

Exhibit 12.1

Description of Proposed Antenna System

DAYTIME/CRITICAL HOURS ANTENNA SYSTEM

1. The common Daytime/Critical Hours directional antenna array consists of four (4) vertical guyed uniform cross-section steel towers mounted on base piers and insulators. Each tower stands 39.2 meters AGL above a 1.5 meter base pier and insulator for an overall tower height of 40.7 meters AGL. No aviation lighting is required. Given the common site elevation of 16.8 meters, each tower will stand at an overall height of 57.5 meters AMSL. No Antenna Structure Registration is required.
2. The proposed ground system will consist of 120 buried copper radials, extending 64.1 meters (210.2 feet) or 90.0° in electrical length, about the base of each tower except where shortened to terminate at property boundaries or transverse copper straps running midway between the towers. The material used for the radials will be #10 AWG, soft drawn copper wire or equivalent.
3. The proposed Daytime antenna system theoretical parameters are as follows:

Call: WKFL.P
Hours: Daytime
Power: 10.0 kW

Freq: 1170 kHz
Lat: 28-42-25 N
Theo RMS: 901.70 mV/m @ 1km @ 10.0 kW

BUSHNELL, FL, US
Lng: 082-07-25 W

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	55.0	25.0	0.0	0.0
2	0.770	113.0	80.0	355.0	0.0	0	1	55.0	25.0	0.0	0.0
3	0.750	214.0	70.0	50.0	0.0	0	1	55.0	25.0	0.0	0.0
4	0.820	130.0	60.0	140.0	0.0	0	1	55.0	25.0	0.0	0.0

Theoretical RMS: 901.70 mV/m@1km Erss = 1656.44 mV/m@1km
Standard RMS: 947.78 mV/m@1km Q = 41.41 mV/m@1km

4. The proposed Critical Hours antenna system theoretical parameters are as follows:

Call: WKFL.P
Hours: Critical Hours
Power: 5.3 kW

Freq: 1170 kHz
Lat: 28-42-25 N
Theo RMS: 656.44 mV/m @ 1km @ 5.3 kW

BUSHNELL, FL, US
Lng: 082-07-25 W

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Switch	TL Switch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	0.0	0	1	55.0	25.0	0.0	0.0
2	0.770	113.0	80.0	355.0	0.0	0	1	55.0	25.0	0.0	0.0
3	0.750	214.0	70.0	50.0	0.0	0	1	55.0	25.0	0.0	0.0
4	0.820	130.0	60.0	140.0	0.0	0	1	55.0	25.0	0.0	0.0

Theoretical RMS: 656.44 mV/m@1km Erss = 1205.90 mV/m@1km
Standard RMS: 689.99 mV/m@1km Q = 30.15 mV/m@1km

4. The sampling system for the proposed array will conform to §73.68 of the Commission's Rules regarding approved sampling systems.

Exhibit 12.2

Vertical Plan of Antenna System

The site is located 0.45 km south of the "H" intersection of Old Canal Road and County Road 312, the city of Bushnell, Sumter County, Florida.

Site Location (NAD 27)

NL: 28° 42' 25"

WL: 82° 07' 25"

