

COMPREHENSIVE TECHNICAL EXHIBIT

APPLICATION FOR A CONSTRUCTION PERMIT FOR RESERVED CHANNEL NONCOMMERCIAL
EDUCATIONAL BROADCAST STATION

KSLs DICKINSON, ND

BETHESDA CHRISTIAN BROADCASTING

PREPARED BY:

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INTRODUCTION

This technical exhibit has been prepared on behalf of Bethesda Christian Broadcasting, in support of a minor change to reserved-channel station KSLS Dickinson, ND (Facility ID #174276). Proposed are a change in channel and a change in effective radiated power. All information contained in this report is believed to be accurate to the best of my knowledge and belief.

SUMMARY OF PROPOSED STATION DATA

Channel: 214

Frequency: 90.7 MHz

ERP: 3.40 kW

HAAT: 131 meters

ANTENNA: Non-Directional, Bext TFC2K, 4-bay circular

ANTENNA HEIGHT ABOVE GROUND: 45 meters

SITE LOCATION: 46-55-14.87 N, 102-43-49.45 W (NAD 27)

INTERFERENCE DISCUSSION

Contour Overlap

The lack of any prohibited field contour overlap of the proposed station with any co-channel, first, second, or third adjacent stations is shown in Figures 1, 2, & 3. All contours are calculated using FCC/NGDC terrain data and curves data from 47 CFR 73.333.

Canadian Border

The site of the proposed station is 282 kilometers from the Canadian border, and is therefore within the Canadian border zone. 47 CFR 73.207 outlines the minimum required spacing in respect to Canadian stations. The proposed station is considered as a class A station, and therefore the maximum separation distance, in respect to Canadian class C stations, is 247 km. Because the proposed station is not within 247 km of the Canadian border, it is believed that this proposed station is in compliance. Furthermore, Figure 4 shows that the 34 dBu interfering contour does not reach beyond the Canadian border.

Channel 6 Protection

Under 47 CFR 73.525, any proposal to modify an existing reserved-channel station must consider potential interference caused to television stations operating on channel 6 within the distances specified in 47 CFR 73.525(a). The proposed station would operate on channel 214, and therefore must protect channel 6 stations within 187 km. A search of the FCC database shows that there are no television stations operating on channel 6 within 187 km of the proposed site.

