NEXTEL

221' SELF-SUPPORT LATTICE TOWER

NEXTEL SITE NAME: UVA EAST LAWN

NEXTEL SITE #: VA 063P-A

CROWN BU#

W. MAIN ST HWY 250 (AT Markle Southern Blvd)
CHARLOTTESVILLE, VIRGINIA 22911

AMENDED BY

10/21/00

3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 — 650 ft Scale: 1:22,400 Detail: 12-2 Datum: NAD27

VICINITY MAP

A/C	AIR CONDITIONING	MGR	MANAGER
ADJ	ADJUSTABLE	MIN	MINIMUM
AFF	ABOVE FINISH FLOOR	MISC	MISCELLANEOUS
APPROX	APPROXIMATELY		
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	N	NORTH
AWG	AMERICAN WIRE GAUGE	NA	NOT APPLICABLE
		NIC	NOT IN CONTRACT
BLDG	BUILDING	NTS	NOT TO SCALE
BLK	BLOCK		
BMR	BASE MOBILE RADIO	OC	ON CENTER
B/S	BUILDING STANDARD	OD	OUTSIDE DIAMETER
		OPG	OPENING
CLG	CEILING	OPP	OPPOSITE
CLR	CLEAR		
CONC	CONCRETE	PLYWD	PLYWOOD
CONST	CONSTRUCTION	PR	PAIR
CONT	CONTINUOUS	PROJ	PROJECT
		PROP	PROPERTY
DBL	DOUBLE	PT	PRESSURE TREATED
DIA, ø	DIAMETER		
DIAG	DIAGONAL	REQ'D	REQUIRED
DIM	DIMENSION	RM	ROOM
DN	DOWN	RO	ROUGH OPENING
DTL,DETL	DETAIL		
DWG	DRAWING	S	SOUTH
		SHT	SHEET
E	EAST	SIM	SIMILAR
EA	EACH	SPEC	SPECIFICATION
EL,ELEV	ELEVATION	SQ	SQUARE
ELECT	ELECTRICAL	SS	STAINLESS STEEL
EQ	EQUAL	STL	STEEL
EQUIP	EQUIPMENT	STRUCT	STRUCTURAL
EW	EACH WAY	SUSP	SUSPENDED
EXIST	EXISTING	SV	SHEET VINYL
EXT	EXTERIOR		
		THRU	THROUGH
FIN	FINISH	TINND	TINNED
FLUOR	FLUORESCENT	TOC	TOP OF CONCRETE
FLR	FLOOR	TOM	TOP OF MASONRY
FT	FOOT	TYP	TYPICAL
GA	GAUGE	UBC	UNIFORM BUILDING CODE
GALV	GALVANIZE(D)	UNO	UNLESS NOTED OTHERWISE
GC	GENERAL CONTRACTOR		
GRND	GROUND	VERT	VERTICAL
GWB	GYPSUM WALL BOARD	VIF	VERIFY IN FIELD
GYP BD	GYPSUM BOARD	VT	VINYL TILE
HARD'WD	HARDWOOD	W	WEST
HORIZ	HORIZONTAL	W/	WITH
HR	HOUR	WIN	WINDOW
HT	HEIGHT	W/O	WITHOUT
HVAC	HEATING, VENTING & AIR CONDITIONING	WP	WATERPROOF
ID	INSIDE DIA.	∠	ANGLE
IN	INCH	&	AND
INFO	INFORMATION	℄	CENTER LINE
INSUL	INSULATION	℔	PROPERTY LINE
INT	INTERIOR	@	AT
LB(S)	POUND(S)	#	NUMBER
MAX	MAXIMUM		
MECH	MECHANICAL		
MET,MTL	METAL		
MFR	MANUFACTURER		

1 — REVISION
KEY NOTE
100 — ROOM NUMBER
22 — KEYED NOTE
DETAIL REFERENCE
ELEVATION REFERENCE
SECTION REFERENCE

ABBREVIATIONS AND SYMBOLS

ENGINEER
CLOUGH, HARBOUR, AND ASSOCIATES LLP
571 SOUTHLAKE BLVD
SUITE B
RICHMOND, VA 23236
JOSEPH RAMIREZ – PROJECT ENGINEER
(804) 897-3564 – Phone
(804) 897-3566 – Fax

SURVEYOR
PRECISION MEASUREMENTS
2116 DABNEY RD
SUITE B8
RICHMOND, VA 23230
CONTACT: BRIAN LONG
(804) 340-5229 – Phone

GENERAL CONTRACTOR
CROWN COMMUNICATIONS, INC.
1306 MUNICIPAL RADD
ROANOKE, VA 24012
(540) 265-4192
(540) 265-5466– Fax

CONSULTANT TEAM

PROJECT DESCRIPTION
THE PROJECT INCLUDES:

INSTALLATION OF 9'x16' SHELTER ON A 10'x20' CONCRETE PAD.

INSTALLATION OF (3) SECTORS, 3 ANTENNAS PER SECTOR. ANTENNAS TO BE MOUNTED AT 100' AGL ON EXISTING 150' SELF-SUPPORT TOWER.

