

***COMPREHENSIVE TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT***

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**WEAZ-LD – BATON ROUGE, LOUISIANA  
FACILITY ID: 190207**

**DIGITAL NETWORKS–SOUTHEAST, LLC**

**FEBRUARY 2021**

## **APPLICATION FOR CONSTRUCTION PERMIT**

The following engineering statement and attached exhibits have been prepared for **Digital Networks-Southeast, LLC** ("Southeast"), licensee of digital low power television station WEAZ-LD at Baton Rouge, Louisiana, and are in support of their application for construction permit.<sup>1</sup> This application proposes a relocation of the licensed facility.

WEAZ-LD is licensed to operate on television channel 26 as a digital low-power television facility. The station is authorized to operate with a maximum effective radiated power of 2 kW at a center of radiation of 98.6 meters above mean sea level, 30 meters above ground, using a composite directional antenna. The proposed center of radiation is 53.2 meters above mean sea level, which corresponds to 30.0 meters above ground level, or 26.6 meters above average terrain. The composite directional antenna proposed for use by the facility consists of two Kathrein-Scala PR-TV antennas with equal power division between them. One of the antennas in the array would be oriented at 60 degrees true, while the other would be oriented at 270 degrees true. The proposed maximum ERP for WEAZ-LD is 1.70 kW.

The proposed relocation of the facility would be consistent with the provisions of Section 73.3572 of the Commission's Rules. Exhibit E-1 illustrates the predicted 51 dBu F(50,90) service contour from the licensed WEAZ-LD facility, as well as the corresponding contour from the proposed facility. As this map demonstrates, the respective service contours overlap each other. Additionally, the two sites are located fewer than thirty miles apart.

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<sup>1</sup> The Facility ID for WEAZ-LD at Baton Rouge, Louisiana is 190207.

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The proposed technical parameters would not result in interference to other proposed, authorized, or licensed facilities in excess of that permitted under the Commission's Rules. Exhibit E-2 provides tabular output from *TVStudy*. This study demonstrates that the proposed technical parameters would not result in impermissible interference, and that no interference check failures exist.

The proposed facility would not constitute a significant environmental impact, and is exempt from environmental processing. The proposed antenna would be mounted to an existing tower that does not require registration with the Commission. The addition of the antenna to this tower would not increase the existing environmental impact already present from the tower.

Using the equations in Supplement A of *OET Bulletin 65*, the calculated worst-case power density at ground level assuming a downward radiation relative field of 0.3 is  $6.52 \mu\text{W}/\text{cm}^2$ . This value is less than the upper limit of the uncontrolled environment condition upper limit. There are no other broadcast facilities authorized to use the proposed tower.

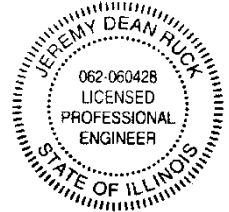
Southeast certifies it will coordinate with all other users of the site to ensure that workers and other personnel are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

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The preceding statement and attached exhibits have been prepared by me, or under my direction, and are true and accurate to the best of my belief and knowledge.



Above signature is digitized copy of actual signature  
License Expires November 30, 2021

