



1-A Certification of Location and Elevation

Date of Survey: 04/11/2013

Rev. 0: 05/24/2013

Prepared For: Jill House
American Tower Corporation
400 Regency Forest Drive
Cary, NC 27511
Site Ref.: AT&T #368-317
ATC #280422
Site Name: Farrington NC
TEP Job No.: 131147
Structure Type: Proposed Telecommunications Tower
Site Address: 464 Old Farrington Rd.
Chapel Hill, NC 27514
(Chatham County)

The elevations referenced hereon are based on N.A.V.D. 1988, and are accurate to within 3 feet, more or less as determined by our survey of the subject property. The values are as follows:

Elevation of Site Above Mean Sea Level: 278.7 feet (AMSL)

The horizontal values of the above referenced point, and the geodetic coordinates thereof, were established by taking multiple readings with dual frequency Global Position Satellite Receivers and are hereby certified to be within 15 feet, more or less, based thereon. The values are as follows:

NAD '27 LATITUDE: 35° - 50' - 54.327" North
LONGITUDE: 079° - 01' - 18.774" West

NAD '83 LATITUDE: 35° - 50' - 54.854" North
LONGITUDE: 079° - 01' - 17.811" West

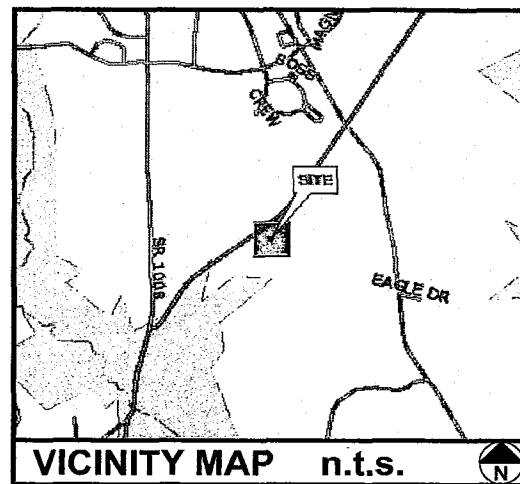
NAD '83 (Decimal) LATITUDE: 35.848570689° North
LONGITUDE: 079.021614101° West




Clifford C. Byrd
Professional Land Surveyor L-3782

5/24/13

Date



NOTES:

1. This plan was prepared without the benefit of a report of title.
2. This plan does not represent a title survey.
3. The basis of the bearings and coordinates, for this plan is the North Carolina State Plane Coordinate System, North American Datum (NCSPCS/NAD 83) based on differential GPS observations performed on April 11, 2013 and tied to the National CORS system via the OPUS utility and expressed in US Survey Feet.
4. Vertical information shown, based on the North American Vertical Datum of 1988 (NAVD '88) in US Survey Feet.
5. This plan does not represent an actual Boundary Survey of the Parent Parcel, Property lines are drawn from information found in Deed Book 1160, Page 172, of the Chatham County Register of Deeds records.
6. All distances are ground unless otherwise noted.
7. Building dimensions are approximate
8. This property is located in flood zone "X", areas determined to be outside 0.2% chance of annual flood. (FEMA Community Panel # 3710979600K, effective February 02, 2007).
9. Lessee Information:
American Towers, LLC
3500 Regency Parkway, Suite 100
Cary, NC 27518
10. Property Information:
Lester and Gloria Porter
464 Old Farrington Rd.
Chapel Hill, NC 27514

LEGEND

- PROPERTY LINE
- - - ADJOINERS PROPERTY LINE (NOT SURVEYED)
- EXISTING UTILITY POLE
- ⊕ EXISTING TELCO PEDESTAL
- IRF 1/2" IRON REBAR (FOUND)
- IRS 1/2" IRON REBAR (SET)
- IPF 1" IRON PIPE (FOUND)
- ⊞ ECM EXISTING CONCRETE MONUMENT
- PROPERTY CORNER (CALCULATED)
- /// EDGE OF PAVEMENT
- - - OHW - - - OVERHEAD WIRE
- - - R/W - - - RIGHT-OF-WAY
- x - CHAIN LINK FENCE
- ~ EXISTING TREE LINE

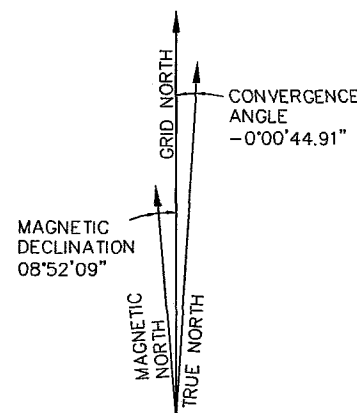
1A CERTIFICATE

LATITUDE: N 35° 50' 54.728" (NAD '27)
LONGITUDE: W 79° 01' 14.563" (NAD '27)

LATITUDE: N 35° 50' 55.255" (NAD '83)
LONGITUDE: W 79° 01' 13.600" (NAD '83)

GROUND ELEV. (AMSL): 282.0± (NAVD '88)

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	CHORD BEARING
C1	556.00'	1511.00'	552.87'	N43°20'44"E



SITE SURVEY

SCALE: 1" = 100'

0 100 200
SCALE IN FEET

PREPARED FOR:

AMERICAN TOWER
AMERICAN TOWERS, LLC
3500 REGENCY PARKWAY, SUITE 100
CARY, NC 27518

PROJECT INFORMATION:

AT&T SITE # 368-317
ATC SITE # 280422
FARRINGTON NC

464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

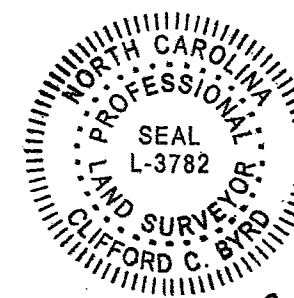
PREPARED BY:

TOWER ENGINEERING PROFESSIONALS

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

SURVEYOR CERTIFICATE

I, CLIFFORD BYRD, CERTIFY THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY BY ME OR UNDER MY DIRECT SUPERVISION, (DEED DESCRIPTION RECORDED IN BOOK AND PAGE AS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS BROKEN LINES, DRAWN FROM INFORMATION FOUND IN BOOK AND PAGE AS REFERENCED HEREON; THAT RATIO OF PRECISION AS CALCULATED IS 1: 10,000 OR GREATER; THAT THE AREA IS COMPUTED BY COORDINATE METHOD; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S.47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL, THIS 15 DAY OF JANUARY, 2014.



Cliff C. Byrd

NORTH CAROLINA PLS #L-3782
CLIFFORD C. BYRD

SHEET TITLE:

SITE SURVEY

DATE: 01/15/2014 REVISION: 0
SHEET #: 1 OF 2 TEP #: 131147

ALL THAT CERTAIN EASEMENT AREA PARCEL OF LAND, SITUATE, LYING AND BEING IN CHATHAM COUNTY, NORTH CAROLINA, BEING A PORTION OF THE LANDS DESCRIBED IN DEED BOOK 1160 AT PAGE 172 OF THE CHATHAM COUNTY REGISTER OF DEEDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT EXISTING IRON ON THE SOUTHERN LIMITS OF THE PARCEL DESCRIBED IN DEED BOOK 1160 AT PAGE 172, SAID EXISTING IRON BEING NORTH 86°46'53" EAST A DISTANCE OF 353.07 FT. FROM A IRON IN THE RIGHT OF WAY OF OLD FARRINGTON ROAD; SAID EXISTING IRON HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTING = 763,637.54', AND EASTING = 1,993,528.40'; THENCE FROM THE POINT OF COMMENCEMENT, NORTH 27°26'29" EAST, A DISTANCE OF 462.04 FT. TO A POINT ON THE EASTERN RIGHT OF WAY OF OLD FARRINGTON ROAD, SAID POINT BEING THE TRUE POINT OF BEGINNING OF THE DESCRIBED 30' ACCESS & UTILITY EASEMENT, AND HAVING NORTH CAROLINA STATE PLANE COORDINATES OF NORTING = 764,047.59', AND EASTING = 1,993,741.30'; THENCE FROM THE POINT OF BEGINNING, SAID POINT BEING THE BEGINNING OF A CURVE, CONCAVE TO THE WEST, HAVING A RADIUS OF 1511.00 FT., A CHORD OF 33.62 FT., BEARING NORTH 45°13'09" EAST; THENCE ALONG THE ARC OF SAID CURVE, WITH THE EASTERN RIGHT OF WAY OF OLD FARRINGTON ROAD A LENGTH OF 33.62 FT.; THENCE LEAVING SAID RIGHT OF WAY, SOUTH 17°58'39" EAST FOR A DISTANCE OF 48.41 FT. TO A POINT; THENCE SOUTH 12°11'05" WEST FOR A DISTANCE OF 109.28 FT. TO A POINT; THENCE SOUTH 21°20'11" EAST FOR A DISTANCE OF 56.67 FT. TO A POINT; THENCE SOUTH 37°14'44" EAST FOR A DISTANCE OF 115.75 FT. TO A POINT; THENCE SOUTH 87°51'50" EAST FOR A DISTANCE OF 34.41 FT. TO A POINT; THENCE NORTH 51°13'35" EAST FOR A DISTANCE OF 17.31 FT. TO A POINT ON THE SOUTHERN LIMITS OF THE DESCRIBED 100'X100' LEASE AREA PARCEL; THENCE ALONG SAID SOUTHERN LIMITS SOUTH 52°29'25" EAST FOR A DISTANCE OF 30.88 FT. TO A POINT; THENCE LEAVING SAID LEASE AREA, SOUTH 51°13'35" WEST FOR A DISTANCE OF 35.83 FT. TO A POINT; THENCE NORTH 87°51'50" WEST A DISTANCE OF 59.79 FT. TO A POINT; THENCE NORTH 37°14'44" WEST FOR A DISTANCE OF 134.13 FT. TO A POINT; THENCE NORTH 21°20'11" WEST FOR A DISTANCE OF 69.90 FT. TO A POINT; THENCE NORTH 12°11'05" EAST FOR A DISTANCE OF 110.25 FT. TO A POINT; THENCE NORTH 17°56'38" WEST FOR A DISTANCE OF 25.16 FT. TO THE POINT OF BEGINNING.

SAID EASEMENT AREA PARCEL CONTAINING 12.251 SQ. FT. OR 0.28 ACRES MORE OR LESS.

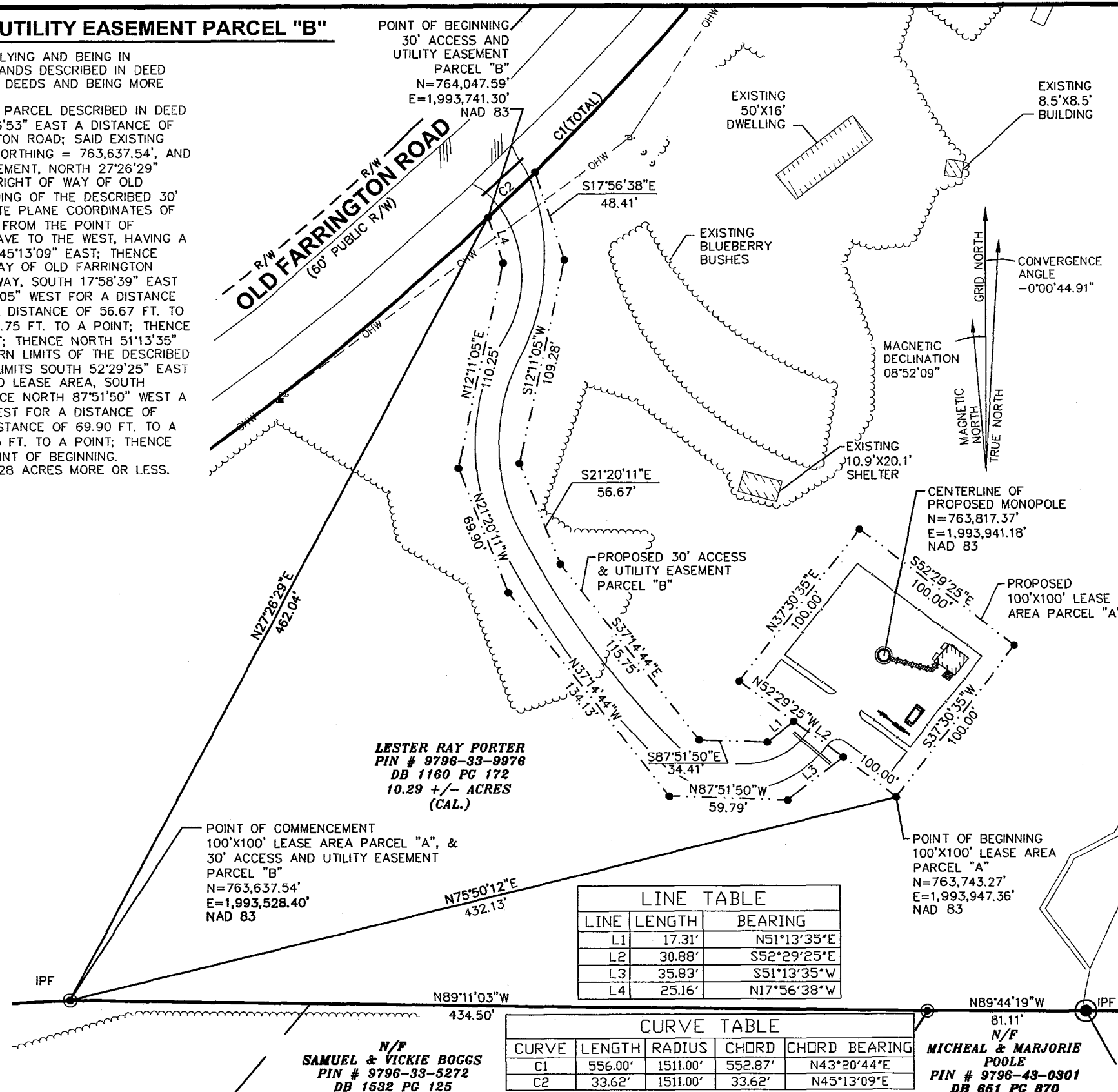
CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	CHORD BEARING
C1	556.00'	1511.00'	552.87'	N43°20'44"E
C2	33.62'	1511.00'	33.62'	N45°13'09"E

LEASE AREA PARCEL "A"

ALL THAT CERTAIN LEASE AREA PARCEL OF LAND, SITUATE, LYING AND BEING IN CHATHAM COUNTY, NORTH CAROLINA, BEING A PORTION OF THE LANDS DESCRIBED IN DEED BOOK 1160 AT PAGE 172 OF THE CHATHAM COUNTY REGISTER OF DEEDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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SCALE: 1" = 60'



PREPARED FOR:



PROJECT INFORMATION:

AT&T SITE # 368-317
ATC SITE # 280422
FARRINGTON NC

464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

PREPARED BY:

TOWER ENGINEERING PROFESSIONALS

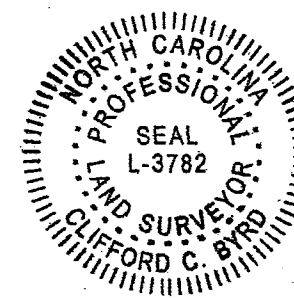
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263

(919) 661-6351

NC LICENSE NO. C-1794

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Clin CRI

NORTH CAROLINA PLS #L-37822
CLIFFORD C. BYRD

SHEET TITLE:

LEGAL DESCRIPTIONS

DATE: 01/15/2014

REVISION: C

SHEET #: 2 OF 2

TEP #: 131147

ATC SITE NUMBER : 280422
ATC SITE NAME: 368-317
PROJECT DESCRIPTION: PROPOSED WIRELESS
TELECOMMUNICATIONS
FACILITY

TOWER TYPE: 195' MONOPOLE
(199' OVERALL)

SITE ADDRESS: 464 OLD FARRINGTON RD
CHAPEL HILL, NC 27514

JURISDICTION: CHATHAM COUNTY
DISTURBED AREA: 0.73 ± ACRES
(COMPOUND & ACCESS DRIVE)

CURRENT USE TYPE: RESIDENTIAL
CURRENT ZONING: R-1
PIN #: 9796-33-9976.000

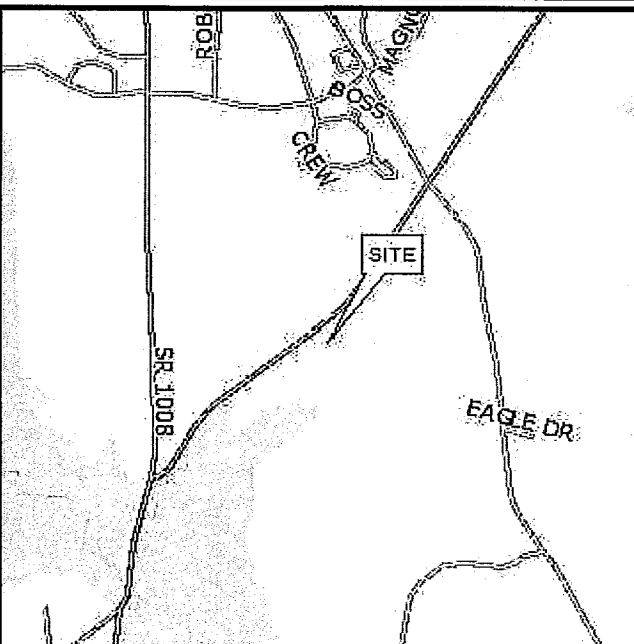
PROJECT INFORMATION

LATITUDE N 35° 50' 54.728" (NAD '27)
LONGITUDE W 79° 01' 14.563" (NAD '27)

LATITUDE N 35° 50' 55.255" (NAD '83)
LONGITUDE W 79° 01' 13.600" (NAD '83)

GROUND ELEV. (AMSL) ≈ 282.1' (NAVD '88)

1-A CERTIFICATION



LOCATION MAP

FROM RALEIGH, NC: HEAD NORTH ON S WILMINGTON ST TOWARD E SOUTH ST. TAKE THE 1ST RIGHT ONTO E SOUTH ST. TAKE THE 1ST RIGHT ONTO S BLOUNT ST. CONTINUE ONTO HAMMOND RD. TAKE THE I-40W/US-64W RAMP. MERGE ONTO I-40W/US-64W. CONTINUE TO FOLLOW I-40W (≈25.9 MI). TAKE EXIT 273A FOR NC 54 W TOWARD CHAPEL HILL. MERGE ONTO NC 54 W. TURN LEFT ONTO FARRINGTON RD. TURN LEFT ONTO FARRINGTON MILL RD. CONTINUE ONTO OLD FARRINGTON RD. SITE WILL BE ON THE LEFT.

DRIVING DIRECTIONS

AMERICAN TOWER CORPORATION

SITE PLAN

AT&T SITE #: 368-317

ATC SITE #:280422

ATC SITE NAME: FARRINGTON NC

464 OLD FARRINGTON RD

CHAPEL HILL, NC 27514

SITE PROJECT MANAGER:

NAME: AMERICAN TOWERS, LLC
ADDRESS: 3500 REGENCY PARKWAY, STE 100
CITY, STATE, ZIP: CARY, NC 27518
CONTACT: JILL HOUSE
PHONE: (919) 466-5163

SITE APPLICANT:

NAME: AMERICAN TOWERS, LLC
ADDRESS: 3500 REGENCY PARKWAY, STE 100
CITY, STATE, ZIP: CARY, NC 27518
CONTACT: JILL HOUSE
PHONE: (919) 466-5163

SURVEYOR:

NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 3703 JUNCTION BOULEVARD
CITY, STATE, ZIP: RALEIGH, NC 27603
CONTACT: CLIFFORD C. BYRD, P.L.S.
PHONE: (919) 661-6351

CIVIL ENGINEER:

NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 3703 JUNCTION BOULEVARD
CITY, STATE, ZIP: RALEIGH, NC 27603
CONTACT: KIMBERLY S. MARTIN, P.E.
PHONE: (919) 661-6351

ELECTRICAL ENGINEER:

NAME: TOWER ENGINEERING PROFESSIONALS
ADDRESS: 3703 JUNCTION BOULEVARD
CITY, STATE, ZIP: RALEIGH, NC 27603
CONTACT: FREDERICK T. HERB, P.E.
PHONE: (919) 661-6351

PROPERTY OWNER:

NAME: RAY LESTER PORTER JR.
ADDRESS: 998 WHIPPOORWILL LANE
CITY, STATE, ZIP: CHAPEL HILL, NC 27514-7542
CONTACT: RAY LESTER PORTER JR.
PHONE: (919) 933-3668

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

1. NORTH CAROLINA BUILDING CODE (2012 EDITION)
2. NORTH CAROLINA CODE COUNCIL
3. ANSI/TIA-222-G-2-2009
4. 2012 NCEC (NEC 2011 + ADDENDA)
5. LOCAL BUILDING CODE
6. CITY/COUNTY ORDINANCES

CODE COMPLIANCE

UTILITIES:

POWER COMPANY: PROGRESS ENERGY
CONTACT: CUSTOMER SERVICE
PHONE: (800) 452-2777
METER # NEAR SITE: UNKNOWN

TELEPHONE COMPANY: AT&T
CONTACT: CUSTOMER SERVICE
PHONE: (800) 225-5288
PHONE # NEAR SITE: (919) 933-3668
PEDESTAL # NEAR SITE: UNKNOWN

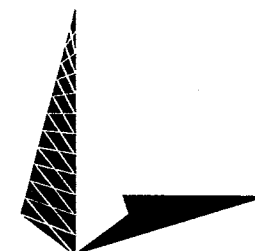
CONTACT INFORMATION

SHEET	DESCRIPTION	REV
T1	TITLE SHEET	2
N1	GENERAL NOTES	2
C1	SITE PLAN	2
C1A	SITE LAYOUT	2
C2	COMPOUND DETAIL	2
C3	TOWER ELEVATION	2
C4	SHELTER ELEVATIONS	2
C5	SHELTER FOUNDATION DETAILS	2
C6	GENERATOR & FUEL TANK ELEVATIONS	2
C7	GENERATOR FOUNDATION DETAILS	2
C8	ICE BRIDGE DETAILS I	2
C9	ICE BRIDGE DETAILS II	2
C10	FENCE DETAILS	2
C11	SIGNAGE DETAILS	2
C12	CULVERT & DRIVEWAY DETAILS	2
C13	SOIL & EROSION CONTROL PLAN AND DETAILS	2
C14	PIPE OUTLET PROTECTION DETAILS	2
L1	LANDSCAPING PLAN	2
L2	LANDSCAPING DETAILS	2
E1	ELECTRICAL NOTES	2
E2	SERVICE ROUTING PLAN & ONE LINE DIAGRAM	2
E3	TOWER & SHELTER GROUNDING PLAN	2
E4	PANELBOARD SCHEDULE	2
E5	SERVICE RACK DETAILS I	2
E5A	SERVICE RACK DETAILS II	2
E6	GROUNDING DETAILS I	2
E7	GROUNDING DETAILS II	2

APPENDIX: GENERAC 80 KW GENERALY ASSEMBLY
AND INSTALLATION SUPPLEMENT

INDEX OF SHEETS

PLANS PREPARED BY:



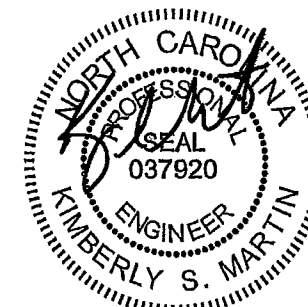
TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

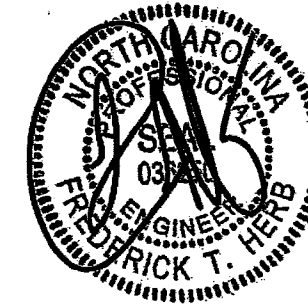
DRAWN BY: MAW CHECKED BY: JAS

SEAL:



April 30, 2014

SEAL:



April 30, 2014

SHEET NUMBER:

T-1

REVISION:

2

TEP #: 131147

1. ALL REFERENCES MADE TO OWNER IN THESE DOCUMENTS SHALL BE CONSIDERED ATC OR IT'S DESIGNATED REPRESENTATIVE.
2. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT, THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE OF NORTH CAROLINA.
3. THE STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TIA-222-G-2-2009. THIS CONFORMS TO THE REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE, 2012 EDITION.
4. WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, 2012 EDITION.
5. UNLESS SHOWN OR NOTED OTHERWISE ON THE CONTRACT DRAWINGS, OR IN THE SPECIFICATIONS, THE FOLLOWING NOTES SHALL APPLY TO THE MATERIALS LISTED HEREIN, AND TO THE PROCEDURES TO BE USED ON THIS PROJECT.
6. ALL HARDWARE ASSEMBLY MANUFACTURER'S INSTRUCTIONS SHALL BE FOLLOWED EXACTLY AND SHALL SUPERSEDE ANY CONFLICTING NOTES ENCLOSED HEREIN.
7. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND IT'S COMPONENT PARTS DURING ERECTION AND/OR FIELD MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIE DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
8. ALL DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATION. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND THE OWNER'S ENGINEER. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE ENGINEER SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE PROCEDURES.
9. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK. RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULE AND MATERIALS ACCESS, WITH THE AT&T PROJECT MANAGER.
12. BILL OF MATERIALS AND PART NUMBERS LISTED ON CONSTRUCTION DRAWINGS ARE INTENDED TO AID CONTRACTOR/OWNER. CONTRACTOR/OWNER SHALL VERIFY PARTS AND QUANTITIES WITH MANUFACTURER PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
13. ALL PERMITS THAT MUST BE OBTAINED ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
14. 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR MUST NOTIFY THE APPLICABLE JURISDICTIONAL (STATE, COUNTY OR CITY) ENGINEER.
15. THE CONTRACTOR SHALL REWORK (DRY, SCARIFY, ETC.) ALL MATERIAL NOT SUITABLE FOR SUBGRADE IN ITS PRESENT STATE. AFTER REWORKING, IF THE MATERIAL REMAINS UNSUITABLE, THE CONTRACTOR SHALL UNDERCUT THIS MATERIAL AND REPLACE WITH APPROVED MATERIAL. ALL SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK PRIOR TO PAVING. ANY SOFT MATERIAL SHALL BE REWORKED OR REPLACED.
16. THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL PIPES, DITCHES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
17. THE OWNER SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY GOVERNING AGENCY INSPECTORS.

18. ANY BUILDINGS ON THIS SITE ARE INTENDED TO SHELTER EQUIPMENT WHICH WILL ONLY BE PERIODICALLY MAINTAINED AND ARE NOT INTENDED FOR HUMAN OCCUPANCY.
19. TEMPORARY FACILITIES FOR PROTECTION OF TOOLS AND EQUIPMENT SHALL CONFORM TO LOCAL REGULATIONS AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
20. THE CONTRACTOR AND ITS SUBCONTRACTORS SHALL CARRY LIABILITY INSURANCE IN THE AMOUNTS AND FORM IN ACCORDANCE WITH AT&T SPECIFICATIONS. CERTIFICATES DEMONSTRATING PROOF OF COVERAGE SHALL BE PROVIDED TO AT&T PRIOR TO THE START OF THE WORK ON THE PROJECT.
21. THE CONTRACTOR SHALL CONTACT ALL APPLICABLE UTILITY SERVICES TO VERIFY LOCATIONS OF EXISTING UTILITIES AND REQUIREMENTS FOR NEW UTILITY CONNECTIONS PRIOR TO EXCAVATING.
22. THE CONTRACTOR SHALL MAINTAIN THE JOB CLEAR OF TRASH AND DEBRIS. ALL WASTE MATERIALS SHALL BE REMOVED FROM THE SITE PRIOR TO SUBSTANTIAL COMPLETION AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL FURNISH ONE 55 GALLON BARREL, AND TRASH BAGS, AND SHALL REMOVE TRASH, DEBRIS, ETC., ON A DAILY BASIS.
23. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL CONDITIONS PRIOR TO SUBMITTING HIS PROPOSAL. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS WITH THOSE AT THE SITE. ANY VARIATION WHICH REQUIRES PHYSICAL CHANGE SHALL BE BROUGHT TO THE ATTENTION OF THE ATC PROJECT ENGINEER FOR FACILITIES/CONSTRUCTION.
24. THE CONTRACTOR SHALL GUARANTEE THE WORK PERFORMED ON THE PROJECT BY THE CONTRACTOR AND ANY OR ALL OF THE SUBCONTRACTORS WHO PERFORMED WORK FOR THE CONTRACTOR ON THIS PROJECT. THE GUARANTEE SHALL BE FOR A FULL YEAR FOLLOWING ISSUANCE OF THE FINAL PAYMENT OF RETAINAGE. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE YEAR FROM ACCEPTANCE DATE.

GENERAL NOTES

PLANS PREPARED FOR:



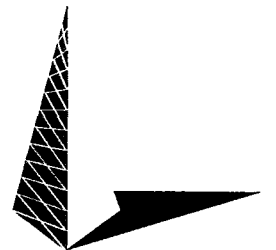
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

PROJECT INFORMATION:

AT&T SITE #: 368-317
ATC SITE #: 280422
FARRINGTON NC

464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS

3703 JUNCTION BOULEVARD

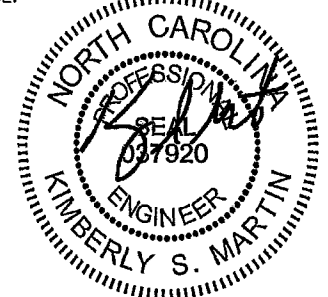
RALEIGH, NC 27603-5263

OFFICE: (919) 661-6351

www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**GENERAL
NOTES**

SHEET NUMBER:

N-1

REVISION:

2

TEP #: 131147

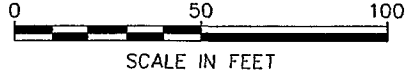
NOTES:

1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NCSPCS NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON JANUARY 3, 2014.
2. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF NAVD 1988 IN FEET.
3. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
4. THE TOWER IS LOCATED IN ZONE "X," AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #3710979600K, DATED FEBRUARY 2, 2007.