PROJECT DESCRIPTION

SITE DIRECTIONS
TAKE I-581 WEST TO I-81 NORTH. TAKE I-81 NORTH TO I-64 EAST TO EXIT 120. GO NORTH ON SSR 631 FOR 2 MILES. MAKE A LEFT ON MAIN ST (SSR 250). GO APPROXIMATELY 2100 FT TOWER ON RIGHT SIDE OF STREET.

SITE DIRECTIONS

PROJECT MANAGER: _____ –
CONSTRUCTION MANAGER: _____ –
NETWORK OPERATIONS MANAGER: _____ –
NATIONAL DIRECTOR MANAGER: _____ –
SIGNATURE DATE

APPROVED BY

SHEET NUMBER	DESCRIPTION
T-1	PROJECT INFORMATION, VICINITY MAP, SHEET INDEX
C-1	EXISTING CONDITIONS
C-2	SITE PLAN VIEW
C-3	ELEVATION VIEW
C-4	STRUCTURAL DETAILS
E-1	ELECTRICAL SITE PLAN
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL DETAILS
E-4	ELECTRICAL DETAILS
E-5	ELECTRICAL SPECIFICATIONS
E-6	ELECTRICAL SPECIFICATIONS
E-7	ELECTRICAL SPECIFICATIONS

SHEET INDEX

SITE NAME
UVA EAST LAWN

SITE NUMBER
VA-063P-A

SITE ADDRESS
N. MAIN ST HWY 250
CHARLOTTESVILLE, VIRGINIA 22911

SITE OWNER/CONTACT
NORFOLK SOUTHERN
110 FRANKLIN ST.
ROANOKE, VA 24011
(540) 981-4000

APPLICANT
NEXTEL PARTNERS INC.
4500 CARILLON POINT
KIRK LAND, WA 98033

GENERAL INFORMATION
LATITUDE – 38° 1' 58"
LONGITUDE – 78° 29' 31"
ELEVATION – 221± (AMSL)

POWER COMPANY
AMERICAN ELECTRIC POWER 800-956-4237

TELEPHONE COMPANY
VERIZON 804-554-661 OR 804-965-8611

PARCEL NUMBER
N/A

ZONING JURISDICTION
CITY OF CHARLOTTESVILLE

DEED BOOK & PAGE
237, 256

FEMA FLOOD PLANE
N/A

PROJECT SUMMARY

CROWN COMMUNICATIONS
1306 MUNICIPAL ROAD
ROANOKE, VA 24012
(540) 265 – 4192
(540) 265 – 5466 FAX

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CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS & PLANNERS
571 SOUTHLAKE BLVD. – RICHMOND, VIRGINIA – 23236
SUITE B 804-897-3564
CHA Project No. 9315.55.38

