cy of Sulsun City—Sulsun Logistics Center Project aft EIR	
	Appendix R
	Noise Supporting Informatio



TABLE Existing-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Bella Vista Drive to Pintail Drive

NOTES: Suisun Logistics - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

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

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn
70 Ldn 65 Ldn 60 Ldn 55 Ldn
----- 0.0 64.6 131.5 279.5

TABLE Existing-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Pintail Drive to Montebello Drive

NOTES: Suisun Logistics - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn 	60 Ldn 	55 Ldn
0.0	62.3	126.2	267.9

TABLE Existing-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Montebello Drive to Petersen Road

NOTES: Suisun Logistics - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

NIGHT
9.60
1.50
2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	64.6	131.5	279.5

TABLE Existing-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Sunset Avenue to Emperor Drive

NOTES: Suisun Logistics - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	103.9	219.1	469.7

TABLE Existing-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Emperor Drive to Walters Road

NOTES: Suisun Logistics - Existing

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	89.9	188.1	402.6

TABLE Near-Term-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Bella Vista Drive to Pintail Drive

NOTES: Suisun Logistics - Near-Term

* * ASSUMPTIONS * *

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

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	69.2	141.9	302.2

TABLE Near-Term-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Pintail Drive to Montebello Drive

NOTES: Suisun Logistics - Near-Term

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1700 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

NIGHT
9.60
1.50
2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	RLINE TO Ldn
70 Ldn	65 Ldn		55 Ldn
0.0	67.0	136.8	291.0

TABLE Near-Term-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Montebello Drive to Petersen Road

NOTES: Suisun Logistics - Near-Term

* * ASSUMPTIONS * *

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

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	71.5	147.0	313.2

TABLE Near-Term-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Sunset Avenue to Emperor Drive

NOTES: Suisun Logistics - Near-Term

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3300 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

	, -	ROADWAY CENTER	
70 Ldn	65 Ldn 	60 Ldn 	55 Ldn
56.5	112.8	238.5	511.7

TABLE Near-Term-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Emperor Drive to Walters Road

NOTES: Suisun Logistics - Near-Term

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2600 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

NIGHT
9.60
1.50
2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	97.0	203.9	436.8

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

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Bella Vista Drive to Pintail Drive

NOTES: Suisun Logistics - Near Term with Project

* * ASSUMPTIONS * *

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

TRAFFIC DISTRIBUTION PERCENTAGES

NIGHT
9.60
1.50
2.50

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

* * CALCULATED NOISE LEVELS * *

	,	ROADWAY CENTER	
70 Ldn	65 Ldn 	60 Ldn 	55 Ldn
0.0	71.5	147.0	313.2

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

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Pintail Drive to Montebello Drive

NOTES: Suisun Logistics - Near Term with Project

* * ASSUMPTIONS * *

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

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS		
	82.40	9.60
M-TRUCK	S	
	1.50	1.50
H-TRUCK	S	
	2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	71.5	147.0	313.2

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

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Montebello Drive to Petersen Road

NOTES: Suisun Logistics - Near Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2000 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT
AUTOS		
	82.40	9.60
M-TRUCI	KS	
	1.50	1.50
H-TRUCI	KS	
	2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

	,	ROADWAY CENTER	
70 Ldn 	65 Ldn 	60 Ldn 	55 Ldn
0.0	73.7	151.9	324.1

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

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Sunset Avenue to Emperor Drive

NOTES: Suisun Logistics - Near Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3400 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
57.4	114.9	243.3	522.0

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

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Emperor Drive to Walters Road

NOTES: Suisun Logistics - Near Term with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2700 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGH'I'
AUTOS		
:	82.40	9.60
M-TRUCK:	S	
	1.50	1.50
H-TRUCK:	S	
	2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn 	60 Ldn 	55 Ldn
0.0	99.3	209.0	447.9

TABLE Cumulative-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Bella Vista Drive to Pintail Drive

NOTES: Suisun Logistics - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2500 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	84.3	175.7	375.8

TABLE Cumulative-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Pintail Drive to Montebello Drive

NOTES: Suisun Logistics - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2200 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY NIGHT
--- -----AUTOS
82.40 9.60
M-TRUCKS
1.50 1.50
H-TRUCKS
2.50 2.50

