EXHIBIT E

NOISE ANALYSIS

APPENDIX C

TRAFFIC NOISE ANALYSIS

DRAFT TRAFFIC NOISE IMPACT AND ABATEMENT STUDY

Louisiana Highway 447
I-12 East Bound Off Ramp to Joe May Road

Louisiana Department of Transportation and Development

SPN H.005734; FAPN HP-005734

APTIM Project No.: 137924

July 2018

Prepared for:

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

PO Box 94245
Baton Rouge, Louisiana 70804

Prepared by:

APTIM

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Baton Rouge, LA 70809

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Acronyms and Abbreviations

AASHTO	American Association of State Highways and Transportation Officials
AOI	Area of Interest
CFR	Code of Federal Regulations
dBA	Decibels – A Weighted
DEIS	Draft Environmental Impact Statement
FHWA	Federal Highway Administration
LA 447	Louisiana Highway 447
LADOTD	Louisiana Department of Transportation and Development
Leq	Equivalent Noise Level
LOS	Level of Service
NAC	Noise Abatement Criteria
TNM	Traffic Noise Model

1.0 INTRODUCTION

Background

The intersection of I-12 and LA 447 located in Livingston Parish, LA was experiencing major traffic backups on the interstate. To alleviate these traffic problems, signalization was replaced with roundabouts at the ramp termini of LA 447 and I-12. There still needed to be a study of the entire corridor to see in this area. The LA 447 Corridor Study will evaluate what other alternatives could be implemented to improve traffic for the LA 447 Corridor in Livingston Parish, Louisiana.

Project Description

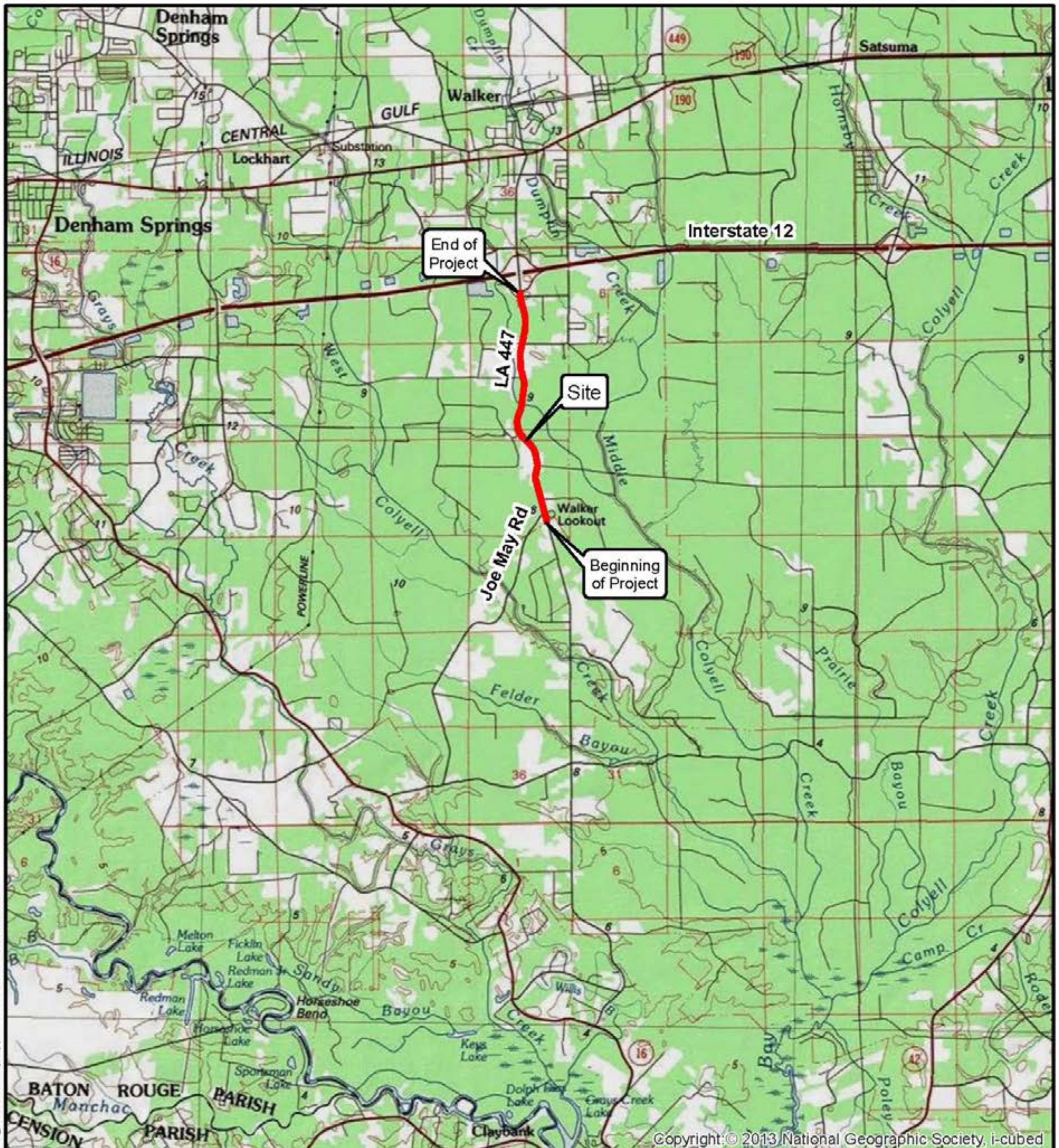
The Louisiana Department of Transportation and Development (LADOTD) is proposing to improve the mobility and safety of vehicle, pedestrian, and bicycle traffic along a 2.47 mile-long portion of the southern section of LA 447 from I-12 to Joe May Road.

This project would be accomplished in three (3) phases as follows:

- Phase one would be to construct a three-lane section on LA 447 from Buddy Ellis Road to Joe May Road and a southbound right turning lane at Joe May Road.

- Phase two would include the construction of a roundabout at Buddy Ellis Road.

- Phase three would include construction of a four-lane divided section on LA 447 from the eastbound Interstate 12 (I-12) ramp to Buddy Ellis Road. Phase three would include construction of a limited access intersection at Milton Road, a roundabout at the intersection of O'Donovan Boulevard for improved access to Our Lady of the Lake Hospital, and any necessary improvements to the roundabout constructed at Buddy Ellis during phase two. **Figure 1** shows the area of interest on a topographic map.



Legend

Area of Interest

N

0 0.75 1.5 3
Miles

LOUISIANA DEPARTMENT
OF TRANSPORTATION AND DEVELOPMENT

LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY

FIGURE NUMBER 1

SITE LOCATION

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G:\LDOTD\153766\GIS_Documents\Project_Maps\dod_153766_007_site.mxd; Analyst: j.perten; Date: 6/22/2018 8:39:07 AM

Aptim Environmental and Infrastructure, Inc. (APTIM) conducted a Traffic Noise Impact and Abatement Study for the proposed project. Since Federal Funding will be used for construction of this project, a traffic noise analysis is mandated by regulations in the Federal Register under 23 Code of Federal Regulations (CFR) 772. This report evaluates noise impacts due to building the proposed corridor as well as the no build condition using FHWA's Noise Abatement Criteria (NAC) (**Appendix A**). Topics covered in this report include description of the land usage, traffic noise modeling, analysis of noise abatement, and a conclusion.

1.1 Purpose and Scope

The purpose of the proposed build alternatives is to:

- Provide the best mobility and safety of vehicle, pedestrian, and bicycle traffic along the LA 447 corridor under current and anticipated traffic volumes. Roundabouts are intended to improve traffic flow and reduce congestion on LA 447 and prevent traffic exiting I-12 from backing up on the Interstate.

2.0 DESCRIPTION OF LAND USE

2.1 Current Use

Relative to the Noise Abatement Criteria, the most predominant activity categories in the study area are those defined in **Table 1** as Activity Category B and C. Activity Category E and F are also represented at a few locations.

Activity Category F includes the exterior impact criteria for developed lands that are not sensitive to highway traffic noise and appear here at 8 locations as emergency services, industrial, and retail facilities. Activity Category E includes the exterior impact criteria for developed lands that are less sensitive to highway traffic noise and appear here at 2 locations as offices and restaurants. Activity Category D is defined to include noise impact to the interior of certain structures. Evaluation of interior impact is outside the scope of this evaluation. Activity Category C is defined to include exterior noise impact to cemeteries, day care centers, and places of worship, which appear at 4 locations in the study area. Activity Category B is defined as residential properties and includes single-family homes and mobile home parks, appear predominately at 67 locations throughout the study area. Therefore, it will be necessary to evaluate whether future external noise levels at receptors would exceed 66 dBA. **Table 1** shows FHWA's Noise Abatement Criteria (NAC).

Table 1
FHWA Noise Abatement Criteria
Hourly A-weighted Sound Level decibels (dBA)

Activity Category	Activity Leq (h)	Evaluation Location	Activity Description	In Louisiana, Impact occurs when Noise Level (dBA) ***IS EQUAL TO OR THAN*** the values below*
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	**56**
B	67	Exterior	Residential (includes undeveloped lands permitted for residential).	**66**
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. (Includes undeveloped lands permitted for these activities).	**66**
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	**51**
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (Includes undeveloped lands permitted for these activities).	**71**
F	------	------	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	**n/a**
G	------	------	Undeveloped lands that are not permitted.	**n/a**

*These values are consistent with the FHWA's requirement for consideration of traffic noise impacts 1 dBa below their noise abatement criteria.

2.2 Future Use

Future use of the surrounding area will continue to be a mix of commercial and residential. All activity categories are expected to remain the same: B, C, E, and F.

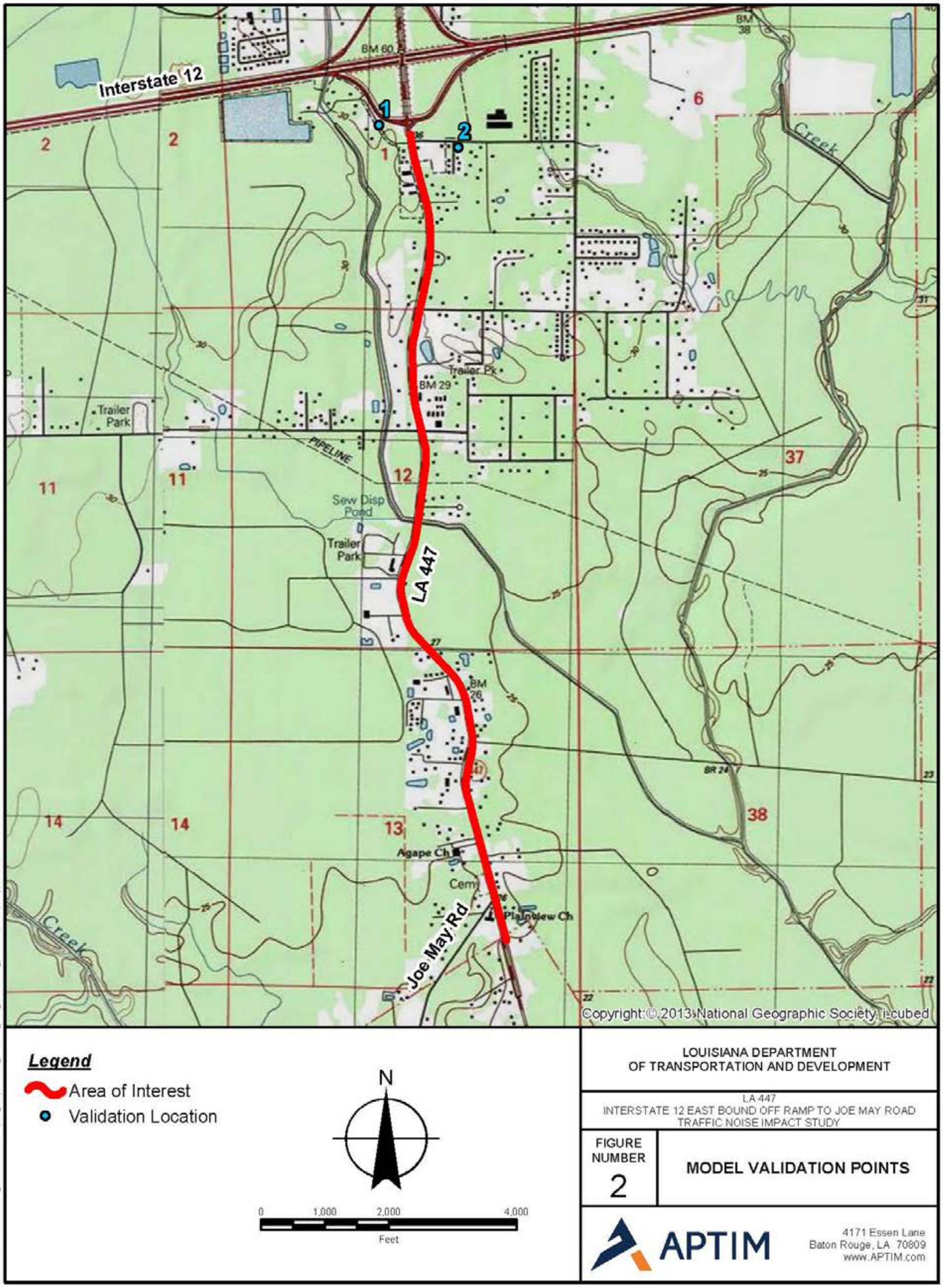
3.0 TRAFFIC NOISE MODEL

3.1 Modeling Procedure

FHWA Traffic Noise Model 2.5 (TNM) was used to analyze the noise impacts adhering the

FHWA Highway Traffic Noise: Analysis and Abatement Guide (FHWA, 2011) and the FHWA Traffic Noise Model User's Guide (Version 2.5 Addendum) (FHWA, 2004) as well as the LADOTD Highway Traffic Noise Policy (**Appendix A**).

The TNM model combines several aspects of the corridor including traffic and roadway width. Traffic input data are based on the Alternative Analysis Report by Neel-Schaffer, Inc. dated February 2014. The model used 2015 traffic data for the existing traffic conditions and 2030 for the projected design year. Noise data collected in 2016 at two locations (**Figure 2**) were used for model validation. The data is presented in Appendix D. Receiver locations were determined by a combination of field observations and review of aerial photos from Google Earth throughout the corridor. A total of 84 locations were selected for inclusion in the model as shown on **Figure 3-1 to 3-6**. A description of each receiver is presented in the TNM Receiver tales in the TNM model appendices.


Interstate 12
LA 447
Joe May Rd
Trailer Park
Trailer Pk
Sew Disp Pond
PIPELINE
Agape Ch
Cem
Plainview Ch
Creek
BM 60
BM 29
BM 26
Copyright: © 2013 National Geographic Society, i-cubed
Legend
Area of Interest
Validation Location
N
0 1,000 2,000 4,000
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER
2
MODEL VALIDATION POINTS
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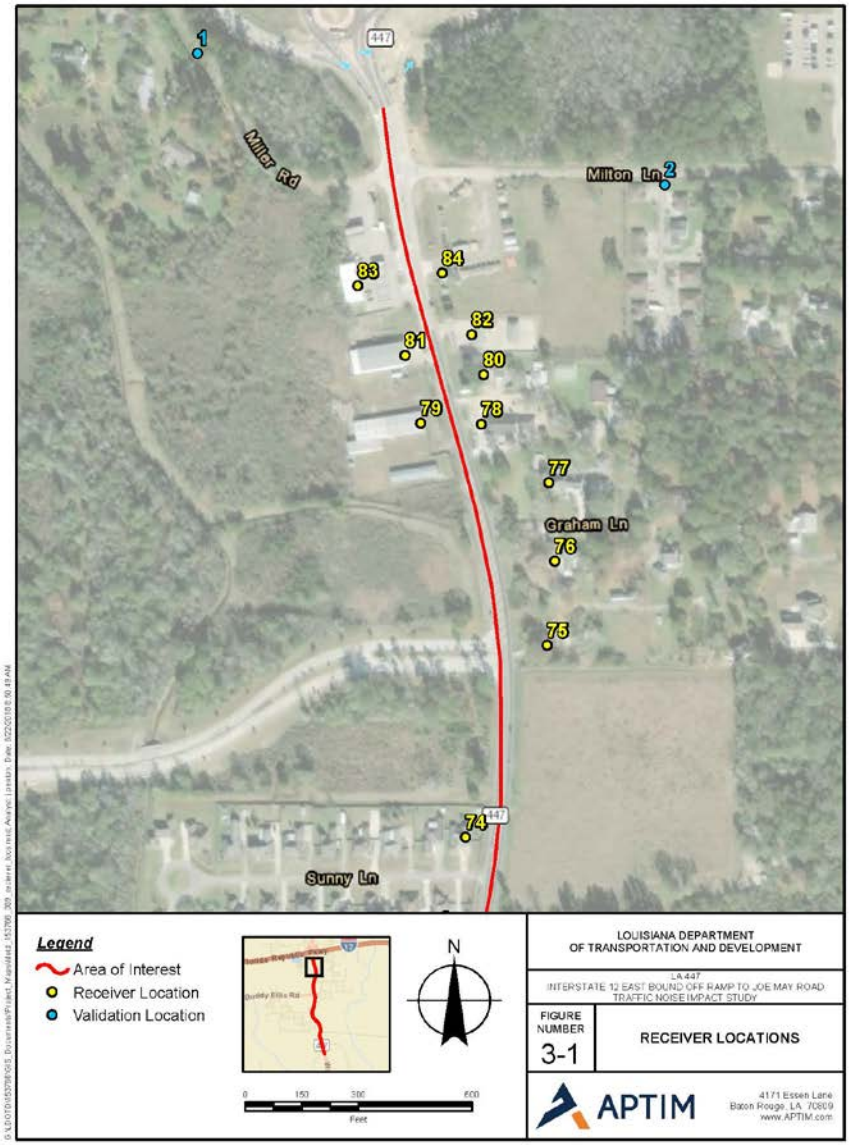
1
Miller Rd
Milton Ln
2
83
84
82
81
80
79
78
77
Graham Ln
76
75
74
447
Sunny Ln
Legend
Area of Interest
Receiver Location
Validation Location
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 3-1
RECEIVER LOCATIONS
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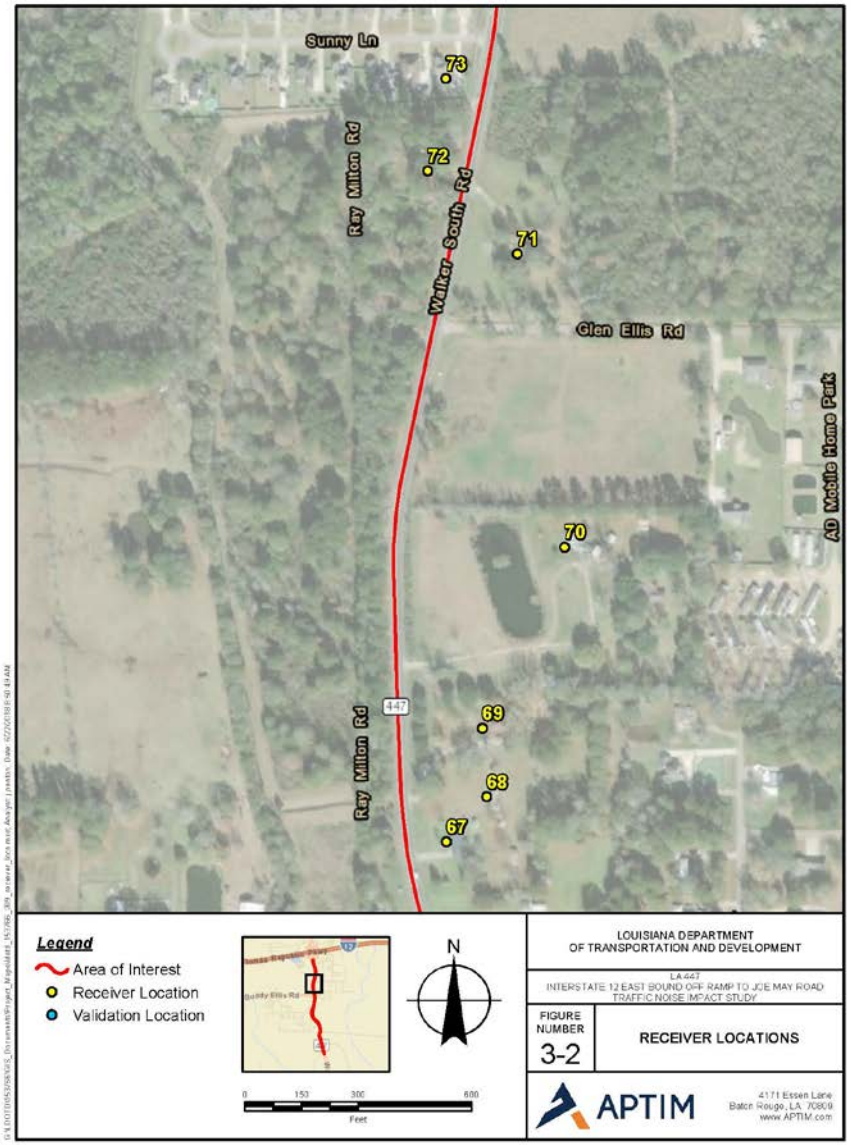
Sunny Ln
73
Ray Milton Rd
72
Walker South Rd
71
Glen Ellis Rd
AD Mobile Home Park
70
447
69
Ray Milton Rd
68
67
Legend
Area of Interest
Receiver Location
Validation Location
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 3-2
RECEIVER LOCATIONS
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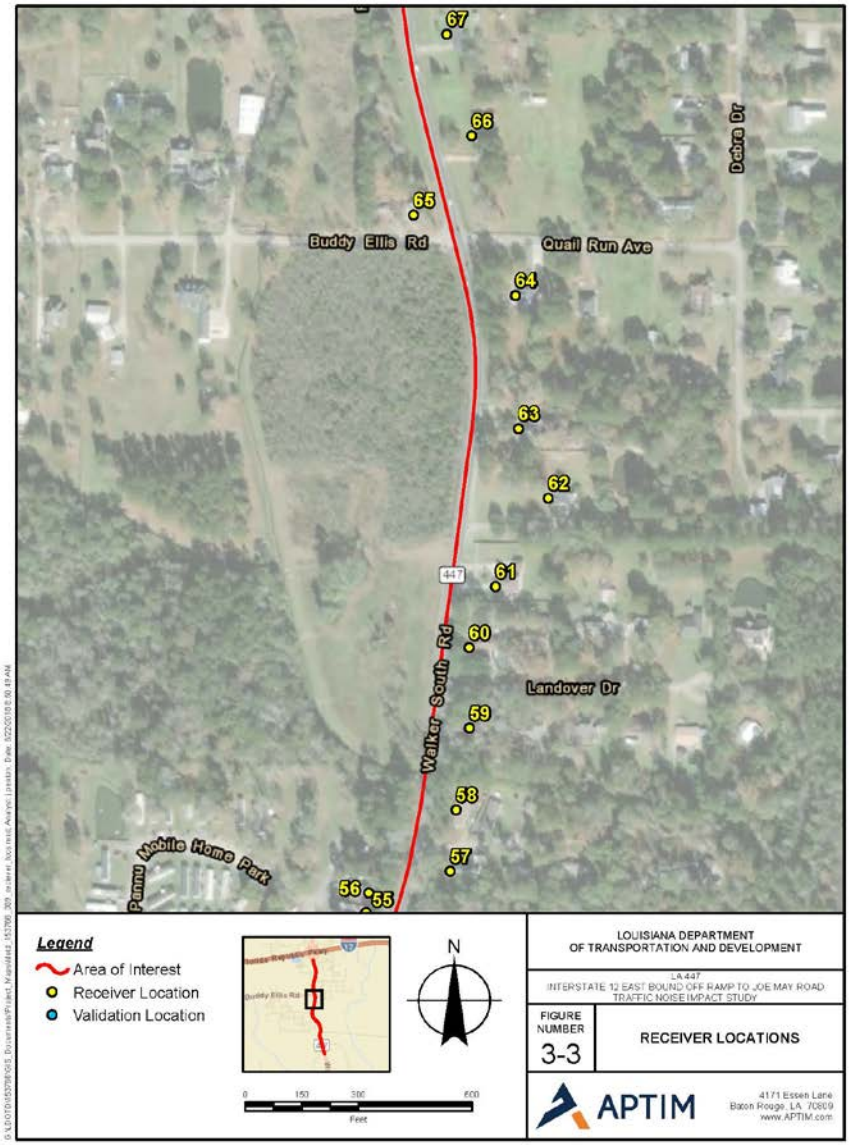
67
66
65
64
63
62
61
60
59
58
57
56
55
Buddy Ellis Rd
Quail Run Ave
Debra Dr
Landover Dr
Walker South Rd
447
Pannu Mobile Home Park
Legend
Area of Interest
Receiver Location
Validation Location
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 3-3
RECEIVER LOCATIONS
APTIM
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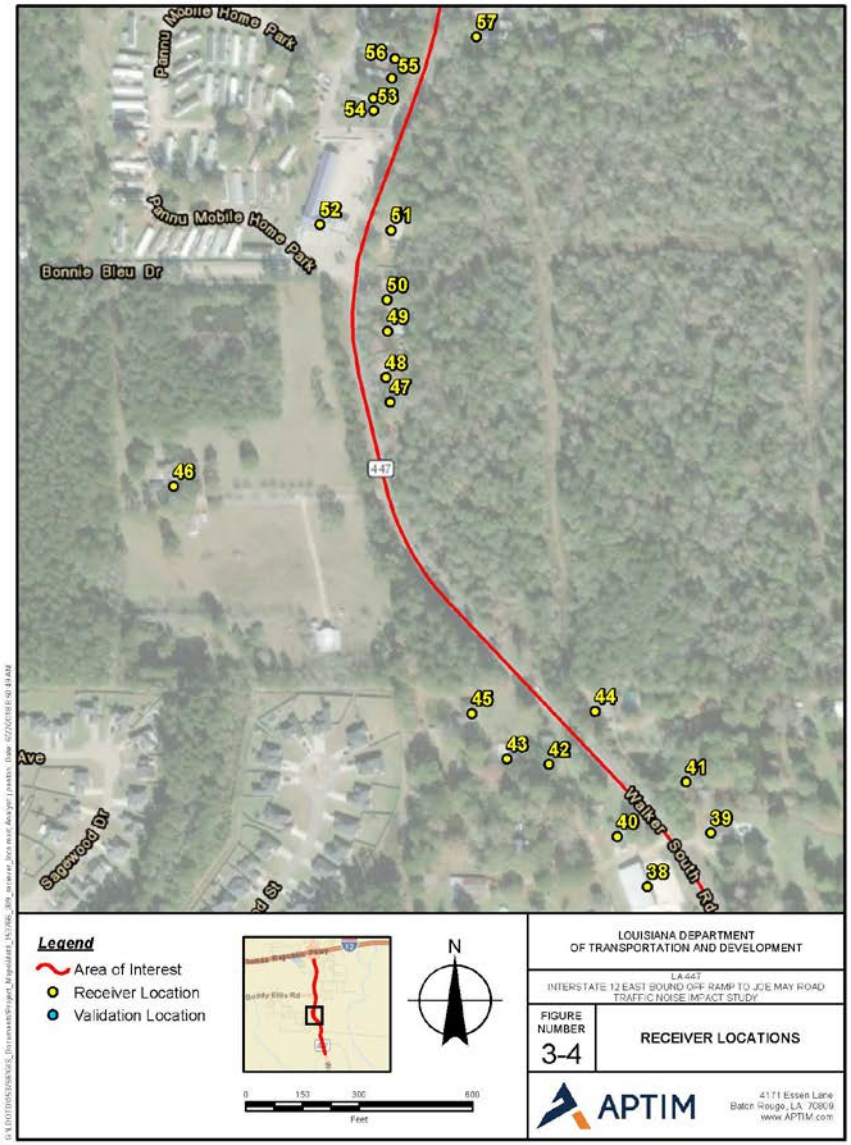
Pannu Mobile Home Park
57
56
55
54
53
52
51
Pannu Mobile Home Park
Bonnie Bleu Dr
50
49
48
47
46
447
45
44
43
42
41
40
39
38
Walker South Rd
Sagewood Dr
Legend
Area of Interest
Receiver Location
Validation Location
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 3-4
RECEIVER LOCATIONS
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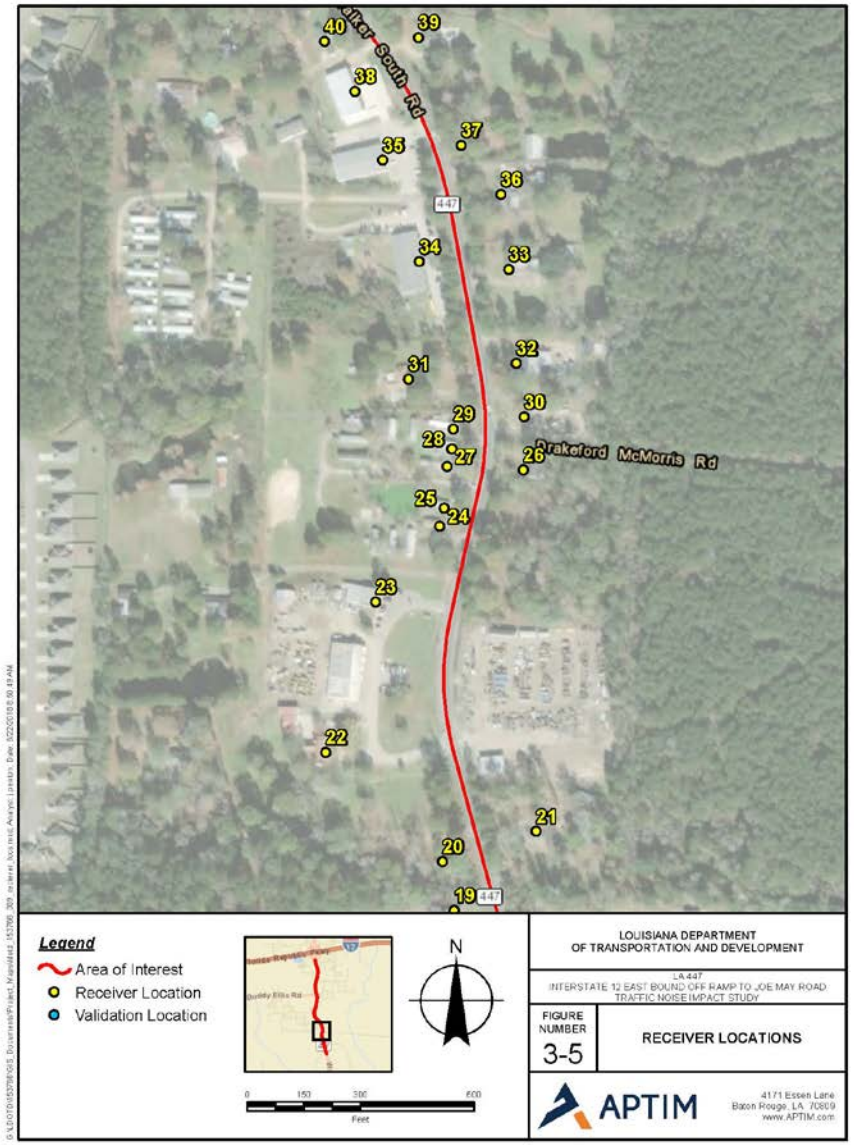
Walker South Rd
Drakeford McMorris Rd
447
Legend
Area of Interest
Receiver Location
Validation Location
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 3-5
RECEIVER LOCATIONS
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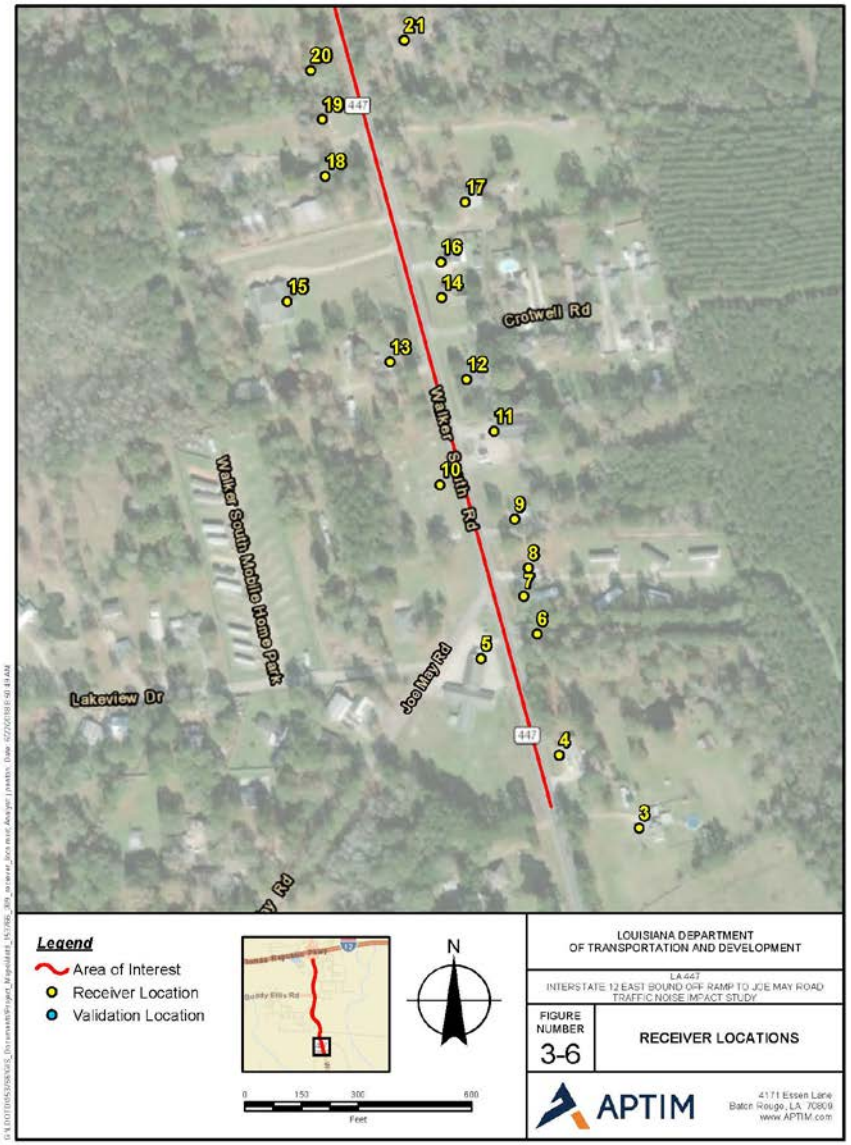
Walker South Rd
Crotwell Rd
Walker South Mobile Home Park
Joe May Rd
Lakeview Dr
447
Legend
Area of Interest
Receiver Location
Validation Location
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 3-6
RECEIVER LOCATIONS
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3.2 Modeling Procedure

The existing noise levels were measured on March 3 and 4, 2016 using a sound level meter (Larson Davis Model 831). Calibration and conformance documentation of the noise equipment is included in **Appendix B**. The sound level meter was calibrated at the beginning of the trip and rechecked before each measurement. The traffic was manually counted and recorded by APTIM employees recorded for each 15 minute interval. These measurements were used to represent the equivalent noise level (Leq), and the traffic counts during the 15 minute interval were multiplied by four to represent hourly traffic volume. **Figure 2** shows the locations of the validation points.

