Appendix CC
Noise Measurements

Appendix CC-1
Field Notes

FIELD NOISE MEASUREMENT DATA

Report: ST1 Day

File: ST1 Day

Project Name: Solar 1 AFC — Page ___ of ___

Project #: 27658182.10000 — Day / Date: 11/3/08 — My Name: CM/AP

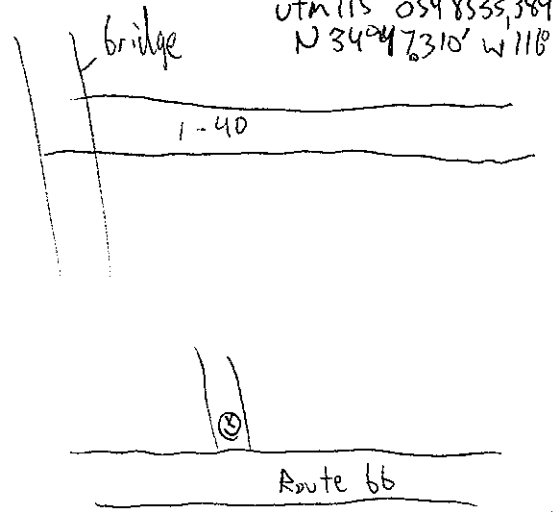
Sound Level Meter	Calibrator	Weather Meter
Model # LD 820	Model # Cal 150B	Model # Sm-28 — Serial # 02393
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114.0 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	11:25		55.8	39.4	65.1	58.8	53.6	47.1	6 / SE	73.1	48.6	28.31	0
	11:30		54.4	41.9	62.0	57.4	54.1	45.3					
	11:35		57.5	43.2	65.1	61.2	55.6	49.5					
	11:40		55.1	39.1	63.7	59.2	52.3	45.3					
	11:45		57.4	41.2	70.1	61.3	54.1	47.2					
	11:50		57.8	43.0	67.3	62.1	54.3	47.2					
	11:55		55.2	42.2	64.8	59.3	52.4	46.4					
	12:00		57.9	45.5	65.6	62.0	54.9	48.5					
	12:05		56.4	42.3	66.6	61.3	52.3	44.3					
	12:10		54.2	42.1	64.9	58.4	51.1	44.7					

Roadway Name	US I-40 W	I-40 E	
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles	217	204	
Medium Trucks	32 16vs	17 36vs	
Heavy Trucks	96 1motor	85 2motor	

12:15	58.1	44.1	66.4	62.6	54.9	46.3
12:20	56.7	43.7	65.7	60.5	54.6	48.1

Location(s) / GPS Reading(s):
UTM 11S 0548533, 3849721
N 34°47.310' W 118°28.171'



about .3 miles from residence

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Report! ST1 Night

FIELD NOISE MEASUREMENT DATA

File: ST1 Night

Project Name: Solar 1 AFC | Page ___ of ___
Project #: 27658182.10000 | Day / Date: 11/3/08 | My Name: CM/AP

Sound Level Meter	Calibrator	Weather Meter
Model # LD 820 SLM	Model # LD CAL 150 B	Model # Sm28 Serial # 02393
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	23:15	23:20	56.9	40.5	66.4	61.5	51.5	44.9	10-22 mph	65.8	44.6	28.2	20%
	23:20	23:25	55.7	35.6	63.9	60.5	51.5	40.7					
	23:25	23:30	54.6	35.5	66.4	58.4	48.0	39.9					
	23:30	23:35	54.5	37.6	61.8	59.1	51.8	40.0					
	23:35	23:40	52.5	39.2	61.3	57.5	47.3	41.7					
	23:40	23:45	53.7	34.9	60.4	58.9	49.3	37.0					
	23:45	23:50	54.3	37.4	64.2	59.0	50.1	39.7					
	23:50	23:55	56.7	40.0	67.5	61.3	52.7	42.3					
	23:55	24:00	57.9	37.6	64.0	62.5	55.7	42.6					
	0:00	0:05	56.5	44.0	67.3	60.1	53.9	49.6					

Roadway Name	US40 EB	US40 WB	
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way	2	2	
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles	~~80~~ 12	30	
Medium Trucks			
Heavy Trucks	101	64	

Location(s) / GPS Reading(s):

See dAT reading
Nearest residence

0:05	0:10	58.1	47.6	66.3	61.3	56.8	51.7
0:10	0:15	59.4	45.3	67.3	63.4	56.9	50.6

Other Noise Sources: distant: aircraft / (roadway traffic) / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Report: STZ Day

FIELD NOISE MEASUREMENT DATA

File: STZ Day

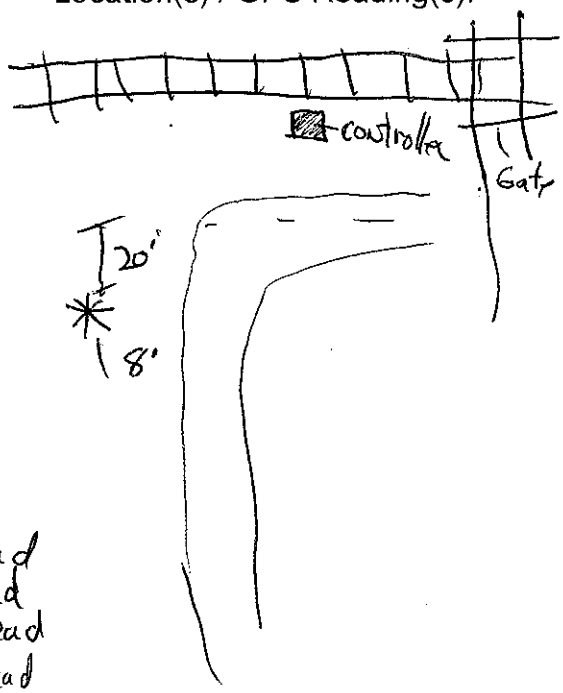
Project Name: Solar 1 AFC | Page ___ of ___
Project #: 27658182.10000 | Day / Date: 11/3/08 | My Name: CM/AD

