

TECHNICAL STATEMENT
IN SUPPORT OF REQUEST FOR WAIVER AND
EXTENSION OF REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)
APPLICATION FOR CONSTRUCTION PERMIT
LOW POWER STATION KCSO-LD
SACRAMENTO, CALIFORNIA
CHANNEL 3 3 KW (MAX-DA) 447 M AMSL
CHANNEL 3 5 KW (MAX-DA) 447 M AMSL (STA)

The applicant proposes a relocation of its licensed low power television facility, KCSO-LD, Sacramento, California, from its current location on a mountain peak near San Andreas, California to the Walnut Grove, California broadcast antenna farm. It is respectfully requested to extend its authorization for operation with a maximum effective radiated power of 5 kW pursuant to Special Temporary Authority (STA) at the new transmitter site.

ixa

Waiver of Section 74.787(b)(iii)

The proposed relocation amounts to a move of 69.5 km (43.2 miles) from the licensed KCSO-LD transmitter site at San Andreas. Because this exceeds the 30-mile (48-km) maximum distance requirement for a ‘minor change’ application, a request for waiver of Section 74.787(b)(iii) of the FCC Rules is requested.

The request for waiver is necessitated by several critical factors that make it a practical impossibility to fulfill the 30-mile ‘minor change’ requirement and maintain coverage of its city of license of Sacramento and to the other areas that rely on service from KCSO-LD.

It is noted that the instant proposal is compliant with Sections 74.787(b)(i) (no change in frequency/output channel) and 74.787(b)(ii) (contour overlap with existing licensed facility).

The attached map identified as Figure 1 shows the predicted 43 dBu f(50,90) coverage contours of the licensed and proposed facilities for KCSO-LD. As indicated therein there is more than 50% overlap of the area within the predicted coverage contours of the respective facilities in compliance with Section 74.787(b)(ii) of the FCC Rules.

No Usable Antenna Structures

In support of the request for waiver, it is demonstrated herein that there are no registered antenna structures exceeding 61 m (200 ft) in height anywhere within 30 miles of the KCSO-LD licensed transmitter site at San Andreas in the direction of Sacramento. The attached Figure 1 shows that more than a 90-degree quadrant of the 30-mile circular area from KCSO-LD, including the entire range of angles toward Sacramento, is completely devoid of antenna structures exceeding 61 m in height. This area is highlighted in yellow on the map.

A complete list of antenna structures located within 30 miles of the KCSO-LD licensed facility is attached hereto as Figure 2. There are a total of 62 locations identified, with AM broadcast sites consolidated into single locations. Of these 62, only 13 locations have structures exceeding 61 m in height above ground.

There are a number of broadcast facility records in the FCC Engineering Database located within 30 miles of the KCSO-LD transmitter site at San Andreas. However, none of these facilities have tower structures greater than 61 m and fall within the arc of angles toward Sacramento. Of the two that have structure heights greater than 61 m (KQOD/FM and KWIN/FM), these facilities are off-angle and too far away to

provide 43 dBu f(50,90) service of Sacramento even if it would be possible to utilize the structures with 5 kW maximum ERP. See Figure 3.

Walnut Grove Antenna Farm

The purpose of the proposal is to move KCSO-LD to the main DTV transmitter site ‘*antenna farm*’ for the Sacramento market. As has been documented in prior filings, the KCSO-LD has been at a coverage disadvantage in the Sacramento market due to the severe noise issues and coverage issues related to digital operations on low-band VHF Channel 3. KCSO-LD previously documented 565 view complaints about its coverage from the Sacramento, Stockton and Modesto areas.*

The FCC authorized KCSO-LD a Special Temporary Authority (STA) to increase its maximum ERP to 5 kW in order to help overcome the reception difficulties on Channel 3. KCSO-LD requests that this STA be extended to it as part of a comprehensive solution to its coverage problem that involves the relocation to the Sacramento DTV antenna farm at Walnut Grove.

A study was conducted of all DTV stations in the Sacramento DMA. See attached tabulation at Figure 4. There are a total of 11 stations that fall into that category. Of these 11 stations, 10 provide over-the-air (OTA) service to the Sacramento metro area itself. Of these 10, 9 are located at the Walnut Grove antenna farm and one (KUVS-DT) is located at the San Andreas site. See attached map at Figure 5.

In the case of KCSO-LD, significant advantages accrue from being collocated at the Walnut Grove antenna farm with 9 out of 10 of the DTV stations in the Sacramento market. Most importantly KCSO-LD will be located at the location for optimum viewing of all of the major network stations in the Sacramento market with the exception of only KUVS-DT (Univision).

* See FCC File No. BPDVL-20101102ABA, Exhibit 1, ‘Attachment in Support of Requested Waiver’

Reception Improvements

By relocating to the Walnut Grove antenna farm, KCSO-LD will instantly gain an improvement in receive antenna performance for all viewers with antennas directed at the Walnut Grove antenna farm. This is likely to be a high percentage of the viewers in the Sacramento market. According to the FCC Office of Engineering and Technology Bulletin No. 69, the discrimination factor for DTV receiving antennas is given by the fourth power of the cosine of the discrimination angle, not to exceed the front-to-back ratio, which in the case of low-band VHF is 10 dB.