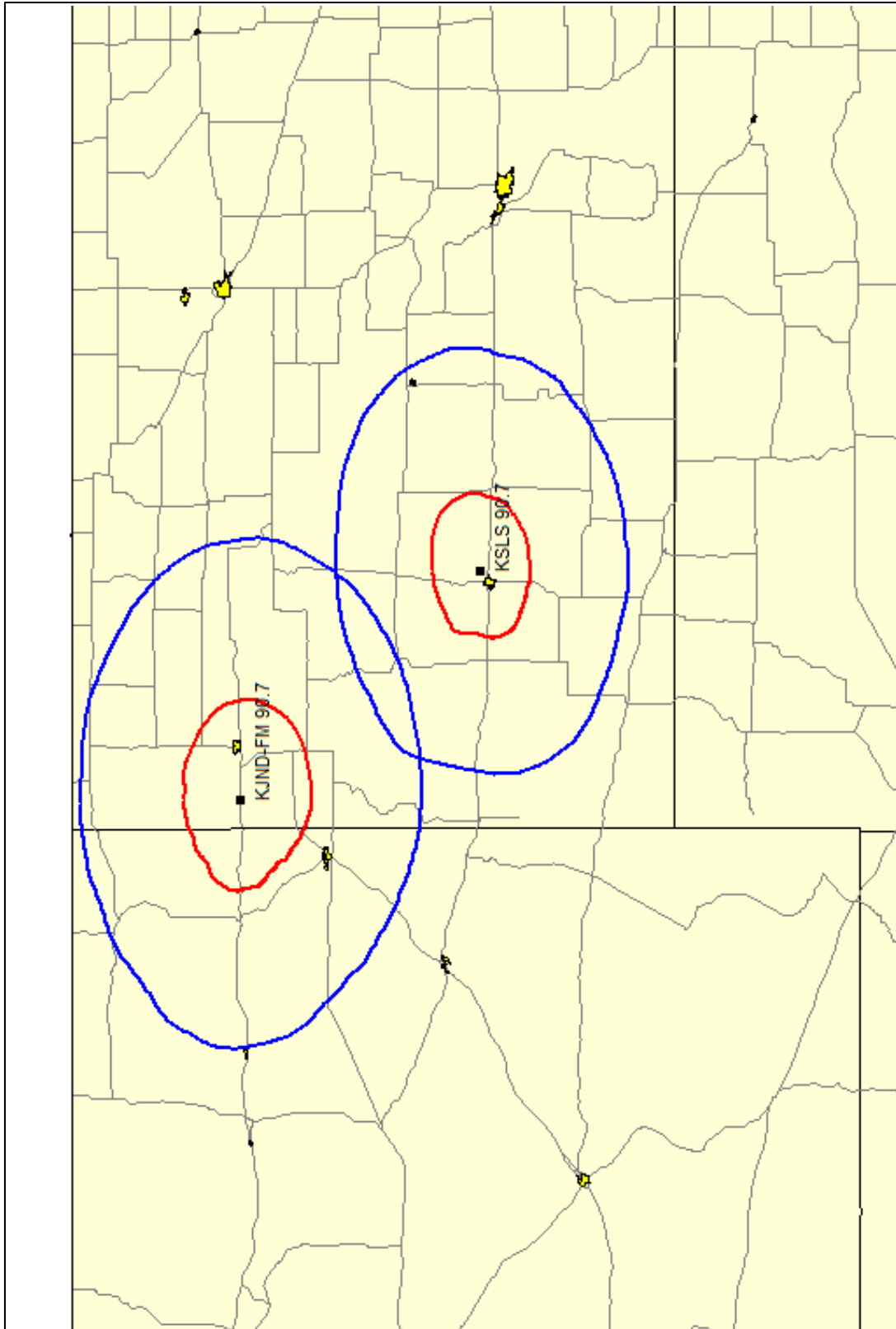


Figure 1. Pertinent contours of the proposed station and co-channel stations. RED=60 dBu F(50,50), BLUE=40 dBu F(50,10).