Sound Level Meter	Calibrator	Weather Meter
Model # LD 820SLM	Model # C150	Model # SM28 Serial # 02393
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
4	2:50	~~3:00~~ 2:54	39.4	34.0	49.7	43.3	36.1	34.6	5.4 mph East	77.5°	42.1%	28.21	0%
	2:55	3:00	34.9	33.7	40.6	35.8	34.6	34.0					
	3:00	3:05	34.2	33.8	36.0	34.9	34.4	33.8					
	3:05	3:10	34.5	33.9	37.9	35.0	34.5	34.1					
	3:10	3:15	39.4	33.8	50.0	43.8	34.9	33.8					
	3:15	3:20	37.0	34.1	42.4	38.9	36.6	34.4					

Roadway Name	None		
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):



0550080
3851383
N 34° 48.209'
E 116° 27.148'

2:52 - Jet overhead
3:06 - Jet overhead
3:13 - Jet overhead
3:16 - Jet overhead

Other Noise Sources: distant: aircraft / (roadway traffic) / trains / landscaping / rustling leaves / children playing / dogs barking / (birds vocalizing)

Notes and Sketches on Reverse

Report: ST2 Night

FIELD NOISE MEASUREMENT DATA

File: ST2 Night

Project Name: Solar 1 AFC | Page ___ of ___
Project #: 27658182.10000 | Day / Date: 11/3/08 | My Name: AP/CM

Sound Level Meter	Calibrator	Weather Meter
Model # 820	Model # CAL 150	Model # SM28 Serial # 02393
Serial # 1324	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.8 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	12:30	12:35	42.4	38.4	52.0	43.8	42.2	40.3	11.5 mph E	58.4	53.6	28.07	?
	12:35	12:40	85.1	40.8	102.6	83.4	48.0	42.6					
	12:40	12:45	42.8	36.9	48.9	44.8	42.7	38.3					
	12:45	12:50	75.6	36.6	94.5	59.4	41.9	38.4					
	12:50	12:55	76.3	36.3	94.7	81.7	39.3	37.3					
	12:55	1:00	79.6	36.0	100.8	79.7	50.6	37.9					

Roadway Name			
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):

See Daytime readings
Near train tracks

12:36 Train with whistles
12:49 Train with whistles
12:53 Train with whistles

Other Noise Sources: distant: aircraft / (roadway traffic) / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

Report: ST3 Day

File: ST5 Day

Project Name: Solar 1 AFC | Page ___ of ___

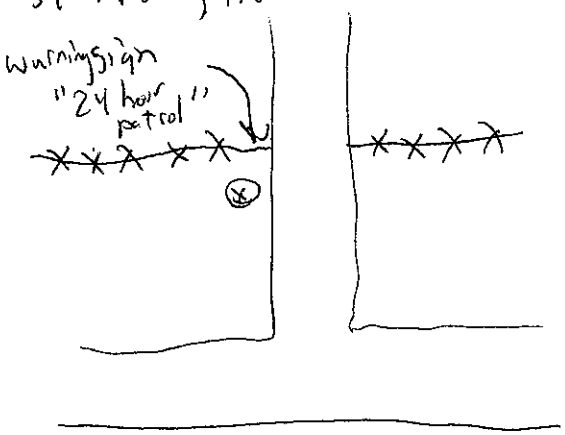
Project #: 27658182.10000 | Day / Date: 11/6/08 | My Name: AP/CM

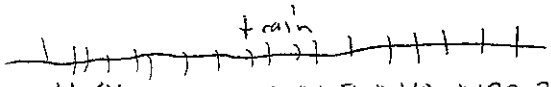
Sound Level Meter	Calibrator	Weather Meter
Model # LD 820	Model # Cal 150B	Model # Sn28 Serial # 02393
Serial # 1655	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.9 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	16:45		34.9	30.1	41.9	37.7	33.9	31.3	1/E	68.3	27.0	28.39	0
	16:50		38.9	30.7	48.9	42.1	37.3	34.1					
	16:55		38.7	31.0	45.9	41.4	38.0	33.5					
	17:00		39.1	32.8	45.7	41.5	38.0	35.3					
	17:05		40.1	28.8	47.3	43.0	39.5	31.6					
	17:10		41.5	31.9	51.3	44.4	39.7	33.7					
	17:15		56.1	33.2	77.4	47.4	40.3	35.1					
	17:20		45.0	37.0	52.3	48.3	43.8	40.1					
	17:25		74.2	41.4	84.5	75.9	72.5	42.9					
	17:30		42.8	38.6	51.9	44.6	42.1	40.3					
	17:35		77.0	43.1	84.5	82.4	52.0	45.1					
	17:40		43.6	40.8	46.9	45.0	43.6	41.8					

Roadway Name	None		
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):
UTM 11S 0557260, 3849007
34°46.898', 116°22.450'





Aircraft - 16:54, 17:01, 17:05, 17:08, 17:10, 17:20-21, 17:30, 17:42

Train - 17:24, 17:35

Other Noise Sources: distant aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

Report: ST3 Night

File: ST5 Night

Project Name: Solar 1 AFC — Page ___ of ___

Project #: 27658182.10000 — Day / Date: 11/6/08 — My Name: CM

Sound Level Meter	Calibrator	Weather Meter
Model # 820	Model # Cal 150B	Model # SM28 Serial # 02393
Serial # 1655	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.9 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	23:20		64.6	41.5	75.4	72.4	46.0	43.3	1 / E	55.5	31.1	28.23	–
	23:25		48.3	40.8	53.0	51.2	47.0	43.8					
	23:30		73.3	46.3	84.6	76.4	61.8	48.3					
	23:35		45.0	32.8	50.3	47.9	44.4	38.2					
	23:40		72.2	45.1	86.0	74.9	50.7	46.6					
	23:45		75.1	42.8	83.6	80.6	54.0	44.9					
	23:50		43.2	35.1	49.0	45.7	42.6	40.2					
	23:55		41.9	36.7	47.2	44.0	41.4	38.9					
	0:00		44.7	32.3	49.4	47.5	44.7	36.7					
	0:05		45.8	41.2	51.8	48.5	45.1	42.7					