Jeremy D. Ruck, PE  
February 6, 2021

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2.6.2021

**WEAZ-LD**

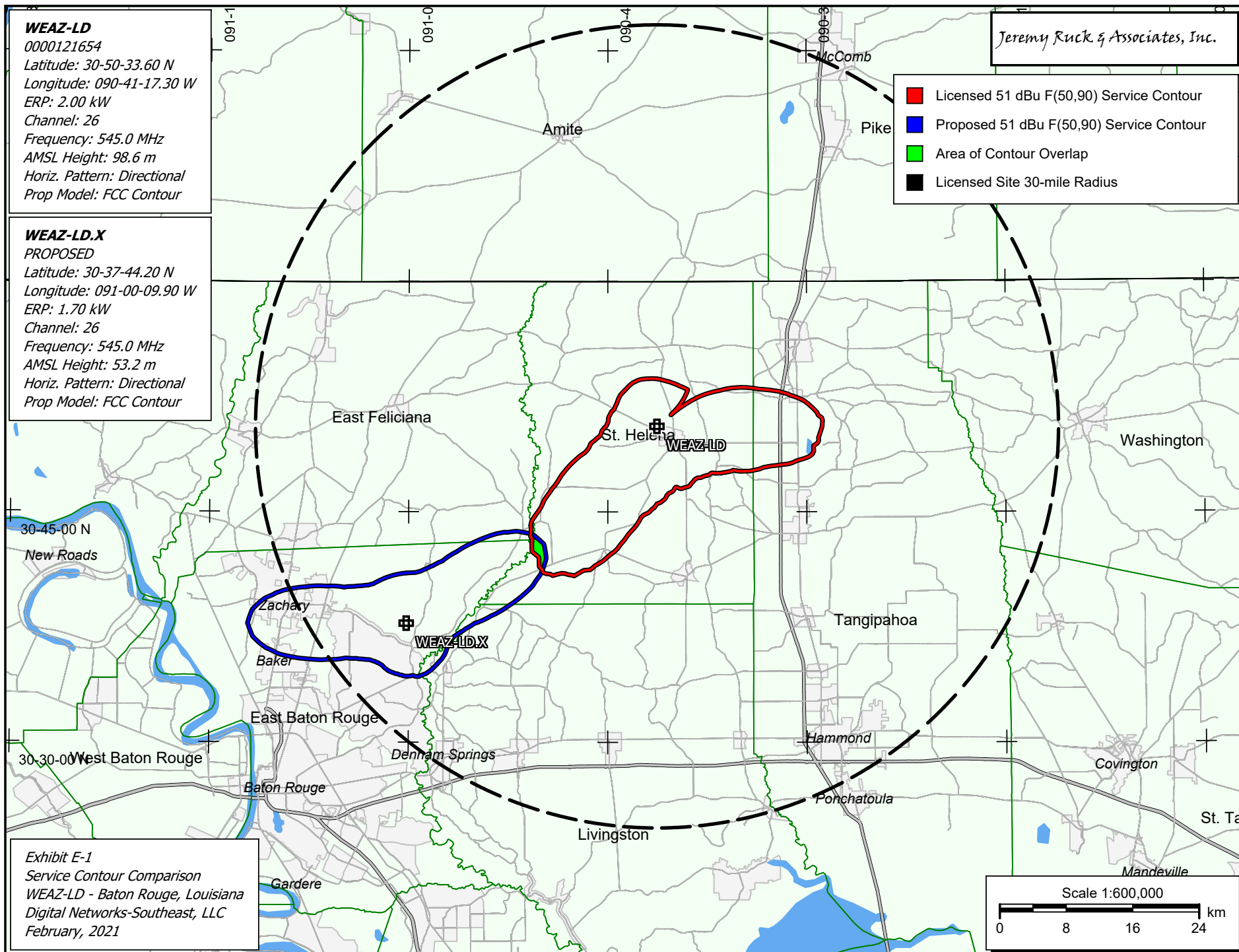
0000121654  
Latitude: 30-50-33.60 N  
Longitude: 090-41-17.30 W  
ERP: 2.00 kW  
Channel: 26  
Frequency: 545.0 MHz  
AMSL Height: 98.6 m  
Horiz. Pattern: Directional  
Prop Model: FCC Contour

**WEAZ-LD.X**

PROPOSED  
Latitude: 30-37-44.20 N  
Longitude: 091-00-09.90 W  
ERP: 1.70 kW  
Channel: 26  
Frequency: 545.0 MHz  
AMSL Height: 53.2 m  
Horiz. Pattern: Directional  
Prop Model: FCC Contour

Jeremy Ruck & Associates, Inc.

- Licensed 51 dBu F(50,90) Service Contour
- Proposed 51 dBu F(50,90) Service Contour
- Area of Contour Overlap
- Licensed Site 30-mile Radius

**Exhibit E-1**

Service Contour Comparison  
WEAZ-LD - Baton Rouge, Louisiana  
Digital Networks-Southeast, LLC  
February, 2021

## Exhibit E-2 - TVStudy Interference Study

tvstudy v2.2.5 (4uoc83)

Database: 127.0.0.1, Study: WEAZ-LD CH 26 ASRN 1034996 53.2 m AMSL 1.7 kW ERP PR-TV x2 1@60 1@270, Model: Longley-Rice  
Start: 2021.02.06 11:59:42