As indicated in Figure 6, the majority of viewers will see a receive antenna discrimination angle improvement of between 57° and 102° due to the relocation to the Walnut Grove antenna farm. The resulting discrimination factor improvement will be an estimated 10 dB due to this pointing angle advantage. This is a very significant improvement for viewers of KCSO-LD, which coupled with the extension of the STA for 5 kW ERP operation, provides a more comprehensive solution to KCSO-LD's low-band VHF coverage and reception issues in the Sacramento market.

Coverage Improvement in Sacramento

The licensed KCSO-LD transmitter site is located approximately 80 km from Sacramento. The instant proposal will place the KCSO-LD transmitter site only approximately 35 km from Sacramento. As evident in Figure 1, the predicted 43 dBu f(50,90) service contour for the proposed KCSO-LD facility will fully encompass the Sacramento city limits as a result of the move to Walnut Grove. This is an improvement over the current situation wherein the KCSO-LD predicted 43 dBu f(50,90) service contour fall over 5 km short of coverage of the Sacramento city limits.

Reduction in Predicted Interference

It is demonstrated in the Interference Analysis report contained in the instant application that the KCSO-LD proposal is compliant with the FCC's *de minimis* interference protection requirements with respect to all facilities with the exception of the K03HY-D, San Francisco, CA, licensed facility (FCC File No. BLDVL-20140609AAP). There is an interference consent agreement with the licensee of K03HY-D, which is included in the instant application.

In addition, it is demonstrated in the Interference Analysis report that the current level of predicted interference with respect to station K03HY-D of 6.7% will be reduced to 5.2% as a result of the instant proposal – a 1.5% reduction in predicted interference to the K03HY-D licensed facility.

Conclusion

Based on the foregoing, it is concluded that the relocation of KCSO-LD to the Walnut Grove antenna farm, in conjunction with extension of the STA for operation with 5 kW ERP, would be the best possible comprehensive strategy toward addressing the low-band VHF coverage issues of KCSO-LD in the Sacramento market.

