

Appendix I: Noise Supporting Information



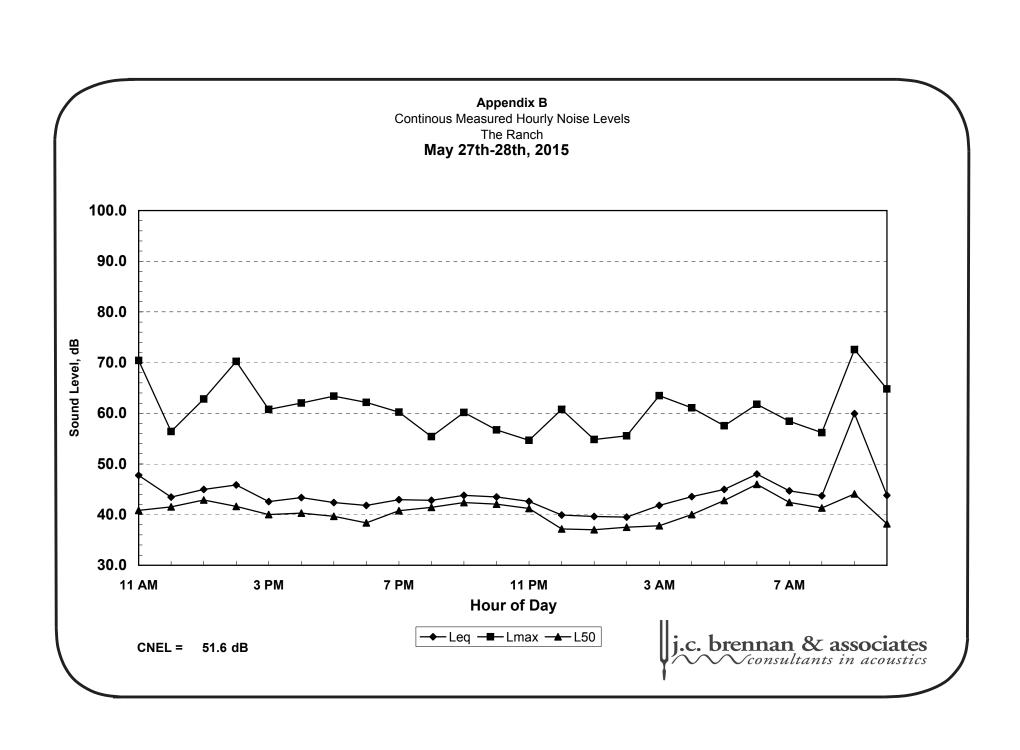
Appendix B
2017-157 The Ranch [Cowan Ranch, 2015]
Continous 24 Hr Monitoring - Site A
May 27th-28th, 2015

Hour	Leq	Lmax	L50	L90
11:00	47.7	70.4	40.8	36.7
12:00	43.4	56.4	41.5	37.8
13:00	45.0	62.8	42.9	39.3
14:00	45.9	70.2	41.6	37.3
15:00	42.6	60.8	40.0	36.0
16:00	43.4	62.0	40.3	36.4
17:00	42.4	63.4	39.7	35.8
18:00	41.8	62.1	38.4	34.7
19:00	43.0	60.2	40.8	37.1
20:00	42.8	55.4	41.4	38.0
21:00	43.8	60.2	42.4	38.7
22:00	43.5	56.7	42.1	38.2
23:00	42.6	54.7	41.2	38.4
0:00	39.9	60.8	37.2	33.5
1:00	39.6	54.8	37.0	34.5
2:00	39.5	55.5	37.5	35.2
3:00	41.8	63.5	37.8	34.3
4:00	43.6	61.1	40.0	36.7
5:00	45.0	57.5	42.8	39.0
6:00	48.0	61.8	46.0	41.8
7:00	44.7	58.4	42.4	39.0
8:00	43.7	56.2	41.3	37.5
9:00	59.9	72.6	44.1	34.7
10:00	43.8	64.8	38.2	34.3

			Statistical Summary							
		Daytime (7 a.m 7 p.m.)			Evening (7 p.m 10 p.m.)		Nighttime (10 p.m 7 a.m.)			
		High	Low	Average	High	Low	Average	High	Low	Average
Leq	(Average)	59.9	41.8	50.3	43.8	42.8	43.2	48.0	39.5	43.5
Lmax	(Maximum)	72.6	56.2	63.3	60.2	55.4	58.6	63.5	54.7	58.5
L50	(Median)	44.1	38.2	40.9	42.4	40.8	41.5	46.0	37.0	40.2
L90	(Background)	39.3	34.3	36.6	38.7	37.1	37.9	41.8	33.5	36.8

Computed CNEL, dB	51.6
% Daytime Energy	83%
% Evening Energy	4%
% Nighttime Energy	13%





Location	Fire Station Generator	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA)								
		50 ft		Usage	Distance to	Ground	Shielding	Calcula	ted (dBA)	
No.	Equipment Description	Lmax	Quantity	factor**	Receptor	Effect	(dBA)***	Lmax	Leq	Energy
1	Generator (107 dBA SPL at 3.3 feet)	84	1	50	375	0.5	8	58.5	51.1	129216.1645
2										
3										
4										
5										
6										
7										
8										
9										
10										
Notes:		•					Lmax*	58	Leq	51
*Calculate	ed Lmax is the Loudest value.					_		•	•	
** Percent	tage of time during an hour that the piece of equ	ipment is operating a	at full power							
***Shieldir	ng provided by proposed Fire Station building		·							

TABLE Existing-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - north of Prewett Ranch Road

NOTES: The Ranch EIR - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	65.3	132.9	282.7