Roadway Name			
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):

See day sheet

0:10	44.0	34.8	50.6	47.3	43.5	36.4
0:15	44.7	31.8	50.5	48.1	44.0	36.6

Train – 23:20, 23:30, 23:41, 23:44

Other Noise Sources: distant: aircraft / (roadway traffic) / (trains) / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Report: ST4 Day

FIELD NOISE MEASUREMENT DATA

File: ST7 Day

Project Name: Solar \ AFC Page ___ of ___

Project #: 27658182.10000 Day / Date: 11/07/08 My Name: CM

Sound Level Meter	Calibrator	Weather Meter
Model # 820	Model # Cal 150B	Model # SM28 Serial # 02393
Serial # 1655	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.9 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	14:10		48.4	39.0	55.5	53.5	41.8	40.0	6-7/E	78.1	25.6	28.11	0
	14:15		41.1	38.5	43.4	42.1	40.9	39.8					
	14:20		43.0	39.5	56.5	44.6	42.0	40.3					
	14:25		42.7	38.4	51.2	45.6	41.1	39.2					

Roadway Name	LOS partially blocked		
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

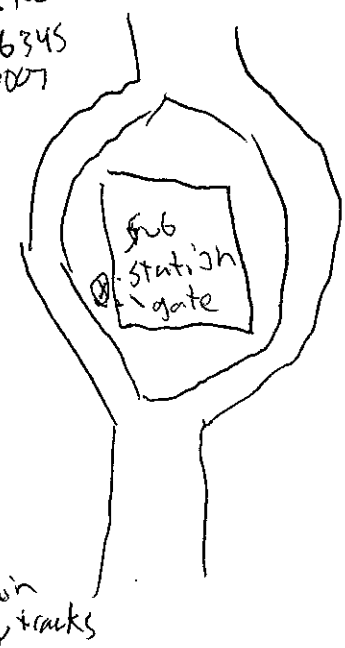
Location(s) / GPS Reading(s):

↑ I-40

N 34°46.902' W 116°23.050'

UTM 0556345

115 3849007



ST7 Day

Train - 14:10
Aircraft - 14:24

Transmission line noise

Other Noise Sources: distant: aircraft / (roadway traffic) / (trains) / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

Report: ST4 Night

FIELD NOISE MEASUREMENT DATA

File: ST7 Night

Project Name: Solar 1 AFC | Page ___ of ___
Project #: 27658182.10000 | Day / Date: 11/07/08 | My Name: CM

Sound Level Meter	Calibrator	Weather Meter
Model # 820	Model # Cal 150B	Model # Sm28 Serial # 02393
Serial # 1655	Serial # 2233	
Weighting: A / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / Soft / Mixed
Response: Slow / Fast / Impl	Post-Test: 113.9 dBA SPL	Topo: Flat / Hilly (describe)
Windscreen: Yes / No		Wind: Steady / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
	00:30		51.7	38.3	61.3	56.3	48.0	40.7	1/E	45	32.0	28.23	-
	00:35		48.6	37.9	55.5	51.5	47.9	41.7					
	00:40		48.4	37.0	56.2	52.7	45.4	38.7					
	00:45		50.4	42.1	59.1	53.9	48.4	43.8					

Roadway Name			
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):

See day sheet

at substation gate

~~ST6~~ ST7 Night

Train - 00:30, 00:44

Transmission line noise

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

Report: LT1 File: LT1

Project Name: Solar 1 AFC Page of

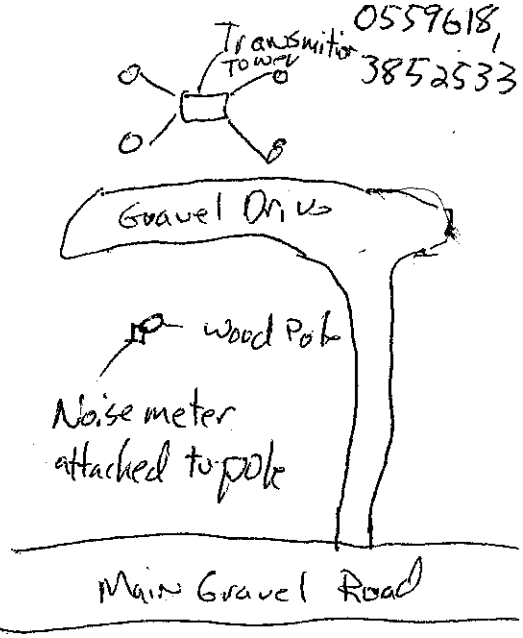
Project #: 27658182.10000 Day / Date: 11/02/08 My Name: CM / AP

Sound Level Meter	Calibrator	Weather Meter
Model # 712	Model # Cal 150B	Model # SM28 Serial # 02393
Serial # 0418	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114.0 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114.0 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: Steady / (Gusty)

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
1	12:05								15 mph	70	46%	27.6	80%
2nd try	1:35								2.5 / E	78.5	33.9%	27.86	0%

Roadway Name			
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s): 0559618, 3852533



Transmition lines are producing significant noise around the area.

Location 34°48.810 + 116°20.891

Site is just north of Study Area on East edge

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

Report: LT2

File: LT2

Project Name: Solar 1 AFC

Page ___ of ___

Project #: 27658182.10000

Day / Date: 10/2/08

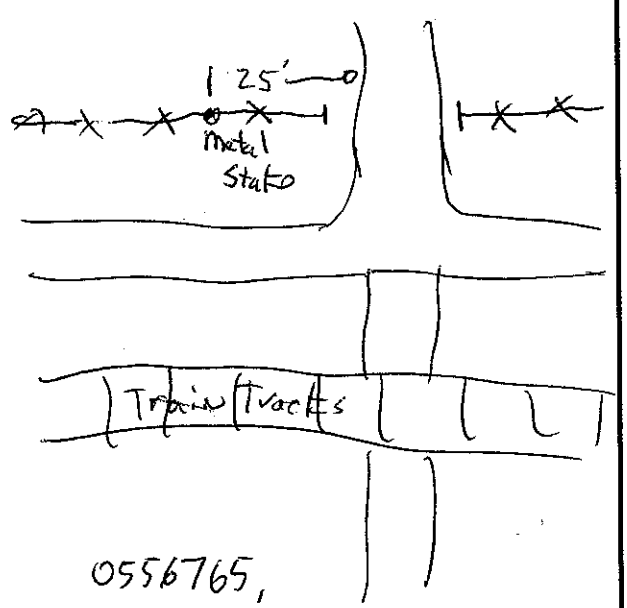
My Name: CM/AP

Sound Level Meter	Calibrator	Weather Meter
Model # 720	Model # C150B	Model # ___ Serial # ___
Serial # 0395	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 114 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
2	1:45								21 mph East	71.7°	40.3%	27.91	40%
2 addl	2:00								8.7 mph East	75.5°	33.8	28.02	0%

