

PRIVILEGED AND CONFIDENTIAL

MEMORANDUM

To: Eric Reuter, Reuter Associates
 From: Marc C. Wallace, QEP
 Date: February 23, 2010
 Subject: Requested Sample Modeling Results

Ref 3251

Per your email, dated February 22, 2010, Tech Environmental, Inc. (Tech) conducted additional acoustic modeling for the 7, 8 and 13 White Tail Way residences at heights of 5 and 15 feet above grade. The model analysis was based on all stationary and mobile sources operating at their maximum load. It also includes the sound attenuation walls on the secondary and tertiary crushers and screens and the 30-foot high earth berm consistent with the modeling approach in Supplemental Sound Study Report submitted to MassDEP on February 22nd. The predicted sound levels for all three receiver locations at a height of 5 feet above grade ranged from 48.2 dBA to 49.7 dBA. The model predicted a slight increase in sound levels at a height of 15 feet above grade at each receiver. The predicted sound levels at this height were 48.4 dBA to 49.9 dBA. Table 1 presents a summary of the modeling results at both receiver heights. The predicted sound levels at both heights would comply with the Littleton Noise Bylaw sound limit of 50 dBA for residential areas. Table 2 presents a summary of the modeling results at 15 feet above grade for all three receivers and how they would also comply with the MassDEP Noise Policy 10-dBA allowable incremental increase in ambient sound levels. In addition, the modeling results also show that there would be no pure tones present at each receiver.

TABLE 1

SOUND MODELING RESULTS AT 5 AND 15 FEET ABOVE GRADE (dBA) COMPARED TO LITTLETON NOISE BYLAW

Receiver Location	Predicted Sound Level (dBA) at 5 ft above grade	Predicted Sound Level (dBA) at 15 ft above grade	Littleton Noise Bylaw Limit	Compliance? (Yes/No)
7 White Tail Way	49.7	49.9	50	Yes
8 White Tail Way	48.2	48.4	50	Yes
13 White Tail Way	48.7	49.3	50	Yes

TABLE 2

SOUND MODELING RESULTS AT 15 FEET ABOVE GRADE COMPARED TO THE MASSDEP NOISE POLICY (dBA)

Receiver Location	Ambient Sound Level without Crushing Plant Operating *	Predicted Sound Level	Total Expected Future Sound Level	Sound Level Increase Over Ambient
7 White Tail Way	40	49.9	50	10
8 White Tail Way	40	48.4	49	9
13 White Tail Way	40	49.3	50	10

* MassDEP allowable sound limit is based on measured ambient sound level of 40 dBA at 11 White Tail Way.

Enclosed is a copy of the CadnaA modeling results including sound source contributions at each receiver location, per your request.

If you have any questions, please call me at (781) 890-2220 x30.

ACOUSTIC MODEL OUTPUT

Background Levels, by Octave Band

Receptor	dB(A)	<u>Octave Bands</u>									
		<u>31.5</u>	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1K</u>	<u>2K</u>	<u>4K</u>	<u>8K</u>	<u>16K</u>
White Tail Way # 7	40	45	47	43	39	40	34	23	15	15	-
White Tail Way # 8	40	45	47	43	39	40	34	23	15	15	-
White Tail Way # 13	40	45	47	43	39	40	34	23	15	15	-

Cadna Predicted Levels, by Octave Band

Receptor (at 15' above grade)	dB(A)	<u>Octave Bands</u>									
		<u>31.5</u>	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1K</u>	<u>2K</u>	<u>4K</u>	<u>8K</u>	<u>16K</u>
White Tail Way # 7	49.9	19.1	32.1	38	41.3	45	45.4	40.1	25.1	-	-
White Tail Way # 8	48.4	17.6	30.7	36.8	40	43.6	43.9	37.9	20.8	-	-
White Tail Way # 13	49.3	18.5	31.3	38.5	40.8	44.2	44.5	39.3	25.9	-	-
Receptor (at 5' above grade)											
White Tail Way # 7	49.7	19.3	32.3	38.2	40.6	44.6	45.4	40.2	25.4	-	-
White Tail Way # 8	48.2	17.6	30.7	36.8	39.7	43.3	43.7	37.7	20.2	-	-
White Tail Way # 13	48.7	18.4	31.2	38.3	40.2	43.6	43.9	38.6	24.8	-	-

Aggregate Industries - Littleton, MA
Cadna Receptors

Tech Environmental Inc.
2/23/2010

Name	M.	ID	Level Lr Day (dBA)	Height (m)	Coordinates		
					X (m)	Y (m)	Z (m)
7 White Tail Way		White_Tail_All	49.7	1.52 r	198899.8	922921.2	80.29
8 White Tail Way		White_Tail_All	48.2	1.52 r	198907.4	923032.8	85.88
13 White Tail Way		White_Tail_All	48.7	1.52 r	198983.6	922817.8	79.45
7 White Tail Way 15ft		White_Tail_15ft	50.1	4.57 r	198899.8	922921.3	83.35
8 White Tail Way 15ft		White_Tail_15ft	48.4	4.57 r	198907.5	923032.8	88.93
13 White Tail Way 15ft		White_Tail_15ft	49.3	4.57 r	198983.5	922817.9	82.5

