONCRETE MONUMENT FOUND
UP	UTILITY POLE
SSMH	SANITARY SEWER MANHOLE
SDMH	STORM DRAIN MANHOLE
INV	INVERT
EP	EDGE OF PAVEMENT
TC	TOP OF CURB
BC	BACK OF CURB
OU	OVERHEAD UTILITY
TR	TRANSFORMER
SWGT	SINGLE WING CATCH BASIN
DWGT	DOUBLE WING CATCH BASIN
CLF	CHAIN LINK FENCE
WV	WATER VALVE
WM	WATER METER
N/F	NOW OR FORMERLY

GRAPHIC SCALE IN FEET
SCALE: 1" = 20'

I HEREBY CERTIFY THAT THIS MAP IS CORRECT AND WAS DRAWN UNDER MY DIRECT SUPERVISION. ANY VISIBLE ENCROACHMENTS ARE SHOWN HEREON.

C. DARRELL TAYLOR, FLORIDA REGISTERED LICENSED SURVEYOR NO. 6904

DATE: 7/22/2016

THIS MAP IS NOT A CERTIFIED SURVEY AND WAS NOT SEEN REVIEWED BY A LOCAL GOVERNMENT AGENCY FOR COMPLIANCE WITH ANY APPLICABLE LAND DEVELOPMENT REGULATIONS. THIS MAP IS ONLY INTENDED FOR THE PARTIES AND PURPOSES SHOWN. THIS MAP IS NOT FOR RECORDATION. NO TITLE REPORT PROVIDED.

C. DARRELL TAYLOR
LICENSED SURVEYOR
6904
STATE OF FLORIDA

NO.	DATE	REVISION

SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT LAND SURVEYORS
1010 Pennsylvania Avenue
McDonough, GA 30253
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

mobilitie
550 NEWPORT CENTER DRIVE
SUITE 200
NEWPORT BEACH, CA 92660

"JA90XSRKBC"

SECTION 36, TOWNSHIP 2S NORTH, RANGE 1 WEST, CITY OF TALLAHASSEE, LEON COUNTY, FLORIDA

DRAWN BY: EJL
CHECKED BY: JRL
APPROVED: C. DYER
DATE: JULY 22, 2016
P2P JOB #: G160389

SHEET: 1 OF 1

SITE ID: 9FLB003697
JA90XSRKBC
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE INFORMATION

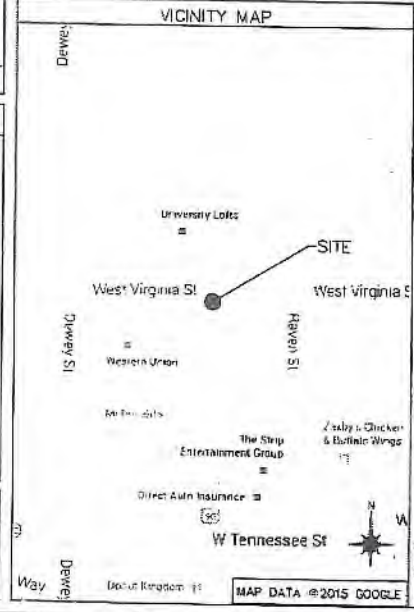
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS ST:	W VIRGINIA ST & RAVEN ST
APPLICANT:	MOBILITIE, LLC
APPLICANT ADDRESS:	3475 Piedmont Rd. NE, Suite 1000 Atlanta, GA 30305
LATITUDE:	30° 26' 44.59" N (30.445720)
LONGITUDE:	84° 17' 35.65" W (-84.293236)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 89' AMSL
COUNTY:	LEON COUNTY
JURISDICTION:	CITY OF TALLAHASSEE

BEFORE SCALING:

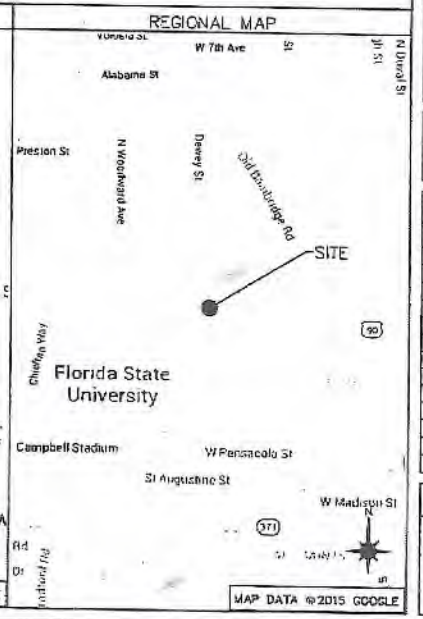
CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



DIG ALERT

811 know what's below. Call before you dig.

TWO WORKING DAYS BEFORE YOU DIG

PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON AN EXISTING WOOD UTILITY POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

– INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON AN EXISTING WOOD UTILITY POLE

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX

SHEET NO:	SHEET TITLE
0.0	TITLE SHEET
1.0	SITE PLAN & EXHIBIT PHOTO
2.0	POLE ELEVATIONS
2.1	POLE ELEVATIONS
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	ANTENNA & EQUIPMENT DETAILS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
6.0	TRAFFIC CONTROL PLAN
6.1	TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

ARCHITECT/ENGINEER

JACOBS ENGINEERING GROUP, INC.
5449 BELLS FERRY ROAD
ACWORTH, GA 30102
CONTACT: KARL KRATINA
PROJECT MANAGER
TEL: (678) 460-1416
FAX: (770) 701-2501

mobilitie

PROJECT NO:	ER000201
DRAWN BY:	L. TARUBAL
CHECKED BY:	N. MICHELENA

A	06.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JA90XSRKBC
9FLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

TITLE SHEET

SHEET NUMBER

0.0

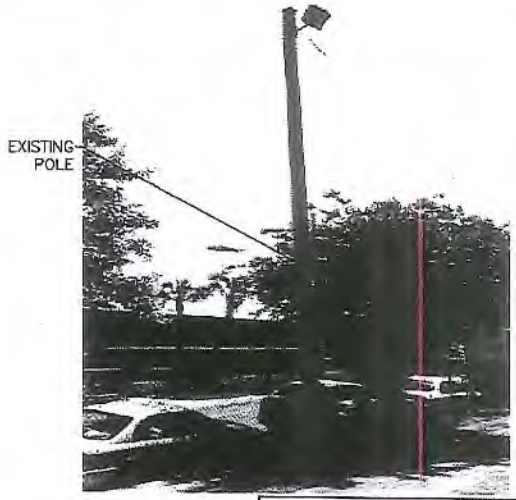
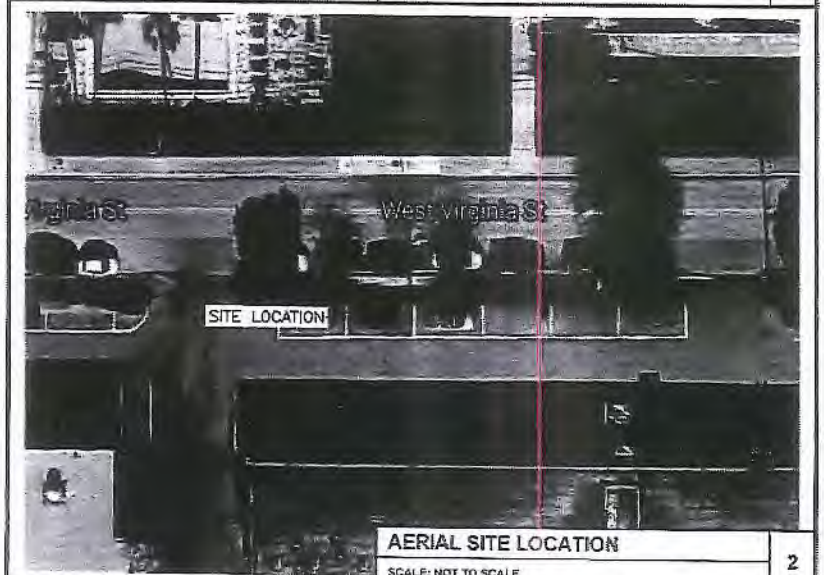


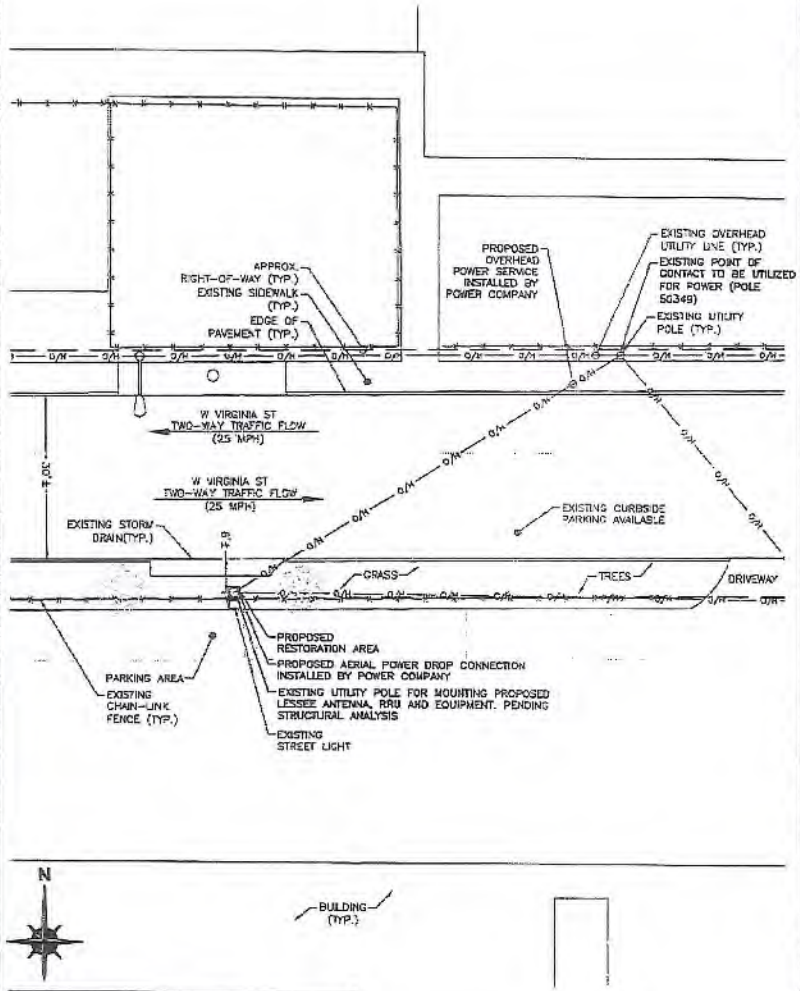
EXHIBIT PHOTO 1

SCALE: NOT TO SCALE



AERIAL SITE LOCATION 2

SCALE: NOT TO SCALE



NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

ENLARGED SITE PLAN 3

SCALE: 1"=20'-0" (1"=10'-0" ON 22"x34" SHEET)

mobilitie

PROJECT NO:	ER500201
DRAWN BY:	L. TARUBAL
CHECKED BY:	M. MICHELENA

A	06.15.15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XSRKBC
9FL8003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

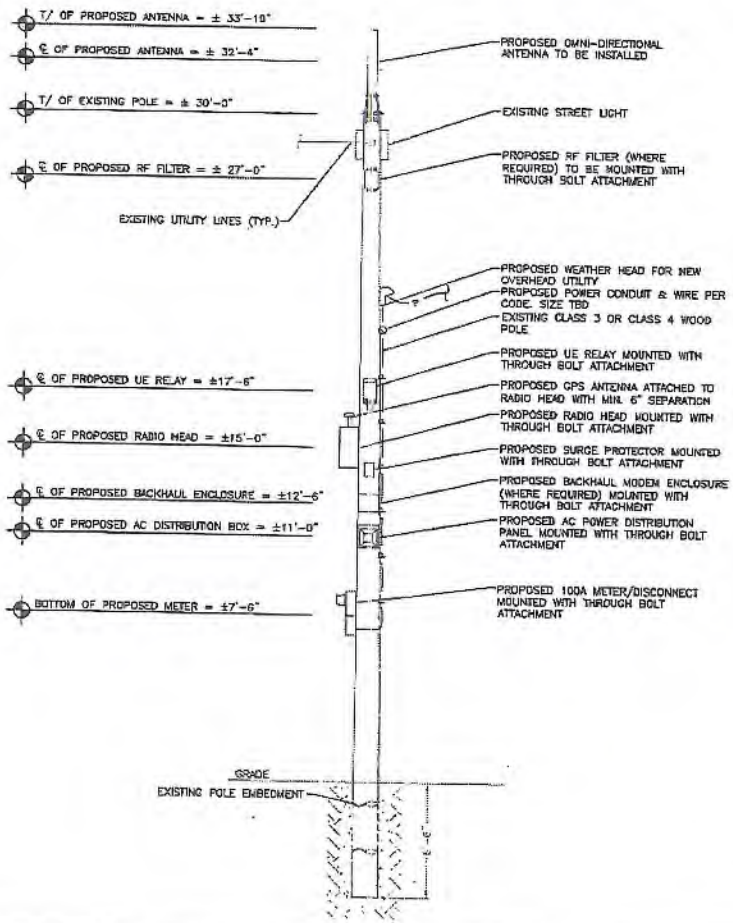
SHEET TITLE

SITE PLAN & EXHIBIT PHOTO

SHEET NUMBER

1.0

NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.



NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (15kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.7" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.8" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 8.5" X 3.81"	14 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.44" X 4.69" X 3.5"	TBD
1	REJECT FILTER	13.6" X 8.1" X 2.4"	7.7 LBS

PROPOSED FRONT POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie

PROJECT NO:	ER000201
DRAWN BY:	L. TARUBAL
CHECKED BY:	M. MICHELENA

1	06.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XSRKBC
8FLBC05697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

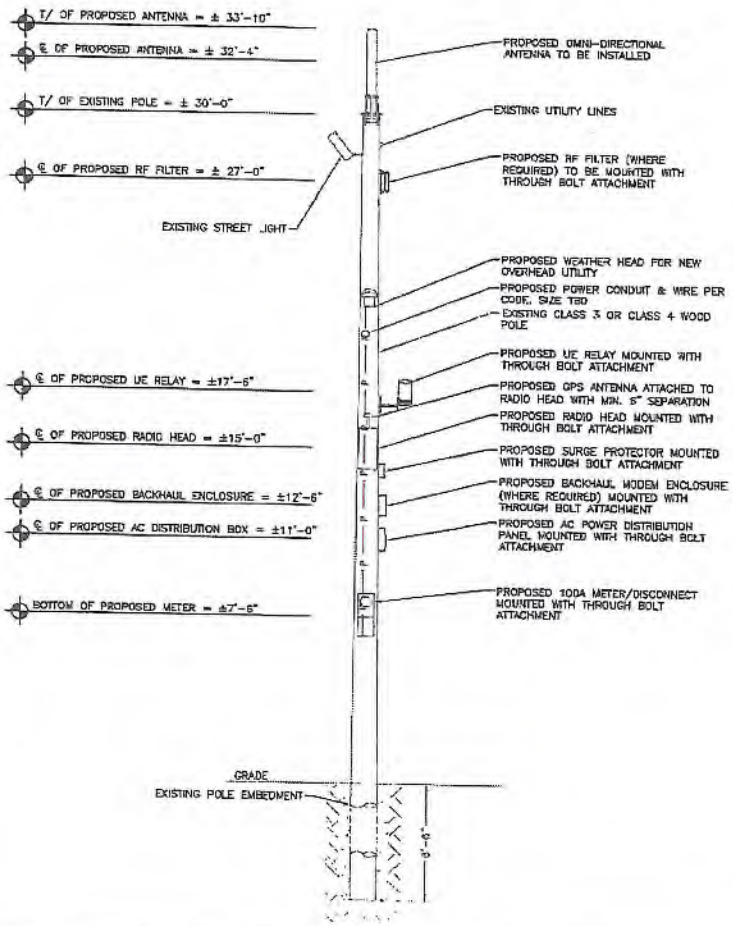
SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.0

NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.



NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 6" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.7" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 8.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.5" DIAMETER	0.3 LBS
1	AC DISTRIBUTION	9.25" X 9.5" X 3.81"	14 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.44" X 4.88" X 3.5"	TBD
1	REJECT FILTER	13.6" X 8.1" X 2.4"	7.7 LBS

PROPOSED SIDE POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie

PROJECT NO:	ERS30201
DRAWN BY:	L. TARUDAL
CHECKED BY:	M. MICHELENA

A	06.16.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

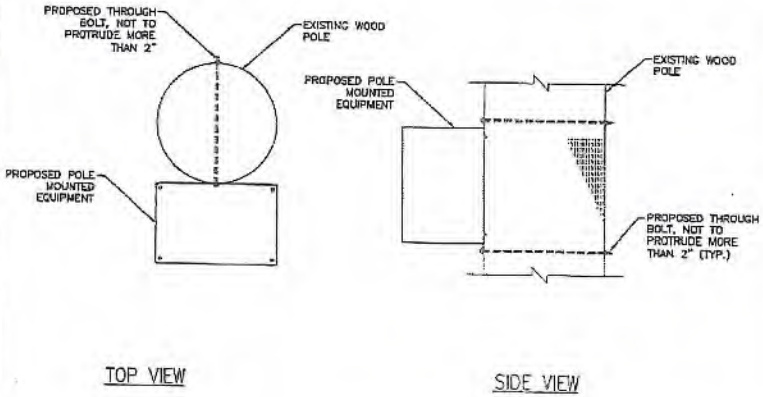
JA00XSRKBC
BFLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

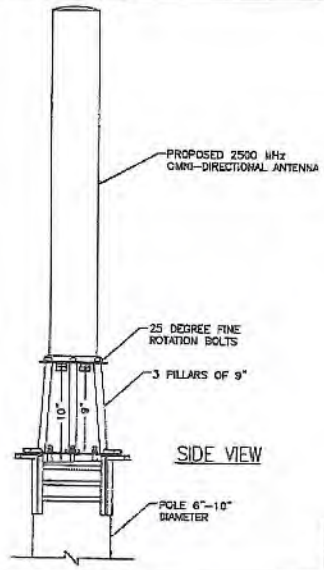
2.1



EQUIPMENT MOUNTING DETAIL

SCALE: NOT TO SCALE

1



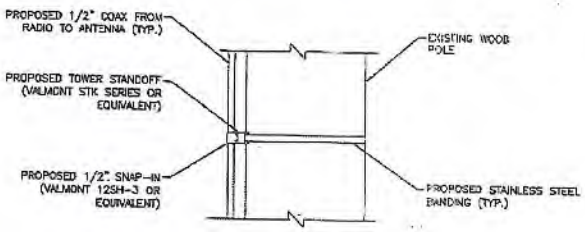
NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 3" TO 10" DIAMETER.
2. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION.