Roadway Name			
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):



0556765,
3849502

Train Horn during start of reading

N 34° 47.169'

E 116° 22.771'

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

FIELD NOISE MEASUREMENT DATA

Report: LT3

File: LT3

Project Name: Solar 1 AFC — Page ___ of ___

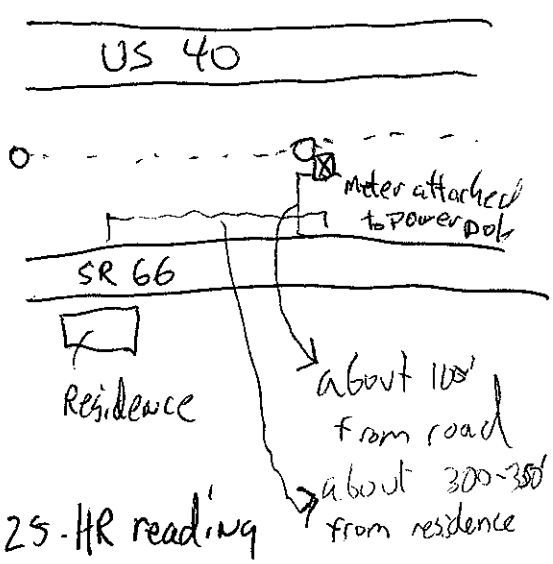
Project #: 27658182.10000 — Day / Date: 11/5/08 — My Name: AP/CM

Sound Level Meter	Calibrator	Weather Meter
Model # LD 712	Model # CAL 150 B	Model # Skymaster Serial # 02393
Serial # 0418	Serial # 2233	
Weighting: (A) / C / Flat	Pre-Test: 114 dBA SPL	Terrain: Hard / (Soft) / Mixed
Response: (Slow) / Fast / Impl	Post-Test: 113.5 dBA SPL	Topo: (Flat) / Hilly (describe)
Windscreen: (Yes) / No		Wind: (Steady) / Gusty

ID	Time Start	Time Stop	Leq	Lmin	Lmax	L10	L50	L90	Wind Spd/ Dir (mph)	Temp (°F)	RH (%)	Bar Psr (in Hg)	Cloud Cover (%)
1	11:10								6.4mph	70.8°F	28.5	28.53	5%
	STOPPED IN MIDDLE OF NIGHT DUE TO POWER												
	FAILURE-LIKELY FROM COLD												
2	12:30												

Roadway Name			
Speed (post/obs)			
Number of Lanes			
Width (pave/row)			
1- or 2- way			
Grade			
Bus Stops			
Stoplights			
Street Parking			
Automobiles			
Medium Trucks			
Heavy Trucks			

Location(s) / GPS Reading(s):



0549164, 3849699
34°47.301', 116°27.755'

25-HR reading

Other Noise Sources: distant: aircraft / roadway traffic / trains / landscaping / rustling leaves / children playing / dogs barking / birds vocalizing

Notes and Sketches on Reverse

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Appendix CC-2
Site Photos

	Photograph 1 **Date:** 11/03/08 **Comments:** ST1: Short-term monitor, reference position near residence located south of Route 66, west of Hector Road; meter and picture facing north at north of Route 66.
	Photograph 2 **Date**: 11/03/08 **Comments**: ST1: Short-term monitor, reference position near residence located south of Route 66, west of Hector Road; meter facing north, picture facing east at north of Route 66.

Photograph 3

Date: 11/03/08

Comments:
ST2: Short-term monitor, reference position west of Hector Road, south of train tracks; meter facing east, picture facing north.

Photograph 4
Date: 11/03/08

Comments:
ST2: Short-term monitor, reference position west of Hector Road, south of train tracks; meter facing east, picture facing south.

	Photograph 5 **Date:** 11/05/08 **Comments:** ST3: Short-term monitor, reference point at the gate post entering the residence to the east of the Project area, north of the train tracks; meter facing south, picture facing north.
	Photograph 6 **Date**: 11/05/08 **Comments**: ST3: Short-term monitor, reference point at the gate post entering the residence to the east of the Project area, north of the train tracks; meter facing south, picture facing south.

Photograph 7

Date: 11/07/08

Comments:
ST4: Short-term monitor, reference position at northeastern gate of Pisgah Substation; meter facing south, picture facing north.

Photograph 8
Date: 11/07/08

Comments:
ST4: Short-term monitor, reference position at northeastern gate of Pisgah Substation; meter facing south, picture facing south.

	Photograph 9 **Date:** 11/02/08 **Comments:** LT1: Long-term monitor, reference position at northeastern corner of Project area; microphone facing south, picture facing west.
	Photograph 10 **Date**: 11/02/08 **Comments**: LT1: Long-term monitor, reference position at northeastern corner of Project area; microphone facing south, picture facing east.

Photograph 11

Date: 11/02/08

Comments:
LT2: Long-term monitor, reference position at southeastern corner of Project area; microphone facing south, picture facing south.

Photograph 12
Date: 11/05/08

Comments:
LT3: Long-term monitor, reference position nearby resident located south of Route 66 and west of Hector Road; microphone facing north, picture facing north at north of Route 66.

Photograph 13
Date: 11/05/08

Comments:
LT3: Long-term monitor, reference position nearby resident located south of Route 66 and west of Hector Road; microphone facing north, picture facing southwest, towards residence at north of Route 66.