COMMONWEALTH OF VIRGINIA
DAVID L. BARLOW
NO. 31636
10-5-00
PROFESSIONAL ENGINEER

RELEASE	
DATE	
09/25/00	ISSUED FOR REVIEW

REVISIONS		
NO.	DATE	
1	10/3/00	ISSUED FOR REVIEW
2		
3		
4		
5		

DRAWN BY: QCB
CHECKED BY: JR

SITE NAME
UVA EAST LAWN

SITE NUMBER
NEXTEL SITE# - VA 063P-A

SITE ADDRESS
N. MAIN ST HWY 250
CHARLOTTESVILLE, VA 22911

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

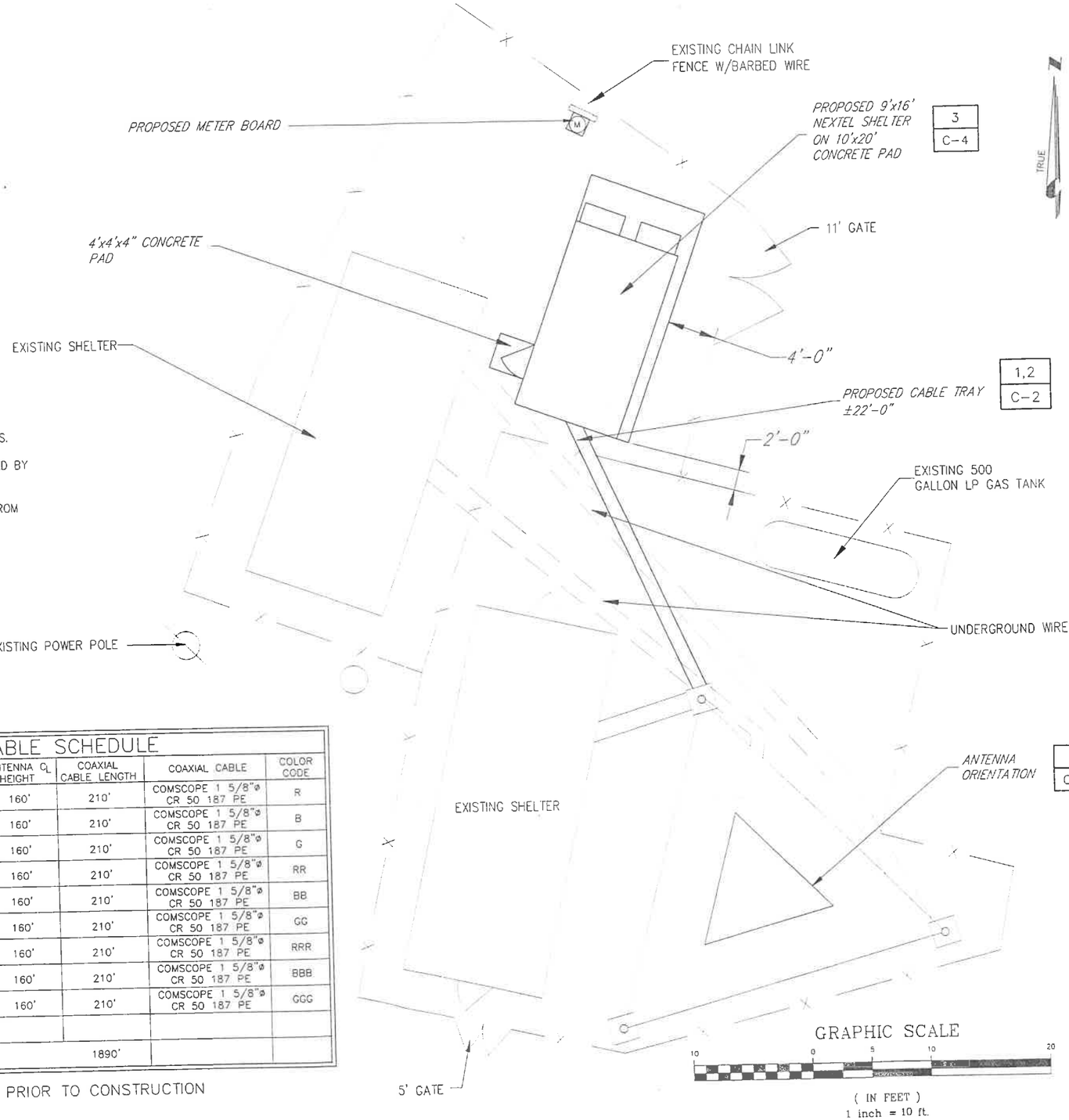
PLOT SCALE: AS SHOWN

GENERAL NOTES:

THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, (MISS UTILITY) CALL 1-800-257-7777, M-F 0700-1700 OR, (MISS UTILITY OF DELMARVA) CALL 1-800-282-8555, M-F 0700-1700

NOTES:

1. ALL ANTENNAS TO BE FURNISHED WITH EMS MTG-D10-20 DOWN TILT BRACKETS. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH RF ENGINEER. ANTENNA DOWNTILT SHALL BE SET AND VERIFIED BY A SMART LEVEL.
2. PROVIDE COMMSCOPE 540 NMNM-6 JUMPER CABLE 6'-0" MAXIMUM LENGTH FROM ANTENNA TO MAIN COAXIAL CABLE.
3. ANTENNA CENTERLINE HEIGHT IS IN REFERENCE TO 0.0'.
4. DOWNTILTS TO BE VERFIED WITH NEXTEL PRIOR TO CONSTRUCTION.



ANTENNA AND COAXIAL CABLE SCHEDULE									
ANTENNA MARK	SECTOR	ANTENNA	COAXIAL CABLE FEED LOCATION	DOWN-TILT*	AZIMUTH	ANTENNA $\mathcal{L}$ HEIGHT	COAXIAL CABLE LENGTH	COAXIAL CABLE	COLOR CODE
A-1	1	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	0°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	R
A-2	1	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	0°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	B
A-3	1	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	0°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	G
B-1	2	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	120°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	RR
B-2	2	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	120°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	BB
B-3	2	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	120°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	GG
C-1	3	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	240°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	RRR
C-2	3	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	240°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	BBB
C-3	3	RWA-80015 DIN PANEL (96.5"x11.6"x6.3")	BOTTOM	0°	240°	160'	210'	COMSCOPE 1 5/8"ø CR 50 187 PE	GGG
				TOTAL LENGTH			1890'		

* DOWNTILT TO BE VERIFIED WITH NEXTEL PRIOR TO CONSTRUCTION

2 / C-2 ANTENNA & COAX SCHEDULE
NO SCALE

1 / C-2 SITE PLAN
SCALE: 1"=10'

CROWN COMMUNICATIONS
1306 MUNICIPAL ROAD
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CHA

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ENGINEERS & PLANNERS
571 SOUTHLAKE BLVD. - RICHMOND, VIRGINIA - 23236
SUITE B 804-897-3584
CHA Project No. 9515.55.36

COMMONWEALTH OF VIRGINIA
DAVID L. BARLOW
NO. 31636
PROFESSIONAL ENGINEER

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NEXTEL SITE# - VA 063A

SITE ADDRESS
N. MAIN ST HWY 250
CHARLOTTESVILLE, VA 22911

SHEET TITLE
SITE PLAN VIEW

SHEET NUMBER
C-2

PLOT SCALE: AS SHOWN

GENERAL NOTES

1. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
2. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
3. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
5. CONTRACTOR SHALL SUPPORT STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED.
6. DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
7. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
8. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.