7 White Tail Way 5ft

Source Name	ID	Partial Level Future with Primary 7 White Tail Way									
		dBA	31.5	63	125	250	500	1000	2000	4000	8000
ST-1 HP 400 Crusher	Future	31.5	-2.6	17.1	21.8	26.4	27.4	23.1	15.1	-2.2	-55.9
CRST-2 Dual HP 400 Crushers	Future	32.3	2.9	12.7	18.7	23.9	27.5	27.3	23.9	10.5	-34.2
ST-1 8'x20' Screen	Future	28.1	-6.6	11	12.4	18.6	24.8	23.2	14.6	-4.2	-59.1
ST-3 (2) 8'x24' DD Screens	Future	38.6	3.2	21.7	21.3	27.6	34.8	34.6	26.9	8	-39.8
ST-4 (1) 4'x8' Rinse Screen	Future	37.8	13.4	25.5	31	30.9	31.7	31.2	26	12.1	-30
ST-5 (1) 4'x8' Screen	Future	41.7	16.4	28.9	32.9	31.6	35	37.2	33.3	18.8	-30.8
Surge Pile	Future	35.1	-7.5	7.8	17.7	26.5	28.3	31.9	27	11.5	-36.2
TS-1 Transfer	Future	34.5	-7.4	7.7	17.3	29	30	28.9	22.4	5.2	-43.3
C-10 Gear Box	Future	26.5	-13.5	1.7	7.9	15.4	22.3	22.8	16.9	1.8	-45.4
C-11 Gear Box	Future	23.7	-13.6	1.3	6.8	13.5	19.6	19.5	13.4	-1.4	-44
C-12 Gear Box	Future	29.8	-13.4	2.2	8.7	15.3	24.8	26.5	21.9	7.6	-39.1
C-13 Gear Box	Future	28.4	-13.5	1.9	8.3	15.3	23.8	24.9	19.7	4.7	-43
C-14 Gear Box	Future	27.5	-13.4	1.9	8.2	15.5	23.1	23.9	18.3	3.3	-43.7
C-15 Gear Box	Future	23.9	-13.6	1.3	6.9	13.7	19.9	19.8	13.7	-1.1	-44.4
C-17 Gear Box	Future	29.1	-14.9	0.6	7.3	13.8	23.7	25.9	21.7	6.9	-45.7
C-18 Gear Box	Future	29	-15	0.6	7.2	13.8	23.7	25.9	21.7	6.9	-45.8
C-19 Gear Box	Future	21.6	-15.1	0	5.7	12.6	18.2	16.7	8.8	-8.8	-61.7
C-20 Gear Box	Future	29.1	-14.9	0.6	7.3	13.9	23.8	25.9	21.8	7.1	-45.3
C-21 Gear Box	Future	28.4	-15.6	0	6.6	13.3	23.1	25.2	20.9	5.2	-50.3
C-22 Gear Box	Future	28.7	-15.3	0.3	6.9	13.5	23.4	25.6	21.4	6.2	-47.8
C-23 Gear Box	Future	29.3	-14.7	0.8	7.5	14	23.9	26.1	22	7.4	-44.2
C-24 Gear Box	Future	29.1	-14.9	0.7	7.3	13.9	23.8	25.9	21.7	6.8	-45.6
C-24 Gear Box	Future	29.2	-14.9	0.7	7.3	13.8	23.8	26	21.9	7.3	-44.7
C-24 Gear Box	Future	23.9	-13.5	1.3	6.9	13.7	19.9	19.8	13.7	-1.1	-44.2
C-25 Gear Box	Future	29.2	-14.8	0.7	7.4	13.9	23.8	26	21.9	7.2	-44.8
C-26 Gear Box	Future	28	-15.8	-0.3	6.3	12.7	22.8	24.8	20.4	4.4	-52.7
C-27 Gear Box	Future	27.9	-15.9	-0.4	6.2	12.6	22.6	24.7	20.3	4.1	-53.6
C-3 Gear Box	Future	26.6	-14.3	1.2	7.3	14.1	22.2	23	17.2	1	-50.9
C-5 Gear Box	Future	23.6	-13.4	1.3	6.6	13.4	19.6	19.5	13.3	-2	-46.9
C-6A Gear Box	Future	20.1	-14.9	-0.6	4.3	10.4	16.1	15.7	9.5	-2.9	-46.7
C-6B Gear Box	Future	20.7	-13.6	0.8	5.4	11.2	16.7	16.3	10	-5	-49.8
C-7 Gear Box	Future	25.9	-13.4	1.9	7.9	15.2	21.7	22	16	0.8	-46.3
C-8 Gear Box	Future	19.7	-15	-0.9	4	10.1	15.7	15.2	9.6	-2.7	-46.1
C-9 Gear Box	Future	24.1	-13.4	1.7	7.3	13.9	20	19.9	13.8	-1.4	-48.1
Truck Backing Up Beeper	Truck_Beeper	18.8				-83.5	-81	18.8	-84.3		
Truck Backing Up Engine	Truck_Engine	30.8	4.2	11.9	25.4	21.5	24.8	25	19	9	-21.3
Truck Backing Up Engine	Truck_Engine	39.7	4.8	13.9	29.2	26.4	33.5	36.2	31.5	19.5	-17.8
Truck Backing Up Engine	Truck_Engine	28.5	0.8	9.4	23.7	20.3	23	21.6	12.2	-7.2	-62.9
Truck Backing Up Engine	Truck_Engine	26.5	0.4	8.8	22.5	17.8	20.1	19.4	10.5	-9.1	-65
Truck Backing Up Alarm	Truck_Alarm	13.4				-87	-85.6	13.4			
Truck Backing Up Alarm	Truck_Alarm	14.5				-85.3	-83.6	14.5			
Truck Backing Up Alarm	Truck_Alarm	29.7			-84.8	-78.8	-72.6	29.7	-71.8	-82.3	
Truck Pulling Away	Truck_Away	35.7	1.4	10.5	25.8	23	29.9	32.4	26.5	10.2	-43.5
Truck Pulling Away	Truck_Away	27.7	0.7	9.1	23.2	19.5	21.9	20.4	11	-8.3	-62.8
Primary Crusher	Primary_Crusher	44	3.6	23.1	27.4	36.6	39.8	39.1	33.4	15.8	-38.9