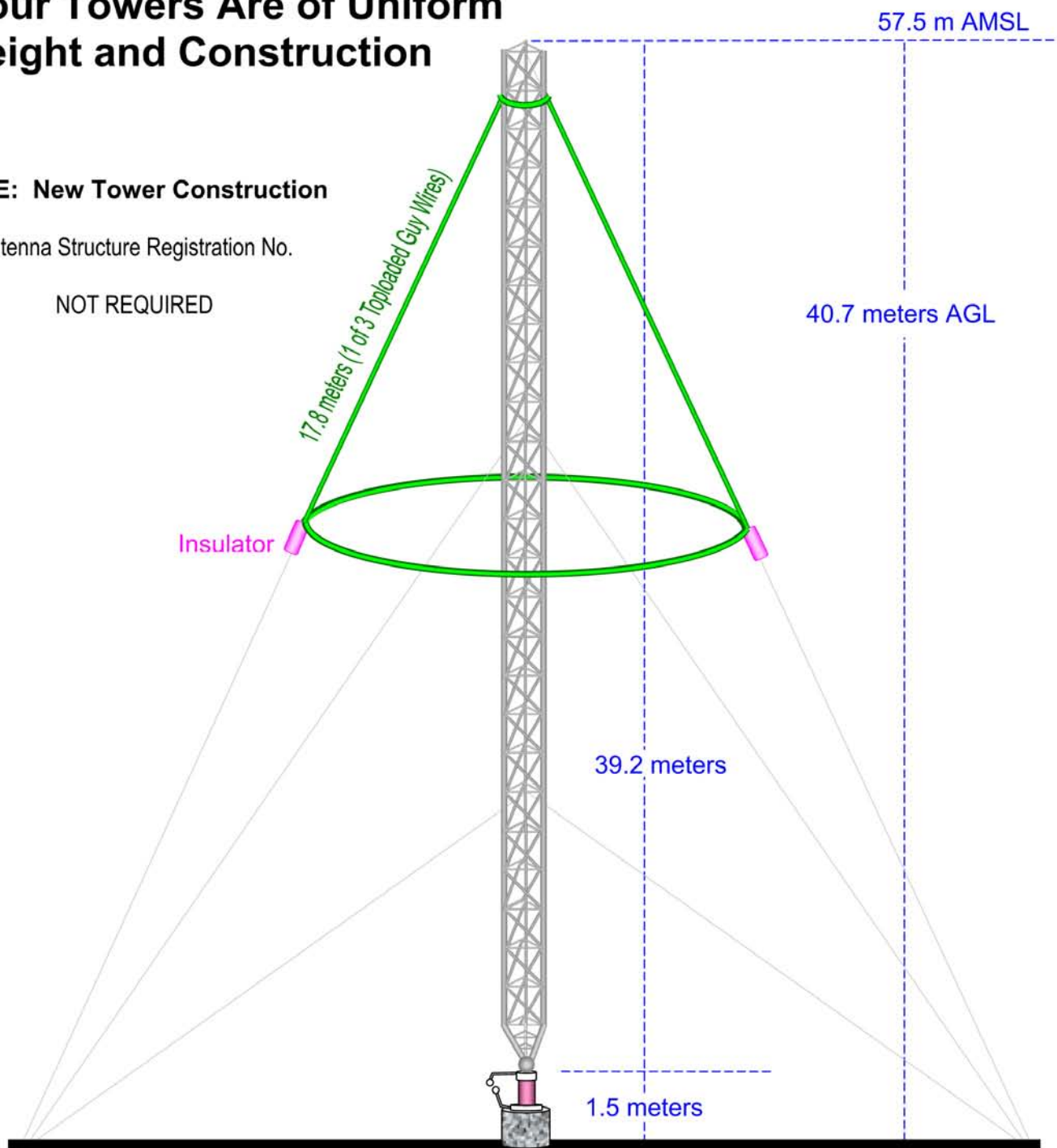
(28-42-25.78 N; 82-07-24.80 W NAD '83)

All Four Towers Are of Uniform Height and Construction

NOTE: New Tower Construction

Antenna Structure Registration No.