LEGEND

- EXIST. PROPERTY LINE
- EXIST. UTILITY POLE
- EXIST. TELCO PEDESTAL
- PROPERTY CORNER
- - - 200 - - - EXIST. CONTOUR LINE
- /// EDGE OF PAVEMENT
- - - OHW - - - OVERHEAD WIRE
- - - R/W - - - RIGHT-OF-WAY
- X - CHAIN LINK FENCE
- ~ EXISTING TREE LINE

N/F
LESTER RAY PORTER
ETUX
PIN # 9796-44-3358
DB 1160 PG 153



SITE PLAN

SCALE: 1" = 100'

PLANS PREPARED FOR:

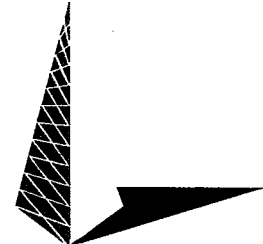


AMERICAN TOWER
CORPORATION
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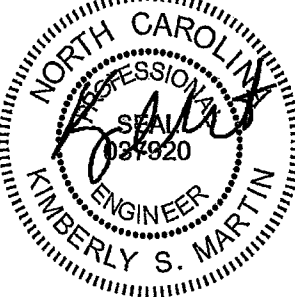
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

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0	01-13-14	PRELIMINARY

DRAWN BY: KWJ CHECKED BY: JAS

SHEET TITLE:

SITE PLAN

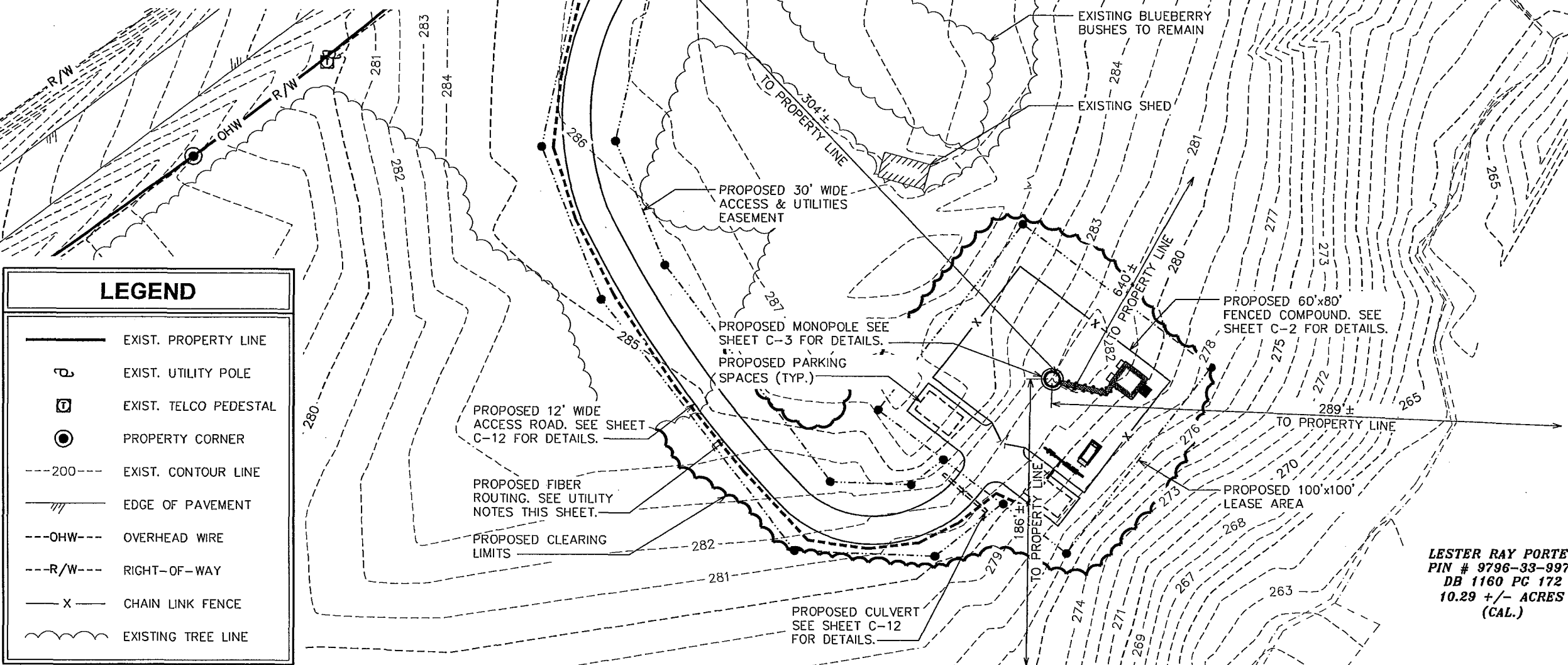
SHEET NUMBER:	REVISION:
C-1	2
	TEP #: 131147

NOTES:

1. THE BASIS OF THE MERIDIANS AND COORDINATES FOR THIS PLAT IS THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM 1983 (NCSPCS NAD 83), BASED ON DIFFERENTIAL GPS OBSERVATIONS PERFORMED ON JANUARY 3, 2014.
2. VERTICAL INFORMATION SHOWN, BASED ON THE NORTH AMERICAN VERTICAL DATUM OF NAVD 1988 IN FEET.
3. ALL DISTANCES ARE GROUND UNLESS OTHERWISE NOTED.
4. THE TOWER IS LOCATED IN ZONE "X," AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO FEMA COMMUNITY PANEL #3710979600K, DATED FEBRUARY 2, 2007.

UTILITY NOTES:

1. FIBER LENGTH FROM R.O.W. 465'±.
2. 12" SEPARATION REQUIRED BETWEEN POWER AND FIBER CONDUITS IF LOCATED IN THE SAME TRENCH.
3. ATC TO INSTALL (1) 4" CONDUIT WITH PULL STRING FROM PROPOSED FIBER HANDHOLE AT COMPOUND ALONG ACCESS & UTILITY EASEMENT TO BE STUBBED UP 10' FROM R.O.W.
4. FIBER HANDHOLE TO BE PLACED EVERY 500' OR THIRD 90° TURN AS NEEDED.
5. LOCAL FIBER UTILITY TO INSTALL 4" CONDUIT FROM R.O.W. TO BE STUBBED UP 10' FROM R.O.W.



SITE LAYOUT

SCALE: 1" = 50'

PLANS PREPARED FOR:



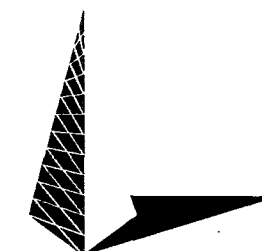
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

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FARRINGTON NC

464 OLD FARRINGTON RD.
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(CHATHAM COUNTY)

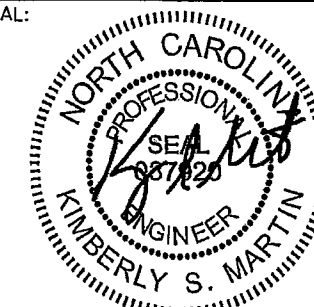
PLANS PREPARED BY:



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3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



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DRAWN BY: KWJ CHECKED BY: JAS

SHEET TITLE:

SITE LAYOUT

SHEET NUMBER:

C-1A

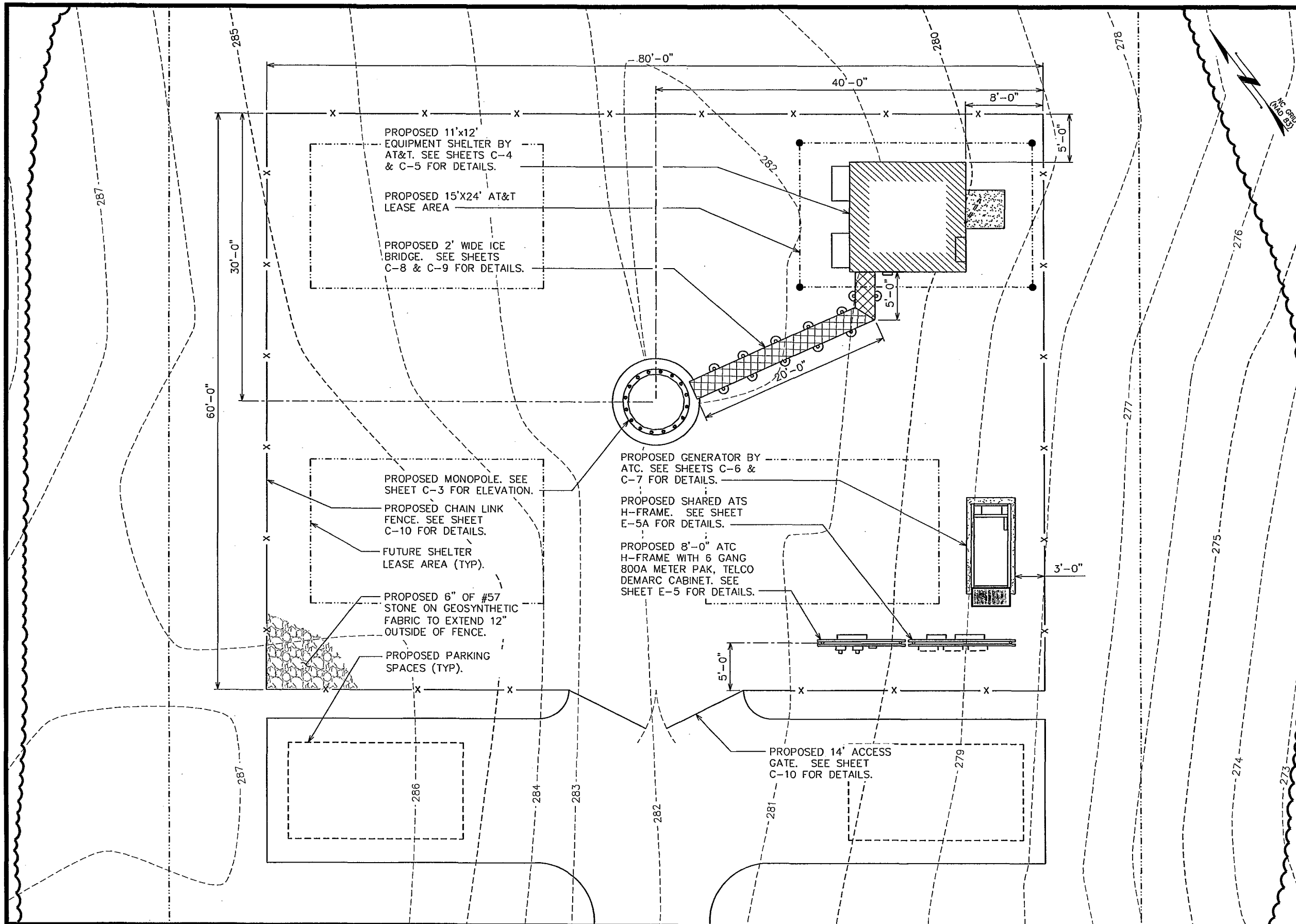
REVISION:

2

TEP #: 131147

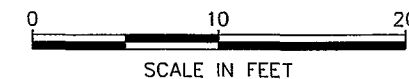
LESTER RAY PORTER
PIN # 9796-33-9976
DB 1160 PG 172
10.29 +/- ACRES
(CAL.)

0 50 100
SCALE IN FEET



COMPOUND DETAIL

SCALE: 1" = 10'



PLANS PREPARED FOR:

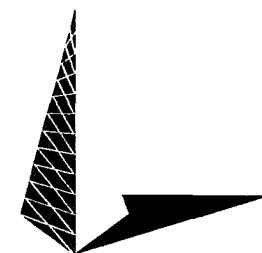


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CARY, NC 27518

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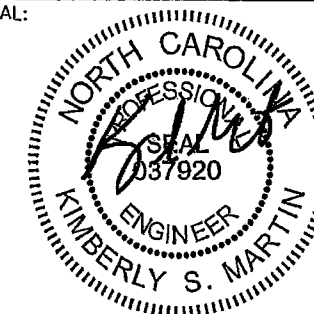
PLANS PREPARED BY:



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REV	DATE	ISSUED FOR:

DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:

**COMPOUND
DETAIL**

SHEET NUMBER:

C-2

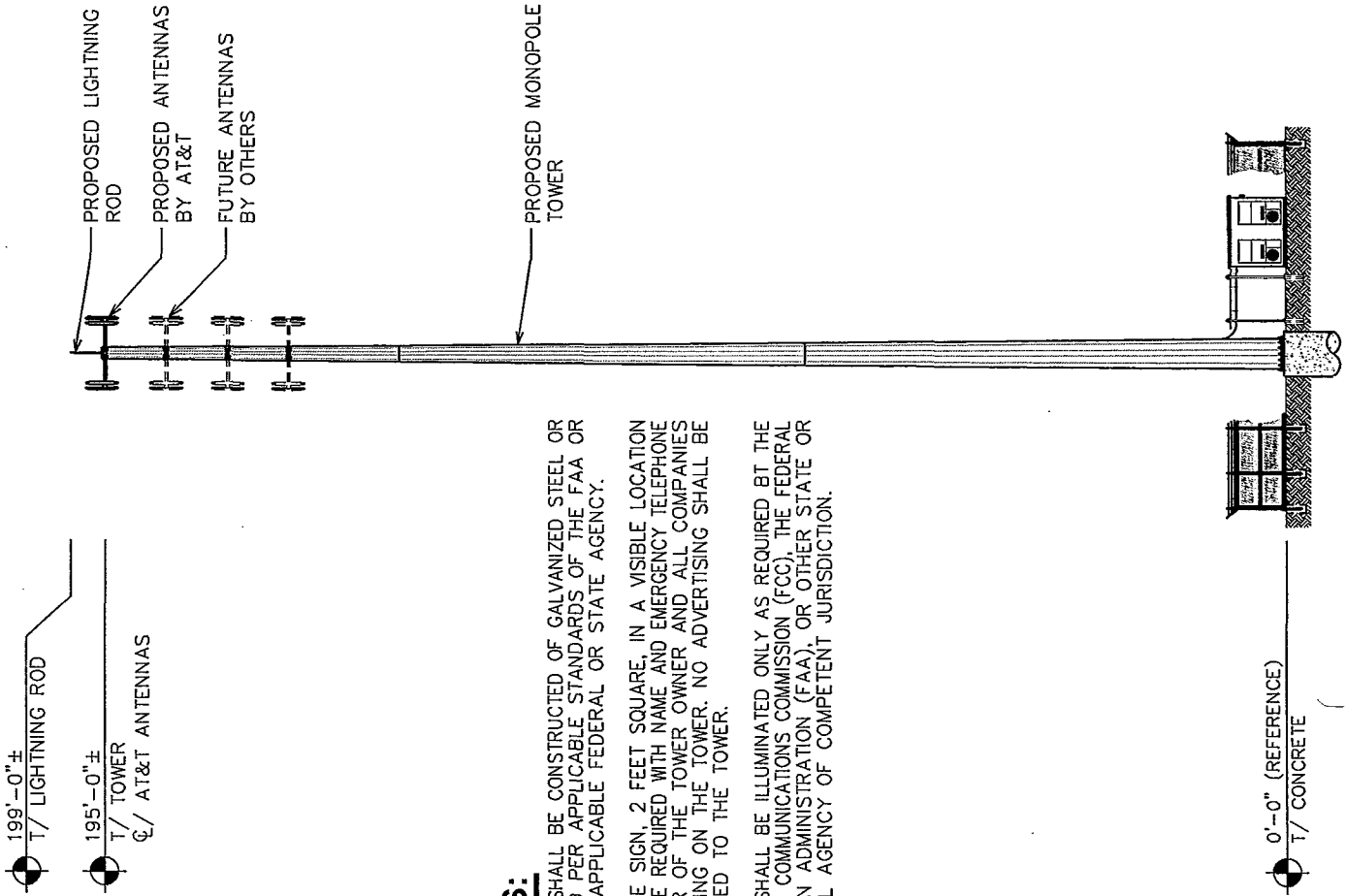
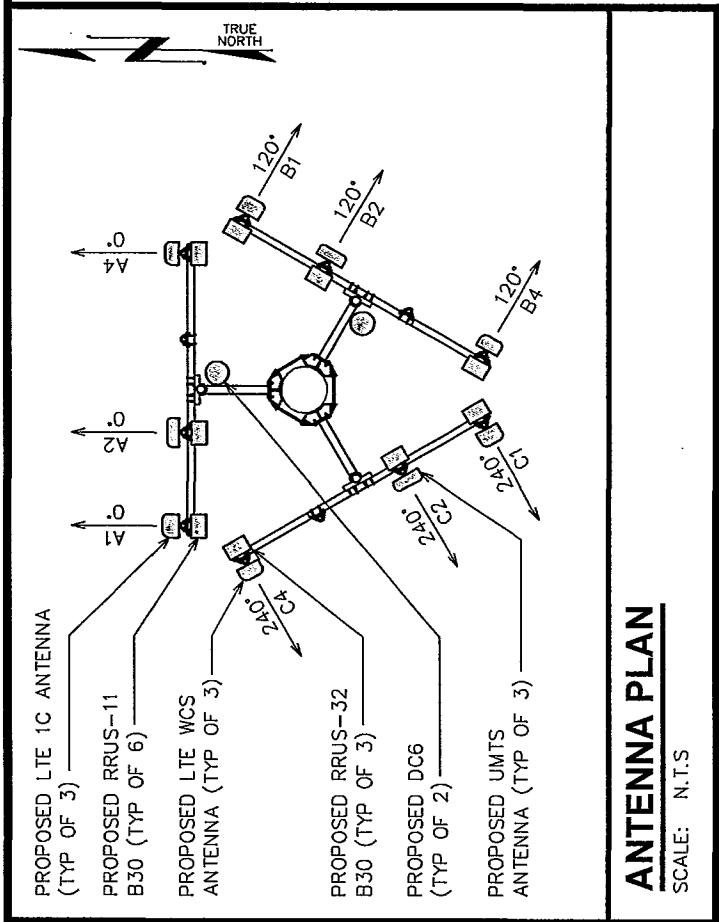
REVISION:

2

TEP #: 131147

PROPOSED ANTENNA/CABLE SCHEDULE													
ANT.	SECTOR	TECH.	MANUFACTURER (MODEL #)	AZIMUTH*	MOUNTING HEIGHT	ELEC. D-TILT	MECH. D-TILT	RRU MODEL	JUMPER SIZE	JUMPER LENGTH (FROM RRU)	DC6 MODEL	CABLE RUN	CABLE LENGTH
A1	ALPHA	LTE	ANDREW SBNHH-1D65C	0°	℄ @ 195'-0"	4°	0°	RRUS-11 (TOP)	5mm JUMPER	5'±	(2) DC6-48-60-18-8F	(2) FIBER (3) DC POWER	243'±
B1	BETA		ANDREW SBNHH-1D65C	120°	℄ @ 195'-0"	4°	0°	RRUS-11 (TOP)	5mm JUMPER	5'±			
C1	GAMMA		ANDREW SBNHH-1D65C	240°	℄ @ 195'-0"	4°	0°	RRUS-11 (TOP)	5mm JUMPER	5'±			
A2	ALPHA	UMTS	ANDREW HBX-6516DS-A1M	0°	℄ @ 195'-0"	2°	0°	RRUS-11 (TOP)	5mm JUMPER	5'±			
B2	BETA		ANDREW HBX-6516DS-A1M	120°	℄ @ 195'-0"	2°	0°	RRUS-11 (TOP)	5mm JUMPER	5'±			
C2	GAMMA		ANDREW HBX-6516DS-A1M	240°	℄ @ 195'-0"	2°	0°	RRUS-11 (TOP)	5mm JUMPER	5'±			
A4	ALPHA	WCS	ANDREW SBNHH-1D65C	0°	℄ @ 195'-0"	1°	0°	RRUS-32 B30 (TOP)	5mm JUMPER	5'±			
B4	BETA		ANDREW SBNHH-1D65C	120°	℄ @ 195'-0"	1°	0°	RRUS-32 B30 (TOP)	5mm JUMPER	5'±			
C4	GAMMA		ANDREW SBNHH-1D65C	240°	℄ @ 195'-0"	1°	0°	RRUS-32 B30 (TOP)	5mm JUMPER	5'±			

* - AZIMUTHS BASED ON TRUE NORTH
* - ANTENNA MODEL AND AZIMUTH INFORMATION IS TAKEN FROM INFORMATION PROVIDED BY AT&T ON 01-16-2014



NOTES:

1. TOWER SHALL BE CONSTRUCTED OF GALVANIZED STEEL OR PAINTED PER APPLICABLE STANDARDS OF THE FAA OR OTHER APPLICABLE FEDERAL OR STATE AGENCY.
2. A SINGLE SIGN, 2 FEET SQUARE, IN A VISIBLE LOCATION SHALL BE REQUIRED WITH NAME AND EMERGENCY TELEPHONE NUMBER OF THE TOWER OWNER AND ALL COMPANIES OPERATING ON THE TOWER. NO ADVERTISING SHALL BE ATTACHED TO THE TOWER.
3. TOWER SHALL BE ILLUMINATED ONLY AS REQUIRED BY THE FEDERAL COMMUNICATIONS COMMISSION (FCC), THE FEDERAL AVIATION ADMINISTRATION (FAA), OR OTHER STATE OR FEDERAL AGENCY OF COMPETENT JURISDICTION.

TOWER ELEVATION
SCALE: 1" = 30'

PLANS PREPARED FOR:
AMERICAN TOWER CORPORATION
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

PROJECT INFORMATION:
AT&T SITE #: 368-317
ATC SITE #: 280422
FARRINGTON NC
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CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

PLANS PREPARED BY:
TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net
N.C. LICENSE # C-1794

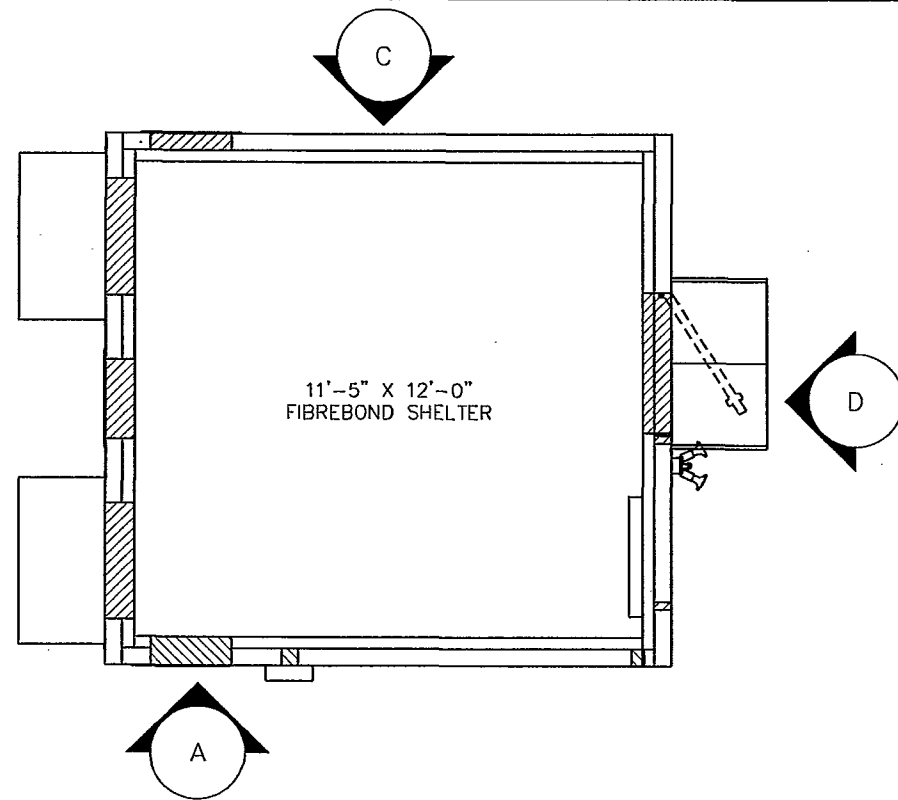
SEAL:
NORTH CAROLINA
ENGINEER
KIMBERLY S. MARTIN
007920
April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

DRAWN BY: CSN CHECKED BY: GMA

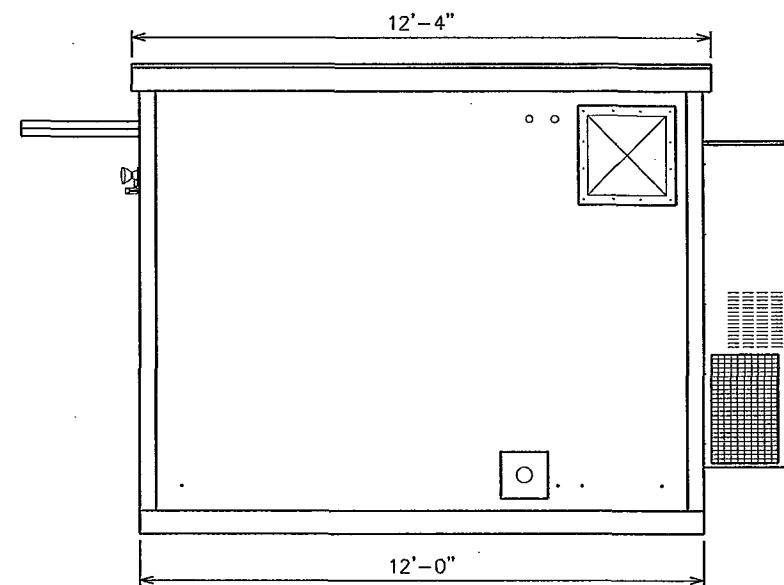
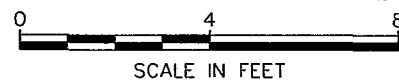
SHEET TITLE:
TOWER ELEVATION

SHEET NUMBER:
C-3
REVISION:
2
TEP #: 131147



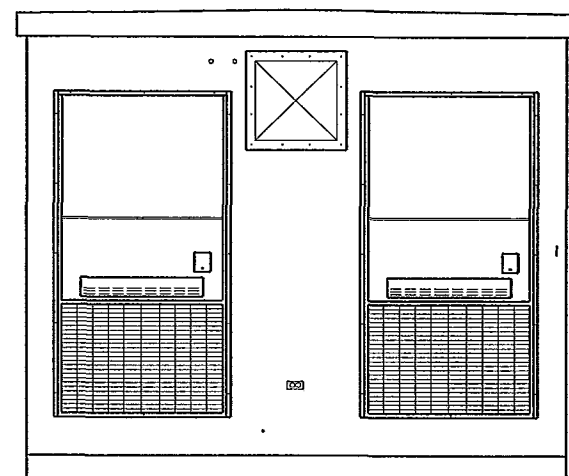
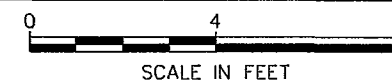
EQUIPMENT LAYOUT

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



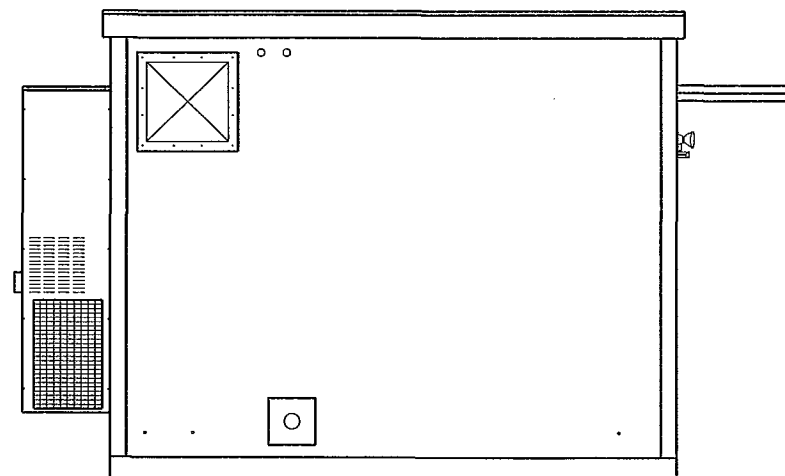
ELEVATION A

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



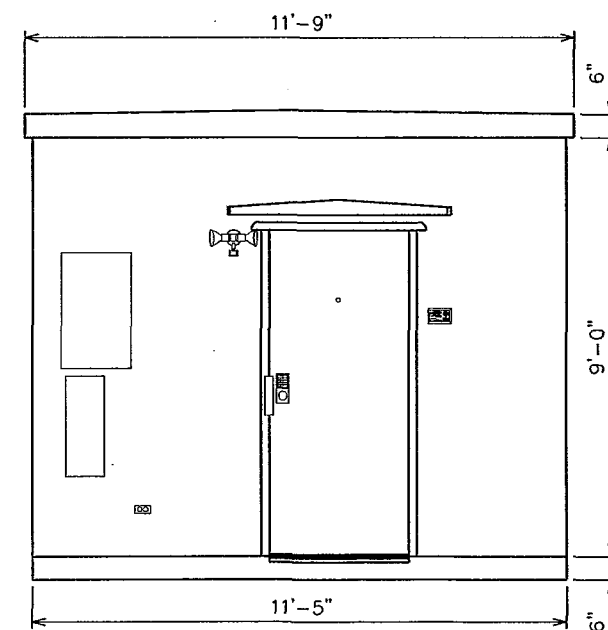
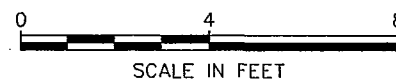
ELEVATION B

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



ELEVATION C

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



ELEVATION D

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

PLANS PREPARED FOR:

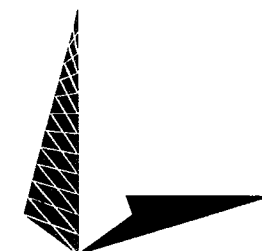


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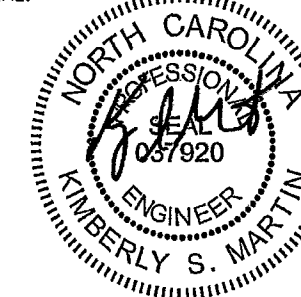
PLANS PREPARED BY:



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DRAWN BY: MAW CHECKED BY: SCB

SHEET TITLE:

**SHELTER
ELEVATIONS**

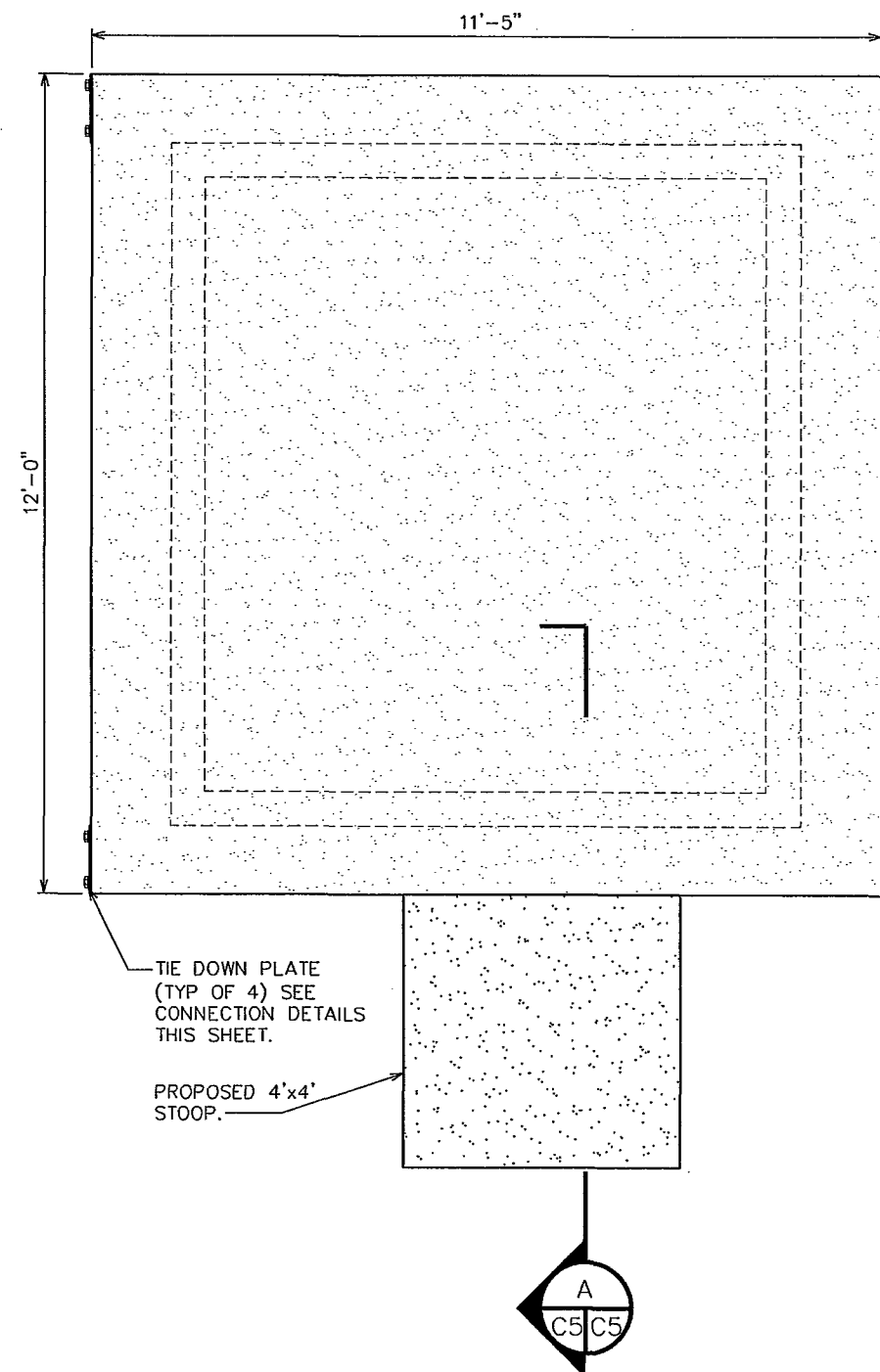
SHEET NUMBER:

C-4

REVISION:

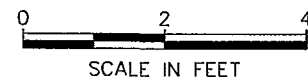
2

TEP #: 131147



SHELTER FOUNDATION PLAN

SCALE: $\frac{3}{8}$ " = 1'-0"



GENERAL STRUCTURAL NOTES:

SPECIFICATION/CODES:

1. CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF THE ACI CODE.
2. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI) "MANUAL OF STANDARD PRACTICE".
3. DESIGN SHALL BE PER NORTH CAROLINA STATE BUILDING CODE, 2012 EDITION.

