



ENGINEERING STATEMENT

OF

BENJAMIN L. PIDEK, P.E.

IN SUPPORT OF

APPLICATION FOR MINOR CHANGE IN A LICENSED FACILITY

K38IG-LD

(BDISDTL-20090915ADQ)

VICTORIA, TX

Background

Mosely Enterprises, LLC (Mosely) is the licensee of the analog low power station K38IG, Ch. 38 at Victoria, TX (BLTTL-20070319ACB, Facility ID: 127289). Mosely has been granted a Construction Permit (BDISDTL-20090915ADQ) to displace from Ch. 38 to Ch. 33 and flashcut the analog facility to digital operation on Ch. 33. The K38IG digital CP has the following parameters:

Coordinates: 28° 46' 42" N (NAD27)
96° 58' 08" W
ERP: 15 kW (DA)
RCAMSL: 164.0m

Mosely now proposes to move the digital facility to a different, nearby registered tower (ASR#1238711).

**PROVIDING COMMUNICATION
SYSTEMS ENGINEERING**

CORPORATE OFFICE
1475 NORTH 200 WEST
POST OFFICE BOX 311
NEPHI, UT 84648

TEL: (435) 623-8601
FAX: (435) 623-8610

REGIONAL OFFICE
1172 SOUTH M-13
LENNON, MI 48449

TEL: (810)-621-5656
FAX: (810)-621-4146



Antenna System, Tower and Operating Parameters

Mosely proposes to use an existing Dielectric TUA-O4SP-14/55-1-T-R omni-directional antenna for the facility that is already side-mounted on the proposed, registered tower (ASR#1238711). No change in the overall height of the structure (360.3m AMSL) is necessary and, therefore, no notification to the FAA or modification of the ASR is required. The proposed facility will have the following parameters:

Coordinates: 28° 50' 42" N (NAD27)
97° 07' 33" W
ERP: 4 kW (omni)
RCAMSL: 351.3m

Coverage

As shown in Figure 1, attached hereto, the F(50,90) 51 dBu contour of the proposed K38IG digital facility will completely overlap the F(50,50) 74 dBu contour of the existing analog facility. Additionally, the location of the proposed tower site for the digital facility is less than 30 miles (only 10.6 miles) from the location of the licensed analog facility.

Interference

An interference study was conducted using the proposed parameters^{1/} with software that emulates that used by the Commission. The results of the OET-69 analysis indicate that the proposed facility will cause 4.95% interference to the K32LC low power digital Construction

^{1/} Interference studies assumed the use of the stringent emissions mask as specified on the instant application.

PROVIDING COMMUNICATION
SYSTEMS ENGINEERING

CORPORATE OFFICE
1475 NORTH 200 WEST
POST OFFICE BOX 311
NEPHI, UT 84648

TEL: (435) 623-8601
FAX: (435) 623-8610

REGIONAL OFFICE
1172 SOUTH M-13
LENNON, MI 48449

TEL: (810)-621-5656
FAX: (810)-621-4146



Permit facility (BNPDTL-20100510AKI) which is above the FCC 2% interference limit between digital low power facilities; however, the existing K38IG digital Construction Permit facility (BDISDTL-20090915ADQ) is already predicted to cause 11.28% to the K32LC digital Construction Permit facility.

In September 2009, K38IG filed an application for Construction Permit to displace to Ch. 33 and flashcut to digital operation. The Construction Permit was subsequently granted in December 2009 (BDISDTL-20090915ADQ). K32LC filed its application for a Construction Permit to flashcut to digital operation on Ch. 32 in May 2010, long after the K38IG Construction Permit had been granted. Given that the K38IG Construction Permit had already been granted before K32LC had filed for its digital Construction Permit, K32LC essentially agreed to accept the predicted 11.28% interference from K38IG; therefore, the proposed modification to the K38IG facility will actually reduce the predicted interference to K32LC from 11.28% to 4.95%. [It should be noted that the baseline level of interference to K32LC from K38IG should remain 11.28% since K32LC agreed to accept this interference, even though the proposed modification to the K38IG Construction Permit will reduce the interference to K32LC.]

No other analog or digital LPTV or translator stations are predicted to receive more than the allowable 2% interference and, also, no domestic full-service DTV or Class A stations are predicted to receive more than the allowable 0.5% new interference from the proposed K38IG facility.

Environmental/RFR

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation (RFR). Any other non-RFR conditions that might require the preparation of

PROVIDING COMMUNICATION
SYSTEMS ENGINEERING

CORPORATE OFFICE
1475 NORTH 200 WEST
POST OFFICE BOX 311
NEPHI, UT 84648

TEL: (435) 623-8601
FAX: (435) 623-8610

REGIONAL OFFICE
1172 SOUTH M-13
LENNON, MI 48449

TEL: (810)-621-5656
FAX: (810)-621-4146



an EA are beyond the scope of this report; however, since the structure is existing and registered, such conditions should not be an issue requiring further consideration as there will be no increase in height or change in width of the tower structure.

The location of the proposed construction is a multi-user site and it is assumed that the site is currently “in compliance” with FCC guidelines for human exposure to RFR (as defined in OET-65). The additional worst case ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.000274 mW/cm², which is less than 5% (and, in fact, much less than 1%) of the MPE for public exposure (0.390667 mW/cm²) at Ch. 33 (584 MHz - 590 MHz). The contribution to the overall RFR from the proposed facility is negligible (less than 5%) and, therefore, the site will remain “in compliance” with FCC guidelines.

Mosely agrees to comply with the Commission’s requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure. Access to the site is restricted and appropriate signage warning of potential RFR hazards is posted.