Study created: 2021.02.06 11:59:42

Study build station data: LMS TV 2021-01-30

Proposal: WEAZ-LD D26 LD LIC Baton rouge, LA  
File number: BLANK0000121654  
Facility ID: 190207  
Station data: User record  
Record ID: 285  
Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WSTY-LP	N23-	TX	LIC	HAMMOND, LA	BLTTTL19990104JE	50.5 km
No	K33MP-D	D25	LD	CP	ALEXANDRIA, LA	BLANK0000054048	149.6
No	WLPB-TV	D25	DT	CP	BATON ROUGE, LA	BLANK0000035855	34.4
No	WLPB-TV	D25	DT	LIC	BATON ROUGE, LA	BLEDT20101201ALR	34.4
No	WXXV-TV	D25	DT	LIC	GULFPORT, MS	BLANK0000090276	186.3
No	WEDS-LD	D26	LD	LIC	MOBILE, AL	BLANK0000080841	304.2
No	W26FC-D	D26	LD	CP	TUSCALOOSA, AL	BLANK0000071985	397.5
No	KBCA	D26	DT	LIC	ALEXANDRIA, LA	BLANK0000078715	157.9
No	WGNO	D26	DT	LIC	NEW ORLEANS, LA	BLCDT20121019AAK	125.5
No	W26BB	N26+	TX	LIC	VICKSBURG, MS	BLTTTL19940527JF	193.0
No	W26BB	D26	LD	CP	VICKSBURG, MS	BDFCDTL20090818ABI	193.1
No	KRIV	D26	DT	CP	HOUSTON, TX	BLANK0000035805	447.4
No	KRIV	D26	DT	LIC	HOUSTON, TX	BLCDT20111212AHM	447.4
No	KULC-LD	D26	LD	CP	PORT ARTHUR, TX	BLANK0000074302	295.8
No	KTAL-TV	D26	DT	LIC	TEXARKANA, TX	BLANK0000073076	380.0
No	KWCE-LP	N27-	TX	LIC	ALEXANDRIA, LA	BLTTTL20060714ACI	153.3
No	K27NB-D	D27	LD	LIC	BATON ROUGE, LA	BLANK0000103489	42.7
No	WWL-TV	D27	DT	LIC	NEW ORLEANS, LA	BLANK0000109373	122.5
No	W42CW	D27z	LD	CP	HATTIESBURG, MS	BLANK0000054571	172.9
No	W06DD	N30z	TX	LIC	NATCHEZ, MS	BLTTTL20060103ABY	112.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D26  
Mask: Full Service  
Latitude: 30 37 44.20 N (NAD83)  
Longitude: 91 0 9.90 W  
Height AMSL: 53.2 m  
HAAT: 26.6 m  
Peak ERP: 1.70 kW  
Antenna: SCA PR-TV x2 Array 1@60 1@270 0.0 deg  
Elev Pattern: Generic

50.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.016 kW	13.5 m	6.4 km
45.0	0.696	19.1	16.2
90.0	0.058	28.4	8.8
135.0	0.013	34.5	6.4
180.0	0.014	36.6	6.7
225.0	0.015	33.1	6.6
270.0	1.70	28.1	20.4
315.0	0.021	19.1	6.9

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## Exhibit E-2 - TVStudy Interference Study

Distance to Canadian border: 1435.5 km

Distance to Mexican border: 776.5 km

Conditions at FCC monitoring station: Powder Springs GA  
Bearing: 57.0 degrees Distance: 690.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 313.3 degrees Distance: 1661.8 km

Study cell size: 1.00 km  
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

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### Interference to proposal scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WEAZ-LD	D26	LD	LIC	Baton rouge, LA	BLANK0000121654	
Undesireds:	WLPB-TV	D25	DT	CP	BATON ROUGE, LA	BLANK0000035855	34.4 km
	W26BB	N26+	TX	LIC	VICKSBURG, MS	BLTTL19940527JF	193.0
	Service area			Terrain-limited		IX-free	Percent IX
	369.0	28,784		369.0	28,784	355.1	28,641 3.78 0.50
Undesired				Total IX		Unique IX	Prct Unique IX
WLPB-TV D25 DT CP				14.0	143	14.0	143 3.78 0.50

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### Interference to proposal scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	WEAZ-LD	D26	LD	LIC	Baton rouge, LA	BLANK0000121654	
Undesireds:	W26BB	N26+	TX	LIC	VICKSBURG, MS	BLTTL19940527JF	193.0 km
	Service area			Terrain-limited		IX-free	Percent IX
	369.0	28,784		369.0	28,784	369.0	28,784 0.00 0.00

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