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Appendix CC-3
Long-Term Sound Level Measurement

Table CC-3-1
LT1 Detailed Long-Term Noise Measurement Data Summary

Hourly Results at LT1 (dBA)							
Hour Start	Hour End	Statistical Descriptors					
		L_{eq}	L_{min}	L_{max}	L_{10}	L_{50}	L_{90}
13:35	14:00	45	40	55	46	45	43
14:00	15:00	44	37	54	45	44	42
15:00	16:00	44	38	53	45	44	42
16:00	17:00	44	39	54	45	44	42
17:00	18:00	47	43	57	49	46	45
18:00	19:00	49	43	58	51	48	46
19:00	20:00	54	44	67	56	52	49
20:00	20:15	57	48	67	60	55	50

Note: Measurement was conducted on November 3, 2008.

Table CC-3-2
LT2 Detailed Long-Term Noise Measurement Data Summary

24-hr Measurement Hourly Results at LT2 (dBA)							
Hour Start	Hour End	Statistical Descriptors					
		L_{eq}	L_{min}	L_{max}	L_{10}	L_{50}	L_{90}
13:40	14:40	75	44	100	66	56	52
14:40	15:40	78	39	101	65	48	43
15:40	16:40	72	39	100	55	48	44
16:40	17:40	73	39	100	57	48	46
17:40	18:40	72	42	100	58	50	45
18:40	19:40	74	42	101	53	48	45
19:40	20:40	76	41	101	61	49	46
20:40	21:40	71	43	98	57	49	47
21:40	22:40	70	41	98	52	47	44
22:40	23:40	63	40	94	50	47	45
23:40	0:40	72	39	102	47	43	41
0:40	1:40	76	38	101	55	45	40
1:40	2:40	76	39	101	56	48	43
2:40	3:40	74	37	102	45	39	38
3:40	4:40	71	37	99	42	41	38
4:40	5:40	78	36	103	52	43	38
5:40	6:40	74	35	102	50	41	38
6:40	7:40	76	36	101	55	46	40
7:40	8:40	38	36	50	39	38	37
8:40	9:40	77	36	100	61	41	38
9:40	10:40	75	37	100	50	40	38
10:40	11:40	76	37	103	50	39	38
11:40	12:40	78	37	101	67	45	38
12:40	13:40	75	37	100	49	43	39

Note: Measurement was conducted on November 2, 2008 – November 3, 2008.

Table CC-3-3
LT3 Detailed Long-Term Noise Measurement Data Summary

25-hr Measurement Hourly Results at LT3 (dBA)							
Hour Start	Hour End	Statistical Descriptors					
		L_{eq}	L_{min}	L_{max}	L_{10}	L_{50}	L_{90}
13:00	14:00	66	43	76	70	62	52
14:00	15:00	65	45	78	69	62	53
15:00	16:00	66	44	80	70	62	52
16:00	17:00	65	39	78	69	60	51
17:00	18:00	64	40	74	68	60	51
18:00	19:00	64	42	75	68	60	52
19:00	20:00	65	42	77	69	62	53
20:00	21:00	63	45	76	67	60	53
21:00	22:00	64	40	77	68	60	50
22:00	23:00	63	44	82	67	59	51
23:00	0:00	63	38	74	67	58	47
0:00	1:00	62	38	76	66	56	47
1:00	2:00	62	38	76	67	56	46
2:00	3:00	62	41	81	67	57	48
3:00	4:00	62	38	78	66	57	47
4:00	5:00	63	40	74	67	57	47
5:00	6:00	65	40	76	69	61	50
6:00	7:00	64	44	76	68	61	53
7:00	8:00	65	44	78	69	60	50
8:00	9:00	64	40	78	69	59	49
9:00	10:00	64	38	78	69	58	46
10:00	11:00	64	40	78	69	58	49
11:00	12:00	65	42	78	70	61	51
12:00	13:00	66	43	84	70	62	52
13:00	14:00	67	42	77	71	63	54

Note: Measurement was conducted on November 6, 2008 – November 7, 2008.

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Appendix CC-4
Suncatcher Construction Noise Calculation

Table CC-4-1
Monthly Construction Use (Each 18MW Block)

Equipment Description	Utilization	HP	Base Sound (SPL at 1m, dBA)	Project Monthly Construction Equipment Use-Months			
				1	2	3	4
PLC Trencher	100%	125	111	1			
Backhoe	100%	120	111	1			
Compactor	100%	120	111	1			
Cable/Rigging Truck	100%	250	114	1			
Flatbed Truck w. Boom	100%	275	114	1			
Pickup Truck	100%	150	111	1			
Dozer	100%	250	114	1			
Grader	100%	175	112	1			
Loader	100%	250	114	1			
Backhoe	100%	120	111	1			
Dump Truck	100%	250	114	1			
Compactor	100%	120	111	1			
Drill Rig	100%	100	110		5		
Water Truck	100%	200	113		1		
Fuel/Service Truck	100%	200	113		1		
Flatbed Truck w. Boom	100%	275	114		5		
Pickup Truck	100%	150	111		5		
Backhoe	100%	120	111		5		
Flatbed Truck w. Boom	100%	275	114			1	
Maxi Sneeker	100%	100	110			1	
Backhoe	100%	120	111			1	
Maxi Sneeker	100%	100	110			5	
Flatbed Truck w. Boom	100%	275	114			5	
Backhoe	100%	120	111			5	
Skid Steer	100%	45	106			5	
Telehandler	100%	120	111				8
SES Field Service Truck		250	114				8
Crane	100%	250	114				4
Pickup Truck	100%	150	111				8
Track Transporter	100%	275	114				4
Grader	100%	175	112		1	1	1
Compactor	100%	120	111		1	1	1
Aggregate				12	24	25	34