The model was validated by measuring the noise at two locations along the corridor. Per the LADOTD Highway traffic Noise policy, the model results must be within 3dBA of the measured noise levels. **Table 2** shows the validation results. All points were within the 3dBA tolerance and the model was validated (**Appendix C**). The location of each point is described below and shown in **Table 2**.

Point 1 - Miller Road – Validation Pt. # 09 and #14
Point 2 - Milton Road – Validation Pt. #10 and #13

Table 2
Traffic Noise Model Validation Results

Data Point	Date	Time	Measured Leq (decibels)	Predicted Leq (decibels)	Difference (decibels)
Point 1	3/3/16	5:04 PM	63.5	62.4	-1.1
Point 2	3/3/16	5:26 PM	64.8	62.7	-2.1

3.3 Existing and Future Noise Levels

Traffic data used to predict the existing and future noise levels was prepared by Urban Systems, Inc. (USI) (2013). Traffic provided by Neel-Schaffer, Inc. included the balanced peak hour traffic volumes for: 2015 existing, 2030 No-Build and Build predictions (see **Appendix D-1**). Conservatively, the highest traffic count regardless of time of day was used in the TNM models, i.e., generally, PM traffic counts were used for south bound lanes and AM for north bound lanes. Vehicle class percentages were applied to generate TNM traffic input values for automobiles, medium trucks, heavy trucks, buses, and motorcycles based on DOTD Statewide averages for vehicle class percentages. Vehicle types in the DOTD classifications were grouped together into TNM categories as shown in the **Table 3** below. The calculated vehicle class peak hour traffic loads are presented in **Appendix D-2.**

Table 3
Vehicle Class Percentages Based On DOTD Statewide Averages

Functional Class	TNM Category	TNM %
Cycles	M	3
Cars	A	87
Busses	B	1
Medium Trucks	MT	3
Heavy Trucks	HT	6

Eighty-four (84) noise sensitive receptors were identified within the model limits that might be impacted by traffic noise and could potentially need to be evaluated for noise abatement measures. Receiver locations were determined by a combination of field observations and review of aerial photos from Google Earth throughout the existing and proposed corridor. The term receivers is used when discussing the TNM points that represent these 84 receptors (see **Figures 3-1 to 3-6**). A total of three TNM models were used to determine the sound levels at each receiver including for the 2015 Existing Year, 2030 No-Build, and 2030 Build Alternative. The predicted hourly equivalent sound level at each receiver are presented in **Table 4**. The TNM traffic input tables, TNM predicted sound level results, and TNM plan views for the three models are included as **Appendices E**, **F**, and **G**, respectively. TNM receiver input table (used for all scenarios) is in **Appendix E**, Roadway input table for the Existing and 2030 No Build scenarios is in **Appendix E**, and Roadway input table for 2030 Build Alternative is in **Appendix G**.

Table 4

TNM PREDICTED NOISE LEVELS

Receiver Name	Receiver No.	DOTD NAC (dBA)	Existing Year (2015)		Design Year (2030)					
					No Build			Build Alternative		
			LAeq1h (dBA)	Impact Type	LAeq1h (dBA)	Increase over Existing (dBA)	Impact Type	LAeq1h (dBA)	Increase over Existing (dBA)	Impact Type
Miller Road - Cal. Pt. 09&14 - #1	1	66	62.9	----	63.9	1	----	63.9	0	----
Milton Road - Cal. Pt. 10&13 - #2	2	66	60	----	60.1	0.1	----	60.2	0.1	----
Residence 1 - #3	3	66	56.9	----	58.6	1.7	----	59.7	1.1	----
Fire Station - #4	4	71	68.7	----	70.3	1.6	----	70.4	0.1	----
Church1 - #5	5	66	66	Snd Lvl	67.8	1.8	Snd Lvl	68.4	0.6	Snd Lvl
Residence 2 - #6	6	66	64.9	----	66.6	1.7	Snd Lvl	66.6	0	Snd Lvl
Residence 3 - #7 - MH	7	66	65.9	----	67.5	1.6	Snd Lvl	67.6	0.1	Snd Lvl
Residence 4 - #8	8	66	62.9	----	64.6	1.7	----	64.6	0	----
Residence 5 - #9	9	66	62.9	----	64.6	1.7	----	64.6	0	----
Cemetery - #10	10	66	68	Snd Lvl	69.9	1.9	Snd Lvl	70.5	0.6	Snd Lvl
Sibleys Grocery - #11	11	71	62.3	----	64	1.7	----	64	0	----
Residence 6 - #12	12	66	65.4	----	67.1	1.7	Snd Lvl	67.3	0.2	Snd Lvl
Residence 7 - #13	13	66	63.2	----	65	1.8	----	65.2	0.2	----
Residence 8 - #14	14	66	66.3	Snd Lvl	67.9	1.6	Snd Lvl	68.2	0.3	Snd Lvl
Residence 9 - #15	15	66	54	----	55.8	1.8	----	56.7	0.9	----
Residence 10 - #16	16	66	63.9	----	65.6	1.7	----	65.5	-0.1	----
Residence 11 - #17	17	66	58	----	59.8	1.8	----	60.6	0.8	----
Residence 12 - #18	18	66	61.1	----	62.9	1.8	----	62.7	-0.2	----
Residence 13 - #19	19	66	63.6	----	65.3	1.7	----	64.8	-0.5	----
Residence 14 - #20 - MH	20	66	64.1	----	65.8	1.7	----	65.3	-0.5	----
Residence 15 - #21	21	66	60.6	----	62.4	1.8	----	62	-0.4	----
Residence 16 - #22	22	66	53.7	----	55.5	1.8	----	56.2	0.7	----
Richard Price Contracting Co - #23	23	71	58.2	----	59.9	1.7	----	60.4	0.5	----
Residence 17 - #24 - MH	24	66	65.7	----	67.6	1.9	Snd Lvl	67.8	0.2	Snd Lvl
Residence 18 - #25 - MH	25	66	65.8	----	67.6	1.8	Snd Lvl	67.8	0.2	Snd Lvl
Residence 19 - #26	26	66	63	----	64.7	1.7	----	64.7	0	----
Residence 20 - #27 - MH	27	66	64.3	----	66.1	1.8	Snd Lvl	66.2	0.1	Snd Lvl
Residence 21 - #28 - MH	28	66	65	----	66.9	1.9	Snd Lvl	67	0.1	Snd Lvl
Residence 22 - #29 - MH	29	66	65.1	----	66.9	1.8	Snd Lvl	67.1	0.2	Snd Lvl
Residence 23 - #30 - MH	30	66	63.3	----	65	1.7	----	65.1	0.1	----
Residence 24 - #31	31	66	58.5	----	60.3	1.8	----	61.2	0.9	----
Residence 25 - #32	32	66	64	----	65.6	1.6	----	65.8	0.2	----
Residence 26 - #33	33	66	62.2	----	63.9	1.7	----	64	0.1	----
Livingston Head Start - #34	34	66	63	----	64.8	1.8	----	65	0.2	----
Dollar General - #35	35	71	61.3	----	63	1.7	----	63.1	0.1	----
Residence 27 - #36	36	66	61.2	----	62.9	1.7	----	63	0.1	----
Residence 28 - #37	37	66	66.7	Snd Lvl	68.4	1.7	Snd Lvl	68.7	0.3	Snd Lvl
Unnamed Business 1 - #38	38	71	62.6	----	64.3	1.7	----	63.9	-0.4	----
Residence 29 - #39	39	66	64.2	----	65.9	1.7	----	65.8	-0.1	----
Residence 30 - #40 - MH	40	66	63.8	----	65.6	1.8	----	65.3	-0.3	----
Residence 31 - #41	41	66	62.3	----	64.1	1.8	----	63.4	-0.7	----
Residence 32 - #42 - MH	42	66	63.8	----	65.6	1.8	----	65.2	-0.4	----
Residence 33 - #43	43	66	59.5	----	61.3	1.8	----	61.5	0.2	----
Residence 34 - #44	44	66	65.4	----	67.1	1.7	Snd Lvl	67.2	0.1	Snd Lvl
Residence 35 - #45	45	66	60.1	----	61.8	1.7	----	62.2	0.4	----
Residence 36 - #46	46	66	50.3	----	52	1.7	----	52.6	0.6	----
Residence 37 - #47 - MH	47	66	67.5	Snd Lvl	69.1	1.6	Snd Lvl	69.4	0.3	Snd Lvl
Residence 38 - #48 - MH	48	66	66.9	Snd Lvl	68.6	1.7	Snd Lvl	68.9	0.3	Snd Lvl
Residence 39 - #49	49	66	64.5	----	66.2	1.7	Snd Lvl	66.2	0	Snd Lvl
Residence 40 - #50 - MH	50	66	64.8	----	66.6	1.8	Snd Lvl	66.6	0	Snd Lvl
Residence 41 - #51 - MH	51	66	68.1	Snd Lvl	69.9	1.8	Snd Lvl	70.3	0.4	Snd Lvl
Best Stop Quick Mart #3 - #52	52	71	63.2	----	64.9	1.7	----	64.9	0	----
Residence 42 - #53 - MH	53	66	65.4	----	67.1	1.7	Snd Lvl	67.4	0.3	Snd Lvl
Residence 43 - #54 - MH	54	66	64.4	----	66.1	1.7	Snd Lvl	66.2	0.1	Snd Lvl
Residence 44 - #55 - MH	55	66	67.3	Snd Lvl	68.9	1.6	Snd Lvl	69.3	0.4	Snd Lvl
Residence 45 - #56 - MH	56	66	66.3	Snd Lvl	68	1.7	Snd Lvl	68.2	0.2	Snd Lvl
Residence 46 - #57 - MH	57	66	63.5	----	65.2	1.7	----	65.1	-0.1	----
Residence 47 - #58 - MH	58	66	64.8	----	66.5	1.7	Snd Lvl	66.6	0.1	Snd Lvl
Residence 48 - #59	59	66	65.1	----	66.8	1.7	Snd Lvl	66.2	-0.6	Snd Lvl
Residence 49 - #60	60	66	67.7	Snd Lvl	69.4	1.7	Snd Lvl	69.3	-0.1	Snd Lvl
Residence 50 - #61	61	66	63.4	----	65.1	1.7	----	64.8	-0.3	----
Residence 51 - #62	62	66	58.3	----	60	1.7	----	60.9	0.9	----
Residence 52 - #63	63	66	63.4	----	65.1	1.7	----	64	-1.1	----

Table 5

TNM PREDICTED NOISE LEVELS (Continued)

Receiver Name	Receiver No.	DOTD NAC (dBA)	Existing Year (2015)		Design Year (2030)					
					No Build			Build Alternative		
			LAeq1h (dBA)	Impact Type	LAeq1h (dBA)	Increase over Existing (dBA)	Impact Type	LAeq1h (dBA)	Increase over Existing (dBA)	Impact Type
Residence 53 - #64	64	66	63.4	----	65.1	1.7	----	62.9	-2.2	----
Residence 54 - #65 - MH	65	66	67.2	Snd Lvl	68.9	1.7	Snd Lvl	77.5	8.6	Both
Residence 55 - #66	66	66	65	----	66.7	1.7	Snd Lvl	65	-1.7	----
Residence 56 - #67	67	66	64.9	----	66.7	1.8	Snd Lvl	67.1	0.4	Snd Lvl
Residence 57 - #68	68	66	58.8	----	60.5	1.7	----	61.5	1	----
Residence 58 - #69	69	66	58.8	----	60.5	1.7	----	61.6	1.1	----
Residence 59 - #70	70	66	53.5	----	55.2	1.7	----	56	0.8	----
Residence 60 - #71	71	66	60.5	----	62.3	1.8	----	63.3	1	----
Residence 61 - #72	72	66	65.3	----	67	1.7	Snd Lvl	67.7	0.7	Snd Lvl
Residence 62 - #73	73	66	65	----	66.8	1.8	Snd Lvl	67.5	0.7	Snd Lvl
Residence 63 - #74	74	66	67	Snd Lvl	68.7	1.7	Snd Lvl	69.3	0.6	Snd Lvl
Residence 64 - #75	75	66	63.1	----	64.9	1.8	----	65	0.1	----
Residence 65 - #76	76	66	60.4	----	62.2	1.8	----	63.5	1.3	----
Residence 66 - #77	77	66	59.3	----	61	1.7	----	62.3	1.3	----
Fundemental Early Learning Center - #78	78	66	67.7	Snd Lvl	69.6	1.9	Snd Lvl	70.5	0.9	Snd Lvl
Unnamed Business 2 - #79	79	71	67.1	----	68.9	1.8	----	69.7	0.8	----
Residence 67 - #80	80	66	64.2	----	66	1.8	Snd Lvl	66.7	0.7	Snd Lvl
Family RV Center - #81	81	71	68.3	----	70	1.7	----	70.9	0.9	----
Bayou Self Car Wash - #82	82	71	64.8	----	66.5	1.7	----	66.7	0.2	----
Chevron - #83	83	71	62.5	----	64.3	1.8	----	64.5	0.2	----
Cook Portable Warehouses - #84	84	71	67.4	----	69.2	1.8	----	69.5	0.3	----

3.4 Determination of Traffic Noise Impacts

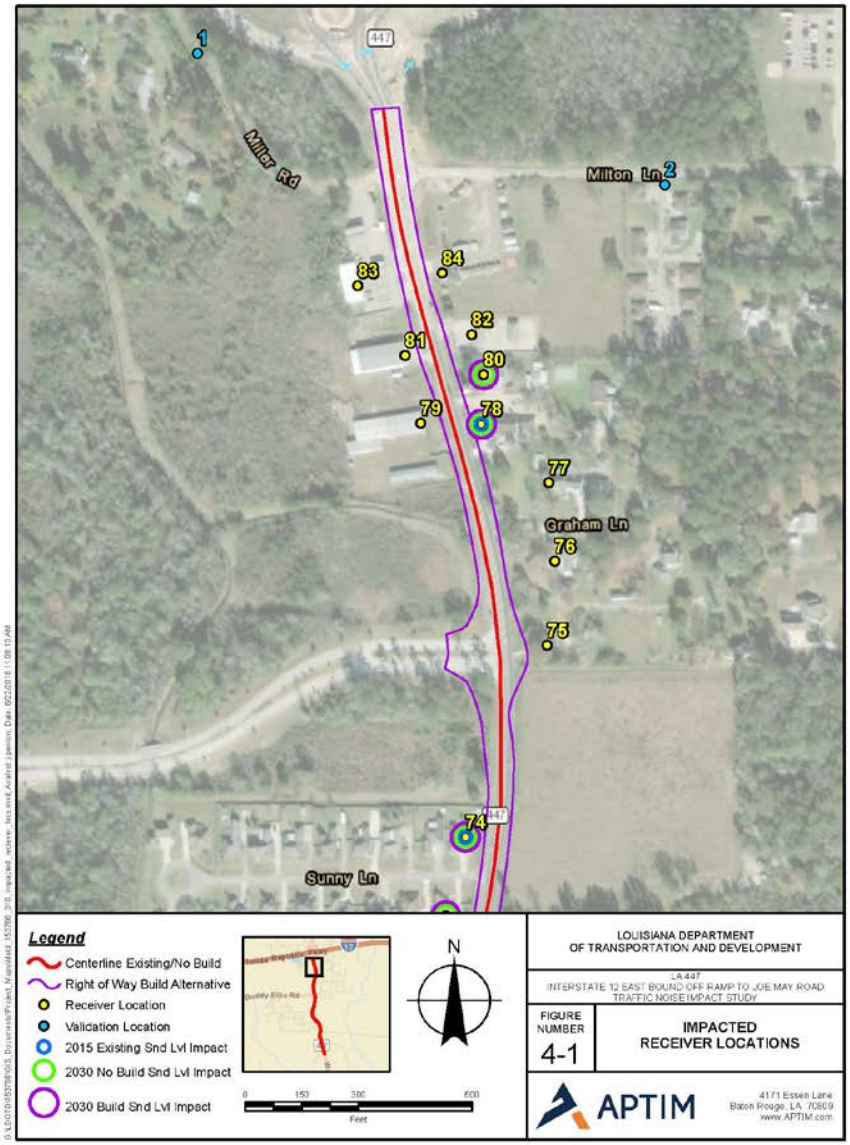
Traffic noise impacts for the existing year, design year no-build, and design year build conditions were determined from a comparison of the NAC to the TNM results. When a predicted noise level equaled or exceeded the DOTD NAC of 66 dBA or 71 dBA for Activity Category E and F, or where the predicted noise level exceeded an existing noise level by 10 dBA or more, a noise impact would be expected to occur. A summary of the TNM predicted levels and impact type, if any, is shown in **Table 4**.

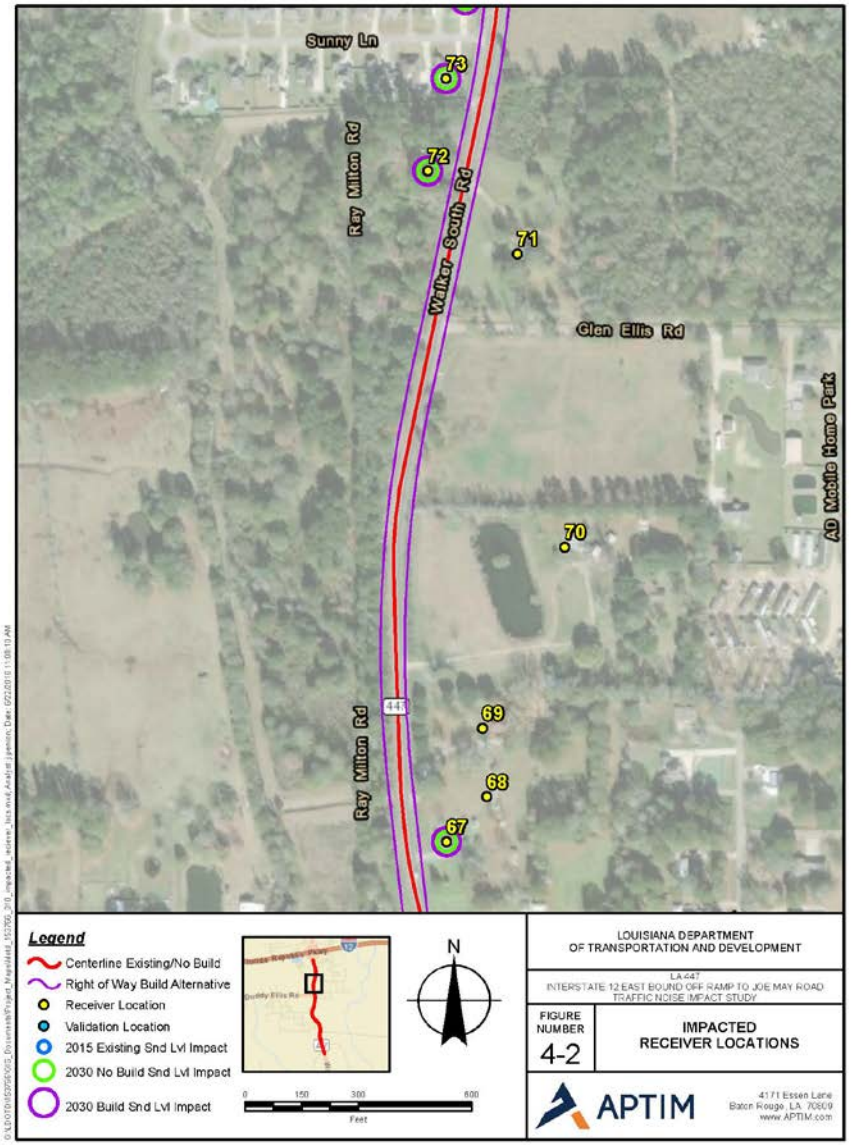
Of the 84 receivers modeled, 13 experienced a noise impact during the 2015 existing year conditions (see **Figure 4-1 to 4-6** at the end of this section). All receivers are residences that are located in close proximity to LA 447, of which, 6 are mobile homes. All impacts were sound level impacts that resulted from the predicted noise reaching the NAC of 66 dBA for Category B.

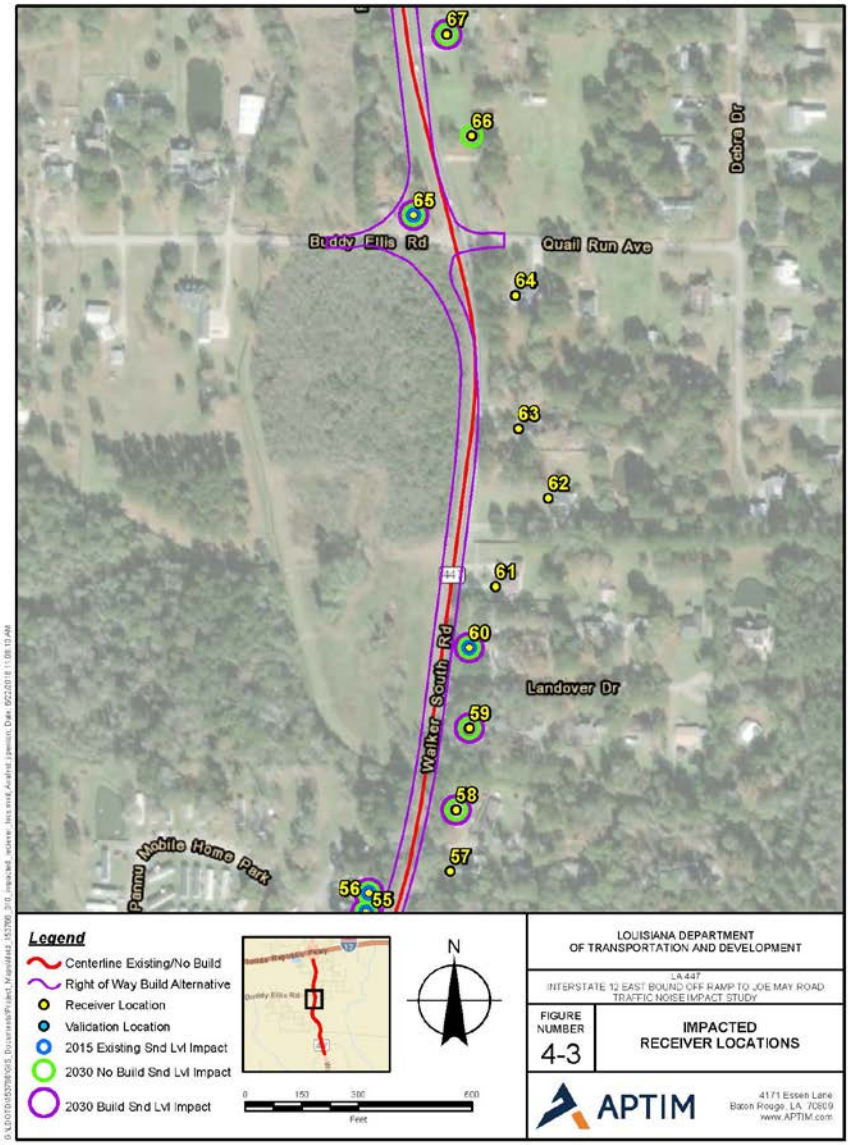
The 2030 design year traffic predictions for the No-Build Alternative resulted in a noise impact to 33 receivers (see **Figure 4-1 to 4-6** at the end of this section). As in the existing conditions, the same 33 residential receivers are impacted, of which, 16 are mobile homes. All impacts were sound level impacts that resulted from the predicted noise reaching the NAC of 66 dBA for Category B.

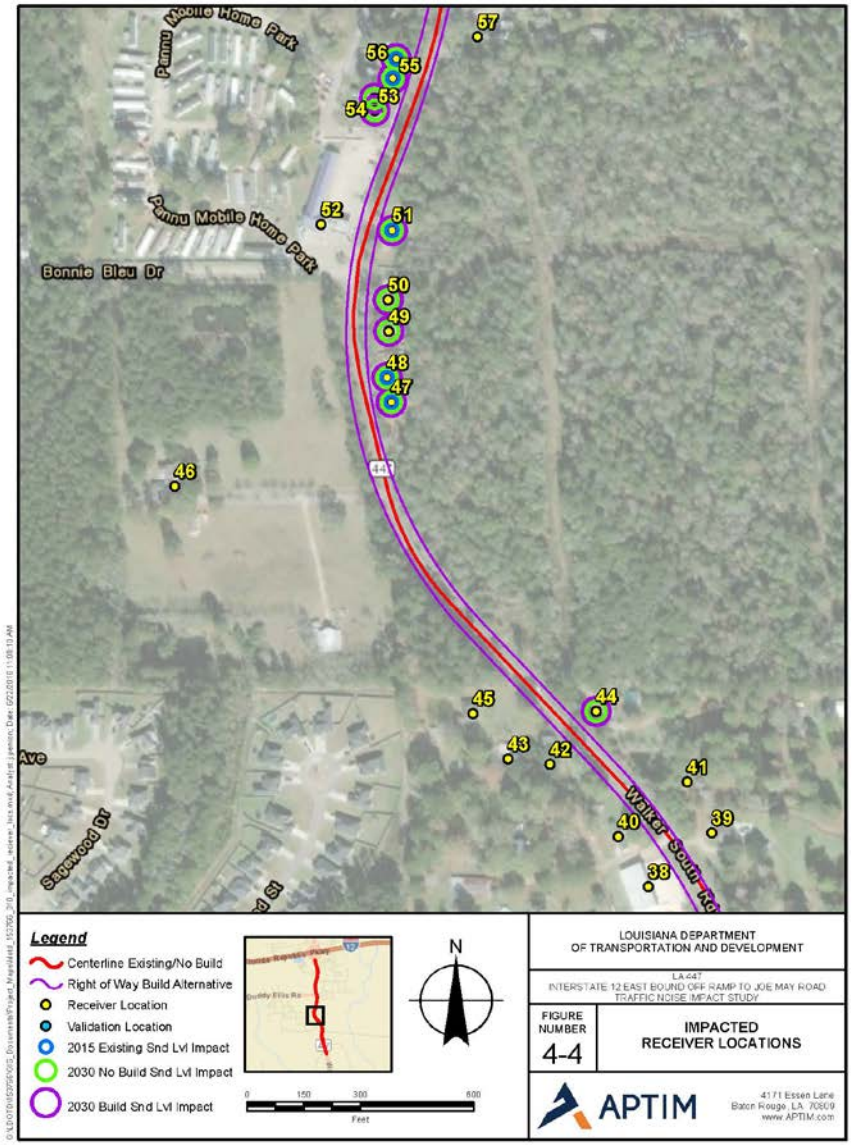
The 2030 design year traffic predictions for the Build Alternative resulted in a noise impact to 32 receivers (see **Figure 4-1 to 4-6** at the end of this section) where 31 were impacted from exceeding the NAC of 66 dBA and 1 (Residence #54) from both exceeding the NAC of 66 dBA and an increase of at least 10 dBA, representing a Substantial Increase impact, of which, 16 are mobile homes. The dual impact to Residence #54 and the removal of Residence #55 (Point 65) (**Figure 4-3**) from the impact list are the result of the realignment of the traffic circle at Buddy Ellis Road.

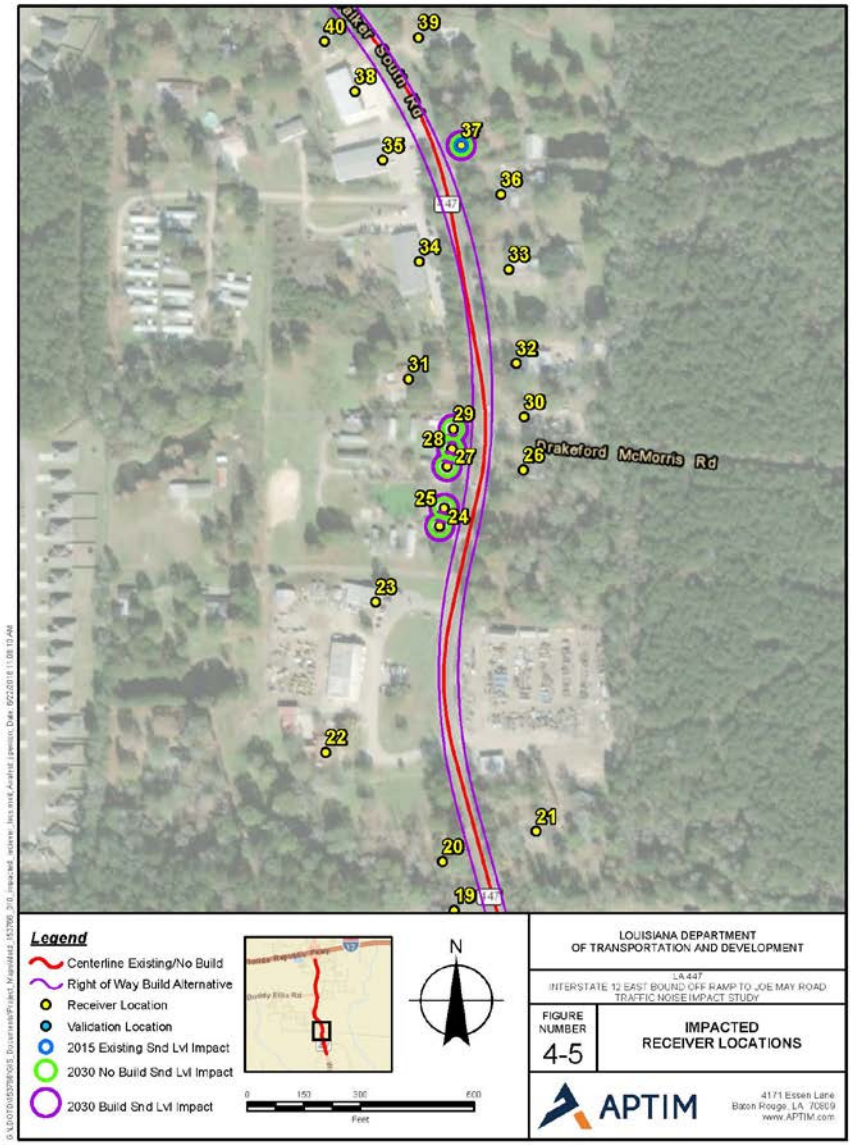
Abatement measures are considered for all these receptors and are discussed in **Section 4**.