DESIGN DATA

1. LIVE LOADS

   WIND LOADS: PER EIA/TIA F-222 = 70 MPH
   ICE LOADS: 1/2" RADIAL ON ALL COMPONENTS & CABLE
   SNOW LOAD: PER VIRGINIA UNIFORM STATE BUILDING CODE.
   SEISMIC LOADS: PER VIRGINIA UNIFORM STATE BUILDING CODE.

2. DEAD LOADS — OUTDOOR
   PREFABRICATED SHELTER — 25000#

ANTENNA SUPPORT BRACKET NOTES

1. DESIGN RESPONSIBILITY OF ANTENNA MOUNTING BRACKETS AND POLES AND ALL COMPONENTS THEREOF AND ATTACHMENT THERETO SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. MFR SHALL PROVIDE TO THE ENGINEER FOR APPROVAL, DRAWINGS DETAILING ALL COMPONENTS OF THE ASSEMBLY, INCLUDING CONNECTIONS, DESIGN LOADS, AND ALL OTHER PERTINENT DATA. ALL SUBMISSIONS SHALL BEAR THE STAMP AND SIGNATURE OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE THE WORK IS BEING PERFORMED.
2. BRACKETS SHALL BE DESIGNED TO SUPPORT CURRENT AND FUTURE PANEL ANTENNA COAXIAL CABLES AS SHOWN.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
2. ALL INTERIOR STRUCTURAL STEEL USED SHALL BE, WHEN DELIVERED, FINISHED WITH ONE COAT FABRICATOR'S NON-LEAD, RED OXIDE PRIMER. PRIMING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE PRIMED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
3. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A36 UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
4. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
5. CONNECTIONS:
   A. ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION ", 9TH EDITION. AT THE COMPLETION OF WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
   B. BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
   C. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
   D. CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER.

THESE DRAWINGS ARE BASED ON INFORMATION PROVIDED TO CLOUGH, HARBOUR & ASSOCIATES, LLP BY NEXTEL AND THE TOWER OWNER ASSUME ALL LIABILITY FOR ALL STRUCTURAL ANALYSIS, INTEGRITY AND REQUIRED IMPROVEMENTS OF AND TO THE EXISTING TOWERS, EXISTING STRUCTURES, AND EXISTING SUPPORTS.

COAXIAL CABLE SCHEDULE

DIAMETER	CABLE LENGTH	dB LOSS / 100.0'	MIN. BENDING RADIUS
1/2" FLEX	0.0' - 10.0'	5.1	1.25'
1/2"	0.0' - 50.0'	3.5	5.0'
7/8"	51.0' - 100.0'	1.95	10.0'
1 1/4"	101.0' - 150.0'	1.55	15.0'
1 5/8"	151.0' - 250.0'	1.25	20.0'

CONCRETE NOTES

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE";
2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%) WITH A MAXIMUM 4" SLUMP, CONCRETE SAMPLES SHALL BE TAKEN FROM EACH CONCRETE BATCH. THREE SAMPLES SHALL BE PREPARED ONE FOR A 7-DAY TEST HAVING A MIN. COMPRESSIVE STRENGTH 4,000 PSI, ONE FOR A 28-DAY TEST HAVING A MIN COMPRESSIVE STRENGTH OF 4,000 PSI. AND ONE SPARE.
4. MAXIMUM AGGREGATE SIZE SHALL BE 1".
5. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 185
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	DRINKABLE
ADMIXTURES:	NON-CHLORIDE CONTAINING

6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
8. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3 IN.