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

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.38

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn
70 Ldn 65 Ldn 60 Ldn 55 Ldn
----- 0.0 78.0 161.7 345.2

TABLE Cumulative-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Montebello Drive to Petersen Road

NOTES: Suisun Logistics - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY NIGHT
--- -----AUTOS
82.40 9.60
M-TRUCKS
1.50 1.50
H-TRUCKS
2.50 2.50

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

* * CALCULATED NOISE LEVELS * *

Ldn AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO Ldn
70 Ldn 65 Ldn 60 Ldn 55 Ldn
----- 0.0 82.2 171.1 365.7

TABLE Cumulative-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Sunset Avenue to Emperor Drive

NOTES: Suisun Logistics - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3900 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
62.0	125.5	266.4	571.9

TABLE Cumulative-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Emperor Drive to Walters Road

NOTES: Suisun Logistics - Cumulative

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3500 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
58.4	117.1	248.0	532.2

TABLE Cumulative with Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Bella Vista Drive to Pintail Drive

NOTES: Suisun Logistics - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NTGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	86.4	180.3	385.7

TABLE Cumulative with Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Pintail Drive to Montebello Drive

NOTES: Suisun Logistics - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2400 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	82.2	171.1	365.7

TABLE Cumulative with Project-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: Walters Road - Montebello Drive to Petersen Road

NOTES: Suisun Logistics - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2600 SPEED (MPH): 45 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
82.40	9.60
S	
1.50	1.50
S	
2.50	2.50
	82.40 S 1.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERL	INE TO Lar
70 Ldn	65 Ldn	60 Ldn	55 Ldn
0.0	86.4	180.3	385.7

TABLE Cumulative with Project-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Sunset Avenue to Emperor Drive

NOTES: Suisun Logistics - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4000 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

DAY	NIGHT
AUTOS	
82.40	9.60
M-TRUCKS	
1.50	1.50
H-TRUCKS	
2.50	2.50

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTERI	LINE TO Ldn
70 Ldn	65 Ldn	60 Ldn	55 Ldn
62.9	127.5	270.8	581.6

TABLE Cumulative with Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 09/10/2021

ROADWAY SEGMENT: SR-12 - Emperor Drive to Walters Road

NOTES: Suisun Logistics - Cumulative with Project

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3600 SPEED (MPH): 50 GRADE: .5

TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	NIGHT	
AUTOS			
	82.40	9.60	
M-TRUCE	ΚS		
	1.50	1.50	
H-TRUCE	ΚS		
	2.50	2.50	

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

* * CALCULATED NOISE LEVELS * *

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO Ldn
70 Ldn	65 Ldn 	60 Ldn 	55 Ldn
59.3	119.2	252.6	542.2

Loading/Unloading

receptor	. Closest Residence - northeast of Froject									
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculat	ed (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Loading/Unloading	80	3	1	630	1	0	58.0	31.8	1499.718053
2	Loading/Unloading	80	3	1	670	1	0	57.5	31.0	1246.828899
3	Loading/Unloading	80	3	1	710	1	0	57.0	30.2	1047.746507
4	Loading/Unloading	80	3	1	750	1	0	56.5	29.5	888.888889
5	Loading/Unloading	80	3	1	790	1	0	56.0	28.8	760.5889189
6	Loading/Unloading	80	3	1	830	1	0	55.6	28.2	655.8386252
7										
8										
9										
10										
Notes:		•					Lmax[4]	58	Leq	38

[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Receptor: Closest	Residence - southeast of Project	
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		Reference (dBA)								
		50 ft		Usage	Distance to	Ground	Shielding	Calculat	ted (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Loading/Unloading	80	5	1	875	1	0	55.1	29.7	932.9446064
2	Loading/Unloading	80	5	1	885	1	0	55.0	29.6	901.6753669
3	Loading/Unloading	80	5	1	895	1	0	54.9	29.4	871.7880495
4	Loading/Unloading	80	5	1	905	1	0	54.8	29.3	843.2071485
5	Loading/Unloading	80	5	1	915	1	0	54.8	29.1	815.8620553
6	Loading/Unloading	80	5	1	925	1	0	54.7	29.0	789.6866918
7										
8										
9										
10										
Notes:							Lmax[4]	55	Leq	37

Notes:

[1] Percentage of time activity occurs each hour

[2] Soft ground terrain between project site and receptor.