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3



NOTE:
SPACE SNAP-INS PER CABLE MANUFACTURER'S SPECIFICATIONS

CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE

2

ANTENNA SIGNAGE:
ON WOOD POLES – SIGN ON ALUMINUM WITH SS SCREW TO THE POLE
ON METAL POLES – ADHESIVE VINYL OR PLACARD STRAPPED WITH SS TIES
ON CONCRETE / COMPOSITE – PLACARD STRAPPED WITH SS TIES
SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S)
SIZE APPROX. 6" x 5.5"

OWNER / OPERATOR NOTE:
SITE ID LABEL TO BE AFFIXED WITH TZe524t LABELING TAPE OR EQUIVALENT BLACK ON WHITE LABELING TAPE OF AT LEAST 18mm WIDTH WITH EXTRA-STRENGTH ADHESIVE. USE ANY COMPATIBLE P-TOUCH LABEL MAKER. TEXT SHOULD BE PRINTED IN ALL CAPS WITH A MINIMUM HEIGHT OF 1/2".

POLE MOUNTED SIGNS

SCALE: NOT TO SCALE

4

mobilitie

PROJECT NO:	ER500269
DRAWN BY:	L. TARUBAL
CHECKED BY:	M. MICHELENA

A	05.15.18	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

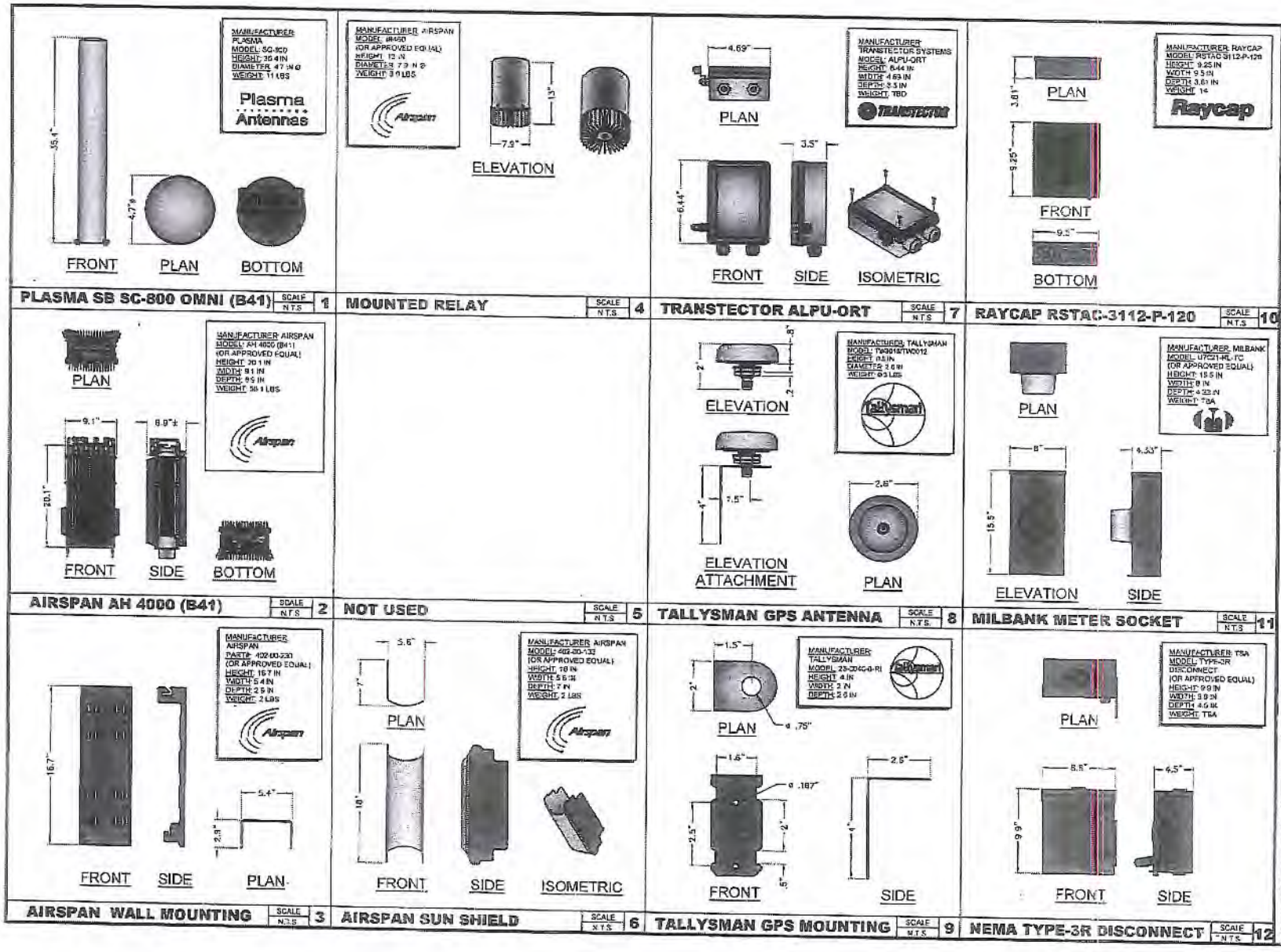
JAS0XSRKSC
9FLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

ANTENNA & EQUIPMENT MOUNTING DETAILS

SHEET NUMBER

3.0



mobilitie

PROJECT NO: ER600201
DRAWN BY: L. TARUBAL
CHECKED BY: M. MICHELENA

A	08.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA80XSRKBC
9FLB003997
W VIRGINIA ST S
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE
ANTENNA & EQUIPMENT DETAILS

SHEET NUMBER
3.1

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS UTILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT.
5. ALL CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
6. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:
   - N.E.C. NATIONAL ELECTRICAL CODE
   - A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
   - I.E.E.E. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   - A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS
   - N.E.M.A. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
   - U.L. UNDERWRITERS' LABORATORIES, INC.
   - N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

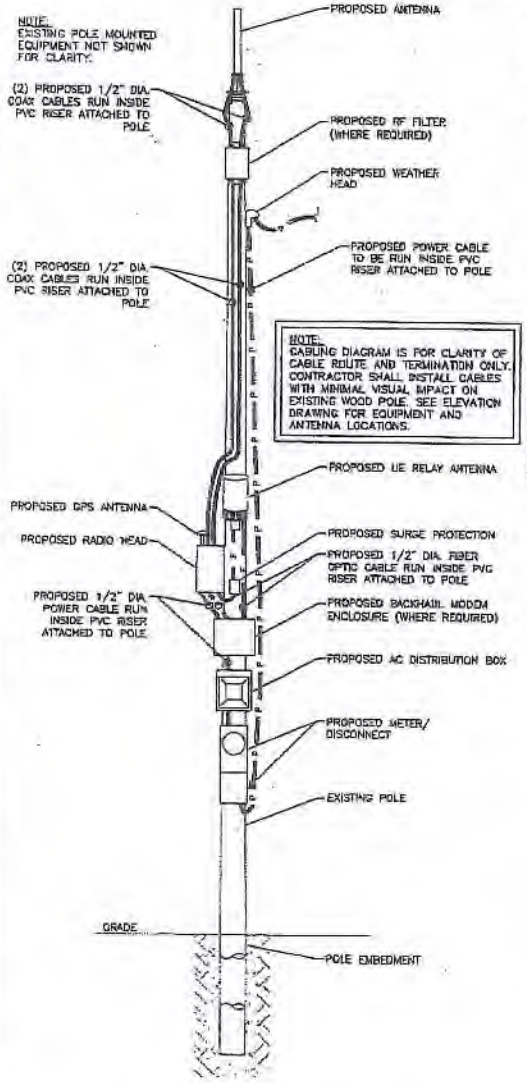
1. WIRING OF EVERY KIND MUST BY INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL, AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ARCHITECT/ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY.



CABLING NOTES:

A) WOOD, CONCRETE AND EXISTING METALLIC POLES

I) FROM GRADE LINE TO 11'-0" ABOVE GRADE, ALL CABLES/CONDUCTORS EXCEPT GROUNDING CONDUCTOR MUST RUN IN RIGID GALVANIZED STEEL CONDUIT (RGS)

II) GROUNDING CONDUCTORS IN EXPOSED LOCATIONS MUST BE INSTALLED IN PVC.

III) IN EARTH INSTALL PVC CONDUIT FOR BACKHAUL AND ELECTRICAL SERVICE. TRANSITION TO RGS AT GRADE LINE.

IV) ABOVE 11'-0" ALL CABLES (POWER, ETHERNET, COAXIAL) MUST RUN IN PVC UTILITY POLE RISER.

(1) AT MAJOR EQUIPMENT, EXTEND UTILITY DUCT IMMEDIATELY ADJACENT TO THE EQUIPMENT. INSTALL CABLES IN THE UTILITY POLE RISER CREATING CABLE DRIP LOOPS NOT LESS THAN THE CABLE BENDING RADIUS.

(2) INSIDE THE UTILITY POLE RISER, UTILIZE ½" COAX BLOCKS WITH LAG SCREWS TO SUPPORT COAX, RADIO AND MW POWER, RF COAX, AND ETHERNET CABLES TO WITHIN 12" OF THE EQUIPMENT BEING SERVED AND ON INTERVALS NOT TO EXCEED 6'.

V) FOR UNDERGROUND NFG/PUBLIC BACKHAUL, ROUTE ETHERNET CABLE IN CONDUIT UP THE POLE AND ENTER THE UTILITY POLE RISER. SEAL EXPOSED END OF CONDUIT WITH A CABLE TERMINATION FITTING.

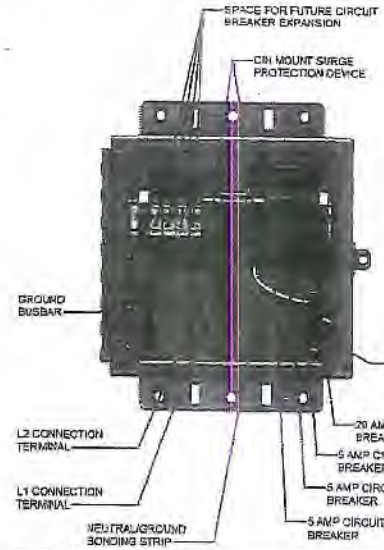
VI) BY APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX. EXAMPLE: UTILITY-REQUIRED DISCONNECT ON POLE W/ AC DISTRIBUTION BOX ON OPPOSITE SIDE OF POLE.

B) NEW METALLIC POLES

I) PROCURE NEW POLES WITH SUITABLE HAND HOLES SUCH THAT HAND HOLES EXIST AT ALL EQUIPMENT LOCATIONS.

(1) WITH CLIENT APPROVAL IN SELECT CASES TO FACILITATE IMPROVED APPEARANCE, ½" COAXIAL CABLES MAY BE "SUPERFLEX" IN LIEU OF LDF-4

II) WHERE POSSIBLE, INSTALL POLE BASE SUCH THAT THE ELECTRICAL FEED AND BACKHAUL (IF UNDERGROUND) CIRCUIT ENTER THE POLE THROUGH THE POLE BASE. IF A DISCONNECTING MEANS SEPARATE FROM THE AC DISTRIBUTION BOX IS REQUIRED BY JURISDICTION OR UTILITY, WITH APPROVAL IN SELECT CASES LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LFMC) MAY BE USED IN LENGTHS NOT TO EXCEED 36" TO EXTEND THE ELECTRICAL SERVICE CONDUIT TO THE AC DISTRIBUTION BOX.



CABLING DIAGRAM 1

SCALE: NOT TO SCALE

mobilitie

PROJECT NO:	SR900201
DRAWN BY:	L. TARUSKIL
CHECKED BY:	M. MICHELENA

A	05.23.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

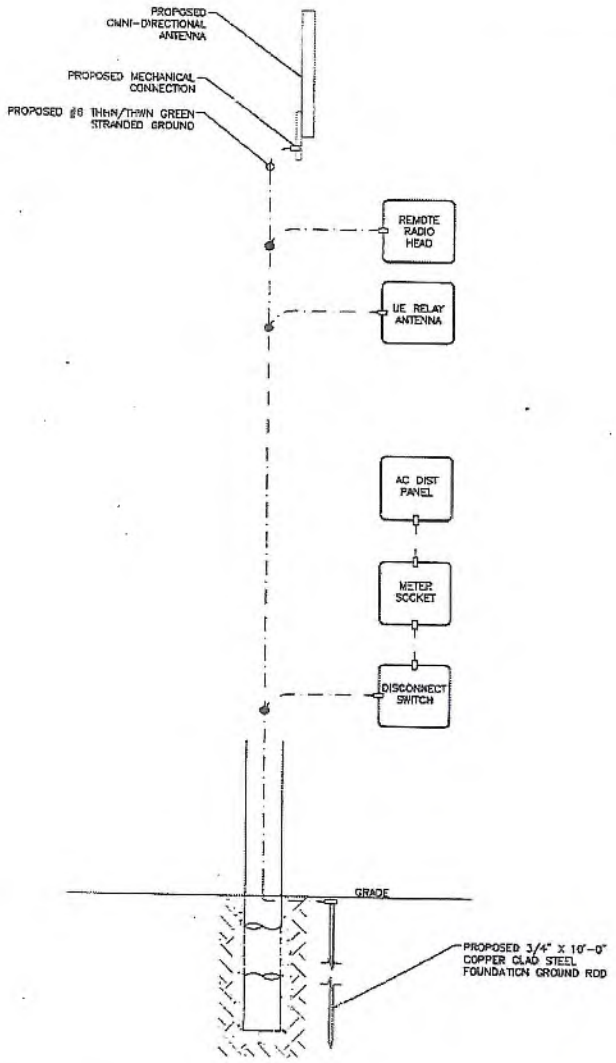
JAB0XSRKBC
3FLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

4.0



LEGEND
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	ER600201
DRAWN BY:	L. TARUBAL
CHECKED BY:	M. MICHELENA

A	05.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAGOXS.RKBC
9FLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

5.0

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL REQUIREMENTS

PART 1 – GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH-UP PAINTING. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 – FINAL CLEANING

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.
   - A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREA, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
   - B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE.
   - C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
   - D. CLEAN EXPOSED EXTERIOR HARD SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
   - E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING MANCHOLES, MANHOLES, AND SIMILAR SPACES.
   - F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.
   - G. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CANNOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
   - H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.
   - I. DUST OFF ALL EQUIPMENT AND ITEMS WITHIN EQUIPMENT ENCLOSURE.
2. REMOVAL OF PROTECTION: REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREMOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

SITE WORK

PART 1 – GENERAL

1. WORK INCLUDED: SEE SITE PLAN.
2. DESCRIPTIONS: IF APPLICABLE, LEASE AREA, AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
3. QUALITY ASSURANCE
   - A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
   - B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
   - C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
4. SEQUENCING
   - A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
   - B. CONSTRUCT TEMPORARY CONSTRUCTION AREA, DESIGNATED AREA TO BE APPROVED BY CONSTRUCTION MANAGER AND LOCAL AUTHORITIES.
   - C. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.
   - D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
   - E. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.
5. SUBMITTALS
   - A. BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD
   - B. AFTER CONSTRUCTION
     1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
     2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
     3. LANDSCAPING WARRANTY STATEMENT
6. WARRANTY
   - A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.
   - B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
   - C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
   - D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

PART 2 – PRODUCTS

1. MATERIALS
   - A. SOIL STERILIZER SHALL BE EPA-REGISTERED, PRE-EMERGENCE LIQUID:

TOTAL KILL PRODUCT 910 EPA 10292-7 (313) 563-6000	PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48126
AMBUSH HERBICIDE EPA REGISTERED (800) 526-4924	FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVE. UNION, NJ 07083

   - B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) – ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
   - C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 500X.

PART 3 – EXECUTION

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION
2. PREPARATION
   - A. CLEAR BRUSH AND DEBRIS FROM LEASE AREA AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
   - B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
   - C. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
   - D. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
   - A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
   - B. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
   - C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
   - D. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
   - E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
   - F. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREA, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
   - A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.
   - B. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

mobilitie

PROJECT NO:	ER600297
DRAWN BY:	L. TARUDAL
CHECKED BY:	M. MICHELENA

A	06.15.10	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAGOXSRKBC
9FL9003697
W VIRGINIA ST S
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

ELECTRICAL

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
2. ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.)
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "U.L." WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "U.L." LISTED.
5. ALL CONDUIT SHALL HAVE A PULL CORD.
6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS.
7. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IBC, NEC AND ALL APPLICABLE CODES.
9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
10. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SERVICE AND DISTRIBUTION

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG. COLOR CODED.
2. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
3. CONDUIT:
   A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3. WHERE PERMITTED BY CODE. FITTINGS SHALL BE "IMAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
   B. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE.
   C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE DIGGING.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FOURTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
7. GROUNDING ELECTRODE SYSTEM
   A. PREPARATION
      1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
      2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
   B. EXTERNAL CONNECTIONS
      1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
      2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD). MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
   C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
   D. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
   E. LUGS
      1. LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #54____BE OR EQUIVALENT

A.	535 MCM DLO	54680BE
B.	262 MCM DLO	54672BE
C.	#1/0 DLO	54652BE
D.	#4/0 THWN AND BARE	54655BE
E.	#2/0 THWN	54652BE
F.	#2 THHN	54207BE
G.	#6 DLO	54205BE

      2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

8. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

POLES, POSTS, AND STANDARDS (SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL
   A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
   B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE.

TELECOMMUNICATIONS WIRING COMPONENTS (COAXIAL ANTENNA CABLE)

1. GENERAL
   A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
   B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
   A. COAXIAL CABLE:
      1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
      2. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
3. ANTENNA AND COAXIAL CABLE GROUNDING
   A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS).
4. COAXIAL CABLE IDENTIFICATION
   A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
      1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
      2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
   B. USE ANDREW CABLE TIES (PT.# 27290) TO SECURE IDENTIFICATION TAGS.
      1. TESTING: LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER/QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

mobilitie

PROJECT NO:	EB600201
DRAWN BY:	L.TARUBAL
CHECKED BY:	M.MICHELENA

A	05.13.15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XSRKBC
SFLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

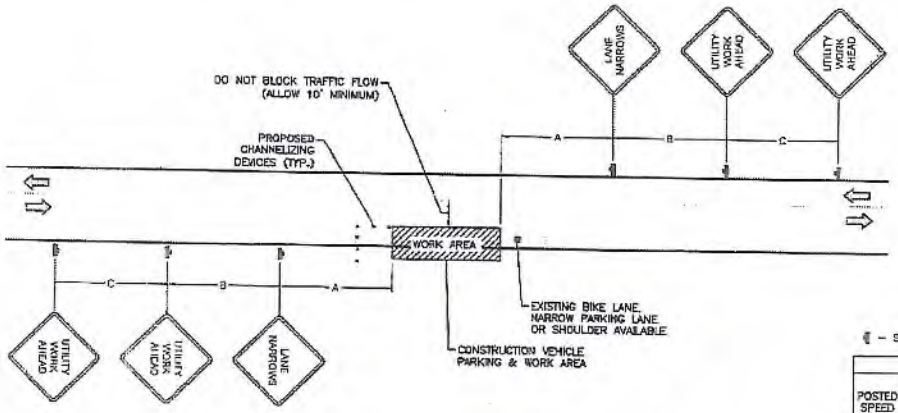
GENERAL NOTES

SHEET NUMBER

GN-2

PLAN NOTES:

1. PLANS DEPICTED ARE GENERAL GUIDELINES FOR TEMPORARY TRAFFIC CONTROL PLANS (TCP) TO INCLUDE PEDESTRIAN AND WORKER SAFETY. CONTRACTOR IS REQUIRED TO HAVE PREPARED A SITE-SPECIFIC TCP FOR REVIEW AND APPROVAL BY THE HIGHWAY AUTHORITY HAVING JURISDICTION. IF REQUIRED, THE FIRM PREPARING THE TCP SHALL BE AUTHORIZED OR CERTIFIED BY THE AUTHORITY HAVING JURISDICTION.
2. EXTEND CHANNELIZATION DEVICES INTO SHOULDER WHERE APPLICABLE.
3. DISTANCES AS INDICATED IN TABLE 1 SHOULD BE INCREASED FOR CONDITIONS THAT WOULD AFFECT STOPPING DISTANCE SUCH AS DOWNGRADES OR LIMITED SIGHT DISTANCES. DISTANCES CAN BE DECREASED FOR LOW-SPEED (RESIDENTIAL) AREAS WITH APPROVAL BY THE AUTHORITY HAVING JURISDICTION. NIGHT-TIME WORK IS PROHIBITED UNLESS IT IS REQUIRED AS A CONDITION OF APPROVAL BY THE HIGHWAY AND LOCAL AUTHORITY HAVING JURISDICTION.
4. SHOULDER TAPERS SHOULD BE 1/3 OF THE ON-STREET TAPER LENGTH.
5. MAINTAIN A MINIMUM LANE WIDTH OF 10'.