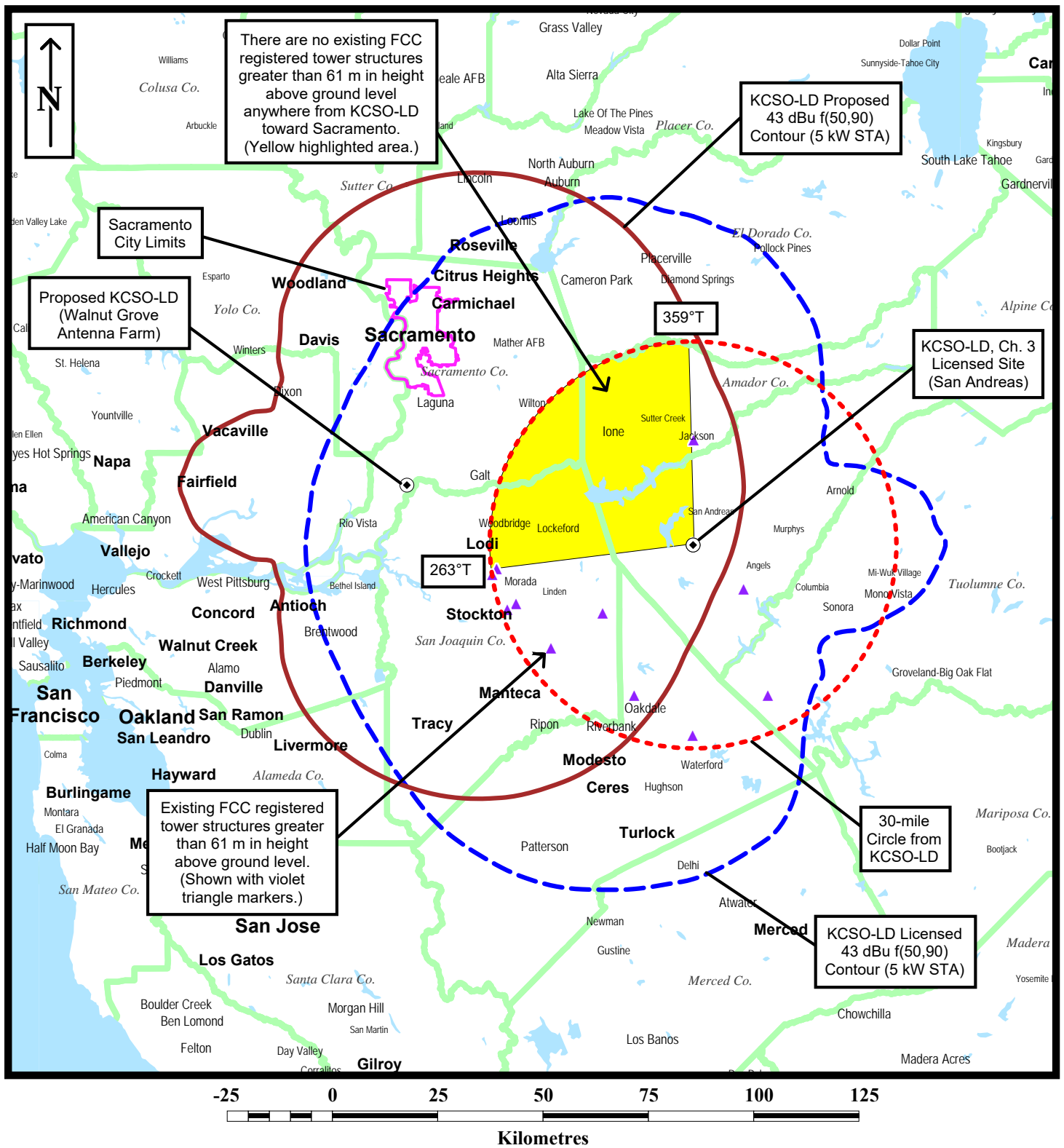


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April 5, 2016

Figure 1



PREDICTED COVERAGE CONTOURS AND TOWER ANALYSIS

FCC REGISTERED ANTENNA STRUCTURES WITHIN 30-MILES
OF KCSO-LD LICENSED FACILITY AT SAN ANDREAS

Location No.	ASRN	City in CA	Height of Structure (m)	Ground Elevation (m AMSL)	Overall Height (m)	Structure Type	Date of Construction	Lat Deg	Lat Min	Lat Sec	Lon Deg	Lon Min	Lon Sec
1	1013442	COLUMBIA	3.7	646.2	6.1	BANT	06/22/1992	38	2	13	120	24	38
2	1020745	SUTTER CREEK	5	518	21	B	05/30/1989	38	22	52	120	47	18
3	1013443	COLUMBIA	6.7	646.2	10.7	BANT	06/22/1992	38	2	10	120	24	38
4	1236516	Jackson	8.4	506.7	16.2	TOWER	04/01/1993	38	22	24.1	120	47	55.8
5	1273707	San Andreas	8.5	401.4	8.5	POLE	02/10/2011	38	8	47.8	120	38	48.3
6	1275685	Valley Springs	9	231	9	TOWER	08/16/2010	38	9	16.2	120	48	52.6
7	1275670	Valley Springs	12	166	12	TOWER	08/16/2010	38	9	3.1	120	48	59.7
8	1014449	SONORA	12.2	673.6	12.2	POLE	03/03/1993	37	59	25	120	22	31
9	1261521	SONORA	12.8	748.3	13.1	MAST	05/08/2008	37	58	47.9	120	24	10.8
10	1241501	San Andreas	14.3	400.8	15.8	POLE	01/09/2004	38	8	44.1	120	38	43.8
11	1275686	Del Rio	15	22	15	TOWER	08/20/2010	37	45	14.7	121	0	39.9
12	1016004	FARMINGTON	15.2	29	15.2	TOWER	01/01/1961	37	54	50	121	2	13
13	1234467	Jackson	15.2	505.8	16.6	TOWER	10/01/1993	38	22	20	120	47	52.1
14	1277477	Valley Springs	18	846	18	TOWER	12/10/2010	38	13	47.3	120	36	50.8
15	1051044	SONORA	18.3	746.1	25	TOWER	01/01/1992	37	58	47.5	120	24	10.5
16	1014442	COLUMBIA	18.3	1139.3	24.4	TOWER	07/19/1993	38	1	52	120	21	6
17	1256291	Sonora	19.8	669.7	19.8	POLE	12/28/2005	38	0	28.7	120	24	59.5
18	1279369	Sonora	21.6	655.3	22.6	POLE	05/26/2006	37	58	50.8	120	22	2
19	1023625	JACKSON	22.9	502.9	39.3	TOWER	01/01/1960	38	21	42	120	47	13
20	1258302	lone	23.2	92.7	23.2	TOWER	02/19/2007	38	21	52	120	57	58
21	1222964	Jackson	25.8	483.1	26	TOWER	06/02/2000	38	21	6.4	120	47	33.1
22	1244106	Jackson	26.2	498	26.2	TOWER	06/27/2005	38	21	59.4	120	47	32.5
23	1203909	Sonora	28.3	731.5	28.3	TOWER	01/18/2002	37	58	56.7	120	24	5.6
24	1200084	Acampo	29.3	18.9	30.8	POLE	10/21/1999	38	11	16.5	121	15	41
25	1275369	Lodi	29.6	18	31.7	MAST	06/20/2001	38	4	47.8	121	12	6.4
26	1243686	SAN ADREAS	30.5	468.8	33.8	MAST	08/03/2004	38	11	18.6	120	38	41.9
27	1013699	SAN ANDREAS	30.5	329.2	36.6	TOWER	03/22/1990	38	11	32	120	40	15
28	1258322	San Andreas	30.5	313	30.5	TOWER	01/30/2007	38	12	25.4	120	46	4.3
29	1265805	Clements	30.5	41.2	30.5	TOWER	10/27/2008	38	11	32.2	121	5	5.5
30	1204417	Galt	30.8	19.8	34.7	TOWER	12/06/2005	38	12	22.9	121	15	22
31	1225443	Peters	33.5	26.8	36.6	TOWER	03/30/2001	37	57	52.9	121	5	12.3
32	1208406	Oakdale	35.4	47.2	41.5	TOWER	12/14/1999	37	47	39.7	120	54	50.9
33	1051089	LODI	36.3	16.2	41.5	LTOWER	08/27/2001	38	6	43.3	121	15	8.7
34	1222811	Sonora	36.5	735.4	36.5	POLE	06/15/1992	37	58	57.5	120	24	6.4
35	1258308	Eugene	36.6	85.3	39	TOWER	08/02/2007	37	56	44	120	50	35
36	1265090	Lodi	36.6	14.6	36.6	TOWER	09/10/2008	38	8	5.7	121	16	33.8
37	1233589	Riverbank	36.6	43.3	38.1	TOWER	05/17/2001	37	43	51.1	120	56	6
38	1286635	Twain Harte	39.6	1163.4	39.6	LTOWER	01/01/1998	38	1	1.1	120	13	55.1
39	1062235	SONORA	40	1139	45	TOWER	01/01/1992	38	1	54	120	21	4
40	1051042	Acampo	41.8	51.8	44.5	TOWER	01/01/1996	38	14	4.4	121	2	56.8
41	1063405	Valley Springs	42.7	593.7	44.5	TOWER	04/21/1999	38	14	55.2	120	44	50.3
42	1292495	Galt	44.2	22.9	44.2	GTOWER	07/22/2014	38	14	4.9	121	13	34
43	1285407	Herald	44.5	58.2	45.4	LTOWER	09/30/2010	38	21	24.1	121	8	20.1
44	1295645	Stockton	46	10	46	LTOWER	07/02/2015	37	59	23.7	121	14	42.5
45	1279099	OAKDALE	46	57.9	46.6	TOWER	12/05/2005	37	45	20.3	120	50	53.3
46	1015150	LODI	49.7	19.5	50.9	TOWER	11/15/1994	38	8	3.6	121	14	2.6
47	1051049	Sonora	53.6	1139.3	60.3	GTOWER	01/01/1992	38	1	50.9	120	21	6.7