FOUNDATION NOTES:

1. FOUNDATION DESIGN BASED ON 2000 PSF SOIL BEARING CAPACITY. IF OTHER CONDITIONS EXIST, FOUNDATION SHALL BE REDESIGNED. CONTRACTOR SHALL HAVE SOIL BEARING CAPACITY VERIFIED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES.
2. CONCRETE SHALL BE 3,000 PSI.
3. REBAR F_y = 60,000 PSI.
4. ALL BACKFILL SHALL BE THOROUGHLY COMPACTED TO A MINIMUM OF 95% DENSITY USING THE MODIFIED PROCTOR METHOD.

$\frac{3}{4}$ "x $\frac{1}{2}$ " UNC BOLT
(8 REQUIRED PER BUILDING).

$\frac{3}{4}$ "x 2 $\frac{1}{2}$ " CONCRETE ANCHOR
(8 REQUIRED PER BUILDING).

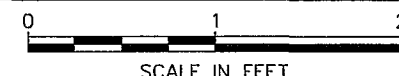
SHELTER.

12"x12"x $\frac{1}{4}$ " TIE DOWN PLATE
(4 REQUIRED PER BUILDING).

FOUNDATION.

CONNECTION DETAIL

SCALE: 1" = 1'-0"



(4)-#4 REBAR LONGITUDINALLY.

6x6 D8/D8 WWF OR #4 @ 12" E.W.

6 MIL. POLY.

1" CHAMFER.

PREFORMED EXPANSION JOINT MATERIAL.

4" THICK SLAB.

#4 REBAR @ 12" E.W.

FINISHED GRADE

1'-0" MIN
(10" TO FROST DEPTH).

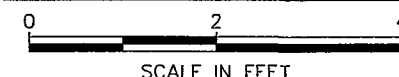
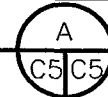
PROPOSED 6" FREE DRAINING GRANULAR BACKFILL UNDER SLAB. (CLEAN FILL TO BE USED).

#4 STIRRUPS AT 18".

3" CLEAR (MIN)
(TYPICAL)

PAD SECTION

SCALE: $\frac{1}{2}$ " = 1'-0"



PLANS PREPARED FOR:

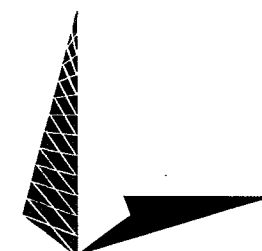


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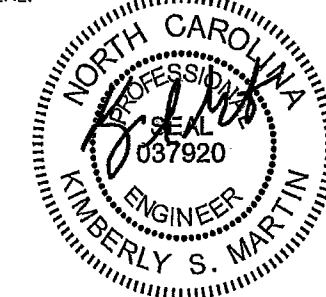
PLANS PREPARED BY:



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OFFICE: (919) 661-6351
www.tepgroup.net

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SEAL:



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DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

SHELTER FOUNDATION DETAILS

SHEET NUMBER:

C-5

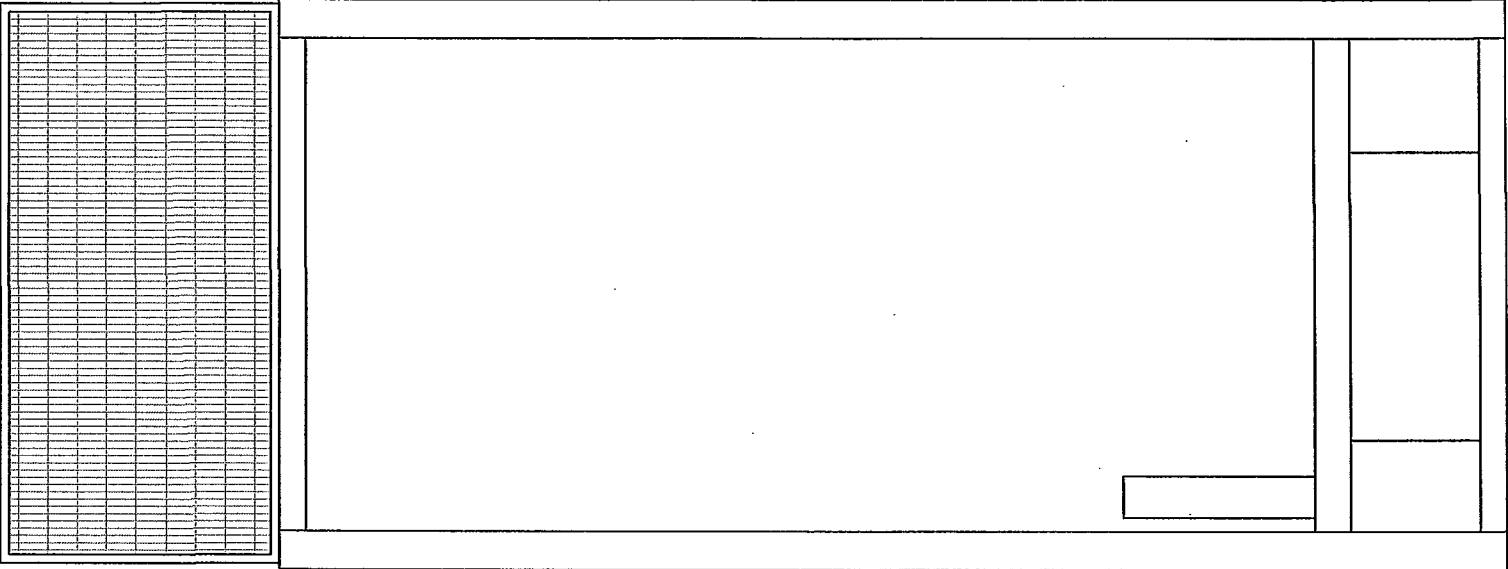
REVISION:

2

TEP #: 131147

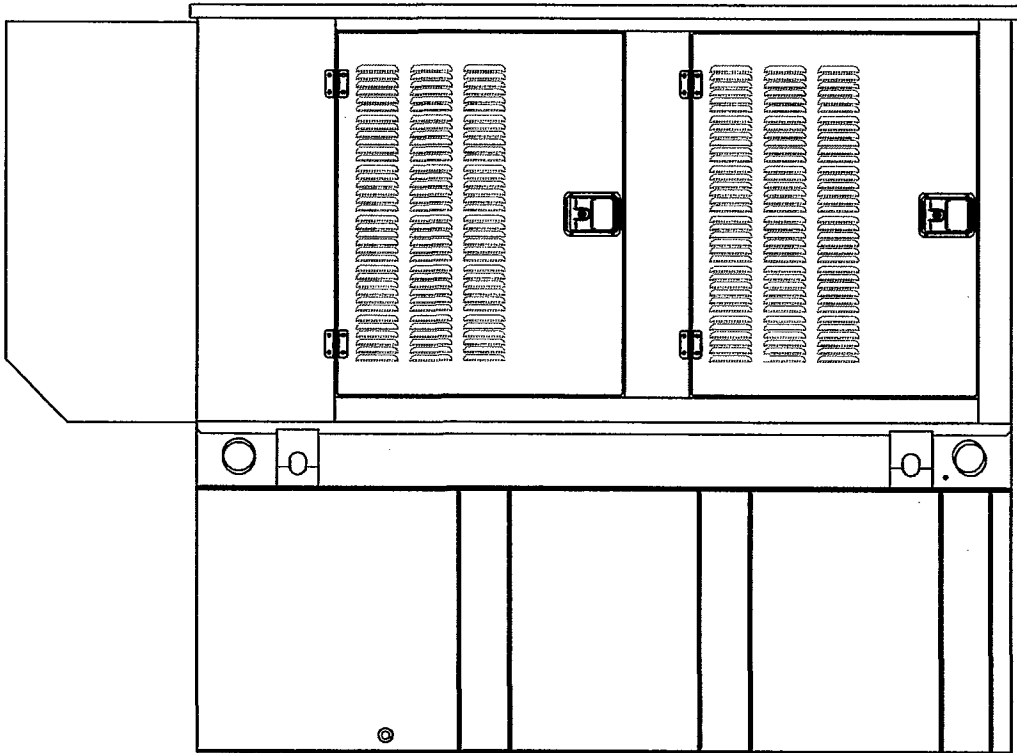
GENERATOR NOTE:

80KW INDUSTRIAL DIESEL GENERATOR
BY GENERAC. CONTRACTOR TO VERIFY
DIMENSIONS WITH MANUFACTURER.



GENERATOR LAYOUT

SCALE: N.T.S.

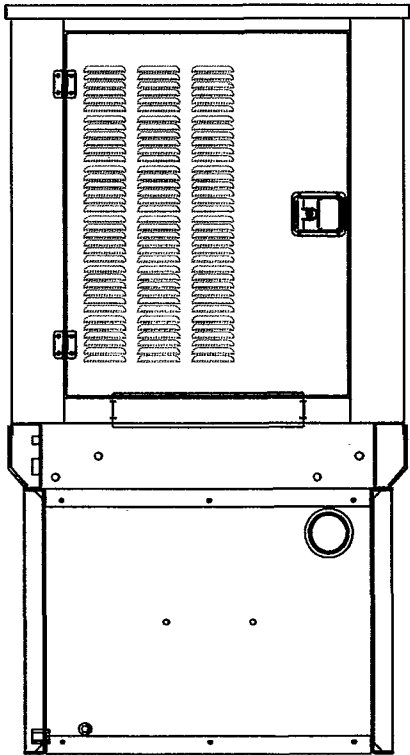


NOTE:

ANCHOR GENERATOR FUEL TANK TO
CONCRETE PAD PER GENERAC
DESIGN DRAWINGS.

ELEVATION A

SCALE: N.T.S.



ELEVATION B

SCALE: N.T.S.

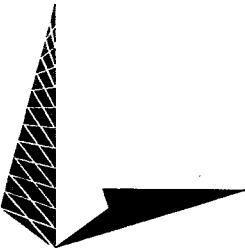
PLANS PREPARED FOR:

AMERICAN TOWER
CORPORATION
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

PROJECT INFORMATION:

AT&T SITE #: 368-317
ATC SITE #: 280422
FARRINGTON NC
464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

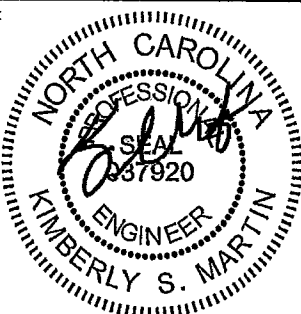
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**GENERATOR & FUEL
TANK ELEVATIONS**

SHEET NUMBER:

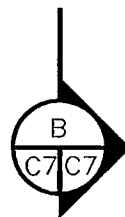
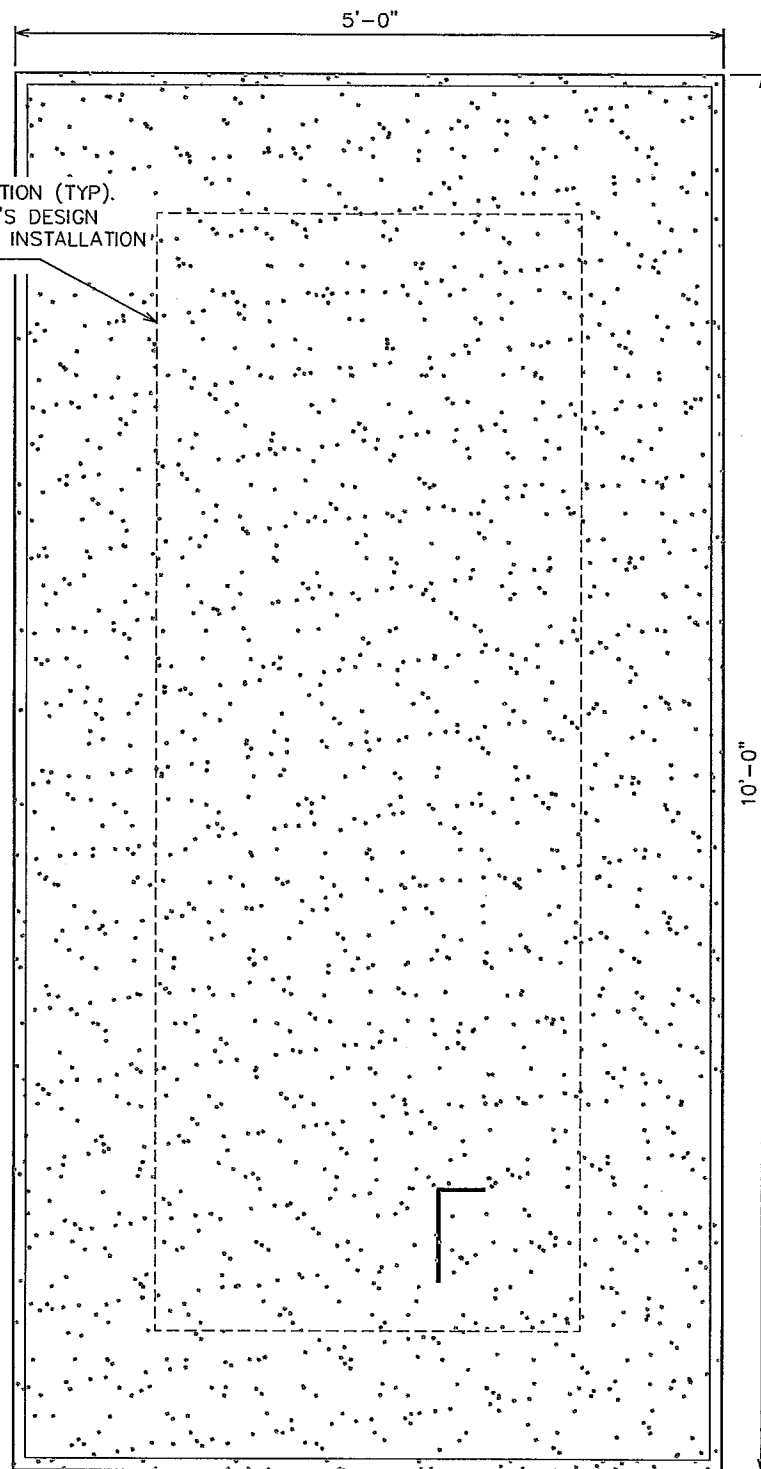
C-6

REVISION:

2

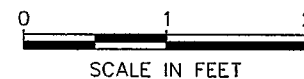
TEP #: 131147

ANCHOR HOLE LOCATION (TYP).
SEE MANUFACTURER'S DESIGN
DRAWINGS PRIOR TO INSTALLATION
OF GENERATOR.

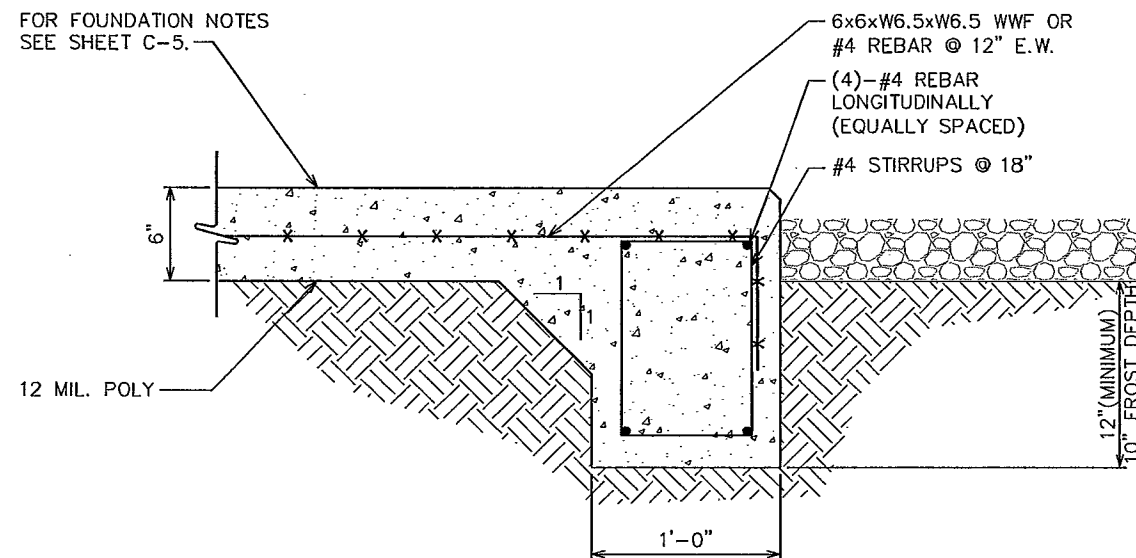


GENERATOR FOUNDATION

SCALE: 3/4" = 1'-0"

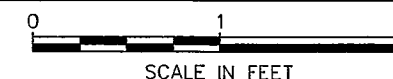
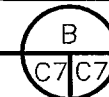


FOR FOUNDATION NOTES
SEE SHEET C-5.



SECTION

SCALE: 1" = 1'-0"



PLANS PREPARED FOR:



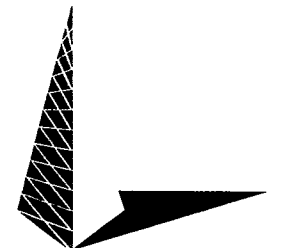
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

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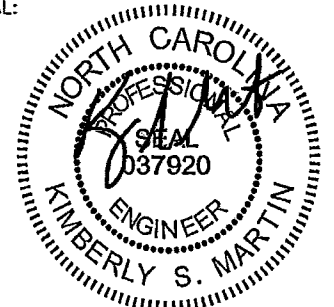
PLANS PREPARED BY:



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RALEIGH, NC 27603-5263
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DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**GENERATOR
FOUNDATION
DETAILS**

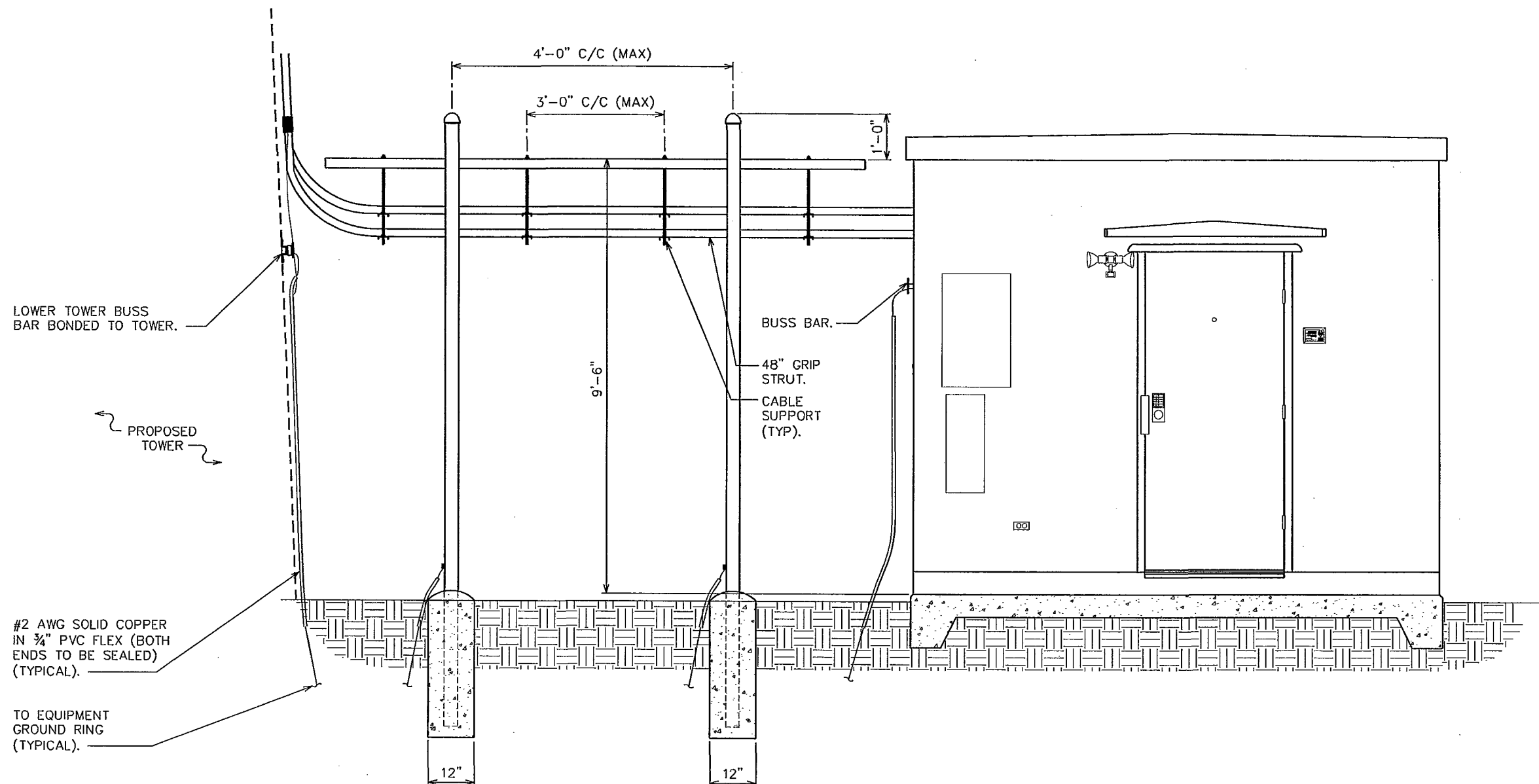
SHEET NUMBER:

C-7

REVISION:

2

TEP #: 131147



ICE BRIDGE DETAILS

SCALE: N.T.S

PLANS PREPARED FOR:

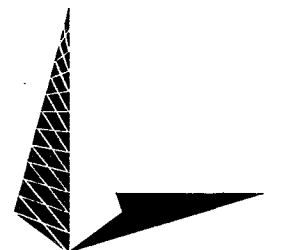


AMERICAN TOWER
CORPORATION
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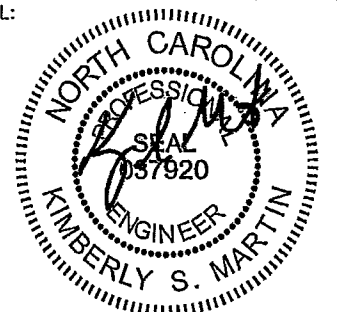
PLANS PREPARED BY:



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DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

ICE BRIDGE
DETAILS I

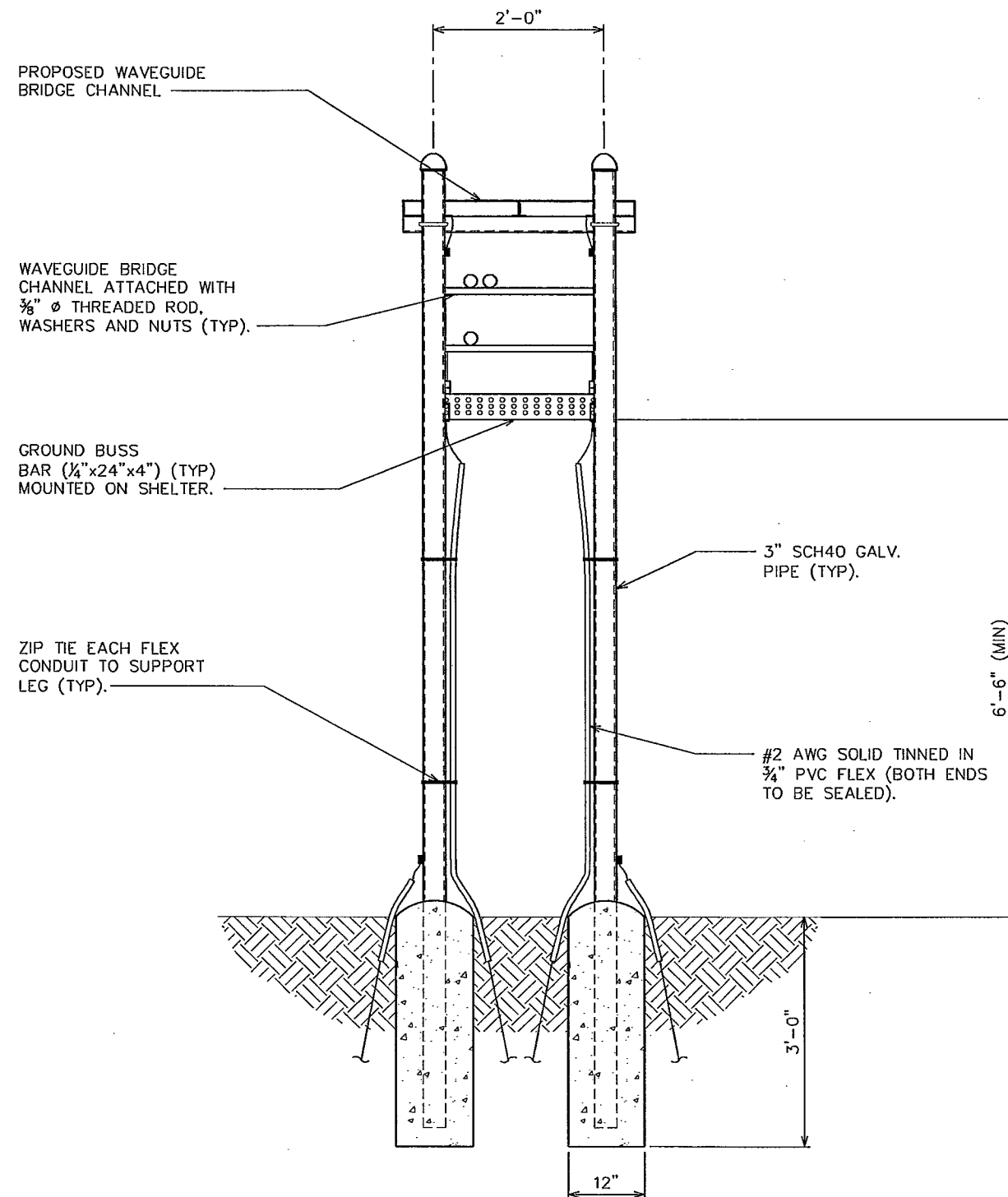
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C-8

REVISION:

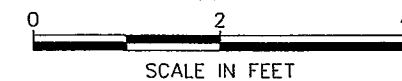
2

TEP #: 131147



ICE BRIDGE DETAILS

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



PLANS PREPARED FOR:

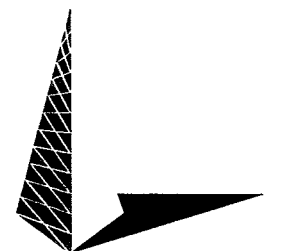


AMERICAN TOWER
CORPORATION
3500 REGENCY PARKWAY, STE. 100
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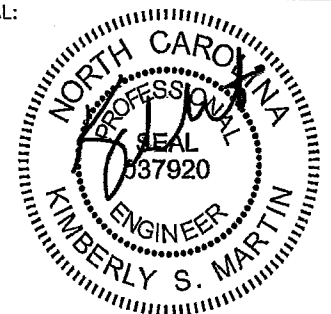
PLANS PREPARED BY:



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DRAWN BY: JMM CHECKED BY: JAS

SHEET TITLE:

ICE BRIDGE
DETAILS II

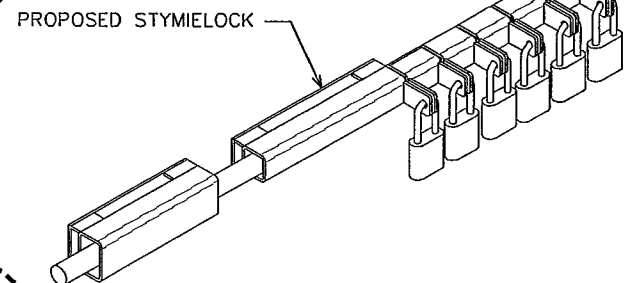
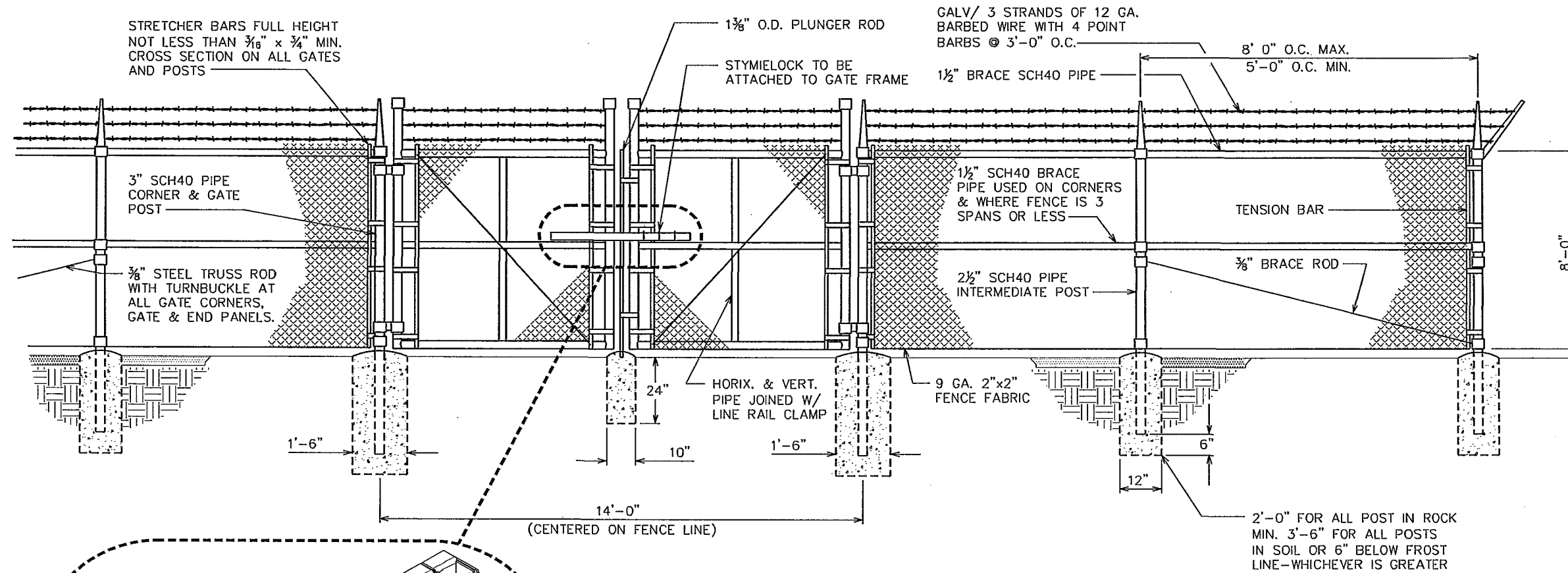
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C-9

REVISION:

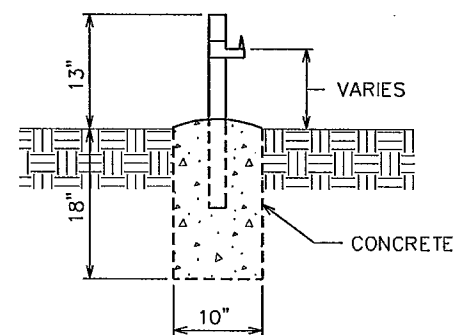
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TEP #: 131147



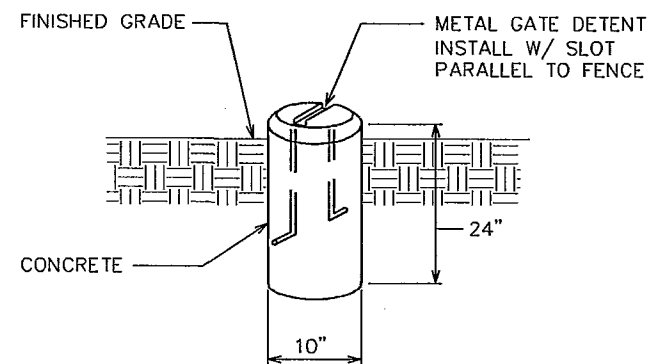
TYPICAL FENCE ELEVATION

SCALE: N.T.S.