8 White Tail Way 5ft

Source Name	ID	Partial Level Future with Primary 8 White Tail Way									
		dBA	31.5	63	125	250	500	1000	2000	4000	8000
ST-1 HP 400 Crusher	Future	30.8	-3.5	16.4	21.2	25.7	26.7	22.2	12.9	-6.4	-67.4
CRST-2 Dual HP 400 Crushers	Future	31.3	1.8	11.9	18.1	23.3	26.9	26.5	21.3	5.7	-47
ST-1 8'x20' Screen	Future	27.1	-7.7	10	11.5	17.7	23.9	22.1	13	-8.4	-70.6
ST-3 (2) 8'x24' DD Screens	Future	37.6	1.6	20.5	20.2	26.8	34	33.5	25.2	3.8	-53.7
ST-4 (1) 4'x8' Rinse Screen	Future	36.6	11.5	23.8	29.4	29.5	30.6	30.3	24.8	8.6	-42.6
ST-5 (1) 4'x8' Screen	Future	39.5	14.8	27.3	31.7	31.2	33.1	34.2	29.5	12.7	-45.6
Surge Pile	Future	34.4	-9	6.3	16.1	27.6	28.6	30.3	25.2	8.1	-46
TS-1 Transfer	Future	33.9	-9.1	6.1	15.8	27.8	29.3	28.7	22.4	3.7	-52.7
C-10 Gear Box	Future	24.9	-15.3	0.1	6.3	13.9	20.7	21.2	14.8	-2.7	-58.9
C-11 Gear Box	Future	22.4	-15.4	-0.4	5.3	12.2	18.4	18.3	11.6	-5.6	-58.8
C-12 Gear Box	Future	28.4	-15.2	0.3	6.9	15.2	23.2	25.2	20.6	4.8	-50
C-13 Gear Box	Future	27.3	-15.4	0.1	6.6	14.8	22.5	24	18.6	1.7	-54.7
C-14 Gear Box	Future	26.5	-15.3	0.2	6.6	14.6	22	23	17.2	0.1	-55.8
C-15 Gear Box	Future	22.8	-15.4	-0.3	5.5	12.6	18.9	18.8	12.2	-5.1	-59.2
C-17 Gear Box	Future	27.2	-16.5	-1	5.6	13.9	22	24	19.3	2.1	-59.2
C-18 Gear Box	Future	27.1	-16.6	-1.1	5.5	13.8	21.9	23.9	19.1	1.8	-59.9
C-19 Gear Box	Future	21.2	-16.5	-1.3	4.8	12	17.8	16.4	8.4	-11.4	-73.6
C-20 Gear Box	Future	27.2	-16.5	-1	5.6	13.9	22	24	19.2	2	-59.3
C-21 Gear Box	Future	26.5	-17.1	-1.5	5.1	13.3	21.3	23.3	18.3	0.2	-64.6
C-22 Gear Box	Future	26.8	-16.8	-1.3	5.4	13.6	21.7	23.6	18.8	1.2	-61.7
C-23 Gear Box	Future	27.4	-16.4	-0.8	5.8	14.1	22.1	24.2	19.5	2.6	-57.6
C-24 Gear Box	Future	27.2	-16.5	-1	5.7	14	22	24	19.3	2.2	-58.8
C-24 Gear Box	Future	27.2	-16.5	-0.9	5.7	14	22	24	19.3	2.2	-58.7
C-24 Gear Box	Future	22.7	-15.4	-0.3	5.5	12.5	18.8	18.7	12.1	-5.2	-59
C-25 Gear Box	Future	27.3	-16.5	-0.9	5.7	14	22	24	19.4	2.3	-58.6
C-26 Gear Box	Future	26.3	-17.2	-1.7	4.9	13.2	21.2	23.1	18.1	-0.3	-65.8
C-27 Gear Box	Future	26.2	-17.3	-1.7	4.9	13.1	21.1	23	17.9	-0.6	-66.6
C-3 Gear Box	Future	20	-15.9	-0.6	3.7	10.2	16.1	15.8	8.6	-10.1	-69.5
C-5 Gear Box	Future	24.5	-14.9	0.6	6.3	13.7	20.4	20.7	14.3	-2.9	-57.3
C-6A Gear Box	Future	19.6	-15.7	-1.3	3.6	10	15.7	15.3	8.4	-7.9	-60.1
C-6B Gear Box	Future	21.2	-15.2	-0.2	5.1	11.5	17.3	17	10.2	-7.2	-61.8
C-7 Gear Box	Future	28.4	-15.2	0.4	7	15.3	23.2	25.1	20.4	4.5	-50.2
C-8 Gear Box	Future	19.1	-15.8	-1.5	3.3	9.5	15.2	14.7	7.9	-7.7	-59.5
C-9 Gear Box	Future	25.1	-15.1	0.3	6.5	14	20.9	21.4	15.1	-2.3	-57.8
Truck Backing Up Beeper	Truck_Beeper	16.3				-85.7	-83.3	16.3	-87.7		
Truck Backing Up Engine	Truck_Engine	28.4	1.9	9.7	23.1	19.2	22.5	22.5	15.6	3.2	-36.4
Truck Backing Up Engine	Truck_Engine	36.7	2.6	11.8	27	25.3	30.9	33.1	27.1	11.6	-36.2
Truck Backing Up Engine	Truck_Engine	29.8	-0.3	8.5	23.2	20.4	24.5	24.8	16	-5.3	-70.1
Truck Backing Up Engine	Truck_Engine	28.3	-0.7	7.9	22.3	19.2	23	23	13.8	-8.1	-74.2
Truck Backing Up Alarm	Truck_Alarm	16.9				-85.7	-82.7	16.9			
Truck Backing Up Alarm	Truck_Alarm	17.8				-85.1	-82	17.8	-87.9		
Truck Backing Up Alarm	Truck_Alarm	26.6			-87	-79.9	-75.2	26.6	-76.2		
Truck Pulling Away	Truck_Away	34.1	0	9.1	24.4	22.6	28.3	30.6	24.1	5.3	-57.5
Truck Pulling Away	Truck_Away	28.5	-0.5	8.1	22.5	19.4	23.1	23.2	14.1	-7.3	-71.5
Primary Crusher	Primary_Crusher	42.4	2.1	21.7	26	35.1	38.3	37.5	31.4	11.8	-50.2