**PROVIDING COMMUNICATION
SYSTEMS ENGINEERING**

CORPORATE OFFICE
1475 NORTH 200 WEST
POST OFFICE BOX 311
NEPHI, UT 84648

TEL: (435) 623-8601
FAX: (435) 623-8610

REGIONAL OFFICE
1172 SOUTH M-13
LENNON, MI 48449

TEL: (810)-621-5656
FAX: (810)-621-4146



Certification

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

A handwritten signature in black ink, appearing to read "B. Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.
July 11, 2014

**PROVIDING COMMUNICATION
SYSTEMS ENGINEERING**

CORPORATE OFFICE
1475 NORTH 200 WEST
POST OFFICE BOX 311
NEPHI, UT 84648

TEL: (435) 623-8601
FAX: (435) 623-8610

REGIONAL OFFICE
1172 SOUTH M-13
LENNON, MI 48449

TEL: (810)-621-5656
FAX: (810)-621-4146

Mid-State Consultants

FCC Protected F(50,50) 74 dBu Contour of Licensed K38IG Analog Facility (Black) vs. F(50,90) 51 dBu Contour of Proposed K38IG 4 kW Facility (Red)

K38IG-LP
 BLTTL20070319ACB
 Latitude: 28-46-42 N
 Longitude: 096-58-08 W
 ERP: 0.11 kW
 Channel: 38
 Frequency: 617.0 MHz
 AMSL Height: 45.2 m
 Horiz. Pattern: Directional

Prop. K38IG-LD
 Latitude: 28-50-42 N
 Longitude: 097-07-33 W
 ERP: 4.00 kW
 Channel: 17
 Frequency: 491.0 MHz
 AMSL Height: 351.3 m
 Horiz. Pattern: Omni

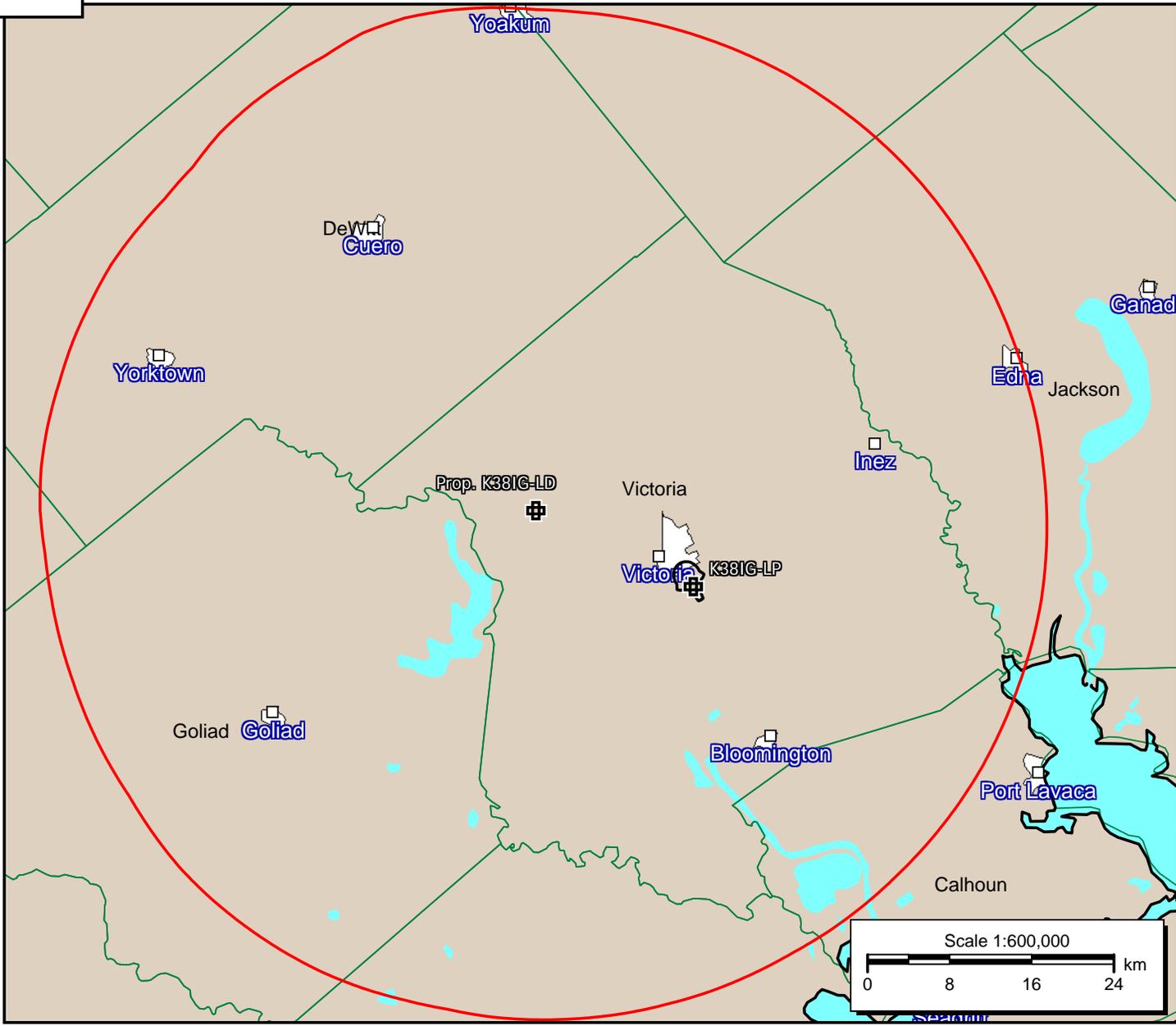


Figure 1