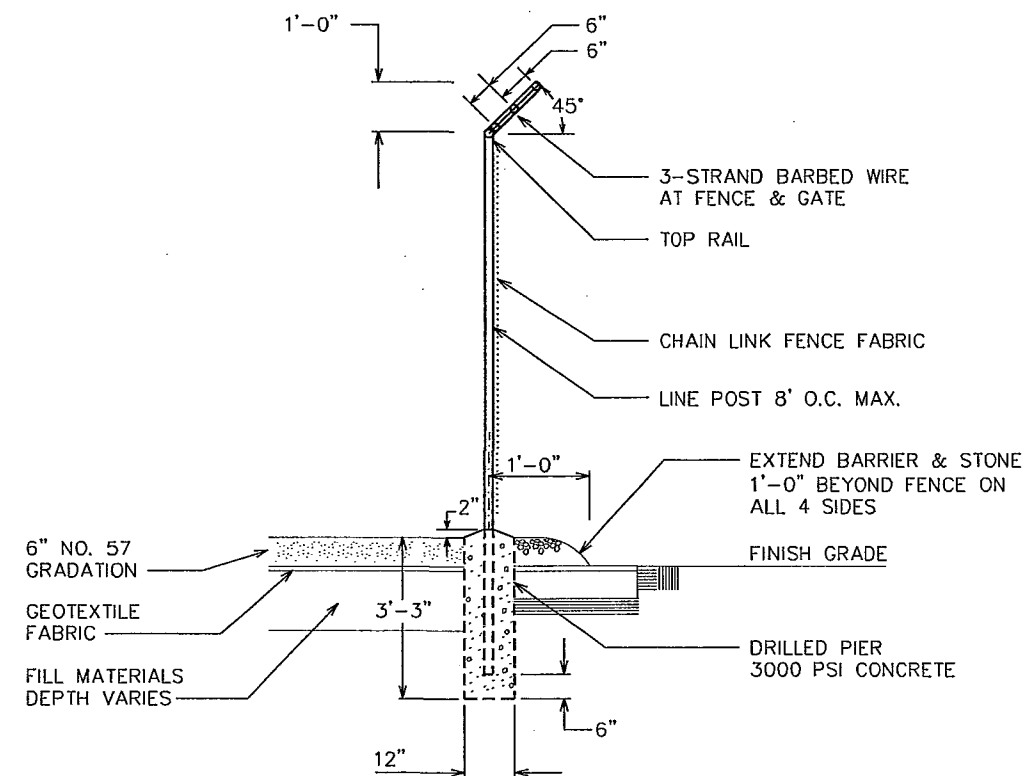
GATE STOP / KEEPER DETAIL

SCALE: N.T.S.



GATE DETENT DETAIL

SCALE: N.T.S.



FENCE / BARBED WIRE ARM DETAIL

SCALE: N.T.S.

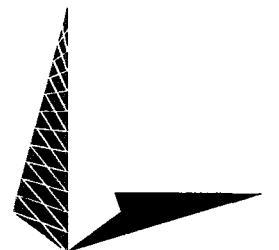
PLANS PREPARED FOR:



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 (CHATHAM COUNTY)

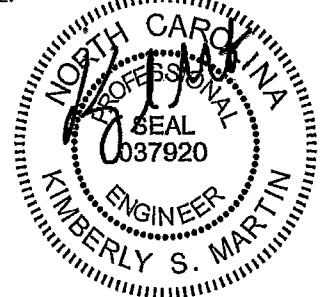
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
 3703 JUNCTION BOULEVARD
 RALEIGH, NC 27603-5263
 OFFICE: (919) 661-6351
 www.tepgroup.net

N.C. LICENSE # C-1794

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0	01-13-14	PRELIMINARY

DRAWN BY: SCB CHECKED BY: GMA

SHEET TITLE:

**FENCE
DETAILS**

SHEET NUMBER:


C-10

REVISION:

2

TEP #: 131147

property of




**AUTHORIZED
PERSONNEL
ONLY!**

In case of emergency or prior to performing maintenance on this site, call 1-800-638-2822 and reference cell site number: _____

- ① WHITE/BLUE BACKGROUND W/ BLACK LETTERING
QUANTITY: (1)
SIZE: 9"x12"
(TO BE MOUNTED ON UNIVERSAL POWER CABINET DOOR ADJACENT TO COMPOUND ENTRY - SEE NOTE 3)

NO TRESPASSING
VIOLATORS WILL BE PROSECUTED

property of




In case of emergency or prior to performing maintenance on this site, call 1-800-830-3365 and reference cell site number: _____

- ③ WHITE/RED BACKGROUND W/ BLACK LETTERING
QUANTITY: (4)
SIZE: 12"x12"
(ONE TO BE MOUNTED ON EACH SIDE OF COMPOUND FENCE)

**DO NOT CLIMB
TOWER WITHOUT
OWNER'S WRITTEN
PERMISSION**

- ④ WHITE BACKGROUND W/ RED LETTERING
QUANTITY: (1)
(TO BE MOUNTED AT EYE LEVEL ON TOWER NEAR SAFETY CLIMB)

NOTICE



Radio Frequency fields beyond this point may exceed the FCC general public exposure limit.

OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RADIO FREQUENCY ENVIRONMENTS.

In accordance with Federal Communications Commission rules on radio frequency exposure 47 CFR 1.1307(b)

- ② WHITE/BLUE BACKGROUND W/ BLACK LETTERING
QUANTITY: (1)
(TO BE MOUNTED AT EYE LEVEL ON TOWER NEAR SAFETY CLIMB)

000

- ⑤ WHITE BACKGROUND W/ BLACK LETTERING
E911 STREET #
QUANTITY: (1 TYP)
LETTERS MUST BE A MINIMUM 6" TALL
(TO BE MOUNTED ON THE GATE OF COMPOUND)

- ① SITE IDENTIFICATION SIGN
② FCC/RF EXPOSURE SIGN
③ AUTHORIZED ENTRY SIGN
④ TOWER CLIMBING SIGN
⑤ STREET ADDRESS SIGN
⑥ INFORMATION RF EXPOSURE SIGN
⑦ TOWER REGISTRATION SIGN

INFORMATION

AMERICAN TOWER operates telecommunications equipment at this location.

Stay back a minimum of 3 feet from any antenna.

ObeY all posted signs and guidelines.

Do not cross into areas restricted by striping and/or barriers.

Contact the owner(s) of the antenna(s) and follow their instructions prior to performing any repairs or maintenance within a restricted area of closer than 3 feet from the antenna.

Contact AMERICAN TOWER at 1-800-830-3365 prior to doing any work near AMERICAN TOWER structures. This is site #-----.

Contact the management office if this door/hatch/gate is found unlocked.

- ⑥ WHITE BACKGROUND W/ BLACK LETTERING
QUANTITY: (1) PER ACCESS GATE
(TO BE MOUNTED ON COMPOUND ACCESS GATE)

FCC TOWER REGISTRATION NO.:
0123456789

- ⑦ WHITE BACKGROUND W/ BLACK LETTERING
QUANTITY: (1)
(TO BE MOUNTED ON COMPOUND ACCESS GATE - SEE NOTE 5)
NOTE: NUMBER SHOWN IS GENERIC, CONTACT CONSTRUCTION MANAGER FOR ACTUAL FCC TOWER REG. #.

NOTES:

- SIGNS SHALL MEASURE 8"x12", BE FABRICATED FROM CORROSION RESISTANT PRESSED METAL, AND PAINTED WITH LONG LASTING UV RESISTANT COATINGS.
- SIGNS (EXCEPT WHERE NOTED OTHERWISE) SHALL BE MOUNTED TO THE TOWER, GATE AND FENCE USING A MINIMUM OF 9 GAUGE ALUMINUM WIRE, HOG RINGS (AS UTILIZED IN FENCE INSTALLATIONS) OR BRACKETS WHERE NECESSARY. BRACKETS SHALL BE OF SIMILAR METAL AS THE STRUCTURE TO AVOID GALVANIC CORROSION.
- AMERICAN TOWER SITE # AND EMERGENCY CONTACT # SHALL BE MOUNTED ON THE UNIVERSAL POWER CABINET DOOR ADJACENT TO THE COMPOUND ENTRY WITH PERMANENT SET ADHESIVE. TWO-SIDED TAPE SHALL BE UTILIZED AT EACH CORNER ON THE BACKSIDE TO AID PLACEMENT UNTIL ADHESIVE SETS.
- ADDITIONAL E911 ADDRESS SIGNS ARE REQUIRED AT EACH ACCESS ROAD GATE LEADING TO THE COMPOUND AS WELL AS ON THE COMPOUND GATE ITSELF. LETTERING ON 911 ADDRESS SIGNS MUST BE A MINIMUM OF 6" TALL.
- ADDITIONAL FCC REGISTRATION # SIGNS ARE REQUIRED AT EACH ACCESS ROAD GATE LEADING TO THE COMPOUND AS WELL AS ON THE COMPOUND GATE ITSELF.
- RECOMMENDED SOURCE FOR OBTAINING SIGNAGE:

ST. CLAIR SIGNS
3184 WADE HAMPTON BLVD.
TAYLORS, SC 29687
(864) 244-0040

RF EXPOSURE SIGNS
RICHARD TELL ASSOCIATES
3433 RINGSTAR ROAD, SUITE 3
NORTH LAS VEGAS, NV 89030
(702) 645-3338

PLANS PREPARED FOR:



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CARY, NC 27518

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464 OLD FARRINGTON RD.
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(CHATHAM COUNTY)

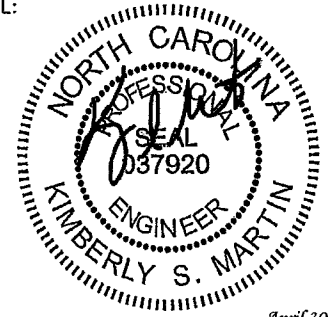
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
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N.C. LICENSE # C-1794

SEAL:



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REV	DATE	ISSUED FOR:
DRAWN BY: JHJ		CHECKED BY: GMA

SHEET TITLE:

**SIGNAGE
DETAILS**

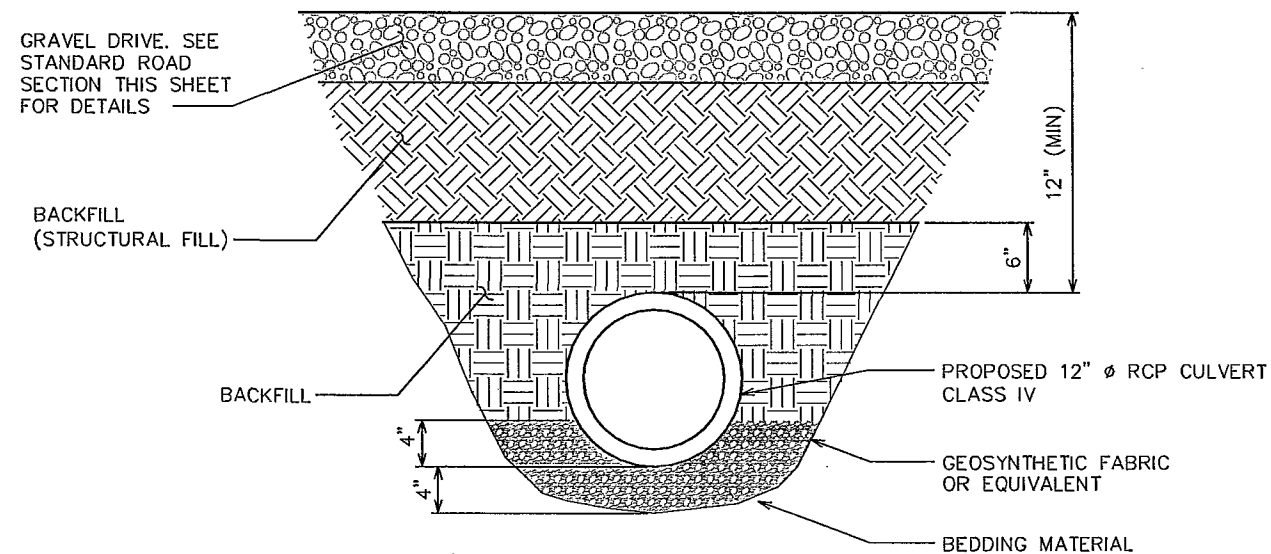
SHEET NUMBER: **C-11**

REVISION: **2**

TEP #: 131147

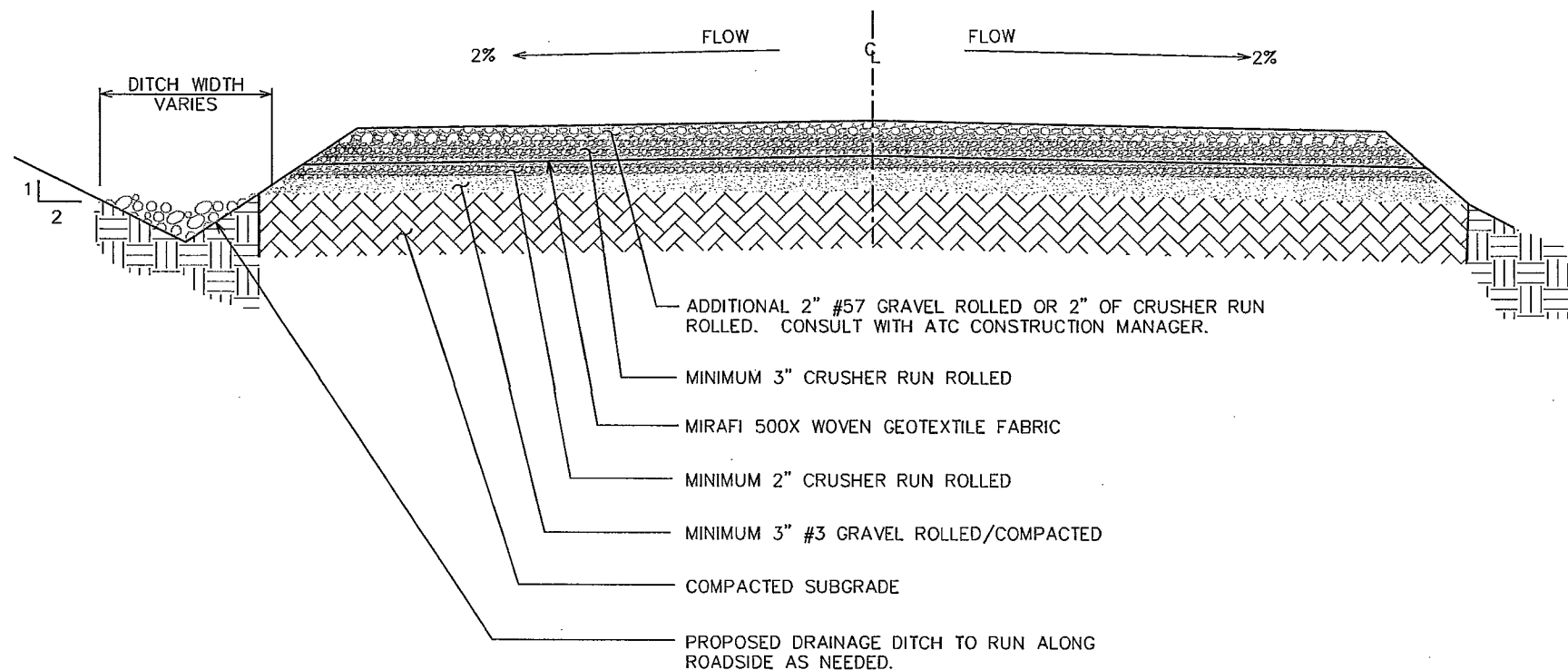
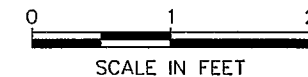
TYPICAL SIGNS AND SPECIFICATIONS

SCALE: N.T.S.



CULVERT DETAIL @ COMPOUND ENTRANCE

SCALE: $\frac{3}{4}" = 1'-0"$



STANDARD ROAD SECTION (GOOD SUBGRADE)

SCALE: $\frac{1}{2}" = 1'-0"$

PLANS PREPARED FOR:



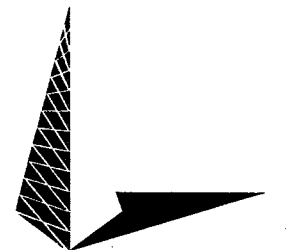
3500 REGENCY PARKWAY, STE. 100
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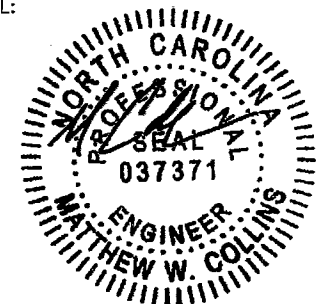
PLANS PREPARED BY:



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DRAWN BY: MSQ CHECKED BY: GMA

SHEET TITLE:

**CULVERT &
DRIVEWAY
DETAILS**

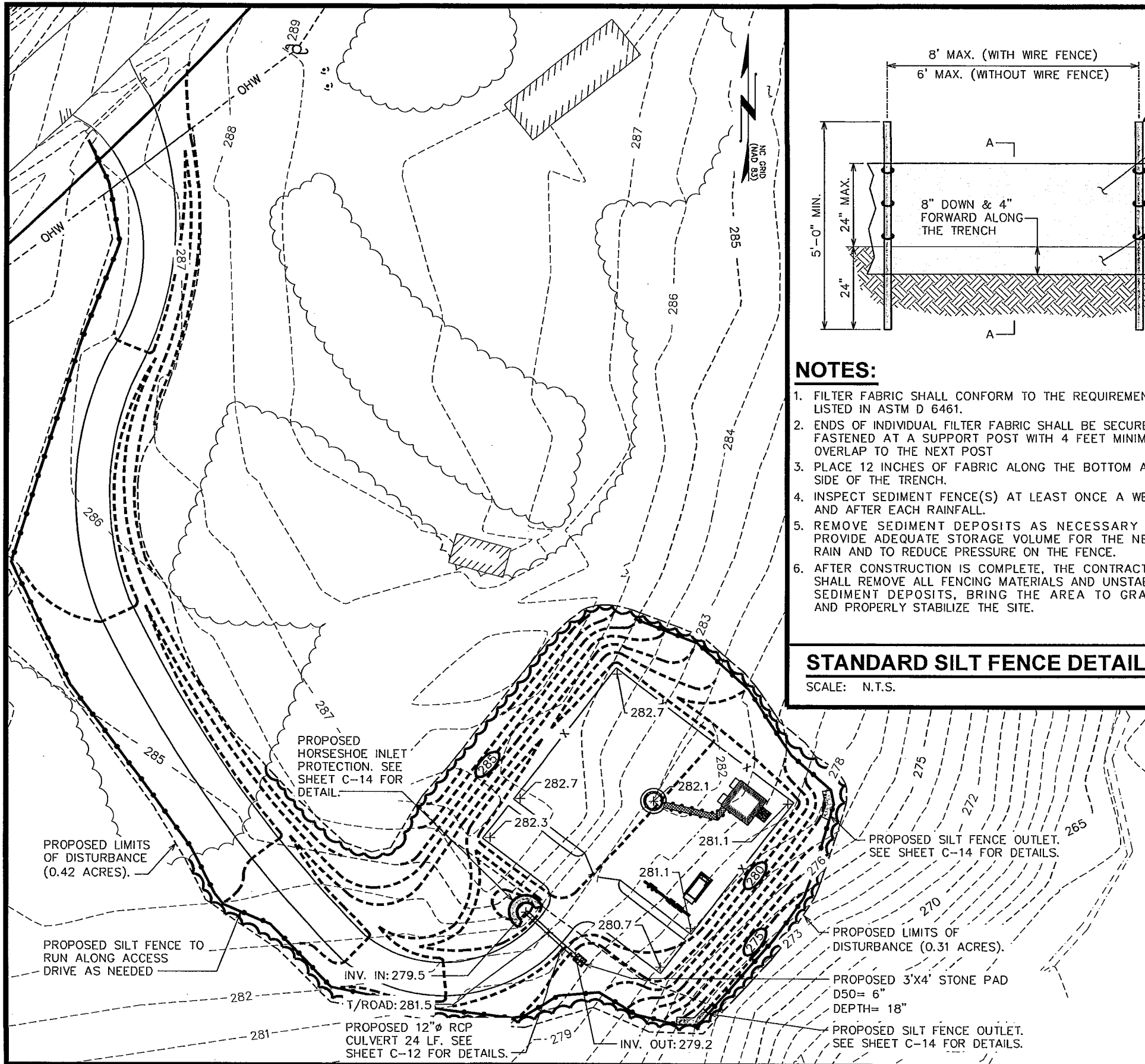
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C-12

REVISION:

2

TEP #: 131147

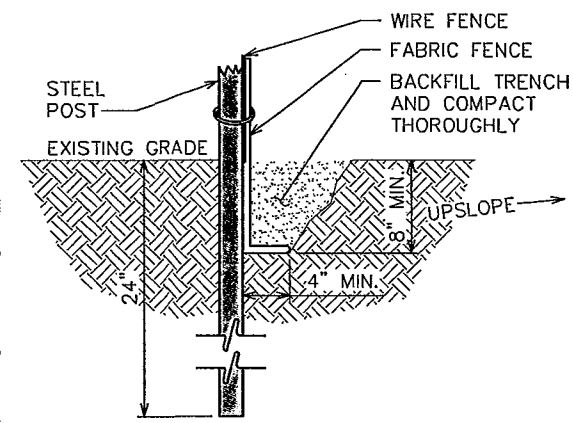
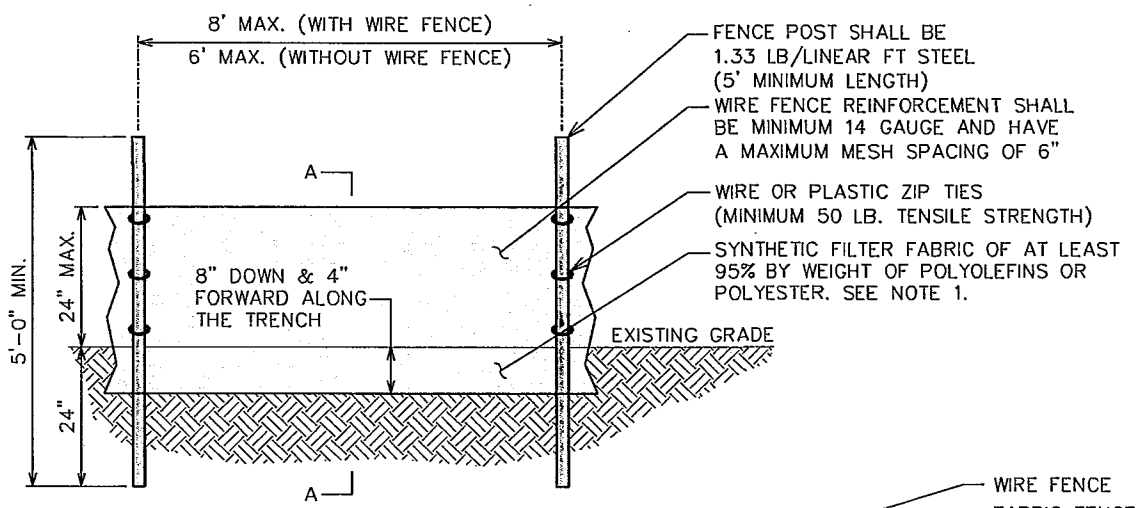


NOTES:

- 1. FILTER FABRIC SHALL CONFORM TO THE REQUIREMENTS LISTED IN ASTM D 6461.
- 2. ENDS OF INDIVIDUAL FILTER FABRIC SHALL BE SECURELY FASTENED AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST
- 3. PLACE 12 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
- 4. INSPECT SEDIMENT FENCE(S) AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL.
- 5. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE.
- 6. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE AND PROPERLY STABILIZE THE SITE.

STANDARD SILT FENCE DETAIL

SCALE: N.T.S.



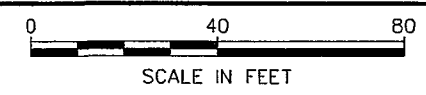
SECTION A-A

SITE DATA TABLE

TOTAL PARCEL AREA:	10.29 ACRES±
EXISTING IMPERVIOUS:	0.12 ACRES± (1.17%)
PROPOSED IMPERVIOUS:	0.26 ACRES± (2.53%)
TOTAL IMPERVIOUS:	0.38 ACRES± (3.69%)
PROPOSED ACCESS DRIVE DISTURBED AREA:	0.42 ACRES± (4.08%)
PROPOSED COMPOUND DISTURBED AREA:	0.31 ACRES± (3.01%)
TOTAL PROPOSED DISTURBED AREA:	0.73 ACRES± (7.09%)

SOIL & EROSION CONTROL PLAN

SCALE: 1" = 40'



PLANS PREPARED FOR:

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3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:

NORTH CAROLINA
PROFESSIONAL SEAL
037371
ENGINEER
MATTHEW W. COLLINS

April 30, 2014

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0	01-13-14	PRELIMINARY
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DRAWN BY: KWJ CHECKED BY: GMA

SHEET TITLE:

SOIL & EROSION CONTROL PLAN

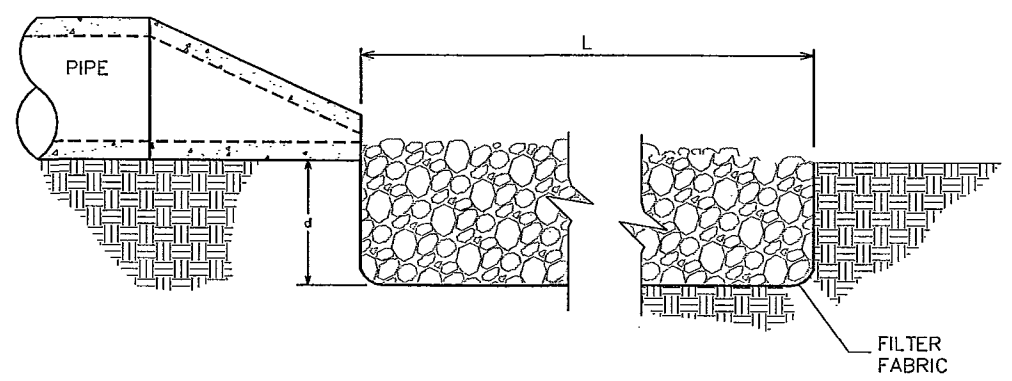
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REVISION: **2**

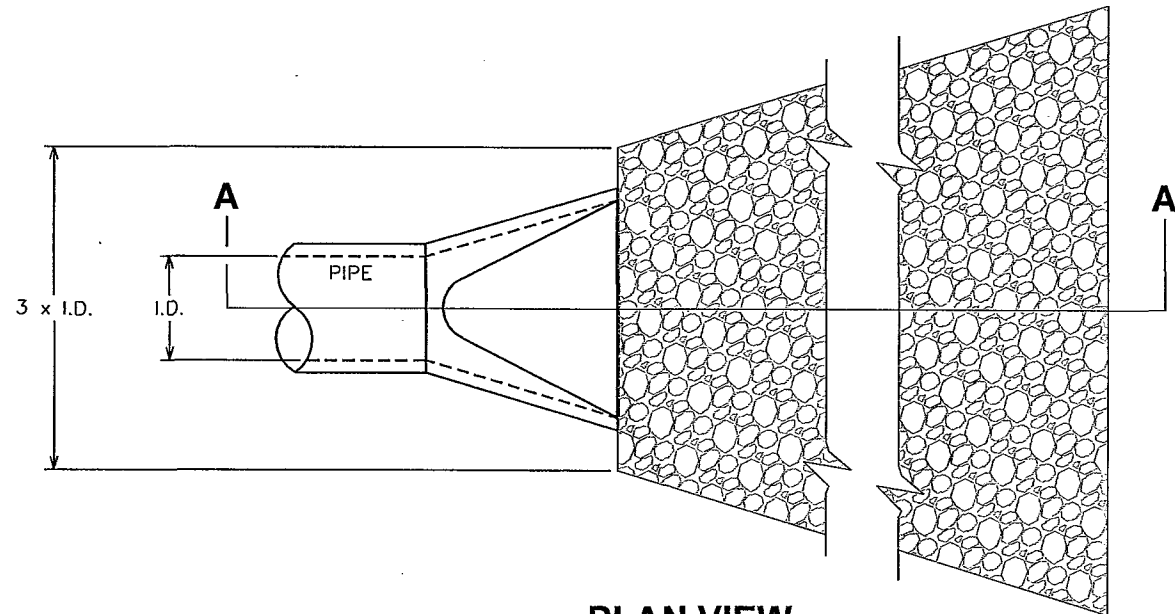
TEP #: 131147

NOTES:

- 1. L = THE LENGTH OF THE RIPRAP APRON.
- 2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).
- 3. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.



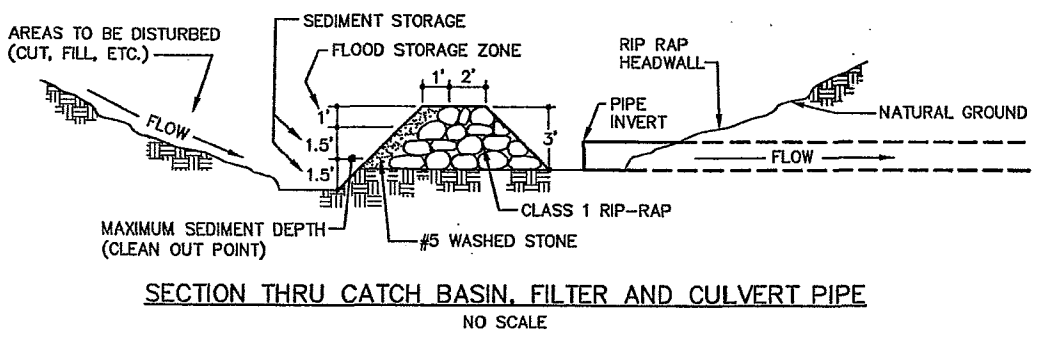
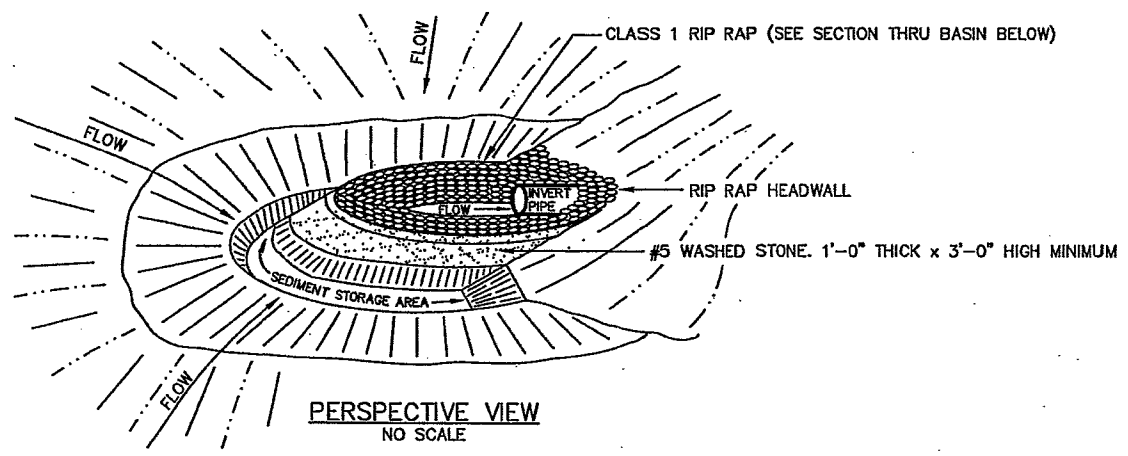
SECTION 'A-A'



PLAN VIEW

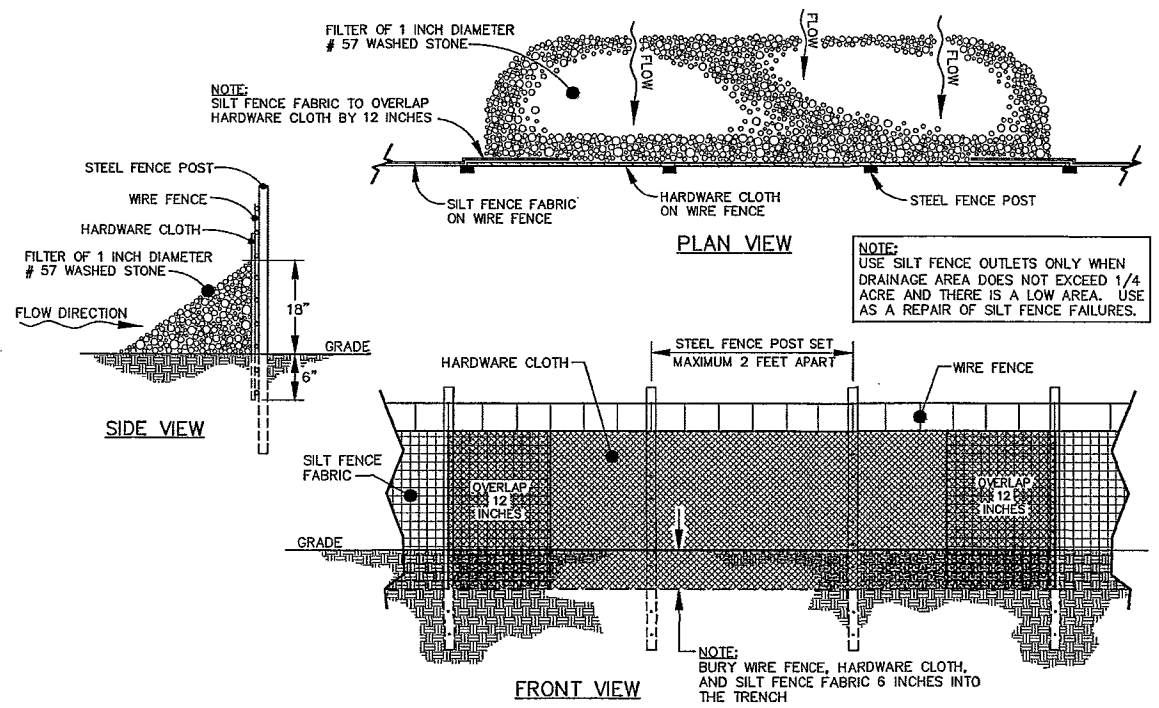
PIPE OUTLET PROTECTION

SCALE: N.T.S.