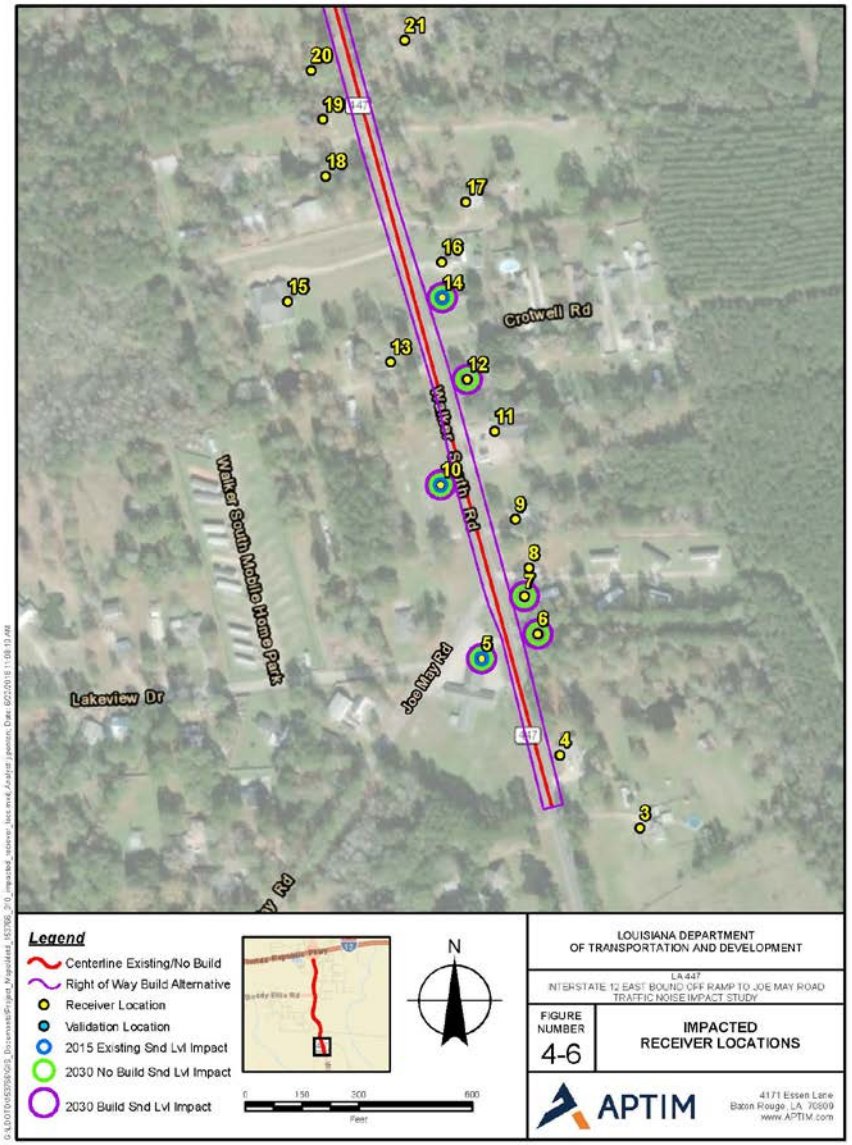

1
Miller Rd
Milton Ln
2
83
84
82
81
80
79
78
77
Graham Ln
76
75
74
Sunny Ln
447
Legend
Centerline Existing/No Build
Right of Way Build Alternative
Receiver Location
Validation Location
2015 Existing Snd Lvl Impact
2030 No Build Snd Lvl Impact
2030 Build Snd Lvl Impact
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 4-1
IMPACTED RECEIVER LOCATIONS
APTIM
4171 Essen Lane
Baton Rouge, LA 70809
www.APTIM.com


Sunny Ln
73
Ray Milton Rd
72
Walker South Rd
71
Glen Ellis Rd
AD Mobile Home Park
70
69
68
67
Ray Milton Rd
447
Legend
Centerline Existing/No Build
Right of Way Build Alternative
Receiver Location
Validation Location
2015 Existing Snd Lvl Impact
2030 No Build Snd Lvl Impact
2030 Build Snd Lvl Impact
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 4-2
IMPACTED RECEIVER LOCATIONS
APTIM
4171 Essen Lane
Baton Rouge, LA 70809
www.APTIM.com


67
66
65
64
63
62
61
60
59
58
57
56
55
Buddy Ellis Rd
Quail Run Ave
Debra Dr
Walker South Rd
Landover Dr
Pannu Mobile Home Park
Legend
Centerline Existing/No Build
Right of Way Build Alternative
Receiver Location
Validation Location
2015 Existing Snd Lvl Impact
2030 No Build Snd Lvl Impact
2030 Build Snd Lvl Impact
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 4-3
IMPACTED RECEIVER LOCATIONS
APTIM
4171 Essen Lane
Baton Rouge, LA 70809
www.APTIM.com


57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
40
39
38
Pannu Mobile Home Park
Bonnie Bleu Dr
Sagewood Dr
Walker South Rd
Legend
Centerline Existing/No Build
Right of Way Build Alternative
Receiver Location
Validation Location
2015 Existing Snd Lvl Impact
2030 No Build Snd Lvl Impact
2030 Build Snd Lvl Impact
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 4-4
IMPACTED RECEIVER LOCATIONS
APTIM
4171 Essen Lane
Baton Rouge, LA 70809
www.APTIM.com


Walker South Rd
Drakeford McMorris Rd
Legend
Centerline Existing/No Build
Right of Way Build Alternative
Receiver Location
Validation Location
2015 Existing Snd Lvl Impact
2030 No Build Snd Lvl Impact
2030 Build Snd Lvl Impact
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 4-5
IMPACTED RECEIVER LOCATIONS
APTIM
4171 Essen Lane
Baton Rouge, LA 70809
www.APTIM.com


Crotwell Rd
Walker South Rd
Walker South Mobile Home Park
Joe May Rd
Lakeview Dr
Legend
Centerline Existing/No Build
Right of Way Build Alternative
Receiver Location
Validation Location
2015 Existing Snd Lvl Impact
2030 No Build Snd Lvl Impact
2030 Build Snd Lvl Impact
N
0 150 300 600
Feet
LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
LA 447
INTERSTATE 12 EAST BOUND OFF RAMP TO JOE MAY ROAD
TRAFFIC NOISE IMPACT STUDY
FIGURE NUMBER 4-6
IMPACTED RECEIVER LOCATIONS
APTIM
4171 Essen Lane
Baton Rouge, LA 70809
www.APTIM.com

4.0 ANALYSIS OF THE NOISE ABATEMENT METHODS

The LADOTD Highway Traffic Noise Policy (**Appendix A**) states that "when noise impacts are identified, noise abatement shall be considered and evaluated for feasibility and reasonableness. Traffic noise impacts will be determined and alternative noise abatement measures analyzed by giving weight to the benefits and cost of abatement, and to the overall social, economic, and environmental impacts." This information is assessed to determine if the abatement goals can be achieved and if so, if the abatement measures can be physically be implemented.

4.1 Traffic Management Measures

Traffic management measures as defined in the LADOTD noise abatement policy include traffic control devices, signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits and exclusive lane designations. A review of the locations of the receivers indicate that most are associated with traffic intersections. The TNM model used constant traffic along each roadway, not taking into consideration slower speeds where approaching intersection. To implement traffic management measures, the traffic speed was reduced in the abatement model.

Traffic management measures include using traffic control devices, reducing speed limit, restricting vehicle type or time, and assigning a lane for trucks. Traffic control devices are already installed along LA 447 within the project area. The addition of signals would increase traffic congestion. Reducing speed limits to reduce noise levels would only be effective if the limits were reduced substantially, which would likely increase traffic congestions and delays. Thus, these measures are not feasible or reasonable.

4.2 Alteration of Horizontal and Vertical Alignments

The scope of the project is to widen the existing roadway. Altering the current alignments would most likely result in additional impacts to the surrounding properties. Also, there would be additional costs associated with purchasing right-of-way since there is limited corridor space available. This measure is not considered to be feasible or reasonable.

4.3 Construction of Noise Barriers

According to the noise abatement criteria set in the LADOTD Highway Traffic Noise Policy (**Appendix A**), a noise barrier must be both feasible and reasonable before it can be proposed. The criteria for meeting each requirement is below:

Feasibility includes concerns such as engineering, maintenance, safety, drainage issues and 75% of the first row of impacted receptors achieving at least a 5 dBA reduction in highway traffic noise.

Reasonableness includes achieving the noise reduction design goal, cost effectiveness, and concurrence of benefited receptors. In order to meet the noise reduction goal, at least one receptor must receive an 8 dBA reduction. To be considered reasonable, feasibility requirements must first be met.

A noise wall would generally be analyzed for noise abatement effectiveness, but due to the frequent placement of driveways, no noise reduction would occur because of the frequent gaps in wall coverage. Achieving the feasibility criterion of75% of impacted first row receivers gaining a 5 dBA reduction, and the reasonableness criterion of an 8 dBA reduction for at least one receiver would not be possible under these circumstances. Thus, these measures are not feasible or reasonable.

4.4 Noise Insulation for Public Use or Nonprofit Institutional Structures

Insulation for these facilities should be considered in the design phase keeping in mind that the post-installation maintenance and operational costs are not eligible for federal-aid funding.

4.5 Analysis of Construction Noise

Construction noise is expected to have temporary impacts upon all of the receptors in the area. The particular receivers of concern are the ones located within 500 feet of the project centerline. It is recommended that all construction operations be restricted to working hours whenever possible.

Abatement measures should be employed whenever possible. All construction equipment such as pumps, compressors, generators, bulldozers, cranes, trucks, etc., should be properly mulled and all motor panels should be closed to reduce the noise impacts. Section

107.14 of the Louisiana Standard Specifications for Roads and Bridges, 2006 edition, and the FHWA Highway Construction Noise Handbook (FHWA-HEP-06-015, August 2006) can be referenced for further details on the sources and abatement of construction noise.

5.0 CONCLUSIONS AND RECOMMENDATIONS

There are residential, commercial, and a place of worship receivers located adjacent to the project area that will be impacted by noise due to this project. Approximately 40

percent of impacted receivers show impact from the current No Build scenario. Approximately ½ of future impacted residences are mobile homes. Barrier modeling was not performed as part of this noise study as barriers would not meet criteria for feasibility or reasonableness. Therefore, a noise wall will not be built as part of this project.

Construction noise generated as a result of the proposed project will cause temporary impacts to the sensitive receivers. The construction contractor will minimize noise impacts by adhering to the abatement measures stated in Section 107.14 (Environmental Protection) of the Louisiana Standard Specification for Roads and Bridges, 2006 edition.

An analysis of the effects of the noise levels was performed adhering to the policies of LADOTD and FHWA. The procedure used to assess these effects include determining highway traffic noise levels using TNM 2.5 and evaluating these effects by comparing future modeled noise levels to the criteria set forth in the policies of LADOTD and FHWA. If during design, conditions substantially change that impact potential receivers, the DOTD should reevaluate the noise impacts.

6.0 REFERENCES

Federal Highway Administration (FHWA). 2004. Traffic Noise Model User's Guide Version 2.5.

Federal Highway Administration (FHWA). 2006. Construction Noise Handbook.

Federal Highway Administration (FHWA). 2011. Highway Traffic Noise: Analysis and Abatement Guide.

Louisiana Department of Transportation (LADOTD). 2009. State of Louisiana- Highway Traffic Noise Policy.

Neel Schaffer, Inc. 2014. LA 447 Corridor Study Alternate Analysis Report.

Transportation Research Board (TRB), 2000. Highway Capacity Manual

APPENDIX A
LADOTD HIGHWAY TRAFFIC NOISE POLICY 2011

STATE OF LOUISIANA

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

HIGHWAY TRAFFIC NOISE POLICY

July 2011

TABLE OF CONTENTS

INTRODUCTION

This document contains the Louisiana Department of Transportation and Development's (DOTD) policy on highway traffic noise. This policy describes the implementation of the requirements of the Federal Highway Administration (FHWA) noise regulations for Federal-aid projects found in 23 Code of Federal Regulations Part 772 (23 CFR Part 772).[1] DOTD developed this policy in accordance with FHWA regulations and guidance, and FHWA reviewed and approved this policy for implementation.

In the 1972 Federal-aid Highway Act, Congress required FHWA to develop a noise standard for new Federal-aid highway projects. In accordance with 23 United States Code section 109(i) (23 USC 109(i)), FHWA promulgated noise regulations which applied to Federal-aid projects. In June 1995, FHWA mandated that state transportation agencies adopt a written Highway Traffic Noise Policy consistent with the regulations and their June 1995 guidance. DOTD complied, with its first written policy approved by FHWA in August 1996. Since its initial approval, the DOTD highway traffic noise policy has been revised three times, in 1997, 2004 and 2009. Each revision required FHWA review and approval prior to implementation. On July 13, 2010, FHWA published their new noise regulations in the Federal Register[2] and mandated that state transportation agencies rewrite their noise policies to be consistent with the new regulations. The states were given until January 2011 to submit proposed policies for FHWA review. To assist states in rewriting their policies, FHWA published guidance dated June 2010 and revised January 2011 which can be found on FHWA's web site.[3] The effective date of the new regulations is July 13, 2011.

The policy herein contains information on how highway traffic noise impacts are defined, how noise abatement is evaluated, and how noise abatement decisions are made in Louisiana. **This policy as written assumes that the noise analyst is familiar with the provisions of the Federal regulation on which this policy is based.** If you need further information regarding the policy, contact the DOTD Environmental Section at (225) 242-4502.

PURPOSE

The purpose of this written policy is to outline DOTD's policy and procedures for compliance with the FHWA Noise regulations found at 23 CFR 772.

[1] Access CFR regulations from http://www.gpoaccess.gov/cfr/retrieve.html
[2] Access Federal Register, Vol. 75, page 39820 from FR Main page at http://www.gpoaccess.gov/fr/index.html
[3] Access FHWA noise guidance, regulations, and related material from http://www.fhwa.dot.gov/environment/noise/

DEFINITIONS

Reference is made to the definitions contained in the regulations (23 CFR 772.5). Defined below are some of the terms specifically referenced in the policy or which require additional refinement.

Benefited Receptor - a recipient of an abatement measure, whether impacted or not, receiving 5 dBA or more reduction in the noise level as a result of the proposed abatement.

Common Noise Environment – a group of receptors within the same Activity Category in Table 1 that are exposed to similar noise sources and levels; traffic volumes, traffic mix, and speed; and topographic features.

Date of Public Knowledge - the date of approval of the Record of Decision, Finding of No Significant Impact, or Categorical Exclusion. The date of public knowledge is the date at which the DOTD will no longer be responsible for providing noise abatement for new development which occurs adjacent to the proposed project. Provision of such abatement measures becomes the responsibility of the local communities or private developers.

Design Year – the future year used to estimate the probable traffic volume for which a highway is designed. The design year will normally be 20 years from the projected start of project construction.

Existing Noise Levels – the worst noise hour, resulting from the natural and mechanical sources and human activity, usually present in a particular area.

Leq – the equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as a time-varying sound level during the same period.

Leq(h) – the hourly value of Leq.

Multifamily Dwelling – A residential structure containing more than one residence. Each residence in a multifamily dwelling shall be counted as one receptor when determining impacted and benefited receptors.

Noise Reduction Design Goal – the optimum desired noise reduction determined from calculating the difference between future build noise levels with abatement to future build noise levels without abatement. The noise reduction design goal in Louisiana is 8 dBA.

Permitted – A definite commitment to develop land with an approved specific design of land use activities as evidenced by the issuance of a building permit.

Property Owner – an individual or group of individuals that hold a title, deed, or other legal documentation of ownership of a property or a residence.

Receptor – A discrete or representative location of a noise sensitive area(s), for any of the land uses listed in Table 1.

Residence – a dwelling unit. Either a single family residence or each dwelling unit in a multifamily dwelling.

Statement of Likelihood – A statement provided in an environmental document based on the feasibility and reasonableness analysis at the time the document is being approved.

Traffic Noise Impacts – design year build condition noise levels that *approach* or exceed the FHWA Noise Abatement Criteria for the future build condition, or design year build condition noise levels that exceed the existing noise levels by 10 dBA. (*Approach* is defined as 1 dBA less than the FHWA Noise Abatement Criteria.)

Type I Project –
(1) The construction of a highway on new location; or
(2) The physical alteration of an existing highway where there is either:
    (a) Substantial Horizontal Alteration (a project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition), or
    (b) Substantial Vertical Alteration (a project that removes shielding therefore exposing the line-of-sight between the receptor and the traffic noise source by altering the vertical alignment of the highway or by altering the topography); or
(3) The addition of a through-traffic lane. This includes the addition of a through-traffic lane that functions as a HOV, HOT, bus, or truck climbing lane; or
(4) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or
(5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or
(6) Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or
(7) The addition of a new or substantial alteration of a weight station, rest stop, ride-share lot or toll plaza.
*Note that if a project is determined to be a Type I project, then the entire project area as defined in the environmental document is a Type I project.

Type II Project – a proposed project to provide noise abatement on an existing highway. DOTD does not have a Type II program.

Type III Project – a proposed project that does not meet the classification of a Type I or Type II project. Type III projects do not require a noise analysis.

APPLICABILITY

This policy applies to all Federal highway projects in the State of Louisiana; that is, any projects that receive Federal-aid funds or are otherwise subject to FHWA approval.

This policy also applies to the construction of <u>new</u> control of access highways that are funded through DOTD with no FHWA involvement.

Type II programs to provide noise abatement along existing highways are voluntary. DOTD does not have a Type II program; therefore, DOTD will not consider Type II projects.

DOTD will consider and construct barriers when sufficient funds (Federal or State) are appropriated by either State or Federal legislature specific to the construction of a barrier. These legislative mandated barriers may or may not be part of a Type I project. These barriers will be designed in accordance with the legislation as to location, height, and other parameters. If the design parameters are not specified in the legislation, the barrier will be designed to achieve a reasonable noise reduction in accordance with this policy.

This policy shall not prohibit the application of visual screens or security fences. Visual screens and security fences are not eligible for Federal-aid funding as noise abatement.

TRAFFIC NOISE ANALYSIS

The traffic noise analysis will include the steps listed below for each alternative under detailed study. Note that if any segment or component of an alternative meets the definition of a Type I project, then the entire alternative is considered to be Type I and is subject to the noise analysis requirements below.

1. **Identification of Existing Land Uses Affected by Noise:** The following types of activities and land uses affected by noise from the highway will be identified for analysis:
    a. Category A: Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose;
    b. Category B: residential;
    c. Category C: active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings;
    d. Category D: auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios;
    e. Category E: hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F;
    f. Category F: agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing; and
    g. Category G: undeveloped lands that are not permitted.

    Justification for the designation of lands as Category A must be submitted to FHWA on a case-by-case basis for concurrence. Justifications will be submitted through the FHWA Division Office to FHWA Headquarters.

2. **Determination of Existing Noise Levels:** The determination of existing noise levels will be made utilizing field measurements of actual noise levels. A log will be kept noting the time of day, meteorological conditions, calibration results, and any unusual ambient noise sources experienced during each measurement.

Noise measurements will be taken utilizing ANSI Type 1 or Type 2 Sound Level Meters used in accordance with the manufacturer's operations manual. Meters are to be calibrated before and after each measurement. Meters should have valid factory calibration certification. Measurements should be done in accordance with the FHWA publication entitled, "Measurement of Highway – Related Noise," dated May 1996.[4]

Noise measurements will be taken in time intervals no shorter than 15 minutes and no longer than one hour unless alternate intervals are given prior approval by DOTD.

Actual traffic counts will be made during each field measurement. These traffic counts will be categorized according to the following vehicle classes:

Automobiles (A) – all vehicles with two axles and four wheels designed primarily for transportation of nine or less passengers or transportation of cargo.

Medium Trucks (MT) – all vehicles with two axles and six wheels designed for the transportation of cargo.

Heavy Trucks (HT) – all vehicles having three or more axles designed for the transportation of cargo.

Buses (B) – all vehicles designed to carry more than nine passengers.

Motorcycles (M) – all vehicles with two or three wheels and an open-air driver/passenger compartment.

Sites selected for field measurements will receive prior approval of DOTD. These sites will represent noise sensitive receptors in each Activity Category which are likely to be affected by the project. Sites outside of the immediate vicinity of the project may also be chosen to determine the ambient noise levels unaffected by the roadway. For proposed highways on new alignments where no highway currently exists, measurements must be taken at representative receptor locations. Unless specifically approved by DOTD, field measurements will be taken to represent exterior activities only.

Field measurements will be taken at approved sites at peak and off-peak times. Peak hour noise levels will be the hour with the highest noise levels, not necessarily the hour with the highest traffic volumes.

Upon the consent of the Environmental Engineer Administrator, existing noise levels may be determined by utilizing other methodology, including computer models consistent with the current FHWA highway traffic noise prediction model. Traffic characteristics, data, selection of receptor locations, and other input parameters utilized will be at the discretion of DOTD.

[4] Located on web at http://www.fhwa.dot.gov/environment/noise/measurement/measure.cfm

3. **Prediction of Traffic Noise Levels:** Any traffic noise prediction methodology is approved for use in any traffic noise analysis required by this policy if the methodology used at the time the noise study is consistent with the requirements of 23 CFR 772.9.[5]

   Report predicted noise levels in the noise report and related documents in the same format as reported by the model used.[6]

   To validate model results, it is necessary to compare the noise levels measured in the field to the noise levels predicted by the model using the roadway parameters and traffic data collected in the field. If the modeled results are within 3 dBA of the measured noise levels, no further action is required, and the model can be used to determine future noise levels. If the modeled results are not within 3 dBA of the measured noise levels, then further investigation is warranted into the reason(s) for the discrepancy prior to using the model to determine future noise levels.

   In predicting noise levels and assessing noise impacts, traffic characteristics that will yield the worst hourly traffic noise impact on a regular basis for the design year will be used. The period with the highest sound levels may not be at the peak traffic hour but instead, during some period when traffic volumes are lower but the truck mix or vehicle speeds are higher.

   Future noise levels will be based on modeling results utilizing data for the design year. This data, including traffic volumes, composition and speed, other reasonably foreseeable development, and the implementation of other transportation projects, will be based on accepted engineering practice and local planning assumptions.

4. **Determination of Traffic Noise Impacts:** Traffic noise impacts occur when the future (predicted, design year, build condition) noise levels *approach or exceed* the FHWA Noise Abatement Criteria, or when the future (predicted, design year, build condition) noise levels exceed the existing noise levels at any sensitive receptor by 10 dBA. FHWA requires that the States define *approach* as at least 1 dBA below their Noise Abatement Criteria.

[5] The approved model in effect on July 13, 2011, the effective date of the regulations, is FHWA TNM version 2.5. When running the TNM 2.5 model, average pavement type must be used for prediction of future noise levels unless FHWA approves use of another type.

[6] The current approved model, TNM, reports results in tenths, a decimal format (##.#).

FHWA Noise Abatement Criteria
Hourly A-weighted Sound Level decibels (dBA)

Activity category	Activity Leq (h)	Evaluation Location	Activity Description	In Louisiana, Impact occurs when Noise Level ***IS EQUAL TO OR GREATER THAN*** the values below*
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.	**56**
B	67	Exterior	Residential (includes undeveloped lands permitted for residential).	**66**
C	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings. (Includes undeveloped lands permitted for these activities).	**66**
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.	**51**
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F. (Includes undeveloped lands permitted for these activities).	**71**
F	------	------	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.	**n/a**
G	------	------	Undeveloped lands that are not permitted.	**n/a**

*These values are consistent with the FHWA's requirement for consideration of traffic noise impacts 1 dBA below their noise abatement criteria.

The noise analysis must include analysis for each type of receptor present in the study area. Noise contour lines shall not be used to determine noise impacts, but noise contour lines can be used for project alternative screening or for land use planning purposes.

In determining and abating traffic noise impacts, primary consideration is to be given to exterior areas of frequent human use. Examples of possible receptor locations for residential receivers are patios, courtyards, front or back yard, pool areas, etc. Generally, the receptor location which lies between the noise source and the receiver is chosen as the location to model. If the circumstances of a particular receiver are atypical, contact the DOTD Environmental Section Coordinator for guidance.

In determining the number of receptors impacted/benefited, the number will include all dwelling units (i.e., owner-occupied, rental units, mobile homes, etc.). Each unit in a multifamily building is counted as one receptor.

For hotels, motels, offices, and other developed lands, receptor locations will be sited at outdoor areas of frequent human use such as patios, courtyards, pool areas, locations of outdoor seating, etc.

For parks and recreational areas, model each designated use area as a receptor location. For example, the park may have ball fields, basketball courts, playground equipment, tennis courts, picnic area, pool, etc. Each of these specific activity areas would be modeled to determine noise impact at each of these locations.

In those situations where there are no exterior activities to be affected by the traffic noise, or where exterior activities are far from or physically shielded from the roadway in a manner that prevents an impact on exterior activities, the interior criterion, Activity Category D, shall be used as the basis of determining noise impacts. An indoor analysis shall only be done after exhausting all outdoor analysis options. Interior noise level predictions may be estimated by using the information in Table 6 of FHWA's guidance document entitled, "Highway Traffic Noise: Analysis and Abatement Guidance," dated June 2010 and revised January 2011.[7]

When applying the interior criterion, consideration is given to the impact and abatement of interior rooms facing the roadway that are occupied frequently with a use that would benefit from a reduction in noise. For example, a classroom, prayer room, or meeting room would benefit from a reduction in noise, but a storage room or boiler room would not. When determining the cost for reasonableness, one building is one receptor, although multiple rooms may be insulated or provided noise reduction windows.

For Category F, no highway noise analysis is required under 23 CFR 772.

For Category G, if the undeveloped land is not permitted for development by the date of public knowledge, the noise levels are determined in accordance with 23 CFR 772.17(a) and results are documented in the environmental document.

[7] On-line guidance available at FHWA website, http://www.fhwa.dot.gov/environment/noise/regulations_and_guidance/analysis_and_abatement_guidance/

5. **<u>Evaluation of Noise Abatement</u>:** When traffic noise impacts are identified, noise abatement shall be considered and evaluated for *feasibility* and *reasonableness*. Traffic noise impacts will be determined and alternative noise abatement measures analyzed by giving weight to the benefits and cost of abatement, and to the overall social, economic and environmental impacts.

   In abating traffic noise impacts, primary consideration is given to exterior areas where frequent human use occurs and a lowered noise level would be of benefit.

   The noise abatement measures listed below may be incorporated into Type I Federal or Federal-aid projects to reduce traffic noise impacts.

   (1) Construction of noise barriers, including acquisition of property rights, either within or outside the highway right-of-way. Landscaping is not a viable noise barrier;

   (2) Traffic management measures (e.g., traffic control devices and signing for prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits and exclusive lane designations);

   (3) Alteration of horizontal and vertical alignments;

   (4) Acquisition of property rights (predominantly unimproved property) to serve as a buffer zone to preempt development which would be adversely impacted by traffic noise;

   (5) Noise insulation of Activity Category D land use facilities listed in Table 1. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

   Feasibility:

   For a noise barrier to be considered acoustically feasible, 75% of the first row of impacted receptors adjacent to the barrier must achieve at least a 5 dBA reduction in highway traffic noise.

   Other feasibility factors that will be considered are safety, barrier height, topography, drainage, utilities, maintenance of the abatement measure, and access to adjacent properties.

   DOTD will not build noise barriers that it considers unsafe to the traveling public or adjacent properties. Topography and drainage may impact the design of the barrier or make the barrier unfeasible to construct. Utilities may render a barrier unfeasible when a conflict between the utility and barrier exists and the utility cannot be moved or cannot be moved without creating other insurmountable problems. (Note that the cost to relocate a utility will be added to the cost of the barrier when the relocation is necessary for the construction of the barrier. If this relocation cost is large, the barrier, although feasible, may become unreasonable due to cost.) DOTD must be able to access the barrier for maintenance purposes. If access cannot be obtained, the barrier is unfeasible. When access to adjacent properties must be maintained, a barrier may be unfeasible if it cannot be designed to provide the needed access. Noise barriers

that block existing driveways are considered unfeasible; however, there may be situations whereby the property owners agree in writing to forfeit their access eliminating this concern. Situations may arise whereby access is needed for seasonal activities such as maintenance or management of adjacent properties. These situations will be considered on case by case basis.

Noise barriers on bridges are limited to a maximum height of 14 feet, measured from top of noise barrier to bridge slab. Costs associated with mounting the barrier to the bridge, including the cost to modify the bridge structure to support the barrier, will be added to the cost of the barrier for determining reasonableness.

Reasonableness:

For abatement measure to be considered reasonable all of the following three criteria must be met: (a) achievement of the noise reduction design goal, (b) cost effectiveness, and (c) concurrence of benefited receptors.

(a) Noise Reduction Design Goal: When noise abatement measures are being considered, every effort will be made to obtain a substantial noise reduction of at least 8 dBA. At a minimum, at least one receptor must receive an 8 dBA reduction for the noise abatement system to be reasonable. For noise barriers meeting the abovementioned criteria, the height and length of the barrier will be optimized using the cost/benefited receptor ratio.

(b) Cost Effectiveness: The cost estimate of the noise abatement measure (including but not limited to the costs of real estate acquisition, construction servitude or utility relocation) should be equal to or less than $35,000 per benefited receptor. The unit cost used to estimate the cost of likely barriers will be updated regularly (at least every five years) and published on DOTD's web site. *The final analysis regarding cost effectiveness will occur during design when more detail information is available regarding the cost of the barrier system*, and

(c) Consideration of Viewpoints: As part of the NEPA public involvement process, viewpoints from the community, including benefited receptors, will be solicited for all aspects of the project, including noise impacts and abatement. Public Involvement will be tailored to the project. If no relevant objections to the proposed noise abatement are made at this level of public involvement, this criterion is deemed met and abatement considered reasonable from the viewpoint of benefited receptors. If relevant objections are identified, a follow-up solicitation will occur with property owners and residents of the benefited receptors. The abatement measure will be considered reasonable from the viewpoint of benefitting receptors if 50% or more of the responses received are positive. *Follow-up coordination with benefited receptors may occur during the design stage when more detail information is available regarding barrier design*.

<u>Follow-up Coordination with Benefited Receptors during Final Design</u>

For noise barriers, the most common type of abatement, the Department will contact benefited receptors when the barrier design changes substantially from what was

presented in the NEPA document. The abatement measure will be considered reasonable from the viewpoint of benefitting receptors if 50% or more of the responses received are positive.

To ascertain desires, property owners and residents may be invited to attend a meeting specifically to discuss the proposed barrier, or they may be asked to complete a survey (paper, electronic, phone, etc.). Contact may be made through a variety of means such as in person, letters, flyers left at the receptor site, public notices, web sites, phone calls, emails or other reliable means or combination of means. Names and/or addresses may be obtained from the tax assessor's roll, clerk of court records, neighborhood associations, local government databases, reliable internet sources, or other reliable sources or combination of sources. Those who do not respond as requested will be deemed as not interested in the barrier. DOTD will give more weight to the desire of the property owner than to the desire of the lessee. (When conflicting responses are received, DOTD will consider the property owner's response over that of the lessee's.)

The criteria above must be met collectively for a noise abatement measure to be deemed reasonable. Failure to achieve all criteria collectively will result in the noise abatement measure being deemed not reasonable. **During stage 1 of project development (NEPA stage), the analysis will identify noise abatement measures that are likely to be incorporated into the project's design. The final determination of any proposed noise abatement measure will be made during the design stage.** During the design stage, only abatement measures identified in stage 1 as likely will be reevaluated for reasonableness. If the decision to provide an abatement measure changes during final design, the Department will inform the public.

The following optional factors are considered when determining justification for additional cost allowances to an already determined reasonable barrier:

- date of development (implementation requires public outreach),
  Favorable consideration will be given to residential developments that existed prior to the initial construction of the highway. (This factor applies to projects along existing highways and not to new alignments.)

Residential development existed prior to the original construction of the highway	Added to Reasonableness Criteria (b)
No	$0
Yes	$2,000

- changes between existing and future build-conditions,
  Favorable consideration will be given to impacted receptors that experience future build noise levels that are 30 dBA more than future no-build noise levels.

Incremental Increase in Noise Level Between the Future No-build and the Future Build Noise Levels Before Noise Abatement	Added to Reasonableness Criteria (b)
Less than 30 dBA	$0
30 dBA or greater	$2,000

- exposure to higher absolute highway traffic noise levels,
  Favorable consideration will be given to impacted receptors that have predicted future noise levels above 76 dBA

Predicted Future Build Noise Level Before Noise Abatement	Added to Reasonableness Criteria (b)
66-75 dBA	$0
76-79 dBA	$1,000
80 dBA or greater	$2,000

and

- use of noise compatible planning concepts by the local government,
  Favorable consideration will be given to areas that have noise compatible (relevant to highway noise) zoning requirements in place that include the project area.

Noise compatible zoning in place for study area	Added to Reasonableness Criteria (b)
No	$0
Yes, in place for 1 to 2 years	$1,000
Yes, in place for 2 or more years	$1,500

DOCUMENTATION

The noise study report will document the results of the noise study. This report may be a standalone document incorporated into the NEPA document by reference, or it may be included in the appendix of the NEPA document.

Before adoption of a Final Environmental Impact Statement, Finding of No Significant Impact, or Categorical Exclusion, for Federal-aid projects, the DOTD will identify noise abatement measures which

are both reasonable and feasible and likely to be incorporated in the project. The statement of likelihood included in the environmental document will give the locations and physical description of the noise abatement measures as well as explain that the final recommendation will be determined during final design with input from benefited receptors. The DOTD will also identify noise impacts for which no apparent solution is available.

MISCELLANEOUS PROVISIONS

Third party funding is not allowed if the funding is required to make the abatement measure feasible or reasonable. Third party funding is acceptable to make functional enhancements such as absorptive treatment, access doors, or aesthetic enhancements to a noise abatement measure already determined to be both reasonable and feasible.

DOTD allows the use of either absorptive or reflective barriers. DOTD generally assumes reflective barriers in its noise analyses. This does not preclude the use of absorptive barriers or absorptive treatments. For example, a contractor may be given the option of using any barrier system on the Qualified Products List (QPL)[8] for construction. The QPL includes both reflective and absorptive systems. Therefore, the contract may choose either an absorptive or a reflective system as long as the system is on the QPL. Using an absorptive barrier when a reflective barrier was assumed for modeling purposes is not considered a substantial change in design for the purposes of soliciting viewpoints of benefited receptors. Note that decorative features often requested for visual enhancements may preclude use of absorptive treatments or some QPL barrier systems. If separate absorptive treatments are requested, the cost for the treatment will be added to the cost of the barrier system to determine reasonableness. If the additional absorptive treatment increases the cost above the maximum cost/benefited receptor value, it will not be considered for implementation unless the optional reasonableness factors apply. Use of absorptive barriers or treatments on a project is discretionary.

Cost averaging is used when a common noise environment exists. Common noise environments occur when the traffic mix and speeds are the same. For instance, a common noise environment could occur along a road segment between interchanges on a controlled access highway if the traffic speed is constant. Application requires that no single common noise environment exceeds $70,000/benefited receptor and that collectively all common noise environments being averaged do not exceed $35,000/benefited receptor.

Information for Local Officials: In an effort to prevent future traffic noise impacts on currently undeveloped lands, DOTD will inform local officials, within whose jurisdiction the highway project is located, of the best estimation of future noise levels for both developed and undeveloped lands or properties in the immediate vicinity of the project and information that may be useful to local communities to limit future land development to that which will be compatible with anticipated highway noise levels.