[3] Shielding due to terrain or structures

[4] Calculated Lmax is the Loudest value.

Mechanical Equipment Noise Calculation

modifical Equipment relies subdistrict											
Receptor	: Closest Residence - northeast of Project	Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements									
		Reference (dBA)									
		25 ft		Usage	Distance to	Ground	Shielding	Calcula	ated (dBA)		
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy	
1	Commercial grade mechanical ventilation equipment	60	1	100	510	0.5	0	33.8	27.3	532.0158626	
2	Commercial grade mechanical ventilation equipment	60	1	100	540	0.5	0	33.3	26.6	461.1748574	
3	Commercial grade mechanical ventilation equipment	60	1	100	570	0.5	0	32.8	26.1	402.868102	
4	Commercial grade mechanical ventilation equipment	60	1	100	610	0.5	0	32.3	25.3	340.0364192	
5	Commercial grade mechanical ventilation equipment	60	1	100	640	0.5	0	31.8	24.8	301.5782986	
6											
7											
8											
9		1									
10											
Notes:		•					Lmax[4]	34	Leq	33	

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Receptor: Closest Residence - southeast of Project		Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements								
		Reference (dBA)								
		25 ft		Usage	Distance to	Ground	Shielding	Calcula	ted (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	Commercial grade mechanical ventilation equipment	60	1	100	285	0.5	0	38.9	33.6	2278.966135
2	Commercial grade mechanical ventilation equipment	60	1	100	425	0.5	0	35.4	29.2	839.223616
3	Commercial grade mechanical ventilation equipment	60	1	100	465	0.5	0	34.6	28.3	670.2203951
4	Commercial grade mechanical ventilation equipment	60	1	100	505	0.5	0	33.9	27.4	545.2825207
5	Commercial grade mechanical ventilation equipment	60	1	100	545	0.5	0	33.2	26.5	450.6701213
6										
7										
8										
9										
10										
Notes:	•	•					Lmax[4]	39	Leq	37

Notes:
[1] Percentage of time activity occurs each hour
[2] Soft ground terrain between project site and receptor.
[3] Shielding due to terrain or structures
[4] Calculated Lmax is the Loudest value.

Parking Lot activity

receptor:	Closest Residence - northeast of Project									
		Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calculat	ted (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	parking lot activity	70	10	1	435	1	5	46.2	26.8	480.222210
2	parking lot activity	70	10	1	465	1	5	45.6	25.9	393.143549
3	parking lot activity	70	10	1	495	1	5	45.1	25.1	325.90754
4	parking lot activity	70	10	1	525	1	5	44.6	24.4	273.16943
5	parking lot activity	70	10	1	555	1	5	44.1	23.6	231.22301
6										
7										
8										
9										
10										
lotes:							Lmax[4]	46	Leq	32
2] Soft gro 3] Shieldii	tage of time activity occurs each hour ound terrain between project site and receptor. ng due existing 6-foot high soundwall along resi ted Lmax is the Loudest value.	dential property line								

	·	Reference (dBA) 50 ft		Usage	Distance to	Ground	Shielding	Calcula	ted (dBA)	
No.	Equipment Description	Lmax	Quantity	factor[1]	Receptor	Effect[2]	(dBA)[3]	Lmax	Leq	Energy
1	parking lot activity	70	20	1	260	1	5	50.7	36.5	4498.00532
2	parking lot activity	70	10	1	300	1	5	49.4	31.7	1464.017435
3	parking lot activity	70	10	1	340	1	5	48.3	30.0	1005.711143
4	parking lot activity	70	10	1	380	1	5	47.4	28.6	720.3759796
5	parking lot activity	70	10	1	420	1	5	46.5	27.3	533.5340508
6	parking lot activity	70	10	1	460	1	5	45.7	26.1	406.1032994
7 8										
9										
10										
Notes:							Lmax[4]	51	Leq	39
[2] Soft gr [3] Shieldi	ntage of time activity occurs each hour ound terrain between project site and receptor. ing due existing 6-foot high soundwall along resi ated Lmax is the Loudest value.	dential property line								