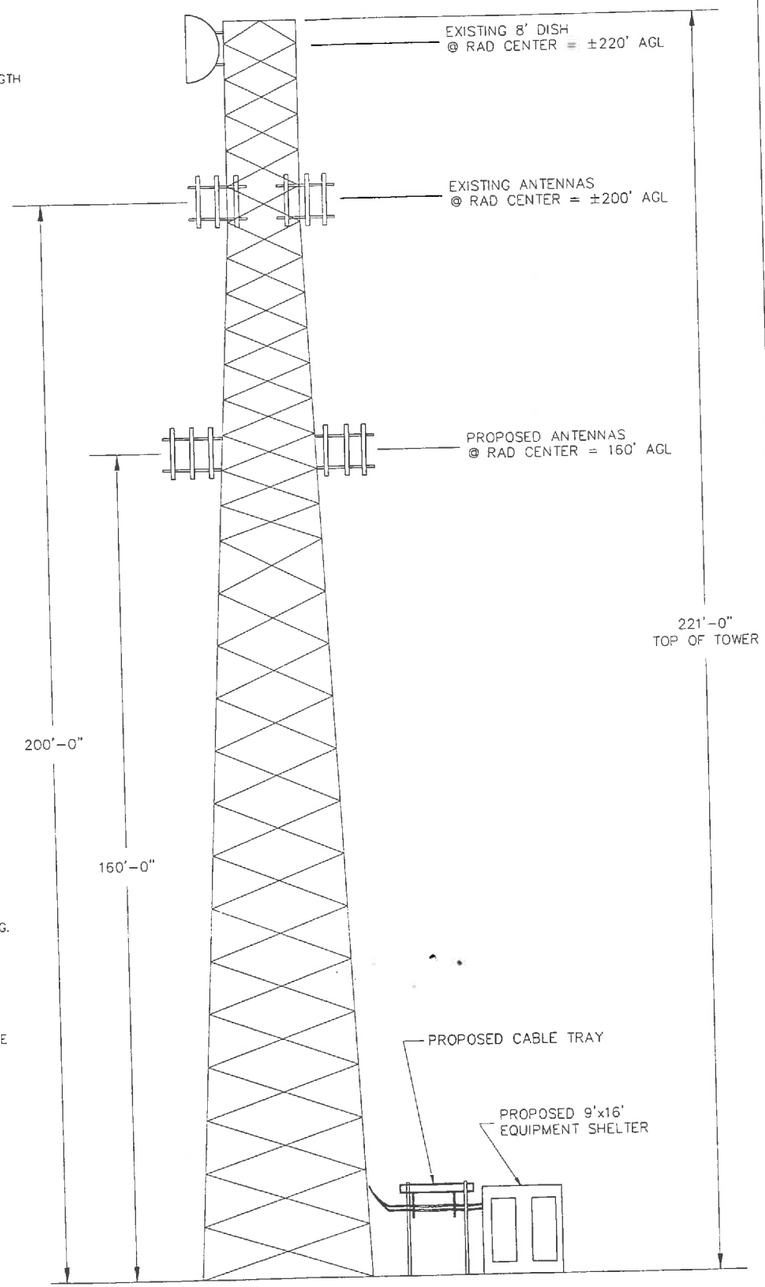
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1 1/2 IN.

   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....3/4 IN.
   BEAMS AND COLUMNS .....1 1/2 IN.

9. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. INSTALLATION OF CONCRETE ANCHOR, SHALL BE PER MANUFACTURERS WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
11. CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
12. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
15. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.

NOTES

1. ALL ANTENNAS TO BE FURNISHED WITH DOWNTILT BRACKETS. CONTRACTOR TO COORDINATE REQUIRED MECHANICAL DOWNTILT FOR EACH ANTENNA WITH RF ENGINEER.
2. ANTENNA CENTERLINE HEIGHT IS IN REFERENCE TO ELEVATION 0.0'.
3. CHECK WITH RF ENGINEER FOR LATEST ANTENNA TYPE & AZIMUTH.
4. CONTRACTOR SHALL VERIFY ANTENNA TYPE AND AZIMUTH WITH CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL NOT INSTALL COLD SHRINK RAP INSULATORS UNTIL AFTER CABLES HAVE BEEN SWEPT.
6. THE COAXIAL CABLE SHALL NOT EXCEED 100.0' BETWEEN GROUND KITS.
7. THE USE OF ALTERNATE GROUNDING MEANS (SUCH AS LYNCOLE XIT) SHALL COMPLY WITH G.C.E.I. CONSTRUCTION SPECIFICATIONS & BUILDING PRACTICES.



1 / C-3 TOWER ELEVATION
SCALE: NTS

CROWN COMMUNICATIONS
1306 MUNICIPAL ROAD
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(540) 265 - 4192
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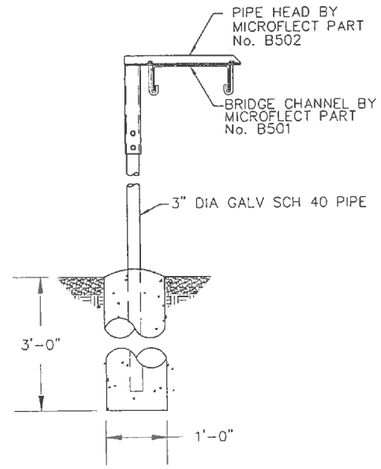
CHARLOTTESVILLE, VA 22911