A copy of the environmental document (with included noise study) and/or noise study report (if one is prepared) will be provided to local officials upon approval of the environmental document. Local

[8] QPL 69, Noise Reduction Systems (Noise Barriers), can be found at http://www.dotd.la.gov/highways/construction/lab/qpl/tableofcontents.shtml

officials or agencies, which may have jurisdiction, include the Mayor's office, city/town/parish council, parish police jury, and metropolitan planning organization, as applicable.

Construction Noise: The following general steps are to be performed for all Type I projects:

a. Identify land uses or activities that may be affected by noise from the construction of the project. The identification is to be performed during the project development studies.

b. Determine the measures that are needed in the plans and specifications to minimize or eliminate adverse construction noise impacts to the community including alternate designs to keep noise levels to a minimum (e.g. the use of drilled shafts vs. driven piles in noise sensitive areas).[9] This determination will include a weighing of benefits achieved and the overall adverse social, economic, and environmental effects and costs of abatement measures.

c. Incorporate the needed abatement measures in the plans and specifications, as appropriate.

When practicable, DOTD will construct any permanent noise abatement measures as the first phase of a highway construction project to abate construction noise impacts of subsequent phases of the same project.

Revision: DOTD may revise this policy as necessary to keep current with the state-of-the-art technology, legislation, regulation, and guidance, as well as construction cost indices in the fields of highway traffic noise prediction, impact, and abatement.

The unit cost used in the noise analysis for determining reasonableness of noise abatement measures will be updated regularly at least every five years. It is the responsibility of the analyst to ensure that they are using the correct unit cost. Contact the DOTD Environmental Coordinator for more information.

Revisions to this policy affecting Federal or Federal-aid projects must be concurred with by the FHWA prior to adoption.

DOTD and FHWA are not responsible for notification of revisions to this policy. Inquiries as to the latest revision that may be applicable should be made in writing to:

Environmental Engineer Administrator
Louisiana Department of Transportation and Development
Post Office Box 94245
Baton Rouge, Louisiana 70804-9245

Implementation Plan: This policy will become effective July 13, 2011. It will apply to all projects started on or after the above effective date, and to all projects currently being evaluated pursuant to NEPA that do not have a completed noise study. A noise study is deemed completed if it was reviewed and commented on by DOTD and/or FHWA and considered final.

[9] The FHWA Roadway Construction Noise Model (FHWA RCNM) may be used to model construction noise at a sensitive receptor. For highly complex and controversial projects in urban areas, the "Highway Construction Noise: Measurement, Prediction and Mitigation" (HICNOM) method may be used, but requires specific input.

For noise studies performed under past policies: If, during later stages of project development, changes occur that affect only a portion of the project requiring a reevaluation of the noise study for that portion, the policy in effect at the time of the original study will be applicable. When these situations arise, DOTD will consult with FHWA Division office on the project specific issues to ensure that FHWA is in agreement.

APPENDIX B
CALIBRATION AND CONFORMANCE OF NOISE EQUIPMENT AND NOISE DATA COLLECTION

APPENDIX B-1
CERTIFICATIONS

THE MODAL SHOP INC.
A PCB GROUP CO.

3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

~Certificate of Calibration~

Manufacturer: PCB
Model Number: 377B02
Serial Number: 140262
Asset ID:
Description: Free-Field Microphone

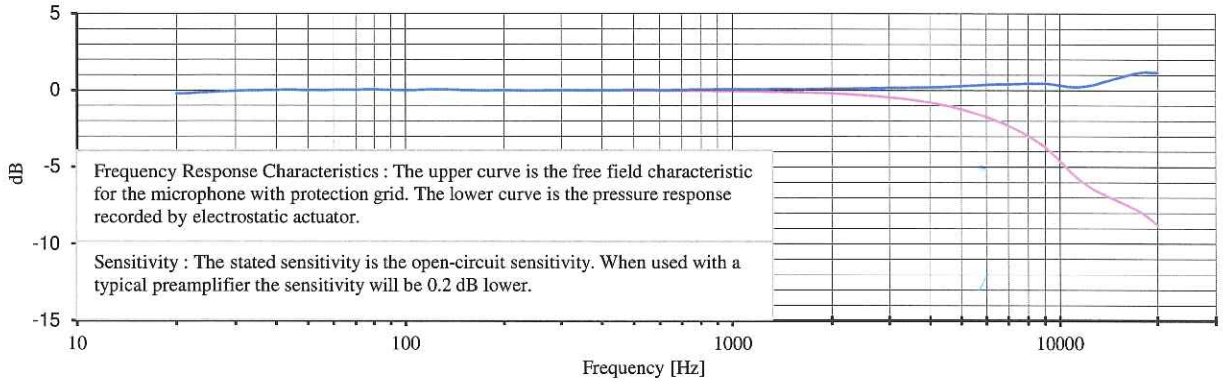
Customer: TMS Rental
Address:

Calibration Date: Feb 02, 2016 12:28:10
Due Date:

Sensitivity:	**250 Hz**	**1 kHz**	
	-27.10	-27.15	dB re. 1V/Pa
	44.15	43.89	mV/Pa

Temperature:	74 (23)	°F (°C)
Humidity:	30	%
Ambient Pressure:	992.7	mbar
Polarization Voltage:	0	VDC

Cal. Results: In Tolerance



Traceability: The calibration is traceable through 683/281764-12.

Notes:
Calibration results relate only to the items calibrated.
This certificate may not be reproduced, except in full, without written permission.
This calibration is performed in compliance with ISO 9001, ISO 17025 and ANSI Z540.
Measurement uncertainty (250 Hz sensitivity calibration) at 95% confidence level: 0.30 dB.
Calibrated per procedure PRD-P204.

User Note: As Found / As Left: In Tolerance.

Frequency Response with reference to level at 250 Hz

Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)	Frequency (Hz)	Upper (dB)
20	-0.24	**630**	0.02	**4500**	0.24		
25	-0.13	**800**	0.06	**5000**	0.29		
31.5	-0.03	**1000**	0.07	**5600**	0.34		
40	0.02	**1120**	0.07	**6300**	0.39		
50	0.02	**1250**	0.08	**7100**	0.42		
63	0.02	**1400**	0.09	**8000**	0.45		
80	0.05	**1600**	0.08	**9000**	0.46		
100	0.01	**1800**	0.09	**10000**	0.33		
125	0.05	**2000**	0.11	**11200**	0.22		
160	0.00	**2240**	0.12	**12500**	0.34		
200	0.00	**2500**	0.14	**14000**	0.63		
250	0.00	**2800**	0.16	**16000**	0.96		
315	0.01	**3150**	0.18	**18000**	1.19		
400	0.00	**3550**	0.19	**20000**	1.15		
500	0.03	**4000**	0.21				

Technician: Ed Devlin

Approval: Edward A. Devlin

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	77606	9/1/2015	9/1/2016

ACCREDITED
Calibration Lab
CALIBRATION CERT 2649.01

Certificate of Calibration and Conformance

This document certifies that the instrument referenced below meets published specifications per Procedure PRD-P263; ANSI S1.4-1983 (R 2006) Type 1; S1.4A-1985; S1.43-1997 Type 1; S1.11-2004 Octave Band Class 0; S1.25-1991; IEC 61672-2002 Class 1; 60651-2001 Type 1; 60804-2000 Type 1; 61260-2001 Class 0; 61252-2002.

Manufacturer:	Larson Davis	Temperature:	71.6	°F
Model Number:	831		22.00	°C
Serial Number:	2983	Rel. Humidity:	29.1	%
Customer:	TMS Rental	Pressure:	989.7	mbars
Description:	Sound Level Meter		989.7	hPa

Note: As Found / As Left: In Tolerance

Upon receipt for testing, this instrument was found to be:

Within the Stated tolerance of the manufacturer's specification

Calibration Date: 25-Feb-16 Calibration Due:

Calibration Standards Used:

Manufacturer	Model	Serial Number	Cal Due
Larson Davis	LDSigGen/2239	0760/0109	4/14/2016

This Certificate attests that this instrument has been calibrated under the stated conditions with Measurement and Test Equipment (M&TE) Standards traceable to the National Institute of Standards and Technology (NIST). All of the Measurement Standards have been calibrated to their manufacturers' specified accuracy / uncertainty. Evidence of traceability and accuracy is on file at The Modal Shop and/or Larson Davis Corporate Headquarters. An acceptable accuracy ratio between the Standard(s) and the item calibrated has been maintained. This instrument meets or exceeds the manufacturer's published specification unless noted.

This calibration complies with ISO 17025 and ANSI Z540. The collective uncertainty of the Measurement Standard used does not exceed 25% of the applicable tolerance for each characteristic calibrated unless otherwise noted.

The results documented in this certificate relate only to the item(s) calibrated or tested. Calibration interval assignment and adjustment are the responsibility of the end user. This certificate may not be reproduced, except in full, without the written approval of The Modal Shop.

Technician: Andy McGuire Signature:

The Modal Shop, Inc.
3149 East Kemper Road
Cincinnati, OH 45241
Phone: (513) 351-9919
(800) 860-4867
www.modalshop.com

THE MODAL SHOP INC
A PCB GROUP CO.

~Calibration Certificate~

3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

Manufacturer:	Larson Davis	Asset ID:	44100
Model:	CAL200	Calibration Date:	Apr 13, 2015 12:27:29
Serial Number:	8536	Due Date:	
Description:	Acoustic Calibrator	Technician:	Michael Malec
Customer:	TMS Rental	Approval:	

Calibration Results:

Temperature:	23 °C (75 °F)
Humidity:	41.00%
Pressure:	996.3 mbar

Measured SPL : 94.05 dB re. 20µPa

Measured Frequency : 1,000.00 Hz

Upon receipt for calibration, the instrument was found to be:
WITHIN the stated tolerance of the manufacturer's specification.

Note: **As Found: In Tolerance. As Left: In Tolerance.**

Measurement uncertainty at 95% confidence level: 0.3 dB

The subject instrument was calibrated to the indicated specification using standards stated below or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the customer.

This calibration is traceable through : 683/281764-12

Notes:
The calibration was performed under operating procedures intended to implement the requirements of ISO 9001, ISO 17025 and ANSI Z540. Unless otherwise noted, the reported value is both "as found" and "as left" data. Calibration results relate only to the items calibrated. This certificate may not be reproduced, except in full, without written permission.

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	9/15/2014	9/15/2015

THE MODAL SHOP INC.
A PCB GROUP CO.

~Calibration Certificate~

3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

Manufacturer:	Larson Davis	Asset ID:	44100
Model:	CAL200	Calibration Date:	Apr 13, 2015 12:58:28
Serial Number:	8536	Due Date:	
Description:	Acoustic Calibrator	Technician:	Michael Malec
Customer:	TMS Rental	Approval:	

Calibration Results:

Temperature:	23 °C (74 °F)
Humidity:	42.40%
Pressure:	995.8 mbar

Measured SPL : 113.91 dB re. 20µPa

Measured Frequency : 1,000.00 Hz

Upon receipt for calibration, the instrument was found to be:
WITHIN the stated tolerance of the manufacturer's specification.

Note: **As Found: In Tolerance. As Left: In Tolerance.**

Measurement uncertainty at 95% confidence level: 0.3 dB

The subject instrument was calibrated to the indicated specification using standards stated below or to accepted values of natural physical constants. This document certifies that the instrument met the following specification upon its return to the customer.

This calibration is traceable through : 683/281764-12

Notes:
The calibration was performed under operating procedures intended to implement the requirements of ISO 9001, ISO 17025 and ANSI Z540. Unless otherwise noted, the reported value is both "as found" and "as left" data. Calibration results relate only to the items calibrated. This certificate may not be reproduced, except in full, without written permission.

Reference Equipment Used:

Manuf.	*Model*	*Serial*	*Cal. Date*	*Due Date*
GRAS	40AG	9542	9/15/2014	9/15/2015

APPENDIX B-2
COLLECTED DATA


Miller Road - Pt #009 &#014

Milton Road - Pt #010 & #013

TNM TRAFFIC COUNT 6pm

009

Project Name	LA 447		
Name of Counter	Brian Early		
Date	3-Mar-16		
Time	1704 AM or PM		
Direction of Traffic	Miller Rd		
Location		Tick Marks	Total
	Automobile: 2axle, 4 tire	///	3
	Medium Trucks 2 axle, 6 tire		
	Heavy Trucks 3 or more Axles		
	Bus		
	Motorcycle		

010

TNM TRAFFIC COUNT 7pm

Project Name	LA 447		
Name of Counter	Brian Early		
Date	3-Mar-16		
Time	1726 AM or PM		
Direction of Traffic	Milton LN		
Location		Tick Marks	Total
	IN Automobile: 2axle, 4 tire out to LA 447	17 32	49
	In out to LA 447 Medium Trucks 2 axle, 6 tire	1	1
	Heavy Trucks 3 or more Axles		
	Bus		
	Motorcycle		

013

TNM TRAFFIC COUNT

Project Name	LA 447		
Name of Counter	Brian Early		
Date	4-Mar-16		
Time	0736 (AM) or PM		
Direction of Traffic			
Location	Milton Rd	Data point 13 Tick Marks	Total
	In	34	
	out to LA447	22	56
Automobile: 2axle, 4 tire			
Medium Trucks 2 axle, 6 tire			
Heavy Trucks 3 or more Axles			
Bus		7	7
Motorcycle			

TNM TRAFFIC COUNT 4am 014

Project Name	LA 447		
Name of Counter	Brian Early		
Date	4-Mar-16		
Time	0757 AM or PM		
Direction of Traffic			
Location	Miller Rd	Data Point 14 Tick Marks	Total
	In out to LA447 Automobile: 2axle, 4 tire	1	1
	Medium Trucks 2 axle, 6 tire		
	Heavy Trucks 3 or more Axles		
	Bus		
	Motorcycle		

Modern Rd. House driving facing Ramp

5:04

009

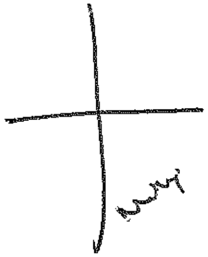
0 Birds chirping
1
2
3
4
5 Music playing in truck on on ramp.
6
7
8
9
10 Birds chirping
11
12
13 Car & truck passed.
14
15

(10)

(5:26pm)

7:30pm

3:00 - 4:45



??

Penders apts.

13600 Milton Lane @ the Begin

0 Car w/ music Blasting

1 Quality passes by.

2

3

4 Resident asks questions.

5

6

7

8

9 horn blown by 18 wheeler.

10

11

12

13

14

15

Project Name	LA 447
Name	Justin Schexnayder
Date	4 ~~3~~-Mar-16
Time	7:36 AM or PM
Location	13606 Milton LN
Minute	Notes
0	
1	Birds chirping
2	
3	
4	
5	
6	
7	High Traffic due to school
8	
9	
10	Trailer on truck.
11	
12	Child sing 2 yard dogs.
13	child rolling schoolbag; 3 children @ bus stop.
14	Play games. Child yells.
15	

03

Picture 3 & 4

Additional Notes:

Project Name	LA 447
Name	Justin Schexnayder
Date	4 ~~3~~-Mar-16
Time	7:57 AM or PM
Location	Miller Rd.
Minute	Notes
0	Birds chirping
1	
2	2 18 wheelers on ramp, 18 wheeler on ramp; cough.
3	
4	
5	
6	loud truck on interstate
7	
8	
9	
10	
11	
12	Loud Bird
13	
14	Guy in front stops to talk.
15	

16

Additional Notes:

went 2:00 more to [illegible]

014

Photo 5 the

LA 447 Stage 1
Pt 009 - Miller Road PM

Summary

File Name	831_Data.009
Serial Number	0002983
Model	Model 831
Firmware Version	2.301
User	
Location	
Job Description	
Note	

Measurement Description

Start	2016-03-03 17:04:45
Stop	2016-03-03 17:19:45
Duration	00:15:00.7
Run Time	00:15:00.7
Pause	00:00:00.0
Pre Calibration	2016-02-29 11:05:33
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	**C**	**Z**
Under Range Peak	77.6	74.6	**79.6** dB
Under Range Limit	**26.5**	27.0	32.8 dB
Noise Floor	17.4	17.8	23.3 dB

Results

LAeq	63.5 dB	
LAE	93.0 dB	
EA	224.152 µPa²h	
LZpeak (max)	2016-03-03 17:11:26	112.2 dB
LASmax	2016-03-03 17:17:06	85.0 dB
LASmin	2016-03-03 17:10:59	57.7 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	9	53.2 s
LAS > 85.0 dB (Exceedance Counts / Duration)	1	1.1 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	63.5	63.5	-99.9	63.5	63.5	-99.9
LCeq	76.0 dB					
LAeq	63.5 dB					
LCeq - LAeq	12.5 dB					
LAIeq	66.0 dB					
LAeq	63.5 dB					
LAIeq - LAeq	2.5 dB					
# Overloads	0					
Overload Duration	0.0 s					
# OBA Overloads	1.0					
OBA Overload Duration	2.0 s					

Statistics

LAS5.00	64.2 dB
LAS10.00	62.8 dB
LAS33.30	61.3 dB
LAS50.00	60.7 dB
LAS66.60	60.2 dB
LAS90.00	59.1 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRM831	2016-02-29 11:05:33	-27.6			
PRM831	2015-06-18 08:51:00	-25.3	50.7	59.0	56.2
PRM831	2015-03-25 09:10:07	-25.9	48.2	46.9	40.6

LA 447 Stage 1
Pt 010 - Milton Road PM

Summary

File Name	831_Data.010
Serial Number	0002983
Model	Model 831
Firmware Version	2.301
User	
Location	
Job Description	
Note	

Measurement Description

Start	2016-03-03 17:26:43
Stop	2016-03-03 17:41:45
Duration	00:15:01.7
Run Time	00:15:01.7
Pause	00:00:00.0
Pre Calibration	2016-02-29 11:05:33
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	**C**	**Z**
Under Range Peak	77.6	74.6	**79.6** dB
Under Range Limit	**26.5**	27.0	32.8 dB
Noise Floor	17.4	17.8	23.3 dB

Results

LAeq	64.8 dB		
LAE	94.4 dB		
EA	302.687 µPa²h		
LZpeak (max)	2016-03-03 17:29:42	118.3 dB	
LASmax	2016-03-03 17:31:48	76.2 dB	
LASmin	2016-03-03 17:36:36	53.3 dB	
SEA	-99.9 dB		
LAS > 65.0 dB (Exceedance Counts / Duration)	44	266.3 s	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	64.8	64.8	-99.9	64.8	64.8	-99.9

LCeq	82.2 dB
LAeq	64.8 dB
LCeq - LAeq	17.4 dB
LAleq	68.3 dB
LAeq	64.8 dB
LAleq - LAeq	3.5 dB
# Overloads	0
Overload Duration	0.0 s
# OBA Overloads	9.0
OBA Overload Duration	24.2 s

Statistics

LAS5.00	71.2 dB
LAS10.00	69.3 dB
LAS33.30	63.2 dB
LAS50.00	60.8 dB
LAS66.60	58.7 dB
LAS90.00	55.9 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRM831	2016-02-29 11:05:33	-27.6			
PRM831	2015-06-18 08:51:00	-25.3	50.7	59.0	56.2
PRM831	2015-03-25 09:10:07	-25.9	48.2	46.9	40.6

LA 447 Stage 1
Pt 013 - Milton Road AM

Summary

File Name	831_Data.013
Serial Number	0002983
Model	Model 831
Firmware Version	2.301
User	
Location	
Job Description	
Note	

Measurement Description

Start	2016-03-04 07:36:54
Stop	2016-03-04 07:51:58
Duration	00:15:03.1
Run Time	00:15:03.1
Pause	00:00:00.0
Pre Calibration	2016-02-29 11:05:33
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting			
Peak Weight	Z Weighting			
Detector	Slow			
Preamp	PRM831			
Microphone Correction	Off			
Integration Method	Linear			
OBA Range	Low			
OBA Bandwidth	1/1 and 1/3			
OBA Freq. Weighting	Z Weighting			
OBA Max Spectrum	Bin Max			
Gain	0.0 dB			
Overload	145.1 dB			
	A	**C**	**Z**	
Under Range Peak	77.6	74.6	**79.6** dB	
Under Range Limit	**26.5**	27.0	32.8 dB	
Noise Floor	17.4	17.8	23.3 dB	

Results

LAeq	64.4 dB		
LAE	93.9 dB		
EA	273.558 µPa²h		
LZpeak (max)	2016-03-04 07:50:06	103.1 dB	
LASmax	2016-03-04 07:47:37	79.3 dB	
LASmin	2016-03-04 07:46:05	50.1 dB	
SEA	-99.9 dB		
LAS > 65.0 dB (Exceedance Counts / Duration)	39	220.1 s	
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s	
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s	

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	64.4	64.4	-99.9	64.4	64.4	-99.9
LCeq	72.6 dB					
LAeq	64.4 dB					
LCeq - LAeq	8.3 dB					
LAleq	67.1 dB					
LAeq	64.4 dB					
LAleq - LAeq	2.7 dB					
# Overloads	0					
Overload Duration	0.0 s					
# OBA Overloads	0					
OBA Overload Duration	0.0 s					

Statistics

LAS5.00	70.5 dB
LAS10.00	68.4 dB
LAS33.30	61.3 dB
LAS50.00	57.1 dB
LAS66.60	54.3 dB
LAS90.00	51.9 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRM831	2016-02-29 11:05:33	-27.6			
PRM831	2015-06-18 08:51:00	-25.3	50.7	59.0	56.2
PRM831	2015-03-25 09:10:07	-25.9	48.2	46.9	40.6

LA 447 Stage 1
Pt 014 - Miller Road AM

Summary

File Name	831_Data.014
Serial Number	0002983
Model	Model 831
Firmware Version	2.301
User	
Location	
Job Description	
Note	

Measurement Description

Start	2016-03-04 07:56:33
Stop	2016-03-04 08:13:46
Duration	00:17:12.2
Run Time	00:17:12.2
Pause	00:00:00.0
Pre Calibration	2016-02-29 11:05:33
Post Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting
Peak Weight	Z Weighting
Detector	Slow
Preamp	PRM831
Microphone Correction	Off
Integration Method	Linear
OBA Range	Low
OBA Bandwidth	1/1 and 1/3
OBA Freq. Weighting	Z Weighting
OBA Max Spectrum	Bin Max
Gain	0.0 dB
Overload	145.1 dB

	A	C	Z
Under Range Peak	77.6	74.6	**79.6** dB
Under Range Limit	**26.5**	27.0	32.8 dB
Noise Floor	17.4	17.8	23.3 dB

Results

LAeq	62.4 dB	
LAE	92.5 dB	
EA	197.336 µPa²h	
LZpeak (max)	2016-03-04 07:59:19	96.1 dB
LASmax	2016-03-04 08:12:26	75.4 dB
LASmin	2016-03-04 07:57:07	56.1 dB
SEA	-99.9 dB	
LAS > 65.0 dB (Exceedance Counts / Duration)	9	134.1 s
LAS > 85.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 135.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 137.0 dB (Exceedance Counts / Duration)	0	0.0 s
LZpeak > 140.0 dB (Exceedance Counts / Duration)	0	0.0 s

Community Noise	**Ldn**	**LDay 07:00-22:00**	**LNight 22:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-22:00**
	62.4	62.4	-99.9	62.4	62.4	-99.9
LCeq	73.7 dB					
LAeq	62.4 dB					
LCeq - LAeq	11.3 dB					
LAleq	63.9 dB					
LAeq	62.4 dB					
LAleq - LAeq	1.6 dB					
# Overloads	0					
Overload Duration	0.0 s					
# OBA Overloads	0					
OBA Overload Duration	0.0 s					

Statistics

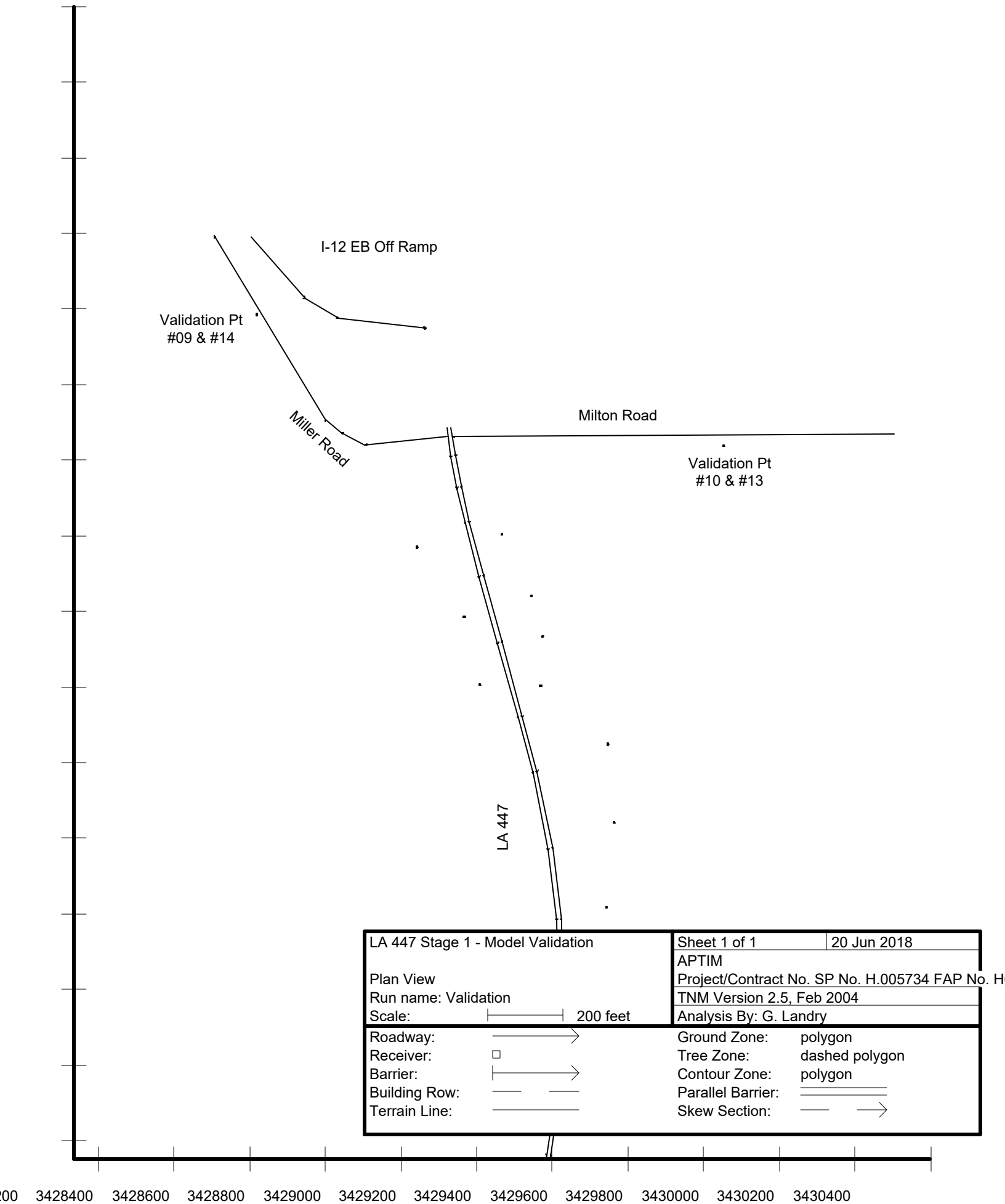
LAS5.00	67.1 dB
LAS10.00	64.4 dB
LAS33.30	60.9 dB
LAS50.00	59.7 dB
LAS66.60	58.8 dB
LAS90.00	57.6 dB

Calibration History

Preamp	**Date**	**dB re. 1V/Pa**	**6.3**	**8.0**	**10.0**
PRM831	2016-02-29 11:05:33	-27.6			
PRM831	2015-06-18 08:51:00	-25.3	50.7	59.0	56.2
PRM831	2015-03-25 09:10:07	-25.9	48.2	46.9	40.6

APPENDIX C
TNM MODEL VALIDATION

APPENDIX E-C-1
VALIDATION MODEL PLAN VIEW


I-12 EB Off Ramp
Validation Pt
#09 & #14
Miller Road
Milton Road
Validation Pt
#10 & #13
LA 447
LA 447 Stage 1 - Model Validation
Plan View
Run name: Validation
Scale: 200 feet
Sheet 1 of 1
20 Jun 2018
APTIM
Project/Contract No. SP No. H.005734 FAP No. H
TNM Version 2.5, Feb 2004
Analysis By: G. Landry
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
200
3428400
3428600
3428800
3429000
3429200
3429400
3429600
3429800
3430000
3430200
3430400