PIPE INLET PROTECTION DETAIL

SCALE: N.T.S.



STANDARD SILT FENCE OUTLET DETAIL

SCALE: N.T.S.

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SEAL:

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MATTHEW W. COLLINS
037371
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0	01-13-14	PRELIMINARY

DRAWN BY: JJC CHECKED BY: GMA

SHEET TITLE:

SOIL & EROSION CONTROL DETAILS

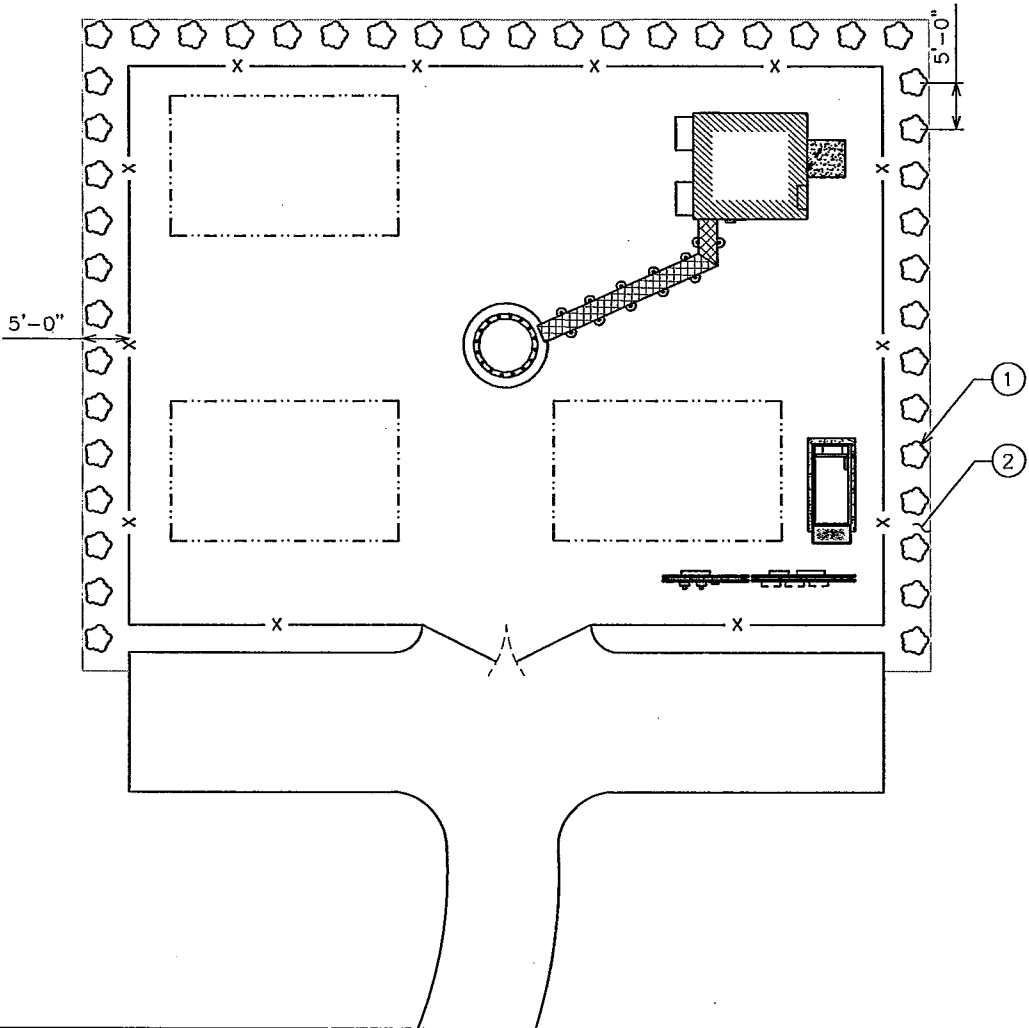
SHEET NUMBER: **C-14**

REVISION: **2**

TEP #: 131147

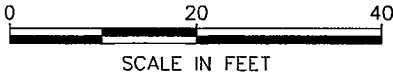
LANDSCAPE NOTES:

- 1. TOPSOIL TO BE PROVIDED BY SITE CONTRACTOR IN ROUGH GRADE TO WITHIN 1" OF FINISH GRADE.
- 2. EACH PLANT TO BE FREE FROM DISEASE, INSECT INFESTATION, AND MECHANICAL INJURIES, AND IN ALL RESPECTS BE SUITABLE FOR FIELD PLANTING.
- 3. ALL PLANTS TO BE FULLY GUARANTEED (LABOR AND MATERIALS) FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF INSTALLATION.
- 4. ALL PLANTS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSI Z60.1-1973 IN REGARD TO SIZING, GROWING, AND B&B SPECIFICATIONS.
- 5. THE CONTRACTOR SHALL PROTECT ALL EXISTING TREES AND SHRUBS WITHIN THE CONSTRUCTION AREA IDENTIFIED AS "TO REMAIN" FROM DAMAGE BY EQUIPMENT AND CONSTRUCTION ACTIVITIES.



COMPOUND DETAIL

SCALE: 1" = 20'



PLANTING SCHEDULE								
ITEM	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT @ PLANTING	HEIGHT @ 4 YRS.	SPREAD/ CALIPER	SPACING	REMARKS
SHRUBS								
①	44	(MORELLA CERIFERA)	WAX MYRTLE	2'-0" (MIN)	6'-0" (MIN)	N/A	5' (MIN)	SHOWN AS
MULCH								
②	-	-	MULCH	-	-	-	-	APPLY 3"-4" DEEP WITHIN BUFFERYARD FOR GROUND COVER

PLANS PREPARED FOR:

AMERICAN TOWER CORPORATION
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

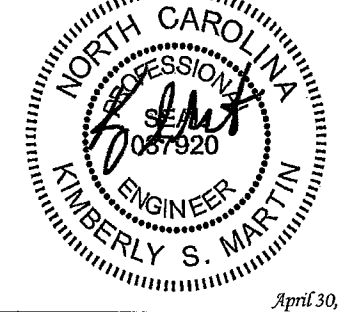
PROJECT INFORMATION:

AT&T SITE #: 368-317
ATC SITE #: 280422
FARRINGTON NC
464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

PLANS PREPARED BY:

TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net
N.C. LICENSE # C-1794

SEAL:



2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: MAW CHECKED BY: SCB

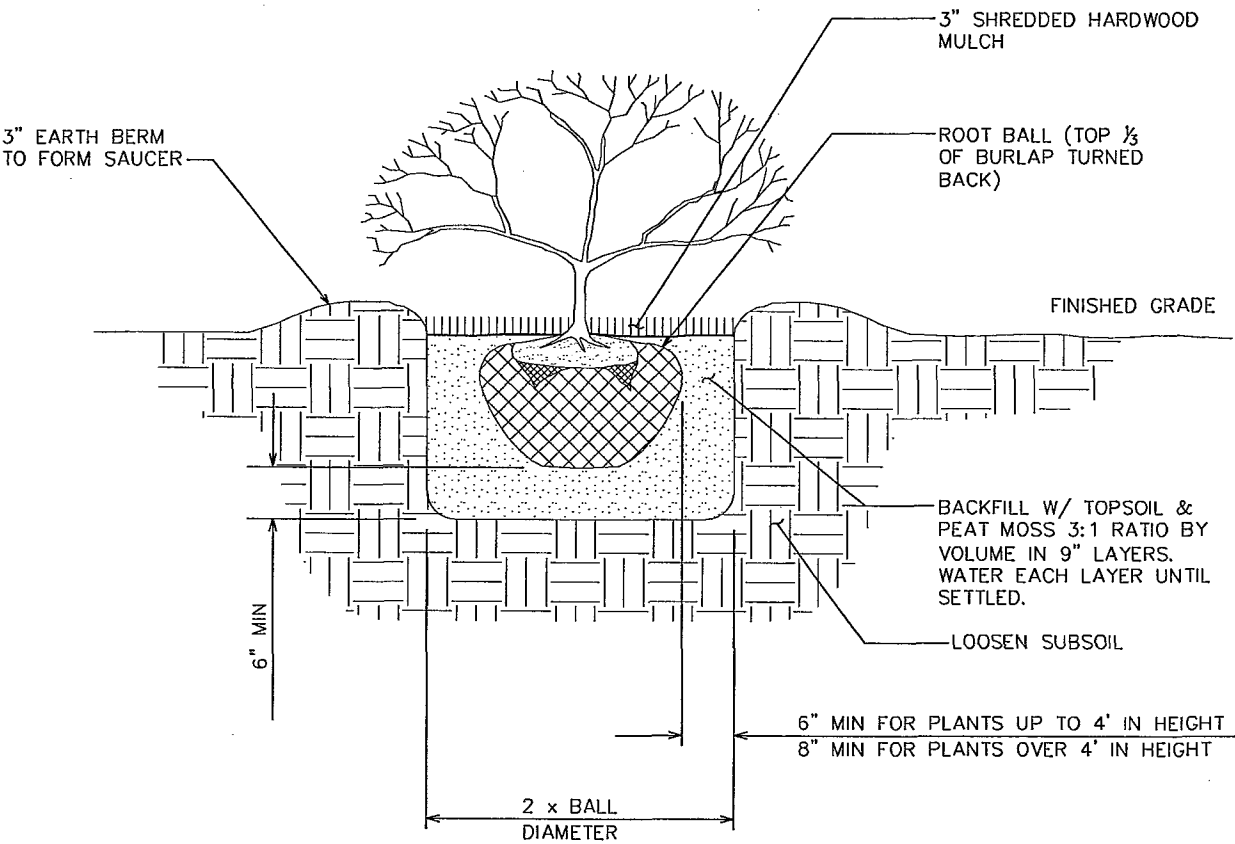
SHEET TITLE:

LANDSCAPING PLAN

SHEET NUMBER: **L-1**
REVISION: **2**
TEP #: 131147

NOTE:

SEE LANDSCAPING NOTES ON L-1



PLANS PREPARED FOR:

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SEAL:

NORTH CAROLINA
PROFESSIONAL ENGINEER
KIMBERLY S. MARTIN
April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

DRAWN BY: JHJ CHECKED BY: GMA

SHEET TITLE:

**LANDSCAPING
DETAILS**

SHEET NUMBER:

L-2

REVISION:

2

TEP #: 131147

LANDSCAPING DETAILS

SCALE: N.T.S.

SCOPE:

1. SHALL INCLUDE ALL LABOR, MATERIALS AND APPLIANCES REQUIRED FOR THE FURNISHING, INSTALLING AND TESTING, COMPLETE AND READY FOR OPERATION OF ALL WORK SHOWN ON THE DRAWING AS SPECIFIED HEREIN:
- | | |
|------------------------|-------------------------------|
| 1. ELECTRIC SERVICE | 4. MISCELLANEOUS MATERIALS |
| 2. CONDUIT AND RACEWAY | 5. TELEPHONE CONDUITS |
| 3. CONDUCTORS | 6. LIGHTNING ARRESTING SYSTEM |

CODES

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

TESTING

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

GUARANTEE

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

CO-ORDINATION:

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

EXAMINATION OF SITE

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

CUTTING, PATCHING AND EXCAVATION:

1. COORDINATION OF ALL SLEEVES, CHASES, ETC., WILL BE REQUIRED PRIOR TO THE CONSTRUCTION OF ANY PORTION OF THE WORK. ALL CUTTING AND PATCHING OF WALLS, PARTITIONS, FLOORS, AND CHASES IN CONCRETE, WOOD, STEEL OR MASONRY SHALL BE DONE AS PROVIDED ON THE DRAWINGS.
2. ALL NECESSARY EXCAVATIONS AND BACKFILLING INCIDENTAL TO THE WORK UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWING SHALL BE PROVIDED BY THIS CONTRACTOR.
3. SEAL ALL PENETRATION THROUGH WALL AND FLOORS WITH APPROVED GROUT.

EXTERIOR CONDUIT:

1. ALL EXPOSED CONDUIT SHALL BE NEATLY INSTALLED AND RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. SUPPORTS AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL.

RACEWAYS

1. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE RIGID STEEL, EMT OR SCH40 PVC AS INDICATED ON THE DRAWINGS.
2. WHERE INSTALLED ON EXTERIORS AND EXPOSED TO DAMAGE, ALL CONDUIT SHALL BE RIGID STEEL. ALUMINUM CONDUIT SHALL NOT BE ALLOWED.
3. CONCEALED CONDUIT IN WALLS OR INTERIOR SPACES ABOVE GRADE MAY BE EMT.
4. UNDERGROUND CONDUITS SHALL BE RIGID STEEL OR SCHEDULE 40 PVC AS INDICATED ON THE DRAWINGS.
5. ALL CONDUIT RUNS SHALL USE APPROVED COUPLINGS AND CONNECTORS. PROVIDE INSULATED BUSHING FOR ALL CONDUIT TERMINATIONS. ALL CONDUIT RUNS IN A WET LOCATION SHALL HAVE WATERPROOF FITTINGS.
6. PROVIDE SUPPORTS FOR ALL CONDUITS IN ACCORDANCE WITH NEC REQUIREMENTS. ALL CONDUITS SHALL BE SIZED AS REQUIRED BY NEC.
7. BURIAL DEPTH OF ALL CONDUITS SHALL BE AS REQUIRED BY CODE FOR EACH SPECIFIC CONDUIT TYPE AND APPLICATION.
8. CONDUIT ROUTES ARE SCHEMATIC. CONTRACTOR SHALL FIELD VERIFY BEFORE BID. COORDINATE ROUTE WITH WIRELESS CARRIER AND BUILDING OWNER.

EQUIPMENT:

1. ALL DISCONNECT SWITCHES SHALL BE SERVICE ENTRANCE RATED, HEAVY DUTY TYPE.
2. NEW CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AS DETERMINED BY THE LOCAL UTILITY. CONTRACTOR SHALL VERIFY MAXIMUM AVAILABLE FAULT CURRENT, AND COORDINATE INSTALLATION WITH THE LOCAL UTILITY BEFORE STARTING WORK.
3. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL/LISTED BY UL OR A NORTH CAROLINA APPROVED THIRD PARTY TESTING AGENCY.

CONDUCTORS

1. FURNISH AND INSTALL CONDUCTORS CALLED FOR IN THE DRAWINGS. ALL CONDUCTORS SHALL HAVE TYPE THWN (MIN) (75° C) INSULATION, RATED FOR 600 VOLTS.
2. ALL CONDUCTORS SHALL BE COPPER, THE USE OF ALUMINUM CONDUCTORS SHALL NOT BE ALLOWED. ALL CONDUCTORS SHALL BE UL LISTED AND SHALL BE PROVIDED AND INSTALLED AS FOLLOWS:
 - A. MINIMUM WIRE SIZE SHALL BE #12 AWG.
 - B. ALL CONDUCTORS SIZE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS SIZED #10 AND SMALLER MAY BE SOLID OR STRANDED.
 - C. CONNECTION FOR #10 AWG AND SMALLER SHALL BE BY TWISTING TIGHT AND INSTALLING INSULATED PRESSURE OR WIRE NUT CONNECTIONS.
 - D. CONNECTION FOR #8 AWG AND LARGER SHALL BE BY USE OF STEEL CRIMP-ON SLEEVES WITH NYLON INSULATOR.
3. ALL CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC STANDARDS.
4. THE RACEWAY SYSTEM SHALL BE COMPLETE BEFORE INSTALLING CONDUCTORS.

PENETRATIONS:





1. CONTRACTOR SHALL COMPLY WITH UL PENETRATION DETAILS FOR PENETRATIONS OF ALL RATED WALLS, ROOF, ETC.

GROUNDING

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

ABBREVIATIONS AND LEGEND

A	—	AMPERE	PVC	—	SCH40 RIGID NON-METALLIC CONDUIT
AFG	—	ABOVE FINISHED GRADE	RGS	—	RIGID GALVANIZED STEEL CONDUIT
ATS	—	AUTOMATIC TRANSFER SWITCH	SW	—	SWITCH
AWG	—	AMERICAN WIRE GAUGE	TGB	—	TOWER GROUND BAR
BCW	—	BARE COPPER WIRE	UL	—	UNDERWRITERS LABORATORIES
BFG	—	BELOW FINISHED GRADE	V	—	VOLTAGE
BKR	—	BREAKER	W	—	WATTS
C	—	CONDUIT	XFMR	—	TRANSFORMER
CKT	—	CIRCUIT	XMTR	—	TRANSMITTER
DISC	—	DISCONNECT			
EGR	—	EXTERNAL GROUND RING			
EMT	—	ELECTRIC METALLIC TUBING			
FSC	—	FLEXIBLE STEEL CONDUIT			
GEN	—	GENERATOR			
GPS	—	GLOBAL POSITIONING SYSTEM			
GRD	—	GROUND			
IGB	—	ISOLATED GROUND BAR			
IGR	—	INTERIOR GROUND RING (HALO)			
KW	—	KILOWATTS			
NEC	—	NATIONAL ELECTRIC CODE			
PCS	—	PERSONAL COMMUNICATION SYSTEM			
PH	—	PHASE			
PNL	—	PANEL			
PNLBD	—	PANELBOARD			

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

PLANS PREPARED FOR:

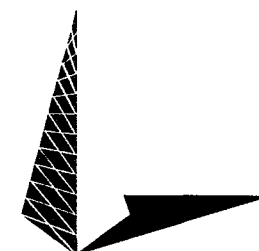


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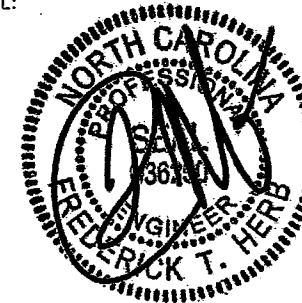
PLANS PREPARED BY:



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SEAL:



April 30, 2014

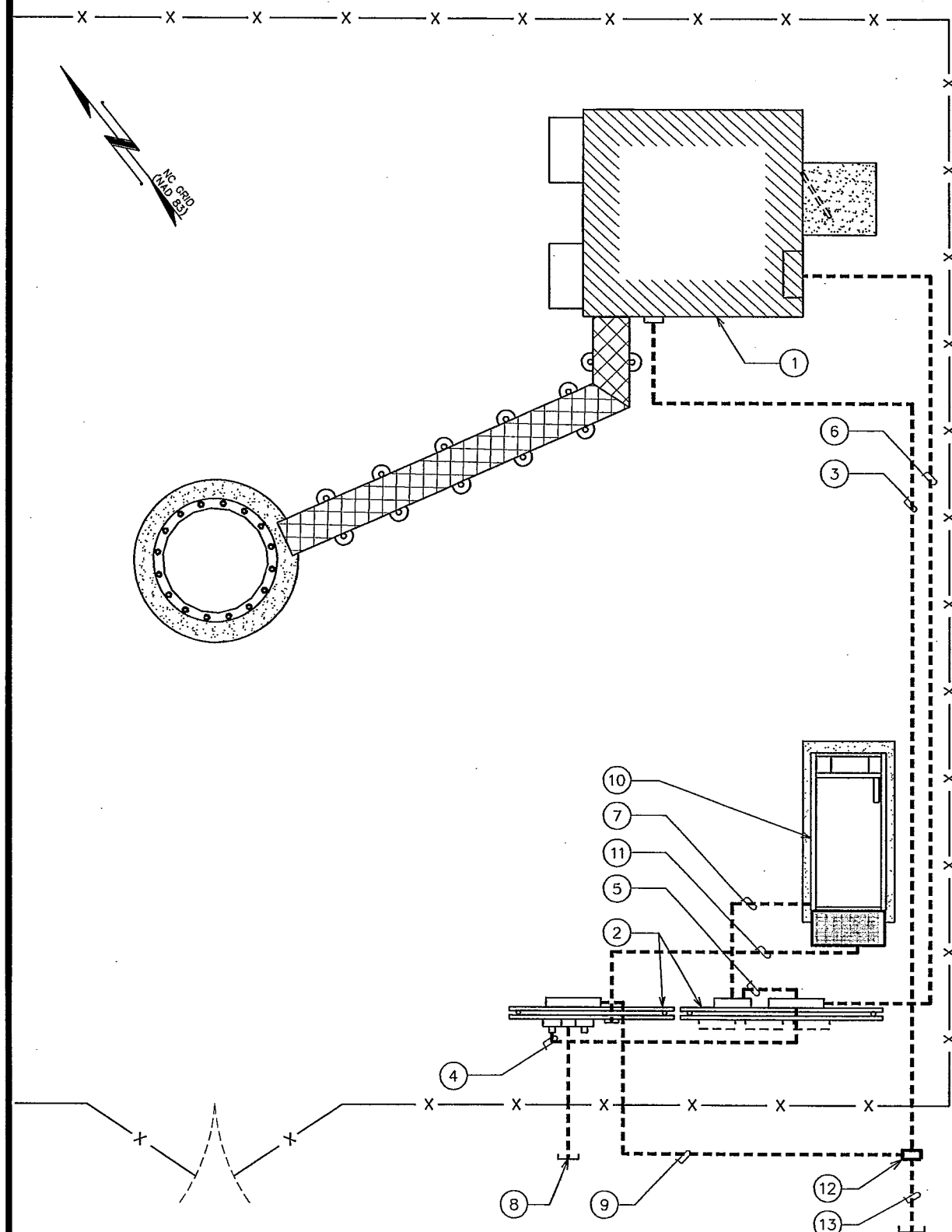
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DRAWN BY: SCB	CHECKED BY: FTH
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SHEET TITLE:

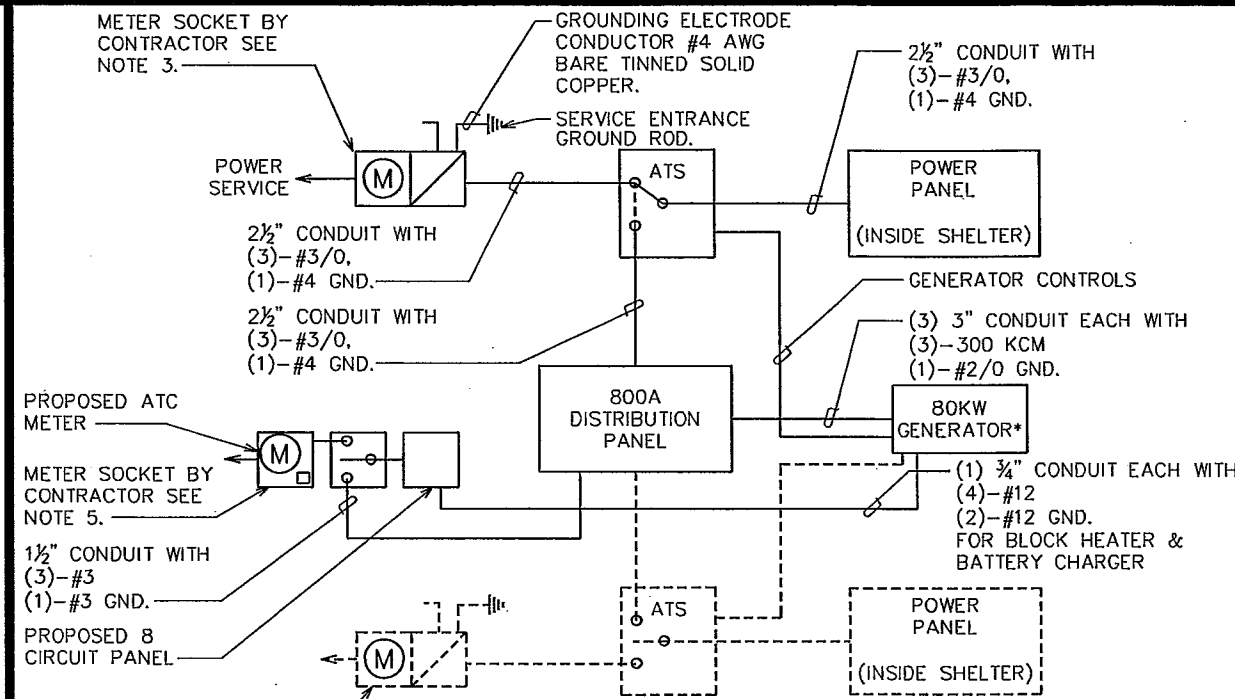
ELECTRICAL NOTES

SHEET NUMBER: E-1	REVISION: 2
	TEP #: 13114



SERVICE ROUTING PLAN

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



ONE LINE DIAGRAM NOTES:

1. ELECTRICAL SERVICE SHALL BE 120/240V, 1Ø, 3W, 200A.
2. PROVIDE SERVICE ENTRANCE RATED CIRCUIT BREAKER TYPE DISCONNECT SWITCH.
3. INSTALL A 200 AMP METER BASE AS DIRECTED BY THE UTILITY COMPANY.
4. CONTRACTOR TO VERIFY BATTERY CHARGER AND BLOCK HEATER LOADING.
5. INSTALL A 100 AMP METER BASE AS DIRECTED BY THE UTILITY COMPANY.

*80KW GENERATOR TO BE SUPPLIED WITH MAIN LINE CIRCUIT BREAKER NOT TO EXCEED THE MAXIMUM STANDBY OUTPUT OR 400A.

ONE LINE DIAGRAM

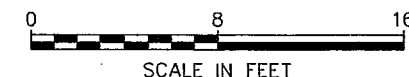
SCALE: N.T.S.

PLAN NOTES:

- 1 PROPOSED AT&T EQUIPMENT SHELTER.
- 2 PROPOSED H-FRAMES SEE SHEETS E-5 & E-5A FOR DETAILS
- 3 (1) 4" TELCO CONDUIT W/ (3) 1/4" FLEX INTERDUCT & PULL STRING FOR FIBER POWER LEADS.
- 4 (1) 2 1/2" POWER CONDUIT FROM PROPOSED METER TO 200A AUTOMATIC TRANSFER SWITCH.
- 5 (1) 2 1/2" POWER CONDUIT FROM 800A DISTRIBUTION PANEL TO 200A AUTOMATIC TRANSFER SWITCH.
- 6 (1) 2 1/2" POWER CONDUIT FROM 200A AUTOMATIC TRANSFER SWITCH TO TENANT SHELTER DISTRIBUTION PANEL.
- 7 (3) 3" POWER CONDUIT FROM THE PROPOSED GENERATOR TO THE 800A DISTRIBUTION PANEL
- 8 PROPOSED (2) 4" POWER CONDUIT STUBBED UP 3' OUTSIDE FENCE. CONTRACTOR TO COORDINATE SERVICE WITH LOCAL POWER COMPANY.
- 9 PROPOSED (1) 4" TELCO/FIBER CONDUIT FROM TELCO EQUIPMENT CABINET TO FIBER HANDHOLE.
- 10 PROPOSED GENERATOR. SEE DETAILS SHEETS C-6 AND C-7
- 11 AUTOMATIC START-UP AND INTER CARRIER CONTROL BY GENERATOR COMPANY.
- 12 PROPOSED FIBER HANDHOLE BY AT&T.
- 13 PROPOSED 4" CONDUIT W/ PULL STRING FROM FIBER HANDHOLE TO BE STUBBED UP 10' FROM R.O.W. ROUTE TO FOLLOW ACCESS & UTILITY EASEMENT.

TRENCHING NOTE:

PRIOR TO ANY DIGGING, THE CONTRACTOR SHALL IDENTIFY ALL EXISTING UTILITIES ON SITE.



PLANS PREPARED FOR:

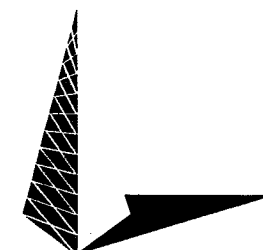


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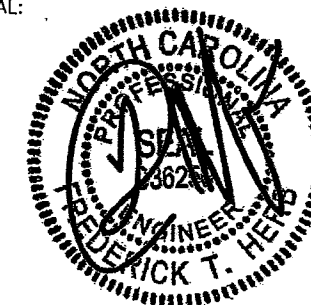
PLANS PREPARED BY:



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N.C. LICENSE # C-1794

SEAL:



April 30, 2014

REV	DATE	ISSUED FOR:
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DRAWN BY: CSN CHECKED BY: FTH

SHEET TITLE:

**SERVICE ROUTING
PLAN & ONE-LINE
DIAGRAM**

SHEET NUMBER:

E-2

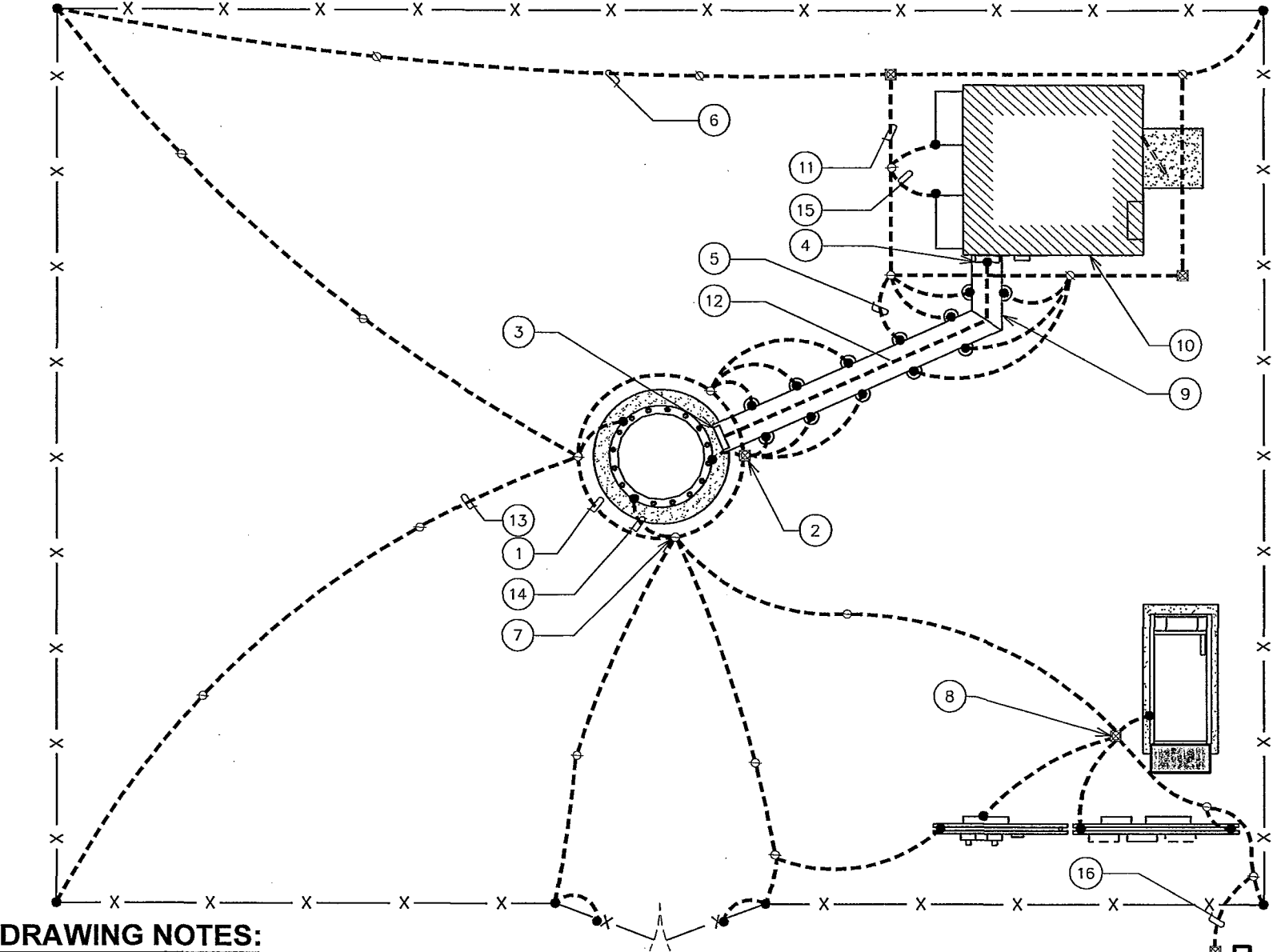
REVISION:

2

TEP #: 131147

GROUNDING NOTES

- GROUNDING ELECTRODES SHALL BE CONNECTED IN A RING USING #2 AWG BARE TINNED COPPER WIRE. THE TOP OF THE GROUND RODS AND THE RING CONDUCTOR SHALL BE 2 FEET BELOW FINISHED GRADE. GROUNDING ELECTRODES SHALL BE DRIVEN ON 10'-0" CENTERS. (MIN. 15'-0" MAX)
- BONDING OF THE GROUNDED CONDUCTOR (NEUTRAL) AND THE GROUNDING CONDUCTOR SHALL BE AT THE SERVICE DISCONNECTING MEANS/ BONDING JUMPER SHALL BE INSTALLED INSTALLED PER N.E.C. ARTICLE 250.30.
- CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER WHEN THE GROUNDING SYSTEM IS COMPLETE. THE CONSTRUCTION MANAGER SHALL INSPECT THE GROUNDING SYSTEM PRIOR TO BACKFILLING.