SHEET TITLE
ELEVATION VIEW

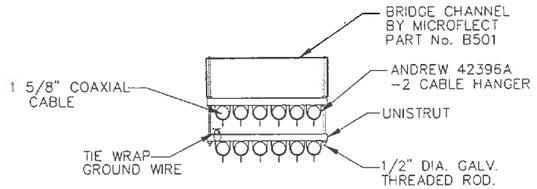
SHEET NUMBER
C-3

PLOT SCALE: AS SHOWN

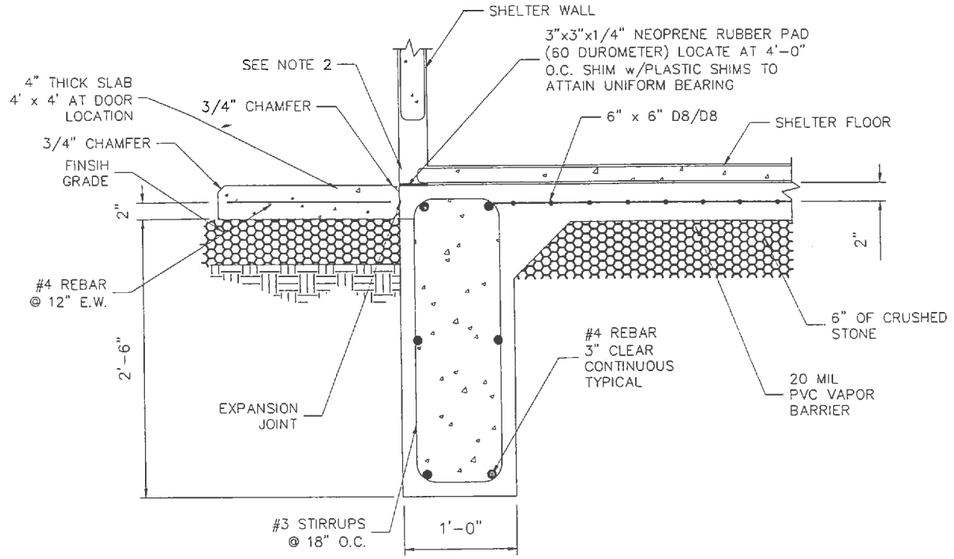


1 / C-2 CABLE TRAY SUPPORT POST
NO SCALE

NOTE: 1. 8" MAX SPACING BETWEEN SUPPORTS.
2. TOP OF PIER IN SLAB LOCATION TO BE 6" BELOW GRADE.

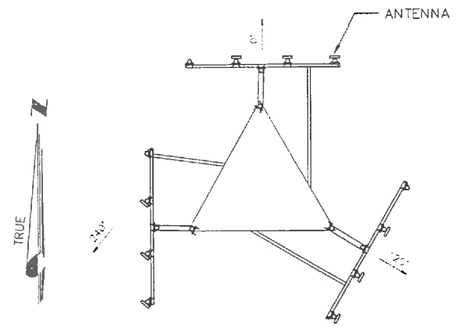


2 / C-2 CABLE SUPPORT DETAIL
NO SCALE



3 / C-2 FOUNDATION DETAIL
NO SCALE

NOTES:
1. SLAB ON GRADE SHALL BE 5000 PSI AIR ENTRAINED CONCRETE PLACED OVER A MIN. 6" GRAVEL TO AASH TO NO. 57 OR MD. CR-6 ON UNDISTURBED OR WELL COMPACTED SOIL WITH A BEARING PRESSURE OF 2000 PSF MIN. (NO ORGANIC MATTER PERMITTED)
2. SHELTER SHALL BE ANCHORED TO FOUNDATION AS PER MANUFACTURER'S RECOMMENDATIONS.
3. BOTTOM OF FOUNDATION MUST BE BELOW FROST LINE AND BEAR ON UNDISTURBED SOIL.



4 / C-2 ANTENNA MOUNTS – PLAN VIEW
NO SCALE

NOTE: 1. ANTENNA MOUNTS SHALL BE IN ACCORDANCE WITH TOWER MANUFACTURER SPECIFICATIONS.

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371 SOUTHLAKE BLVD. - RICHMOND, VIRGINIA - 23236
SUITE B 804-897-3564
CHA Project No. 9515.55.38