FCC REGISTERED ANTENNA STRUCTURES WITHIN 30-MILES
OF KCSO-LD LICENSED FACILITY AT SAN ANDREAS

Location No.	ASRN	City in CA	Height of Structure (m)	Ground Elevation (m AMSL)	Overall Height (m)	Structure Type	Date of Construction	Lat Deg	Lat Min	Lat Sec	Lon Deg	Lon Min	Lon Sec
48	1205700	Sonora	54.9	1018	54.9	TOWER	01/01/1994	38	0	30	120	21	47.9
49	1231097	Lockeford	54.9	29.9	57.9	TOWER	12/28/2001	38	14	1	121	10	33
50	1014924	STOCKTON	61.6	10.1	62.5	3TA1	01/01/1947	37	58	56	121	13	46
	1014925	STOCKTON	61.6	10.1	62.5	3TA2	01/01/1947	37	58	55	121	13	48
	1014926	STOCKTON	61.6	10.1	62.5	3TA3	01/01/1947	37	58	55	121	13	51
51	1014798	FARMINGTON	68.6	51.8	74.6	TOWER	10/01/1972	37	58	27	120	58	12
52	1014628	ANGELS CAMP	73.2	867.7	79.2	TOWER	10/16/2001	38	1	12.6	120	35	8.8
53	1026312	Stockton	76.2	20.7	79.2	TOWER	01/01/1997	37	53	55.4	121	6	36.1
54	1210448	Lodi	86.3	10.7	87.8	TOWER	12/03/2005	38	3	30.9	121	16	11.8
55	1015979	WATERFORD	87	55.7	89.3	5TA1	02/23/1997	37	42	35	120	43	33
	1015980	WATERFORD	87	56.7	89.3	5TA2	02/23/1997	37	42	35	120	43	36
	1015981	WATERFORD	87	57.6	89.3	5TA3	02/23/1997	37	42	34	120	43	39
	1015982	WATERFORD	87	57.7	89.3	5TA4	02/23/1997	37	42	33	120	43	42
	1015983	WATERFORD	87	56.9	89.3	5TA5	01/01/1985	37	42	32	120	43	40
56	1012846	OAKDALE	89.8	52.2	90.8	3TA1	01/01/1987	37	47	50	120	53	9
	1012847	OAKDALE	89.8	52.2	90.8	3TA2	01/01/1987	37	47	51	120	53	5
	1012848	OAKDALE	89.8	52.2	90.8	3TA3	01/01/1987	37	47	53	120	53	1
57	1014627	JACKSON	99.1	703.5	103	LTOWER	01/01/1973	38	20	23.8	120	43	16.6
58	1047885	SAN ANDREAS	104.5	837.6	105.5	TOWER	04/26/2011	38	7	7	120	43	31
59	1258633	Lodi	105.5	12.8	106.4	TOWER	04/04/2008	38	4	16.6	121	15	29.2
60	1036021	STOCKTON	109.7	14.3	110.6	TOWER	07/21/2010	37	59	47.5	121	12	19.7
61	1038488	JAMESTOWN	122.3	317	123	TOWER	03/01/1985	37	47	34	120	31	12
62	1050375	Altaville	125	834.5	126.5	GTOWER	09/02/1998	38	7	9.7	120	43	30.9