Table CC-4-2
Calculated Construction Levels at ST1

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month			
		1	2	3	4
PLC Trencher	400	59	0	0	0
Backhoe	400	58	0	0	0
Compactor	400	58	0	0	0
Cable/Rigging Truck	400	62	0	0	0
Flatbed Truck w. Boom	400	62	0	0	0
Pickup Truck	400	59	0	0	0
Dozer	400	62	0	0	0
Grader	400	60	0	0	0
Loader	400	62	0	0	0
Backhoe	400	58	0	0	0
Dump Truck	400	62	0	0	0
Compactor	400	58	0	0	0
Drill Rig	400	0	65	0	0
Water Truck	400	0	61	0	0
Fuel/Service Truck	400	0	61	0	0
Flatbed Truck w. Boom	400	0	69	0	0
Pickup Truck	400	0	66	0	0
Backhoe	400	0	65	0	0
Flatbed Truck w. Boom	400	0	0	62	0
Maxi Sneeker	400	0	0	58	0
Backhoe	400	0	0	58	0
Maxi Sneeker	400	0	0	65	0
Flatbed Truck w. Boom	400	0	0	69	0
Backhoe	400	0	0	65	0
Skid Steer	400	0	0	61	0
Telehandler	400	0	0	0	68
SES Field Service Truck	400	0	0	0	71
Crane	400	0	0	0	68
Pickup Truck	400	0	0	0	68
Track Transporter	400	0	0	0	68
Grader	400	0	60	60	60
Compactor	400	0	58	58	58
Aggregate		71	73	73	76

Table CC-4-3
Calculated Construction Levels at SR1

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month			
		1	2	3	4
PLC Trencher	470	57	0	0	0
Backhoe	470	57	0	0	0
Compactor	470	57	0	0	0
Cable/Rigging Truck	470	60	0	0	0
Flatbed Truck w. Boom	470	61	0	0	0
Pickup Truck	470	58	0	0	0
Dozer	470	60	0	0	0
Grader	470	59	0	0	0
Loader	470	60	0	0	0
Backhoe	470	57	0	0	0
Dump Truck	470	60	0	0	0
Compactor	470	57	0	0	0
Drill Rig	470	0	63	0	0
Water Truck	470	0	59	0	0
Fuel/Service Truck	470	0	59	0	0
Flatbed Truck w. Boom	470	0	68	0	0
Pickup Truck	470	0	65	0	0
Backhoe	470	0	64	0	0
Flatbed Truck w. Boom	470	0	0	61	0
Maxi Sneeker	470	0	0	56	0
Backhoe	470	0	0	57	0
Maxi Sneeker	470	0	0	63	0
Flatbed Truck w. Boom	470	0	0	68	0
Backhoe	470	0	0	64	0
Skid Steer	470	0	0	60	0
Telehandler	470	0	0	0	66
SES Field Service Truck	470	0	0	0	69
Crane	470	0	0	0	66
Pickup Truck	470	0	0	0	67
Track Transporter	470	0	0	0	67
Grader	470	0	59	59	59
Compactor	470	0	57	57	57
Aggregate		70	72	72	74

Table CC-4-4
Calculated Construction Levels at ST3

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month			
		1	2	3	4
PLC Trencher	900	52	0	0	0
Backhoe	900	51	0	0	0
Compactor	900	51	0	0	0
Cable/Rigging Truck	900	55	0	0	0
Flatbed Truck w. Boom	900	55	0	0	0
Pickup Truck	900	52	0	0	0
Dozer	900	55	0	0	0
Grader	900	53	0	0	0
Loader	900	55	0	0	0
Backhoe	900	51	0	0	0
Dump Truck	900	55	0	0	0
Compactor	900	51	0	0	0
Drill Rig	900	0	58	0	0
Water Truck	900	0	54	0	0
Fuel/Service Truck	900	0	54	0	0
Flatbed Truck w. Boom	900	0	62	0	0
Pickup Truck	900	0	59	0	0
Backhoe	900	0	58	0	0
Flatbed Truck w. Boom	900	0	0	55	0
Maxi Sneeker	900	0	0	51	0
Backhoe	900	0	0	51	0
Maxi Sneeker	900	0	0	58	0
Flatbed Truck w. Boom	900	0	0	62	0
Backhoe	900	0	0	58	0
Skid Steer	900	0	0	54	0
Telehandler	900	0	0	0	60
SES Field Service Truck	900	0	0	0	64
Crane	900	0	0	0	61
Pickup Truck	900	0	0	0	61
Track Transporter	900	0	0	0	61
Grader	900	0	53	53	53
Compactor	900	0	51	51	51
Aggregate		64	66	66	69

Table CC-4-5
Calculated Construction Levels at SR2

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month			
		1	2	3	4
PLC Trencher	2480	43	0	0	0
Backhoe	2480	43	0	0	0
Compactor	2480	43	0	0	0
Cable/Rigging Truck	2480	46	0	0	0
Flatbed Truck w. Boom	2480	46	0	0	0
Pickup Truck	2480	44	0	0	0
Dozer	2480	46	0	0	0
Grader	2480	44	0	0	0
Loader	2480	46	0	0	0
Backhoe	2480	43	0	0	0
Dump Truck	2480	46	0	0	0
Compactor	2480	43	0	0	0
Drill Rig	2480	0	49	0	0
Water Truck	2480	0	45	0	0
Fuel/Service Truck	2480	0	45	0	0
Flatbed Truck w. Boom	2480	0	53	0	0
Pickup Truck	2480	0	51	0	0
Backhoe	2480	0	50	0	0
Flatbed Truck w. Boom	2480	0	0	46	0
Maxi Sneeker	2480	0	0	42	0
Backhoe	2480	0	0	43	0
Maxi Sneeker	2480	0	0	49	0
Flatbed Truck w. Boom	2480	0	0	53	0
Backhoe	2480	0	0	50	0
Skid Steer	2480	0	0	45	0
Telehandler	2480	0	0	0	52
SES Field Service Truck	2480	0	0	0	55
Crane	2480	0	0	0	52
Pickup Truck	2480	0	0	0	53
Track Transporter	2480	0	0	0	52
Grader	2480	0	44	44	44
Compactor	2480	0	43	43	43
Aggregate		55	57	57	60

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Appendix CC-5
Overall Construction Noise Calculation

Table CC-5-1
Monthly Construction Use (Overall)