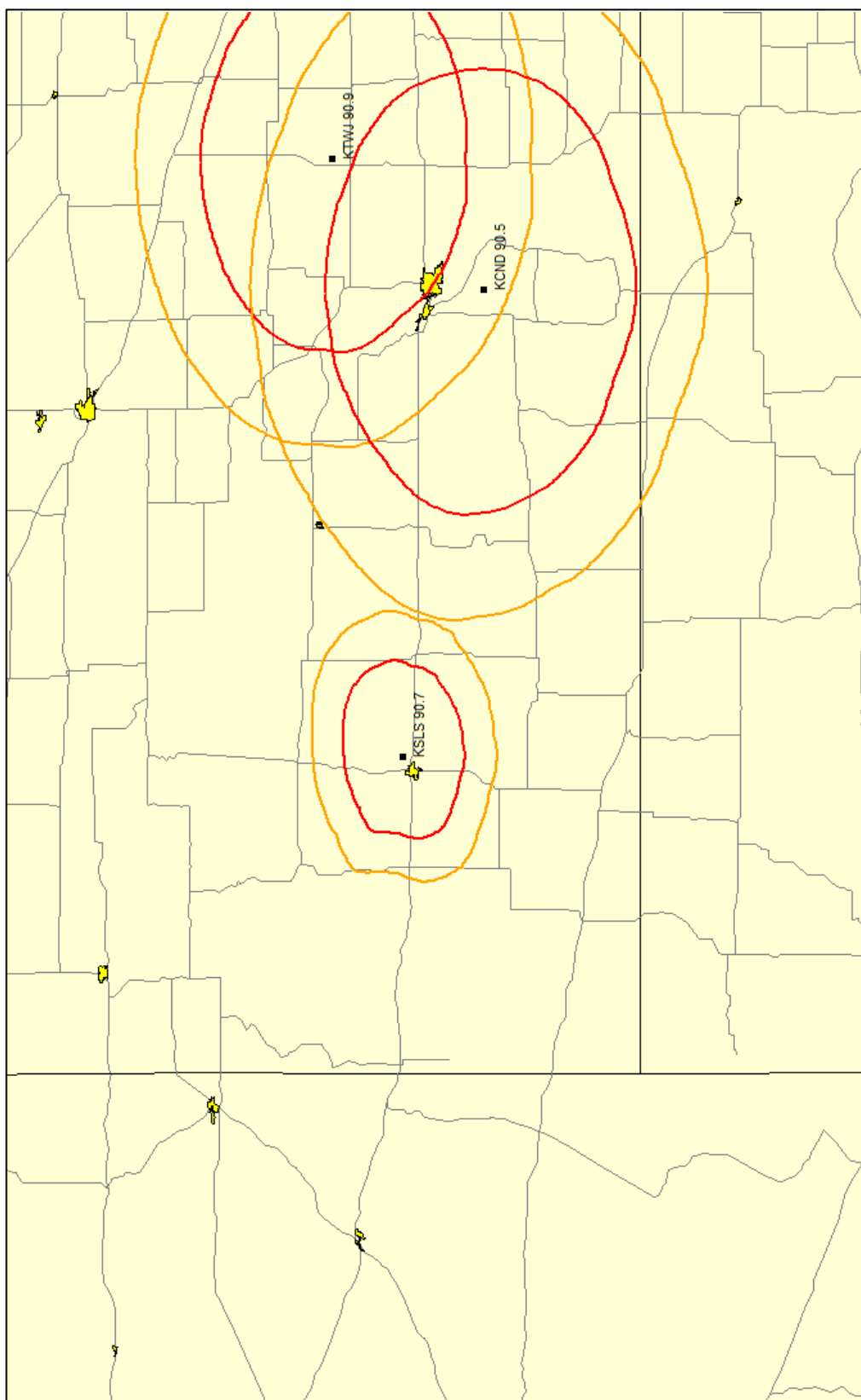


Figure 2. Pertinent contours of the proposed station and first adjacent stations. RED=60 dBu F(50,50), ORANGE=54 dBu F(50,10).

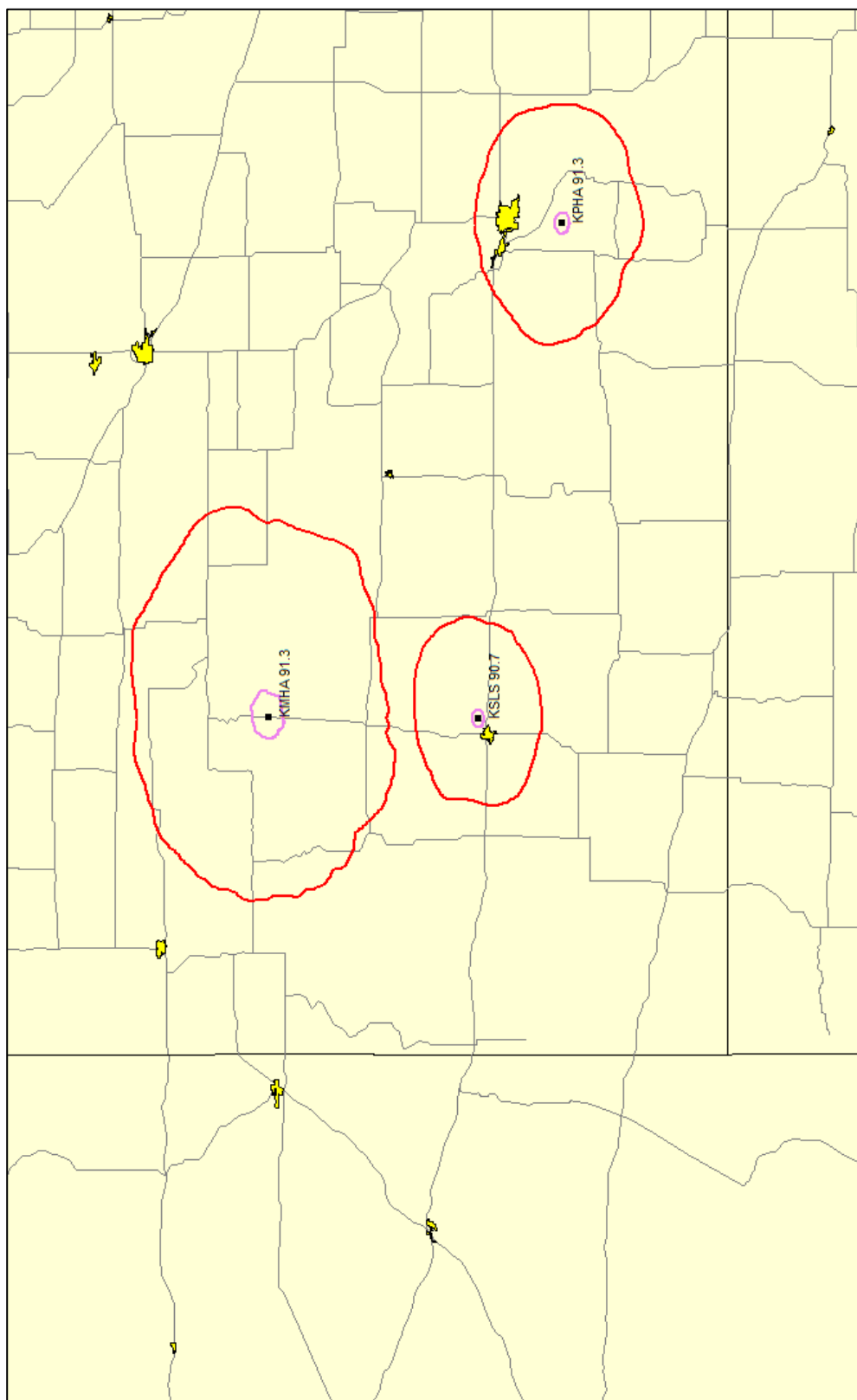


Figure 3. Pertinent contours of the proposed station and second and third adjacent stations. RED=60 dBu F(50,50), PINK=100 dBu F(50,10).