LICENSED BROADCAST RECORDS WITHIN 30 MILES

Site Study

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida



Latitude: 038-07-10

Distance: 48.28 km

Longitude: 120-43-27

AM Stations

Rec. Type	Callsign	Freq. (kHz)	City	State	Co.	Latitude	Longitude	Hours	Ant. Mode	Status	Power (kW)	RMS (mV/m)	Dist. (km)	Bear. (deg)
C	KVML	1450	SONORA	CA	US	038-00-30	120-21-44	U	ND1	L	0.94	304	34.1	111.2 (wrong direction)
C	KMPH	840	MODESTO	CA	US	037-42-34	120-43-34	D	DA2	L	5	731.4	45.5	180.2 (wrong direction)
C	KMPH	840	MODESTO	CA	US	037-42-34	120-43-34	N	DA2	L	5	781.5	45.5	180.2 (wrong direction)
C	KCBC	770	MANTECA	CA	US	037-47-51	120-53-01	D	DA2	L	50	2341.6	38.4	201.4 (wrong direction)
C	KCBC	770	MANTECA	CA	US	037-47-51	120-53-01	N	DA2	L	4.1	695.85	38.4	201.4 (wrong direction)
C	KWSX	1280	STOCKTON	CA	US	037-58-55	121-13-44	N	DAN	L	1	382.46	46.9	251.1 (wrong direction)
C	KWSX	1280	STOCKTON	CA	US	037-58-58	121-13-46	D	DAN	L	1	308.99	46.9	251.2 (wrong direction)
C	KCVR	1570	LODI	CA	US	038-05-10	121-12-57	D	DA2	L	5	705.57	43.3	265.2 (48 m tower)
C	KCVR	1570	LODI	CA	US	038-05-10	121-12-57	N	DA2	L	0.5	225.23	43.3	265.2 (48 m tower)
C	KVGC	1340	JACKSON	CA	US	038-21-21	120-46-08	D	ND2	L	0.44	287.5	26.5	351.6 (26 m tower)
C	KVGC	1340	JACKSON	CA	US	038-21-21	120-46-08	N	ND2	L	0.25	287.5	26.5	351.6 (26 m tower)

FM Stations

Rec. Type	Callsign	Ch.	Serv.	Cls.	City	State	Latitude	Longitude	Status	HAAT (m)	ERP (kW)	RCAMSL (m)	Dist. (km)	Bear. (deg)
C	KGRB	232	FS	B1	JACKSON	CA	038-20-24	120-43-13	LIC	332.6	0.8	804.4	24.5	0.8 (wrong direction)
C	KGRB	232	FM	B1	JACKSON	CA	038-24-10	120-39-15	LIC	241	4.3	893	32	11 (wrong direction)
C	K210EV	210	FX	D	PINE GROVE	CA	038-24-57	120-35-20	LIC	212.2	0.01	996	35	19.7 (wrong direction)
C	K283AY	283	FX	D	WEST POINT	CA	038-25-45	120-33-25	LIC	172.5	0.13	1049	37.4	22.9 (wrong direction)
C	KQBM-LP	279	FL	L1	WEST POINT	CA	038-23-57	120-31-39	LIC	-22	0.1	862	35.5	28.8 (wrong direction)
C	K289AJ	289	FX	D	WEST POINT	CA	038-18-07	120-19-08	LIC	380.2	0.25	1674	40.9	60.1 (wrong direction)
C	K294AW	294	FX	D	ARNOLD	CA	038-18-07	120-19-08	LIC	382.2	0.14	1676	40.9	60.1 (wrong direction)
C	K234AL	234	FX	D	BELLEVUE	CA	038-03-49	120-14-47	LIC	498.7	0.01	1532	42.4	98.3 (wrong direction)
C	K251BI	251	FX	D	BELLEVUE	CA	038-03-49	120-14-47	LIC		0.01	1523	42.4	98.3 (wrong direction)
C	KXSR	219	FS	B	GROVELAND	CA	038-03-49	120-14-47	LIC	501	3.4	1537	42.4	98.3 (wrong direction)
C	KXSR	219	FM	B	GROVELAND	CA	038-03-46	120-14-45	LIC	485	4	1543	42.4	98.4 (wrong direction)
C	KCVR-FM	255	FM	A	COLUMBIA	CA	038-02-15	120-22-05	LIC	100	6	818	32.5	106.2 (wrong direction)
C	KZSQ-FM	224	FS	A	SONORA	CA	038-00-30	120-21-44	LIC	373.4	0.39	1055	34.1	111.2 (wrong direction)
C	KZSQ-FM	224	FM	A	SONORA	CA	038-00-30	120-21-44	LIC	393	0.38	1072	34.1	111.2 (wrong direction)
C	KKBN	228	FM	A	TWAIN HARTE	CA	038-00-30	120-21-44	LIC	384.7	0.4	1066	34.1	111.2 (wrong direction)
C	KKBN	228	FS	A	TWAIN HARTE	CA	038-00-30	120-21-44	LIC	373.4	0.4	1055	34.1	111.2 (wrong direction)
C	K264BP	264	FX	D	WEST SONORA	CA	038-00-30	120-21-45	LIC		0.01	1021	34.1	111.2 (wrong direction)
C	K296FO	296	FX	D	SONORA	CA	037-58-58	120-24-03	LIC	178.4	0.2	749.8	32.2	118.1 (wrong direction)