Equipment Description	Utilization	HP	Base Sound (SPL at 1m, dBA)	Project Monthly Construction Equipment Use-Months																																											
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Aerial Lift (JLG)	100%	120	111	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Air Compressor	100%	50	107	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Asphalt Paver	100%	120	111	2	2	2	2	2	2	2	2	2	2	1	1																													
Backhoe	100%	120	111	4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6												
Compactor	100%	120	111	5	8	8	8	5	5	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1		
Concrete Pump Truck	100%	250	114	1	2	2	2	2	1	1							2	1	1						3	3	3																		
Crane	100%	250	114	1	4	4	4	4	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Dozer	100%	250	114	4	5	3	2	2	1	2	2	2	2	2	4	4	5	4	4	4	2	2	2	2	3	3	1																	
Drilling Rig	100%	250	114	3	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	5	5	5	5	5	5																		
Dump Truck	100%	250	114	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	5	6	6	3	2	2	2	2	2	2	2	2	2	2	2	2					
Flatbed Truck	100%	250	114	6	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	2	2	2	2					
Fork Lift	100%	50	107	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Generator	100%	50	107	2	2	2	2	2	7	7	6	6	6	6	6	6	6	6	6	6	1	2	2	2	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1					
Grader	100%	175	112	6	6	6	6	5	6	6	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1		
Light Tower	100%	50	107	1	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Loader	100%	250	114	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	3	2	2	2	2	2	2	2	2	2	2	2	2					
Maxi Sneeker (Trencher)	100%	50	107		3	3	1	1	3	3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6												
Pickup Truck	100%	175	112	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4
Skid Steer (Bobcat)	100%	50	107						4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5												
Telehandler	100%	120	111						3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Water Truck	100%	250	114	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2		
Welding Machine	100%	50	107		2	2	2	2	1	1	1	1	1	1	1	1									1	1	1																		
Aggregate				64	90	88	85	81	96	96	97	97	97	94	97	98	100	98	98	97	85	86	85	85	92	92	77	66	66	66	66	65	48	48	48	44	44	44	44	27	27	27	23	22

Table CC-5-2
Calculated Construction Levels at ST1

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month																																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Aerial Lift (JLG)	7200	36	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	36
Air Compressor	7200	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	30
Asphalt Paver	7200	36	36	36	36	36	36	36	36	36	36	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
Backhoe	7200	39	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	0	0	0	0	0	0	0	0	0	0	0	39
Compactor	7200	40	42	42	42	40	40	40	41	41	41	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	33	33	33	0	40
Concrete Pump Truck	7200	37	40	40	40	40	37	37	0	0	0	0	0	0	40	37	37	0	0	0	0	0	41	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Crane	7200	37	43	43	43	43	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	37
Dozer	7200	43	44	41	40	40	37	40	40	40	40	40	43	43	44	43	43	43	40	40	40	40	41	41	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Drilling Rig	7200	41	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
Dump Truck	7200	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	41	40	40	40	40	40	40	40	40	40	40	40	40	0	0	0	0	44
Flatbed Truck	7200	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	40	40	40	40	0	0	0	0	44
Fork Lift	7200	34	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	34
Generator	7200	33	33	33	33	33	38	38	37	37	37	37	37	37	37	37	37	37	30	33	33	33	34	34	33	30	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	33
Grader	7200	43	43	43	43	42	43	43	41	41	41	40	41	41	41	41	41	41	41	41	41	41	41	41	41	40	40	40	40	40	40	40	40	40	40	40	40	35	35	35	0	43
Light Tower	7200	30	33	33	33	33	33	30	30	30	30	30	30	33	33	33	33	33	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	30
Loader	7200	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	41	40	40	40	40	40	40	40	40	40	40	40	40	0	0	0	0	44
Maxi Sneeker (Trencher)	7200	0	34	34	30	30	34	34	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	0	0	0	0	0	0	0	0	0	0	0	0
Pickup Truck	7200	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Skid Steer (Bobcat)	7200	0	0	0	0	0	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	0	0	0	0	0	0	0	0	0	0	0	0
Telehandler	7200	0	0	0	0	0	38	38	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	0
Water Truck	7200	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43	40	40	40	0	44
Welding Machine	7200	0	33	33	33	33	30	30	30	30	30	30	30	30	0	0	0	0	0	0	0	0	30	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aggregate		53	55	54	54	54	55	55	55	55	55	54	55	55	55	55	55	55	54	54	54	54	54	54	53	52	52	52	52	52	52	52	52	51	51	51	51	49	49	49	48	53

Table CC-5-3
Calculated Construction Levels at SR1

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month																																											
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Aerial Lift (JLG)	6900	37	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	37
Air Compressor	6900	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	30
Asphalt Paver	6900	37	37	37	37	37	37	37	37	37	37	34	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Backhoe	6900	40	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	0	0	0	0	0	0	0	0	0	0	0	40
Compactor	6900	41	43	43	43	41	41	41	42	42	42	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	34	34	34	0	41
Concrete Pump Truck	6900	37	40	40	40	40	37	37	0	0	0	0	0	0	40	37	37	0	0	0	0	0	42	42	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Crane	6900	37	43	43	43	43	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	37
Dozer	6900	43	44	42	40	40	37	40	40	40	40	40	43	43	44	43	43	43	40	40	40	40	42	42	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Drilling Rig	6900	42	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	44	44	44	44	44	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Dump Truck	6900	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	44	44	45	45	42	40	40	40	40	40	40	40	40	40	40	40	40	0	0	0	0	45
Flatbed Truck	6900	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	40	40	40	40	0	0	0	0	45
Fork Lift	6900	35	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	35
Generator	6900	33	33	33	33	33	38	38	38	38	38	38	38	38	38	38	38	38	30	33	33	33	35	35	33	30	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	33
Grader	6900	43	43	43	43	42	43	43	41	41	41	40	41	41	41	41	41	41	41	41	41	41	41	41	41	40	40	40	40	40	40	40	40	40	40	40	40	35	35	35	0	43
Light Tower	6900	30	33	33	33	33	33	30	30	30	30	30	30	33	33	33	33	33	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	0	0	0	0	30
Loader	6900	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	42	40	40	40	40	40	40	40	40	40	40	40	40	0	0	0	0	45
Maxi Sneeker (Trencher)	6900	0	35	35	30	30	35	35	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	0	0	0	0	0	0	0	0	0	0	0	0
Pickup Truck	6900	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Skid Steer (Bobcat)	6900	0	0	0	0	0	36	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	0	0	0	0	0	0	0	0	0	0	0	0
Telehandler	6900	0	0	0	0	0	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	0
Water Truck	6900	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	43	43	43	43	43	43	43	43	43	43	43	43	40	40	40	0	45
Welding Machine	6900	0	33	33	33	33	30	30	30	30	30	30	30	30	0	0	0	0	0	0	0	0	30	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aggregate		54	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55	54	54	54	54	55	55	54	53	53	53	53	53	52	52	52	51	51	51	51	49	49	49	48	54