DRAWING NOTES:

- | | | |
|---|---|--|
| ① PROPOSED TOWER GROUND RING | ⑥ #2 AWG BOND TO PROPOSED GROUND RING (TYP OF 2) | ⑫ #2 AWG BARE SOLID TINNED COPPER WIRE BETWEEN BUS BARS |
| ② INSPECTION WELL AT CONNECTION TO PROPOSED GROUND RING | ⑦ 5/8" x 10' COPPER GROUND ROD (TYP) | ⑬ TOWER BONDING TO FENCE (TYP OF 2) |
| ③ TOWER BUS BAR | ⑧ SERVICE ENTRANCE GROUND ROD WITH INSPECTION WELL. SEE E-6 FOR DETAIL. | ⑭ TOWER BONDING TO TOWER GROUND RING (TYP OF 3) |
| ④ ICE BRIDGE BUS BAR | ⑨ ICE BRIDGE | ⑮ PROPOSED HVAC GROUNDING (TYP OF 2). MECHANICAL FASTENERS AT ABOVE GROUND CONNECTIONS AS ALLOWED BY CODE. |
| ⑤ #2 AWG ICE BRIDGE BOND BURIED 30" BFG (TYP) | ⑩ EQUIPMENT SHELTER | ⑯ PROPOSED #2 GROUND TO BE STUBBED UP NEXT TO PROPOSED FIBER HANDHOLE. |
| | ⑪ #2 AWG GROUND RING BURIED 30" BFG | |

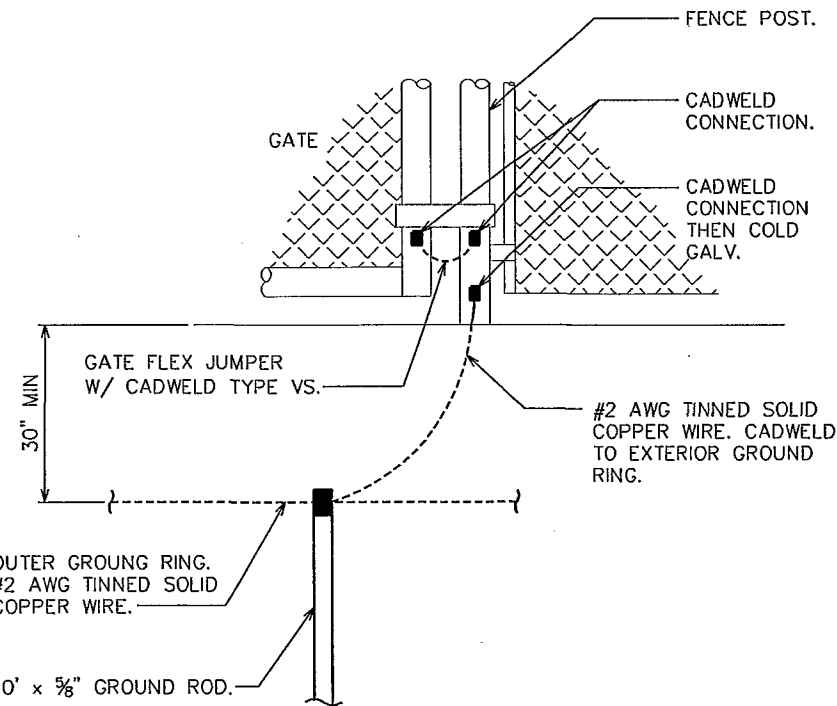
TOWER GROUNDING PLAN

SCALE: 1" = 10'

0 10 20
SCALE IN FEET

FENCE GROUNDING

SCALE: N.T.S.



TYPICAL GATE POST GROUNDING DETAIL

SCALE: N.T.S.

PLANS PREPARED FOR:

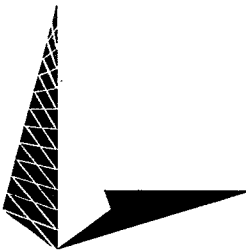


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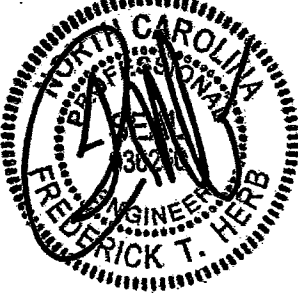
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DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

TOWER & SHELTER
GROUNDING PLAN

SHEET NUMBER:

E-3

REVISION:

2

TEP #: 131147

800A ATC DISTRIBUTION PANEL SCHEDULE												
LOAD SERVED	VOLT AMPERES (WATTS)		WIRE	BREAKER		CKT #	PHASE	CKT #	BREAKER		CKT #	LOAD SERVED
	L1	L2		P	TRIP				P	TRIP		
AT&T ATS	10695		3/0	2	200	1	A	2	-	-	-	FUTURE CARRIER SERVICE T.B.D.
		11230					B					
FUTURE CARRIER SERVICE T.B.D.	-		-	-	-	5	A	6	-	-	-	FUTURE CARRIER SERVICE T.B.D.
		-				7	B					
FUTURE CARRIER SERVICE T.B.D.	-		-	-	-	9	A	10	-	-	-	SPARE
		-				11	B					
SPARE	-		-	-	-	13	A	14	-	-	-	SPARE
SPARE			-	-	-	15	B	16	-	-	-	SPARE
VOLT AMPS	10695	11230									VOLT AMPS	
			L1 VOLT AMPERES		10695		11230		L2 VOLT AMPERES			
											TOTAL VOLT AMPERES	
											TOTAL AMPS	

AT&T POWER PANEL SCHEDULE															
LOAD SERVED	VOLT AMPERES (WATTS)		WIRE	BREAKER		CKT #	PHASE	CKT #	BREAKER		WIRE	VOLT AMPERES (WATTS)		LOAD SERVED	
	L1	L2		P	TRIP				TRIP	P		L1	L2		
3 TON HVAC #1	3400	3400	8	2	50	1	A	2	50	2	8	3400	3400	3 TON HVAC #2	
INTERIOR LIGHTS	335	1080	12	1	15	3	B	4	30	2	10	800	800	RECTIFIER #2	
INTERIOR RECEPTACLES	360	150	12	1	20	5	A	6	30	2	10	800	800	RECTIFIER #3	
EXTERIOR RECEPTACLES	800	800	10	2	30	7	B	8	30	2	10	800	800	RECTIFIER #4	
EXTERIOR LIGHTS						9	A	10	30	2	10	800	800		
RECTIFIER #1						11	B	12	30	2	10	800	800		
						13	A	14	30	2	10	800	800		
						15	B	16	30	2	10	800	800		
						17	A	18	30	2	10	800	800		
						19	B	20	30	2	10	800	800		
						21	A	22	30	2	10	800	800		
						23	B	24	30	2	10	800	800		
						25	A	26	30	2	10	800	800		
						27	B	28	30	2	10	800	800		
						29	A	30	30	2	10	800	800		
VOLT AMPS	4895	5430	L1 VOLT AMPERES				10695	L2 VOLT AMPERES				11230	5800	5800	VOLT AMPS
<div> <div>TOTAL VOLT AMPERES</div> <div>21925</div> </div> <div> <div>TOTAL AMPS</div> <div>91.35</div> </div> <div> <div>AMPS X 125%</div> <div>114.19</div> </div> <div> <div>X 110% FOR MAIN</div> <div>125.61</div> </div>															

100A ATC SERVICE PANEL SCHEDULE																																																	
LOAD SERVED	VOLT AMPERES (WATTS)		WIRE	BREAKER		CKT #	PHASE	CKT #	BREAKER		WIRE	VOLT AMPERES (WATTS)		LOAD SERVED																																			
	L1	L2		P	TRIP				P	TRIP		L1	L2																																				
BATTERY CHARGER	1440		12	1	20	1	A	2	-	-	-	-	-	SPARE																																			
SPARE		-	-	-	-	3	B	4	20	1	12		1440	BLOCK HEATER																																			
SPARE	-		-	-	-	5	A	6	-	-	-	-		SPARE																																			
SPARE		-	-	-	-	7	B	8	-	-	-			SPARE																																			
VOLT AMPS	1440	-												VOLT AMPS																																			
<table border="1"> <thead> <tr> <th colspan="2">L1 VOLT AMPERES</th> <th colspan="2">L2 VOLT AMPERES</th> </tr> </thead> <tbody> <tr> <td>1440</td> <td>1440</td> <td colspan="2">TOTAL VOLT AMPERES</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">2800</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">TOTAL AMPS</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">11.6667</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">AMPS X 125%</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">14.5833</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">X 110% FOR MAIN</td> </tr> <tr> <td colspan="2"></td> <td colspan="2">16.04</td> </tr> </tbody> </table>														L1 VOLT AMPERES		L2 VOLT AMPERES		1440	1440	TOTAL VOLT AMPERES				2800				TOTAL AMPS				11.6667				AMPS X 125%				14.5833				X 110% FOR MAIN				16.04	
L1 VOLT AMPERES		L2 VOLT AMPERES																																															
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		X 110% FOR MAIN																																															
		16.04																																															

SHEET NUMBER: E-4	REVISION: 2
	TEP #: 131147

SCALE: N.T.S.

NOTES:

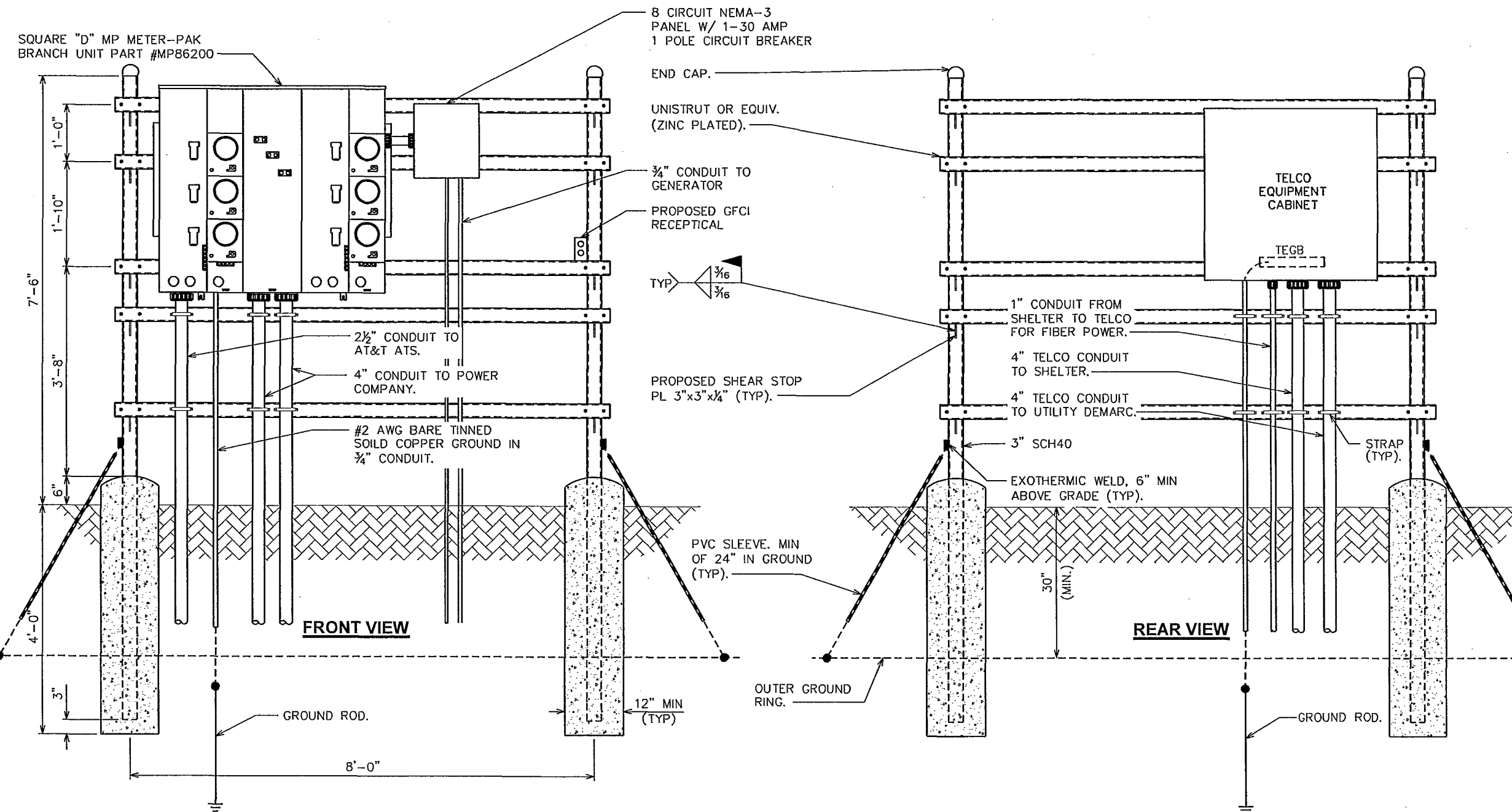
1. ELECTRIC SERVICE: 240/120V, 1Ø, 3W, 800A
UNDERGROUND SERVICE TO POLE RISER.
2. USE COPPER STRANDED, 600V, TYPE THW/THWN, WITH
CROSS-LINKED POLYETHYLENE INSULATION FOR #8 AWG
AND LARGER WIRE.

3. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC
(MEET UL STANDARDS G51 AND NEMA TC2-1990). EXPOSED
CONDUITS SHALL BE PVC UV RESISTANT OR RIGID
GALVANIZED STEEL. ALL CONDUIT BENDS SHALL BE A
MINIMUM OF 36" RADIUS.

4. GROUNDING CONDUCTOR SHALL BE 2 AWG SOLID BARE
TINNED COPPER UNLESS OTHERWISE NOTED.

5. 4" PVC CONDUIT INSTALLED 30' (MINIMUM) BELOW GRADE
FOR INCOMING SERVICE BY TELEPHONE COMPANY. PROVIDE
PULL STRING - 200 LB. TEST POLYETHYLENE CORD.

6. METER CENTER PART NUMBER SHOWN INCLUDES 4-JAW
RINGED METER SOCKETS. CONTRACTOR TO VERIFY METER
CONNECTION SPECIFICATIONS WITH LOCAL UTILITY PRIOR
TO ORDERING.



SERVICE RACK DETAILS

SCALE: N.T.S.

PLANS PREPARED FOR:



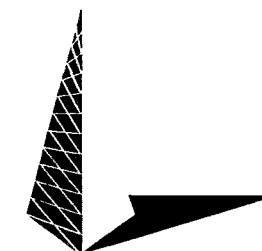
3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

PROJECT INFORMATION:

AT&T SITE #: 368-317
ATC SITE #: 280422
FARRINGTON NC

464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

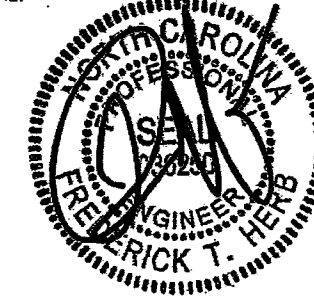
PLANS PREPARED BY:



TOWER ENGINEERING PROFESSIONALS
3703 JUNCTION BOULEVARD
RALEIGH, NC 27603-5263
OFFICE: (919) 661-6351
www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



April 30, 2014

2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY
REV	DATE	ISSUED FOR:

DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**SERVICE RACK
DETAILS I**

SHEET NUMBER:

E-5

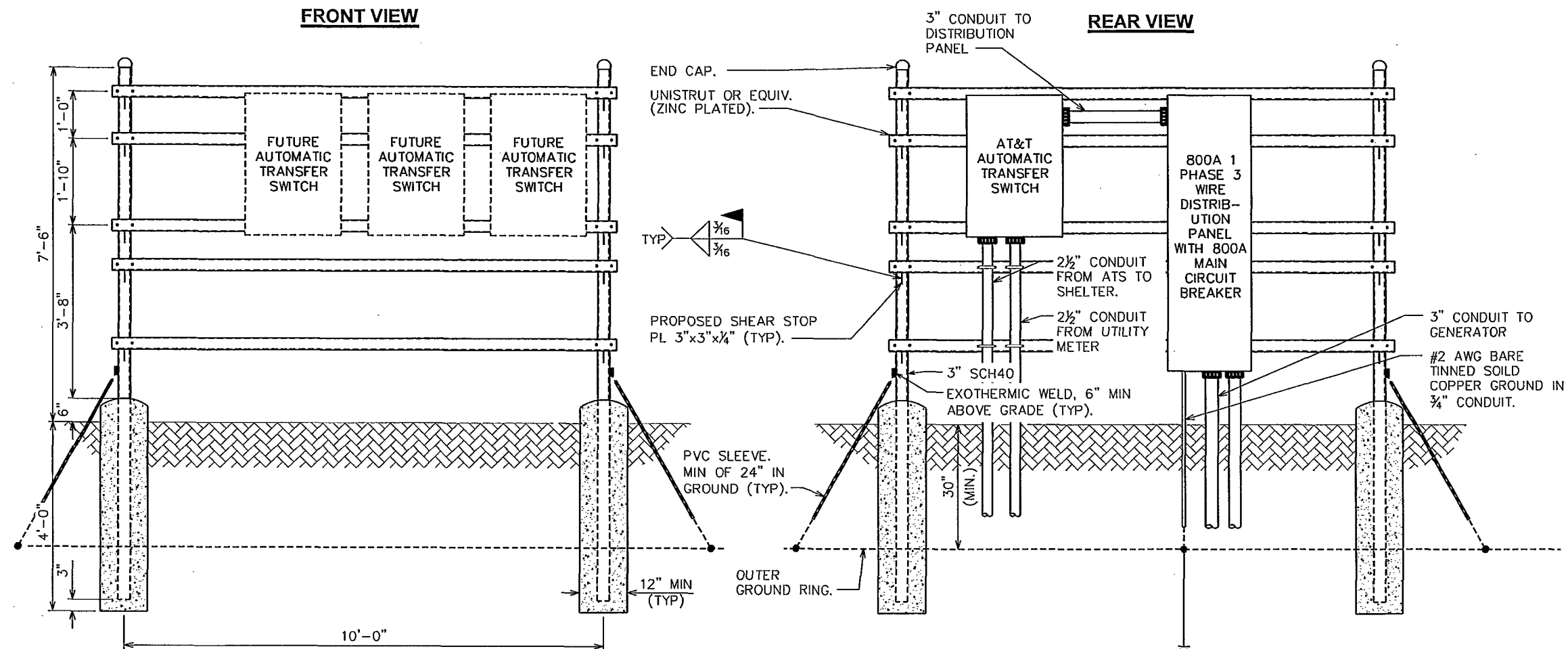
REVISION:

2

TEP #: 131147

NOTE:

SEE SHEET E-5 FOR SERVICE RACK NOTES.

**SERVICE RACK DETAILS**

SCALE: N.T.S.

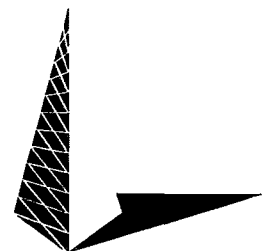
PLANS PREPARED FOR:

3500 REGENCY PARKWAY, STE. 100
CARY, NC 27518

PROJECT INFORMATION:

AT&T SITE #: 368-317
ATC SITE #: 280422
FARRINGTON NC464 OLD FARRINGTON RD.
CHAPEL HILL, NC 27514
(CHATHAM COUNTY)

PLANS PREPARED BY:

**TOWER ENGINEERING PROFESSIONALS**

3703 JUNCTION BOULEVARD

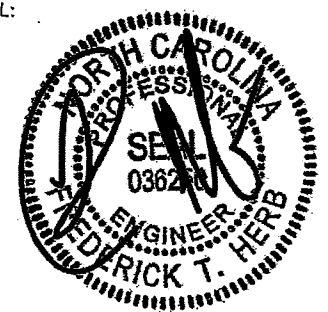
RALEIGH, NC 27603-5263

OFFICE: (919) 661-6351

www.tepgroup.net

N.C. LICENSE # C-1794

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April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

DRAWN BY: CSN CHECKED BY: FTH

SHEET TITLE:

**SERVICE RACK
DETAILS II**

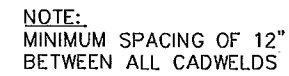
SHEET NUMBER:

E-5A

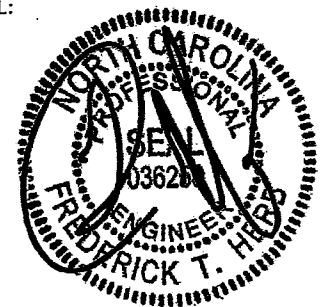
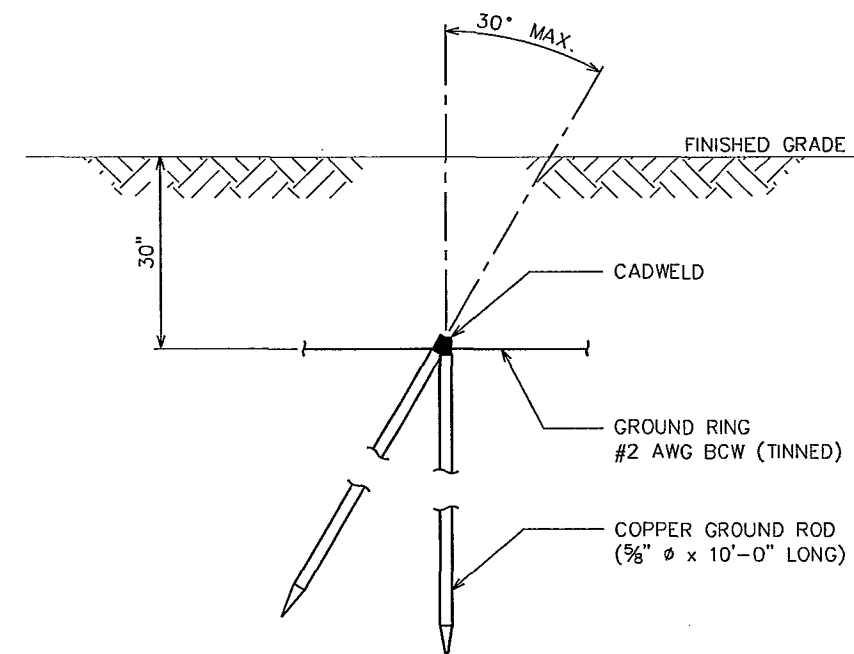
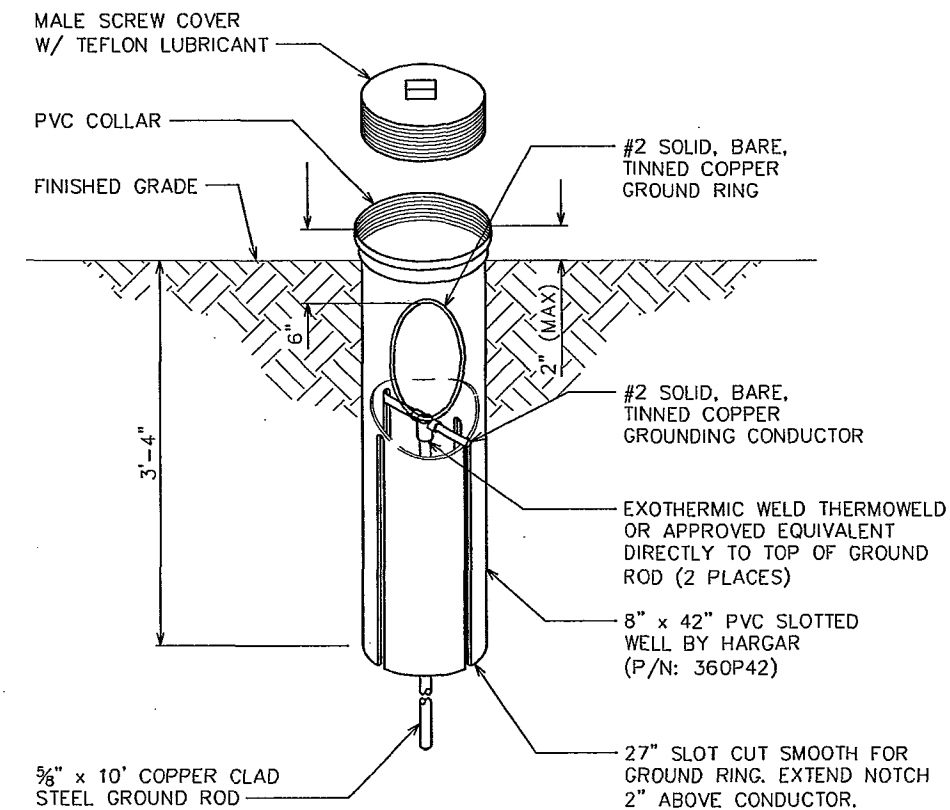
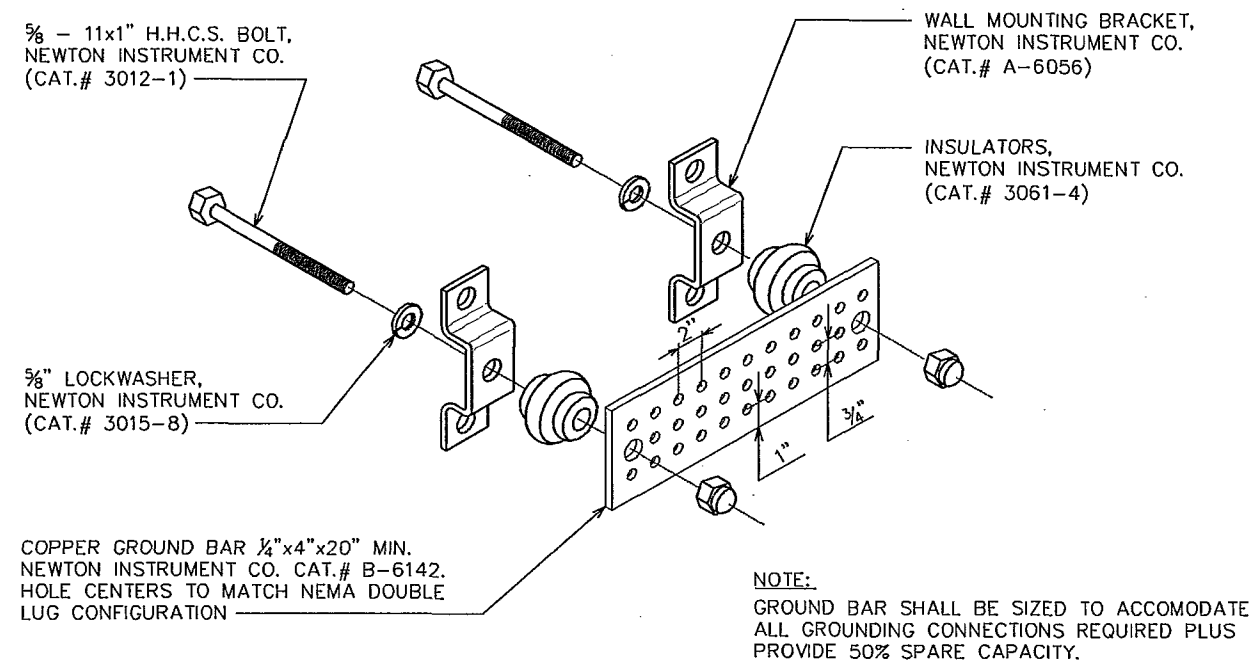
REVISION:

2

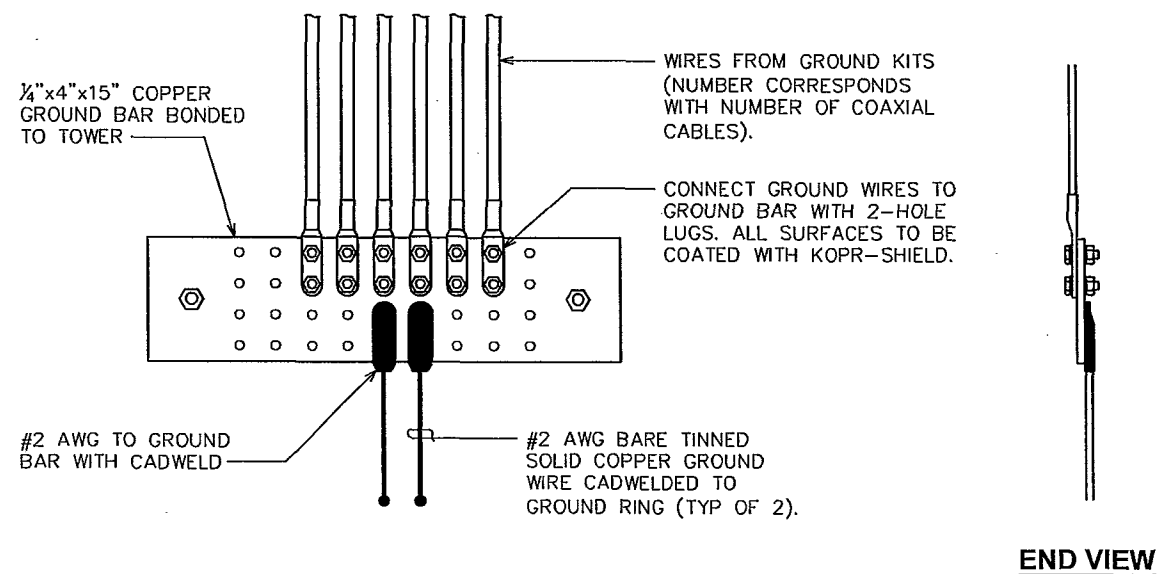
TEP #: 131147



A cross-sectional diagram of a ground rod installation. A horizontal line at the top represents the ground surface. A vertical rod, labeled "GROUND ROD", extends downwards from the surface. At the top of the rod, there is a black rectangular area labeled "CADWELD". A horizontal line, labeled "GROUND WIRE", is connected to the cadweld. The rod has a wavy, textured bottom section.