Site Study

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida



Latitude: 038-07-10 **Distance:** 48.28 km

Longitude: 120-43-27

FM Stations

Rec. Type	Callsign	Ch.	Serv.	Cls.	City	State	Latitude	Longitude	Status	HAAT (m)	ERP (kW)	RCAMSL (m)	Dist. (km)	Bear. (deg)
C	KQBM	214	FM	A	SAN ANDREAS	CA	038-01-23	120-35-26	LIC	475	0.1	873	15.9	132.5
C	KLRS	207	FM	B1	SAN ANDREAS	CA	038-07-10	120-43-27	LIC	587	0.45	945	0	141.8
C	KHOP	236	FM	B	OAKDALE	CA	037-47-34	120-31-08	LIC	193	29.5	433	40.5	153.6
C	KRVR	288	FM	A	COPPEROPOLIS	CA	037-56-55	120-42-16	LIC	238	1	489	19	174.8
C	KQOD	261	FM	A	STOCKTON	CA	037-59-47.8	121-12-15.9	LIC	100	6	115	44.3	252.2 *
C	KWIN	249	FM	A	LODI	CA	038-04-17	121-15-25	LIC	100	6	112	47	263.6 *
C	KWIN	249	FS	A	LODI	CA	038-04-17	121-15-25	LIC	76	6	88	47	263.6
C	KSTG-LP	268	FL	L1	LODI	CA	038-07-08	121-15-39	LIC	28.08	0.1	42	47.1	270.1
													(27 m structure)	

TV Stations

Rec. Type	Callsign	Ch.	Srv.	City	State	DA	Latitude	Longitude	Status	HAAT (m)	ERP (kW)	RCAMSL (m)	Dist. (km)	Bear. (deg)
C	KMMW-LD	28	LD	STOCKTON	CA	C	038-07-10	120-43-27	LIC		15	910.2	0	141.8
													(San Andreas site)	
C	KCSO-LD	3	LD	SACRAMENTO	CA	C	038-07-10	120-43-27	LIC		3	948.5	0	141.8
													(San Andreas site)	
C	KUVS-DT	18	DT	MODESTO	CA	D	038-07-07	120-43-27	LIC	555	500	911	0.1	180
													(San Andreas site)	

Notes:

* Even if the KQOD or KWIN transmitter sites could be employed, coverage of Sacramento with a 43 dBu f(50,90) contour would not be possible assuming a maximum ERP of 5 kW.