◐ – SIGN

TABLE 1

POSTED SPEED (MPH)	DISTANCE BETWEEN SIGNS			TAPER	BUFFER
	A	B	C	L (SEE NOTE)	
15	100'	100'	100'	45'	100'
20	100'	100'	100'	80'	115'
25	100'	100'	100'	125'	155'
30	200'	200'	200'	180'	200'
35	200'	200'	200'	245'	250'
40	350'	350'	350'	320'	305'
45	350'	350'	350'	540'	360'
50	500'	500'	500'	600'	425'
55	500'	500'	500'	660'	495'
60	500'	500'	500'	720'	570'
65	500'	500'	500'	780'	645'

NOTES:

A) DISTANCES IN FEET UNLESS OTHERWISE NOTED.
B) CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.
C) DISTANCES SHOWN ARE NOT VALID FOR LIMITED ACCESS HIGHWAYS. CONSULT STATE DOT MANUAL FOR DISTANCES.
D) ADJUST DISTANCES TO COMPLY WITH REQUIREMENT OF THE STATE OR LOCAL HIGHWAY AUTHORITY HAVING JURISDICTION. SEE NOTE 1, SHEET G.1.
E) TAPER LENGTHS SHOWN BASED ON 12' LANE WIDTH. SEE NOTE 16, SHEET G.1.

TRAFFIC CONTROL PLAN - CURBSIDE PARKING

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	ER550201
DRAWN BY:	L. TARUBAL
CHECKED BY:	M. MICHELENA

A	08.15.16	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XSRKBC
9FLB003697
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

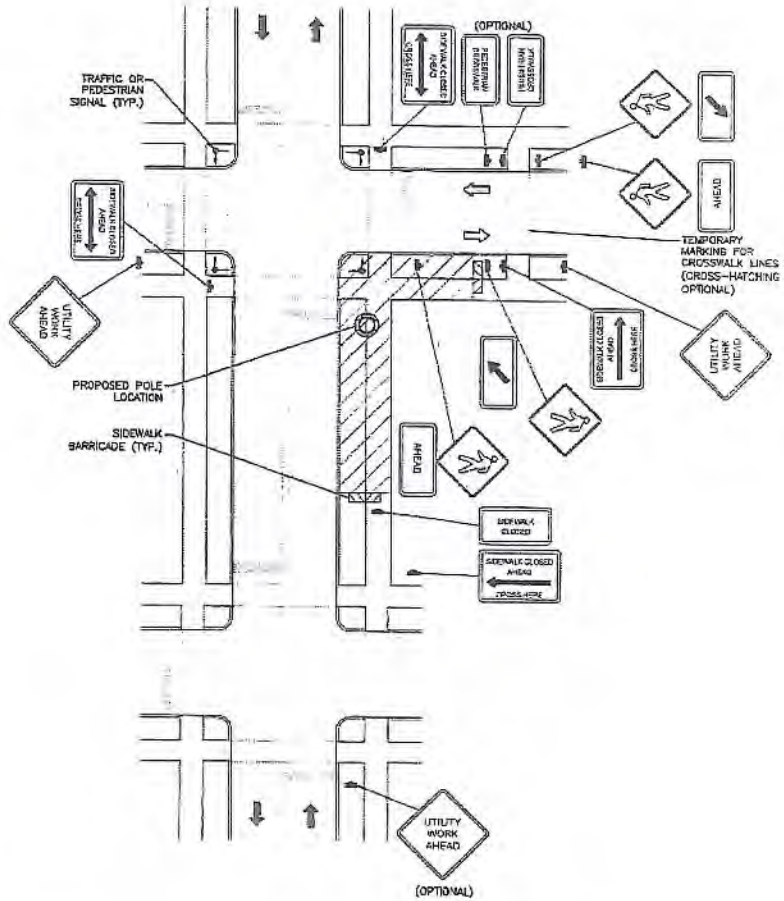
TRAFFIC CONTROL PLAN

SHEET NUMBER

6.0

TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL SIGNAGE, LAYOUTS AND PROCEDURES SHALL COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION, WHICHEVER IS MORE STRINGENT.
2. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
3. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
4. SELECTION, PLACEMENT, MAINTENANCE, AND PROTECTION OF TRAFFIC, PEDESTRIANS, AND WORKERS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) – PART VI "TEMPORARY TRAFFIC CONTROL", AND LOCAL JURISDICTIONAL REQUIREMENTS UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE APPROPRIATE HIGHWAY AUTHORITY HAVING JURISDICTION.
5. ADVANCE WARNING SIGNS, DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY AND FOR ACTUAL TRAFFIC SPEEDS IF IN EXCESS OF POSTED SPEED LIMITS.
6. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.
7. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON THE EXISTING TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
8. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED, OR RELOCATED. ALL TRAFFIC CONTROL DEVICES SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITION AFTER COMPLETION OF WORK.
9. CONTRACTOR SHALL CONTACT LOCAL AUTHORITY HAVING HIGHWAY JURISDICTION AND PROVIDE ADDITIONAL "FLAGMEN" OR POLICE SUPERVISION, IF REQUIRED.
10. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 3H:1V SLOPE PRIOR TO END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE EITHER BACKFILLED OR PRECAST CONCRETE CURB BARRIER CONSTRUCTION BARRIER SET TEMPORARILY IN PLACE TO SHIELD VEHICULAR AND PEDESTRIAN TRAFFIC.
11. WHERE DICTATED BY LOCAL CONDITIONS, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN AND WORKER CROSSING LOCATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES AND OSHA REQUIREMENTS.
12. CONSTRUCTION ZONE SPEED LIMIT IF REDUCED FROM POSTED LIMITS SHALL BE IN ACCORDANCE WITH MUTCD AND WILL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.
13. THERE SHALL BE NO WORKERS, EQUIPMENT, OR OTHER VEHICLES IN THE BUFFER SPACE OR THE ROLL AHEAD SPACE.
14. DRIVEWAYS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1 SIGN (ROAD WORK AHEAD) AS A MINIMUM.
15. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION PROVIDED THEY COMPLY WITH MUTCD.
16. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.
17. WHEN CHANNELIZATION DEVICES HAVE THE POTENTIAL OF LEADING VEHICULAR TRAFFIC OUT OF THE INTENDED VEHICULAR TRAFFIC SPACE, THE CHANNELIZATION DEVICES SHOULD BE EXTENDED A DISTANCE IN FEET OF 2.0 TIMES THE SPEED LIMIT IN MPH BEYOND THE DOWNSTREAM END OF THE TRANSITION AREA.
18. TAPER LENGTHS ARE CALCULATED AS FOLLOWS:
L= $WS^2/60$ (40 MPH AND HIGHER) OR L2= WS (OVER 40 MPH).
WHERE W= OFFSET WIDTH (FT), S= TRAFFIC SPEED (MPH).



TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SCALE: NOT TO SCALE

1

mobilitie

PROJECT NO:	0150000261
DRAWN BY:	L. TARUBAL
CHECKED BY:	M. MICHELENA

A	05.13.15	FOR REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA9DXSRKBC
9FLB003897
W VIRGINIA ST &
RAVEN ST
TALLAHASSEE, FL 32304
UTILITY POLE

SHEET TITLE

TYPICAL PEDESTRIAN / WORKER SAFETY PLAN

SHEET NUMBER

6.1

TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Information

Project Name: Utility Pole ID: 9FLB003534

Location Address: ROW of 699-711 Suwanee Street (30.436274, -84.275387)

Intersecting Streets: Suwannee ST & E Lafayette ST

Point of commencement: Suwannee ST

Point of completion: Suwanee ST

Length of Installation: N/A

Project Description: Install back haul transport equipment on existing utility pole in the ROW

Applicant Information

Applicant Name: Mobilitie, LLC

Contact Person: Megan Sikes Title: NRE Manager

Mailing Address: 3475 Piedmont Rd. Atlanta, GA 30214

Phone Number: (404) 989-8380 Cell Number:

Email Address: megan.sikes@mobilitie.com

Contractor Information

Contractors License No.: CGC1522704

Contractor/Company: TTS

Contact Person: Jason Gillis Title:

Mailing Address: 9335 Industrial Trace, Alpharetta, GA 30004

Phone Number: (770) 521-9137 Cell Number:

24 hour Emergency Contact Person: Cell Number:

Email Address:

Agent Information

Agent Name:

Contact Person:

Mailing Address:

Phone Number: Cell Number:

Email Address:

CITY OF TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Type and Construction Method, Circle all that apply

Cable:	Cut	Bore	Overhead
Electric:	Cut	Bore	Overhead
Telephone:	Cut	Bore	Overhead
Gas:	Cut	Bore	
Sewer:	Cut	Bore	
Water:	Cut	Bore	
Curb:	Demo	Construct	
Asphalt:	Demo	Construct	
Sidewalk:	Demo	Construct	
Driveway:	New	Reconstruct	
Drainage:	Connection		
Sign:	Permanent	Temporary	illuminated, electric permit no:_____

Fiber Optics

1. Does the installation provide local Connectivity? Yes No
   a. If YES, Is a Franchise Agreement in place with the City? Yes No
   b. If YES, Provide the date of the agreement. _____
   c. If NO, Describe the purpose of the installation, so a determination can be made if a Franchise agreement is required._____

Boring

Boring type:_____

How many bore crossings:

_____Underground Electric
_____Gas
_____Potable Water
_____Sanitary Sewer Mains & Laterals
_____Storm Sewer
_____Roads
_____Driveways
_____Sidewalks

Submit preconstruction videos of sanitary sewer mains and laterals and storm sewer lines crossing the bore.

I (print name) Megan Sikes do herby make application to the City of Tallahassee for a permit to perform the above noted construction in, on, or under the public streets of the City of Tallahassee. By my signature, I certify that I have verified the existence and location of all existing utilities within the proposed construction area with the appropriate utility or service provider in compliance with the "Specification for Construction within the City of Tallahassee Right of Way" and sound engineering practices. (Copies of the noted specifications may be obtained from the City Streets and Drainage Division)

Signature of Applicant: Megan Sikes Date: 7/28/16

SITE ID: 9FLB003534 / JA90XS675B
SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

Know what's **below.**
Call before you dig.

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE INFORMATION

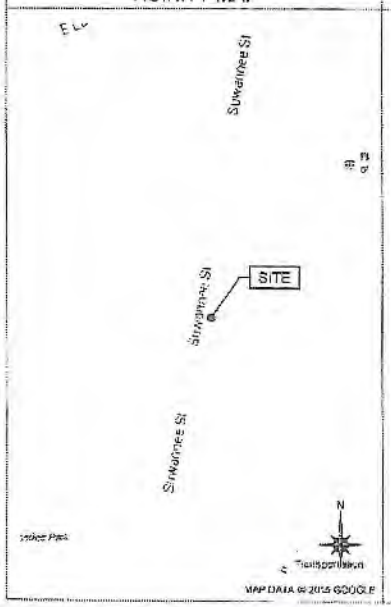
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS STREET:	SUWANNEE ST & E LAFAYETTE ST TALLAHASSEE, FL 32399
APPLICANT:	MOBILITIE, LLC
APPLICANT ADDRESS:	3475 PIEDMONT ROAD NE, SUITE 1000 ATLANTA, GEORGIA 30305 PHONE: 512-638-5402
LATITUDE:	N 30° 26' 10.6" (30.436274)
LONGITUDE:	W 84° 16' 31.1" (-84.275307)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	±118' AMSL
COUNTY:	LEON COUNTY
JURISDICTION:	TALLAHASSEE

BEFORE SCALING:

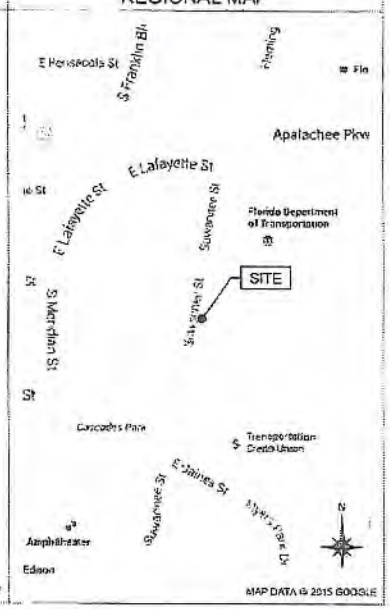
CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON EXISTING UTILITY POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

- INSTALL PROPOSED BACKHAUL TRANSPORT ON EXISTING UTILITY POLE

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX

SHEET NO.	SHEET TITLE
0.0	TITLE SHEET
1.0	SITE PLAN & INSIGHT PHOTO
2.0	POLE ELEVATION
2.1	POLE ELEVATION
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
3.1	ANTENNA & EQUIPMENT SPECIFICATIONS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
6.0	EQUIPMENT & SAFETY LABELS
6.1	TRAFFIC CONTROL PLAN
6.2	TRAFFIC CONTROL PLAN
6.3	TRAFFIC CONTROL PLAN
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES

THESE DRAWINGS ARE BASED ON SITE INFORMATION PROVIDED TO KMB. KMB HAS NOT PERFORMED FIELD VERIFICATION.

ARCHITECT/ENGINEER

KMB DESIGN GROUP, LLC
1400 ROUTE 34, SUITE 209
WALL, NJ 07719
FOR QUESTIONS EMAIL: designteam@kmbdg.com
TEL: (732) 280-5920
FAX: (732) 280 2990
www.KMBDG.com

mobilitie

PROJECT NO:	9FLB003534
DRAWN BY:	RC
CHECKED BY:	SJB

A	07/17/18	KMB DESIGN GROUP, LLC

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 88902 7/13/18

"THIS DRAWING IS THE PROPERTY OF KMB DESIGN GROUP, LLC. THIS DRAWING MAY NOT BE REPRODUCED, REVISED OR ALTERED IN ANY FORM OR MANNER WITHOUT PRIOR WRITTEN PERMISSION. UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT."

JA90XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE

TITLE SHEET

SHEET NUMBER

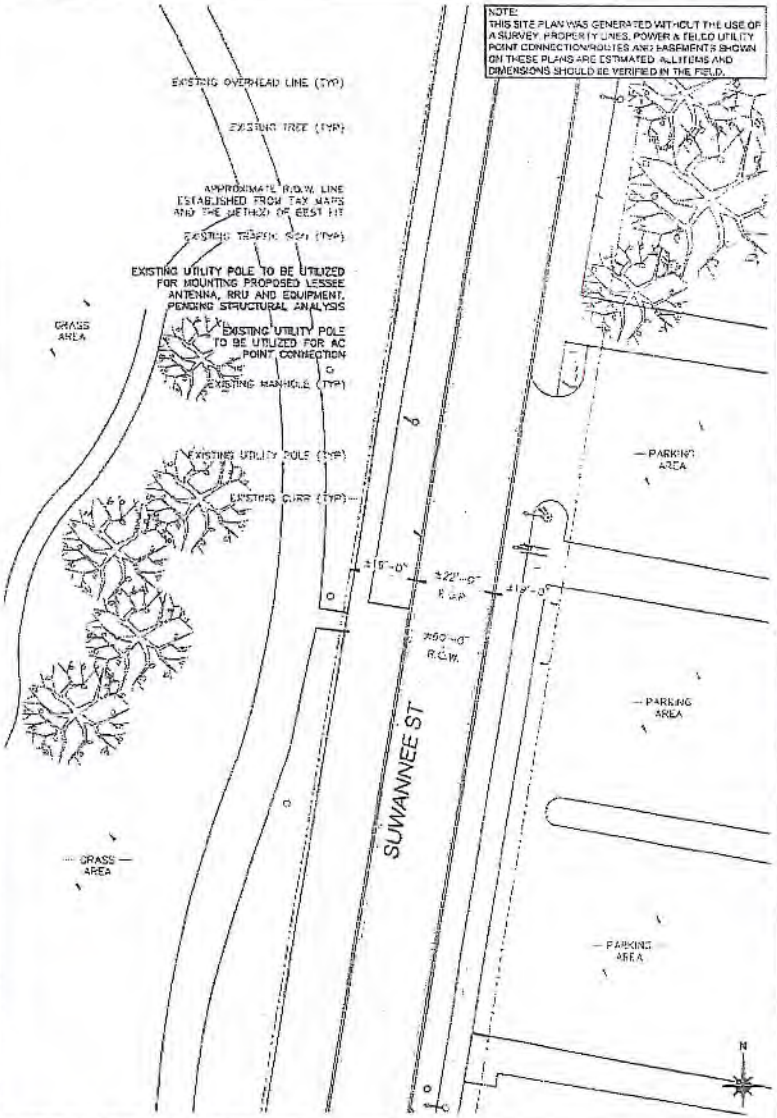
0.0

1 EXHIBIT PHOTO

SCALE: NTS

2 AERIAL SITE LOCATION

SCALE: NTS



3 ENLARGED SITE PLAN

11x17 SCALE: 1/32" = 1'-0" | 24x36 SCALE: 1/16" = 1'-0"

mobilitie

PROJECT NO:	0FLB003534
DRAWN BY:	RC
CHECKED BY:	SJB

A	07/01/16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 86802 7/13/16

"IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT"