COMMONWEALTH OF VIRGINIA
DAVID L. BARLOW
NO. 31636
PROFESSIONAL ENGINEER

RELEASE	
DATE	
08/28/00	ISSUED FOR REVIEW

REVISIONS		
NO.	DATE	
1	10/3/00	ISSUED FOR REVIEW
2		
3		
4		
5		

DRAWN BY: QCB
CHECKED BY: JR

SITE NAME
UVA EAST LAWN

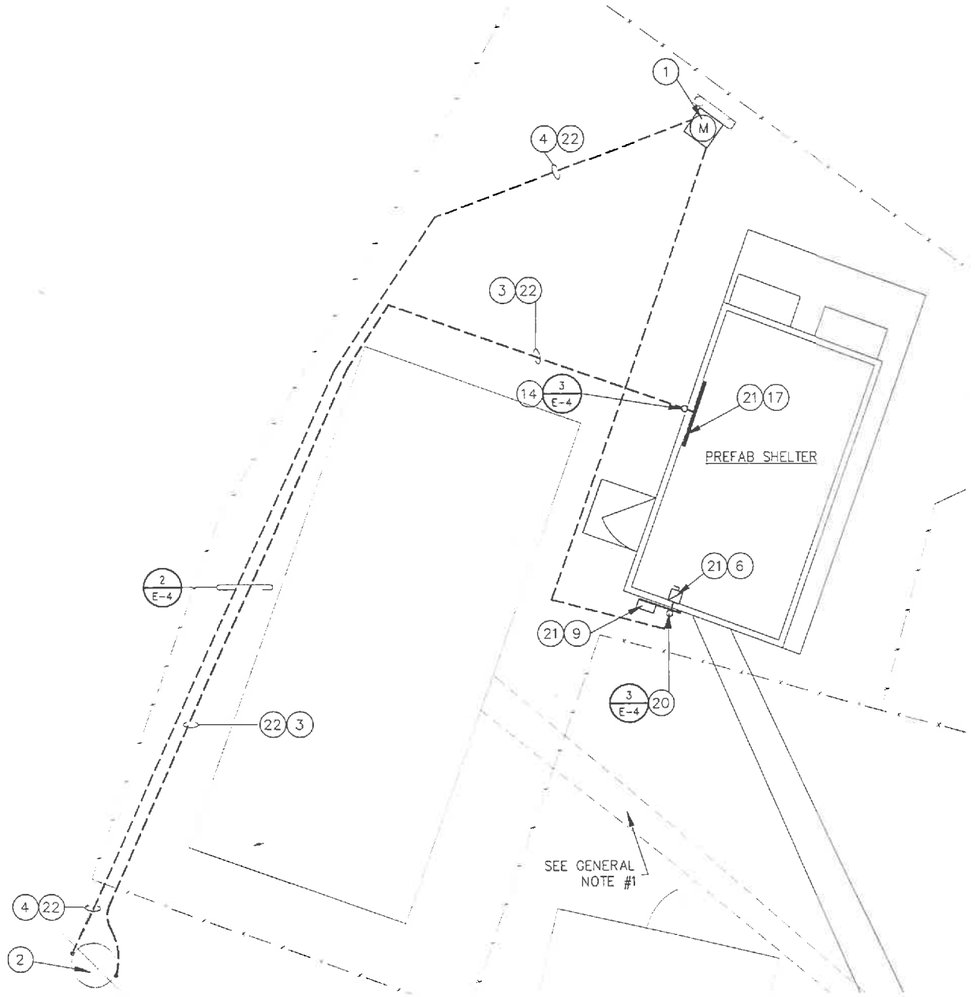
SITE NUMBER
NEXTEL SITE# - VA 063P-A

SITE ADDRESS
N. MAIN ST HWY 250
CHARLOTTESVILLE, VA 22911

SHEET TITLE
STRUCTURAL DETAILS

SHEET NUMBER
C-4

PLOT SCALE: AS SHOWN



1 E-1 ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'-0"

ABBREVIATIONS

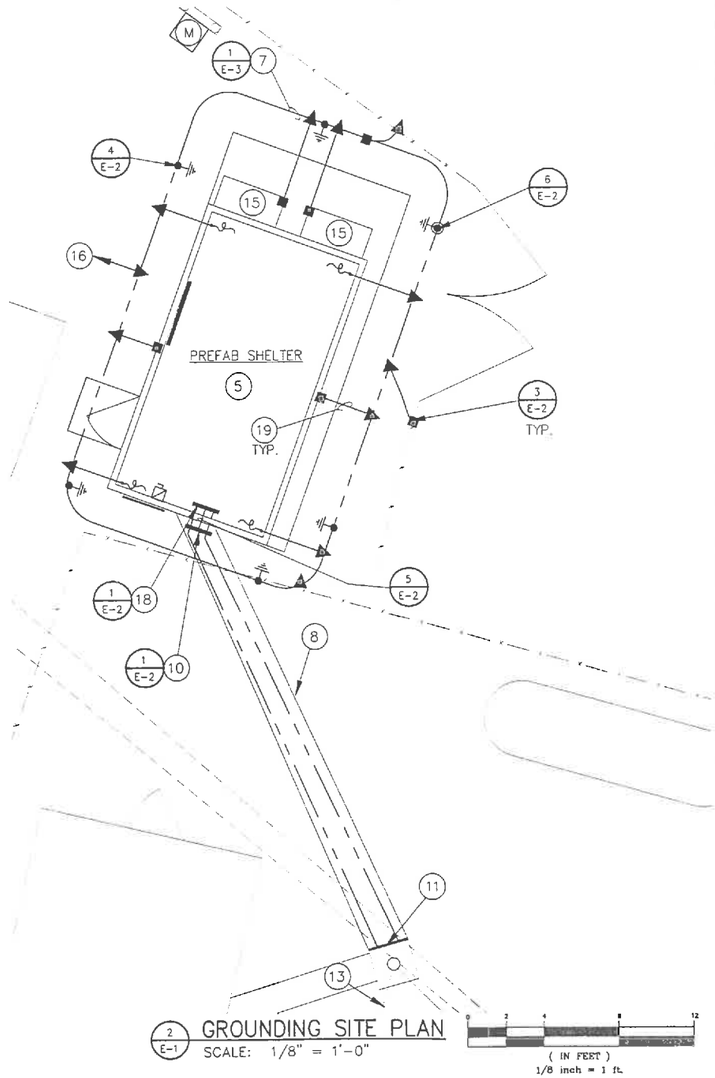
A	AMPERES
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPS INTERRUPTING CAPACITY
AWG	AMERICAN WIRE GAUGE
BCW	BARE COPPER WIRE (SOLID TINNED)
C	CONDUIT
CB	CIRCUIT BREAKER
CIGBE	COAX ISOLATED GROUND BAR, EXTERNAL
DWG	DRAWING
EGB	ENTRY PORT GROUND BAR
EMT	ELECTRICAL METALLIC TUBING
G/GRD	GROUND
IGR	INTERIOR GROUND RING
KVA	KILOVOLT-AMPERE
KW	KILOWATT
MGB	MASTER GROUND BAR
MIN	MINIMUM
MTS	MANUAL TRANSFER SWITCH
NEC	NATIONAL ELECTRICAL CODE
P	POLE
RGS	RIGID GALVANIZED STEEL CONDUIT
SGB	SECTOR GROUND BAR
TYP	TYPICAL
V	VOLTS
W/	WITH
WP	WEATHERPROOF
#	NUMBER