TABLE Existing-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - south of Prewett Ranch Road

NOTES: The Ranch EIR - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	56.3	112.4

TABLE Existing-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Lone Tree Way to Prewett Ranch Road

NOTES: The Ranch EIR - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	91.1	190.9	408.6

TABLE Existing-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Prewett Ranch Road to Wellness Way

NOTES: The Ranch EIR - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	87.2	182.1	389.5

TABLE Existing-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Wellness Way to Sand Creek Road

NOTES: The Ranch EIR - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	75.9	159.9	342.6

TABLE Existing with Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - north of Prewett Ranch Road

NOTES: The Ranch EIR - Existing with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS.		
	1.56	0.09	0.19
H-TRUC	KS.		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	79.4	164.7	351.9

TABLE Existing with Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - south of Prewett Ranch Road

NOTES: The Ranch EIR - Existing with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	108.7	229.6

TABLE Existing with Project-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Lone Tree Way to Prewett Ranch Road

NOTES: The Ranch EIR - Existing with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	106.7	225.3	483.2

TABLE Existing with Project-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Prewett Ranch Road to Wellness Way

NOTES: The Ranch EIR - Existing with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	106.3	224.4	481.3

TABLE Existing with Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Wellness Way to Sand Creek Road

NOTES: The Ranch EIR - Existing with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	86.2	182.5	391.5

TABLE Near-Term without Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - north of Prewett Ranch Road

NOTES: The Ranch EIR - Near-Term without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	'KS		
	1.56	0.09	0.19
H-TRUC	KS.		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	66.8	136.4	290.2

TABLE Near-Term without Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - south of Prewett Ranch Road

NOTES: The Ranch EIR - Near-Term without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1900 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT	
AUTOS				
	75.51	12.57	9.34	
M-TRUCKS				
	1.56	0.09	0.19	
H-TRUC	CKS			
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	58.0	116.3

TABLE Near-Term without Project-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Lone Tree Way to Prewett Ranch Road

NOTES: The Ranch EIR - Near-Term without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	105.1	221.7	475.4

TABLE Near-Term without Project-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Prewett Ranch Road to Wellness Way

NOTES: The Ranch EIR - Near-Term without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	93.7	196.7	421.2

TABLE Near-Term without Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Wellness Way to Sand Creek Road

NOTES: The Ranch EIR - Near-Term without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT	
AUTOS				
	75.51	12.57	9.34	
M-TRUCKS				
	1.56	0.09	0.19	
H-TRUC	CKS			
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	84.8	179.5	385.0

TABLE Near-Term with Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - north of Prewett Ranch Road

NOTES: The Ranch EIR - Near-Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT	
AUTOS				
	75.51	12.57	9.34	
M-TRUCKS				
	1.56	0.09	0.19	
H-TRUCKS				
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	81.2	168.9	360.9

TABLE Near-Term with Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - south of Prewett Ranch Road

NOTES: The Ranch EIR - Near-Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	EVENING	NIGHT
AUTOS		
75.51	12.57	9.34
M-TRUCKS		
1.56	0.09	0.19
H-TRUCKS		
0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	55.8	111.2	235.1

TABLE Near-Term with Project-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Lone Tree Way to Prewett Ranch Road

NOTES: The Ranch EIR - Near-Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
58.5	117.5	248.8	534.0

TABLE Near-Term with Project-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Prewett Ranch Road to Wellness Way

NOTES: The Ranch EIR - Near-Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUCK	.S		
	1.56	0.09	0.19
H-TRUCK	.S		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
57.5	115.1	243.7	522.9

TABLE Near-Term with Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Wellness Way to Sand Creek Road

NOTES: The Ranch EIR - Near-Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUCK	S		
	1.56	0.09	0.19
H-TRUCK	IS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	96.4	204.7	439.6

TABLE Cumulative without Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - north of Prewett Ranch Road

NOTES: The Ranch EIR - Cumulative without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	66.8	136.4	290.2

TABLE Cumulative without Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - south of Prewett Ranch Road

NOTES: The Ranch EIR - Cumulative without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5300 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	0.0	107.4	226.8

TABLE Cumulative without Project-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Lone Tree Way to Prewett Ranch Road

NOTES: The Ranch EIR - Cumulative without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUCE	ζS		
	1.56	0.09	0.19
H-TRUCE	ζS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
60.0	120.9	256.4	550.5

TABLE Cumulative without Project-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Prewett Ranch Road to Wellness Way

NOTES: The Ranch EIR - Cumulative without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	99.3	208.9	447.7

TABLE Cumulative without Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Wellness Way to Sand Creek Road

NOTES: The Ranch EIR - Cumulative without Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 14500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUCK	.S		
	1.56	0.09	0.19
H-TRUCK	.S		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	96.8	205.6	441.6

TABLE Cumulative with Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - north of Prewett Ranch Road

NOTES: The Ranch EIR - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	80.3	166.8	356.4

TABLE Cumulative with Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Dallas Ranch Road - south of Prewett Ranch Road

NOTES: The Ranch EIR - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8800 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	72.2	148.7	317.0

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Lone Tree Way to Prewett Ranch Road

NOTES: The Ranch EIR - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 22600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
64.0	130.0	276.2	593.2

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Prewett Ranch Road to Wellness Way

NOTES: The Ranch EIR - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	110.0	232.4	498.6

TABLE Cumulative with Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/15/2019

ROADWAY SEGMENT: Deer Valley Road - Wellness Way to Sand Creek Road

NOTES: The Ranch EIR - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16100 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUCK	KS .		
	1.56	0.09	0.19
H-TRUCK	KS .		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	103.6	220.4	473.5