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BUSINESS LICENSE #: N/A

REVISIONS			
REV	DATE	DESCRIPTION	INT
0	01/05/23	100% CONSTRUCTION	JDB
A	11/07/22	ISSUED FOR REVIEW 90%	JDB

REVIEWED BY: BMW

THESE PLANS AND SPECIFICATIONS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF POWDER RIVER DEVELOPMENT SERVICES, LLC WHETHER THE PROJECTS FOR WHICH THEY ARE MADE ARE EXECUTED OR NOT. THESE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS WITHOUT PRIOR WRITTEN CONSENT OF THE ENGINEER.

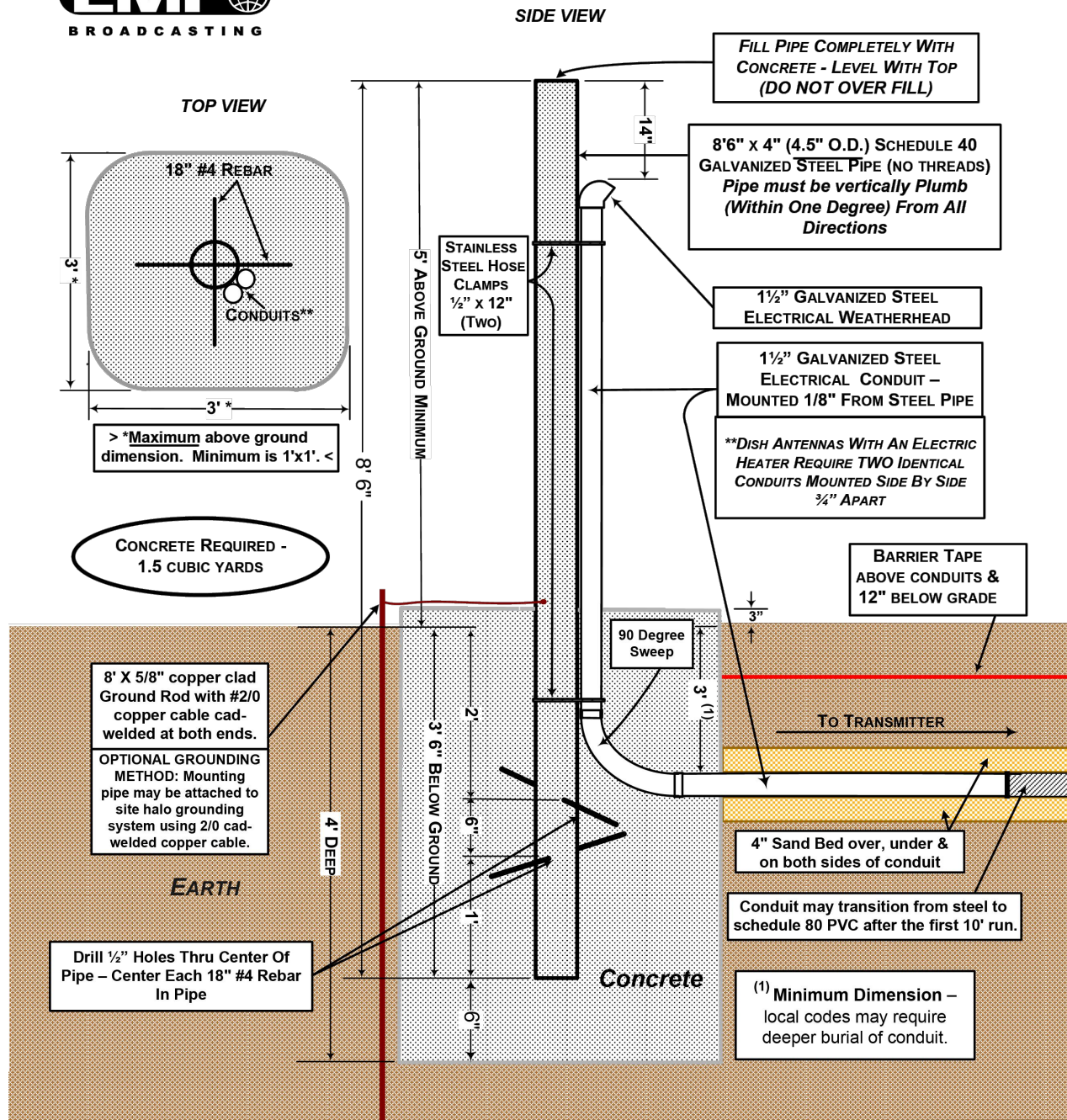
SITE INFORMATION
SITE NAME:
WNKC GLOUCESTER, MA

FCC #: ----

285 BOSTON ST
TOPSFIELD, MA 01983
ESSEX COUNTY

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C-1



EMF GROUND POLE INSTALLATION
FOR 1.8m SATELLITE DISH

DRAWN BY	Skip Bushell	DWG NO	ENG-SAT-1	REV	5.2
ISSUED	SCALE	Not to scale	EMF Engineering	SHEET	1 OF 1



SPECIFICATIONS

Type 183 1.8 m Ku-band RxTx Class III Antenna System

Type Approval Information

Antenna Model	62 - 1835611
Intelsat Standard	Standard G & K2 (IESS 601)
Approval Code	IA027800

(See Our Website for a Complete List of Type Approvals)

RF Performance

Effective Aperture	1.8 m (71 in)
Operating Frequency	Tx 13.75 - 14.50 GHz Rx 10.70 - 12.75 GHz
Polarization	Linear, Orthogonal
Gain (±2 dBi)	Tx 46.8 dBi @ 14.3 GHz Rx 45.3 dBi @ 12.0 GHz
3 dB Beamwidth	Tx 0.79° @ 14.3 GHz Rx 0.99° @ 12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dBi)	1° < θ < 20° 29 - 25 Log θ 20° < θ < 26.3° -3.5 26.3° < θ < 48° 32 - 25 Log θ 48° < θ < 180° -10
Antenna Cross-Polarization	30 dB (On Axis) 26 dB in .5 dB Contour
Antenna Noise Temperature	10° El 43° K 20° El 28° K 30° El 23° K
VSWR	Tx 1.3:1 Rx 1.5:1
Isolation (Port to Port)	Tx 80 dB Rx 35 dB
Feed Interface	Tx WR75 Flat Flange Rx WR75 Flat Flange

(All specifications typical)

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	One-Piece Offset Feed Prime Focus
Mount Type	Elevation over Azimuth
Elevation Adjustment Range	10° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous ±10° Fine Adjustment
Feed Support	Rectangular Section with Alignment Legs
Mast Pipe Interface	114 mm (4.50 in) Diameter
Wind Loading	Operational 80 km/h (50 mph) Survival 200 km/h (125 mph)
Temperature	-50°C to 80°C
Humidity	0 to 100% (Condensing)
Atmosphere	Standard Hardware Meets 500 Hour Salt Spray Test Requirements (ASTM B-117)
Solar Radiation	360 BTU/h/ft²
Shock and Vibration	As Encountered During Shipping and Handling



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EQUIPMENT DETAILS

SHEET NUMBER:

C-2