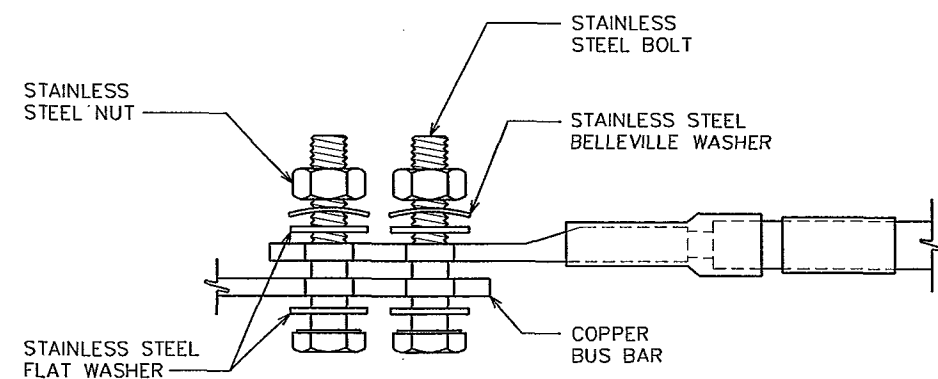


TEP #: 131147



LOWER GROUND BAR

SCALE: N.T.S.



NOTES:

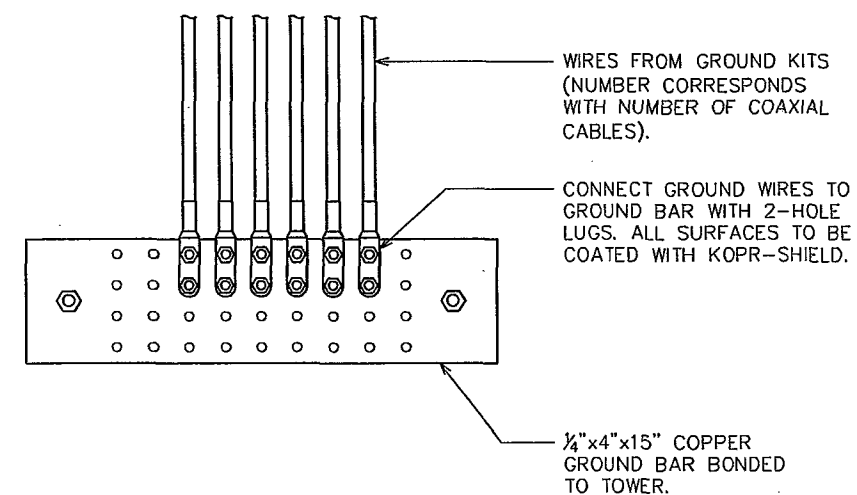
- ALL HARDWARE SHALL BE 18-8 STAINLESS STEEL, INCLUDING THE BELLEVILLE WASHERS. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
- FOR GROUND BOND TO STEEL ONLY; INSERT A DRAGON TOOTH WASHER BETWEEN THE LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHIELD.

LUG DETAIL

SCALE: N.T.S.

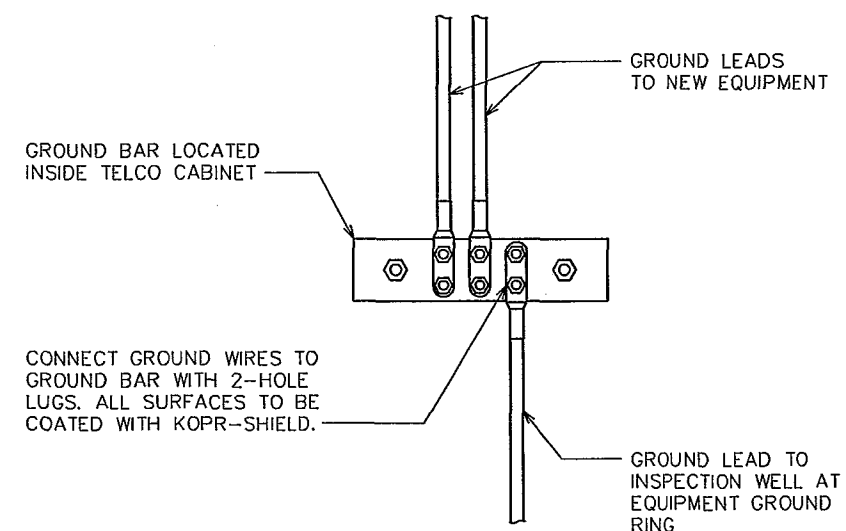
NOTE:

THE CONTRACTOR SHALL UTILIZE AN INTERMEDIATE GROUND BAR FOR ANTENNA RAD CENTERS OVER 200'.



UPPER / INTERMEDIATE GROUND BAR

SCALE: N.T.S.



GROUND BAR IN TELCO CABINET

SCALE: N.T.S.

PLANS PREPARED FOR:



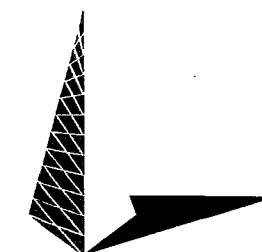
3500 REGENCY PARKWAY, STE. 100
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3703 JUNCTION BOULEVARD

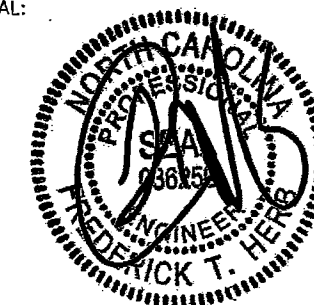
RALEIGH, NC 27603-5263

OFFICE: (919) 661-6351

www.tepgroup.net

N.C. LICENSE # C-1794

SEAL:



April 30, 2014

REV	DATE	ISSUED FOR:
2	04-30-14	CONSTRUCTION
1	01-22-14	PRELIMINARY
0	01-13-14	PRELIMINARY

DRAWN BY: SCB CHECKED BY: FTH

SHEET TITLE:

**GROUNDING
DETAILS II**

SHEET NUMBER:

E-7

REVISION:

2

TEP #: 131147

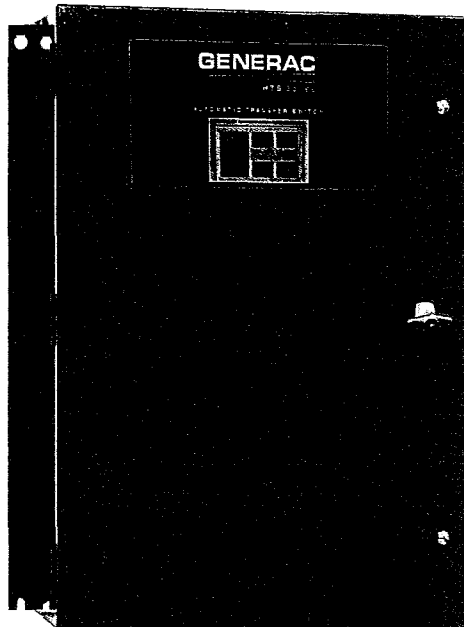
GENERAC 80KW

GENERAL ASSEMBLY AND INSTALLATION SUPPLEMENT

100 - 400 Amps,
600 VAC HTS

Automatic Transfer Switches

100 - 400 Amps, 600 VAC
1 of 2



200 Amp HTS NEMA 1

Description

- The Generac HTS Transfer Switch is a “State of the Art” Smart Switch designed to operate in conjunction with the Generac H100 Series generator controller.
- The HTS Transfer Switch has a 2 wire RS485 communication link to the generator controller.
- The utility voltage is monitored by the HTS along with signal before transfer timing, time delay neutral and inphase transfer.
- Switch operation is instigated by the generator controller.
- All timers and voltage setpoints are programmable through GenLink® Communications Software.
- Time delay neutral and inphase monitor are included.

Standard Features

- Single coil design, electrically operated and mechanically held
- Programmable exercise time
- SPDT aux contacts
- Main contacts are silver alloy
- Conformal coating protects the printed circuit board
- UL1008 Listed
- Indicating LED's for switch position, standby operating, utility available

Optional Accessories

- NEMA 12 enclosure (100-400 Amps)
- NEMA 3R enclosure (All)

- 3 position test switch: Fast Test, Auto, Normal Test
- Arc shutes on main contacts
- Signal before transfer contacts
- Rated to all classes of loads
- Remote start, stop and transfer through GenLink® Communications Software
- Up to four transfer switches per generator
- 50/60 hertz operation

- NEMA 4 and 4x enclosure
- 4 pole for separately derived systems

Interconnections

HTS 100-400 Amp

Switches and Indicators:

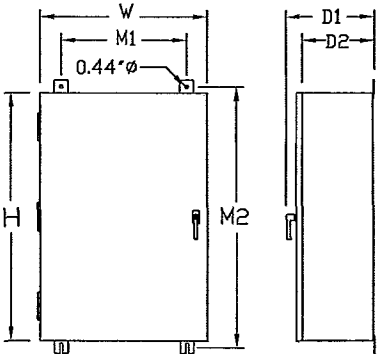
- System Ready LED
- Switch Position LED's
- Test Switch
- Return to Normal Switch
- Standby Operating LED
- Utility Available LED
- Fast Test Switch
- Safety Disconnect Switch

Standby Accept Voltage	85-95%
Standby Accept Frequency.....	85-95%
Nominal Voltage.....	1 Volt Increments
Allowable Deviation of Utility	1-100%
Line Interruption Delay	1-10 Seconds
Engine Warmup Time.....	1-300 Seconds
Minimum Run Time.....	5-60 Minutes
Return to Utility Timer	1-30 Minutes
Engine Cooldown Timer	1-30 Minutes
Signal Before Transfer Timer	1-30 Seconds
Transfer Type	Inphase Time Delay Neutral
Phase Difference for Inphase Transfer	-7 +0 Degrees

Withstand Current - 600 Volt HTS Series

HTS RATED AMPS	100	150	200	300	400
FUSE PROTECTED					
Maximum RMS Symmetrical Fault Current – Amps	200,000	200,000	200,000	200,000	200,000
Maximum Fuse Size – Amps	200	400	400	600	600
Fuse Class	J,T	J,T	J,T	J,T	J,T
CIRCUIT BREAKER PROTECTED					
Maximum RMS Symmetrical Fault Current – Amps	14,000	25,000	25,000	35,000	35,000
Protective Device Continuous Rating (Max.) – Amps	150	300	300	600	600

- Tested in accordance with the withstand and closing requirements of UL 1008 and CSA Standards.
- Current ratings are listed @ 480 VAC.



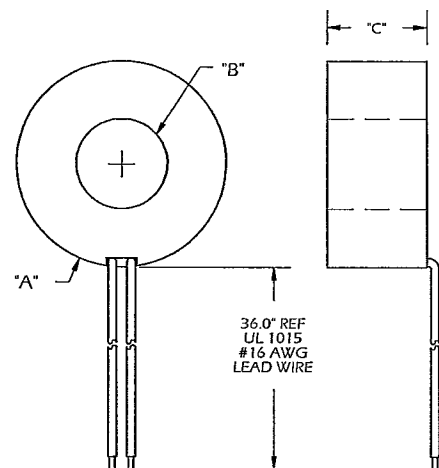
Unit Dimensions

HTS RATED AMPS	VOLTAGE	ENCLOSURE HEIGHT H	ENCLOSURE WIDTH W	WALL MOUNT BOLT PATTERN		ENCLOSURE DEPTH		WEIGHT (lbs.)
				M1	M2	D1	D2	
100	ALL	36	24	18	37.5	12.7	10	180
150-200	120/240	36	24	18	37.5	12.7	10	185
150-200	120/208	36	24	18	37.5	12.7	10	185
150-200	277/480	48*	30*	24	49.5	14.8	12	265
300-400	120/240	36	24	18	37.5	12.7	10	245
300-400	120/208	36	24	18	37.5	12.7	10	245
300-400	277/480	48*	30*	24	49.5	14.8	12	325

Terminal Lug Wire Ranges

HTS RATED AMPS	CONTACTOR TERMINALS (1 LUG PER POLE) LUG WIRE RANGE	NEUTRAL BAR*		GROUND LUG (1 PROVIDED) LUG WIRE RANGE
		# LUGS	LUG WIRE RANGE	
100	2/0 – 14 AWG	4	2/0 – 14 AWG	2/0 – 14 AWG
150	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
200	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
300	600MCM – 4 AWG	4	600MCM – 4 AWG	350MCM – 6 AWG
	or 2 – [250MCM – 1/0 AWG]		[250MCM – 1/0 AWG]**	350MCM – 6 AWG
400	600MCM – 4 AWG	4	600MCM – 4 AWG	350MCM – 6 AWG
	or 2 – [250MCM – 1/0 AWG]		[250MCM – 1/0 AWG]**	

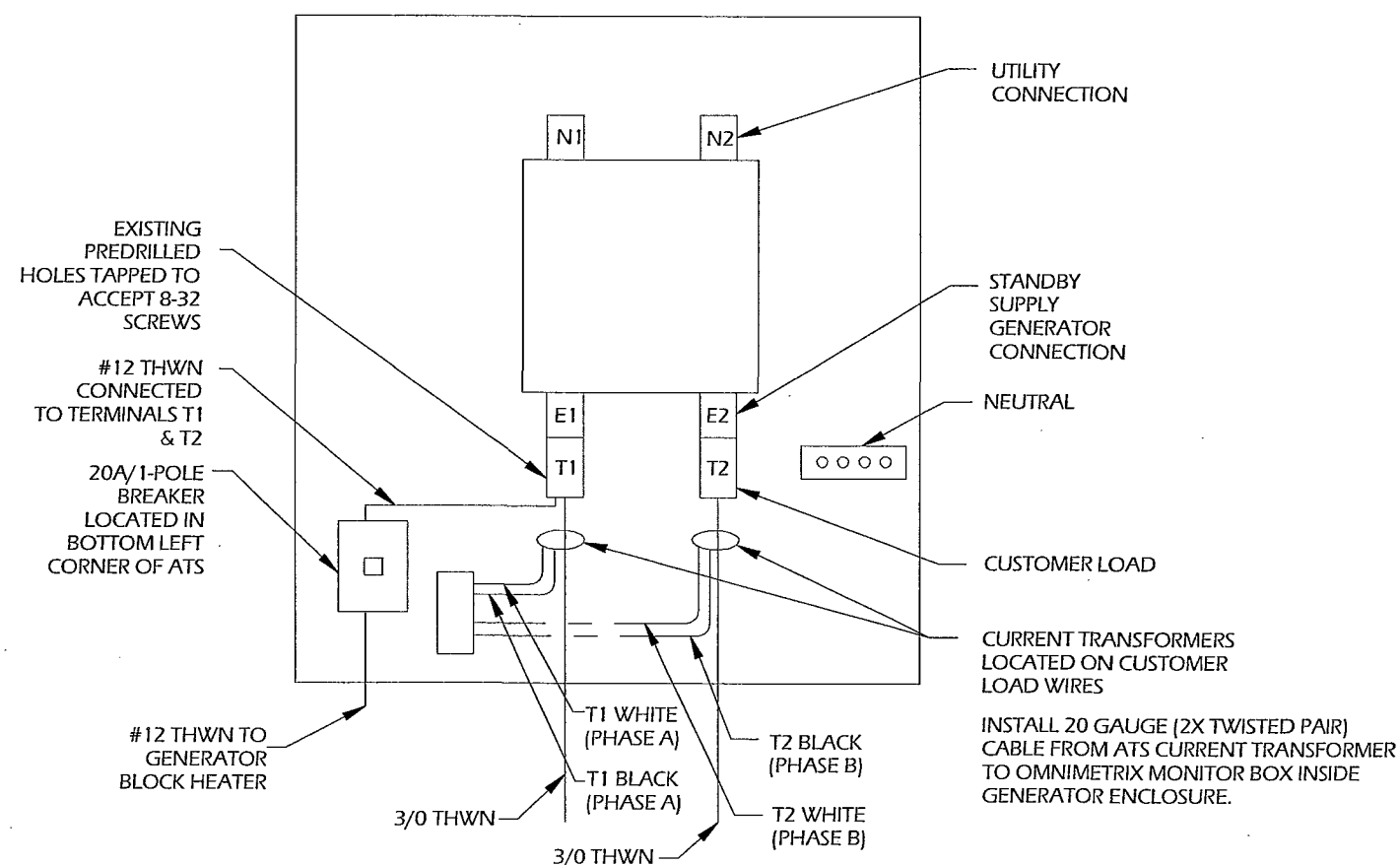
* Not included in HTS with switched neutral. ** Allowable wire range in brackets is for 2 wires per lug.



NOTE:
1. ORIGINAL CURRENT TRANSDUCCERS.

PART NO.	RATIO	MODEL NO.	±%	VA	OHMS	"A"	"B"	"C"
0F7784A	100:1A	635-100-01-L36	1	1	.31	65	28	30.5
0F7784B	200:1A	635-200-01-L36	1	5	.95	65	28	30.5
0F7784C	300:1A	A-300-01-L36	1	4.5	.06	112	57.1	27.4
0F7784D	400:1A	A-400-01-L36	1	4	.11	112	57.1	27.4
0F7784E	500:1A	A-500-01-L36	1	6.5	.13	112	57.1	27.4
0F7784F	600:1A	A-600-01-L36	1	7.5	.15	112	57.1	27.4
0F7784G	800:1A	MW-800-01-L36	1	10	.20	143.5	89	29.2
0F7784H	1000:1A	MW-1000-01-L36	1	12	.22	143.5	89	29.2
0F7784J	1500:1A	MW-1500-01-L36	1	15	.50	143.5	89	29.2
0F7784K	2000:1A	MW-2000-01-L36	1	12	.67	143.5	89	29.2
0F7784L	3000:1A	MW-3000-01-L36	1	25	1.0	143.5	89	29.2

2 CURRENT FLOW METER IN ATS



NOTES:
1. CONNECT TO TENANT BREAKER AT METER.
2. CONNECT TO DISTRIBUTION CENTER BRANCH BREAKER

1 ATS

*SINGLE PHASE

GENERAC
POWER SYSTEMS INC.

Highway 59 & Hillside Rd.
Waukesha, WI. 53188
Phone#262-544-4811

Ref: All Generac Power Systems fuel tank bases supplied from the factory are manufactured and labeled per U.L.142 and are warranted through Generac Power Systems.

UL registration number: MH18459

U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION

Fuel tank base construction:

- Be constructed in accordance with Underwriters Laboratories Standard UL-142. Be constructed in accordance with Flammable and Combustible Liquids Code, NFPA 30; The Standard for Installation and use of Stationary Combustible Engine and Gas Turbines, NFPA 37; and The Standard for Emergency and Standby Power Systems, NFPA 110. Include reinforced steel box channel for generator support, with load rating of 5,000 lbs. per gen-set mounting hole location. Full height gussets shall be provided at gen-set mounting holes. Be shipped with a certificate of Structural/Mechanical Integrity, certifying that it has met standards through rigorous testing and has demonstrated specified capabilities.

Sub Base Tank Testing:

Primary tank and secondary containment basin sections shall be pressurized at 3-5 psi and leak-checked to ensure integrity of sub base weld seams per UL-142 standards

Sub Base Tank Fittings:

The sub base tank shall include the following fittings:

- Appropriately sized NPT
- Fuel supply Fuel return fitting
- NPT for normal vent, sized as appropriate NPT for emergency vent, sized as appropriate
- 2" NPT for manual fill
- NPT for level gauge, sized as appropriate.
- 2" NPT for electronic fuel level; includes Low fuel alarm. High fuel level alarm
- NPT fitting for leak detection alarm

Fuel Level Gauge

The sub base tank shall include a direct-reading fuel level gauge.

Low Fuel Level

Factory Pre-set at 40% remaining for Alarm

Factory Pre-set at 20% remaining for Shut-down

High Fuel Level

Factory Pre-set at 90% full for Alarm

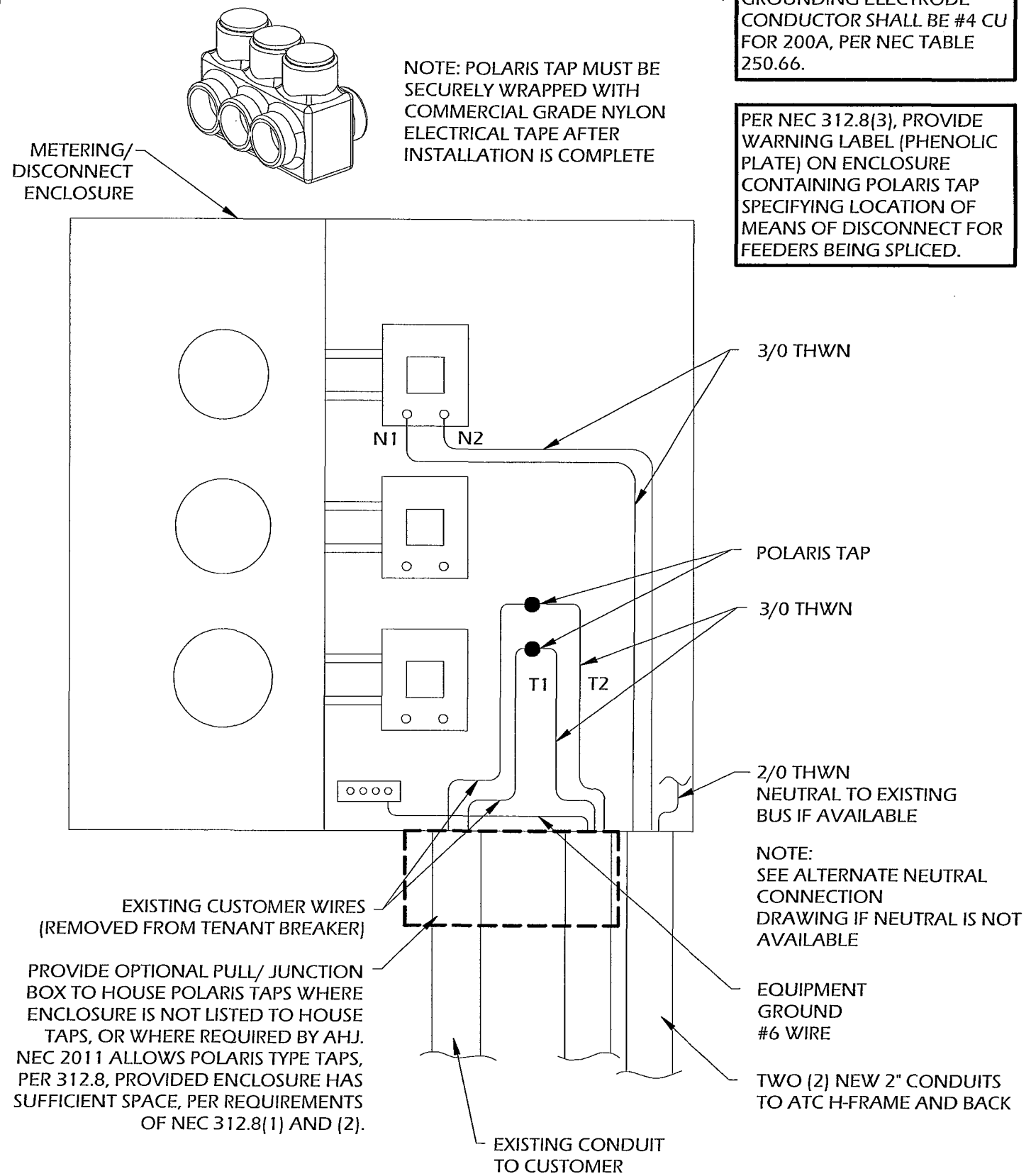
Fuel Containment Basin

Sub base tank shall include a welded steel containment basin, sized at a minimum of 110% of the tank capacity to prevent escape of fuel into the environment in the event of a tank rupture. A fuel containment basin leak detector switch shall be provided.

Sub Base Tank Venting

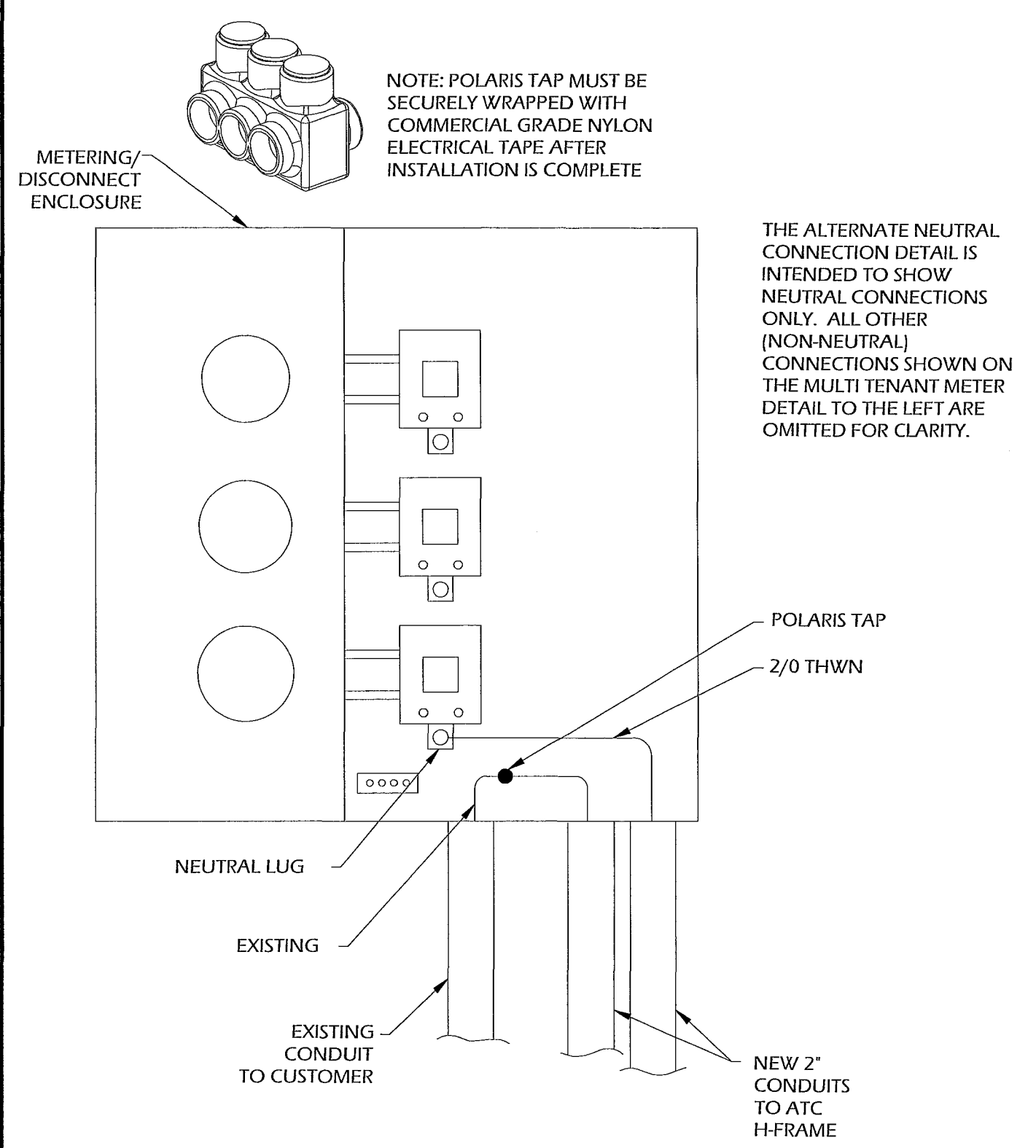
Normal and Emergency Venting:

Normal and Emergency venting shall be sized per U.L. 142 specifications for wetted surface area of tank.



1 MULTI TENANT METER OPTION
SCALE: NOT TO SCALE

*SINGLE PHASE, 200A



2 ALTERNATE NEUTRAL CONNECTION
FOR MULTI-TENANT METER OPTION
SCALE: NOT TO SCALE

BUS COVER

12X

1

EDB2200

200A

2

3

EDB2200

200A

4

5

EDB2200

200A

6

7

EDB2200

200A

8

MAIN LUGS ONLY

800A

10X

NEUTRAL

0X

DEVICE MODIFICATIONS:

REF # DESCRIPTION:

BELL TEST

HI-POT

S/T

GENERAL INFORMATION

(SECTION 1 OF 1)

SERVICE VOLTAGE: 120/240V 1PH 3W ENCLOSURE: TYPE 3R

BUS RATING & TYPE: 800A ALUMINUM NEUTRAL RATING: 800A

GROUND BAR: SLD. BOLTED ALUMINUM, AI OR Cu CABLE

S.C. RATING: 22K A.I.C. FULLY RATED

MAIN DEVICE TYPE: MAIN LUGS ONLY - BOTTOM CABLE ENTRY

MAIN TERMINALS: MECHANICAL - (3) #2-500 kcmil (Cu/Al)

NEUTRAL TERMINALS: MECHANICAL - (3) #2-500 kcmil (Cu/Al)

BOOK CATALOG NO: RPG2457

TRIM: COMPLETE ENCLOSURE (INCLUDES TRIM)

SURFACE MOUNTED

BOX DIMENSIONS: 57" (1447.8mm)H X 24" (609.6mm)W X 12.65" (326.4mm)D

MIN. GUTTER SIZE: TOP=10.625" (269.9mm) BOTTOM=10.625" (269.9mm)

LEFT=5" (127.0mm) RIGHT=5" (127.0mm)

FINAL ID NAMEPLATE: (1) 800A

TYPE: PLASTIC ADHESIVE-BACKED (2) 120/240V 1PH 3W

COLOR: WHITE WITH BLACK LETTERS (3)

UL

SERVICE ENTRANCE LABEL

TRIM LOOK T-HANDLE LOCK ASSEMBLY

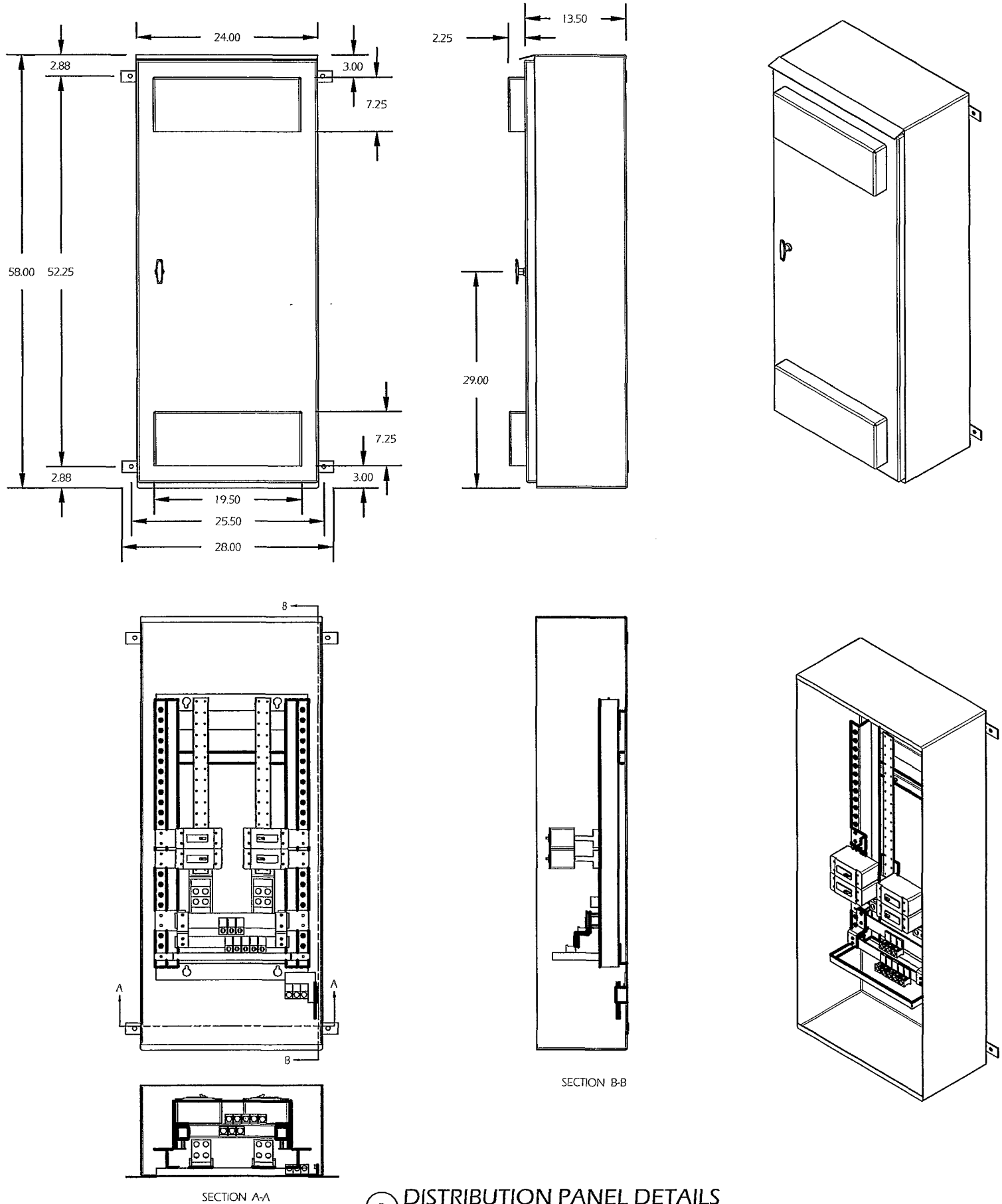
CIRCUIT DIRECTORY PLASTIC SLEEVE WITH CARD

PAINTED BOX ANSI 61

PLANT INFORMATION

	PART NUMBER	QTY	PART NUMBER	QTY
UL LABEL:	7494A06H01	1	EOB2200	4
BUS CUTTING:	6563C06H01	2		
NEUTRAL:	6672C66G03	1		
GROUND BAR, AL/CU:	6572C78G03	1		
CHASSIS ASSEMBLY:	6572C25G06	1		
LUG ASSEMBLY:	6572C52G06	1		
BREAKER ASSY:	6572C87G04	2		
DEAD FRONT COVER:	5554C11801	2		
COVER PACKAGING:	4177B06G02	1		
DEAD FRONT COVER ASSEMBLY:	6574C74G02	1		
PACKAGING:	50C5330G01	1		

Spot _____ Final Inspection _____



1 DISTRIBUTION PANEL
SCALE: NOT TO SCALE

2 DISTRIBUTION PANEL DETAILS
SCALE: NOT TO SCALE

NOTE:
PANEL SHOWN IS FOR SINGLE
PHASE. FOR 3-PHASE SITES, USE
CORRESPONDING 3-POLE
VERSION OF THIS PANEL.