13 White Tail Way 5ft

Source Name	ID	Partial Level Future with Primary 13 White Tail Way									
		dBa	31.5	63	125	250	500	1000	2000	4000	8000
ST-1 HP 400 Crusher	Future	31.2	-2.8	16.8	21.5	26	27.1	22.7	14.9	-2.5	-56.8
CRST-2 Dual HP 400 Crushers	Future	31.8	2.7	12.3	18.2	23.3	26.9	26.6	24	10.7	-33.7
ST-1 8'x20' Screen	Future	28	-6.7	10.9	12.3	18.5	24.7	23.1	14.4	-4.5	-59.8
ST-3 (2) 8'x24' DD Screens	Future	38.9	3.4	21.5	21.8	28.3	35.3	34.7	27.2	9.4	-34.2
ST-4 (1) 4'x8' Rinse Screen	Future	38.5	14.6	26.6	31.9	31.6	32.2	31.6	26.7	14	-23.4
ST-5 (1) 4'x8' Screen	Future	40.6	12.5	25	31.1	32	34.2	35.7	32.6	19.9	-25
Surge Pile	Future	35.2	-7.8	7.4	17.3	28.4	29.6	31.1	25.8	9.3	-40.4
TS-1 Transfer	Future	34.3	-7.1	8	17.4	29	29.9	28.5	21.9	5	-42.2
C-10 Gear Box	Future	28.6	-12.5	2.9	9.2	17	24.1	25	19.6	5.7	-37.5
C-11 Gear Box	Future	24.6	-12.5	2.3	7.7	14.4	20.5	20.4	14.6	1.1	-36.5
C-12 Gear Box	Future	28.5	-12.6	2.8	9.1	16.8	24	24.8	19.4	5.4	-38.2
C-13 Gear Box	Future	29.5	-12.5	3	9.4	17.4	24.8	25.9	20.9	7.1	-36.3
C-14 Gear Box	Future	28.5	-12.3	3	9.3	17	24	24.8	19.4	5.6	-37
C-15 Gear Box	Future	24.5	-12.5	2.3	7.7	14.4	20.4	20.4	14.6	1.1	-36.5
C-17 Gear Box	Future	30.2	-14.1	1.5	8.2	16.4	24.7	26.9	23.1	9.5	-38.8
C-18 Gear Box	Future	28.2	-14.1	1.4	7.8	15.9	23.5	24.8	19.6	4.1	-46.2
C-19 Gear Box	Future	23.2	-14.2	0.7	6.3	13.1	19.2	19.1	12.8	-2.7	-48.5
C-20 Gear Box	Future	30.4	-14	1.6	8.3	16.5	24.8	27.1	23.4	9.9	-37.7
C-21 Gear Box	Future	29.1	-14.6	0.9	7.5	15.8	23.9	25.8	21.4	6.3	-45.6
C-22 Gear Box	Future	29.8	-14.5	1.1	7.7	16	24.3	26.5	22.5	8.4	-41.7
C-23 Gear Box	Future	30.5	-13.8	1.7	8.4	16.6	24.9	27.2	23.4	9.9	-37.4
C-24 Gear Box	Future	30.3	-14	1.5	8.2	16.5	24.8	27	23.2	9.6	-38.5
C-24 Gear Box	Future	30.2	-14.1	1.5	8.2	16.4	24.7	26.9	23.1	9.5	-38.8
C-24 Gear Box	Future	24.5	-12.5	2.3	7.7	14.4	20.4	20.4	14.6	1.1	-36.5
C-25 Gear Box	Future	30.3	-14	1.6	8.2	16.5	24.8	27	23.2	9.6	-38.3
C-26 Gear Box	Future	28.6	-15.4	0.1	6.7	15.1	23.2	25.3	21.1	5.6	-49.4
C-27 Gear Box	Future	28.4	-15.5	0	6.6	15	23.1	25.2	20.9	5.3	-50.2
C-3 Gear Box	Future	25	-14.8	0.5	6.6	14.1	20.8	21.2	14.9	-1.8	-54.6
C-5 Gear Box	Future	21.9	-14.4	0.2	5.5	12	17.9	17.6	11.3	-3.2	-47.4
C-6A Gear Box	Future	19.9	-14.8	-0.7	4.1	10.2	15.9	15.4	10	-2	-44.4
C-6B Gear Box	Future	23.8	-12.9	1.8	7.1	13.7	19.7	19.6	13.6	0.2	-38.7
C-7 Gear Box	Future	27.9	-12.5	2.8	9	16.6	23.6	24.2	18.7	4.7	-38.6
C-8 Gear Box	Future	19.6	-14.9	-0.9	3.8	9.9	15.5	15	10.1	-1.8	-43.8
C-9 Gear Box	Future	26.9	-12.5	2.7	8.7	16	22.7	23	17.4	3.3	-39.4
Truck Backing Up Beeper	Truck_Beeper	25.4			-84	-78.1	-74.9	25.4	-77.9		
Truck Backing Up Engine	Truck_Engine	36.5	6.9	15.5	29.9	26.9	30.9	31.6	25	13.3	-14.5
Truck Backing Up Engine	Truck_Engine	35.9	6	14.9	29.5	26.4	30.3	30.9	24.1	11.2	-22.4
Truck Backing Up Engine	Truck_Engine	28.7	1.3	9.8	24	20.4	23.1	21.6	12.3	-6.2	-57.3
Truck Backing Up Engine	Truck_Engine	26.3	0.8	8.3	21.4	17.3	20.4	20.1	11.7	-6.3	-56.7
Truck Backing Up Alarm	Truck_Alarm	14.1				-87.5	-85.3	14.1			
Truck Backing Up Alarm	Truck_Alarm	14.7				-85.1	-83.4	14.7			
Truck Backing Up Alarm	Truck_Alarm	24.8			-84.4	-78.6	-75.5	24.8	-78.8		
Truck Pulling Away	Truck_Away	32.6	1.9	10.7	25.5	22.9	27.2	27.9	20.1	2.4	-49.2
Truck Pulling Away	Truck_Away	28.5	1.3	9.8	24	20.3	22.9	21.4	12.2	-6.1	-56.5
Primary Crusher	Primary_Crusher	39.3	3.3	22.3	25.9	33.8	35.3	32.5	24.4	4.5	-51.8