JA90XS575B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

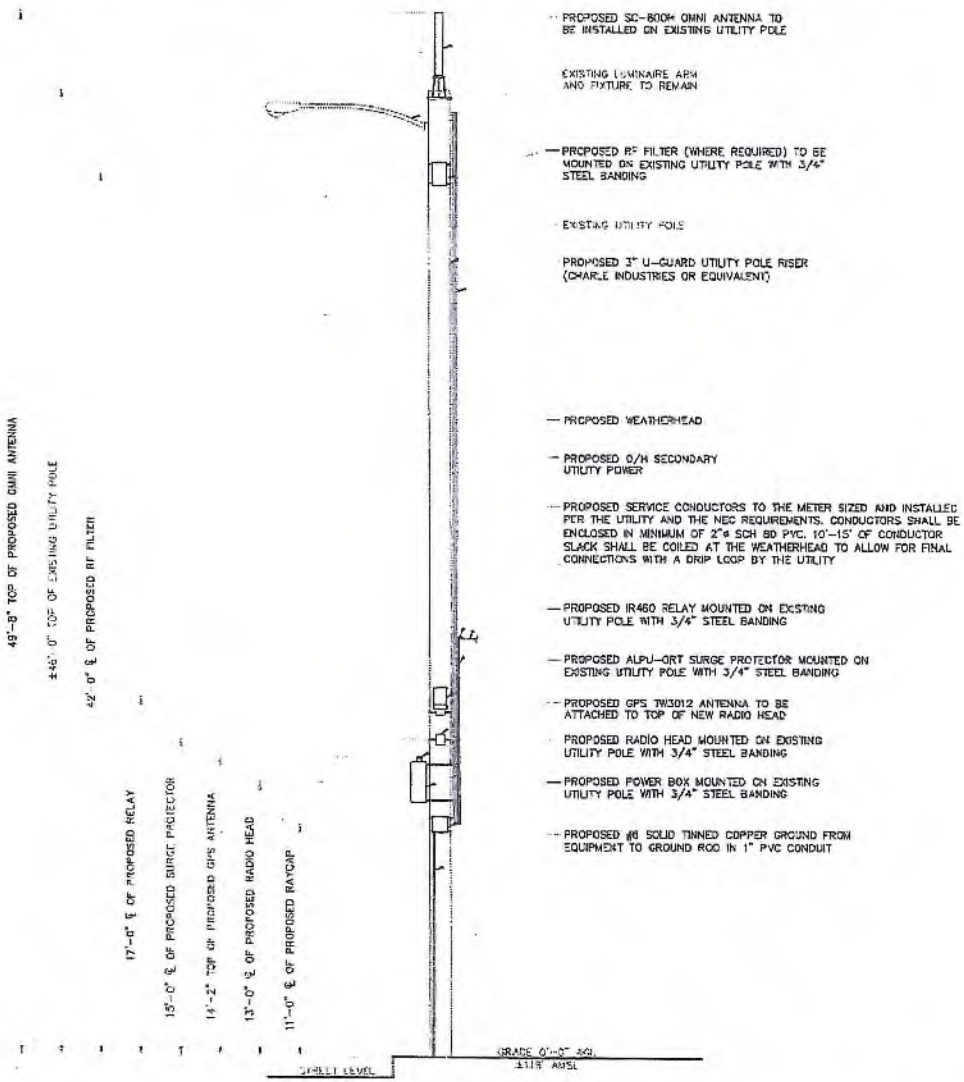
SHEET TITLE

SITE PLAN & EXHIBIT PHOTO

SHEET NUMBER

1.0

NOTE:
KMB DESIGN GROUP, LLC HAS NOT PERFORMED A FULL STRUCTURAL ANALYSIS ON THE POLE AND MOUNTS AS PART OF THIS SUBMITTAL. STRUCTURAL ANALYSIS REPORT TO BE PROVIDED UNDER SEPARATE COVER AND OBTAINED BY CONTRACTOR PRIOR TO CONSTRUCTION.



1 SOUTHWEST ELEVATION

11x17 SCALE: 3/16" = 1'-0" | 24x36 SCALE: 3/8" = 1'-0"

mobilitie

PROJECT NO:	0FLB003534
DRAWN BY:	NC
CHECKED BY:	SJB

4	27-13-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 62902 7/13/16

"IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT"

JA90XS675B

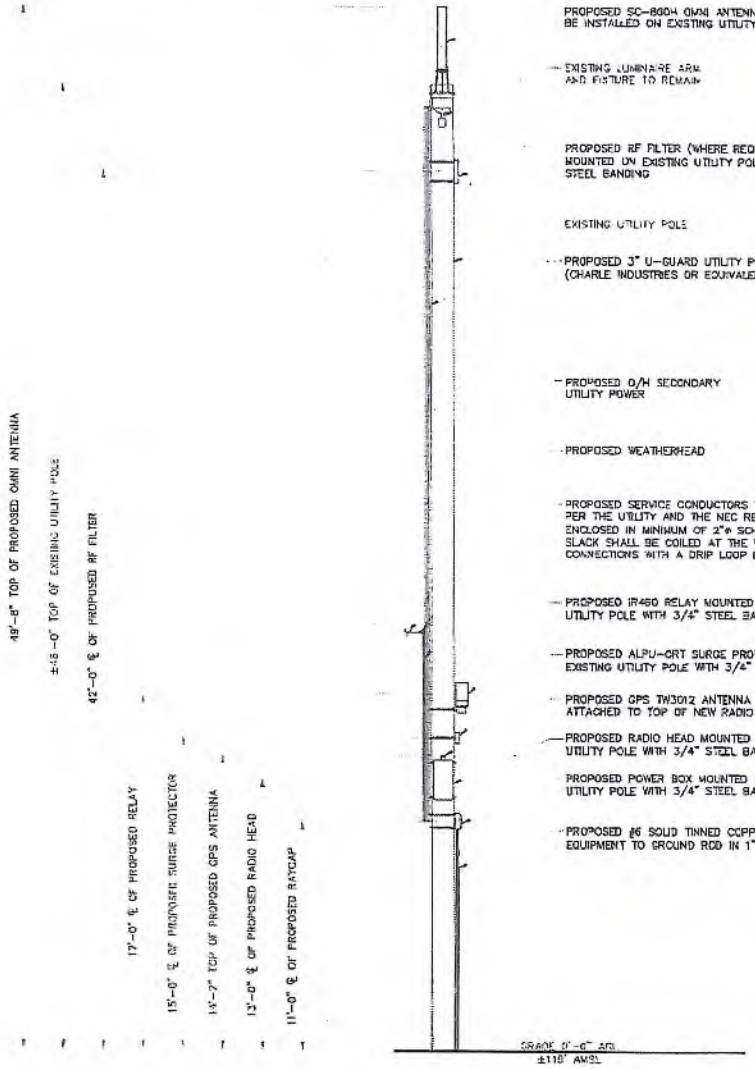
SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE
POLE ELEVATION

SHEET NUMBER
2.0

NOTE:
KMB DESIGN GROUP, LLC HAS NOT PERFORMED A FULL STRUCTURAL ANALYSIS ON THE POLE AND MOUNTS AS PART OF THIS SUBMITTAL. STRUCTURAL ANALYSIS REPORT TO BE PROVIDED UNDER SEPARATE COVER AND OBTAINED BY CONTRACTOR PRIOR TO CONSTRUCTION.



PROPOSED SC-8604 OMNI ANTENNA TO BE INSTALLED ON EXISTING UTILITY POLE

EXISTING LUMINAIRE ARM AND FIXTURE TO REMAIN

PROPOSED RF FILTER (WHERE REQUIRED) TO BE MOUNTED ON EXISTING UTILITY POLE WITH 3/4" STEEL BANDING

EXISTING UTILITY POLE

PROPOSED 3" U-GUARD UTILITY POLE RISER (CHARLE INDUSTRIES OR EQUIVALENT)

PROPOSED O/H SECONDARY UTILITY POWER

PROPOSED WEATHERHEAD

PROPOSED SERVICE CONDUCTORS TO THE METER SIZED AND INSTALLED PER THE UTILITY AND THE NEC REQUIREMENTS. CONDUCTORS SHALL BE ENCLOSED IN MINIMUM OF 2"ø SCH 80 PVC. 10'-15' OF CONDUCTOR SLACK SHALL BE COILED AT THE WEATHERHEAD TO ALLOW FOR FINAL CONNECTIONS WITH A DRIP LOOP BY THE UTILITY

PROPOSED IR460 RELAY MOUNTED ON EXISTING UTILITY POLE WITH 3/4" STEEL BANDING

PROPOSED ALPU-ORT SURGE PROTECTOR MOUNTED ON EXISTING UTILITY POLE WITH 3/4" STEEL BANDING

PROPOSED GPS TW3012 ANTENNA TO BE ATTACHED TO TOP OF NEW RADIO HEAD

PROPOSED RADIO HEAD MOUNTED ON EXISTING UTILITY POLE WITH 3/4" STEEL BANDING

PROPOSED POWER BOX MOUNTED ON EXISTING UTILITY POLE WITH 3/4" STEEL BANDING

PROPOSED #6 SOLID TINNED COPPER GROUND FROM EQUIPMENT TO GROUND ROD IN 1" PVC CONDUIT

1 NORTHWEST ELEVATION

11x17 SCALE: 3/16" = 1'-0" | 24x36 SCALE: 3/8" = 1'-0

mobilitie

PROJECT NO:	SFL8003534
DRAWN BY:	RC
CHECKED BY:	SJB

0	07-13-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 63902 7/13/16

IT IS A VIOLATION OF THE LAW FOR ANYONE UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA30XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

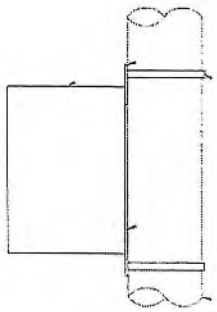
UTILITY POLE

SHEET TITLE

POLE ELEVATION

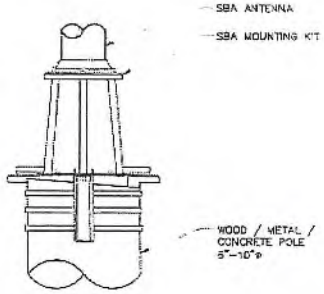
SHEET NUMBER

2.1



1 EQUIPMENT CONNECTION DETAIL

SCALE: NTS



2 ANTENNA MOUNTING DETAIL

SCALE: NTS

3 CABLE ROUTING DETAIL

SCALE: NTS

mobilitie

PROJECT NO:	9FL8003534
DRAWN BY:	RC
CHECKED BY:	SJB

A	07/13/16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68202 7/13/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

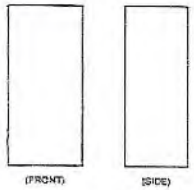
SHEET TITLE

ANTENNA & EQUIPMENT MOUNTING DETAILS

SHEET NUMBER

3.0

AH4000
RADIO HEAD
20.1" x 9.1" x 8.9", ±55.1 lbs

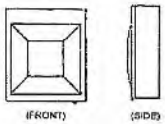


1 EQUIPMENT SPECIFICATIONS
SCALE: NTS

TW3012
GPS ANTENNA
3.8" x 2.6"Ø, ±0.3 lbs

2 EQUIPMENT SPECIFICATIONS
SCALE: NTS

RSTAC-3112-P-120
AC POWER PANEL
9.25" x 9.50" x 3.61



3 EQUIPMENT SPECIFICATIONS
SCALE: NTS

FIMBW2593S-1C
RF FILTER
13.6" x 8.1" x 2.4 x 7.7 lbs

4 EQUIPMENT SPECIFICATIONS
SCALE: NTS

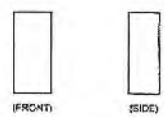
SC-900
2.5 OMNI ANTENNA
35.4" x 4.7"Ø, ±11 lbs

5 ANTENNA SPECIFICATIONS
SCALE: NTS

IRELAY 450
BACKHAUL ANTENNA
13.2" x 7.9"Ø, ±9.9 lbs

6 EQUIPMENT SPECIFICATIONS
SCALE: NTS

ALPU-DRT
SURGE PROTECTOR
6.1" x 4.5" x 2.5"



7 EQUIPMENT SPECIFICATIONS
SCALE: NTS

mobilitie

PROJECT NO:	9FL6003534
DRAWN BY:	RC
CHECKED BY:	SJB

A	[illegible]	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68902 7/13/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE
ANTENNA & EQUIPMENT SPECIFICATIONS

SHEET NUMBER
3.1

UTILITY NOTES

WORK INCLUDES:
THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS UTILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT.
5. ALL CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
6. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES, STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES
   - N.E.C. NATIONAL ELECTRICAL CODE
   - A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
   - I.E.E.E. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   - A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS
   - N.E.M.A. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
   - U.L. UNDERWRITERS LABORATORIES, INC.
   - N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION

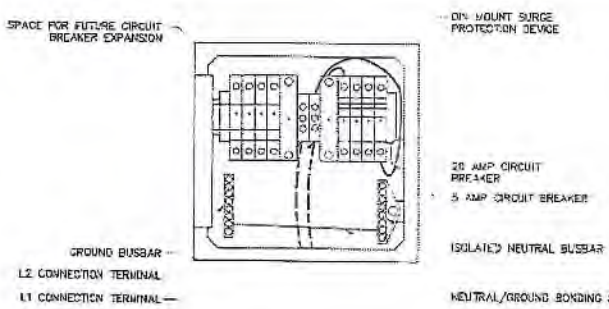
RACEWAYS AND WIRING:

1. WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THHN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:
SEE DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL, AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ARCHITECT/ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:
THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY.

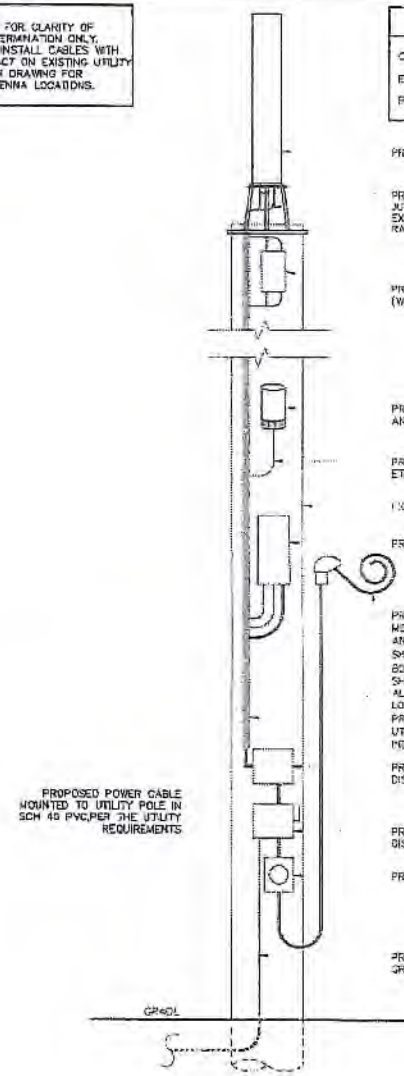
1 NOTES



2 AC DISTRIBUTION PANEL

SCALE: NTS

NOTE:
CABLING DIAGRAM IS FOR CLARITY OF CABLE ROUTE AND TERMINATION ONLY. CONTRACTOR SHALL INSTALL CABLES WITH MINIMAL VISUAL IMPACT ON EXISTING UTILITY POLE. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.



3 CABLE DIAGRAM

SCALE: NTS

LEGEND	
COAX CABLES	
ETHERNET CABLES	
POWER CABLES	

mobilitie

PROJECT NO:	SFL8C025H
DRAWN BY:	RC
CHECKED BY:	SJB

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68802 7/13/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90X5675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32389

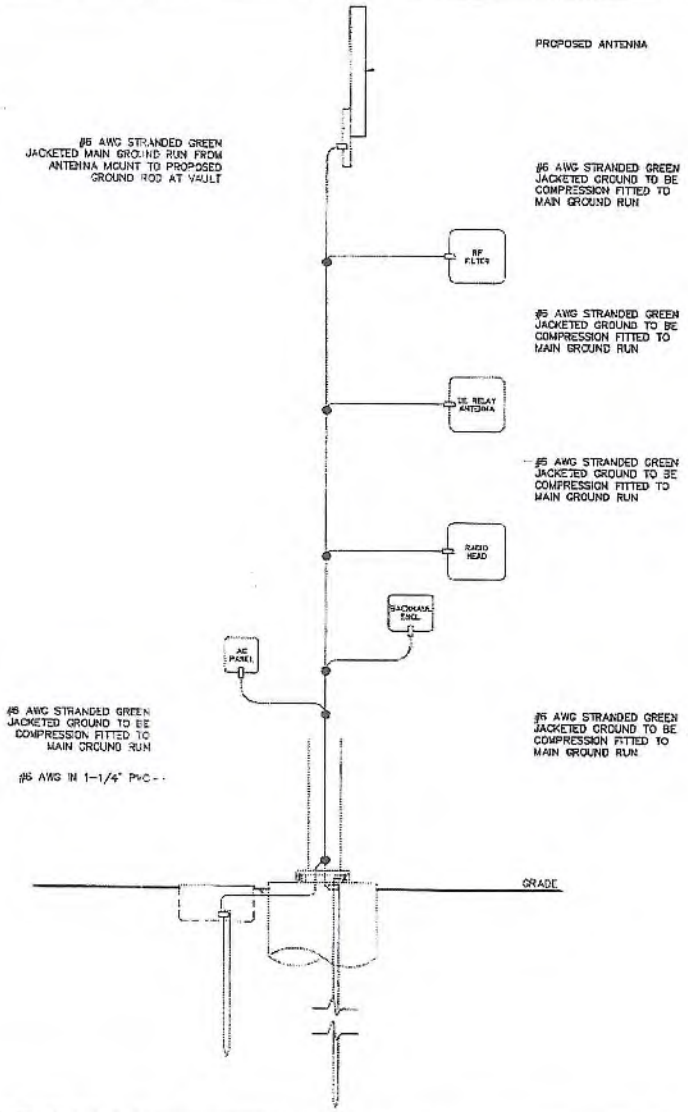
UTILITY POLE

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

4.0



LEGEND:
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

1 GROUNDING DETAILS

SCALE: NTS

mobilitie

PROJECT NO:	SFL9003534
DRAWN BY:	RC
CHECKED BY:	SJB

A	07-03-18	NOT CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 88802 7/03/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSONS, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JAS0XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

5.0

ANTENNA SIGNAGE:
ON WOOD POLES - SIGN ON ALUMINUM WITH SS SCREW TO THE POLE
ON METAL POLES - ADHESIVE VINYL OR PLACARD STRAPPED WITH SS TIES
ON CONCRETE / COMPOSITE - PLACARD STRAPPED WITH SS TIES

SIGN PLACEMENT:
AFFIX TO THE STRUCTURE 3-4' BELOW THE COMMERCIAL RF ANTENNA(S)
SIZE APPROX. 8" x 5.5"

1 RF NOTICE SIGN DETAIL
SCALE: NTS

RF / POWER DISCONNECT INSIDE

NOTE:
RF/POWER DISCONNECT SIGN TO BE PLACED ON OUTSIDE DOOR OF AC DISTRIBUTION BOX.