APPENDIX E-C-2
VALIDATION MODEL TRAFFIC

APTIM **22 June 2018**
G. Landry **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **SP No. H.005734 FAP No. H005734**
RUN: **LA 447 Stage 1 - Model Validation**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
SB	point1	1	735	45	25	45	51	45	8	45	25	45
	point2	2	735	45	25	45	51	45	8	45	25	45
	point3	3	735	45	25	45	51	45	8	45	25	45
	point4	4	735	45	25	45	51	45	8	45	25	45
	point5	5	735	45	25	45	51	45	8	45	25	45
	point6	6	735	45	25	45	51	45	8	45	25	45
	point7	7	735	45	25	45	51	45	8	45	25	45
	point8	8	735	45	25	45	51	45	8	45	25	45
	point9	9	735	45	25	45	51	45	8	45	25	45
	point10	10	735	45	25	45	51	45	8	45	25	45
	point11	11	735	45	25	45	51	45	8	45	25	45
	point12	12	735	45	25	45	51	45	8	45	25	45
	point13	13	735	45	25	45	51	45	8	45	25	45
	point14	14	735	45	25	45	51	45	8	45	25	45
	point15	15	735	45	25	45	51	45	8	45	25	45
	point16	16	735	45	25	45	51	45	8	45	25	45
	point17	17	735	45	25	45	51	45	8	45	25	45
	point18	18	735	45	25	45	51	45	8	45	25	45
	point19	19	735	45	25	45	51	45	8	45	25	45
	point20	20	735	45	25	45	51	45	8	45	25	45
	point21	21	735	45	25	45	51	45	8	45	25	45
	point22	22	735	45	25	45	51	45	8	45	25	45
	point23	23	735	45	25	45	51	45	8	45	25	45

	point24	24	735	45	25	45	51	45	8	45	25	45
	point25	25	735	45	25	45	51	45	8	45	25	45
	point26	26	735	45	25	45	51	45	8	45	25	45
	point27	27	735	45	25	45	51	45	8	45	25	45
	point28	28	735	45	25	45	51	45	8	45	25	45
	point29	29	735	45	25	45	51	45	8	45	25	45
	point30	30	735	45	25	45	51	45	8	45	25	45
	point31	31	735	45	25	45	51	45	8	45	25	45
	point32	32	735	45	25	45	51	45	8	45	25	45
	point33	33	735	45	25	45	51	45	8	45	25	45
	point34	34	735	45	25	45	51	45	8	45	25	45
	point35	35	735	45	25	45	51	45	8	45	25	45
	point36	36	735	45	25	45	51	45	8	45	25	45
	point37	37	735	45	25	45	51	45	8	45	25	45
	point38	38	735	45	25	45	51	45	8	45	25	45
	point39	39	735	45	25	45	51	45	8	45	25	45
	point40	40	735	45	25	45	51	45	8	45	25	45
	point41	41	735	45	25	45	51	45	8	45	25	45
	point42	42	735	45	25	45	51	45	8	45	25	45
	point43	43	735	45	25	45	51	45	8	45	25	45
	point44	44	735	45	25	45	51	45	8	45	25	45
	point45	45	735	45	25	45	51	45	8	45	25	45
	point46	46	735	45	25	45	51	45	8	45	25	45
	point47	47	735	45	25	45	51	45	8	45	25	45
	point48	48	735	45	25	45	51	45	8	45	25	45
	point49	49	735	45	25	45	51	45	8	45	25	45
	point50	50	735	45	25	45	51	45	8	45	25	45
	point51	51	735	45	25	45	51	45	8	45	25	45
	point52	52	735	45	25	45	51	45	8	45	25	45
	point53	53	735	45	25	45	51	45	8	45	25	45
	point54	54	735	45	25	45	51	45	8	45	25	45
	point55	55	735	45	25	45	51	45	8	45	25	45
	point56	56	735	45	25	45	51	45	8	45	25	45
	point57	57	735	45	25	45	51	45	8	45	25	45
	point58	58	735	45	25	45	51	45	8	45	25	45
	point59	59	735	45	25	45	51	45	8	45	25	45

	point60	60	735	45	25	45	51	45	8	45	25	45
	point61	61	735	45	25	45	51	45	8	45	25	45
	point62	62	735	45	25	45	51	45	8	45	25	45
	point63	63	735	45	25	45	51	45	8	45	25	45
	point64	64	735	45	25	45	51	45	8	45	25	45
	point65	65	735	45	25	45	51	45	8	45	25	45
	point66	66	735	45	25	45	51	45	8	45	25	45
	point67	67	735	45	25	45	51	45	8	45	25	45
	point68	68	735	45	25	45	51	45	8	45	25	45
	point69	69	735	45	25	45	51	45	8	45	25	45
	point70	70	735	45	25	45	51	45	8	45	25	45
	point71	71	735	45	25	45	51	45	8	45	25	45
	point72	72	735	45	25	45	51	45	8	45	25	45
	point73	73	735	45	25	45	51	45	8	45	25	45
	point74	74	735	45	25	45	51	45	8	45	25	45
	point75	75	735	45	25	45	51	45	8	45	25	45
	point76	76	735	45	25	45	51	45	8	45	25	45
	point77	77	735	45	25	45	51	45	8	45	25	45
	point78	78	735	45	25	45	51	45	8	45	25	45
	point79	79	735	45	25	45	51	45	8	45	25	45
	point80	80	735	45	25	45	51	45	8	45	25	45
	point81	81	735	45	25	45	51	45	8	45	25	45
	point82	82	735	45	25	45	51	45	8	45	25	45
	point83	83	735	45	25	45	51	45	8	45	25	45
	point84	84	735	45	25	45	51	45	8	45	25	45
	point85	85	735	45	25	45	51	45	8	45	25	45
	point86	86	735	45	25	45	51	45	8	45	25	45
	point87	87	735	45	25	45	51	45	8	45	25	45
	point88	88	735	45	25	45	51	45	8	45	25	45
	point89	89	735	45	25	45	51	45	8	45	25	45
	point90	90	735	45	25	45	51	45	8	45	25	45
	point91	91	735	45	25	45	51	45	8	45	25	45
	point92	92	735	45	25	45	51	45	8	45	25	45
	point93	93	735	45	25	45	51	45	8	45	25	45
	point94	94	735	45	25	45	51	45	8	45	25	45
	point95	95	735	45	25	45	51	45	8	45	25	45

	point96	96										
NB	point97	97	612	45	21	45	42	45	7	45	21	45
	point98	98	612	45	21	45	42	45	7	45	21	45
	point99	99	612	45	21	45	42	45	7	45	21	45
	point100	100	612	45	21	45	42	45	7	45	21	45
	point101	101	612	45	21	45	42	45	7	45	21	45
	point102	102	612	45	21	45	42	45	7	45	21	45
	point103	103	612	45	21	45	42	45	7	45	21	45
	point104	104	612	45	21	45	42	45	7	45	21	45
	point105	105	612	45	21	45	42	45	7	45	21	45
	point106	106	612	45	21	45	42	45	7	45	21	45
	point107	107	612	45	21	45	42	45	7	45	21	45
	point108	108	612	45	21	45	42	45	7	45	21	45
	point109	109	612	45	21	45	42	45	7	45	21	45
	point110	110	612	45	21	45	42	45	7	45	21	45
	point111	111	612	45	21	45	42	45	7	45	21	45
	point112	112	612	45	21	45	42	45	7	45	21	45
	point113	113	612	45	21	45	42	45	7	45	21	45
	point114	114	612	45	21	45	42	45	7	45	21	45
	point115	115	612	45	21	45	42	45	7	45	21	45
	point116	116	612	45	21	45	42	45	7	45	21	45
	point117	117	612	45	21	45	42	45	7	45	21	45
	point118	118	612	45	21	45	42	45	7	45	21	45
	point119	119	612	45	21	45	42	45	7	45	21	45
	point120	120	612	45	21	45	42	45	7	45	21	45
	point121	121	612	45	21	45	42	45	7	45	21	45
	point122	122	612	45	21	45	42	45	7	45	21	45
	point123	123	612	45	21	45	42	45	7	45	21	45
	point124	124	612	45	21	45	42	45	7	45	21	45
	point125	125	612	45	21	45	42	45	7	45	21	45
	point126	126	612	45	21	45	42	45	7	45	21	45
	point127	127	612	45	21	45	42	45	7	45	21	45
	point128	128	612	45	21	45	42	45	7	45	21	45
	point129	129	612	45	21	45	42	45	7	45	21	45
	point130	130	612	45	21	45	42	45	7	45	21	45
	point131	131	612	45	21	45	42	45	7	45	21	45

	point132	132	612	45	21	45	42	45	7	45	21	45
	point133	133	612	45	21	45	42	45	7	45	21	45
	point134	134	612	45	21	45	42	45	7	45	21	45
	point135	135	612	45	21	45	42	45	7	45	21	45
	point136	136	612	45	21	45	42	45	7	45	21	45
	point137	137	612	45	21	45	42	45	7	45	21	45
	point138	138	612	45	21	45	42	45	7	45	21	45
	point139	139	612	45	21	45	42	45	7	45	21	45
	point140	140	612	45	21	45	42	45	7	45	21	45
	point141	141	612	45	21	45	42	45	7	45	21	45
	point142	142	612	45	21	45	42	45	7	45	21	45
	point143	143	612	45	21	45	42	45	7	45	21	45
	point144	144	612	45	21	45	42	45	7	45	21	45
	point145	145	612	45	21	45	42	45	7	45	21	45
	point146	146	612	45	21	45	42	45	7	45	21	45
	point147	147	612	45	21	45	42	45	7	45	21	45
	point148	148	612	45	21	45	42	45	7	45	21	45
	point149	149	612	45	21	45	42	45	7	45	21	45
	point150	150	612	45	21	45	42	45	7	45	21	45
	point151	151	612	45	21	45	42	45	7	45	21	45
	point152	152	612	45	21	45	42	45	7	45	21	45
	point153	153	612	45	21	45	42	45	7	45	21	45
	point154	154	612	45	21	45	42	45	7	45	21	45
	point155	155	612	45	21	45	42	45	7	45	21	45
	point156	156	612	45	21	45	42	45	7	45	21	45
	point157	157	612	45	21	45	42	45	7	45	21	45
	point158	158	612	45	21	45	42	45	7	45	21	45
	point159	159	612	45	21	45	42	45	7	45	21	45
	point160	160	612	45	21	45	42	45	7	45	21	45
	point161	161	612	45	21	45	42	45	7	45	21	45
	point162	162	612	45	21	45	42	45	7	45	21	45
	point163	163	612	45	21	45	42	45	7	45	21	45
	point164	164	612	45	21	45	42	45	7	45	21	45
	point165	165	612	45	21	45	42	45	7	45	21	45
	point166	166	612	45	21	45	42	45	7	45	21	45
	point167	167	612	45	21	45	42	45	7	45	21	45

	point168	168	612	45	21	45	42	45	7	45	21	45
	point169	169	612	45	21	45	42	45	7	45	21	45
	point170	170	612	45	21	45	42	45	7	45	21	45
	point171	171	612	45	21	45	42	45	7	45	21	45
	point172	172	612	45	21	45	42	45	7	45	21	45
	point173	173	612	45	21	45	42	45	7	45	21	45
	point174	174	612	45	21	45	42	45	7	45	21	45
	point175	175	612	45	21	45	42	45	7	45	21	45
	point176	176	612	45	21	45	42	45	7	45	21	45
	point177	177	612	45	21	45	42	45	7	45	21	45
	point178	178	612	45	21	45	42	45	7	45	21	45
	point179	179	612	45	21	45	42	45	7	45	21	45
	point180	180	612	45	21	45	42	45	7	45	21	45
	point181	181	612	45	21	45	42	45	7	45	21	45
	point182	182	612	45	21	45	42	45	7	45	21	45
	point183	183	612	45	21	45	42	45	7	45	21	45
	point184	184	612	45	21	45	42	45	7	45	21	45
	point185	185	612	45	21	45	42	45	7	45	21	45
	point186	186	612	45	21	45	42	45	7	45	21	45
	point187	187	612	45	21	45	42	45	7	45	21	45
	point188	188	612	45	21	45	42	45	7	45	21	45
	point189	189	612	45	21	45	42	45	7	45	21	45
	point190	190	612	45	21	45	42	45	7	45	21	45
	point191	191	612	45	21	45	42	45	7	45	21	45
	point192	192										
Milton Rd	point193	193	588	30	12	30	0	0	0	0	0	0
	point194	194										
Quail Ridge Run	point199	199	0	0	0	0	0	0	0	0	0	0
	point200	200										
Joe May Rd	point202	202	0	0	0	0	0	0	0	0	0	0
	point203	203										
Bonnie Bleu Rd	point204	204	0	0	0	0	0	0	0	0	0	0
	point205	205										
Buddy Ellis Rd	point206	206	0	0	0	0	0	0	0	0	0	0
	point201	201										
Miller Rd	point207	207	12	30	0	0	0	0	0	0	0	0

	point195	195	12	30	0	0	0	0	0	0	0	0
	point196	196	12	30	0	0	0	0	0	0	0	0
	point197	197	12	30	0	0	0	0	0	0	0	0
	point198	198										
I-12 EB Off Ramp	point210	210	842	45	29	45	58	45	10	45	29	45
	point211	211	842	45	29	45	58	45	10	45	29	45
	point213	213	842	45	29	45	58	45	10	45	29	45
	point214	214	842	45	29	45	58	45	10	45	29	45
	point216	216										

APPENDIX E-C-3
VALIDATION MODEL SOUND LEVELS

APTIM
G. Landry
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Model Validation
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

20 June 2018
TNM 2.5
Calculated with TNM 2.5

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Miller Road - Cal. Pt. 09&14 - #1	85	1	63.5	62.4	66	-1.1	10	----	62.4	0.0	8	-8.0
Milton Road - Cal. Pt. 10&13 - #2	86	1	64.8	62.7	66	-2.1	10	----	62.7	0.0	8	-8.0
Residence 1 - #3	87	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Fire Station - #4	88	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Church1 - #5	89	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 2 - #6	90	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 3 - #7	91	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 4 - #8	92	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 5 - #9	93	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Cemetery - #10	94	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Sibleys Grocery - #11	95	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 6 - #12	96	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 7 - #13	97	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 8 - #14	98	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 9 - #15	99	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 10 - #16	100	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 11 - #17	101	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 12 - #18	102	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 13 - #19	103	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 14 - #20	104	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 15 - #21	105	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 16 - #22	106	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Richard Price Contracting Co - #23	107	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0
Residence 17 - #24	108	1	0.0	0.0	66	0.0	10	inactive	0.0	0.0	8	0.0

APPENDIX D
TRAFFIC DATA

APPENDIX D-1
TRAFFIC VOLUMES AND PROJECTIONS

LA 447 Corridor Study

Contract No. 4400000651
T.O. No. H.005734

Walker, Louisiana
Livingston Parish

ALTERNATIVE ANALYSIS REPORT

Prepared for:

Louisiana Department of Transportation and Development, Traffic Engineering

February 2014

Conducted by:

NEEL-SCHAFFER

Solutions you can build upon

Neel-Schaffer, Inc.
12021 Bricksome Avenue
Baton Rouge, LA 70816

Neel-Schaffer, Inc.
803 Coolidge Blvd.
Lafayette, LA 70596

Neel-Schaffer, Inc.
800 Jackson Street
Mandeville, LA 70448

Neel-Schaffer, Inc.
6425 Youree Drive
Shreveport, LA 71105

APPENDIX

BALANCED PEAK HOUR VOLUMES

2030 BALANCED VOLUMES

AM {NOON} (PM)

MATCH B

LA 447

CANE MARKET RD.

VALLEY CREEK RD.

DALLAS DR.

ARBOR WALK SUBDIVISION

RIDGECREST DR.

MATT JAMES RD.

GILL LN.

STONESTHROW CT. SUBDIVISION

DOT LEE DR.

MATCH C

60{14}{23)
67{46}{37)
(41){12}15
(629){343}449
44{28}{72)
482{341}{470)
5{3}{3)
5{3}{3)
(5){3}2
(661){385}514
3{3}{5)
521{366}{538)
(659){387}516
(5){2}3
511{368}{537)
16{3}{25)
60{14}{23)
67{40}{44)
(51){12}15
(626){383}518
18{9}{18)
14{2}{7)
27{28}{55)
467{358}{538)
14{10}{9)
15{10}{18)
(15){10}5
(655){413}580
12{10}{16)
480{376}{585)
2{2}{2)
2{2}{2)
(2){2}2
(671){422}594
9{2}{2)
490{384}{599)
2{2}{2)
2{2}{2)
(2){2}2
(671){422}594
9{2}{2)
497{384}{599)
(651){412}588
(21){12}7
488{374}{589)
14{14}{21)
12{5}{5)
15{7}{21)
(9){9}3
(683){417}603
10{9}{25)
489{382}{605)
18{14}{41)
18{12}{12)

MATCH C

LE AYN CT. SUBDIVISION

LEDOUX LN.

BOGAN VILLAGE TRAILER PARK

HENRY DR.

SOPHIE DR.

JOE MAY RD.

CROTWELL RD.

DRAKEFORD McMORRIS RD.

TRAILER PARK

MATCH D

LA 447
(700){420}617
(5){3}2
495{387}{627)
5{3}{5)
(698){420}620
(5){3}2
5{3}{3)
5{3}{3)
495{387}{628)
5{3}{5)
5{3}{3)
5{3}{3)
7{5}{5)
7{5}{14)
(9){5}2
(693){418}623
7{5}{5)
7{5}{14)
3{5}{2)
53{30}{25)
(7){0}3
(700){424}627
7{5}{9)
493{386}{628)
30{38}{68)
496{386}{635)
0{0}{0)
0{0}{0)
(0){0}0
(724){454}680
0{0}{0)
526{424}{704)
3{9}{9)
109{95}{82)
(2){14}5
(723){440}675
87{67}{156)
523{416}{695)
(796){530}782
(9){5}2
603{477}{846)
7{9}{9)
(807){535}785
(3){3}3
606{482}{851)
7{9}{3)
16{15}{15)
18{16}{25)
(3){15}12
(807){528}777
15{25}{20)
597{476}{839)
7{5}{5)
7{9}{14)
3{3}{3)
3{9}{3)

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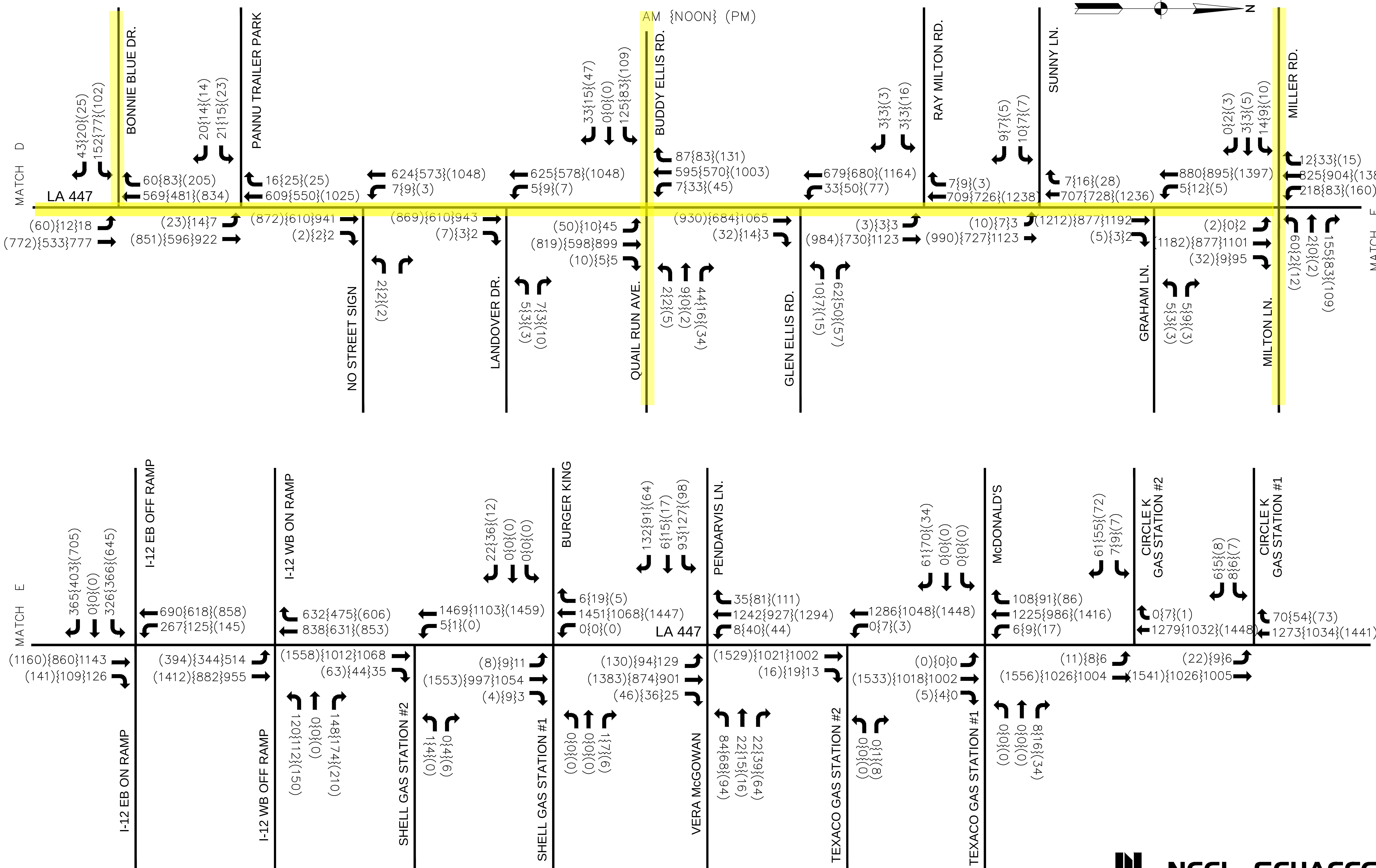
2030 BALANCED VOLUMES



AM {NOON} (PM)
N
LA 447
MATCH D
MATCH E
MATCH F
BONNIE BLUE DR.
PANNU TRAILER PARK
NO STREET SIGN
LANDOVER DR.
BUDDY ELLIS RD.
QUAIL RUN AVE.
GLEN ELLIS RD.
RAY MILTON RD.
SUNNY LN.
GRAHAM LN.
MILLER RD.
MILTON LN.
43{20}(25)
152{77}(102)
60{83}(205)
569{481}(834)
(60){12}18
(772){533}777
20{14}(14)
21{15}(23)
16{25}(25)
609{550}(1025)
(23){14}7
(851){596}922
624{573}(1048)
7{9}(3)
(872){610}941
(2){2}2
2{2}(2)
625{578}(1048)
5{9}(7)
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(7){3}2
5{3}(3)
7{3}(10)
33{15}(47)
0{0}(0)
125{83}(109)
87{83}(131)
595{570}(1003)
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(50){10}45
(819){598}899
(10){5}5
2{2}(5)
9{0}(2)
44{16}(34)
679{680}(1164)
33{50}(77)
(930){684}1065
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3{3}(3)
3{3}(16)
(3){3}3
(984){730}1123
10{7}(15)
62{50}(57)
9{7}(5)
10{7}(7)
7{9}(3)
709{726}(1238)
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(990){727}1123
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707{728}(1236)
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(5){3}2
880{895}(1397)
5{12}(5)
5{3}(3)
5{9}(3)
(2){0}2
(1182){877}1101
(32){9}95
0{2}(3)
3{3}(5)
14{9}(10)
12{33}(15)
825{904}(1387)
218{83}(160)
60{2}(12)
2{0}(2)
155{83}(109)
I-12 EB ON RAMP
I-12 EB OFF RAMP
I-12 WB ON RAMP
I-12 WB OFF RAMP
SHELL GAS STATION #2
SHELL GAS STATION #1
BURGER KING
VERA McGOWAN
PENDARVIS LN.
TEXACO GAS STATION #2
TEXACO GAS STATION #1
McDONALD'S
CIRCLE K GAS STATION #2
CIRCLE K GAS STATION #1
365{403}(705)
0{0}(0)
326{366}(645)
(1160){860}1143
(141){109}126
690{618}(858)
267{125}(145)
(394){344}514
(1412){882}955
632{475}(606)
838{631}(853)
(1558){1012}1068
(63){44}35
120{112}(150)
0{0}(0)
148{174}(210)
1469{1103}(1459)
5{1}(0)
1{4}(0)
0{4}(6)
22{36}(12)
0{0}(0)
0{0}(0)
(8){9}11
(1553){997}1054
(4){9}3
0{0}(0)
0{0}(0)
1{7}(6)
6{19}(5)
1451{1068}(1447)
0{0}(0)
132{91}(64)
6{15}(17)
93{127}(98)
(130){94}129
(1383){874}901
(46){36}25
84{68}(94)
22{15}(16)
22{39}(64)
35{81}(111)
1242{927}(1294)
8{40}(44)
(1529){1021}1002
(16){19}13
0{0}(0)
0{1}(8)
61{70}(34)
0{0}(0)
0{0}(0)
1286{1048}(1448)
0{7}(3)
(0){0}0
(1533){1018}1002
(5){4}0
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8{16}(34)
108{91}(86)
1225{986}(1416)
6{9}(17)
(11){8}6
(1556){1026}1004
61{55}(72)
7{9}(7)
0{7}(1)
1279{1032}(1448)
(1541){1026}1005
6{5}(8)
8{6}(7)
(22){9}6
70{54}(73)
1273{1034}(1441)

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2015 BALANCED VOLUMES

AM {NOON} (PM)

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2015 BALANCED VOLUMES

AM {NOON} (PM)

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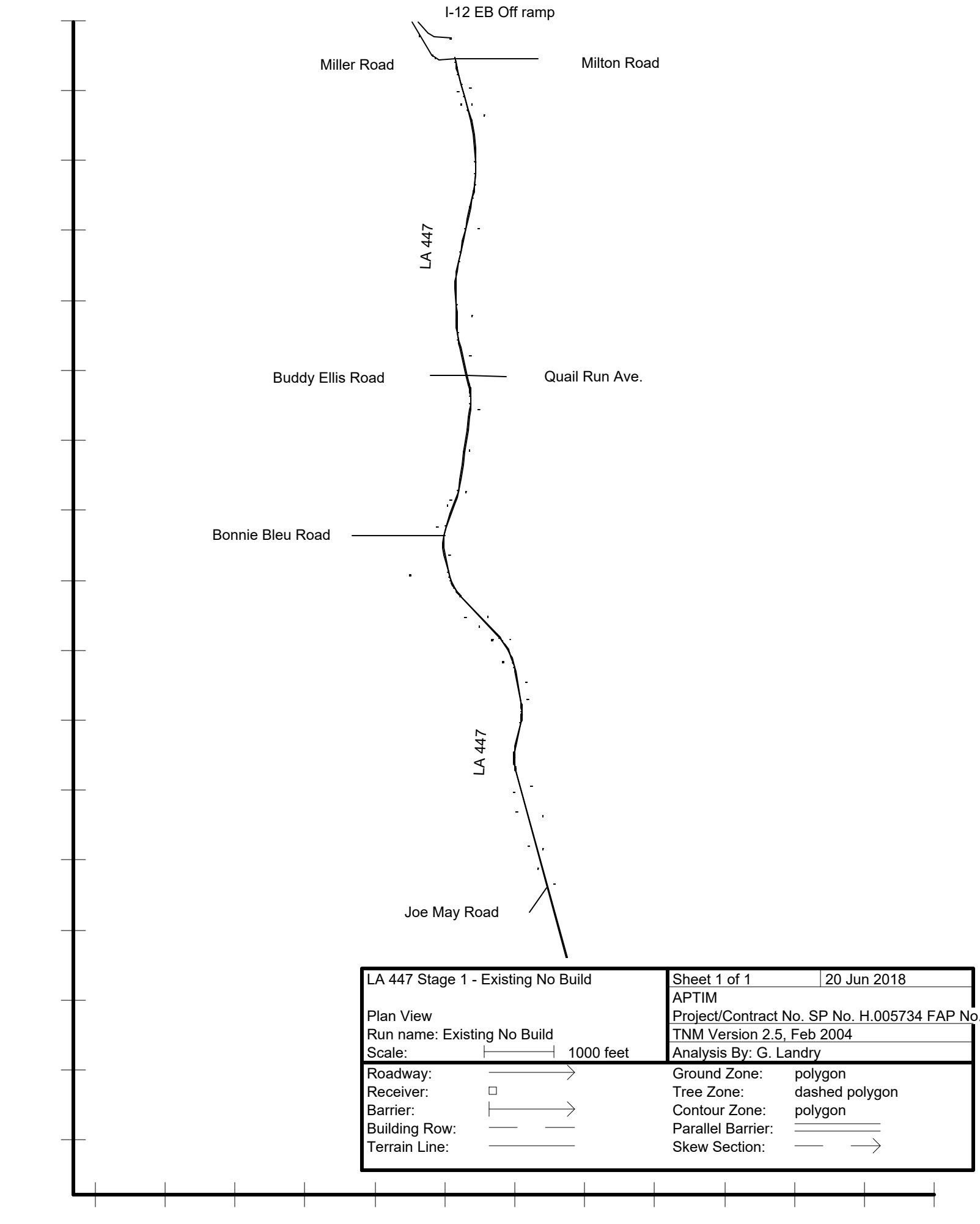
APPENDIX D-2
VEHICLE CLASS TRAFFIC INPUT

TABLE D-2
VEHICLE CLASS TRAFFIC INPUT

	Flow Direction	2015 Existing	2030 No Build	2030 Build	Autos	Mtrucks	Htrucks	Busses	Motorcycles	Autos	Mtrucks	Htrucks	Busses	Motorcycles	Flow Direction	Autos	Mtrucks	Htrucks	Busses	Motorcycles
					87	3	6	1	3	87	3	6	1	3						
		APHT	APHT	APHT	2015 Existing veh/hr					2030 No Build veh/hr						2030 Build Alternative veh/hr				
Buddy Ellis Rd to Miller Rd	N	704	1121	1121	612	21	42	7	21	975	34	67	11	34	N-Inside	488	17	34	6	17
															N-Outside	488	17	34	6	17
	S	845	1206	1206	735	25	51	8	25	1049	36	72	12	36	S-Inside	525	18	36	6	18
															S-Outside	525	18	36	6	18
Bonnie Bleu Rd to Buddy Ellis Rd	N	572	896	896	498	17	34	6	17	780	27	54	9	27		780	27	54	9	27
	S	700	989	989	609	21	42	7	21	860	30	59	10	30		860	30	59	10	30
Joe May Rd to Bonnie Bleu Rd	N	600	781	781	522	18	36	6	18	679	23	47	8	23		679	23	47	8	23
	S	458	808	808	398	14	27	5	14	703	24	48	8	24		703	24	48	8	24
I-12 EB Off-Ramp		968	1161.6	1161.6	842	29	58	10	29	1011	35	70	12	35		1011	35	70	12	35
Miller Rd		22	33	33	19	1	1	0	1	29	1	2	0	1		29	1	2	0	1
Milton Rd		154	155	155	134	5	9	2	5	135	5	9	2	5		135	5	9	2	5
Buddy Ellis Rd		193	287	287	168	6	12	2	6	250	9	17	3	9		250	9	17	3	9
Quail Ridge Rd		27	51	51	23	1	2	0	1	44	2	3	1	2		44	2	3	1	2
Bonnie Bleu Rd		237	332	332	206	7	14	2	7	289	10	20	3	10		289	10	20	3	10
Joe May Rd.		170	247	247	148	5	10	2	5	215	7	15	2	7		215	7	15	2	7

APPENDIX E
TNM 2015 EXISTING MODEL

APPENDIX E-1
2015 EXISTING MODEL PLAN VIEW


I-12 EB Off ramp
Miller Road
Milton Road
LA 447
Buddy Ellis Road
Quail Run Ave.
Bonnie Bleu Road
LA 447
Joe May Road
LA 447 Stage 1 - Existing No Build
Plan View
Run name: Existing No Build
Scale: 1000 feet
Sheet 1 of 1
20 Jun 2018
APTIM
Project/Contract No. SP No. H.005734 FAP No. H
TNM Version 2.5, Feb 2004
Analysis By: G. Landry
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
00 3425000 3426000 3427000 3428000 3429000 3430000 3431000 3432000 3433000 3434000 3435000 3436000

APPENDIX E-2
2015 EXISTING MODEL ROADWAYS

APTIM	20 June 2018
G. Landry	TNM 2.5
INPUT: ROADWAYS	Average pavement type shall be used unless
PROJECT/CONTRACT:	SP No. H.005734 FAP No. H005734 a State highway agency substantiates the use
RUN:	LA 447 Stage 1 - Existing No Build of a different type with the approval of FHWA

Roadway		Points									
Name	Width	Name	No.	Coordinates (pavement)			Flow Control			Segment	
				X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
SB	12.1	point1	1	3,429,117.2	715,488.1	0.00				Average	
		point2	2	3,429,129.8	715,411.2	0.00				Average	
		point3	3	3,429,145.8	715,327.6	0.00				Average	
		point4	4	3,429,166.5	715,235.2	0.00				Average	
		point5	5	3,429,204.2	715,093.3	0.00				Average	
		point6	6	3,429,252.5	714,917.6	0.00				Average	
		point7	7	3,429,306.8	714,719.9	0.00				Average	
		point8	8	3,429,345.5	714,575.0	0.00				Average	
		point9	9	3,429,386.0	714,372.2	0.00				Average	
		point10	10	3,429,408.2	714,185.4	0.00				Average	
		point11	11	3,429,410.5	713,984.5	0.00				Average	
		point12	12	3,429,410.5	713,814.9	0.00				Average	
		point13	13	3,429,394.2	713,653.9	0.00				Average	
		point14	14	3,429,380.8	713,564.2	0.00				Average	
		point15	15	3,429,362.2	713,467.7	0.00				Average	
		point16	16	3,429,335.0	713,339.8	0.00				Average	
		point17	17	3,429,300.8	713,177.4	0.00				Average	
		point18	18	3,429,270.2	713,033.2	0.00				Average	
		point19	19	3,429,233.2	712,859.5	0.00				Average	
		point20	20	3,429,199.8	712,701.0	0.00				Average	
		point21	21	3,429,169.5	712,558.5	0.00				Average	
		point22	22	3,429,141.8	712,422.1	0.00				Average	
		point23	23	3,429,132.0	712,349.4	0.00				Average	
		point24	24	3,429,126.5	712,278.4	0.00				Average	
		point25	25	3,429,125.2	712,223.4	0.00				Average	

		point26	26	3,429,126.0	712,182.1	0.00				Average	
		point27	27	3,429,134.2	711,940.0	0.00				Average	
		point28	28	3,429,137.8	711,841.5	0.00				Average	
		point29	29	3,429,142.2	711,711.4	0.00				Average	
		point30	30	3,429,146.0	711,614.8	0.00				Average	
		point31	31	3,429,151.5	711,545.8	0.00				Average	
		point32	32	3,429,164.8	711,447.4	0.00				Average	
		point33	33	3,429,176.2	711,386.2	0.00				Average	
		point34	34	3,429,188.5	711,333.2	0.00				Average	
		point35	35	3,429,286.2	710,938.2	0.00				Average	
		point36	36	3,429,319.2	710,803.8	0.00				Average	
		point37	37	3,429,329.2	710,749.6	0.00				Average	
		point38	38	3,429,337.2	710,686.1	0.00				Average	
		point39	39	3,429,340.8	710,637.1	0.00				Average	
		point40	40	3,429,342.0	710,573.2	0.00				Average	
		point41	41	3,429,340.0	710,523.5	0.00				Average	
		point42	42	3,429,332.8	710,449.2	0.00				Average	
		point43	43	3,429,318.8	710,344.7	0.00				Average	
		point44	44	3,429,294.0	710,158.7	0.00				Average	
		point45	45	3,429,251.8	709,844.4	0.00				Average	
		point46	46	3,429,227.5	709,663.4	0.00				Average	
		point47	47	3,429,199.2	709,452.6	0.00				Average	
		point48	48	3,429,165.8	709,286.2	0.00				Average	
		point49	49	3,429,140.0	709,193.5	0.00				Average	
		point50	50	3,429,107.8	709,098.9	0.00				Average	
		point51	51	3,429,057.0	708,962.8	0.00				Average	
		point52	52	3,428,990.2	708,782.8	0.00				Average	
		point53	53	3,428,957.8	708,651.2	0.00				Average	
		point54	54	3,428,946.2	708,538.8	0.00				Average	
		point55	55	3,428,950.0	708,465.6	0.00				Average	
		point56	56	3,428,965.2	708,376.2	0.00				Average	
		point57	57	3,429,025.0	708,126.0	0.00				Average	
		point58	58	3,429,042.8	708,054.4	0.00				Average	
		point59	59	3,429,061.5	707,997.6	0.00				Average	
		point60	60	3,429,076.0	707,962.6	0.00				Average	
		point61	61	3,429,094.2	707,924.9	0.00				Average	
		point62	62	3,429,113.0	707,891.4	0.00				Average	
		point63	63	3,429,150.8	707,835.1	0.00				Average	
		point64	64	3,429,177.0	707,801.8	0.00				Average	

		point65	65	3,429,202.2	707,773.6	0.00				Average	
		point66	66	3,429,715.2	707,231.6	0.00				Average	
		point67	67	3,429,759.8	707,181.4	0.00				Average	
		point68	68	3,429,800.2	707,129.4	0.00				Average	
		point69	69	3,429,833.8	707,080.7	0.00				Average	
		point70	70	3,429,872.0	707,016.4	0.00				Average	
		point71	71	3,429,904.0	706,952.2	0.00				Average	
		point72	72	3,429,929.2	706,892.8	0.00				Average	
		point73	73	3,429,954.0	706,820.9	0.00				Average	
		point74	74	3,429,970.2	706,760.4	0.00				Average	
		point75	75	3,429,982.0	706,704.5	0.00				Average	
		point76	76	3,430,059.2	706,277.4	0.00				Average	
		point77	77	3,430,068.0	706,222.4	0.00				Average	
		point78	78	3,430,071.8	706,181.2	0.00				Average	
		point79	79	3,430,073.5	706,132.2	0.00				Average	
		point80	80	3,430,072.0	706,084.9	0.00				Average	
		point81	81	3,430,068.0	706,043.7	0.00				Average	
		point82	82	3,430,063.8	706,013.1	0.00				Average	
		point83	83	3,430,055.8	705,971.5	0.00				Average	
		point84	84	3,429,981.8	705,641.5	0.00				Average	
		point85	85	3,429,970.5	705,579.6	0.00				Average	
		point86	86	3,429,966.2	705,542.2	0.00				Average	
		point87	87	3,429,964.0	705,509.9	0.00				Average	
		point88	88	3,429,963.0	705,473.1	0.00				Average	
		point89	89	3,429,964.2	705,430.9	0.00				Average	
		point90	90	3,429,966.5	705,400.2	0.00				Average	
		point91	91	3,429,970.2	705,368.8	0.00				Average	
		point92	92	3,429,974.0	705,343.8	0.00				Average	
		point93	93	3,429,978.5	705,319.2	0.00				Average	
		point94	94	3,429,984.0	705,295.1	0.00				Average	
		point95	95	3,429,989.8	705,271.9	0.00				Average	
		point96	96	3,430,707.8	702,623.9	0.00					
NB	12.1	point97	97	3,429,129.2	715,490.0	0.00				Average	
		point98	98	3,429,141.5	715,413.3	0.00				Average	
		point99	99	3,429,157.5	715,330.1	0.00				Average	
		point100	100	3,429,178.2	715,238.1	0.00				Average	
		point101	101	3,429,216.0	715,096.4	0.00				Average	
		point102	102	3,429,264.0	714,920.8	0.00				Average	
		point103	103	3,429,318.2	714,723.0	0.00				Average	