7 White Tail Way 15ft

Source

Name

Partial Level Future with Primary

7 White Tail Way 15ft

	ID	dBA	31.5	63	125	250	500	1000	2000	4000	8000
ST-1 HP 400 Crusher	Future	32.1	-2.3	17.6	22.4	27	28	23.7	14.9	-2.5	-56.6
CRST-2 Dual HP 400 Crushers	Future	32.9	3.3	13.3	19.4	24.6	28.3	28	23.7	10.2	-35.2
ST-1 8'x20' Screen	Future	28.4	-6.5	11.2	12.7	19	25.2	23.5	14.9	-4.5	-59.8
ST-3 (2) 8'x24' DD Screens	Future	39.3	2.7	21.2	20.9	28.7	36	34.8	26.9	7.7	-41.2
ST-4 (1) 4'x8' Rinse Screen	Future	38.2	13.3	25.5	31	31.1	32.1	31.8	26.7	12.6	-30.4
ST-5 (1) 4'x8' Screen	Future	41.5	16.3	28.7	32.3	33.5	35.6	36.2	32	17.5	-32.8
Surge Pile	Future	36.7	-7.5	7.7	17.6	29.8	31.8	32	27.4	12.1	-35.2
TS-1 Transfer	Future	35.3	-7.5	7.7	17.4	29.3	30.8	30.1	24	7.1	-41.8
C-10 Gear Box	Future	26.3	-13.6	1.7	8.1	15.8	22.6	22.2	15.2	-0.9	-49.3
C-11 Gear Box	Future	24	-13.7	1.2	6.9	13.8	19.9	19.9	13.8	-1.3	-45.6
C-12 Gear Box	Future	30.3	-13.5	2	8.6	17	25	27	22.9	9	-38
C-13 Gear Box	Future	29	-13.7	1.8	8.3	16.4	24.1	25.6	20.7	5.8	-42.6
C-14 Gear Box	Future	28.1	-13.6	1.8	8.3	16.2	23.6	24.6	19.2	4.2	-43.6
C-15 Gear Box	Future	24.3	-13.7	1.3	7	14	20.3	20.3	14.2	-0.9	-46
C-17 Gear Box	Future	29	-15.1	0.5	7.1	15.5	23.6	25.8	21.6	6.7	-46.4
C-18 Gear Box	Future	28.9	-15.2	0.4	7	15.4	23.5	25.6	21.5	6.4	-47.1
C-19 Gear Box	Future	22.1	-15.1	0	6	13	18.7	17.3	9.6	-8.1	-62.1
C-20 Gear Box	Future	29	-15.1	0.5	7.1	15.5	23.6	25.7	21.6	6.6	-46.5
C-21 Gear Box	Future	28.2	-15.7	-0.2	6.5	14.8	22.9	25	20.6	4.7	-51.8
C-22 Gear Box	Future	28.6	-15.4	0.1	6.8	15.1	23.2	25.4	21.1	5.7	-49.1
C-23 Gear Box	Future	29.2	-14.9	0.6	7.3	15.7	23.8	26	21.9	7.2	-44.9
C-24 Gear Box	Future	29.1	-15.1	0.5	7.1	15.5	23.6	25.8	21.7	6.8	-46.1
C-24 Gear Box	Future	29.1	-15	0.5	7.2	15.5	23.6	25.8	21.7	6.8	-46
C-24 Gear Box	Future	24.3	-13.6	1.3	7	14	20.2	20.2	14.1	-0.9	-45.8
C-25 Gear Box	Future	29.1	-15	0.5	7.2	15.5	23.7	25.8	21.7	6.9	-45.8
C-26 Gear Box	Future	27.9	-16	-0.4	6.2	14.5	22.6	24.7	20.2	4	-53.9
C-27 Gear Box	Future	27.8	-16.1	-0.5	6.1	14.4	22.5	24.6	20.1	3.7	-54.7
C-3 Gear Box	Future	28.2	-14.4	1.2	7.6	15.7	23.4	24.8	19.6	3.9	-48
C-5 Gear Box	Future	25	-13.3	1.6	7.2	14.4	20.9	21	14.9	-0.4	-47.8
C-6A Gear Box	Future	20.8	-14.8	-0.3	4.7	11.1	16.8	16.4	10	-3.4	-47.9
C-6B Gear Box	Future	21.9	-13.6	1.1	6.1	12.2	17.9	17.5	11.2	-4	-50.5
C-7 Gear Box	Future	27.7	-13.5	1.9	8.3	16	23.2	24	18.5	3.3	-44.6
C-8 Gear Box	Future	20.3	-14.9	-0.6	4.4	10.6	16.3	15.9	9.5	-3.1	-47.2
C-9 Gear Box	Future	25.8	-13.5	1.8	7.8	15.1	21.6	21.9	15.9	0.6	-46.9
Truck Backing Up Beeper	Truck_Beeper	18.6				-83.6	-81.2	18.6	-84.7		
Truck Backing Up Engine	Truck_Engine	30.6	3.9	11.7	25.2	21.3	24.6	24.8	18.6	8.4	-22.9
Truck Backing Up Engine	Truck_Engine	39.5	4.4	13.6	28.9	27.4	33.3	36.1	31.4	19.3	-18.6
Truck Backing Up Engine	Truck_Engine	30.4	0.8	9.5	24	21.1	25	25.3	16.9	-2.3	-59.1
Truck Backing Up Engine	Truck_Engine	29.3	0.4	8.9	23.3	20.1	23.8	23.9	15.3	-4.4	-61.5
Truck Backing Up Alarm	Truck_Alarm	17.8				-84.8	-81.9	17.8	-87.5		
Truck Backing Up Alarm	Truck_Alarm	18.3				-84.4	-81.5	18.3	-86.9		
Truck Backing Up Alarm	Truck_Alarm	29.6			-85.1	-77.9	-72.9	29.6	-71.9	-82.5	
Truck Pulling Away	Truck_Away	35.6	1.2	10.3	25.7	24	29.7	32.2	26.3	9.7	-44.9
Truck Pulling Away	Truck_Away	29.4	0.6	9.1	23.5	20.3	24	24.1	15.6	-3.7	-59.1
Primary Crusher	Primary_Crusher	44	3.5	23	27.4	36.5	39.7	39.1	33.5	16	-38.8