2 RF/POWER DISCONNECT SIGN
SCALE: NTS

OWNER / OPERATOR NOTE:
SITE ID LABEL TO BE AFFIXED WITH TZeS241 LABELING TAPE OR EQUIVALENT BLACK ON WHITE LABELING TAPE OF AT LEAST 18mm WIDTH WITH EXTRA-STRENGTH ADHESIVE. USE ANY COMPATIBLE P-TOUCH LABEL MAKER. TEXT SHOULD BE PRINTED IN ALL CAPS WITH A MINIMUM HEIGHT OF 1/2"

3 POLE OWNER SIGN DETAIL
SCALE: NTS

mobilitie

PROJECT NO:	9FLB003534
DRAWN BY:	RC
CHECKED BY:	SJB

A	8-13-18	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68802 7/13/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE
EQUIPMENT & SAFETY LABELS

SHEET NUMBER
6.0

TRAFFIC CONTROL NOTES:

1. Prior to any work on the site, a pre-construction meeting shall be held with the City of Tallahassee Traffic Control Section, Right of Way Management, and the Florida Department of Transportation Traffic Control Section. Plans for Traffic Control for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations, and the Florida Department of Transportation Standards and Specifications, without the approval of the City and Florida DOT, shall be approved by the appropriate highway authority having jurisdiction.
2. Flagmen shall be provided as necessary during construction.
3. Erection, operation, maintenance, and removal of traffic control shall be in accordance with the Manual of Uniform Traffic Control Devices - Part VI "Standards and Guides for Traffic Control for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations", and the Florida Department of Transportation Standards and Specifications, without the approval of the City and Florida DOT, shall be approved by the appropriate highway authority having jurisdiction.
4. Traffic cones shall be placed to maintain the visibility of the traffic control.
5. Advance warning signs, distances, and lane lengths may be increased, at discretion of the Engineer, to allow for safety due to horizontal and vertical curves of the roadway.
6. All traffic control signs, barricades, warning signs, flashing warning lights, and other devices shall be covered, removed, or relocated when not required for the current operation. Signs shall be covered with opaque material. Covering shall be provided in a manner approved by the Engineer and shall be capable of being removed without damage to the sign.
7. Contractor is responsible for maintenance of traffic control devices, including signs, cones, barricades, and other devices, in good condition at all times.
8. Contractor is responsible for repairing any damage to the roadway, sidewalks, curbs, and other facilities caused by his operations.
9. Contractor shall contact local emergency services (police, fire, and rescue) and advise them of the nature and location of the work and the anticipated duration of the work.
10. All equipment and vehicles operated on the roadway shall be operated and parked in such a manner as to minimize the impact of such work on the traffic. Equipment shall be parked off the roadway when not in use. Equipment and vehicles shall be operated in the direction of the flow of traffic.
11. Where required by the Engineer, contractor provides an approved, adequate drainage facility and spill prevention control and countermeasures (SPCC) plan in accordance with all applicable laws and local ordinances.
12. Contractor is responsible for all temporary traffic control devices, including signs, cones, barricades, or other devices, as required by the Engineer.
13. Sufficient warning signs and other traffic control devices shall be installed prior to initiating construction or maintenance operations. Signs shall be placed in a manner that allows motorists to prepare for the upcoming work area. Signs shall be placed on the shoulder of the roadway or on sidewalks, as approved by the Engineer.
14. All equipment and vehicles shall be operated in the same direction as the traffic flow and parked off the roadway whenever possible. Other equipment and vehicles shall be parked in a safe manner.
15. Signs may be substituted for barricades and cones as approved by the Engineer.
16. Flashing lights on barricades, equipment, or vehicles shall be of the type approved by the City of Tallahassee.
17. Unless otherwise shown or directed, the roadway shall be kept in a safe condition at all times. Sufficient equipment and personnel shall be provided to maintain the roadway in a safe condition.
18. Flashing warning signs, cones, and barricades shall be placed in the vicinity of the work area in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and the Florida Department of Transportation Standards and Specifications, and shall be maintained in place and in good condition at all times.

1 TRAFFIC CONTROL NOTES

SCALE: NTS

SYMBOLS

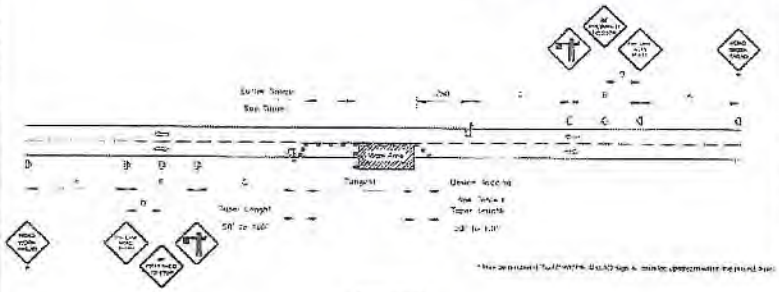
- Work Area
- Channelizing Device
- Work Zone Sign
- Flagman
- Arrowboard (Approximate Location of Arrowboard)
- Lane Shift (Horizontal - Exaggerated Scale)

Refer to Notes 3 & 5 in General Notes 1

TABLE 1

Posted Speed	Device Spacing: Maximum Spacing of Cones or Lane Markers		Maximum Spacing of Tubes, Type I Barricades or Flashing Arrow Signs		Distance Between Signs				Taper Length
	Urban	Rural	Urban	Rural	A	B	C	D	
25	20	40	40	80	200	200	200	200	125
30	20	40	40	80	200	200	200	200	180
35	20	40	40	80	200	200	200	200	245
40	20	40	40	80	200	200	200	200	320
45	20	40	40	80	200	200	200	200	450
50	20	40	40	80	200	200	200	200	500
55	20	40	40	80	200	200	200	200	550
60	20	40	40	80	200	200	200	200	600
65	20	40	40	80	200	200	200	200	650
70	20	40	40	80	200	200	200	200	700
75	20	40	40	80	200	200	200	200	750
80	20	40	40	80	200	200	200	200	800

LEGEND: (Urban) = Urban or suburban environment, where speed is the relative or predominant factor affecting the length of a work area. (Rural) = Rural or high speed environment, where speed is the major factor affecting the length of a work area.



General Notes:

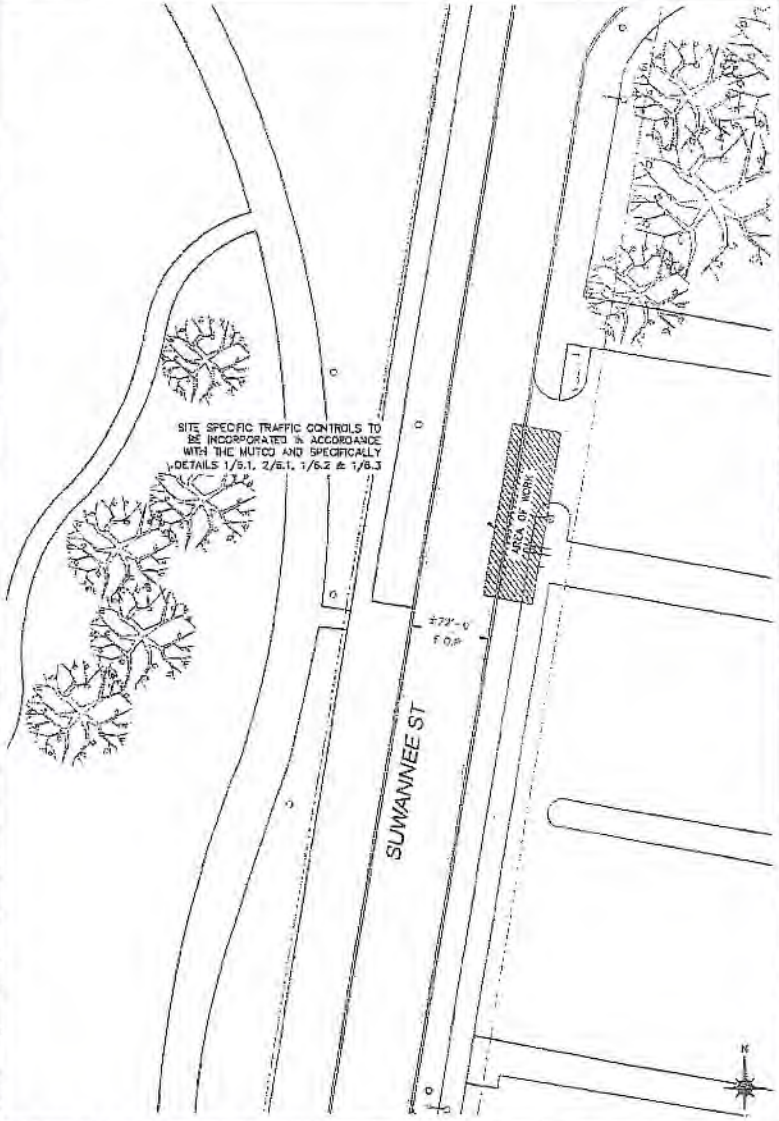
1. Traffic Control Plans may be required at the discretion of the Engineer and the following needs:
2. At the Work Area, the movement of the Contractor from the Travel Way, Temporary Lane Shifts (See Note in Sheet 2 and the Existing Paved Shoulder which is sufficient to provide for an 11' lane between the Work Area and the Edge of Existing Paved Shoulder. Reduce the posted speed when necessary.
3. Temporary Raised Surface Strips:
   a. Cover the both of the following conditions are met concurrently:
      i. Posted Speed is 50 mph or greater
      ii. Work duration is greater than 60 minutes
   b. Use a combined alternate Pavement Marking and Tape when:
   c. Pavement Marking Only, but temporarily remove the tape at locations shown
   d. Use Option 1 in Option 2 as shown on Sheet 2 (Recently overlaid Pavement work zone
4. Authorized vehicles permitted to work within the following areas:
   a. Emergency vehicles
   b. Official vehicles
   c. Field vehicles
   d. Police cruiser

   Work Engineer will be with Contractor to ensure safety. Contractor must be in control of each vehicle. Engineer cannot monitor all activities.
5. When a sidewalk closure is the primary work zone, the TTC plan shall conform to the Pedestrian Work Zone Traffic Control Guidelines.
6. Flashing Warning Lights (Barricade Lights) or Yellow Flags may be placed on cones in the work area to keep the work area marked, flashing, reflecting, or arrow lights operational.
7. When Buffer Space cannot be established, the Contractor shall provide a minimum of 10 feet of paved shoulder to the right of the work area.
8. Material Storage:
   a. Place Minor Material Storage in middle lane lanes, and shall not be closer than 200 feet away from the Traffic Buffer as shown on Sheet 2
   b. Place Storage of Vehicles and Equipment Storage Area in a manner that will not obstruct the flow of traffic or sight distance of the motorists, or cause unnecessary hazards within the roadway. Select a location that will minimize impacts to the adjacent land owners. Select a location that will minimize impacts to the adjacent land owners.
9. Advance Warning Signs (PREPARED TO STOP sign) may be omitted due to the following conditions:
   a. Work operations, which involve [illegible]
   b. Short time stationary work
   c. Work on the Paved Shoulder, provided the work area is not closer than 10 feet from the Edge of the Travel Lane (Table 1)
   d. Work on the Shoulder, provided the work area is not closer than 10 feet from the Edge of the Travel Lane
   e. Volume and Speed of the Traffic Stream is low
   f. Flagmen Control is present and the Flagmen Control Signs are in place
   g. Work is in the [illegible]

   Refer to Section 1 "Traffic Control Plan" in the Manual of Uniform Traffic Control Devices (MUTCD)
10. Contractor is responsible for Advance Warning Signs, Cones, Barricades, and other devices as required by the Engineer.
11. For a single lane traffic flow, the contractor should have the permanent lane closed full time and the traffic control plan should be in place. Contractor is responsible for the safety of the public and workers in the work area. Contractor is responsible for the safety. Contractor is responsible for the safety of the public and workers in the work area.

2 TWO LANE, TWO WAY, WORK WITHIN THE TRAVEL WAY

SCALE: NTS



3 SITE SPECIFIC TRAFFIC CONTROL PLAN

11x17 SCALE: 1/32" = 1'-0" 24x36 SCALE: 1/16" = 1'-0"

mobilitie

PROJECT NO	SFL9002534
DRAWN BY	RC
CHECKED BY	SB

A	12/01/16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 82902 7/10/16

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JAS0XS6758

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

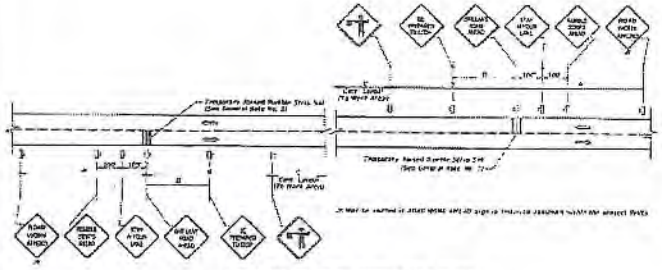
UTILITY POLE

SHEET TITLE

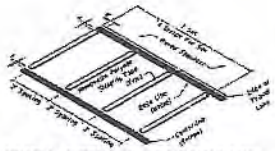
TRAFFIC CONTROL PLAN

SHEET NUMBER

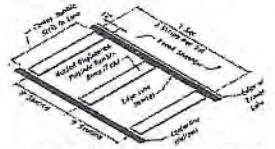
6.1



LAYOUT FOR TEMPORARY RAISED RUMBLE STRIPS
WHEN REQUIRED WITH ADDITIONAL SIGNS



OPTION 1 - REMOVABLE POLYMER STRIPING TAPE RUMBLE STRIP SET

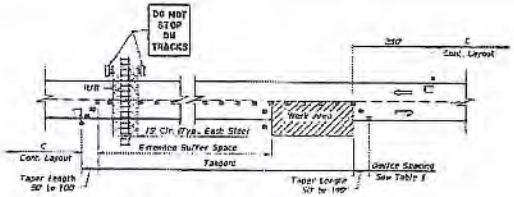


OPTION 2 - MOLDED ENGINEERED POLYMER RUMBLE STRIP SET

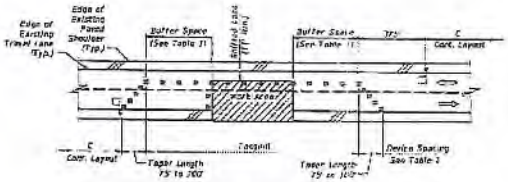
TEMPORARY RAISED RUMBLE STRIPS

1 TEMPORARY RAISED RUMBLE STRIPS

SCALE: NTS



LAYOUT FOR RAILROAD CROSSING
BUFFER SPACE EXTENSION

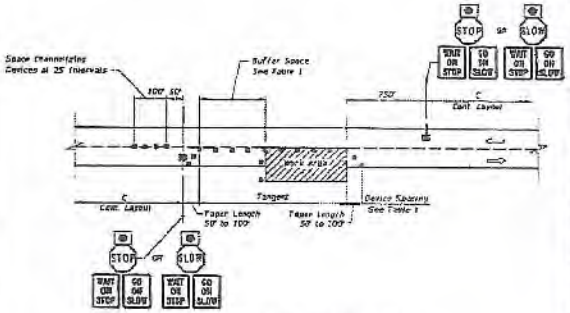


LAYOUT FOR TEMPORARY LANE SHIFT TO SHOULDER
WHEN WORK AREA ENCROACHES ON THE CENTERLINE

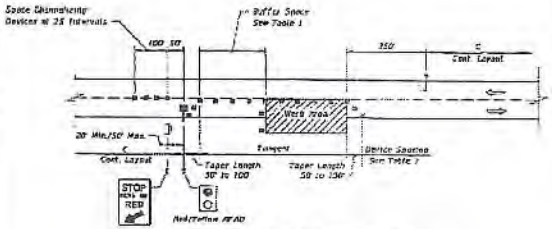
SPECIAL CONDITIONS

2 SPECIAL CONDITIONS

SCALE: NTS



LAYOUT FOR STOP/SLOW AFAD
METHOD 1 - 2 AFAD'S



LAYOUT FOR RED/YELLOW AFAD
METHOD 2 - 1 AFAD & FLAGGER

AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADs)

AUTOMATED FLAGGER ASSISTANCE DEVICES NOTES

1. Illuminate the flagging station when the AFAD is used at nighttime.
2. When the AFAD is not in use, remove or cover signs and move AFAD device outside the clear zone or shield it with a barrel or crash cushion.
3. Only qualified flaggers who have been trained in the operation of the AFAD may operate the AFAD. When in use, each AFAD must be in view of and attended at all times by the flagger operating the device. Use two flaggers and one of the following methods in the deployment of AFAD's:
   Method 1: Place an AFAD at each end of the temporary traffic control zone.
   Method 2: Place an AFAD at one end of the temporary traffic control zone and a flagger at the opposite end.
4. A single flagger may simultaneously operate two AFAD's (Method 1) or may operate a single AFAD at one end of the temporary traffic control zone while being the flagger at the opposite end of the temporary traffic control zone (Method 2) if all four of the following conditions are present:
   a. The flagger has an unobstructed view of the AFAD(s).
   b. The flagger has an unobstructed view of approaching traffic in both directions.
   c. For Method 1, the AFAD's are less than 200 ft apart. For Method 2, the AFAD and the flagger are less than 500 ft apart.
   d. Two trained flaggers are available on site to provide normal flagging operations should an AFAD malfunction.

3 AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADs)

SCALE: NTS

mobilitie

PROJECT NO:	SFL0503534
DRAWN BY	RC
CHECKED BY:	SJB

A	07-13-16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68002 7/13/16

IT IS A VIOLATION OF LAW FOR ANY PERSONS, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

JA30X5675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

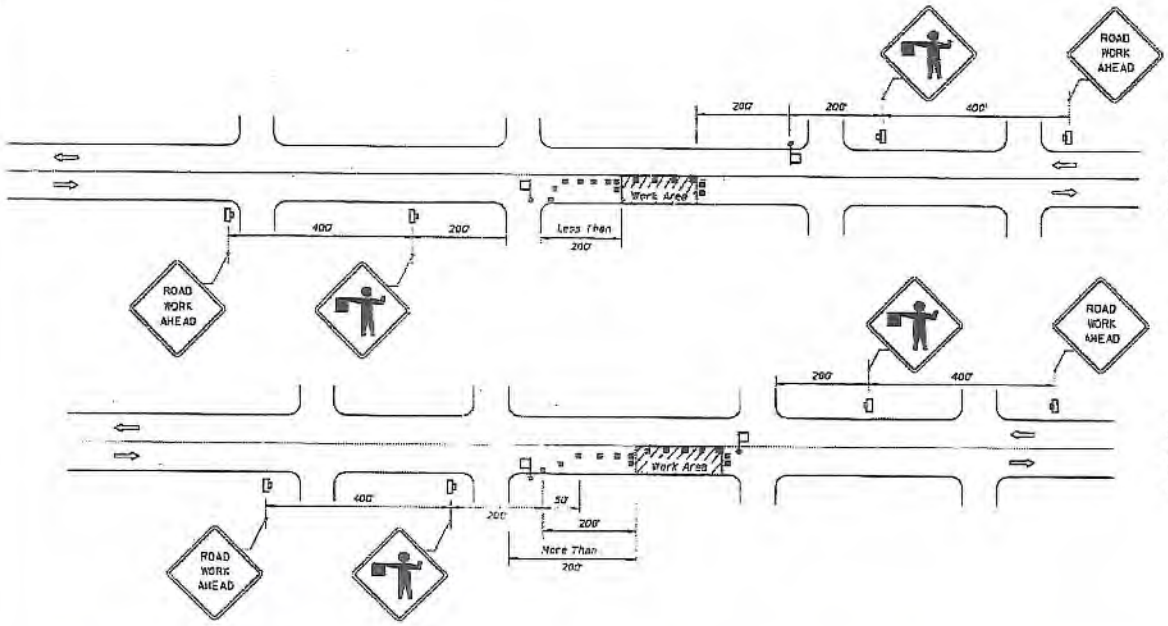
UTILITY POLE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

6.2



CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS 200' OR MORE DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

SYMBOLS

- Work Area
- Channelizing Device
- Work Zone Sign
- Flagger
- Lane Identification + Direction of Traffic

GENERAL NOTES

1 Work operations shall be confined to one travel lane, leaving the opposing travel lane open to traffic.

2 When vehicles in a parking zone block the line of sight to TCZ signs or when TCZ signs encroach on a normal pedestrian walkway, the signs shall be post mounted and located in accordance with MUTCD

3 If work area is confined to an outside auxiliary lane, the work area shall be barricaded and the FLAGGER signs replaced by ROAD WORK AHEAD signs. Flaggers are not required

4 Flaggers shall be in sight of each other or in direct communication at all times

5 The FLAGGER legend sign may be substituted for the symbol sign

6 The maximum spacing between devices shall be no greater than 25 '

7 For general TCZ requirements and additional information, refer to MUTC

8 The two channelizing devices directly in front and directly at the end of th area may be omitted provided vehicles in the work area have high-intensit flashing, oscillating, or strobe lights operating.