SD080

GENERAC[®]

INDUSTRIAL
POWER

Industrial Diesel Generator Set

EPA Emissions Certification: Tier III.

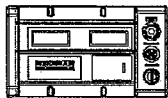
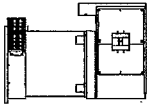
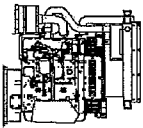
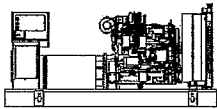
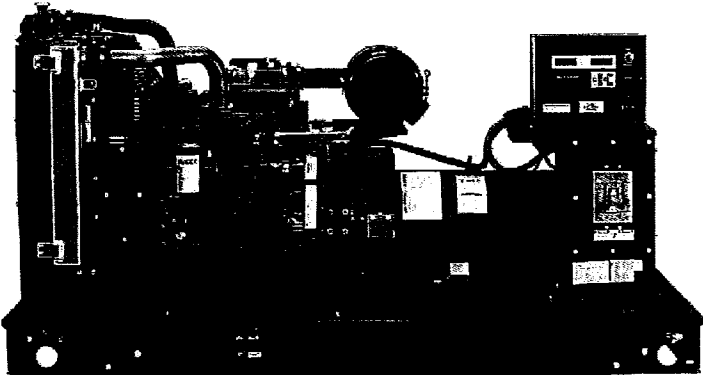
80 kW Diesel

Standby Power Rating

100 kVA 80 kW 60 Hz

Prime Power Rating

90 kVA 72 kW 60 Hz



features

benefits

Generator Set

- PROTOTYPE & TORSIONALLY TESTED
 - UL2200 TESTED
 - RHINOCOAT PAINT SYSTEM
 - WIDE RANGE OF ENCLOSURES AND TANKS
- ▶ PROVIDES A PROVEN UNIT
 - ▶ ENSURES A QUALITY PRODUCT
 - ▶ IMPROVES RESISTANCE TO ELEMENTS
 - ▶ PROVIDES A SINGLE SOURCE SOLUTION

Engine

- EPA TIER COMPLIANT
 - INDUSTRIAL TESTED, GENERAC APPROVED
 - POWER-MATCHED OUTPUT
 - INDUSTRIAL GRADE
- ▶ ENVIRONMENTALLY FRIENDLY
 - ▶ ENSURES INDUSTRIAL STANDARDS
 - ▶ ENGINEERED FOR PERFORMANCE
 - ▶ IMPROVES LONGEVITY AND RELIABILITY

Alternator

- TWO-THIRDS PITCH
 - LAYER WOUND ROTOR & STATOR
 - CLASS H MATERIALS
 - DIGITAL 3-PHASE VOLTAGE CONTROL
- ▶ ELIMINATES HARMFUL 3RD HARMONIC
 - ▶ IMPROVES COOLING
 - ▶ HEAT TOLERANT DESIGN
 - ▶ FAST AND ACCURATE RESPONSE

Controls

- ENCAPSULATED BOARD W/ SEALED HARNESS
 - 4-20mA VOLTAGE-TO-CURRENT SENSORS
 - SURFACE MOUNT TECHNOLOGY
 - ADVANCED DIAGNOSTICS & COMMUNICATIONS
- ▶ EASY, AFFORDABLE REPLACEMENT
 - ▶ NOISE RESISTANT 24/7 MONITORING
 - ▶ PROVIDES VIBRATION RESISTANCE
 - ▶ HARDENED RELIABILITY

primary codes and standards



GENERAC[®] INDUSTRIAL
POWER

application and engineering data

80 kW Diesel

SD080

ENGINE SPECIFICATIONS

General

Make	Iveco / FPT
EPA Emissions Compliance	Tier III
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	Diesel
Displacement - L (cu. in.)	4.5 (274)
Bore - mm (in.)	105 (4.1)
Stroke - mm (in.)	132 (5.2)
Compression Ratio	17.5:1
Intake Air Method	Turbocharged
Cylinder Head Type	2 Valve
Piston Type	Aluminum
Crankshaft Type	Forged Steel
Engine Block Type	Cast Iron / Wet Sleeve

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	+/-0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (gal)(qts)	13.6 (3.6) (14.4)

Cooling System

Cooling System Type	Closed
Water Pump	Belt Driven Centrifugal
Fan Type	Pusher
Fan Blade Number	2538 (10)
Fan Diameter (in.)	26
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120

Fuel System

Fuel Type*	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Inject Pump Make	Standyne
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Engine Type	Direct Injection
Fuel Supply Line - mm (in.)	1/4 inch Npt
Fuel Return Line - mm (in.)	1/4 inch Npt

Engine Electrical System

System Voltage	12VDC
Battery Charging Alternator	90 Amp
Battery Size (at 0 oC)	995 CCA
Battery Group	31
Battery Voltage	12 Volt DC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Model	390 mm Generac
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5%
Telephone Interference Factor (TIF)	<50
Alternator Type	Synchronous Brushless, Opt PMG
Bearings	One - Pre Lubed & Sealed
Coupling	Direct, Flexible Disc
Load Capacity - Standby	80
Load Capacity - Prime	72
Prototype Short Circuit Test	Y

Voltage Regulator Type

Number of Sensed Phases	Digital
Regulation Accuracy (Steady State)	-3
	+/-0.25%

CODES AND STANDARDS COMPLIANCE (WHERE APPLICABLE)

NFPA 99

NFPA 110

ISO 8528-5

ISO 1708A.5

ISO 3046

BS5514

SAE J1349

DIN6271

IEEE C62.41 TESTING

NEMA ICS 1

Rating Definitions:

Standby - Applicable for a varying emergency load for the duration of a utility power outage with no overload capability. (Max. load factor = 70%)

Prime - Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. (Max. load factor = 80%) A 10% overload capacity is available for 1 out of every 12 hours

operating data (60Hz)

	STANDBY	PRIME
Single-Phase 120/240VAC @ 1.0pf	80 Amps: 333	72 Amps: 300
Three-Phase 120/208VAC @ 0.8pf	80 Amps: 278	72 Amps: 250
Three-Phase 120/240VAC @ 0.8pf	80 Amps: 241	72 Amps: 217
Three-Phase 277/480VAC @ 0.8pf	80 Amps: 120	72 Amps: 108
Three-Phase 346/600VAC @ 0.8pf	80 Amps: 96	72 Amps: 87

		skVA v. Voltage Dip											
		480VAC						208/240VAC					
Alternator	kW	10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard*	80	59	88	117	147	176	205	44	59	88	110	132	154
Upsize 1	100	79	118	157	197	236	275	59	79	118	148	177	206
Upsize 2	125	116	174	232	290	348	406	87	116	174	218	261	305

*All Generac industrial alternators utilize Class H materials. Standard alternator provides less than or equal to Class F temperature rise. Upsize 1 provides less than or equal to Class A temperature rise.

Fuel Consumption Rates**

Fuel Pump Lift - in (m)	<table><tr><th colspan="3">STANDBY</th><th colspan="3">PRIME</th></tr><tr><th>Percent Load</th><th>gph</th><th>lph</th><th>Percent Load</th><th>gph</th><th>lph</th></tr><tr><td>25%</td><td>2.1</td><td>7.9</td><td>25%</td><td>1.9</td><td>7.2</td></tr><tr><td>50%</td><td>3.7</td><td>14.0</td><td>50%</td><td>3.4</td><td>12.9</td></tr><tr><td>75%</td><td>5.2</td><td>19.7</td><td>75%</td><td>4.7</td><td>17.8</td></tr><tr><td>100%</td><td>6.3</td><td>23.8</td><td>100%</td><td>5.8</td><td>22.0</td></tr></table>						STANDBY			PRIME			Percent Load	gph	lph	Percent Load	gph	lph	25%	2.1	7.9	25%	1.9	7.2	50%	3.7	14.0	50%	3.4	12.9	75%	5.2	19.7	75%	4.7	17.8	100%	6.3	23.8	100%	5.8	22.0
STANDBY			PRIME																																							
Percent Load	gph	lph	Percent Load	gph	lph																																					
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100%	6.3	23.8	100%	5.8	22.0																																					
36(.9)																																										
Total Fuel Pump Flow (Combustion + Return)																																										
13.6 gph																																										

**Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.

Coolant System Capacity - Gal (L)	<div> <div>4.5 (17.44)</div> <div> <div>STANDBY</div> <div>PRIME</div> </div> </div>			
Maximum Radiator Backpressure	Coolant Flow per Minute	gpm (lpm)	32.7 (123.8)	32.7 (123.8)
1.5" H ₂ O Column	Heat rejection to Coolant	BTU/hr	137,140	137,140
	Inlet Air	cfm (m3/min)	6360 (180.0)	6360 (180.0)
	Max. Operating Radiator Air Temp	F° (C°)	122(50)	122(50)
	Max. Operating Ambient Temperature	F° (C°)	122(50)	122(50)

	STANDBY		PRIME	
Intake Flow at Rated Power	cfm (m3/min)	306 (8.67)	275 (7.80)	

Exhaust Outlet Size (Open Set)		STANDBY	PRIME
3.0"	Exhaust Flow (Rated Output)	cfm (m3/hr)	790(134.4)
Maximum Backpressure (Post-Silencer)	Maximum Backpressure	inHg (Kpa)	1.5(5.1)
1.5"	Exhaust Temp (Rated Output)	F (C)	887(475)

		STANDBY	PRIME
Rated Engine Speed	rpm	1800	1800
Horsepower at Rated kW***	hp	131	127
Piston Speed	ft/min (m/min)	1559(44.1)	1559(44.1)
BMEP	psi	210	194

*** Refer to "Emissions Data Sheets" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration - Operational characteristics consider maximum ambient conditions. Derte factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performing ratings in accordance with ISO3046, B5514, ISO8528 and DIN6271 standards.

standard features and options

<ul style="list-style-type: none"> ③ Genset Vibration Isolation ③ IBC Seismic Certified/Seismic Rated Vibration Isolators ③ Extended warranty ③ Export boxing ③ Gen-Link Communications Software ③ Steel Enclosure ③ Aluminum Enclosure 	Std Opt Opt Opt Opt Opt Opt	General ③ Digital H Control Panel - Dual 4x20 Display ③ Digital G-100 Control Panel - Touchscreen ③ Digital G-200 Paralleling Control Panel - Touchscreen ③ Programmable Crank Limiter ③ 21-Light Remote Annunciator ③ Remote relay Panel (8 or 16)	Std na na Std Opt Opt
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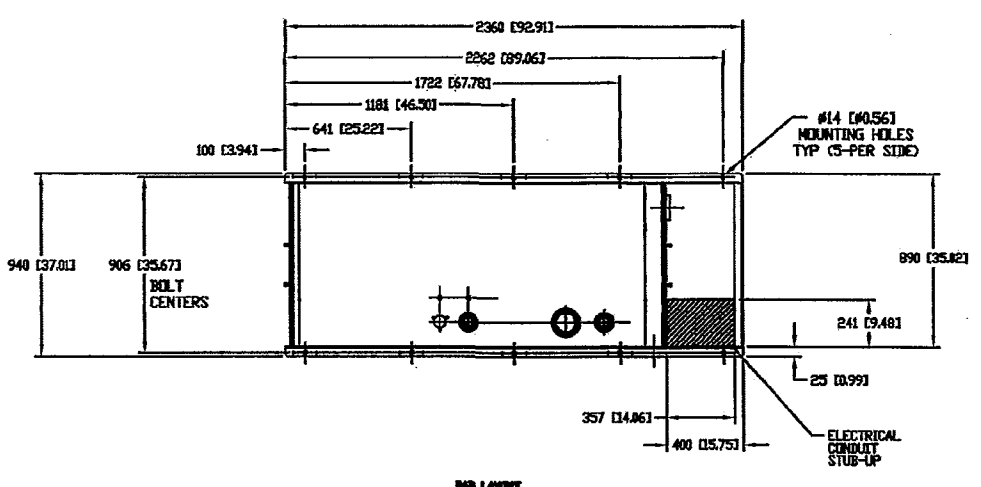
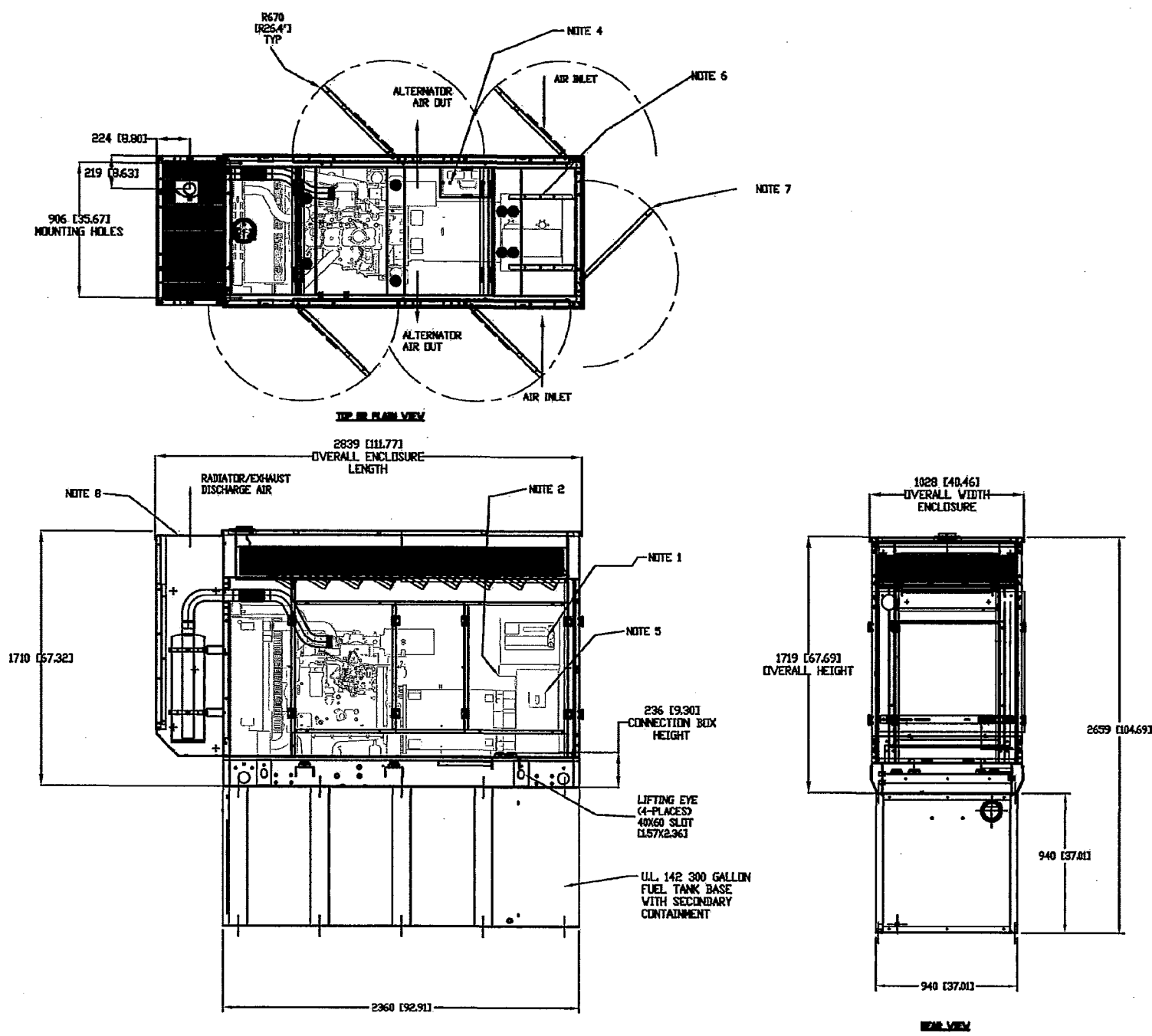
General		Fuel System		RS-485	
<input checked="" type="radio"/> Oil Drain Extension	Std	<input checked="" type="radio"/> Fuel lockoff solenoid	Std	<input checked="" type="radio"/> All-Phase Sensing DVR	-
<input type="radio"/> Oil Make-Up System	Opt	<input checked="" type="radio"/> Secondary fuel filter	Std	<input checked="" type="radio"/> Full System Status	-
<input type="radio"/> Oil Heater	Opt	<input checked="" type="radio"/> Stainless steel flexible exhaust connection	Std	<input checked="" type="radio"/> Utility Monitoring (Req. H-Transfer Switch)	-
		<input checked="" type="radio"/> Industrial Exhaust Silencer	Std	<input checked="" type="radio"/> Z-Wire Start Compatible	-
		<input type="radio"/> Critical Exhaust Silencer	Opt	<input checked="" type="radio"/> Power Output (kW)	-
		<input type="radio"/> Flexible fuel lines	Opt	<input checked="" type="radio"/> Power Factor	-
		<input type="radio"/> Primary fuel filter	Opt	<input checked="" type="radio"/> Reactive Power	-
		<input type="radio"/> Single Wall Tank (Export Only)	-	<input checked="" type="radio"/> All phase AC Voltage	-
		<input type="radio"/> UL 142 Fuel Tank	Opt	<input checked="" type="radio"/> All phase Currents	-
				<input checked="" type="radio"/> Oil Pressure	-
				<input checked="" type="radio"/> Coolant Temperature	-
				<input checked="" type="radio"/> Coolant Level	-
				<input type="radio"/> Oil Temperature	-
				<input checked="" type="radio"/> Fuel Pressure	-
				<input checked="" type="radio"/> Engine Speed	-
				<input checked="" type="radio"/> Battery Voltage	-

<input type="radio"/> 120VAC Coolant Heater	Opt	<input type="radio"/> Low-Speed Exercise	-
<input type="radio"/> 208VAC Coolant Heater	Opt	<input type="radio"/> Isochronous Governor Control	-
<input type="radio"/> 240VAC Coolant Heater	Opt	<input checked="" type="radio"/> -40deg C - 70deg C Operation	-
<input type="radio"/> Other Coolant Heater _____	-	<input checked="" type="radio"/> Waterproof Plug-In Connectors	-
<input type="radio"/> Closed Coolant Recovery System	Std	<input checked="" type="radio"/> Audible Alarms and Shutdowns	-
<input checked="" type="radio"/> UV/Ozone resistant hoses	Std	<input checked="" type="radio"/> Not in Auto (Flashing Light)	-
<input checked="" type="radio"/> Factory-Installed Radiator	Std	<input checked="" type="radio"/> Cry/Off/Manual Switch	-
<input checked="" type="radio"/> Radiator Drain Extension	Std	<input checked="" type="radio"/> E-Stop (Red Mushroom-Type)	-

① Battery charging alternator	Std	○ Remote E-Stop (Red Mushroom-Type, Flush Mount)	-
② Battery cables	Std	② NFPA 110 Level I and II (Programmable)	-
③ Battery tray	Std	③ Remote Communication - RS232	-
○ Battery box	Opt	○ Remote Communication - Modem	-
○ Battery heater	Opt	○ Remote Communication - Ethernet	-
④ Solenoid activated starter motor	Std	○ 10A Run Relay	-
⑤ Air cleaner	Std		
⑥ Fan guard	Std		
⑦ Radiator duct adapter	Std		
○ 2A battery charger	Opt		
○ 10A UL float/equalize battery charger	Opt		
⑧ Rubber-booted engine electrical connections	Std		
		<u>Alarms (Programmable Tolerances, Pre-Alarms and Shutdowns)</u>	
		○ Low Fuel	-
		③ Oil Pressure (Pre-programmed Low Pressure Shutdown)	-
		④ Coolant Temperature (Pre-programmed High Temp Shutdown)	-

<input checked="" type="radio"/> UL2200 GENprotect	Std	<input checked="" type="radio"/> Fuel Pressure	-
<input type="radio"/> Main Line Circuit Breaker	Opt	<input checked="" type="radio"/> Engine Speed (Pre-programmed Overspeed Shutdown)	-
<input type="radio"/> 2nd Circuit Breaker	Opt	<input checked="" type="radio"/> Voltage (Pre-programmed Overvoltage Shutdown)	-
<input type="radio"/> 3rd Circuit Breaker	-	<input type="radio"/> Battery Voltage	-
<input type="radio"/> Alternator Upsizing	Opt		
<input type="radio"/> Anti-Condensation Heater	Opt	Other Options	
<input type="radio"/> Tropical coating	Opt	<input type="radio"/> _____	
<input type="radio"/> Permanent Magnet Excitation	Opt	<input type="radio"/> _____	
		<input type="radio"/> _____	

0H5302C-ATC



- NOTES**
- CONTROL PANEL MAY BE ROTATED 180DEG IN EITHER DIRECTION
 - 1- 25A GFCI DUPLEX OUTLET (250V BY CUSTOMER)
 - CONNECTION POINTS FOR CONTROL WIRES PROVIDED IN AC CONNECTION PANEL
 - BATTERY (12 VOLT NEGATIVE GROUND SYSTEM)
 - MAIN LINE CIRCUIT BREAKER (M.C.B.), (AC LOAD LEADS CONNECT DIRECTLY TO M.C.B.)
 - REMOVABLE BLANK PANEL FOR OPTIONAL 2nd MAIN LINE CIRCUIT BREAKER
 - DOORS MUST BE ABLE TO OPEN TO AT LEAST 90DEG TO BE REMOVED
 - SEE DRAWING 04360A FOR DUCT REMOVAL. REMOVAL OF FRONT DUCT WILL PROVIDE ACCESS TO MUFFLER FOR SERVICING.
 - STANDARD BLOCK HEATER
 - FUEL LINES ARE PLUMBED TO FRAME FOR UNITS WITH NO BASE TANK. FUEL LINES ARE PLUMBED DIRECTLY TO BASE TANK WHEN SO EQUIPPED
 - CENTER OF GRAVITY & WEIGHT MAY SHIFT SLIGHTLY DUE TO UNIT OPTIONS
 - IF GENSET IS TO BE INSTALLED ON A BASETANK REFER TO BASETANK INSTALL DRAWING
- ENGINE SERVICE CONNECTIONS:**
- FUEL INLET = 1/2" NPT COUPLING
FUEL RETURN = 1/2" NPT COUPLING
OIL DRAIN = 1/2" NPT COUPLING
EXHAUST OUTLET = 30" O.D. MUFFLER
- WEIGHT DATA**
- APPROX. DRY WEIGHT WITHOUT FUEL GENSET PACKAGE 4032 lbs.
- RECOMMENDED ELECTRICAL STUB-UPS**
(SEE DETAILED VIEW & TOP VIEW)
- | | |
|--|-----|
| AC LOAD LEAD CONDUIT SEE NOTES 5 & 6 FOR CS LOCATION
NOTE-A (SEE STUB UP AREA I & II) | (A) |
| STUB-UP D GLAND PLATE AC LOAD LEAD CONDUIT FOR PERMANENT MAGNET EXCITATION CONNECTION BOX | (B) |
| STUB-UP ID GLAND PLATE AC LOAD LEAD CONDUIT FOR DIRECT AND BRUSHLESS EXCITATION CONNECTION BOX | (C) |
- OVERALL STUB-UP AREA 120/240V AC TO OUTLET (SEE NOTE 2) FOR OPTIONS

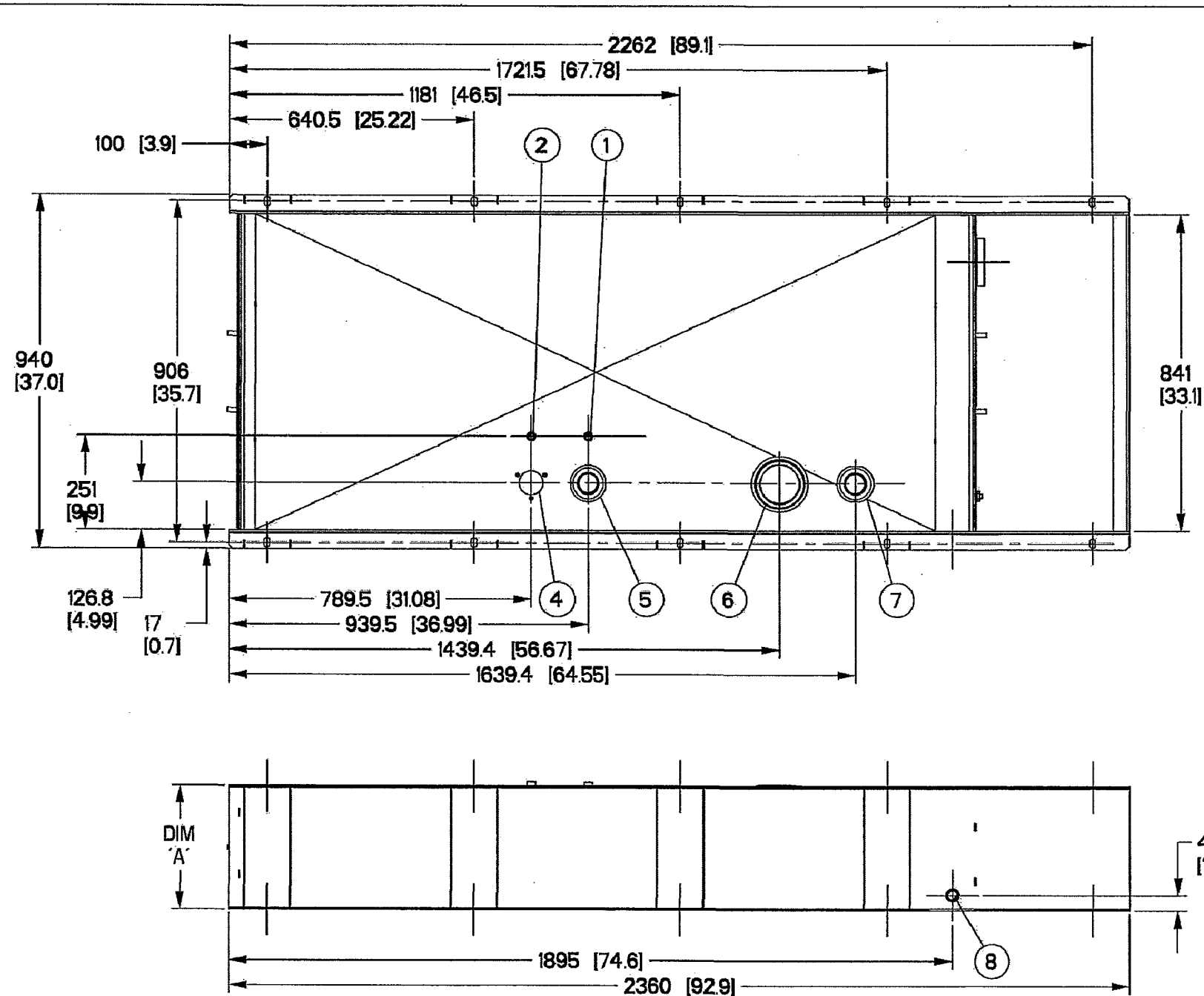
REFERENCE DRAWING 0H5302C FOR INSTALLATION
FUEL TANK DRAWING 0H4610A

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INSTALLATION DRAWING

SD80		GENERAC POWER SYSTEMS Waukesha P.O. BOX 8 WAUKESHA, WIS. 53187	
DIESEL 4.5L IVECO			
TURBOCHARGED & AFTERCOOLED		FILE NAME 0H5302C-B ATC.DWG	SIZE B
SOUND ATTENUATED ENSL., LVL 2		SCALE N/A	FIRST USE D4.5L IVECO
W/ 300 GALLON FTB		DWG NO. 0H5302C-ATC	REV B

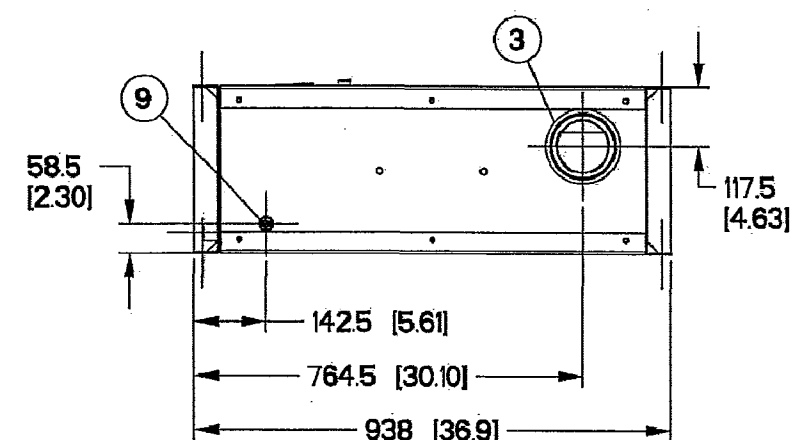


ITEM #	TANK FITTING	FUNCTION
1	3/8" NPT COUPLING	FUEL SUPPLY
2	3/8" NPT COUPLING	FUEL RETURN
3	4" NPT WELD FLANGE	EMERGENCY VENT (OUTER)
4		FUEL LEVEL
5	2" NPT WELD FLANGE	FUEL FILL
6	4" NPT WELD FLANGE	EMERGENCY VENT (INNER)
7	2" NPT WELD FLANGE	VENT
8	3/4" NPT COUPLING	DRAIN
9	Ø22 HOLE	LEAK DETECTOR

TANK P/N	0H48080ST03	0H48090ST03	0H48100ST03
DIM "A"	330 [13]	635 [25]	940 [37]
TOTAL TANK CAPACITY	318 [84]	734 [194]	1154 [305]
USABLE TANK CAPACITY	299 [79]	716 [189]	1134 [300]
DRY WEIGHT (EST)	237 [522]	344 [758]	445 [982]

NOTES:
 1) ALL DIMENSIONS ARE:
 LENGTH: mm [inch]
 WEIGHT: kg [lbs]
 CAPACITY: L [gal]

2) UL #142 LISTED



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GENERAC

TITLE
 B-GROUP, DW TYPE 2 TANKS

ISSUE DATE: 10/02/09

SIZE B CAGE NO DWG NO 0H4610A REV D

SCALE 0.075 WT-KG -- SHEET 1 of 1

INSTALLATION DRAWING