		point104	104	3,429,357.0	714,577.8	0.00				Average	
		point105	105	3,429,397.8	714,374.1	0.00				Average	
		point106	106	3,429,420.2	714,186.1	0.00				Average	
		point107	107	3,429,422.5	713,984.6	0.00				Average	
		point108	108	3,429,422.5	713,814.4	0.00				Average	
		point109	109	3,429,406.2	713,652.4	0.00				Average	
		point110	110	3,429,392.5	713,562.1	0.00				Average	
		point111	111	3,429,374.0	713,465.3	0.00				Average	
		point112	112	3,429,346.8	713,337.2	0.00				Average	
		point113	113	3,429,312.5	713,174.9	0.00				Average	
		point114	114	3,429,282.0	713,030.8	0.00				Average	
		point115	115	3,429,245.0	712,857.0	0.00				Average	
		point116	116	3,429,211.5	712,698.5	0.00				Average	
		point117	117	3,429,181.2	712,556.1	0.00				Average	
		point118	118	3,429,153.8	712,420.1	0.00				Average	
		point119	119	3,429,143.8	712,348.1	0.00				Average	
		point120	120	3,429,138.5	712,277.9	0.00				Average	
		point121	121	3,429,137.2	712,223.4	0.00				Average	
		point122	122	3,429,138.0	712,182.4	0.00				Average	
		point123	123	3,429,146.2	711,940.4	0.00				Average	
		point124	124	3,429,149.8	711,841.9	0.00				Average	
		point125	125	3,429,154.2	711,711.9	0.00				Average	
		point126	126	3,429,158.0	711,615.5	0.00				Average	
		point127	127	3,429,163.2	711,547.0	0.00				Average	
		point128	128	3,429,176.5	711,449.2	0.00				Average	
		point129	129	3,429,188.0	711,388.8	0.00				Average	
		point130	130	3,429,200.2	711,335.9	0.00				Average	
		point131	131	3,429,298.8	710,938.3	0.00				Average	
		point132	132	3,429,331.0	710,806.3	0.00				Average	
		point133	133	3,429,341.0	710,751.4	0.00				Average	
		point134	134	3,429,349.2	710,687.2	0.00				Average	
		point135	135	3,429,352.8	710,637.7	0.00				Average	
		point136	136	3,429,354.0	710,573.1	0.00				Average	
		point137	137	3,429,352.0	710,522.7	0.00				Average	
		point138	138	3,429,344.8	710,447.9	0.00				Average	
		point139	139	3,429,330.8	710,343.1	0.00				Average	
		point140	140	3,429,305.8	710,157.1	0.00				Average	
		point141	141	3,429,263.8	709,842.9	0.00				Average	
		point142	142	3,429,239.5	709,661.8	0.00				Average	

		point143	143	3,429,211.0	709,450.6	0.00				Average	
		point144	144	3,429,177.5	709,283.4	0.00				Average	
		point145	145	3,429,151.2	709,189.9	0.00				Average	
		point146	146	3,429,119.0	709,094.9	0.00				Average	
		point147	147	3,429,068.2	708,958.6	0.00				Average	
		point148	148	3,429,001.5	708,779.0	0.00				Average	
		point149	149	3,428,969.8	708,651.0	0.00				Average	
		point150	150	3,428,958.2	708,538.5	0.00				Average	
		point151	151	3,428,962.0	708,466.9	0.00				Average	
		point152	152	3,428,977.0	708,378.7	0.00				Average	
		point153	153	3,429,036.8	708,128.8	0.00				Average	
		point154	154	3,429,054.2	708,057.7	0.00				Average	
		point155	155	3,429,072.8	708,001.8	0.00				Average	
		point156	156	3,429,087.0	707,967.5	0.00				Average	
		point157	157	3,429,105.0	707,930.4	0.00				Average	
		point158	158	3,429,123.2	707,897.8	0.00				Average	
		point159	159	3,429,160.2	707,842.1	0.00				Average	
		point160	160	3,429,186.2	707,809.4	0.00				Average	
		point161	161	3,429,211.0	707,781.8	0.00				Average	
		point162	162	3,429,724.2	707,239.7	0.00				Average	
		point163	163	3,429,769.0	707,189.1	0.00				Average	
		point164	164	3,429,810.0	707,136.5	0.00				Average	
		point165	165	3,429,843.8	707,087.2	0.00				Average	
		point166	166	3,429,882.5	707,022.1	0.00				Average	
		point167	167	3,429,915.0	706,957.2	0.00				Average	
		point168	168	3,429,940.2	706,897.1	0.00				Average	
		point169	169	3,429,965.2	706,824.4	0.00				Average	
		point170	170	3,429,982.0	706,763.2	0.00				Average	
		point171	171	3,429,993.8	706,706.8	0.00				Average	
		point172	172	3,430,071.0	706,279.4	0.00				Average	
		point173	173	3,430,079.8	706,223.9	0.00				Average	
		point174	174	3,430,083.8	706,182.0	0.00				Average	
		point175	175	3,430,085.5	706,132.2	0.00				Average	
		point176	176	3,430,084.0	706,084.2	0.00				Average	
		point177	177	3,430,080.0	706,042.3	0.00				Average	
		point178	178	3,430,075.5	706,011.1	0.00				Average	
		point179	179	3,430,067.5	705,969.1	0.00				Average	
		point180	180	3,429,993.5	705,639.1	0.00				Average	
		point181	181	3,429,982.2	705,577.8	0.00				Average	

		point182	182	3,429,978.0	705,541.1	0.00				Average	
		point183	183	3,429,976.0	705,509.4	0.00				Average	
		point184	184	3,429,975.0	705,473.2	0.00				Average	
		point185	185	3,429,976.2	705,431.5	0.00				Average	
		point186	186	3,429,978.5	705,401.4	0.00				Average	
		point187	187	3,429,982.0	705,370.4	0.00				Average	
		point188	188	3,429,985.8	705,345.8	0.00				Average	
		point189	189	3,429,990.2	705,321.6	0.00				Average	
		point190	190	3,429,995.5	705,297.8	0.00				Average	
		point191	191	3,430,001.5	705,275.0	0.00				Average	
		point192	192	3,430,721.2	702,618.4	0.00					
Milton Rd	12.0	point193	193	3,430,301.0	715,471.6	0.00				Average	
		point194	194	3,429,133.8	715,465.7	0.00					
Quail Ridge Run	12.0	point199	199	3,429,847.2	710,923.8	0.00				Average	
		point200	200	3,429,299.8	710,938.5	0.00					
Joe May Rd	12.0	point202	202	3,430,438.2	703,608.4	0.00				Average	
		point203	203	3,430,185.8	703,263.1	0.00					
Bonnie Bleu Rd	12.0	point204	204	3,427,646.2	708,651.8	0.00				Average	
		point205	205	3,428,956.5	708,650.3	0.00					
Buddy Ellis Rd	12.0	point206	206	3,429,285.0	710,938.8	0.00				Average	
		point201	201	3,428,769.5	710,937.6	0.00					
Miller Rd	12.0	point207	207	3,429,120.0	715,465.2	0.00				Average	
		point195	195	3,428,902.0	715,444.8	0.00				Average	
		point196	196	3,428,839.2	715,476.2	0.00				Average	
		point197	197	3,428,796.0	715,510.8	0.00				Average	
		point198	198	3,428,503.0	715,996.6	0.00					
I-12 EB Off Ramp	12.0	point210	210	3,428,600.5	715,994.4	0.00				Average	
		point211	211	3,428,742.8	715,831.3	0.00				Average	
		point213	212	3,428,830.5	715,779.6	0.00				Average	
		point214	213	3,429,061.8	715,754.7	0.00				Average	
		point216	214	3,429,060.0	715,751.0	0.00					

APPENDIX E-3
2015 EXISTING MODEL TRAFFIC

APTIM **20 June 2018**
G. Landry **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **SP No. H.005734 FAP No. H005734**
RUN: **LA 447 Stage 1 - Existing No Build**

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
SB	point1	1	735	45	25	45	51	45	8	45	25	45
	point2	2	735	45	25	45	51	45	8	45	25	45
	point3	3	735	45	25	45	51	45	8	45	25	45
	point4	4	735	45	25	45	51	45	8	45	25	45
	point5	5	735	45	25	45	51	45	8	45	25	45
	point6	6	735	45	25	45	51	45	8	45	25	45
	point7	7	735	45	25	45	51	45	8	45	25	45
	point8	8	735	45	25	45	51	45	8	45	25	45
	point9	9	735	45	25	45	51	45	8	45	25	45
	point10	10	735	45	25	45	51	45	8	45	25	45
	point11	11	735	45	25	45	51	45	8	45	25	45
	point12	12	735	45	25	45	51	45	8	45	25	45
	point13	13	735	45	25	45	51	45	8	45	25	45
	point14	14	735	45	25	45	51	45	8	45	25	45
	point15	15	735	45	25	45	51	45	8	45	25	45
	point16	16	735	45	25	45	51	45	8	45	25	45
	point17	17	735	45	25	45	51	45	8	45	25	45
	point18	18	735	45	25	45	51	45	8	45	25	45
	point19	19	735	45	25	45	51	45	8	45	25	45
	point20	20	735	45	25	45	51	45	8	45	25	45
	point21	21	735	45	25	45	51	45	8	45	25	45
	point22	22	735	45	25	45	51	45	8	45	25	45
	point23	23	735	45	25	45	51	45	8	45	25	45

	point24	24	735	45	25	45	51	45	8	45	25	45
	point25	25	735	45	25	45	51	45	8	45	25	45
	point26	26	735	45	25	45	51	45	8	45	25	45
	point27	27	735	45	25	45	51	45	8	45	25	45
	point28	28	735	45	25	45	51	45	8	45	25	45
	point29	29	735	45	25	45	51	45	8	45	25	45
	point30	30	735	45	25	45	51	45	8	45	25	45
	point31	31	735	45	25	45	51	45	8	45	25	45
	point32	32	735	45	25	45	51	45	8	45	25	45
	point33	33	735	45	25	45	51	45	8	45	25	45
	point34	34	735	45	25	45	51	45	8	45	25	45
	point35	35	609	45	21	45	42	45	7	45	21	45
	point36	36	609	45	21	45	42	45	7	45	21	45
	point37	37	609	45	21	45	42	45	7	45	21	45
	point38	38	609	45	21	45	42	45	7	45	21	45
	point39	39	609	45	21	45	42	45	7	45	21	45
	point40	40	609	45	21	45	42	45	7	45	21	45
	point41	41	609	45	21	45	42	45	7	45	21	45
	point42	42	609	45	21	45	42	45	7	45	21	45
	point43	43	609	45	21	45	42	45	7	45	21	45
	point44	44	609	45	21	45	42	45	7	45	21	45
	point45	45	609	45	21	45	42	45	7	45	21	45
	point46	46	609	45	21	45	42	45	7	45	21	45
	point47	47	609	45	21	45	42	45	7	45	21	45
	point48	48	609	45	21	45	42	45	7	45	21	45
	point49	49	609	45	21	45	42	45	7	45	21	45
	point50	50	609	45	21	45	42	45	7	45	21	45
	point51	51	609	45	21	45	42	45	7	45	21	45
	point52	52	609	45	21	45	42	45	7	45	21	45
	point53	53	398	45	14	45	27	45	5	45	14	45
	point54	54	398	45	14	45	27	45	5	45	14	45
	point55	55	398	45	14	45	27	45	5	45	14	45
	point56	56	398	45	14	45	27	45	5	45	14	45
	point57	57	398	45	14	45	27	45	5	45	14	45
	point58	58	398	45	14	45	27	45	5	45	14	45
	point59	59	398	45	14	45	27	45	5	45	14	45

	point60	60	398	45	14	45	27	45	5	45	14	45
	point61	61	398	45	14	45	27	45	5	45	14	45
	point62	62	398	45	14	45	27	45	5	45	14	45
	point63	63	398	45	14	45	27	45	5	45	14	45
	point64	64	398	45	14	45	27	45	5	45	14	45
	point65	65	398	45	14	45	27	45	5	45	14	45
	point66	66	398	45	14	45	27	45	5	45	14	45
	point67	67	398	45	14	45	27	45	5	45	14	45
	point68	68	398	45	14	45	27	45	5	45	14	45
	point69	69	398	45	14	45	27	45	5	45	14	45
	point70	70	398	45	14	45	27	45	5	45	14	45
	point71	71	398	45	14	45	27	45	5	45	14	45
	point72	72	398	45	14	45	27	45	5	45	14	45
	point73	73	398	45	14	45	27	45	5	45	14	45
	point74	74	398	45	14	45	27	45	5	45	14	45
	point75	75	398	45	14	45	27	45	5	45	14	45
	point76	76	398	45	14	45	27	45	5	45	14	45
	point77	77	398	45	14	45	27	45	5	45	14	45
	point78	78	398	45	14	45	27	45	5	45	14	45
	point79	79	398	45	14	45	27	45	5	45	14	45
	point80	80	398	45	14	45	27	45	5	45	14	45
	point81	81	398	45	14	45	27	45	5	45	14	45
	point82	82	398	45	14	45	27	45	5	45	14	45
	point83	83	398	45	14	45	27	45	5	45	14	45
	point84	84	398	45	14	45	27	45	5	45	14	45
	point85	85	398	45	14	45	27	45	5	45	14	45
	point86	86	398	45	14	45	27	45	5	45	14	45
	point87	87	398	45	14	45	27	45	5	45	14	45
	point88	88	398	45	14	45	27	45	5	45	14	45
	point89	89	398	45	14	45	27	45	5	45	14	45
	point90	90	398	45	14	45	27	45	5	45	14	45
	point91	91	398	45	14	45	27	45	5	45	14	45
	point92	92	398	45	14	45	27	45	5	45	14	45
	point93	93	398	45	14	45	27	45	5	45	14	45
	point94	94	398	45	14	45	27	45	5	45	14	45
	point95	95	398	45	14	45	27	45	5	45	14	45

	point96	96										
NB	point97	97	612	45	21	45	42	45	7	45	21	45
	point98	98	612	45	21	45	42	45	7	45	21	45
	point99	99	612	45	21	45	42	45	7	45	21	45
	point100	100	612	45	21	45	42	45	7	45	21	45
	point101	101	612	45	21	45	42	45	7	45	21	45
	point102	102	612	45	21	45	42	45	7	45	21	45
	point103	103	612	45	21	45	42	45	7	45	21	45
	point104	104	612	45	21	45	42	45	7	45	21	45
	point105	105	612	45	21	45	42	45	7	45	21	45
	point106	106	612	45	21	45	42	45	7	45	21	45
	point107	107	612	45	21	45	42	45	7	7	21	45
	point108	108	612	45	21	45	42	45	7	45	21	45
	point109	109	612	45	21	45	42	45	7	45	21	45
	point110	110	612	45	21	45	42	45	7	45	21	45
	point111	111	612	45	21	45	42	45	7	45	21	45
	point112	112	612	45	21	45	42	45	7	45	21	45
	point113	113	612	45	21	45	42	45	7	45	21	45
	point114	114	612	45	21	45	42	45	7	45	21	45
	point115	115	612	45	21	45	42	45	7	45	21	45
	point116	116	612	45	21	45	42	45	7	45	21	45
	point117	117	612	45	21	45	42	45	7	45	21	45
	point118	118	612	45	21	45	42	45	7	45	21	45
	point119	119	612	45	21	45	42	45	7	45	21	45
	point120	120	612	45	21	45	42	45	7	45	21	45
	point121	121	612	45	21	45	42	45	7	45	21	45
	point122	122	612	45	21	45	42	45	7	45	21	45
	point123	123	612	45	21	45	42	45	7	45	21	45
	point124	124	612	45	21	45	42	45	7	45	21	45
	point125	125	612	45	21	45	42	45	7	45	21	45
	point126	126	612	45	21	45	42	45	7	45	21	45
	point127	127	612	45	21	45	42	45	7	45	21	45
	point128	128	612	45	21	45	42	45	7	45	21	45
	point129	129	612	45	21	45	42	45	7	45	21	45
	point130	130	612	45	21	45	42	45	7	45	21	45
	point131	131	498	45	17	45	34	45	6	45	17	45

	point132	132	498	45	17	45	34	45	6	45	17	45
	point133	133	498	45	17	45	34	45	6	45	17	45
	point134	134	498	45	17	45	34	45	6	45	17	45
	point135	135	498	45	17	45	34	45	6	45	17	45
	point136	136	498	45	17	45	34	45	6	45	17	45
	point137	137	498	45	17	45	34	45	6	45	17	45
	point138	138	498	45	17	45	34	45	6	45	17	45
	point139	139	498	45	17	45	34	45	6	45	17	45
	point140	140	498	45	17	45	34	45	6	45	17	45
	point141	141	498	45	17	45	34	45	6	45	17	45
	point142	142	498	45	17	45	34	45	6	45	17	45
	point143	143	498	45	17	45	34	45	6	45	17	45
	point144	144	498	45	17	45	34	45	6	45	17	45
	point145	145	498	45	17	45	34	45	6	45	17	45
	point146	146	498	45	17	45	34	45	6	45	17	45
	point147	147	498	45	17	45	34	45	6	45	17	45
	point148	148	498	45	17	45	34	45	6	45	17	45
	point149	149	522	45	18	45	36	45	6	45	18	45
	point150	150	522	45	18	45	36	45	6	45	18	45
	point151	151	522	45	18	45	36	45	6	45	18	45
	point152	152	522	45	18	45	36	45	6	45	18	45
	point153	153	522	45	18	45	36	45	6	45	18	45
	point154	154	522	45	18	45	36	45	6	45	18	45
	point155	155	522	45	18	45	36	45	6	45	18	45
	point156	156	522	45	18	45	36	45	6	45	18	45
	point157	157	522	45	18	45	36	45	6	45	18	45
	point158	158	522	45	18	45	36	45	6	45	18	45
	point159	159	522	45	18	45	36	45	6	45	18	45
	point160	160	522	45	18	45	36	45	6	45	18	45
	point161	161	522	45	18	45	36	45	6	45	18	45
	point162	162	522	45	18	45	36	45	6	45	18	45
	point163	163	522	45	18	45	36	45	6	45	18	45
	point164	164	522	45	18	45	36	45	6	45	18	45
	point165	165	522	45	18	45	36	45	6	45	18	45
	point166	166	522	45	18	45	36	45	6	45	18	45
	point167	167	522	45	18	45	36	45	6	45	18	45

	point168	168	522	45	18	45	36	45	6	45	18	45
	point169	169	522	45	18	45	36	45	6	45	18	45
	point170	170	522	45	18	45	36	45	6	45	18	45
	point171	171	522	45	18	45	36	45	6	45	18	45
	point172	172	522	45	18	45	36	45	6	45	18	45
	point173	173	522	45	18	45	36	45	6	45	18	45
	point174	174	522	45	18	45	36	45	6	45	18	45
	point175	175	522	45	18	45	36	45	6	45	18	45
	point176	176	522	45	18	45	36	45	6	45	18	45
	point177	177	522	45	18	45	36	45	6	45	18	45
	point178	178	522	45	18	45	36	45	6	45	18	45
	point179	179	522	45	18	45	36	45	6	45	18	45
	point180	180	522	45	18	45	36	45	6	45	18	45
	point181	181	522	45	18	45	36	45	6	45	18	45
	point182	182	522	45	18	45	36	45	6	45	18	45
	point183	183	522	45	18	45	36	45	6	45	18	45
	point184	184	522	45	18	45	36	45	6	45	18	45
	point185	185	522	45	18	45	36	45	6	45	18	45
	point186	186	522	45	18	45	36	45	6	45	18	45
	point187	187	522	45	18	45	36	45	6	45	18	45
	point188	188	522	45	18	45	36	45	6	45	18	45
	point189	189	522	45	18	45	36	45	6	45	18	45
	point190	190	522	45	18	45	36	45	6	45	18	45
	point191	191	522	45	18	45	36	45	6	45	18	45
	point192	192										
Milton Rd	point193	193	134	25	5	25	9	25	2	25	5	25
	point194	194										
Quail Ridge Run	point199	199	23	25	1	25	2	25	0	0	1	25
	point200	200										
Joe May Rd	point202	202	148	25	5	25	10	25	2	25	5	25
	point203	203										
Bonnie Bleu Rd	point204	204	206	25	7	25	14	25	2	25	7	25
	point205	205										
Buddy Ellis Rd	point206	206	168	25	6	25	12	25	2	25	6	25
	point201	201										
Miller Rd	point207	207	19	25	1	25	1	25	0	0	1	25

	point195	195	19	25	1	25	1	25	0	0	1	25
	point196	196	19	25	1	25	1	25	0	0	1	25
	point197	197	19	25	1	25	1	25	0	0	1	25
	point198	198										
I-12 EB Off Ramp	point210	210	842	45	29	45	58	45	10	45	29	45
	point211	211	842	45	29	45	58	45	10	45	29	45
	point213	212	842	45	29	45	58	45	10	45	29	45
	point214	213	842	45	29	45	58	45	10	45	29	45
	point216	214										

APPENDIX E-4
2015 EXISTING MODEL RECEIVERS

APTIM 20 June 2018
G. Landry TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Existing No Build

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Miller Road - Cal. Pt. 09&14 - #1	1	1	3,428,614.8	715,789.1	5.00	5.00	0.00	66	10.0	8.0	Y
Milton Road - Cal. Pt. 10&13 - #2	2	1	3,429,850.5	715,441.7	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 1 - #3	3	1	3,430,836.0	702,979.4	5.00	5.00	0.00	66	10.0	8.0	Y
Fire Station - #4	4	1	3,430,624.5	703,171.9	5.00	5.00	0.00	71	10.0	8.0	Y
Church1 - #5	5	1	3,430,418.0	703,427.5	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 2 - #6	6	1	3,430,566.5	703,493.2	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 3 - #7	7	1	3,430,530.8	703,592.7	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 4 - #8	8	1	3,430,543.2	703,667.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 5 - #9	9	1	3,430,507.0	703,796.2	5.00	5.00	0.00	66	10.0	8.0	Y
Cemetery - #10	10	1	3,430,309.2	703,887.6	5.00	5.00	0.00	66	10.0	8.0	Y
Sibleys Grocery - #11	11	1	3,430,452.0	704,029.4	5.00	5.00	0.00	71	10.0	8.0	Y
Residence 6 - #12	12	1	3,430,379.2	704,166.4	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 7 - #13	13	1	3,430,176.8	704,212.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 8 - #14	14	1	3,430,313.2	704,382.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 9 - #15	15	1	3,429,904.8	704,372.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 10 - #16	16	1	3,430,312.2	704,476.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 11 - #17	17	1	3,430,376.0	704,636.0	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 12 - #18	18	1	3,430,005.2	704,703.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 13 - #19	19	1	3,429,997.8	704,854.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 14 - #20	20	1	3,429,967.0	704,984.1	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 15 - #21	21	1	3,430,214.5	705,063.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 16 - #22	22	1	3,429,658.5	705,272.8	5.00	5.00	0.00	66	10.0	8.0	Y

Richard Price Contracting Co - #23	23	1	3,429,790.2	705,671.2	5.00	5.00	0.00	71	10.0	8.0	Y
Residence 17 - #24	24	1	3,429,960.0	705,871.7	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 18 - #25	25	1	3,429,971.2	705,919.2	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 19 - #26	26	1	3,430,181.2	706,020.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 20 - #27	27	1	3,429,978.8	706,029.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 21 - #28	28	1	3,429,992.0	706,075.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 22 - #29	29	1	3,429,995.5	706,128.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 23 - #30	30	1	3,430,183.0	706,160.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 24 - #31	31	1	3,429,877.0	706,260.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 25 - #32	32	1	3,430,162.0	706,302.3	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 26 - #33	33	1	3,430,143.0	706,550.9	5.00	5.00	0.00	66	10.0	8.0	Y
Livingston Head Start - #34	34	1	3,429,905.8	706,571.6	5.00	5.00	0.00	66	10.0	8.0	Y
Dollar General - #35	35	1	3,429,809.2	706,839.9	5.00	5.00	0.00	71	10.0	8.0	Y
Residence 27 - #36	36	1	3,430,122.0	706,749.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 28 - #37	37	1	3,430,016.8	706,879.7	5.00	5.00	0.00	66	10.0	8.0	Y
Unnamed Business 1 - #38	38	1	3,429,735.0	707,022.2	5.00	5.00	0.00	71	10.0	8.0	Y
Residence 29 - #39	39	1	3,429,903.2	707,164.3	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 30 - #40	40	1	3,429,655.2	707,154.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 31 - #41	41	1	3,429,837.5	707,299.1	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 32 - #42	42	1	3,429,475.0	707,345.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 33 - #43	43	1	3,429,364.0	707,360.0	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 34 - #44	44	1	3,429,597.0	707,486.1	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 35 - #45	45	1	3,429,271.0	707,480.2	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 36 - #46	46	1	3,428,482.0	708,081.3	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 37 - #47	47	1	3,429,055.0	708,304.7	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 38 - #48	48	1	3,429,043.2	708,369.3	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 39 - #49	49	1	3,429,048.2	708,491.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 40 - #50	50	1	3,429,046.8	708,575.1	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 41 - #51	51	1	3,429,057.0	708,759.0	5.00	5.00	0.00	66	10.0	8.0	Y
Best Stop Quick Mart #3 - #52	52	1	3,428,868.5	708,774.2	5.00	5.00	0.00	71	10.0	8.0	Y
Residence 42 - #53	53	1	3,429,011.2	709,076.1	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 43 - #54	54	1	3,429,010.8	709,108.4	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 44 - #55	55	1	3,429,059.8	709,161.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 45 - #56	56	1	3,429,067.8	709,213.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 46 - #57	57	1	3,429,283.0	709,270.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 47 - #58	58	1	3,429,298.5	709,433.2	5.00	5.00	0.00	66	10.0	8.0	Y

Residence 48 - #59	59	1	3,429,333.8	709,649.4	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 49 - #60	60	1	3,429,332.8	709,862.6	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 50 - #61	61	1	3,429,403.0	710,024.3	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 51 - #62	62	1	3,429,542.0	710,257.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 52 - #63	63	1	3,429,463.5	710,442.0	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 53 - #64	64	1	3,429,455.2	710,794.5	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 54 - #65	65	1	3,429,185.8	711,006.9	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 55 - #66	66	1	3,429,339.8	711,217.0	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 56 - #67	67	1	3,429,273.5	711,485.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 57 - #68	68	1	3,429,380.5	711,604.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 58 - #69	69	1	3,429,368.8	711,786.0	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 59 - #70	70	1	3,429,586.5	712,265.1	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 60 - #71	71	1	3,429,461.5	713,041.4	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 61 - #72	72	1	3,429,224.0	713,260.7	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 62 - #73	73	1	3,429,272.0	713,505.4	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 63 - #74	74	1	3,429,324.0	713,713.8	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 64 - #75	75	1	3,429,539.8	714,221.5	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 65 - #76	76	1	3,429,560.5	714,444.7	5.00	5.00	0.00	66	10.0	8.0	Y
Residence 66 - #77	77	1	3,429,544.2	714,652.1	5.00	5.00	0.00	66	10.0	8.0	Y
Fundemental Early Learning Center - #78	78	1	3,429,366.2	714,807.1	5.00	5.00	0.00	66	10.0	8.0	Y
Unnamed Business 2 - #79	79	1	3,429,205.2	714,809.8	5.00	5.00	0.00	71	10.0	8.0	Y
Residence 67 - #80	80	1	3,429,372.0	714,938.1	5.00	5.00	0.00	66	10.0	8.0	Y
Family RV Center - #81	81	1	3,429,164.5	714,989.4	5.00	5.00	0.00	71	10.0	8.0	Y
Bayou Self Car Wash - #82	82	1	3,429,340.8	715,044.0	5.00	5.00	0.00	71	10.0	8.0	Y
Chevron - #83	83	1	3,429,039.0	715,173.5	5.00	5.00	0.00	71	10.0	8.0	Y
Cook Portable Warehouses - #84	84	1	3,429,262.2	715,207.1	5.00	5.00	0.00	71	10.0	8.0	Y

APPENDIX E-5
2015 EXISTING MODEL PREDICTED SOUND LEVELS

APTIM
G. Landry
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Existing No Build
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

20 June 2018
TNM 2.5
Calculated with TNM 2.5

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h		Increase over existing		Type Impact	With Barrier Calculated LAeq1h	Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc			Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Miller Road - Cal. Pt. 09&14 - #1	1	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
Milton Road - Cal. Pt. 10&13 - #2	2	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0
Residence 1 - #3	3	1	0.0	56.9	66	56.9	10	----	56.9	0.0	8	-8.0
Fire Station - #4	4	1	0.0	68.7	71	68.7	10	----	68.7	0.0	8	-8.0
Church1 - #5	5	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
Residence 2 - #6	6	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
Residence 3 - #7	7	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
Residence 4 - #8	8	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
Residence 5 - #9	9	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
Cemetery - #10	10	1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0	8	-8.0
Sibleys Grocery - #11	11	1	0.0	62.3	71	62.3	10	----	62.3	0.0	8	-8.0
Residence 6 - #12	12	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
Residence 7 - #13	13	1	0.0	63.2	66	63.2	10	----	63.2	0.0	8	-8.0
Residence 8 - #14	14	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
Residence 9 - #15	15	1	0.0	54.0	66	54.0	10	----	54.0	0.0	8	-8.0
Residence 10 - #16	16	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
Residence 11 - #17	17	1	0.0	58.0	66	58.0	10	----	58.0	0.0	8	-8.0
Residence 12 - #18	18	1	0.0	61.1	66	61.1	10	----	61.1	0.0	8	-8.0
Residence 13 - #19	19	1	0.0	63.6	66	63.6	10	----	63.6	0.0	8	-8.0
Residence 14 - #20	20	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
Residence 15 - #21	21	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0
Residence 16 - #22	22	1	0.0	53.7	66	53.7	10	----	53.7	0.0	8	-8.0
Richard Price Contracting Co - #23	23	1	0.0	58.2	71	58.2	10	----	58.2	0.0	8	-8.0
Residence 17 - #24	24	1	0.0	65.7	66	65.7	10	----	65.7	0.0	8	-8.0