9 Use Temporary Raised Rumble Strips in accordance with Index 603. Pl of Rumble Strips and additional signs should begin at FLAGGER sign loca

DURATION NOTES

1 ROAD WORK AHEAD sign may be omitted if all of the following conditions are met.

a Work operations are 60 minutes or less
b Speed is 45 mph or less
c. No sight obstructions to vehicles approaching the work area for a distance of 600 feet
d Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating
e Volume and complexity of the roadway has been considered.

1 TWO LANE, TWO WAY, WORK NEAR INTERSECTION

SCALE: NTS

mobilitie

PROJECT NO:	8FLB003534
DRAWN BY:	RC
CHECKED BY:	SAB

A	07/13/16	FOR CLIENT REVIEW

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE 68992 7/13/16

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS675D

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

6.3

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL REQUIREMENTS

PART 1 – GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH-UP PAINTING. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 – FINAL CLEANING

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.
   A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREA, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
   B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE.
   C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
   D. CLEAN EXPOSED EXTERIOR HARD SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
   E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING HANDHOLES, MANHOLES, AND SIMILAR SPACES.
   F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.
   G. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CANNOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
   H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.
   I. DUST OFF ALL EQUIPMENT AND ITEMS WITHIN EQUIPMENT ENCLOSURE.
2. REMOVAL OF PROTECTION. REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD

SITE WORK

PART 1 – GENERAL

1. WORK INCLUDED: SEE SITE PLAN.
2. DESCRIPTIONS: IF APPLICABLE, LEASE AREA, AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
3. QUALITY ASSURANCE
   A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
   B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
   C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
4. SEQUENCING
   A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
   B. CONSTRUCT TEMPORARY CONSTRUCTION AREA, DESIGNATED AREA TO BE APPROVED BY CONSTRUCTION MANAGER AND LOCAL AUTHORITIES.
   C. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.
   D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION. WATER TO ENSURE GROWTH.
   E. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.
5. SUBMITTALS
   A. BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD
   B. AFTER CONSTRUCTION
      - MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
      - MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
      - LANDSCAPING WARRANTY STATEMENT
6. WARRANTY
   A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.
   B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
   C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
   D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

PART 2 – PRODUCTS

1. MATERIALS
   A. SOIL STERILIZER SHALL BE EPA-REGISTERED, PRE-EMERGENCE LIQUID:

TOTAL KILL PRODUCT 910 EPA 10292-7 (313) 563-6000	PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48126
AMBUSH HERBICIDE EPA REGISTERED (800) 526-4924	FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVE. UNION, NJ 07083

   B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) – ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
   C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 500X.

PART 3 – EXECUTION

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION
2. PREPARATION
   A. CLEAR BRUSH AND DEBRIS FROM LEASE AREA AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
   B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
   C. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
   D. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL
3. INSTALLATION
   A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
   B. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
   C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
   D. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
   E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
   F. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREA, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
   A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES. STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.
   B. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

mobilitie

PROJECT NO:	SFL8003534
DRAWN BY:	RC
CHECKED BY:	SAB

#	DATE	REVISION

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68902 7/13/16
"ITEMS INDICATED BY SEAL ARE FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT"

JA80XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

ELECTRICAL

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
2. ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.)
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "U.L." WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "U.L." LISTED.
5. ALL CONDUIT SHALL HAVE A PULL CORD.
6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
7. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY NEC, NFPA AND ALL APPLICABLE CODES.
9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
10. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SERVICE AND DISTRIBUTION

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG. COLOR CODED.
2. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL AND SHALL BE UTILITY COMPANY APPROVED.
3. CONDUIT:
   A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
   B. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
   C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE DIGGING.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FOURTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
7. GROUNDING ELECTRODE SYSTEM
   A. PREPARATION
      1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
      2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
   B. EXTERNAL CONNECTIONS
1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD). MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
   C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
   D. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
   E. LUGS
      - LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTIS SERIES #54 ___BE OR EQUIVALENT

A. 535 MCM DLO		54980BE
B. 267 MCM DLO		54972BE
C. #1/0 DLO		54962BE
D. #4/0 THWN	AND BARE	54866BE
E. #2/0 THWN		54862BE
F. #2 T-HN		54207BE
G. #6 DLO		54205BE

      - WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

8. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

POLES, POSTS, AND STANDARDS (SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL
   A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
   B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE.

TELECOMMUNICATIONS WIRING COMPONENTS (COAXIAL ANTENNA CABLE)

1. GENERAL
   A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
   B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
   A. COAXIAL CABLE:
      - INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
      - LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
3. ANTENNA AND COAXIAL CABLE GROUNDING
   A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
4. COAXIAL CABLE IDENTIFICATION
   A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
      - FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
      - SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
   B. USE ANDREW CABLE TIES (PT.# 27296) TO SECURE IDENTIFICATION TAGS.
      - TESTING: LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE LINEMAN/QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

mobilitie

PROJECT NO	BFL2000534
DRAWN BY:	RC
CHECKED BY:	SAB

KMB DESIGN GROUP, LLC

Stephen A. Bray
PROFESSIONAL ENGINEER

PRELIMINARY
NOT FOR CONSTRUCTION

FL LICENSE: 68907 7/13/18

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JAS0XS675B

SUWANNEE ST & E LAFAYETTE ST
TALLAHASSEE, FL 32399

UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-2

TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Information

Project Name: Utility Pole ID: 9FLB003402

Location Address: 2585 Merchants Row Blvd (30.392581,-84.229623)

Intersecting Streets: Merchants Row Blvd & CEP Way

Point of commencement: Merchants Row

Point of completion: Merchants Row

Length of Installation: N/A

Project Description: Install utility pole in the ROW.

Applicant Information

Applicant Name: Mobilitie, LLC

Contact Person: Megan Sikes Title: NRE Manager

Mailing Address: 3475 Piedmont Rd. Atlanta, GA 30214

Phone Number: (404) 989-8380 Cell Number:

Email Address: megan.sikes@mobilitie.com

Contractor Information

Contractors License No.: CGC1522704

Contractor/Company: TTS

Contact Person: Jason Gillis Title:

Mailing Address: 9335 Industrial Trace, Alpharetta, GA 30004

Phone Number: (770) 521-9137 Cell Number:

24 hour Emergency Contact Person: Cell Number:

Email Address:

Agent Information

Agent Name:

Contact Person:

Mailing Address:

Phone Number: Cell Number:

Email Address:

CITY OF TALLAHASSEE

Public Works Department
Permit Application to Work Within the Public Right-of-Way

Project Type and Construction Method, Circle all that apply

Cable:	Cut	Bore	Overhead
Electric:	Cut	Bore	Overhead
Telephone:	Cut	Bore	Overhead
Gas:	Cut	Bore	
Sewer:	Cut	Bore	
Water:	Cut	Bore	
Curb:	Demo	Construct	
Asphalt:	Demo	Construct	
Sidewalk:	Demo	Construct	
Driveway:	New	Reconstruct	
Drainage:	Connection		
Sign:	Permanent	Temporary	illuminated, electric permit no:_____

Fiber Optics

1. Does the installation provide local Connectivity? Yes No
   a. If YES, Is a Franchise Agreement in place with the City? Yes No
   b. If YES, Provide the date of the agreement. _____
   c. If NO, Describe the purpose of the installation, so a determination can be made if a Franchise agreement is required._____

Boring

Boring type:_____

How many bore crossings:

_____Underground Electric	_____Storm Sewer
_____Gas	_____Roads
_____Potable Water	_____Driveways
_____Sanitary Sewer Mains & Laterals	_____Sidewalks

Submit preconstruction videos of sanitary sewer mains and laterals and storm sewer lines crossing the bore.

I (print name) Megan Sikes do herby make application to the City of Tallahassee for a permit to perform the above noted construction in, on, or under the public streets of the City of Tallahassee. By my signature, I certify that I have verified the existence and location of all existing utilities within the proposed construction area with the appropriate utility or service provider in compliance with the "Specification for Construction within the City of Tallahassee Right of Way" and sound engineering practices. (Copies of the noted specifications may be obtained from the City Streets and Drainage Division)

Signature of Applicant: Megan Sikes Date: 4/27/16

SAM Surveying And Mapping, LLC
4801 Southwest Parkway, Building Two, Suite 100, Austin, TX 78735
Ofc 512.447.0575 Fax 512.326.3029
info@sam.biz www.sam.biz Florida License No. #LB7908

Date: 07-19-2016

Re: FAA 2C Survey Accuracy Certification for a new monopole

Candidate Code: JA90XS212A
General Site Location: 9FLB003402
County: Leon

I hereby certify, to the best of my knowledge and belief, that the following geodetic position and elevation values for the above-referenced proposed pole location have been surveyed to be accurate to within +/- 50 feet horizontally; and that the corresponding elevation is accurate to within +/- 20 feet vertically.

North American Datum of 1983 (2011)
Latitude: N30°23'33.27"
Longitude: W84°13'46.65"

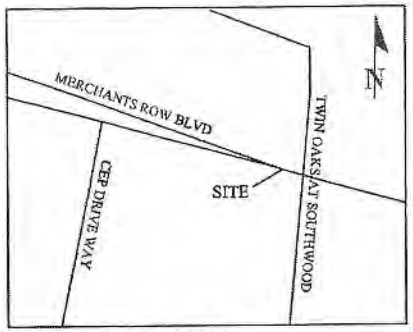
North American Vertical Datum of 1988
Ground Elevation in feet: 68

Surveying And Mapping, LLC

Jon V. Nolting
Professional Surveyor & Mapper
No. 4499 - State of Florida

JON V. NOLTING
LICENSE NUMBER
No. 4499
STATE OF
FLORIDA
PROFESSIONAL SURVEYOR AND MAPPER

1016036723 JA90XS212A-FAA2C.docx



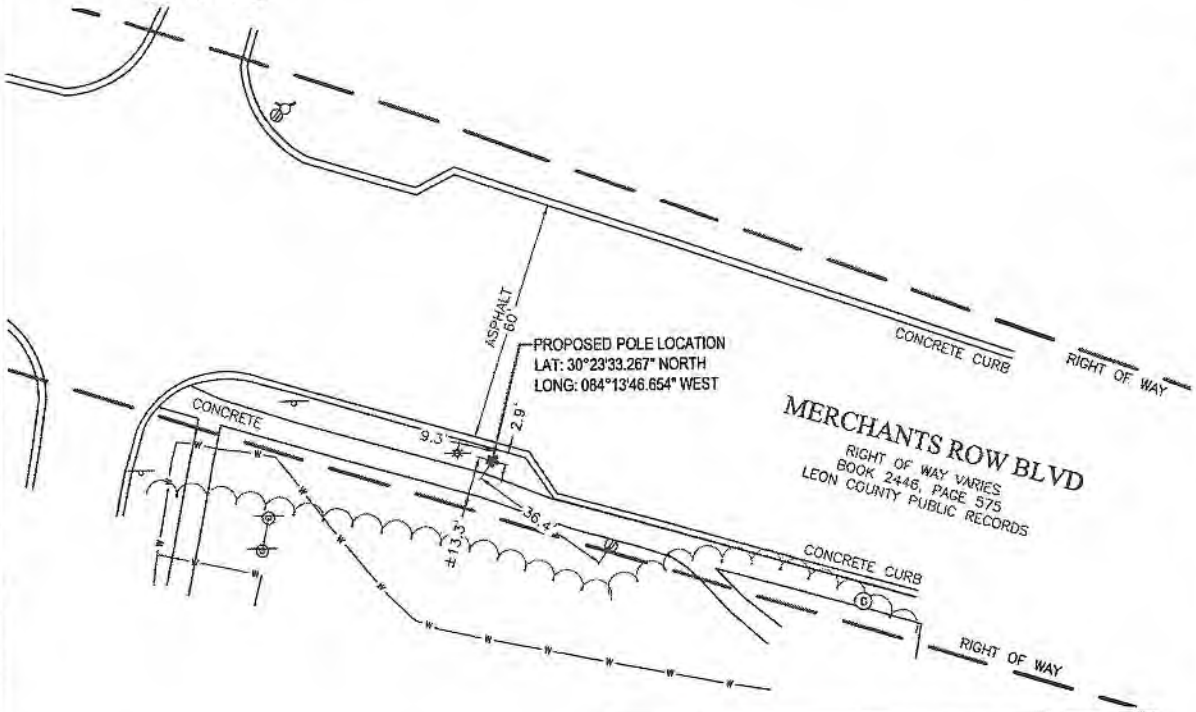
VICINITY MAP
(NOT TO SCALE)

LEGEND

- TREE LINE
- WATER UTILITY
- REBAR SET
- SIGN
- LIGHT POLE
- HYDRANT
- MANHOLE DRAINAGE

N

0 30' 60'
GRAPHIC SCALE



NOTES:

THE PURPOSE OF THIS TOPOGRAPHIC MAP IS TO DOCUMENT THE HORIZONTAL AND VERTICAL POSITIONS OF THE PERMANENT FEATURES VISIBLE ON THE GROUND IN THE MAPPED AREA AS FOUND ON THE DATE OF SURVEY, JUNE 11, 2016.

THE RIGHT OF WAY SHOWN HEREON WAS DERIVED FROM EVIDENCE LOCATED IN THE FIELD, DEED, PLAT AND RIGHT OF WAY RECORDS SHOWN HEREON. THIS IS NOT A BOUNDARY SURVEY.

UNDERGROUND UTILITIES: SURFACE EVIDENCE OF UNDERGROUND UTILITIES WAS LOCATED BY SURVEYING AND MAPPING, LLC. (SAM, LLC) WHEN MARKED IMMEDIATELY PRIOR TO FIELD WORK. IT IS REQUIRED THAT THE POSITIONS OF UNDERGROUND UTILITIES BE VERIFIED PRIOR TO CONSTRUCTION. NO UTILITIES WERE DESIGNATED EXCEPT AS SHOWN HEREON.

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT. NO ABSTRACT EXAMINATION IS IMPLIED. INFORMATION SHOWN HEREON MAY BE SUBJECT TO EASEMENTS, RESTRICTIONS AND RESERVATIONS OF RECORD.

AT THE TIME OF SURVEY, THE PROPOSED POLE LOCATION APPEARS TO BE LOCATED WITHIN FLOOD HAZARD AREA ZONE X AS DESIGNATED AND DELINEATED ON FEMA FLOOD INSURANCE RATE MAP COMMUNITY PANEL 12073C0315F (LEON COUNTY, FLORIDA), WITH EFFECTIVE DATE OF AUGUST 18, 2009.

THIS SURVEY IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR A UNIQUE ELECTRONIC SIGNATURE.

CERTIFICATION:

I HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY AND OTHER PERTINENT DATA SHOWN HEREON, OF THE HEREON DEPICTED PROPERTY WAS MADE ON THE GROUND, CONFORMS TO THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN THE STATE OF FLORIDA, AS OUTLINED IN CHAPTER 5J-17, (FLORIDA ADMINISTRATIVE CODE) AS ADOPTED BY THE DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION, BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN SEPTEMBER, 1981, AS AMENDED, PURSUANT TO CHAPTER 472.027, FLORIDA STATUTES, AND SECTION E OF THE NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS FOR TOPOGRAPHIC STANDARDS APPROVED ON 3/12/02 AND THAT SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF AS SURVEYED UNDER OUR DIRECTION.