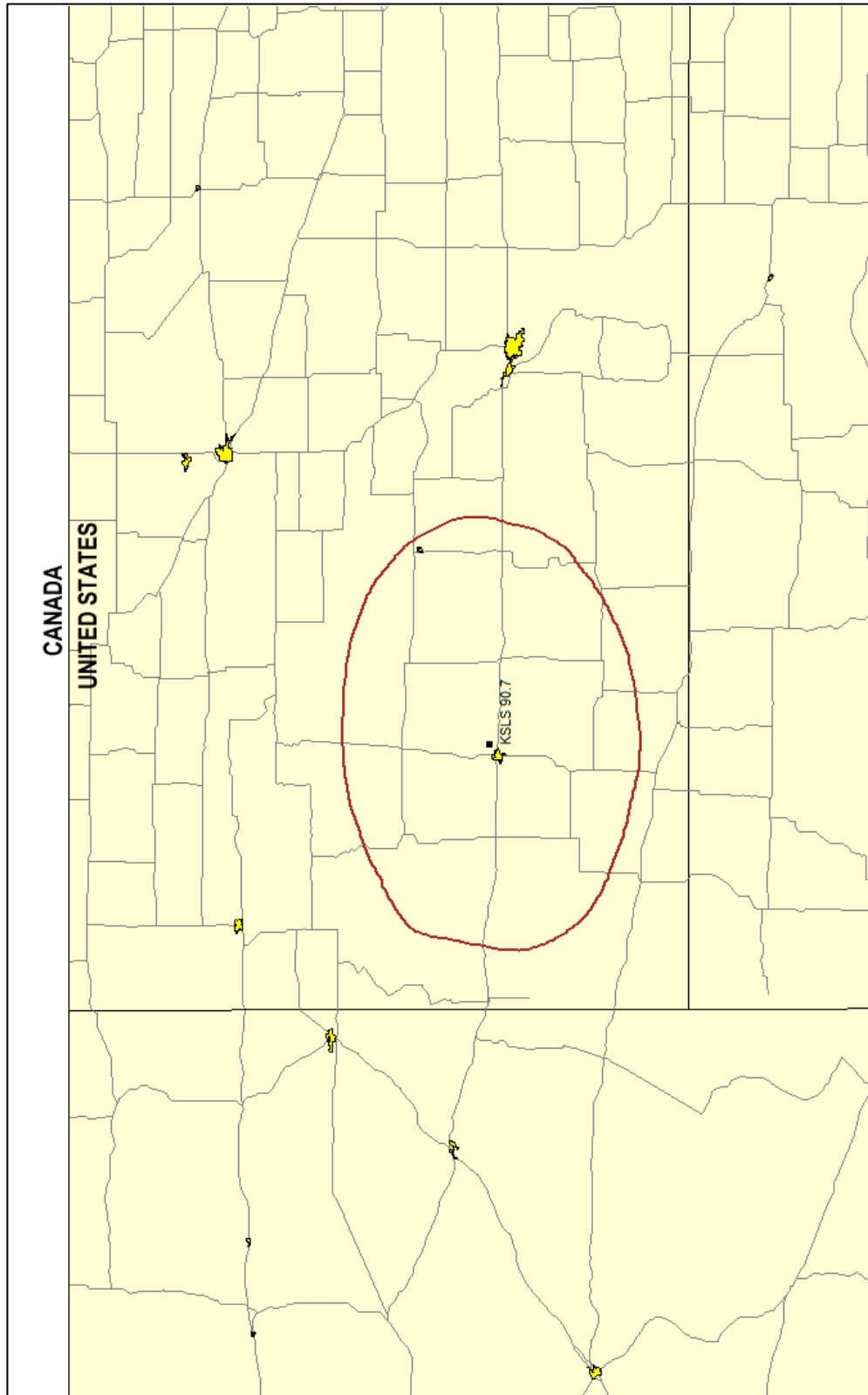


Figure 4. Proposed station 34 dBu interfering contour. The 34 dBu contour does not reach into Canada.