TV Inquiry

DTV Stations in Sacramento DMA

du Treil, Lundin, & Rackley, Inc., Sarasota, Florida

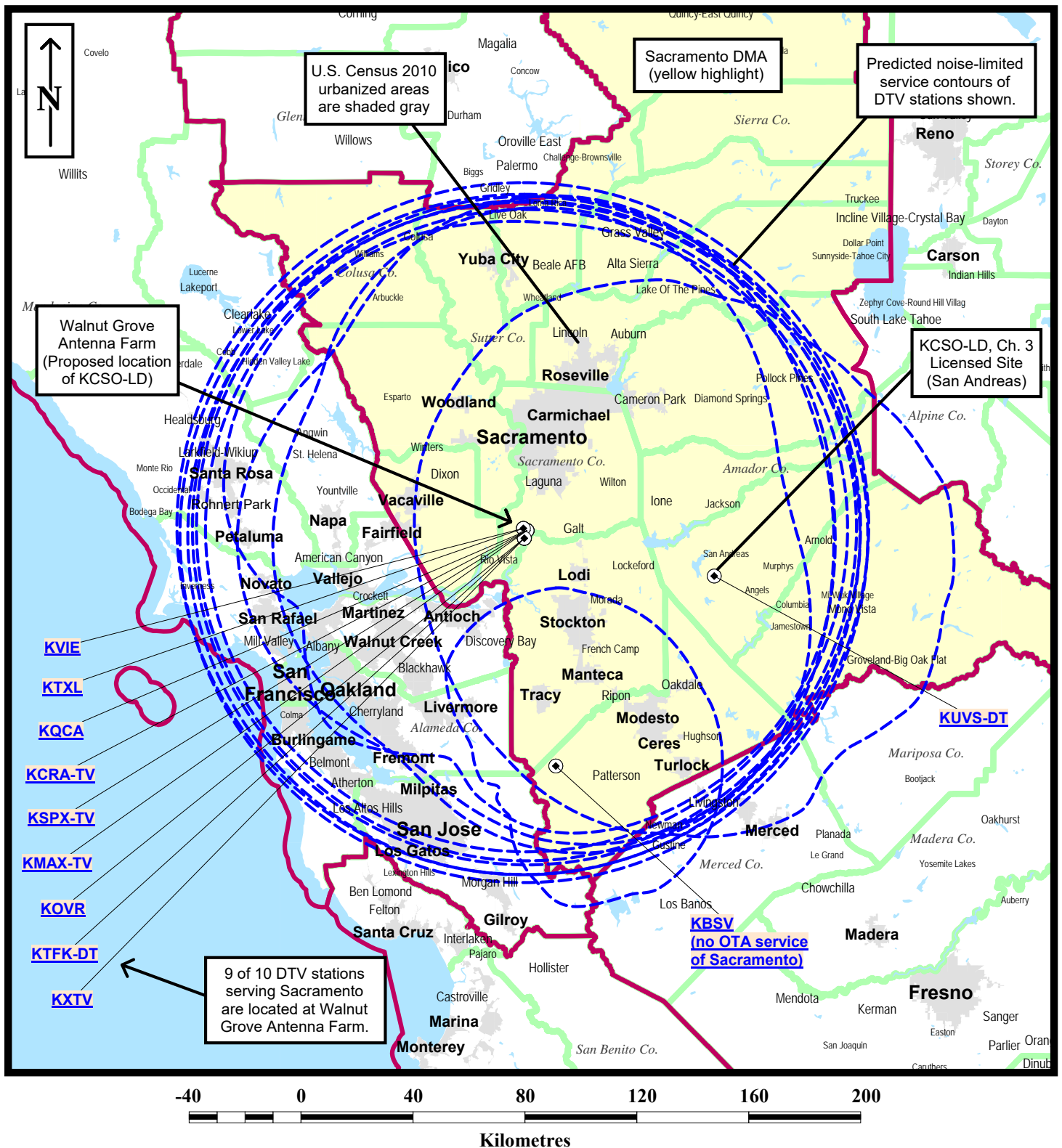


Listed stations are within 150 km of the point at 038-34-54 121-29-36.

<i>Callsign</i>	<i>Chan.</i>	<i>Off.</i>	<i>Zone</i>	<i>Service</i>	<i>Status</i>	<i>City</i>		<i>State</i>	<i>Latitude</i>	<i>Longitude</i>	<i>Distance (km)</i>	
<i>ARN</i>			<i>DA</i>	<i>Ant. ID</i>	<i>Rotation</i>	<i>ERP (kW)</i>	<i>HAAT (m)</i>	<i>RCAMSL (m)</i>	<i>Rec. Type</i>	<i>Facility ID</i>	<i>Bearing (deg)</i>	
KVIE	9		2	DT	LIC	SACRAMENTO		CA	038-16-18	121-30-18	34.43	Transmitter at Walnut Grove
BMLEDT-20100913ABV			N	86569		33	596.8	597.9	C	35855	181.69	
KXTV	10		2	DT	LIC	SACRAMENTO		CA	038-14-24	121-30-03	37.93	Transmitter at Walnut Grove
BLCDDT-20120201AAM			N	107623		28.6	611.9	613	C	25048	180.99	
KBSV	15		2	DT	LIC	CERES		CA	037-30-28	121-22-20.2	119.67	No OTA service of Sacramento
BLEDT-20090213AAZ			D	89659	66	0.421	575.6	1005.2	C	4939	174.89	
KUVS-DT	18		2	DT	LIC	MODESTO		CA	038-07-07	120-43-27	84.63	Transmitter at San Andreas
BLCDDT-20020906ABH			D	36726	0	500	555	911	C	58609	127.27	
KMAX-TV	21		2	DT	LIC	SACRAMENTO		CA	038-15-54	121-29-24	35.15	Transmitter at Walnut Grove
BLCDDT-20041018ABT			N	65705		850	581.2	582.8	C	51499	179.53	
KOVR	25		2	DT	LIC	STOCKTON		CA	038-14-24	121-30-03	37.93	Transmitter at Walnut Grove
BLCDDT-20110922ABJ			N	105853		1000	593	594	C	56550	180.99	
KTFK-DT	26		2	DT	LIC	STOCKTON		CA	038-14-24	121-30-03	37.93	Transmitter at Walnut Grove
BLCDDT-20110819ABS			D	87069	77	850	595	597	C	20871	180.99	
KCRA-TV	35		2	DT	LIC	SACRAMENTO		CA	038-15-54	121-29-24	35.15	Transmitter at Walnut Grove
BMLCDDT-20110630AGB			N	65705		1000	579	581	C	33875	179.53	
KTXL	40		2	DT	LIC	SACRAMENTO		CA	038-16-18	121-30-18	34.43	Transmitter at Walnut Grove
BLCDDT-20090918ABS			D	85579	0	1000	601	602	C	10205	181.69	
KQCA	46		2	DT	LIC	STOCKTON		CA	038-15-54	121-29-24	35.15	Transmitter at Walnut Grove
BLCDDT-20060623AAM			N	65705		600	580	583	C	10242	179.53	
KSPX-TV	48		2	DT	LIC	SACRAMENTO		CA	038-15-54	121-29-24	35.15	Transmitter at Walnut Grove
BLCDDT-20050110ABB			D	44981	0	1000	489	490.4	C	52953	179.53	