7/12/16

JON V. NOLTING
PROFESSIONAL SURVEYOR & MAPPER NO. 4499
STATE OF FLORIDA

JON V. NOLTING
LICENSE NUMBER
No. 4499
STATE OF FLORIDA
PROFESSIONAL SURVEYOR AND MAPPER

UTILITY LOCATE TICKET #159609821
FOR UTILITY QUESTIONS: CONTACT SUNSHINE 811 AT 1-800-852-8057

NO.	REVISIONS	BY	DATE

SAM
SURVEYING•AERIAL MAPPING•ENGINEERING

SAM Surveying and Mapping, LLC.
4801 Southwest Parkway
Building Two, Suite 100
Austin, Texas, 78735
Ofc: 512.447.0575
Fax: 512.326.3029
email: info@sam.biz
Florida License No. LB7908

CANDIDATE ID: JA90XS212A
SITE ID: 9FLB003402
ADDRESS: 2585 MERCHANTS ROW BLVD TALLAHASSEE, FL

TOPOGRAPHIC SURVEY TO SUPPORT LOCATION OF A TELECOMMUNICATION STRUCTURE

PROJECT: MOBILITIE 1016036723

SHEET 1
OF 1

PATH: \\SAMINC\AUS\PROJECTS\1016036723B\100\SURVEY\02BASE\JA90XS212A\JA90XS212A.DWG

SITE ID: 9FLB003402
JA90XS212A
MERCHANTS ROW BLVD & CEP WAY
TALLAHASSEE, FL 32311

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OF EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

SITE INFORMATION

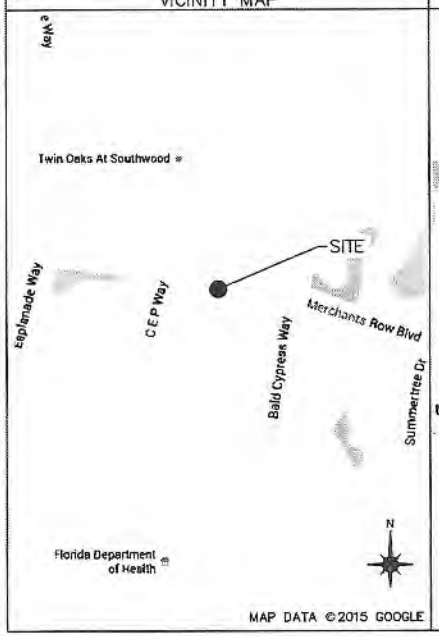
PROPERTY OWNER:	PUBLIC RIGHT-OF-WAY
ADDRESS/CROSS ST:	MERCHANTS ROW BLVD & CEP WAY
APPLICANT:	**MOBILITIE, LLC**
APPLICANT ADDRESS:	3475 Piedmont Rd. NE, Suite 1000 Atlanta, GA 30305
LATITUDE:	30° 23' 33.29" N (30.392581)
LONGITUDE:	84° 13' 46.64" W (-84.229623)
LAT/LONG TYPE:	NAD 83
GROUND ELEVATION:	± 71' AMSL
COUNTY:	TALLAHASSEE/LEON COUNTY
JURISDICTION:	CITY OF TALLAHASSEE

BEFORE SCALING:

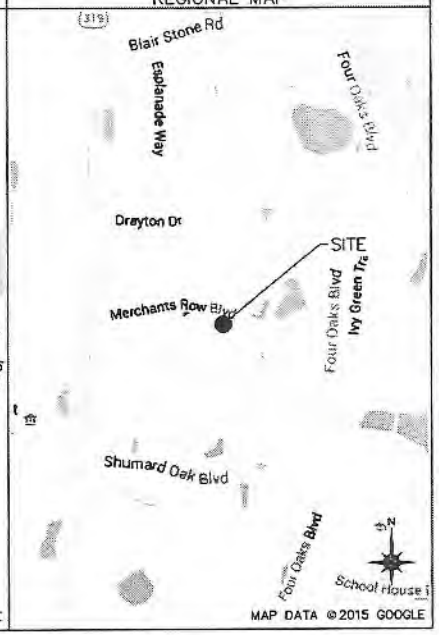
CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS & FIELD CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

LOCATION MAPS

VICINITY MAP



REGIONAL MAP



DIG ALERT

811 Know what's below. Call before you dig.

TWO WORKING DAYS BEFORE YOU DIG

PROJECT DESCRIPTION

END USER PROPOSES TO INSTALL EQUIPMENT ON A PROPOSED STEEL UTILITY POLE WITHIN AN EXISTING RIGHT-OF-WAY. THE SCOPE WILL CONSIST OF THE FOLLOWING:

– INSTALL PROPOSED BACKHAUL TRANSPORT EQUIPMENT ON A PROPOSED STEEL UTILITY POLE

CODES

2015 INTERNATIONAL BUILDING CODE
2014 NATIONAL ELECTRICAL CODE

DRAWING INDEX

SHEET NO:	SHEET TITLE
0.0	TITLE SHEET
1.0	SITE PLAN & EXHIBIT PHOTO
2.0	POLE ELEVATIONS
2.1	POLE ELEVATIONS
3.0	ANTENNA & EQUIPMENT MOUNTING DETAILS
4.0	ELECTRICAL DETAILS
5.0	GROUNDING DETAILS
GN-1	GENERAL NOTES
GN-2	GENERAL NOTES
6.0	TRAFFIC CONTROL PLAN

ARCHITECT/ENGINEER

JACOBS ENGINEERING GROUP, INC.
5449 BELLS FERRY ROAD
ACWORTH, GA 30102
CONTACT: KARL KRATINA
PROJECT MANAGER
TEL: (678) 460-1416
FAX: (770) 701-2501

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

TITLE SHEET

SHEET NUMBER

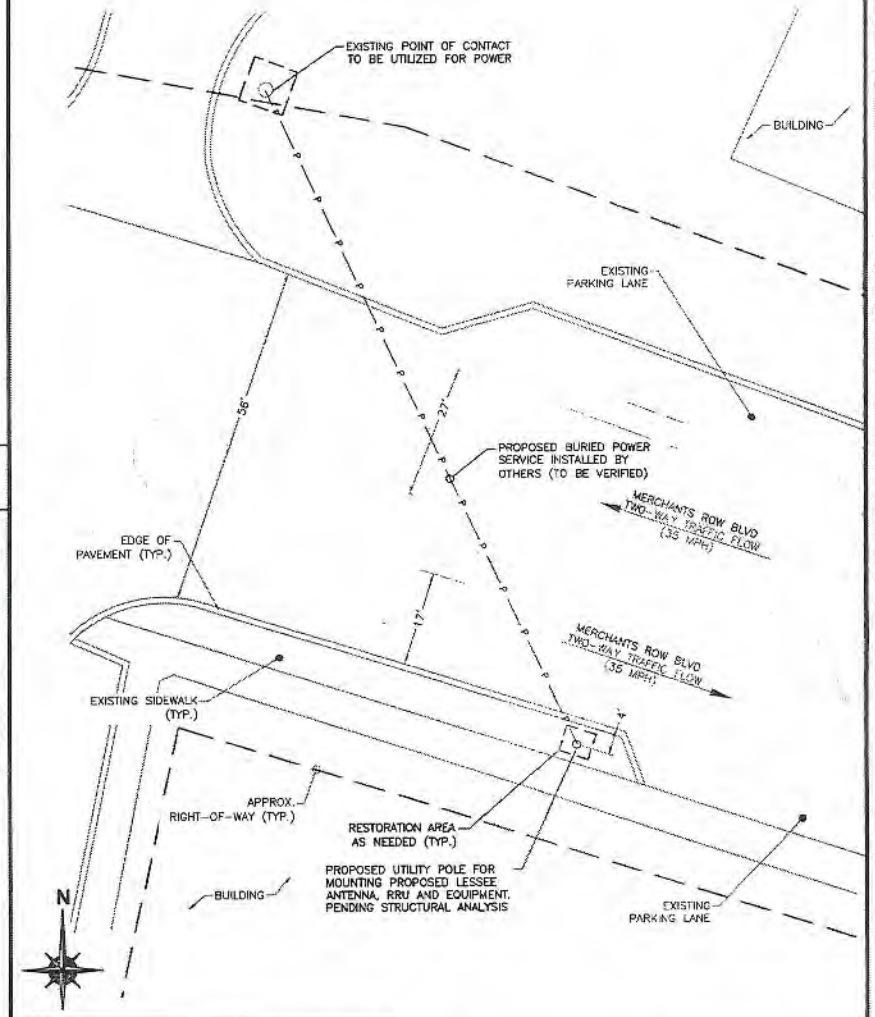
0.0

EXHIBIT PHOTO | 1

SCALE: NOT TO SCALE

AERIAL SITE LOCATION | 2

SCALE: NOT TO SCALE



NOTE:
THIS SITE PLAN WAS GENERATED WITHOUT THE USE OF A SURVEY. PROPERTY LINES, POWER & TELCO UTILITY POINT CONNECTIONS/ROUTES AND EASEMENTS SHOWN ON THESE PLANS ARE ESTIMATED. ALL ITEMS AND DIMENSIONS SHOULD BE VERIFIED IN THE FIELD.

ENLARGED SITE PLAN | 3

SCALE: 1" = 20'-0" (1" = 10'-0" ON 22"x34" SHEET)

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER800201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.28.15	REVISION
A	12.07.15	FOR CLIENT REVIEW

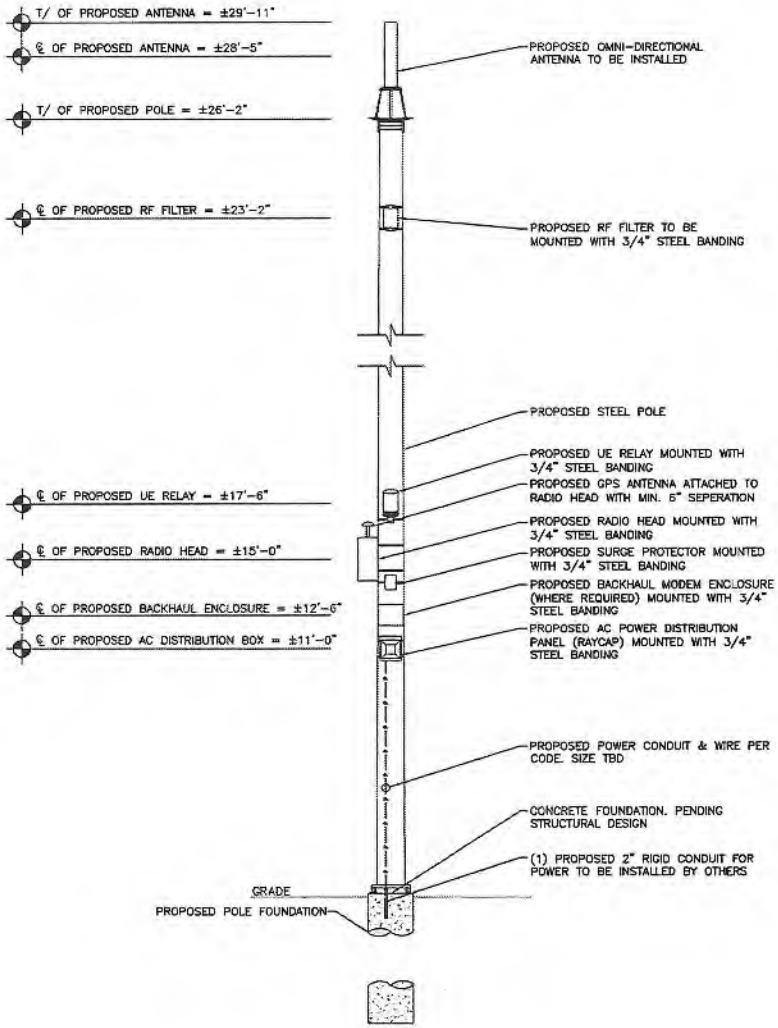
PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE
SITE PLAN & EXHIBIT PHOTO

SHEET NUMBER
1.0



NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.7" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIAMETER	0.3 LBS
1	AC DIST (RAYCAP)	13.1" X 11.4" X 4.4"	TBD
1	REJECT FILTER	13.6" X 8.1" X 2.4"	7.7 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.1" X 4.5" X 2.5"	TBD

PROPOSED FRONT POLE ELEVATIONS

SCALE: 1" = 5'

1

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

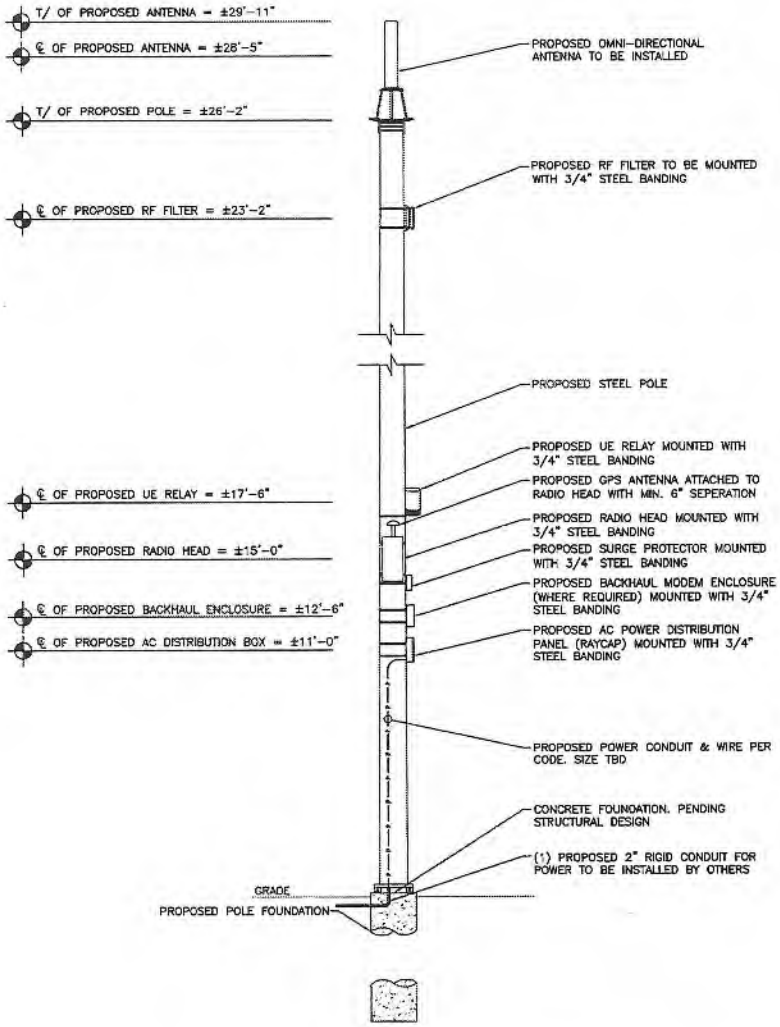
JAS0XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.0



NOTE:
PROJECT SCOPE OF WORK DOES NOT INCLUDE A STRUCTURAL EVALUATION OF THIS POLE OR STRUCTURE. NEW EQUIPMENT SHOWN ON THIS PLAN HAVE NOT BEEN EVALUATED TO VERIFY THE POLE OR STRUCTURE HAS THE CAPACITY TO ADEQUATELY SUPPORT THE EQUIPMENT. PRIOR TO ANY INSTALLATION, A STRUCTURAL EVALUATION OF THE POLE OR STRUCTURE SHOULD BE PERFORMED.

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.
2. ALL CABLES SHALL BE SECURED TO POLE EVERY 36" OR LESS.
3. LIGHTNING RODS SHALL BE INCLUDED AS REQUIRED.
4. STRUCTURAL BACKFILL TO BE COMPACTED IN 8" MAXIMUM LAYERS TO 95% OF CONTENT IN ACCORDANCE WITH ASTM D698. ADDITIONALLY, STRUCTURAL BACKFILL MUST HAVE A MINIMUM COMPACTED UNIT WEIGHT OF 100 POUNDS PER CUBIC FOOT (16kN/m3)

BAND 41 (2500MHz) EQUIPMENT CHART

QUANTITY	DESCRIPTION	DIMENSIONS (HxWxD)	WEIGHT
1	MOUNTED ANTENNA	35.4" X 4.7" DIAMETER	11 LBS
1	MOUNTED RADIO	20.1" X 9.1" X 8.9"	55.1 LBS
1	GPS ANTENNA	0.8" X 2.6" DIAMETER	0.3 LBS
1	AC DIST (RAYCAP)	13.1" X 11.4" X 4.4"	TBD
1	REJECT FILTER	13.6" X 8.1" X 2.4"	7.7 LBS
1	MOUNTED RELAY	13.0" X 7.9" DIAMETER	9.9 LBS
1	SURGE PROTECTOR	6.1" X 4.5" X 2.5"	TBD

PROPOSED SIDE POLE ELEVATION

SCALE: 1" = 5'

1

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

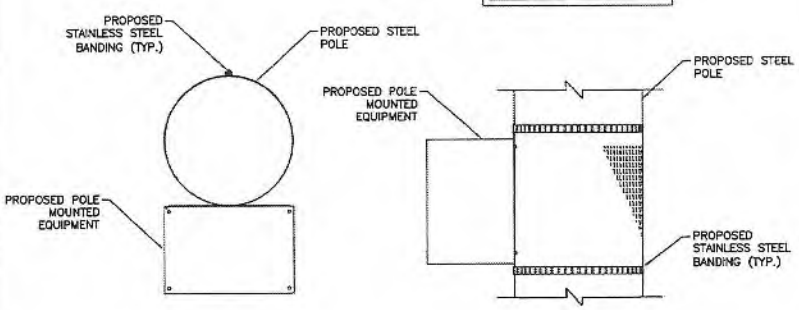
SHEET TITLE

POLE ELEVATIONS

SHEET NUMBER

2.1

NOTE:
INSTALL BRACKETS WITH STAINLESS STEEL BANDING.



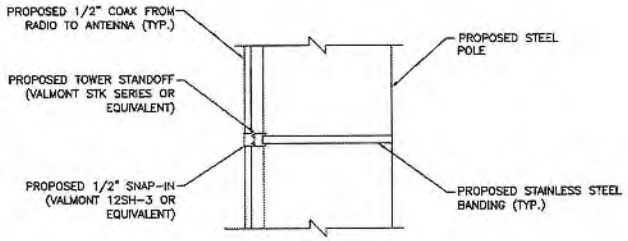
TOP VIEW

SIDE VIEW

EQUIPMENT BANDING DETAIL

SCALE: NOT TO SCALE

1

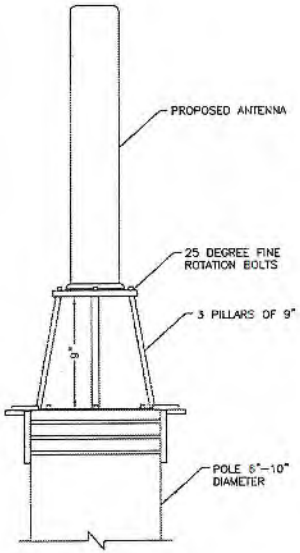


NOTE:
SPACE SNAP-INS PER CABLE MANUFACTURER'S SPECIFICATIONS

CABLE MOUNTING DETAIL

SCALE: NOT TO SCALE

2



SIDE VIEW

NOTE:

1. MOUNTING BRACKET ACCOMMODATES POLE SIZES FROM 6" TO 10" DIAMETER.
2. MOUNTING BRACKET MAY BE USED FOR WOOD, CONCRETE & STEEL POLES.
3. JACOBS HAS NOT PERFORMED A STRUCTURAL EVALUATION FOR THE MOUNTING BRACKET. REFER TO THE MANUFACTURER FOR ADDITIONAL INFORMATION.

ANTENNA MOUNTING DETAIL

SCALE: NOT TO SCALE

3

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD & CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

ANTENNA & EQUIPMENT MOUNTING DETAILS

SHEET NUMBER

3.0

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS UTILITY SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH SECONDARY GROUNDING, AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION AND INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL FIBER SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT.
5. ALL CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
6. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S) AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:
   - N.E.C. NATIONAL ELECTRICAL CODE
   - A.N.S.I. AMERICAN NATIONAL STANDARDS INSTITUTE
   - I.E.E.E. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
   - A.S.T.M. AMERICAN SOCIETY FOR TESTING MATERIALS
   - N.E.M.A. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
   - U.L. UNDERWRITERS LABORATORIES, INC.
   - N.F.P.A. NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

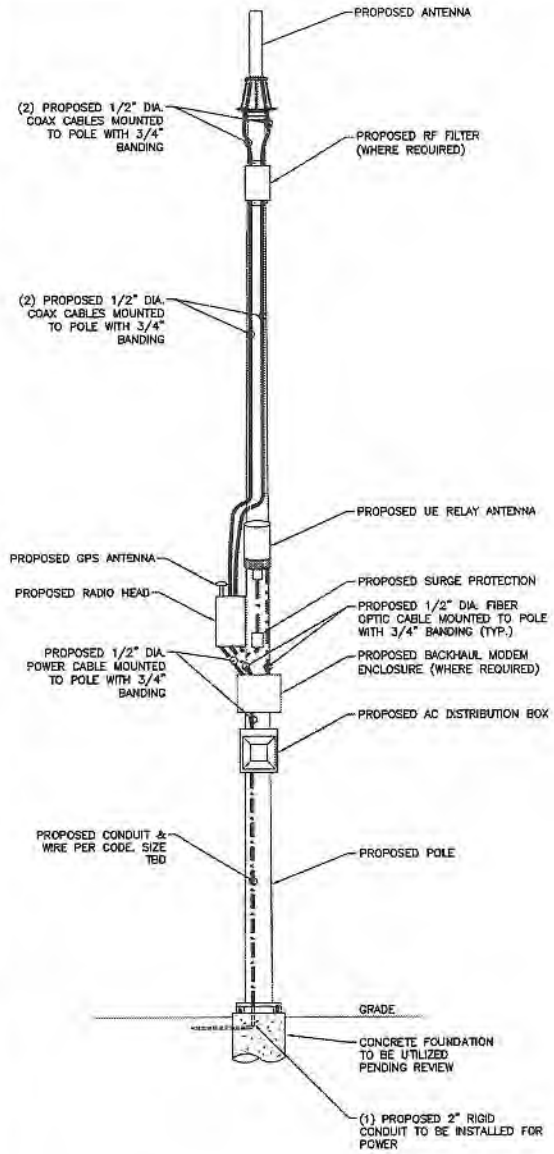
1. WIRING OF EVERY KIND MUST BY INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ARCHITECT/ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

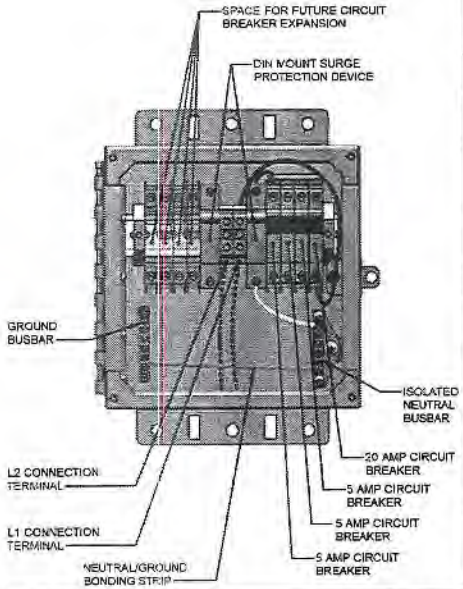
SEE DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL, AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ARCHITECT/ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY.