GENERAL NOTE:

1. THIS SITE INCLUDES EXISTING UNDERGROUND ELECTRIC, TELEPHONE AND GROUNDING SYSTEMS. CONTACT APPROPRIATE AGENCIES TO LOCATE EXISTING UNDERGROUND SERVICES PRIOR TO EXCAVATION. ANY EXCAVATION WITHIN THE PROXIMITY OF UNDERGROUND SERVICES SHALL BE PERFORMED BY HAND.

LEGEND

- EXISTING UTILITY POLE
- METER SOCKET BY THIS CONTRACT. METER BY UTILITY COMPANY.
- SERVICE DISCONNECT
- GROUND BAR (MGB)
- GROUND ROD
- INSPECTION WELL
- COMPRESSION LUG CONNECTION
- EXOTHERMIC WELDED CONNECTOR
- UNDERGROUND ELECTRIC/TELEPHONE
- GROUNDING WIRE
- X — DETAIL NUMBER; X-X — DRAWING(S) NUMBER
- (#) CODED DRAWING NOTE



2 E-1 GROUNDING SITE PLAN
SCALE: 1/8" = 1'-0"

CODED DRAWING NOTES:

1. METER SOCKET AND METER BACKBOARD BY CONTRACTOR. METER AND 200 AMP SERVICE BY UTILITY COMPANY AND INSTALLED BY THIS CONTRACT. COORDINATE FINAL LOCATION WITH UTILITY COMPANY.
2. EXISTING UTILITY POLE WITH POWER/TELCO SERVICE.
3. 2"C. w/6 PAIR, #24 AWG SOLID CORE TELEPHONE CABLE.
4. 2"C. w/ (3) #3/0 + #6G.
5. IGR BY SHELTER MANUFACTURER. GROUNDING CONNECTIONS INSIDE SHELTER BY OTHERS UNLESS NOTED OTHERWISE.
6. SERVICE DISCONNECT SWITCH BY SHELTER MANUFACTURER. LINE SIDE TERMINATIONS BY THIS CONTRACT.
7. #2 SOLID TINNED BCW BURIED EXTERIOR GROUND RING.
8. ICE BRIDGE. BOND EACH SECTION.
9. POWER PEDESTAL, INCUDING GENERATOR RECEPTACLE. TERMINATIONS TO POWER PEDESTAL BY THIS CONTRACT.
10. EXTERIOR GROUND BAR BY SHELTER MANUFACTURER. CABLES AND TERMINATIONS BY THIS CONTRACT.
11. TOP AND BOTTOM (TOWER) CIGBE(S).
12. SECTOR CIGBE(S).
13. EXISTING SELF SUPPORTING TOWER.
14. TELEPHONE CONDUIT STUB-UP. COORDINATE EXACT LOCATION IN FIELD.
15. AC UNITS BY SHELTER MANUFACTURER. GROUNDING CONNECTION BY THIS CONTRACT.
16. TIE INTO EXISTING GROUND RING. FIELD VERIFY EXACT LOCATION.
17. INTERIOR TELEPHONE BOARD BY SHELTER MANUFACTURER. TERMINATIONS BY OTHERS.
18. INTERIOR MAIN GROUND BAR BY SHELTER MANUFACTURER. CABLES AND TERMINATIONS BY THIS CONTRACT.
19. BUILDING T-BRACKET. CADWELD TO GROUND RING.
20. POWER CONDUIT STUB-UP. COORDINATE EXACT LOCATION IN FIELD.
21. LOCATION OF EQUIPMENT IS DEPENDENT ON ACTUAL SHELTER PROVIDED. COORDINATE EXACT LOCATION OF EQUIPMENT IN FIELD.
22. COORDINATE EXACT LOCATION OF CONDUIT IN FIELD.

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PLOT SCALE: AS SHOWN