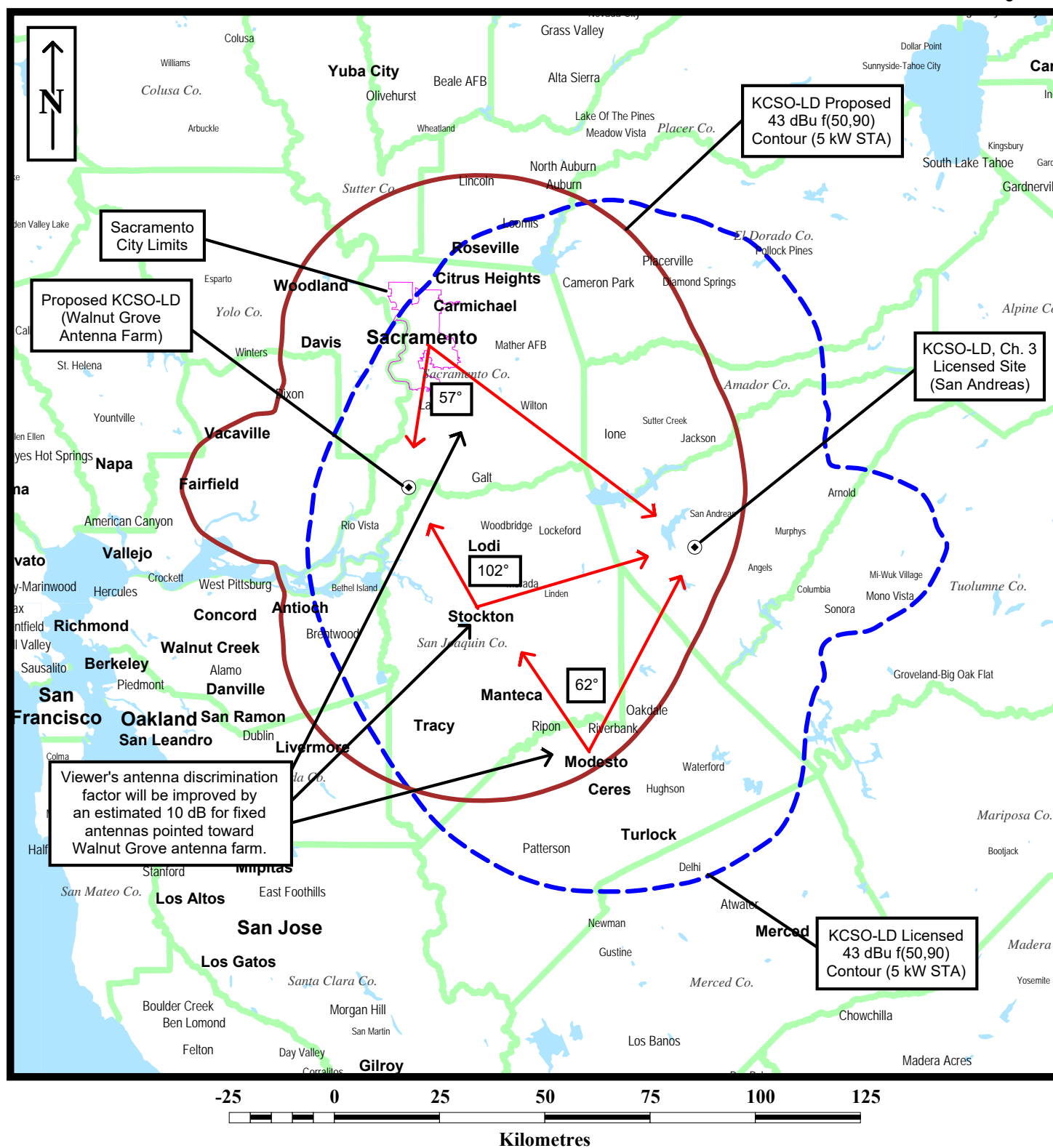
--- Explanation ---

There are ten DTV stations located in the Sacramento DMA that provide over the air (OTA) service to Sacramento. Of these ten, nine are located at the Walnut Grove antenna farm.



DTV PREDICTED COVERAGE CONTOURS AND LOCATIONS IN SACRAMENTO MARKET

Figure 6



VIEWER FIXED-ANTENNA DISCRIMINATION
FACTOR IMPROVEMENT DUE TO MOVE TO ANTENNA FARM

duTreil, Lundin & Rackley, Inc. Sarasota, Florida