NOTE:
CABLING DIAGRAM IS FOR CLARITY OF CABLE ROUTE AND TERMINATION ONLY. CONTRACTOR SHALL INSTALL CABLES WITH MINIMAL VISUAL IMPACT ON PROPOSED STEEL POLE. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.



CABLING DIAGRAM | 1

SCALE: NOT TO SCALE

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ERS00201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

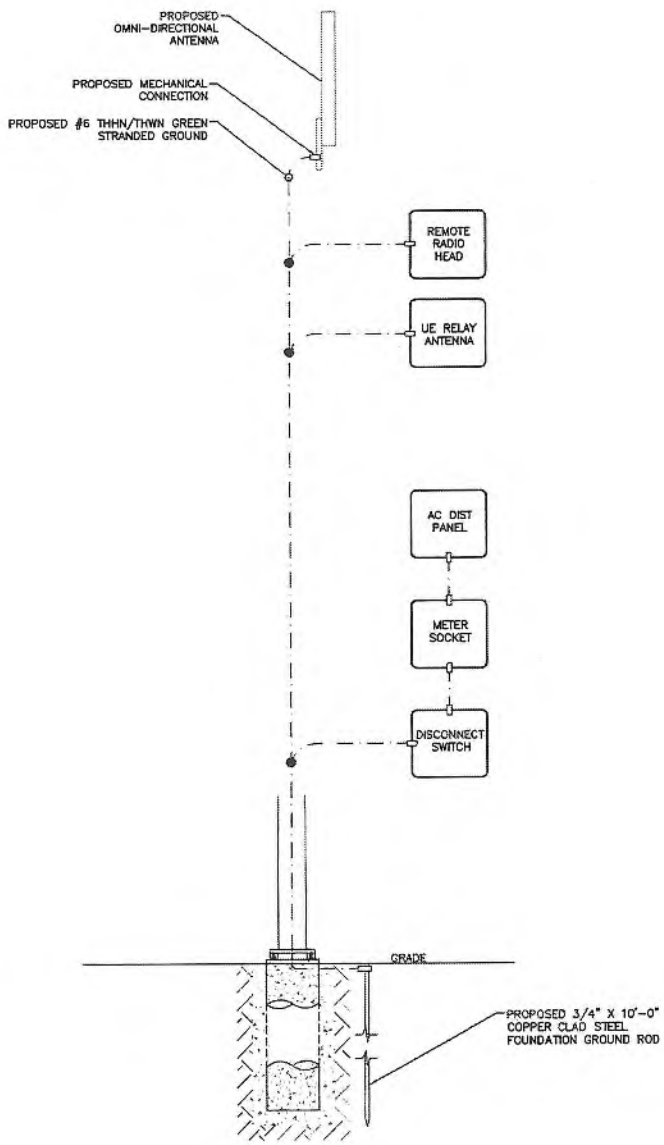
JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

4.0



LEGEND
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- COMPRESSION CONNECTION

NOTE:
GROUNDING RISER FOR DIAGRAMMATIC PURPOSES ONLY. SEE ELEVATION DRAWING FOR EQUIPMENT AND ANTENNA LOCATIONS.

GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

1

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
5.0

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

GENERAL REQUIREMENTS

PART 1 – GENERAL

1. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
2. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
3. COMPLETE FINAL CLEAN UP REQUIREMENT, INCLUDING TOUCH–UP PAINTING. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 – FINAL CLEANING

1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION ON COMPLETION.
   - A. CLEAN THE PROJECT SITE, YARD AND GROUNDS IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREA, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO–CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN–TEXTURED SURFACE.
   - B. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE.
   - C. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
   - D. CLEAN EXPOSED EXTERIOR HARD SURFACED FINISHES TO A DIRT–FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
   - E. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING HANDHOLES, MANHOLES, AND SIMILAR SPACES.
   - F. REMOVE LABELS THAT ARE NOT PERMANENT LABELS.
   - G. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CANNOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
   - H. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY.
   - I. DUST OFF ALL EQUIPMENT AND ITEMS WITHIN EQUIPMENT ENCLOSURE.
2. REMOVAL OF PROTECTION: REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

SITE WORK

PART 1 – GENERAL

1. WORK INCLUDED: SEE SITE PLAN.
2. DESCRIPTIONS: IF APPLICABLE, LEASE AREA, AND UNDERGROUND UTILITY EASEMENTS ARE TO BE CONSTRUCTED TO PROVIDE A WELL DRAINED, EASILY MAINTAINED, EVEN SURFACE FOR USE AND ACCESS.
3. QUALITY ASSURANCE
   - A. APPLY SOIL STERILIZER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (AS NEEDED).
   - B. APPLY AND MAINTAIN GRASS SEED AS RECOMMENDED BY THE SEED PRODUCER (IF REQUIRED).
   - C. PLACE AND MAINTAIN VEGETATION LANDSCAPING, IF INCLUDED WITHIN THE CONTRACT, AS RECOMMENDED BY NURSERY INDUSTRY STANDARDS.
4. SEQUENCING
   - A. CONFIRM SURVEY STAKES AND SET ELEVATION STAKES PRIOR TO ANY CONSTRUCTION.
   - B. CONSTRUCT TEMPORARY CONSTRUCTION AREA, DESIGNATED AREA TO BE APPROVED BY CONSTRUCTION MANAGER AND LOCAL AUTHORITIES.
   - C. APPLY SOIL STERILIZER PRIOR TO PLACING BASE MATERIALS.
   - D. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA TO BASE COURSE ELEVATION, WATER TO ENSURE GROWTH.
   - E. AFTER APPLICATIONS OF FINAL SURFACES, APPLY SOIL STERILIZER TO STONE SURFACES.
5. SUBMITTALS
   - A. BEFORE CONSTRUCTION: IF LANDSCAPING IS APPLICABLE TO THE CONTRACT, SUBMIT TWO COPIES OF THE LANDSCAPE PLAN ON NURSERY LETTERHEAD. IF A LANDSCAPE ALLOWANCE WAS INCLUDED IN THE CONTRACT, PROVIDE AN ITEMIZED LISTING OF PROPOSED COSTS ON NURSERY LETTERHEAD
   - B. AFTER CONSTRUCTION
     1. MANUFACTURER'S DESCRIPTION OF PRODUCT AND WARRANTY STATEMENT ON SOIL STERILIZER.
     2. MANUFACTURER'S DESCRIPTION OF PRODUCT ON GRASS SEED AND FERTILIZER.
     3. LANDSCAPING WARRANTY STATEMENT
6. WARRANTY
   - A. IN ADDITION TO THE WARRANTY ON ALL CONSTRUCTION COVERED IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL REPAIR ALL DAMAGE AND RESTORE AREA AS CLOSE TO ORIGINAL CONDITION AS POSSIBLE AT SITE AND SURROUNDINGS.
   - B. SOIL STERILIZATION APPLICATION TO GUARANTEE VEGETATION FREE AREAS FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
   - C. DISTURBED AREA WILL REFLECT GROWTH OF NEW GRASS COVER PRIOR TO FINAL INSPECTION.
   - D. LANDSCAPING, IF INCLUDED WITHIN THE SCOPE OF THE CONTRACT, WILL BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL INSPECTION.

PART 2 – PRODUCTS

1. MATERIALS
   - A. SOIL STERILIZER SHALL BE EPA–REGISTERED, PRE–EMERGENCE LIQUID:

TOTAL KILL PRODUCT 910 EPA 10292–7 (313) 583–8000	PHASAR CORPORATION P.O. BOX 5123 DEARBORN, MI 48128
AMBUSH HERBICIDE EPA REGISTERED (800) 526–4924	FRAMAR INDUSTRIAL PRODUCTS 1435 MORRIS AVE. UNION, NJ 07083

   - B. ROAD AND SITE MATERIALS SHALL CONFORM TO STATE AND LOCAL DOT SPECIFICATIONS FILL MATERIAL (UNLESS OTHERWISE NOTED) – ACCEPTABLE SELECT FILL SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF HIGHWAY AND TRANSPORTATION STANDARD SPECIFICATIONS.
   - C. SOIL STABILIZER FABRIC SHALL BE MIRAFI 500X.

PART 3 – EXECUTION

1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION
2. PREPARATION
   - A. CLEAR BRUSH AND DEBRIS FROM LEASE AREA AND UNDERGROUND UTILITY EASEMENTS AS REQUIRED FOR CONSTRUCTION.
   - B. UNLESS OTHERWISE INSTRUCTED BY LESSEE, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
   - C. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
   - D. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
   - A. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
   - B. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
   - C. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAPPED.
   - D. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
   - E. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
   - F. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREA, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D–1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS–BUILT DRAWINGS.
5. PROTECTION
   - A. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1–2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATE.
   - B. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

mobilitie

3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305

PHONE: (877) 999–7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.26.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

ELECTRICAL

1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
2. ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OR ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.)
4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "U.L." WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "U.L." LISTED.
5. ALL CONDUIT SHALL HAVE A PULL CORD.
6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
7. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY IBC, NEC AND ALL APPLICABLE CODES.
9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
10. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SERVICE AND DISTRIBUTION

1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED.
2. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
3. CONDUIT:
   A. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
   B. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
   C. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY 811 OR OTHER SUCH UTILITY LOCATING AGENCY 3 DAYS BEFORE DIGGING.
4. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
5. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FOURTH INCH (1/4"). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
6. UPON COMPLETION OF WORK, CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
7. GROUNDING ELECTRODE SYSTEM
   A. PREPARATION
      1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTED SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUNDED. ALL CONNECTIONS ARE TO HAVE A NON-OXIDIZING AGENT APPLIED PRIOR TO INSTALLATION.
      2. IF CONDUCTORS MUST RUN THROUGH CONDUIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
   B. EXTERNAL CONNECTIONS
      1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "ULTRAWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
      2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD). MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
   C. GROUND RODS: ALL GROUND RODS SHALL BE 5/8-INCH DIAMETER X 10'-0" LONG "COPPERWELD" OR APPROVED EQUAL, OF THE NUMBER AND LOCATIONS INDICATED. GROUND RODS SHALL BE DRIVEN FULL LENGTH VERTICAL IN UNDISTURBED EARTH.
   D. GROUND CONDUCTORS: ALL GROUND CONDUCTORS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS OTHERWISE NOTED.
   E. LUGS
      1. LUGS SHALL BE 2-HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #54____BE OR EQUIVALENT

A.	535 MCM DLO	54680BE
B.	262 MCM DLO	54672BE
C.	#1/0 DLO	54662BE
D.	#4/0 THWN AND BARE	54666BE
E.	#2/0 THWN	54662BE
F.	#2 THHN	54207BE
G.	#6 DLO	54205BE

      2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO. 6 AWG TO NO. 4 AWG	6 INCHES
NO. 2 AWG TO NO 1/0 AWG	8 INCHES
NO. 2/0 AWG TO 4/0 AWG	12 INCHES
250 MCM TO 750 MCM	24 INCHES

8. GROUNDING RESISTANCE TEST REPORT: UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS MUST BE SUBMITTED. TWO (2) SETS OF TEST DOCUMENTS FROM THE INDEPENDENT TESTING SERVICE ARE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

POLES, POSTS, AND STANDARDS (SINGLE MAST AND SELF SUPPORTING TOWERS)

1. GENERAL
   A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED.
   B. GROUNDING: GROUND METAL POLES WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE.

TELECOMMUNICATIONS WIRING COMPONENTS (COAXIAL ANTENNA CABLE)

1. GENERAL
   A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
   B. ALL MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
2. MATERIALS:
   A. COAXIAL CABLE:
      1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
      2. LENGTHS LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
3. ANTENNA AND COAXIAL CABLE GROUNDING
   A. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
4. COAXIAL CABLE IDENTIFICATION
   A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
      1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
      2. SECOND LOCATION IS AT END OF THE COAX NEAREST THE EQUIPMENT.
   B. USE ANDREW CABLE TIES (PT.# 27290) TO SECURE IDENTIFICATION TAGS.
      1. TESTING: LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER/QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600201
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

B	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

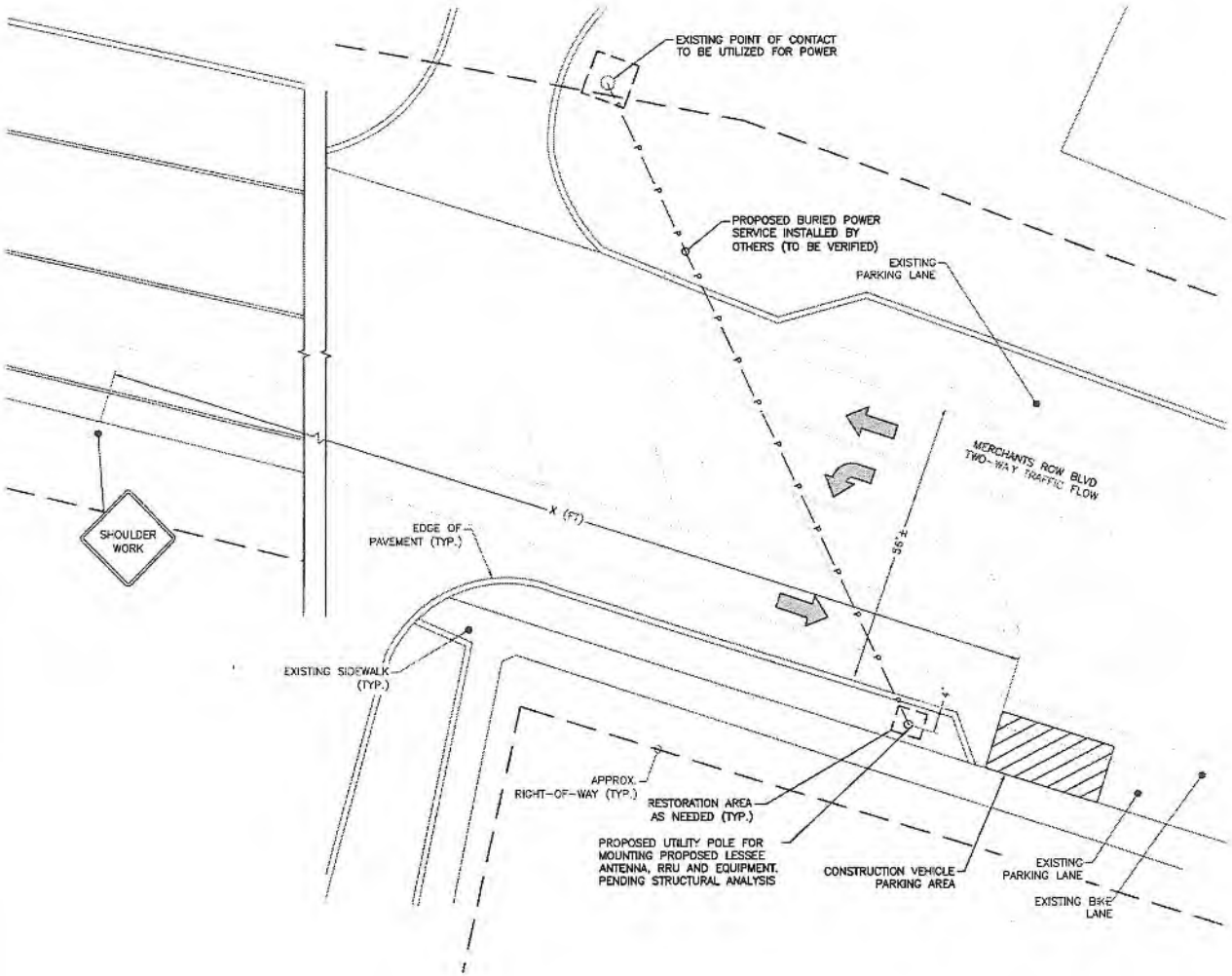
JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-2



NOTE:

1. INSTALL SIGNS IN ACCORDANCE WITH MUTCD.
2. THE SHOULDER WORK SIGN MAY BE OMITTED WHERE THE WORK SPACE IS BEHIND A BARRIER, MORE THAN 24 INCHES BEHIND THE CURB, OR 15 FEET OR MORE FROM THE EDGE OF THE ROADWAY.
3. FOR SHORT-TERM DURATION OR MOBILE OPERATION, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH ACTIVATED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATION, OR STROBE LIGHT IS USED.
4. VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATION, OR STROBE LIGHTS.

TRAFFIC CONTROL SPACING

SPEED (MPH)	X (FT)	L (FT)	B (FT)
15	90	55	100
20	120	95	115
25	150	150	155
30	180	215	200
35	210	295	250
40	240	365	305
45	270	650	360
50	300	720	425
55	330	790	495
60	360	865	570
65	390	935	645
70	420	1010	730

NOTE: CONTRACTOR TO VERIFY EXISTING SPEED LIMIT.

TRAFFIC CONTROL PLAN

SCALE: NOT TO SCALE

1

mobilitie
3475 Piedmont Rd. NE,
Suite 1000 Atlanta, GA 30305
PHONE: (877) 999-7070
EMAIL: SOLUTIONS@MOBILITIE.COM

PROJECT NO:	ER600291
DRAWN BY:	J. BRAZA
CHECKED BY:	R.SHOLTIS

S	04.21.16	REVISION
A	12.07.15	FOR CLIENT REVIEW

PRELIMINARY

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

JA90XS212A
9FLB003402
MERCHANTS ROW BLVD &
CEP WAY
TALLAHASSEE, FL 32311
UTILITY POLE

SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

6.0