NOT REQUIRED



Ground Elevation: 16.8 m AMSL

Drawing is not to Scale

Exhibit 12.3

Horizontal Plat of Proposed Antenna Array



Red Dashed Arcs represent the 41 meter fall radius for each tower

+ Tower 2
28° 42' 27.10" NL
82° 07' 25.68" WL

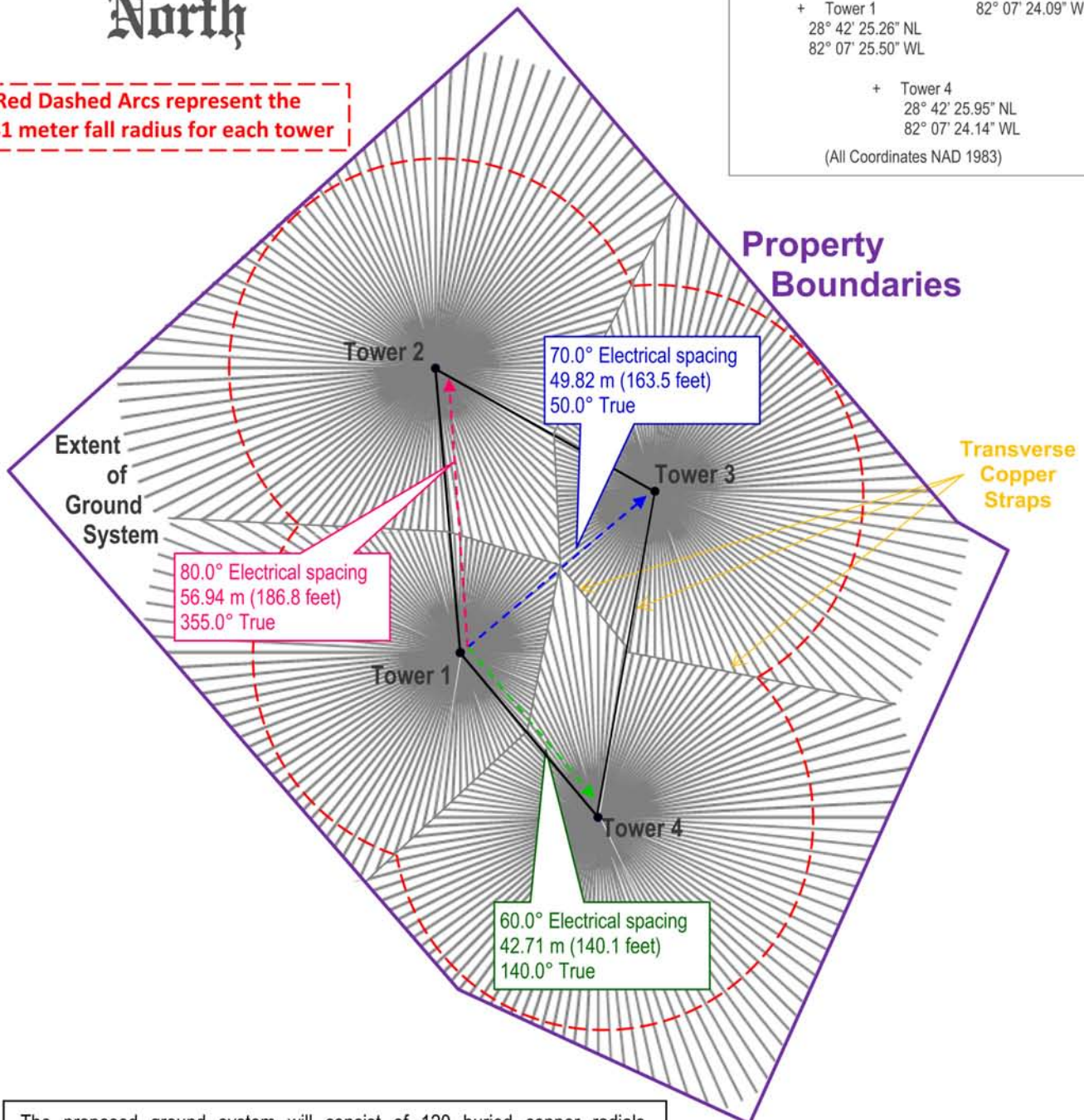
+ Tower 3
28° 42' 26.30" NL
82° 07' 24.09" WL

+ Tower 1
28° 42' 25.26" NL
82° 07' 25.50" WL

+ Tower 4
28° 42' 25.95" NL
82° 07' 24.14" WL

(All Coordinates NAD 1983)

Property
Boundaries



The proposed ground system will consist of 120 buried copper radials, extending 64.1 meters (210.2 feet) or 90.0° in electrical length, about the base of each tower except where shortened to terminate at property boundaries or transverse copper straps running midway between the towers. The material used for the radials will be #10 AWG, soft drawn copper wire or equivalent.