8 White Tail Way 15ft

Source	Partial Level Future with Primary										
Name	ID	8 White Tail Way 15ft									
		dBA	31.5	63	125	250	500	1000	2000	4000	8000
ST-1 HP 400 Crusher	Future	31.1	-3.3	16.7	21.5	26.1	27.1	22.6	13.3	-6.4	-67.4
CRST-2 Dual HP 400 Crushers	Future	31.7	2.1	12.2	18.5	23.7	27.3	26.9	21.3	5.7	-47.1
ST-1 8'x20' Screen	Future	27.2	-7.6	10.1	11.6	17.9	24	22.2	13.2	-8.4	-70.6
ST-3 (2) 8'x24' DD Screens	Future	38.1	1.5	20.1	20	27.7	34.9	33.6	25.1	3.8	-53.8
ST-4 (1) 4'x8' Rinse Screen	Future	36.8	11.6	23.8	29.5	29.7	30.9	30.7	25.2	9	-42.1
ST-5 (1) 4'x8' Screen	Future	39.8	14.8	27.3	31.4	32.2	33.9	34.2	29.5	12.7	-45.6
Surge Pile	Future	35	-9	6.3	16.1	28.3	30.2	30.3	25.2	8.1	-45.9
TS-1 Transfer	Future	34.2	-9.1	6.1	15.9	27.9	29.6	29.1	23.1	4.6	-51.5
C-10 Gear Box	Future	25.5	-15.2	0.2	6.5	14.2	21.2	21.9	15.7	-1.8	-57.9
C-11 Gear Box	Future	22.6	-15.3	-0.3	5.4	12.4	18.7	18.6	12	-5.3	-58.8
C-12 Gear Box	Future	28.6	-15.2	0.3	7	15.3	23.3	25.3	20.9	5.3	-49.2
C-13 Gear Box	Future	27.6	-15.4	0.1	6.7	14.9	22.7	24.3	19.1	2.4	-53.8
C-14 Gear Box	Future	26.8	-15.3	0.2	6.7	14.7	22.2	23.4	17.8	0.8	-55.1
C-15 Gear Box	Future	23.1	-15.3	-0.2	5.6	12.7	19.1	19.1	12.5	-4.8	-59.2
C-17 Gear Box	Future	27.2	-16.5	-1	5.6	13.9	22	24	19.3	2.1	-59.2
C-18 Gear Box	Future	27.1	-16.6	-1.1	5.5	13.8	21.9	23.9	19.1	1.8	-59.9
C-19 Gear Box	Future	21.4	-16.5	-1.2	4.9	12.2	18.1	16.8	8.8	-10.9	-73.2
C-20 Gear Box	Future	27.2	-16.5	-1	5.6	13.9	22	24	19.2	2	-59.3
C-21 Gear Box	Future	26.5	-17.1	-1.5	5.1	13.3	21.3	23.3	18.3	0.2	-64.6
C-22 Gear Box	Future	26.8	-16.8	-1.3	5.4	13.6	21.7	23.6	18.8	1.2	-61.7
C-23 Gear Box	Future	27.4	-16.4	-0.8	5.8	14.1	22.1	24.2	19.5	2.6	-57.6