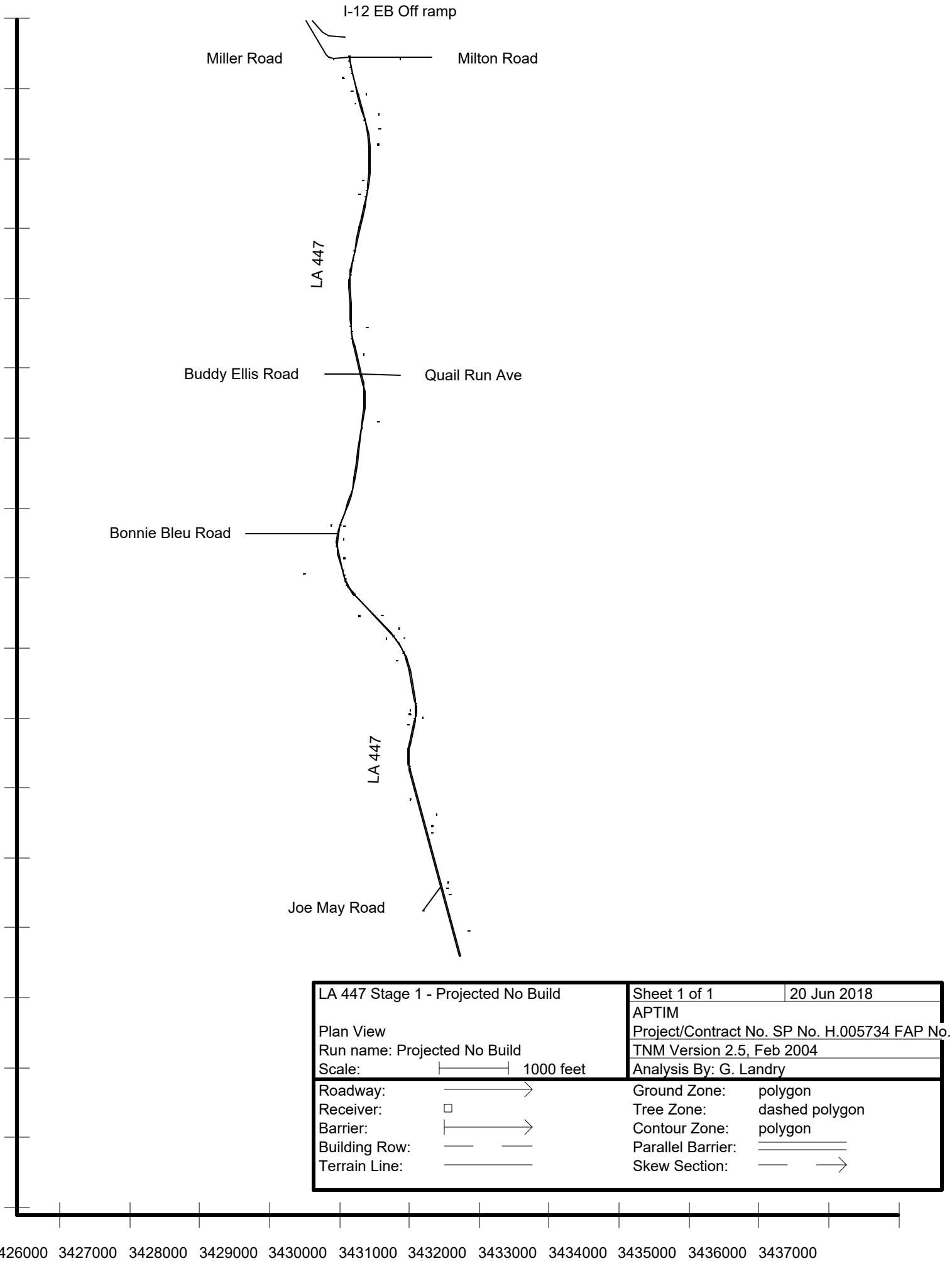
Residence 18 - #25	25	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0
Residence 19 - #26	26	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
Residence 20 - #27	27	1	0.0	64.3	66	64.3	10	----	64.3	0.0	8	-8.0
Residence 21 - #28	28	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Residence 22 - #29	29	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
Residence 23 - #30	30	1	0.0	63.3	66	63.3	10	----	63.3	0.0	8	-8.0
Residence 24 - #31	31	1	0.0	58.5	66	58.5	10	----	58.5	0.0	8	-8.0
Residence 25 - #32	32	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
Residence 26 - #33	33	1	0.0	62.2	66	62.2	10	----	62.2	0.0	8	-8.0
Livingston Head Start - #34	34	1	0.0	63.0	66	63.0	10	----	63.0	0.0	8	-8.0
Dollar General - #35	35	1	0.0	61.3	71	61.3	10	----	61.3	0.0	8	-8.0
Residence 27 - #36	36	1	0.0	61.2	66	61.2	10	----	61.2	0.0	8	-8.0
Residence 28 - #37	37	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
Unnamed Business 1 - #38	38	1	0.0	62.6	71	62.6	10	----	62.6	0.0	8	-8.0
Residence 29 - #39	39	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
Residence 30 - #40	40	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
Residence 31 - #41	41	1	0.0	62.3	66	62.3	10	----	62.3	0.0	8	-8.0
Residence 32 - #42	8	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
Residence 33 - #43	43	1	0.0	59.5	66	59.5	10	----	59.5	0.0	8	-8.0
Residence 34 - #44	44	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
Residence 35 - #45	45	1	0.0	60.1	66	60.1	10	----	60.1	0.0	8	-8.0
Residence 36 - #46	46	1	0.0	50.3	66	50.3	10	----	50.3	0.0	8	-8.0
Residence 37 - #47	47	1	0.0	67.5	66	67.5	10	Snd Lvl	67.5	0.0	8	-8.0
Residence 38 - #48	48	1	0.0	66.9	66	66.9	10	Snd Lvl	66.9	0.0	8	-8.0
Residence 39 - #49	49	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
Residence 40 - #50	50	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
Residence 41 - #51	51	1	0.0	68.1	66	68.1	10	Snd Lvl	68.1	0.0	8	-8.0
Best Stop Quick Mart #3 - #52	52	1	0.0	63.2	71	63.2	10	----	63.2	0.0	8	-8.0
Residence 42 - #53	53	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
Residence 43 - #54	54	1	0.0	64.4	66	64.4	10	----	64.4	0.0	8	-8.0
Residence 44 - #55	55	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0	8	-8.0
Residence 45 - #56	56	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
Residence 46 - #57	57	1	0.0	63.5	66	63.5	10	----	63.5	0.0	8	-8.0
Residence 47 - #58	58	1	0.0	64.8	66	64.8	10	----	64.8	0.0	8	-8.0
Residence 48 - #59	59	1	0.0	65.1	66	65.1	10	----	65.1	0.0	8	-8.0
Residence 49 - #60	60	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
Residence 50 - #61	61	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
Residence 51 - #62	62	1	0.0	58.3	66	58.3	10	----	58.3	0.0	8	-8.0
Residence 52 - #63	63	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
Residence 53 - #64	64	1	0.0	63.4	66	63.4	10	----	63.4	0.0	8	-8.0
Residence 54 - #65	65	1	0.0	67.2	66	67.2	10	Snd Lvl	67.2	0.0	8	-8.0

Residence 55 - #66	66	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Residence 56 - #67	67	1	0.0	64.9	66	64.9	10	----	64.9	0.0	8	-8.0
Residence 57 - #68	68	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
Residence 58 - #69	69	1	0.0	58.8	66	58.8	10	----	58.8	0.0	8	-8.0
Residence 59 - #70	70	1	0.0	53.5	66	53.5	10	----	53.5	0.0	8	-8.0
Residence 60 - #71	71	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0
Residence 61 - #72	72	1	0.0	65.3	66	65.3	10	----	65.3	0.0	8	-8.0
Residence 62 - #73	73	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
Residence 63 - #74	74	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0	8	-8.0
Residence 64 - #75	75	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0
Residence 65 - #76	76	1	0.0	60.4	66	60.4	10	----	60.4	0.0	8	-8.0
Residence 66 - #77	77	1	0.0	59.3	66	59.3	10	----	59.3	0.0	8	-8.0
Fundemental Early Learning Center - #78	78	1	0.0	67.7	66	67.7	10	Snd Lvl	67.7	0.0	8	-8.0
Unnamed Business 2 - #79	79	1	0.0	67.1	71	67.1	10	----	67.1	0.0	8	-8.0
Residence 67 - #80	80	1	0.0	64.2	66	64.2	10	----	64.2	0.0	8	-8.0
Family RV Center - #81	81	1	0.0	68.3	71	68.3	10	----	68.3	0.0	8	-8.0
Bayou Self Car Wash - #82	82	1	0.0	64.8	71	64.8	10	----	64.8	0.0	8	-8.0
Chevron - #83	83	1	0.0	62.5	71	62.5	10	----	62.5	0.0	8	-8.0
Cook Portable Warehouses - #84	84	1	0.0	67.4	71	67.4	10	----	67.4	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	84	0.0	0.0	0.0
All Impacted	13	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX F
TNM 2030 NO-BUILD MODEL

APPENDIX F-1
2030 NO-BUILD MODEL PLAN VIEW



LA 447 Stage 1 - Projected No Build		Sheet 1 of 1	20 Jun 2018
		APTIM	
Plan View		Project/Contract No. SP No. H.005734 FAP No. H	
Run name: Projected No Build		TNM Version 2.5, Feb 2004	
Scale:	1000 feet	Analysis By: G. Landry	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

APPENDIX F-2
2030 NO-BUILD MODEL ROADWAYS

APTIM 22 June 2018
G. Landry TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Projected No Build

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
SB	12.1	point1	1	3,429,117.2	715,488.1	0.00				Average	
		point2	2	3,429,129.8	715,411.2	0.00				Average	
		point3	3	3,429,145.8	715,327.6	0.00				Average	
		point4	4	3,429,166.5	715,235.2	0.00				Average	
		point5	5	3,429,204.2	715,093.3	0.00				Average	
		point6	6	3,429,252.5	714,917.6	0.00				Average	
		point7	7	3,429,306.8	714,719.9	0.00				Average	
		point8	8	3,429,345.5	714,575.0	0.00				Average	
		point9	9	3,429,386.0	714,372.2	0.00				Average	
		point10	10	3,429,408.2	714,185.4	0.00				Average	
		point11	11	3,429,410.5	713,984.5	0.00				Average	
		point12	12	3,429,410.5	713,814.9	0.00				Average	
		point13	13	3,429,394.2	713,653.9	0.00				Average	
		point14	14	3,429,380.8	713,564.2	0.00				Average	
		point15	15	3,429,362.2	713,467.7	0.00				Average	
		point16	16	3,429,335.0	713,339.8	0.00				Average	
		point17	17	3,429,300.8	713,177.4	0.00				Average	
		point18	18	3,429,270.2	713,033.2	0.00				Average	
		point19	19	3,429,233.2	712,859.5	0.00				Average	
		point20	20	3,429,199.8	712,701.0	0.00				Average	
		point21	21	3,429,169.5	712,558.5	0.00				Average	
		point22	22	3,429,141.8	712,422.1	0.00				Average	
		point23	23	3,429,132.0	712,349.4	0.00				Average	
		point24	24	3,429,126.5	712,278.4	0.00				Average	
		point25	25	3,429,125.2	712,223.4	0.00				Average	

		point26	26	3,429,126.0	712,182.1	0.00				Average	
		point27	27	3,429,134.2	711,940.0	0.00				Average	
		point28	28	3,429,137.8	711,841.5	0.00				Average	
		point29	29	3,429,142.2	711,711.4	0.00				Average	
		point30	30	3,429,146.0	711,614.8	0.00				Average	
		point31	31	3,429,151.5	711,545.8	0.00				Average	
		point32	32	3,429,164.8	711,447.4	0.00				Average	
		point33	33	3,429,176.2	711,386.2	0.00				Average	
		point34	34	3,429,188.5	711,333.2	0.00				Average	
		point35	35	3,429,286.2	710,938.2	0.00				Average	
		point36	36	3,429,319.2	710,803.8	0.00				Average	
		point37	37	3,429,329.2	710,749.6	0.00				Average	
		point38	38	3,429,337.2	710,686.1	0.00				Average	
		point39	39	3,429,340.8	710,637.1	0.00				Average	
		point40	40	3,429,342.0	710,573.2	0.00				Average	
		point41	41	3,429,340.0	710,523.5	0.00				Average	
		point42	42	3,429,332.8	710,449.2	0.00				Average	
		point43	43	3,429,318.8	710,344.7	0.00				Average	
		point44	44	3,429,294.0	710,158.7	0.00				Average	
		point45	45	3,429,251.8	709,844.4	0.00				Average	
		point46	46	3,429,227.5	709,663.4	0.00				Average	
		point47	47	3,429,199.2	709,452.6	0.00				Average	
		point48	48	3,429,165.8	709,286.2	0.00				Average	
		point49	49	3,429,140.0	709,193.5	0.00				Average	
		point50	50	3,429,107.8	709,098.9	0.00				Average	
		point51	51	3,429,057.0	708,962.8	0.00				Average	
		point52	52	3,428,990.2	708,782.8	0.00				Average	
		point53	53	3,428,957.8	708,651.2	0.00				Average	
		point54	54	3,428,946.2	708,538.8	0.00				Average	
		point55	55	3,428,950.0	708,465.6	0.00				Average	
		point56	56	3,428,965.2	708,376.2	0.00				Average	
		point57	57	3,429,025.0	708,126.0	0.00				Average	
		point58	58	3,429,042.8	708,054.4	0.00				Average	
		point59	59	3,429,061.5	707,997.6	0.00				Average	
		point60	60	3,429,076.0	707,962.6	0.00				Average	
		point61	61	3,429,094.2	707,924.9	0.00				Average	
		point62	62	3,429,113.0	707,891.4	0.00				Average	
		point63	63	3,429,150.8	707,835.1	0.00				Average	
		point64	64	3,429,177.0	707,801.8	0.00				Average	

		point65	65	3,429,202.2	707,773.6	0.00				Average	
		point66	66	3,429,715.2	707,231.6	0.00				Average	
		point67	67	3,429,759.8	707,181.4	0.00				Average	
		point68	68	3,429,800.2	707,129.4	0.00				Average	
		point69	69	3,429,833.8	707,080.7	0.00				Average	
		point70	70	3,429,872.0	707,016.4	0.00				Average	
		point71	71	3,429,904.0	706,952.2	0.00				Average	
		point72	72	3,429,929.2	706,892.8	0.00				Average	
		point73	73	3,429,954.0	706,820.9	0.00				Average	
		point74	74	3,429,970.2	706,760.4	0.00				Average	
		point75	75	3,429,982.0	706,704.5	0.00				Average	
		point76	76	3,430,059.2	706,277.4	0.00				Average	
		point77	77	3,430,068.0	706,222.4	0.00				Average	
		point78	78	3,430,071.8	706,181.2	0.00				Average	
		point79	79	3,430,073.5	706,132.2	0.00				Average	
		point80	80	3,430,072.0	706,084.9	0.00				Average	
		point81	81	3,430,068.0	706,043.7	0.00				Average	
		point82	82	3,430,063.8	706,013.1	0.00				Average	
		point83	83	3,430,055.8	705,971.5	0.00				Average	
		point84	84	3,429,981.8	705,641.5	0.00				Average	
		point85	85	3,429,970.5	705,579.6	0.00				Average	
		point86	86	3,429,966.2	705,542.2	0.00				Average	
		point87	87	3,429,964.0	705,509.9	0.00				Average	
		point88	88	3,429,963.0	705,473.1	0.00				Average	
		point89	89	3,429,964.2	705,430.9	0.00				Average	
		point90	90	3,429,966.5	705,400.2	0.00				Average	
		point91	91	3,429,970.2	705,368.8	0.00				Average	
		point92	92	3,429,974.0	705,343.8	0.00				Average	
		point93	93	3,429,978.5	705,319.2	0.00				Average	
		point94	94	3,429,984.0	705,295.1	0.00				Average	
		point95	95	3,429,989.8	705,271.9	0.00				Average	
		point96	96	3,430,707.8	702,623.9	0.00					
NB	12.1	point97	97	3,429,129.2	715,490.0	0.00				Average	
		point98	98	3,429,141.5	715,413.3	0.00				Average	
		point99	99	3,429,157.5	715,330.1	0.00				Average	
		point100	100	3,429,178.2	715,238.1	0.00				Average	
		point101	101	3,429,216.0	715,096.4	0.00				Average	
		point102	102	3,429,264.0	714,920.8	0.00				Average	
		point103	103	3,429,318.2	714,723.0	0.00				Average	

		point104	104	3,429,357.0	714,577.8	0.00				Average	
		point105	105	3,429,397.8	714,374.1	0.00				Average	
		point106	106	3,429,420.2	714,186.1	0.00				Average	
		point107	107	3,429,422.5	713,984.6	0.00				Average	
		point108	108	3,429,422.5	713,814.4	0.00				Average	
		point109	109	3,429,406.2	713,652.4	0.00				Average	
		point110	110	3,429,392.5	713,562.1	0.00				Average	
		point111	111	3,429,374.0	713,465.3	0.00				Average	
		point112	112	3,429,346.8	713,337.2	0.00				Average	
		point113	113	3,429,312.5	713,174.9	0.00				Average	
		point114	114	3,429,282.0	713,030.8	0.00				Average	
		point115	115	3,429,245.0	712,857.0	0.00				Average	
		point116	116	3,429,211.5	712,698.5	0.00				Average	
		point117	117	3,429,181.2	712,556.1	0.00				Average	
		point118	118	3,429,153.8	712,420.1	0.00				Average	
		point119	119	3,429,143.8	712,348.1	0.00				Average	
		point120	120	3,429,138.5	712,277.9	0.00				Average	
		point121	121	3,429,137.2	712,223.4	0.00				Average	
		point122	122	3,429,138.0	712,182.4	0.00				Average	
		point123	123	3,429,146.2	711,940.4	0.00				Average	
		point124	124	3,429,149.8	711,841.9	0.00				Average	
		point125	125	3,429,154.2	711,711.9	0.00				Average	
		point126	126	3,429,158.0	711,615.5	0.00				Average	
		point127	127	3,429,163.2	711,547.0	0.00				Average	
		point128	128	3,429,176.5	711,449.2	0.00				Average	
		point129	129	3,429,188.0	711,388.8	0.00				Average	
		point130	130	3,429,200.2	711,335.9	0.00				Average	
		point131	131	3,429,298.8	710,938.3	0.00				Average	
		point132	132	3,429,331.0	710,806.3	0.00				Average	
		point133	133	3,429,341.0	710,751.4	0.00				Average	
		point134	134	3,429,349.2	710,687.2	0.00				Average	
		point135	135	3,429,352.8	710,637.7	0.00				Average	
		point136	136	3,429,354.0	710,573.1	0.00				Average	
		point137	137	3,429,352.0	710,522.7	0.00				Average	
		point138	138	3,429,344.8	710,447.9	0.00				Average	
		point139	139	3,429,330.8	710,343.1	0.00				Average	
		point140	140	3,429,305.8	710,157.1	0.00				Average	
		point141	141	3,429,263.8	709,842.9	0.00				Average	
		point142	142	3,429,239.5	709,661.8	0.00				Average	

		point143	143	3,429,211.0	709,450.6	0.00				Average	
		point144	144	3,429,177.5	709,283.4	0.00				Average	
		point145	145	3,429,151.2	709,189.9	0.00				Average	
		point146	146	3,429,119.0	709,094.9	0.00				Average	
		point147	147	3,429,068.2	708,958.6	0.00				Average	
		point148	148	3,429,001.5	708,779.0	0.00				Average	
		point149	149	3,428,969.8	708,651.0	0.00				Average	
		point150	150	3,428,958.2	708,538.5	0.00				Average	
		point151	151	3,428,962.0	708,466.9	0.00				Average	
		point152	152	3,428,977.0	708,378.7	0.00				Average	
		point153	153	3,429,036.8	708,128.8	0.00				Average	
		point154	154	3,429,054.2	708,057.7	0.00				Average	
		point155	155	3,429,072.8	708,001.8	0.00				Average	
		point156	156	3,429,087.0	707,967.5	0.00				Average	
		point157	157	3,429,105.0	707,930.4	0.00				Average	
		point158	158	3,429,123.2	707,897.8	0.00				Average	
		point159	159	3,429,160.2	707,842.1	0.00				Average	
		point160	160	3,429,186.2	707,809.4	0.00				Average	
		point161	161	3,429,211.0	707,781.8	0.00				Average	
		point162	162	3,429,724.2	707,239.7	0.00				Average	
		point163	163	3,429,769.0	707,189.1	0.00				Average	
		point164	164	3,429,810.0	707,136.5	0.00				Average	
		point165	165	3,429,843.8	707,087.2	0.00				Average	
		point166	166	3,429,882.5	707,022.1	0.00				Average	
		point167	167	3,429,915.0	706,957.2	0.00				Average	
		point168	168	3,429,940.2	706,897.1	0.00				Average	
		point169	169	3,429,965.2	706,824.4	0.00				Average	
		point170	170	3,429,982.0	706,763.2	0.00				Average	
		point171	171	3,429,993.8	706,706.8	0.00				Average	
		point172	172	3,430,071.0	706,279.4	0.00				Average	
		point173	173	3,430,079.8	706,223.9	0.00				Average	
		point174	174	3,430,083.8	706,182.0	0.00				Average	
		point175	175	3,430,085.5	706,132.2	0.00				Average	
		point176	176	3,430,084.0	706,084.2	0.00				Average	
		point177	177	3,430,080.0	706,042.3	0.00				Average	
		point178	178	3,430,075.5	706,011.1	0.00				Average	
		point179	179	3,430,067.5	705,969.1	0.00				Average	
		point180	180	3,429,993.5	705,639.1	0.00				Average	
		point181	181	3,429,982.2	705,577.8	0.00				Average	

		point182	182	3,429,978.0	705,541.1	0.00				Average	
		point183	183	3,429,976.0	705,509.4	0.00				Average	
		point184	184	3,429,975.0	705,473.2	0.00				Average	
		point185	185	3,429,976.2	705,431.5	0.00				Average	
		point186	186	3,429,978.5	705,401.4	0.00				Average	
		point187	187	3,429,982.0	705,370.4	0.00				Average	
		point188	188	3,429,985.8	705,345.8	0.00				Average	
		point189	189	3,429,990.2	705,321.6	0.00				Average	
		point190	190	3,429,995.5	705,297.8	0.00				Average	
		point191	191	3,430,001.5	705,275.0	0.00				Average	
		point192	192	3,430,721.2	702,618.4	0.00					
Milton Rd	12.0	point193	193	3,430,301.0	715,471.6	0.00				Average	
		point194	194	3,429,133.8	715,465.7	0.00					
Quail Ridge Run	12.0	point199	199	3,429,847.2	710,923.8	0.00				Average	
		point200	200	3,429,299.8	710,938.5	0.00					
Joe May Rd	12.0	point202	202	3,430,438.2	703,608.4	0.00				Average	
		point203	203	3,430,185.8	703,263.1	0.00					
Bonnie Bleu Rd	12.0	point204	204	3,427,646.2	708,651.8	0.00				Average	
		point205	205	3,428,956.5	708,650.2	0.00					
Buddy Ellis Rd	12.0	point206	206	3,429,285.0	710,938.8	0.00				Average	
		point201	201	3,428,769.5	710,937.6	0.00					
Miller Rd	12.0	point207	207	3,429,120.0	715,465.2	0.00				Average	
		point195	195	3,428,902.0	715,444.8	0.00				Average	
		point196	196	3,428,839.2	715,476.2	0.00				Average	
		point197	197	3,428,796.0	715,510.8	0.00				Average	
		point198	198	3,428,503.0	715,996.6	0.00					
I-12 EB Off Ramp	12.0	point210	210	3,428,600.5	715,994.4	0.00				Average	
		point211	211	3,428,742.8	715,831.3	0.00				Average	
		point213	212	3,428,830.5	715,779.6	0.00				Average	
		point214	213	3,429,061.8	715,754.7	0.00				Average	
		point216	214	3,429,060.0	715,751.0	0.00					

APPENDIX F-3
2030 NO-BUILD MODEL TRAFFIC

APTIM 20 June 2018
G. Landry TNM 2.5

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Projected No Build

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
SB	point1	1	1049	45	36	45	72	45	12	45	36	45
	point2	2	1049	45	36	45	72	45	12	45	36	45
	point3	3	1049	45	36	45	72	45	12	45	36	45
	point4	4	1049	45	36	45	72	45	12	45	36	45
	point5	5	1049	45	36	45	72	45	12	45	36	45
	point6	6	1049	45	36	45	72	45	12	45	36	45
	point7	7	1049	45	36	45	72	45	12	45	36	45
	point8	8	1049	45	36	45	72	45	12	45	36	45
	point9	9	1049	45	36	45	72	45	12	45	36	45
	point10	10	1049	45	36	45	72	45	12	45	36	45
	point11	11	1049	45	36	45	72	45	12	45	36	45
	point12	12	1049	45	36	45	72	45	12	45	36	45
	point13	13	1049	45	36	45	72	45	12	45	36	45
	point14	14	1049	45	36	45	72	45	12	45	36	45
	point15	15	1049	45	36	45	72	45	12	45	36	45
	point16	16	1049	45	36	45	72	45	12	45	36	45
	point17	17	1049	45	36	45	72	45	12	45	36	45
	point18	18	1049	45	36	45	72	45	12	45	36	45
	point19	19	1049	45	36	45	72	45	12	45	36	45
	point20	20	1049	45	36	45	72	45	12	45	36	45
	point21	21	1049	45	36	45	72	45	12	45	36	45
	point22	22	1049	45	36	45	72	45	12	45	36	45
	point23	23	1049	45	36	45	72	45	12	45	36	45

	point24	24	1049	45	36	45	72	45	12	45	36	45
	point25	25	1049	45	36	45	72	45	12	45	36	45
	point26	26	1049	45	36	45	72	45	12	45	36	45
	point27	27	1049	45	36	45	72	45	12	45	36	45
	point28	28	1049	45	36	45	72	45	12	45	36	45
	point29	29	1049	45	36	45	72	45	12	45	36	45
	point30	30	1049	45	36	45	72	45	12	45	36	45
	point31	31	1049	45	36	45	72	45	12	45	36	45
	point32	32	1049	45	36	45	72	45	12	45	36	45
	point33	33	1049	45	36	45	72	45	12	45	36	45
	point34	34	1049	45	36	45	72	45	12	45	36	45
	point35	35	860	45	30	45	59	45	10	45	30	45
	point36	36	860	45	30	45	59	45	10	45	30	45
	point37	37	860	45	30	45	59	45	10	45	30	45
	point38	38	860	45	30	45	59	45	10	45	30	45
	point39	39	860	45	30	45	59	45	10	45	30	45
	point40	40	860	45	30	45	59	45	10	45	30	45
	point41	41	860	45	30	45	59	45	10	45	30	45
	point42	42	860	45	30	45	59	45	10	45	30	45
	point43	43	860	45	30	45	59	45	10	45	30	45
	point44	44	860	45	30	45	59	45	10	45	30	45
	point45	45	860	45	30	45	59	45	10	45	30	45
	point46	46	860	45	30	45	59	45	10	45	30	45
	point47	47	860	45	30	45	59	45	10	45	30	45
	point48	48	860	45	30	45	59	45	10	45	30	45
	point49	49	860	45	30	45	59	45	10	45	30	45
	point50	50	860	45	30	45	59	45	10	45	30	45
	point51	51	860	45	30	45	59	45	10	45	30	45
	point52	52	860	45	30	45	59	45	10	45	30	45
	point53	53	703	45	24	45	48	45	8	45	24	45
	point54	54	703	45	24	45	48	45	8	45	24	45
	point55	55	703	45	24	45	48	45	8	45	24	45
	point56	56	703	45	24	45	48	45	8	45	24	45
	point57	57	703	45	24	45	48	45	8	45	24	45
	point58	58	703	45	24	45	48	45	8	45	24	45
	point59	59	703	45	24	45	48	45	8	45	24	45

	point60	60	703	45	24	45	48	45	8	45	24	45
	point61	61	703	45	24	45	48	45	8	45	24	45
	point62	62	703	45	24	45	48	45	8	45	24	45
	point63	63	703	45	24	45	48	45	8	45	24	45
	point64	64	703	45	24	45	48	45	8	45	24	45
	point65	65	703	45	24	45	48	45	8	45	24	45
	point66	66	703	45	24	45	48	45	8	45	24	45
	point67	67	703	45	24	45	48	45	8	45	24	45
	point68	68	703	45	24	45	48	45	8	45	24	45
	point69	69	703	45	24	45	48	45	8	45	24	45
	point70	70	703	45	24	45	48	45	8	45	24	45
	point71	71	703	45	24	45	48	45	8	45	24	45
	point72	72	703	45	24	45	48	45	8	45	24	45
	point73	73	703	45	24	45	48	45	8	45	24	45
	point74	74	703	45	24	45	48	45	8	45	24	45
	point75	75	703	45	24	45	48	45	8	45	24	45
	point76	76	703	45	24	45	48	45	8	45	24	45
	point77	77	703	45	24	45	48	45	8	45	24	45
	point78	78	703	45	24	45	48	45	8	45	24	45
	point79	79	703	45	24	45	48	45	8	45	24	45
	point80	80	703	45	24	45	48	45	8	45	24	45
	point81	81	703	45	24	45	48	45	8	45	24	45
	point82	82	703	45	24	45	48	45	8	45	24	45
	point83	83	703	45	24	45	48	45	8	45	24	45
	point84	84	703	45	24	45	48	45	8	45	24	45
	point85	85	703	45	24	45	48	45	8	45	24	45
	point86	86	703	45	24	45	48	45	8	45	24	45
	point87	87	703	45	24	45	48	45	8	45	24	45
	point88	88	703	45	24	45	48	45	8	45	24	45
	point89	89	703	45	24	45	48	45	8	45	24	45
	point90	90	703	45	24	45	48	45	8	45	24	45
	point91	91	703	45	24	45	48	45	8	45	24	45
	point92	92	703	45	24	45	48	45	8	45	24	45
	point93	93	703	45	24	45	48	45	8	45	24	45
	point94	94	703	45	24	45	48	45	8	45	24	45
	point95	95	703	45	24	45	48	45	8	45	24	45

	point96	96										
NB	point97	97	975	45	34	45	67	45	11	45	34	45
	point98	98	975	45	34	45	67	45	11	45	34	45
	point99	99	975	45	34	45	67	45	11	45	34	45
	point100	100	975	45	34	45	67	45	11	45	34	45
	point101	101	975	45	34	45	67	45	11	45	34	45
	point102	102	975	45	34	45	67	45	11	45	34	45
	point103	103	975	45	34	45	67	45	11	45	34	45
	point104	104	975	45	34	45	67	45	11	45	34	45
	point105	105	975	45	34	45	67	45	11	45	34	45
	point106	106	975	45	34	45	67	45	11	45	34	45
	point107	107	975	45	34	45	67	45	11	45	34	45
	point108	108	975	45	34	45	67	45	11	45	34	45
	point109	109	975	45	34	45	67	45	11	45	34	45
	point110	110	975	45	34	45	67	45	11	45	34	45
	point111	111	975	45	34	45	67	45	11	45	34	45
	point112	112	975	45	34	45	67	45	11	45	34	45
	point113	113	975	45	34	45	67	45	11	45	34	45
	point114	114	975	45	34	45	67	45	11	45	34	45
	point115	115	975	45	34	45	67	45	11	45	34	45
	point116	116	975	45	34	45	67	45	11	45	34	45
	point117	117	975	45	34	45	67	45	11	45	34	45
	point118	118	975	45	34	45	67	45	11	45	34	45
	point119	119	975	45	34	45	67	45	11	45	34	45
	point120	120	975	45	34	45	67	45	11	45	34	45
	point121	121	975	45	34	45	67	45	11	45	34	45
	point122	122	975	45	34	45	67	45	11	45	34	45
	point123	123	975	45	34	45	67	45	11	45	34	45
	point124	124	975	45	34	45	67	45	11	45	34	45
	point125	125	975	45	34	45	67	45	11	45	34	45
	point126	126	975	45	34	45	67	45	11	45	34	45
	point127	127	975	45	34	45	67	45	11	45	34	45
	point128	128	975	45	34	45	67	45	11	45	34	45
	point129	129	975	45	34	45	67	45	11	45	34	45
	point130	130	975	45	34	45	67	45	11	45	34	45
	point131	131	780	45	27	45	54	45	9	45	27	45

	point132	132	780	45	27	45	54	45	9	45	27	45
	point133	133	780	45	27	45	54	45	9	45	27	45
	point134	134	780	45	27	45	54	45	9	45	27	45
	point135	135	780	45	27	45	54	45	9	45	27	45
	point136	136	780	45	27	45	54	45	9	45	27	45
	point137	137	780	45	27	45	54	45	9	45	27	45
	point138	138	780	45	27	45	54	45	9	45	27	45
	point139	139	780	45	27	45	54	45	9	45	27	45
	point140	140	780	45	27	45	54	45	9	45	27	45
	point141	141	780	45	27	45	54	45	9	45	27	45
	point142	142	780	45	27	45	54	45	9	45	27	45
	point143	143	780	45	27	45	54	45	9	45	27	45
	point144	144	780	45	27	45	54	45	9	45	27	45
	point145	145	780	45	27	45	54	45	9	45	27	45
	point146	146	780	45	27	45	54	45	9	45	27	45
	point147	147	780	45	27	45	54	45	9	45	27	45
	point148	148	780	45	27	45	54	45	9	45	27	45
	point149	149	679	45	23	45	47	45	8	45	23	45
	point150	150	679	45	23	45	47	45	8	45	23	45
	point151	151	679	45	23	45	47	45	8	45	23	45
	point152	152	679	45	23	45	47	45	8	45	23	45
	point153	153	679	45	23	45	47	45	8	45	23	45
	point154	154	679	45	23	45	47	45	8	45	23	45
	point155	155	679	45	23	45	47	45	8	45	23	45
	point156	156	679	45	23	45	47	45	8	45	23	45
	point157	157	679	45	23	45	47	45	8	45	23	45
	point158	158	679	45	23	45	47	45	8	45	23	45
	point159	159	679	45	23	45	47	45	8	45	23	45
	point160	160	679	45	23	45	47	45	8	45	23	45
	point161	161	679	45	23	45	47	45	8	45	23	45
	point162	162	679	45	23	45	47	45	8	45	23	45
	point163	163	679	45	23	45	47	45	8	45	23	45
	point164	164	679	45	23	45	47	45	8	45	23	45
	point165	165	679	45	23	45	47	45	8	45	23	45
	point166	166	679	45	23	45	47	45	8	45	23	45
	point167	167	679	45	23	45	47	45	8	45	23	45

	point168	168	679	45	23	45	47	45	8	45	23	45
	point169	169	679	45	23	45	47	45	8	45	23	45
	point170	170	679	45	23	45	47	45	8	45	23	45
	point171	171	679	45	23	45	47	45	8	45	23	45
	point172	172	679	45	23	45	47	45	8	45	23	45
	point173	173	679	45	23	45	47	45	8	45	23	45
	point174	174	679	45	23	45	47	45	8	45	23	45
	point175	175	679	45	23	45	47	45	8	45	23	45
	point176	176	679	45	23	45	47	45	8	45	23	45
	point177	177	679	45	23	45	47	45	8	45	23	45
	point178	178	679	45	23	45	47	45	8	45	23	45
	point179	179	679	45	23	45	47	45	8	45	23	45
	point180	180	679	45	23	45	47	45	8	45	23	45
	point181	181	679	45	23	45	47	45	8	45	23	45
	point182	182	679	45	23	45	47	45	8	45	23	45
	point183	183	679	45	23	45	47	45	8	45	23	45
	point184	184	679	45	23	45	47	45	8	45	23	45
	point185	185	679	45	23	45	47	45	8	45	23	45
	point186	186	679	45	23	45	47	45	8	45	23	45
	point187	187	679	45	23	45	47	45	8	45	23	45
	point188	188	679	45	23	45	47	45	8	45	23	45
	point189	189	679	45	23	45	47	45	8	45	23	45
	point190	190	679	45	23	45	47	45	8	45	23	45
	point191	191	679	45	23	45	47	45	8	45	23	45
	point192	192										
Milton Rd	point193	193	135	25	5	25	9	25	2	25	5	25
	point194	194										
Quail Ridge Run	point199	199	44	25	2	25	3	25	1	25	2	25
	point200	200										
Joe May Rd	point202	202	215	25	7	25	15	25	2	25	7	25
	point203	203										
Bonnie Bleu Rd	point204	204	289	25	10	25	20	25	3	25	10	25
	point205	205										
Buddy Ellis Rd	point206	206	250	25	9	25	17	25	3	25	9	25
	point201	201										
Miller Rd	point207	207	29	25	1	25	2	25	0	0	1	25

	point195	195	29	25	1	25	2	25	0	0	1	25
	point196	196	29	25	1	25	2	25	0	0	1	25
	point197	197	29	25	1	25	2	25	0	0	1	25
	point198	198										
I-12 EB Off Ramp	point210	210	1011	45	35	45	70	45	12	45	35	45
	point211	211	1011	45	35	45	70	45	12	45	35	45
	point213	212	1011	45	35	45	70	45	12	45	35	45
	point214	213	1011	45	35	45	70	45	12	45	35	45
	point216	214										