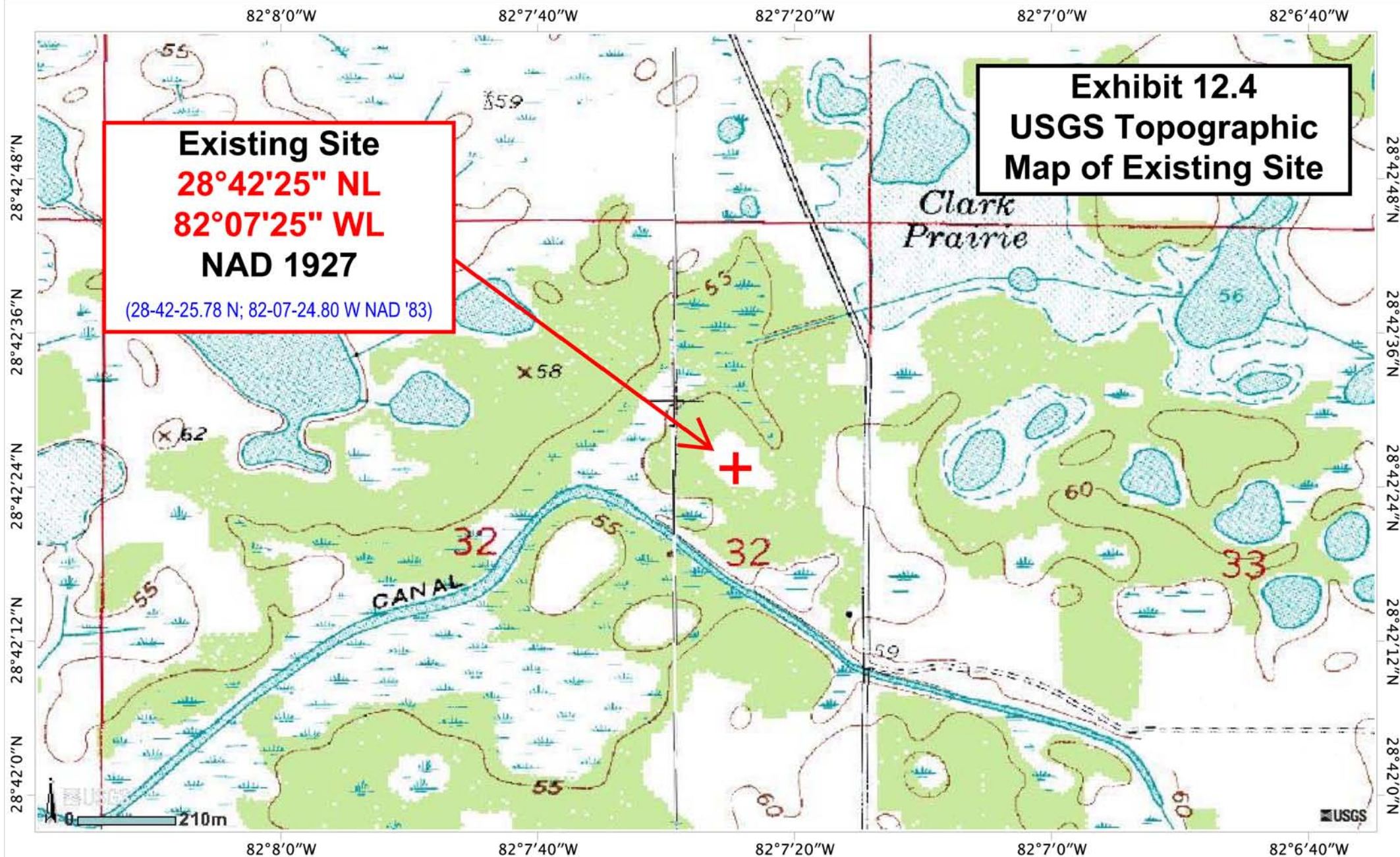


Exhibit 12.4
USGS Topographic
Map of Existing Site

82°7'35"W

82°7'30"W

82°7'25"W

82°7'20"W

82°7'15"W

28°42'33"N

28°42'30"N

28°42'27"N

28°42'24"N

28°42'21"N

28°42'33"N

28°42'30"N

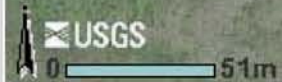
28°42'27"N

28°42'24"N

28°42'21"N

EXISTING SITE

Exhibit 12.5
USGS Photograph
of Existing Site



82°7'35"W

82°7'30"W

82°7'25"W

82°7'20"W

82°7'15"W



82°7'38"W

28°42'34"N

Map Extent

82°7'12"W

28°42'18"N



<http://nationalmap.gov/>

Geographic Coordinate System (WGS84)