C-24 Gear Box	Future	27.2	-16.5	-1	5.7	14	22	24	19.3	2.2	-58.8
C-24 Gear Box	Future	27.2	-16.5	-0.9	5.7	14	22	24	19.3	2.2	-58.7
C-24 Gear Box	Future	23	-15.3	-0.2	5.6	12.7	19	19	12.4	-4.8	-59
C-25 Gear Box	Future	27.3	-16.5	-0.9	5.7	14	22	24	19.4	2.3	-58.6
C-26 Gear Box	Future	26.3	-17.2	-1.7	4.9	13.2	21.2	23.1	18.1	-0.3	-65.8
C-27 Gear Box	Future	26.2	-17.3	-1.7	4.9	13.1	21.1	23	17.9	-0.6	-66.6
C-3 Gear Box	Future	20.9	-15.9	-0.5	4.2	11	17.1	16.7	9.7	-9	-68.4
C-5 Gear Box	Future	25.1	-14.9	0.6	6.5	14	20.9	21.4	15.1	-2	-56.3
C-6A Gear Box	Future	20	-15.6	-1.2	3.9	10.3	16.1	15.7	8.8	-8	-60.1
C-6B Gear Box	Future	21.7	-15.2	-0.1	5.3	11.9	17.8	17.5	10.8	-6.6	-61.2
C-7 Gear Box	Future	28.6	-15.2	0.4	7	15.3	23.3	25.3	20.8	5.1	-49.2
C-8 Gear Box	Future	19.5	-15.7	-1.4	3.5	9.8	15.6	15.1	8.2	-7.7	-59.5
C-9 Gear Box	Future	25.8	-15.1	0.3	6.6	14.4	21.5	22.2	16.1	-1.2	-56.6
Truck Backing Up Beeper	Truck_Beeper	16.4				-85.6	-83.2	16.4	-87.7		
Truck Backing Up Engine	Truck_Engine	28.5	2	9.7	23.2	19.3	22.6	22.6	15.6	3.1	-36.4
Truck Backing Up Engine	Truck_Engine	37.4	2.7	11.8	27.2	25.5	31.3	34	28.7	14.4	-31.8
Truck Backing Up Engine	Truck_Engine	30	-0.2	8.6	23.3	20.5	24.7	25.1	16.3	-5	-69.8
Truck Backing Up Engine	Truck_Engine	28.5	-0.7	7.9	22.4	19.3	23.1	23.2	14.1	-7.8	-74.2
Truck Backing Up Alarm	Truck_Alarm	17.2				-85.6	-82.6	17.2			
Truck Backing Up Alarm	Truck_Alarm	18				-85	-81.8	18	-87.6		
Truck Backing Up Alarm	Truck_Alarm	27.5			-86.8	-79.7	-74.8	27.5	-74.6	-87.4	
Truck Pulling Away	Truck_Away	34.1	0	9.1	24.4	22.6	28.3	30.6	24.1	5.3	-57.5
Truck Pulling Away	Truck_Away	28.7	-0.5	8.2	22.6	19.5	23.3	23.4	14.4	-7	-71.5
Primary Crusher	Primary_Crusher	42.4	2.1	21.7	26	35.1	38.3	37.5	31.4	11.8	-50.2