Table CC-5-4
Calculated Construction Levels at ST3

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month																																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Aerial Lift (JLG)	3600	42	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	42
Air Compressor	3600	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	0	0	0	0	36
Asphalt Paver	3600	42	42	42	42	42	42	42	42	42	42	39	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Backhoe	3600	45	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	0	0	0	0	0	0	0	0	0	0	0	45
Compactor	3600	46	48	48	48	46	46	46	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	39	39	39	0	46
Concrete Pump Truck	3600	43	46	46	46	46	43	43	0	0	0	0	0	0	46	43	43	0	0	0	0	0	47	47	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Crane	3600	43	49	49	49	49	51	51	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	43
Dozer	3600	49	50	47	46	46	43	46	46	46	46	46	49	49	50	49	49	49	46	46	46	46	47	47	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Drilling Rig	3600	47	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	50	50	50	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Dump Truck	3600	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	47	46	46	46	46	46	46	46	46	46	46	46	46	0	0	0	0	50
Flatbed Truck	3600	50	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	50	50	50	50	46	46	46	46	0	0	0	0	50
Fork Lift	3600	40	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	40
Generator	3600	39	39	39	39	39	44	44	43	43	43	43	43	43	43	43	43	43	36	39	39	39	40	40	39	36	36	36	36	36	36	36	36	36	36	36	36	0	0	0	0	39
Grader	3600	49	49	49	49	48	49	49	47	47	47	46	47	47	47	47	47	47	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	41	41	41	0	49
Light Tower	3600	36	39	39	39	39	39	36	36	36	36	36	36	39	39	39	39	39	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	0	0	0	0	36
Loader	3600	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	47	46	46	46	46	46	46	46	46	46	46	46	46	0	0	0	0	50
Maxi Sneeker (Trencher)	3600	0	40	40	36	36	40	40	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	0	0	0	0	0	0	0	0	0	0	0	0
Pickup Truck	3600	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Skid Steer (Bobcat)	3600	0	0	0	0	0	42	42	42	42	42	42	42	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	0	0	0	0	0	0	0	0	0	0	0	0
Telehandler	3600	0	0	0	0	0	44	44	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	0
Water Truck	3600	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	49	49	49	49	49	49	49	49	49	49	49	49	46	46	46	0	50
Welding Machine	3600	0	39	39	39	39	36	36	36	36	36	36	36	36	0	0	0	0	0	0	0	0	36	36	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aggregate		59	61	60	60	60	61	61	61	61	61	60	61	61	61	61	61	61	60	60	60	60	60	60	59	58	58	58	58	58	58	58	58	57	57	57	57	55	55	55	54	59

Table CC-5-5
Calculated Construction Levels at SR2

Equipment Description	Distance to Receiver (m)	Predicted Sound from Quantity of Equipment During Indicated Month																																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Aerial Lift (JLG)	5100	39	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	39
Air Compressor	5100	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	0	0	0	0	33
Asphalt Paver	5100	39	39	39	39	39	39	39	39	39	39	36	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Backhoe	5100	42	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	0	0	0	0	0	0	0	0	0	0	0	42
Compactor	5100	43	45	45	45	43	43	43	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	36	36	36	0	43
Concrete Pump Truck	5100	40	43	43	43	43	40	40	0	0	0	0	0	0	43	40	40	0	0	0	0	0	44	44	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Crane	5100	40	46	46	46	46	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	40
Dozer	5100	46	47	44	43	43	40	43	43	43	43	43	46	46	47	46	46	46	43	43	43	43	44	44	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
Drilling Rig	5100	44	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	47	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Dump Truck	5100	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	44	43	43	43	43	43	43	43	43	43	43	43	43	0	0	0	0	47
Flatbed Truck	5100	47	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	47	47	47	47	43	43	43	43	0	0	0	0	47
Fork Lift	5100	37	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	37
Generator	5100	36	36	36	36	36	41	41	40	40	40	40	40	40	40	40	40	40	33	36	36	36	37	37	36	33	33	33	33	33	33	33	33	33	33	33	33	0	0	0	0	36
Grader	5100	46	46	46	46	45	46	46	44	44	44	43	44	44	44	44	44	44	44	44	44	44	44	44	44	43	43	43	43	43	43	43	43	43	43	43	43	38	38	38	0	46
Light Tower	5100	33	36	36	36	36	36	33	33	33	33	33	33	36	36	36	36	36	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	0	0	0	0	33
Loader	5100	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	44	43	43	43	43	43	43	43	43	43	43	43	43	0	0	0	0	47
Maxi Sneeker (Trencher)	5100	0	37	37	33	33	37	37	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0
Pickup Truck	5100	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Skid Steer (Bobcat)	5100	0	0	0	0	0	39	39	39	39	39	39	39	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0
Telehandler	5100	0	0	0	0	0	41	41	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42	0
Water Truck	5100	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	43	43	43	0	47
Welding Machine	5100	0	36	36	36	36	33	33	33	33	33	33	33	33	0	0	0	0	0	0	0	0	33	33	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aggregate		56	58	57	57	57	58	58	58	58	58	57	58	58	58	58	58	58	57	57	57	57	57	57	56	55	55	55	55	55	55	55	55	54	54	54	54	52	52	52	51	56