US Census SF-1 Population Database

WKFL.P

Proposed Operation

Freq: 1170 kHz

Class: D

Latitude: 28-42-25 N

Longitude: 082-07-25 W

Power: 10 kW

RMS: 901.695 mV/m @1km

Towers: 4

Aucs: 0

5.0 mV/m Contour

Total Population: 51,187

Coverage Area: 1,038 sq. km

2.0 mV/m Contour

Total Population: 171,821

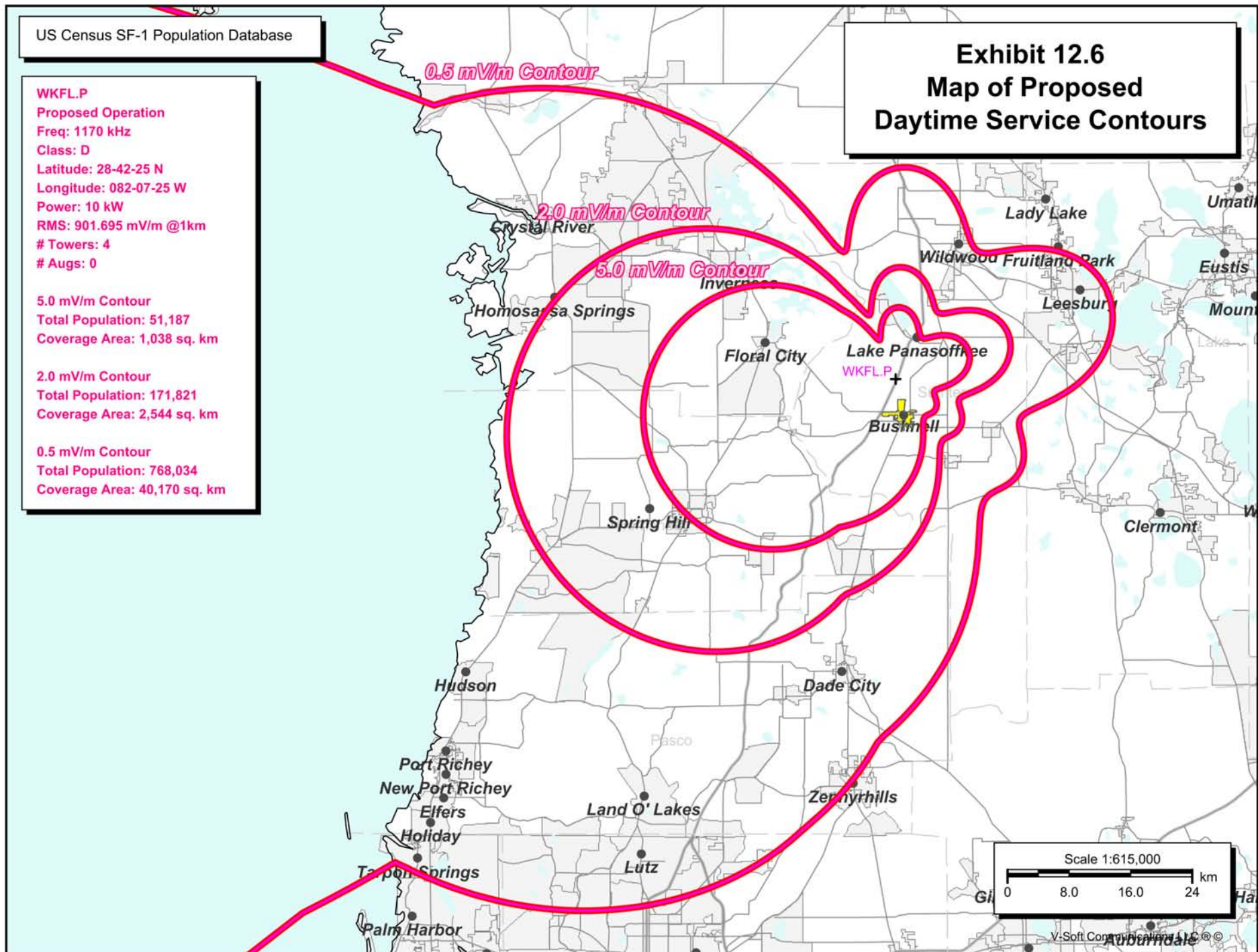
Coverage Area: 2,544 sq. km

0.5 mV/m Contour

Total Population: 768,034

Coverage Area: 40,170 sq. km

Exhibit 12.6 Map of Proposed Daytime Service Contours



US Census SF-1 Population Database

WKFL.P

Proposed Operation

Freq: 1170 kHz

Class: D

Latitude: 28-42-25 N

Longitude: 082-07-25 W

Power: 5.3 kW

RMS: 656.444 mV/m @1km

Towers: 4

Augs: 0

5.0 mV/m Contour

Total Population: 30,484

Coverage Area: 752 sq. km

2.0 mV/m Contour

Total Population: 104,996

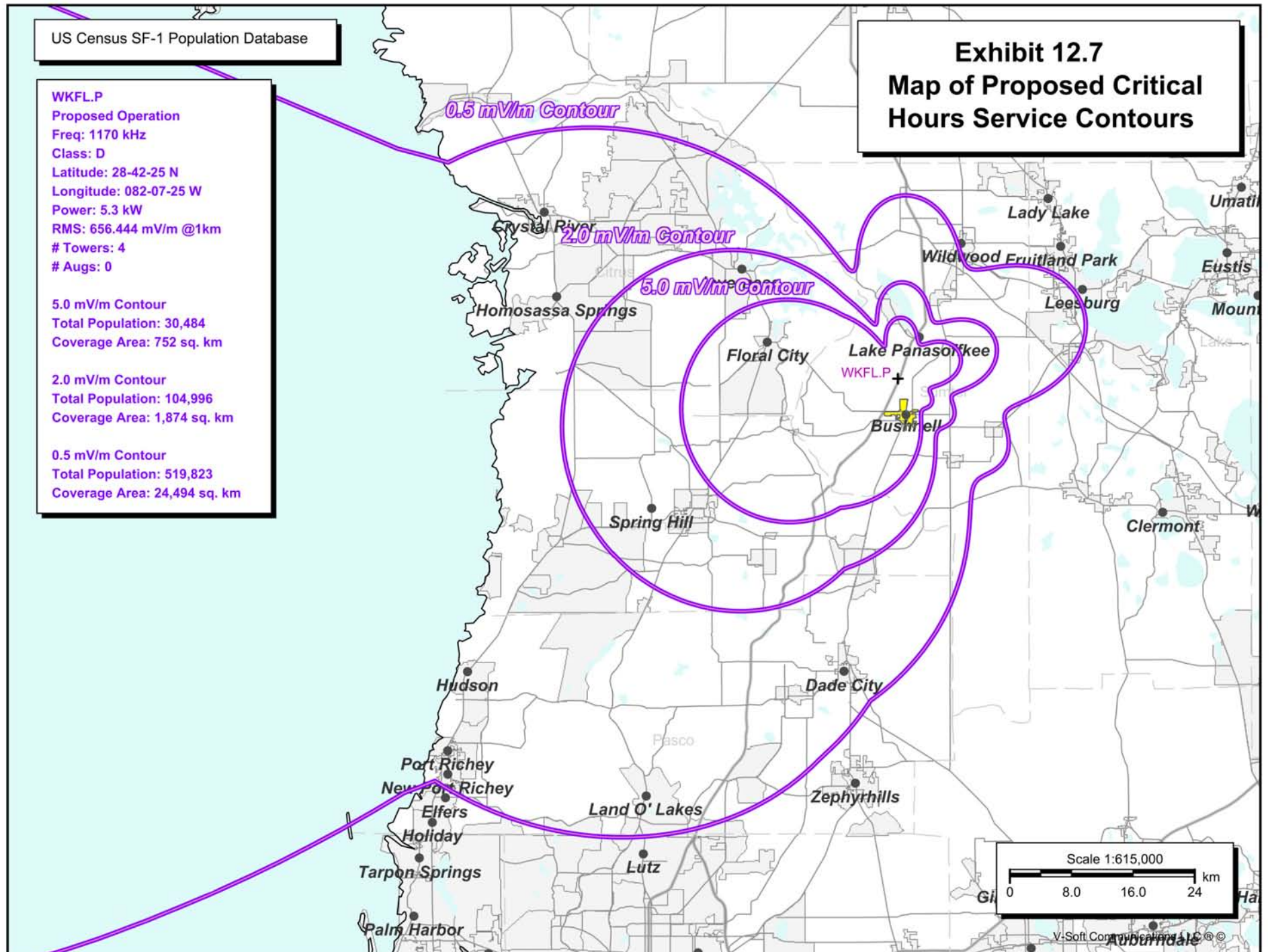
Coverage Area: 1,874 sq. km

0.5 mV/m Contour

Total Population: 519,823

Coverage Area: 24,494 sq. km

Exhibit 12.7 Map of Proposed Critical Hours Service Contours



"+" Represents the US Census SF-1 Population Centroid Database

WKFL.P (Daytime)
Proposed Operation
Freq: 1170 kHz
Class: D
Latitude: 28-42-25 N
Longitude: 082-07-25 W
Power: 10 kW
RMS: 901.695 mV/m @1km
Towers: 4
Augs: 0

1.0 V/m "Blanket" Contour
Total Population: none

WKFL.P (Critical Hours)
Proposed Operation
Freq: 1170 kHz
Class: D
Latitude: 28-42-25 N
Longitude: 082-07-25 W
Power: 5.3 kW
RMS: 656.444 mV/m @1km
Towers: 4
Augs: 0

1.0 V/m "Blanket" Contour
Total Population: none

Exhibit 12.8 Map of Proposed Daytime & Critical Hours 1.0 V/m "Blanket" Interference Contour

1.0 V/m Daytime "Blanket" Contour
1.0 V/m Critical Hours "Blanket" Contour