13 White Tail Way 15ft

Source	Partial Level Future with Primary										
Name	ID	13 White Tail Way 15ft									
		dBA	31.5	63	125	250	500	1000	2000	4000	8000
ST-1 HP 400 Crusher	Future	31.6	-2.6	17.2	21.8	26.4	27.5	23.1	14.9	-2.6	-56.8
CRST-2 Dual HP 400 Crushers	Future	32.1	2.9	12.6	18.6	23.6	27.3	27	24	10.7	-33.7
ST-1 8'x20' Screen	Future	28.3	-6.5	11.1	12.5	18.8	25	23.4	14.8	-4.5	-59.8
ST-3 (2) 8'x24' DD Screens	Future	39.3	3.1	21.2	21.4	28.9	35.9	34.8	27.2	9.3	-34.2
ST-4 (1) 4'x8' Rinse Screen	Future	38.8	14.6	26.7	32.1	31.9	32.6	32.1	27.2	14.6	-22.9
ST-5 (1) 4'x8' Screen	Future	41	12.6	25	31.1	32.1	34.5	36.2	33.5	22	-20.2
Surge Pile	Future	36.2	-7.8	7.5	17.3	29.5	31.4	31.5	26.5	10.4	-38.7
TS-1 Transfer	Future	34.9	-7	8.1	17.6	29.3	30.4	29.3	22.9	6.1	-41
C-10 Gear Box	Future	29.2	-12.4	3	9.4	17.3	24.6	25.6	20.5	6.7	-36.4
C-11 Gear Box	Future	25	-12.4	2.4	8	14.7	20.9	20.8	15	1.5	-36.5
C-12 Gear Box	Future	29.1	-12.5	2.9	9.3	17.1	24.5	25.5	20.3	6.3	-37.2
C-13 Gear Box	Future	30.1	-12.4	3	9.5	17.6	25.2	26.6	21.8	8.2	-35
C-14 Gear Box	Future	29.1	-12.3	3.1	9.5	17.3	24.5	25.4	20.2	6.5	-36
C-15 Gear Box	Future	24.9	-12.4	2.4	7.9	14.7	20.8	20.7	15	1.4	-36.5
C-17 Gear Box	Future	30.3	-14.1	1.5	8.2	16.6	24.7	27	23.2	9.6	-38.4
C-18 Gear Box	Future	29.5	-14	1.5	8.1	16.4	24.3	26.2	21.7	7	-42.6
C-19 Gear Box	Future	23.5	-14.1	0.8	6.5	13.3	19.5	19.4	13.2	-2.3	-48.5
C-20 Gear Box	Future	30.4	-14	1.6	8.3	16.7	24.8	27.1	23.4	9.9	-37.7
C-21 Gear Box	Future	29.3	-14.6	0.9	7.6	15.9	24	26	21.8	7	-44.5
C-22 Gear Box	Future	29.8	-14.5	1.1	7.7	16.1	24.3	26.5	22.6	8.5	-41.6
C-23 Gear Box	Future	30.6	-13.8	1.7	8.4	16.8	25	27.3	23.5	10.2	-36.8
C-24 Gear Box	Future	30.3	-14	1.5	8.2	16.6	24.8	27	23.3	9.8	-38.1
C-24 Gear Box	Future	30.3	-14.1	1.5	8.2	16.6	24.7	27	23.2	9.6	-38.4
C-24 Gear Box	Future	24.9	-12.4	2.4	7.9	14.7	20.8	20.7	15	1.4	-36.5
C-25 Gear Box	Future	30.4	-14	1.6	8.2	16.6	24.8	27.1	23.3	9.9	-37.8
C-26 Gear Box	Future	28.6	-15.4	0.1	6.7	15.1	23.2	25.3	21.1	5.6	-49.4
C-27 Gear Box	Future	28.4	-15.5	0	6.6	15	23.1	25.2	20.9	5.3	-50.2
C-3 Gear Box	Future	25.8	-14.7	0.6	6.9	14.5	21.5	22.1	16	-0.6	-53.3
C-5 Gear Box	Future	22.4	-14.2	0.5	5.9	12.5	18.4	18.2	11.9	-3.2	-47.5
C-6A Gear Box	Future	20.3	-14.7	-0.4	4.4	10.6	16.3	15.9	10	-2	-44.4
C-6B Gear Box	Future	24.1	-12.8	1.9	7.3	14	20	19.9	14	0.2	-38.7
C-7 Gear Box	Future	28.5	-12.5	2.9	9.2	16.9	24.1	24.8	19.5	5.5	-37.7
C-8 Gear Box	Future	19.9	-14.8	-0.6	4.1	10.2	15.8	15.4	10.1	-1.8	-43.8
C-9 Gear Box	Future	27.4	-12.5	2.8	8.9	16.4	23.1	23.6	18	4	-38.7
Truck Backing Up Beeper	Truck_Beeper	26			-83.7	-77.7	-74.4	26	-77.3	-87.4	
Truck Backing Up Engine	Truck_Engine	37	7	15.6	30.1	27.2	31.4	32.1	25.6	14	-14.5
Truck Backing Up Engine	Truck_Engine	36.6	6.1	15	29.7	26.9	31	31.7	25	12.2	-21.4
Truck Backing Up Engine	Truck_Engine	30.3	1.3	9.9	24.2	21	24.8	25	16.8	-1.3	-52.3
Truck Backing Up Engine	Truck_Engine	30.4	1.4	10	24.3	21.1	24.9	25.1	16.9	-1	-51.7
Truck Backing Up Alarm	Truck_Alarm	19				-83.8	-80.8	19	-85.9		
Truck Backing Up Alarm	Truck_Alarm	18.1				-84.5	-81.7	18.1	-87		
Truck Backing Up Alarm	Truck_Alarm	28.8			-83.7	-76.9	-72.6	28.8	-73.9	-84.7	
Truck Pulling Away	Truck_Away	33.2	2	10.9	25.7	23.3	27.8	28.7	21	3.5	-48.1
Truck Pulling Away	Truck_Away	30.2	1.4	9.9	24.2	21	24.7	24.9	16.7	-1.2	-51.5
Primary Crusher	Primary_Crusher	40.4	3.4	22.7	26.5	34.7	36.6	34.1	26.2	6.4	-49.8