APPENDIX F-4
2030 NO-BUILD MODEL RECEIVERS

APTIM 20 June 2018
G. Landry TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Projected No Build

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Miller Road - Cal. Pt. 09&14 - #1	1	1	3,428,614.8	715,789.1	5.00	5.00	62.90	66	10.0	8.0	Y
Milton Road - Cal. Pt. 10&13 - #2	2	1	3,429,850.5	715,441.7	5.00	5.00	60.00	66	10.0	8.0	Y
Residence 1 - #3	3	1	3,430,836.0	702,979.4	5.00	5.00	56.90	66	10.0	8.0	Y
Fire Station - #4	4	1	3,430,624.5	703,171.9	5.00	5.00	68.70	71	10.0	8.0	Y
Church1 - #5	5	1	3,430,418.0	703,427.5	5.00	5.00	66.00	66	10.0	8.0	Y
Residence 2 - #6	6	1	3,430,566.5	703,493.2	5.00	5.00	64.90	66	10.0	8.0	Y
Residence 3 - #7	7	1	3,430,530.8	703,592.7	5.00	5.00	65.90	66	10.0	8.0	Y
Residence 4 - #8	8	1	3,430,543.2	703,667.9	5.00	5.00	62.90	66	10.0	8.0	Y
Residence 5 - #9	9	1	3,430,507.0	703,796.2	5.00	5.00	62.90	66	10.0	8.0	Y
Cemetery - #10	10	1	3,430,309.2	703,887.6	5.00	5.00	68.00	66	10.0	8.0	Y
Sibleys Grocery - #11	11	1	3,430,452.0	704,029.4	5.00	5.00	62.30	71	10.0	8.0	Y
Residence 6 - #12	12	1	3,430,379.2	704,166.4	5.00	5.00	65.40	66	10.0	8.0	Y
Residence 7 - #13	13	1	3,430,176.8	704,212.6	5.00	5.00	63.20	66	10.0	8.0	Y
Residence 8 - #14	14	1	3,430,313.2	704,382.8	5.00	5.00	66.30	66	10.0	8.0	Y
Residence 9 - #15	15	1	3,429,904.8	704,372.9	5.00	5.00	54.00	66	10.0	8.0	Y
Residence 10 - #16	16	1	3,430,312.2	704,476.9	5.00	5.00	63.90	66	10.0	8.0	Y
Residence 11 - #17	17	1	3,430,376.0	704,636.0	5.00	5.00	58.00	66	10.0	8.0	Y
Residence 12 - #18	18	1	3,430,005.2	704,703.8	5.00	5.00	61.10	66	10.0	8.0	Y
Residence 13 - #19	19	1	3,429,997.8	704,854.6	5.00	5.00	63.60	66	10.0	8.0	Y
Residence 14 - #20	20	1	3,429,967.0	704,984.1	5.00	5.00	64.10	66	10.0	8.0	Y
Residence 15 - #21	21	1	3,430,214.5	705,063.9	5.00	5.00	60.60	66	10.0	8.0	Y
Residence 16 - #22	22	1	3,429,658.5	705,272.8	5.00	5.00	53.70	66	10.0	8.0	Y

Richard Price Contracting Co - #23	23	1	3,429,790.2	705,671.2	5.00	5.00	58.20	71	10.0	8.0	Y
Residence 17 - #24	24	1	3,429,960.0	705,871.7	5.00	5.00	65.70	66	10.0	8.0	Y
Residence 18 - #25	25	1	3,429,971.2	705,919.2	5.00	5.00	65.80	66	10.0	8.0	Y
Residence 19 - #26	26	1	3,430,181.2	706,020.9	5.00	5.00	63.00	66	10.0	8.0	Y
Residence 20 - #27	27	1	3,429,978.8	706,029.6	5.00	5.00	64.30	66	10.0	8.0	Y
Residence 21 - #28	28	1	3,429,992.0	706,075.8	5.00	5.00	65.00	66	10.0	8.0	Y
Residence 22 - #29	29	1	3,429,995.5	706,128.8	5.00	5.00	65.10	66	10.0	8.0	Y
Residence 23 - #30	30	1	3,430,183.0	706,160.6	5.00	5.00	63.30	66	10.0	8.0	Y
Residence 24 - #31	31	1	3,429,877.0	706,260.8	5.00	5.00	58.50	66	10.0	8.0	Y
Residence 25 - #32	32	1	3,430,162.0	706,302.3	5.00	5.00	64.00	66	10.0	8.0	Y
Residence 26 - #33	33	1	3,430,143.0	706,550.9	5.00	5.00	62.20	66	10.0	8.0	Y
Livingston Head Start - #34	34	1	3,429,905.8	706,571.6	5.00	5.00	63.00	66	10.0	8.0	Y
Dollar General - #35	35	1	3,429,809.2	706,839.9	5.00	5.00	61.30	71	10.0	8.0	Y
Residence 27 - #36	36	1	3,430,122.0	706,749.6	5.00	5.00	61.20	66	10.0	8.0	Y
Residence 28 - #37	37	1	3,430,016.8	706,879.7	5.00	5.00	66.70	66	10.0	8.0	Y
Unnamed Business 1 - #38	38	1	3,429,735.0	707,022.2	5.00	5.00	62.60	71	10.0	8.0	Y
Residence 29 - #39	39	1	3,429,903.2	707,164.3	5.00	5.00	64.20	66	10.0	8.0	Y
Residence 30 - #40	40	1	3,429,655.2	707,154.9	5.00	5.00	63.80	66	10.0	8.0	Y
Residence 31 - #41	41	1	3,429,837.5	707,299.1	5.00	5.00	62.30	66	10.0	8.0	Y
Residence 32 - #42	42	1	3,429,475.0	707,345.8	5.00	5.00	63.80	66	10.0	8.0	Y
Residence 33 - #43	43	1	3,429,364.0	707,360.0	5.00	5.00	59.50	66	10.0	8.0	Y
Residence 34 - #44	44	1	3,429,597.0	707,486.1	5.00	5.00	65.40	66	10.0	8.0	Y
Residence 35 - #45	45	1	3,429,271.0	707,480.2	5.00	5.00	60.10	66	10.0	8.0	Y
Residence 36 - #46	46	1	3,428,482.0	708,081.3	5.00	5.00	50.30	66	10.0	8.0	Y
Residence 37 - #47	47	1	3,429,055.0	708,304.7	5.00	5.00	67.50	66	10.0	8.0	Y
Residence 38 - #48	48	1	3,429,043.2	708,369.3	5.00	5.00	66.90	66	10.0	8.0	Y
Residence 39 - #49	49	1	3,429,048.2	708,491.8	5.00	5.00	64.50	66	10.0	8.0	Y
Residence 40 - #50	50	1	3,429,046.8	708,575.1	5.00	5.00	64.80	66	10.0	8.0	Y
Residence 41 - #51	51	1	3,429,057.0	708,759.0	5.00	5.00	68.10	66	10.0	8.0	Y
Best Stop Quick Mart #3 - #52	52	1	3,428,868.5	708,774.2	5.00	5.00	63.20	71	10.0	8.0	Y
Residence 42 - #53	53	1	3,429,011.2	709,076.1	5.00	5.00	65.40	66	10.0	8.0	Y
Residence 43 - #54	54	1	3,429,010.8	709,108.4	5.00	5.00	64.40	66	10.0	8.0	Y
Residence 44 - #55	55	1	3,429,059.8	709,161.6	5.00	5.00	67.30	66	10.0	8.0	Y
Residence 45 - #56	56	1	3,429,067.8	709,213.6	5.00	5.00	66.30	66	10.0	8.0	Y
Residence 46 - #57	57	1	3,429,283.0	709,270.8	5.00	5.00	63.50	66	10.0	8.0	Y
Residence 47 - #58	58	1	3,429,298.5	709,433.2	5.00	5.00	64.80	66	10.0	8.0	Y

Residence 48 - #59	59	1	3,429,333.8	709,649.4	5.00	5.00	65.10	66	10.0	8.0	Y
Residence 49 - #60	60	1	3,429,332.8	709,862.6	5.00	5.00	67.70	66	10.0	8.0	Y
Residence 50 - #61	61	1	3,429,403.0	710,024.3	5.00	5.00	63.40	66	10.0	8.0	Y
Residence 51 - #62	62	1	3,429,542.0	710,257.9	5.00	5.00	58.30	66	10.0	8.0	Y
Residence 52 - #63	63	1	3,429,463.5	710,442.0	5.00	5.00	63.40	66	10.0	8.0	Y
Residence 53 - #64	64	1	3,429,455.2	710,794.5	5.00	5.00	63.40	66	10.0	8.0	Y
Residence 54 - #65	65	1	3,429,185.8	711,006.9	5.00	5.00	67.20	66	10.0	8.0	Y
Residence 55 - #66	66	1	3,429,339.8	711,217.0	5.00	5.00	65.00	66	10.0	8.0	Y
Residence 56 - #67	67	1	3,429,273.5	711,485.8	5.00	5.00	64.90	66	10.0	8.0	Y
Residence 57 - #68	68	1	3,429,380.5	711,604.8	5.00	5.00	58.80	66	10.0	8.0	Y
Residence 58 - #69	69	1	3,429,368.8	711,786.0	5.00	5.00	58.80	66	10.0	8.0	Y
Residence 59 - #70	70	1	3,429,586.5	712,265.1	5.00	5.00	53.50	66	10.0	8.0	Y
Residence 60 - #71	71	1	3,429,461.5	713,041.4	5.00	5.00	60.50	66	10.0	8.0	Y
Residence 61 - #72	72	1	3,429,224.0	713,260.7	5.00	5.00	65.30	66	10.0	8.0	Y
Residence 62 - #73	73	1	3,429,272.0	713,505.4	5.00	5.00	65.00	66	10.0	8.0	Y
Residence 63 - #74	74	1	3,429,324.0	713,713.8	5.00	5.00	67.00	66	10.0	8.0	Y
Residence 64 - #75	75	1	3,429,539.8	714,221.5	5.00	5.00	63.10	66	10.0	8.0	Y
Residence 65 - #76	76	1	3,429,560.5	714,444.7	5.00	5.00	60.40	66	10.0	8.0	Y
Residence 66 - #77	77	1	3,429,544.2	714,652.1	5.00	5.00	59.30	66	10.0	8.0	Y
Fundemental Early Learning Center - #78	78	1	3,429,366.2	714,807.1	5.00	5.00	67.70	66	10.0	8.0	Y
Unnamed Business 2 - #79	79	1	3,429,205.2	714,809.8	5.00	5.00	67.10	71	10.0	8.0	Y
Residence 67 - #80	80	1	3,429,372.0	714,938.1	5.00	5.00	64.20	66	10.0	8.0	Y
Family RV Center - #81	81	1	3,429,164.5	714,989.4	5.00	5.00	68.30	71	10.0	8.0	Y
Bayou Self Car Wash - #82	82	1	3,429,340.8	715,044.0	5.00	5.00	64.80	71	10.0	8.0	Y
Chevron - #83	83	1	3,429,039.0	715,173.5	5.00	5.00	62.50	71	10.0	8.0	Y
Cook Portable Warehouses - #84	84	1	3,429,262.2	715,207.1	5.00	5.00	67.40	71	10.0	8.0	Y

APPENDIX F-5
2030 NO-BUILD MODEL PREDICTED SOUND LEVELS

APTIM
G. Landry
RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Projected No Build
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

20 June 2018
TNM 2.5
Calculated with TNM 2.5

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Miller Road - Cal. Pt. 09&14 - #1	1	1	62.9	63.9	66	1.0	10	----	63.9	0.0	8	-8.0
Milton Road - Cal. Pt. 10&13 - #2	2	1	60.0	60.1	66	0.1	10	----	60.1	0.0	8	-8.0
Residence 1 - #3	3	1	56.9	58.6	66	1.7	10	----	58.6	0.0	8	-8.0
Fire Station - #4	4	1	68.7	70.3	71	1.6	10	----	70.3	0.0	8	-8.0
Church1 - #5	5	1	66.0	67.8	66	1.8	10	Snd Lvl	67.8	0.0	8	-8.0
Residence 2 - #6	6	1	64.9	66.6	66	1.7	10	Snd Lvl	66.6	0.0	8	-8.0
Residence 3 - #7	7	1	65.9	67.5	66	1.6	10	Snd Lvl	67.5	0.0	8	-8.0
Residence 4 - #8	8	1	62.9	64.6	66	1.7	10	----	64.6	0.0	8	-8.0
Residence 5 - #9	9	1	62.9	64.6	66	1.7	10	----	64.6	0.0	8	-8.0
Cemetery - #10	10	1	68.0	69.9	66	1.9	10	Snd Lvl	69.9	0.0	8	-8.0
Sibleys Grocery - #11	11	1	62.3	64.0	71	1.7	10	----	64.0	0.0	8	-8.0
Residence 6 - #12	12	1	65.4	67.1	66	1.7	10	Snd Lvl	67.1	0.0	8	-8.0
Residence 7 - #13	13	1	63.2	65.0	66	1.8	10	----	65.0	0.0	8	-8.0
Residence 8 - #14	14	1	66.3	67.9	66	1.6	10	Snd Lvl	67.9	0.0	8	-8.0
Residence 9 - #15	15	1	54.0	55.8	66	1.8	10	----	55.8	0.0	8	-8.0
Residence 10 - #16	16	1	63.9	65.6	66	1.7	10	----	65.6	0.0	8	-8.0
Residence 11 - #17	17	1	58.0	59.8	66	1.8	10	----	59.8	0.0	8	-8.0
Residence 12 - #18	18	1	61.1	62.9	66	1.8	10	----	62.9	0.0	8	-8.0
Residence 13 - #19	19	1	63.6	65.3	66	1.7	10	----	65.3	0.0	8	-8.0
Residence 14 - #20	20	1	64.1	65.8	66	1.7	10	----	65.8	0.0	8	-8.0
Residence 15 - #21	21	1	60.6	62.4	66	1.8	10	----	62.4	0.0	8	-8.0
Residence 16 - #22	22	1	53.7	55.5	66	1.8	10	----	55.5	0.0	8	-8.0
Richard Price Contracting Co - #23	23	1	58.2	59.9	71	1.7	10	----	59.9	0.0	8	-8.0
Residence 17 - #24	24	1	65.7	67.6	66	1.9	10	Snd Lvl	67.6	0.0	8	-8.0

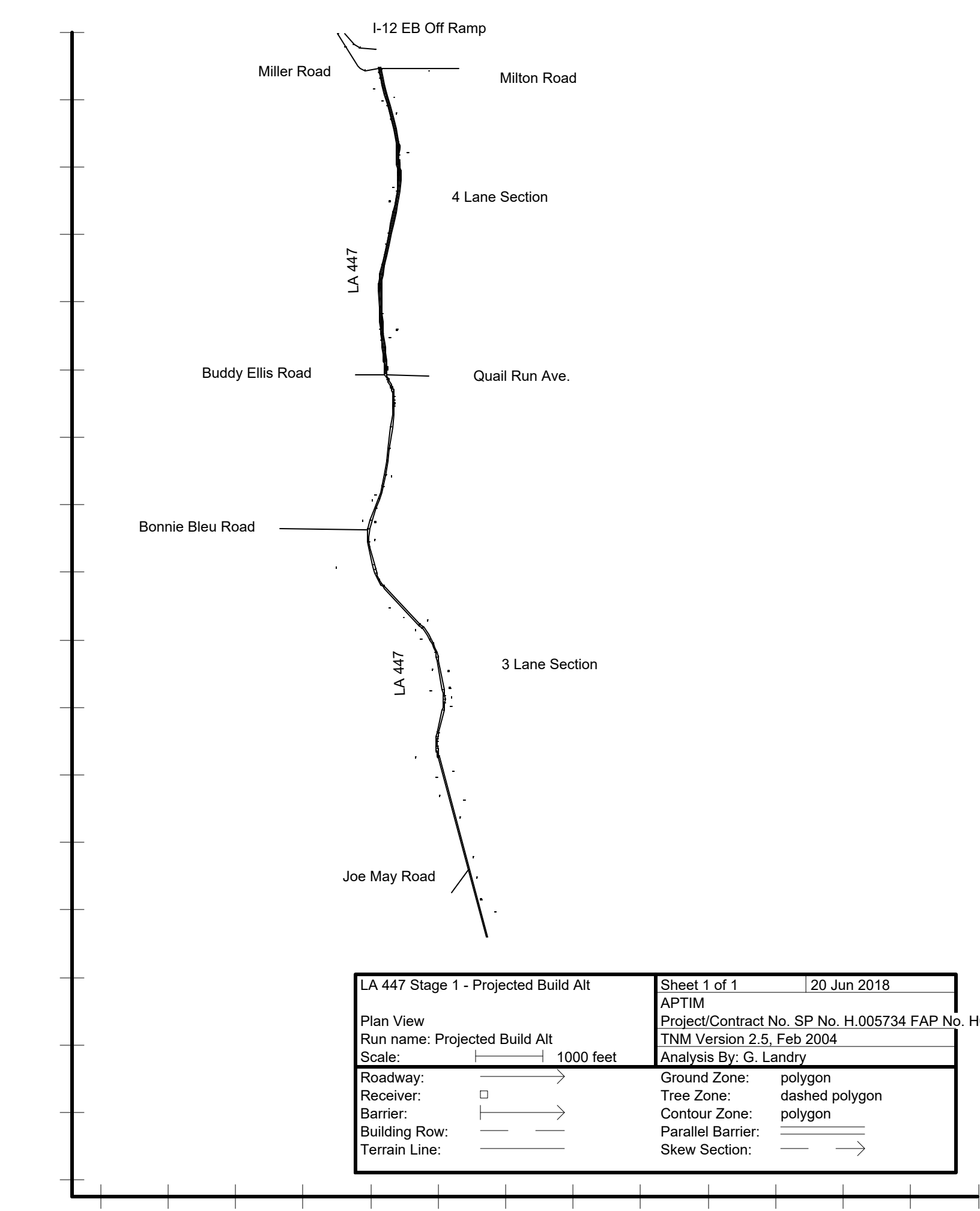
Residence 18 - #25	25	1	65.8	67.6	66	1.8	10	Snd Lvl	67.6	0.0	8	-8.0
Residence 19 - #26	26	1	63.0	64.7	66	1.7	10	----	64.7	0.0	8	-8.0
Residence 20 - #27	27	1	64.3	66.1	66	1.8	10	Snd Lvl	66.1	0.0	8	-8.0
Residence 21 - #28	28	1	65.0	66.9	66	1.9	10	Snd Lvl	66.9	0.0	8	-8.0
Residence 22 - #29	29	1	65.1	66.9	66	1.8	10	Snd Lvl	66.9	0.0	8	-8.0
Residence 23 - #30	30	1	63.3	65.0	66	1.7	10	----	65.0	0.0	8	-8.0
Residence 24 - #31	31	1	58.5	60.3	66	1.8	10	----	60.3	0.0	8	-8.0
Residence 25 - #32	32	1	64.0	65.6	66	1.6	10	----	65.6	0.0	8	-8.0
Residence 26 - #33	33	1	62.2	63.9	66	1.7	10	----	63.9	0.0	8	-8.0
Livingston Head Start - #34	34	1	63.0	64.8	66	1.8	10	----	64.8	0.0	8	-8.0
Dollar General - #35	35	1	61.3	63.0	71	1.7	10	----	63.0	0.0	8	-8.0
Residence 27 - #36	36	1	61.2	62.9	66	1.7	10	----	62.9	0.0	8	-8.0
Residence 28 - #37	37	1	66.7	68.4	66	1.7	10	Snd Lvl	68.4	0.0	8	-8.0
Unnamed Business 1 - #38	38	1	62.6	64.3	71	1.7	10	----	64.3	0.0	8	-8.0
Residence 29 - #39	39	1	64.2	65.9	66	1.7	10	----	65.9	0.0	8	-8.0
Residence 30 - #40	40	1	63.8	65.6	66	1.8	10	----	65.6	0.0	8	-8.0
Residence 31 - #41	41	1	62.3	64.1	66	1.8	10	----	64.1	0.0	8	-8.0
Residence 32 - #42	42	1	63.8	65.6	66	1.8	10	----	65.6	0.0	8	-8.0
Residence 33 - #43	43	1	59.5	61.3	66	1.8	10	----	61.3	0.0	8	-8.0
Residence 34 - #44	44	1	65.4	67.1	66	1.7	10	Snd Lvl	67.1	0.0	8	-8.0
Residence 35 - #45	45	1	60.1	61.8	66	1.7	10	----	61.8	0.0	8	-8.0
Residence 36 - #46	46	1	50.3	52.0	66	1.7	10	----	52.0	0.0	8	-8.0
Residence 37 - #47	47	1	67.5	69.1	66	1.6	10	Snd Lvl	69.1	0.0	8	-8.0
Residence 38 - #48	48	1	66.9	68.6	66	1.7	10	Snd Lvl	68.6	0.0	8	-8.0
Residence 39 - #49	49	1	64.5	66.2	66	1.7	10	Snd Lvl	66.2	0.0	8	-8.0
Residence 40 - #50	50	1	64.8	66.6	66	1.8	10	Snd Lvl	66.6	0.0	8	-8.0
Residence 41 - #51	51	1	68.1	69.9	66	1.8	10	Snd Lvl	69.9	0.0	8	-8.0
Best Stop Quick Mart #3 - #52	52	1	63.2	64.9	71	1.7	10	----	64.9	0.0	8	-8.0
Residence 42 - #53	53	1	65.4	67.1	66	1.7	10	Snd Lvl	67.1	0.0	8	-8.0
Residence 43 - #54	54	1	64.4	66.1	66	1.7	10	Snd Lvl	66.1	0.0	8	-8.0
Residence 44 - #55	55	1	67.3	68.9	66	1.6	10	Snd Lvl	68.9	0.0	8	-8.0
Residence 45 - #56	56	1	66.3	68.0	66	1.7	10	Snd Lvl	68.0	0.0	8	-8.0
Residence 46 - #57	57	1	63.5	65.2	66	1.7	10	----	65.2	0.0	8	-8.0
Residence 47 - #58	58	1	64.8	66.5	66	1.7	10	Snd Lvl	66.5	0.0	8	-8.0
Residence 48 - #59	59	1	65.1	66.8	66	1.7	10	Snd Lvl	66.8	0.0	8	-8.0
Residence 49 - #60	60	1	67.7	69.4	66	1.7	10	Snd Lvl	69.4	0.0	8	-8.0
Residence 50 - #61	61	1	63.4	65.1	66	1.7	10	----	65.1	0.0	8	-8.0
Residence 51 - #62	62	1	58.3	60.0	66	1.7	10	----	60.0	0.0	8	-8.0
Residence 52 - #63	63	1	63.4	65.1	66	1.7	10	----	65.1	0.0	8	-8.0
Residence 53 - #64	64	1	63.4	65.1	66	1.7	10	----	65.1	0.0	8	-8.0
Residence 54 - #65	65	1	67.2	68.9	66	1.7	10	Snd Lvl	68.9	0.0	8	-8.0

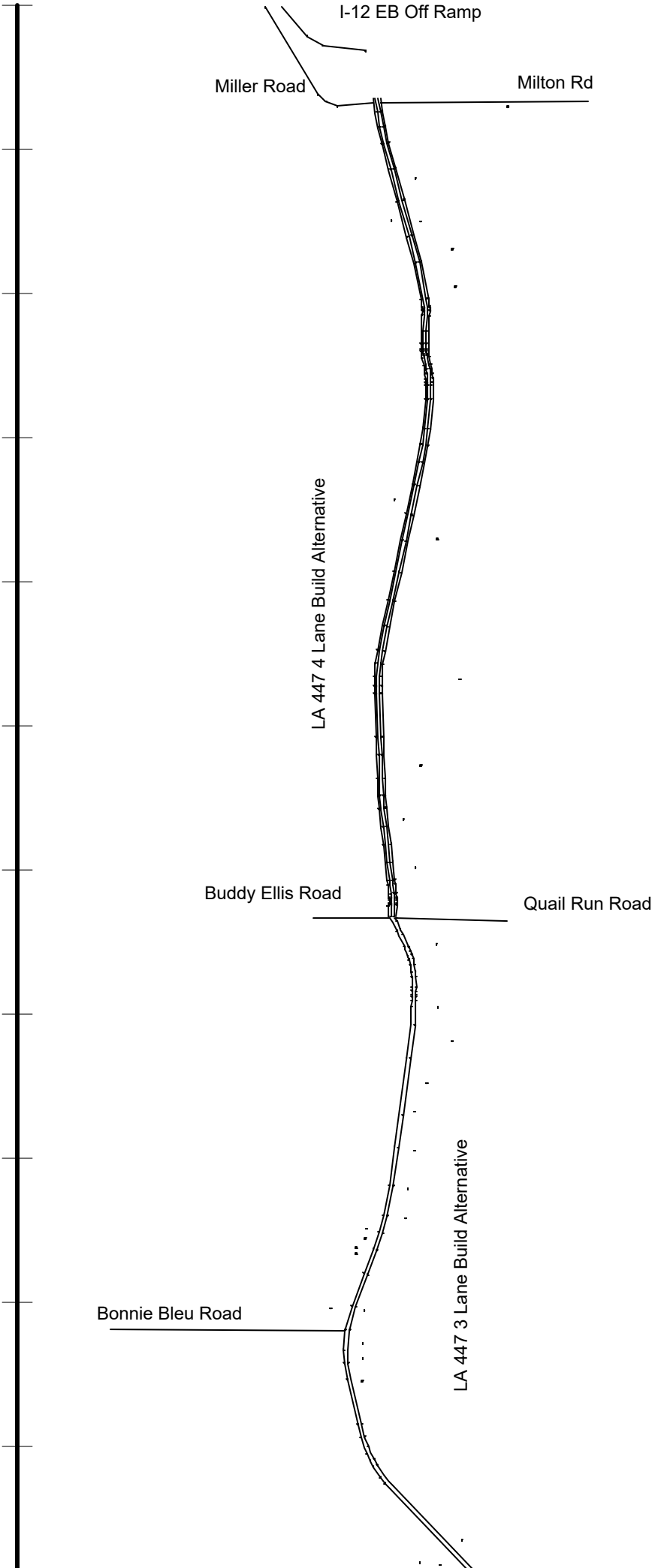
Residence 55 - #66	66	1	65.0	66.7	66	1.7	10	Snd Lvl	66.7	0.0	8	-8.0
Residence 56 - #67	67	1	64.9	66.7	66	1.8	10	Snd Lvl	66.7	0.0	8	-8.0
Residence 57 - #68	68	1	58.8	60.5	66	1.7	10	----	60.5	0.0	8	-8.0
Residence 58 - #69	69	1	58.8	60.5	66	1.7	10	----	60.5	0.0	8	-8.0
Residence 59 - #70	70	1	53.5	55.2	66	1.7	10	----	55.2	0.0	8	-8.0
Residence 60 - #71	71	1	60.5	62.3	66	1.8	10	----	62.3	0.0	8	-8.0
Residence 61 - #72	72	1	65.3	67.0	66	1.7	10	Snd Lvl	67.0	0.0	8	-8.0
Residence 62 - #73	73	1	65.0	66.8	66	1.8	10	Snd Lvl	66.8	0.0	8	-8.0
Residence 63 - #74	74	1	67.0	68.7	66	1.7	10	Snd Lvl	68.7	0.0	8	-8.0
Residence 64 - #75	75	1	63.1	64.9	66	1.8	10	----	64.9	0.0	8	-8.0
Residence 65 - #76	76	1	60.4	62.2	66	1.8	10	----	62.2	0.0	8	-8.0
Residence 66 - #77	77	1	59.3	61.0	66	1.7	10	----	61.0	0.0	8	-8.0
Fundemental Early Learning Center - #78	78	1	67.7	69.6	66	1.9	10	Snd Lvl	69.6	0.0	8	-8.0
Unnamed Business 2 - #79	79	1	67.1	68.9	71	1.8	10	----	68.9	0.0	8	-8.0
Residence 67 - #80	80	1	64.2	66.0	66	1.8	10	Snd Lvl	66.0	0.0	8	-8.0
Family RV Center - #81	81	1	68.3	70.0	71	1.7	10	----	70.0	0.0	8	-8.0
Bayou Self Car Wash - #82	82	1	64.8	66.5	71	1.7	10	----	66.5	0.0	8	-8.0
Chevron - #83	83	1	62.5	64.3	71	1.8	10	----	64.3	0.0	8	-8.0
Cook Portable Warehouses - #84	84	1	67.4	69.2	71	1.8	10	----	69.2	0.0	8	-8.0

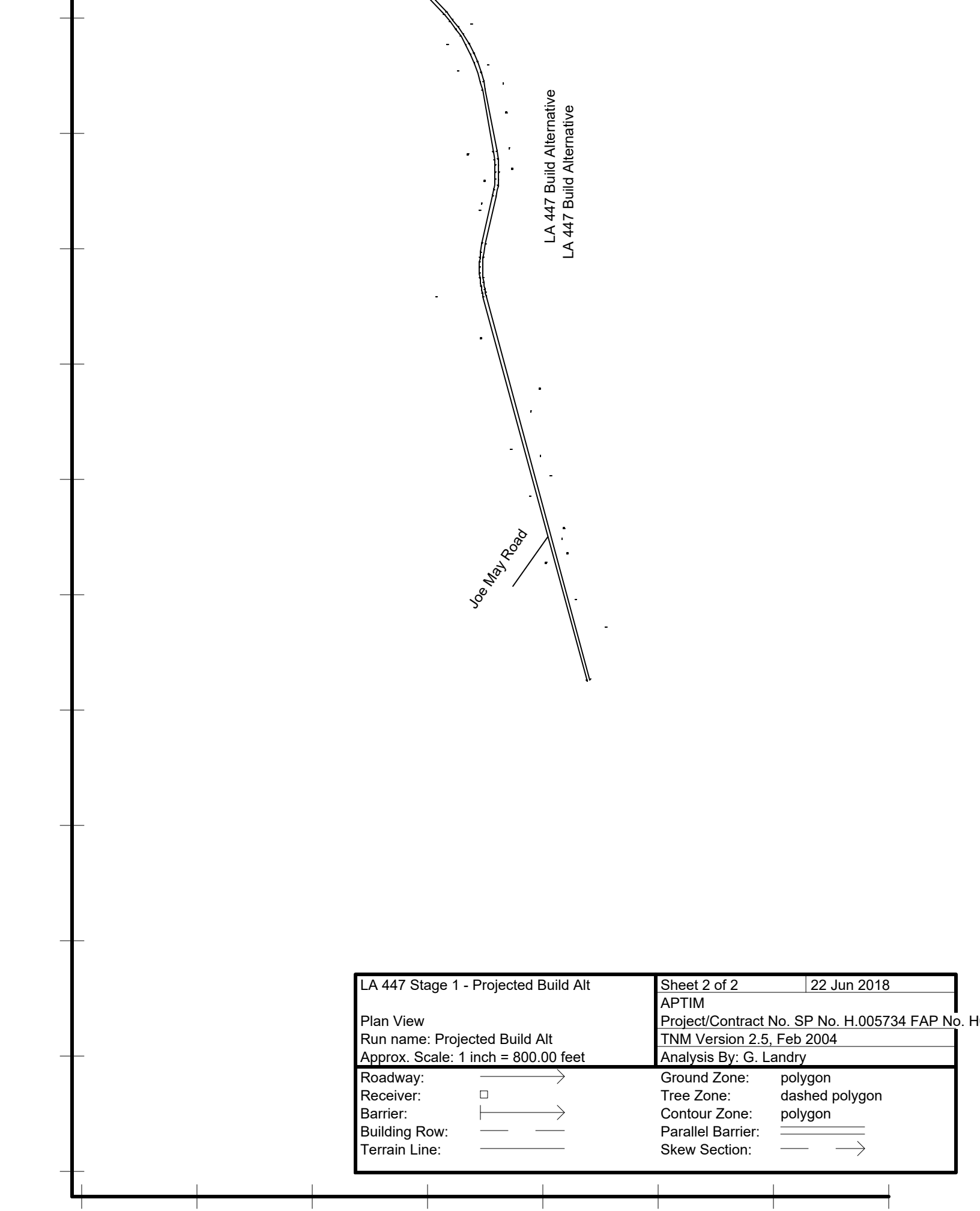
Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	84	0.0	0.0	0.0
All Impacted	33	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

APPENDIX G
TNM 2030 BUILD MODEL

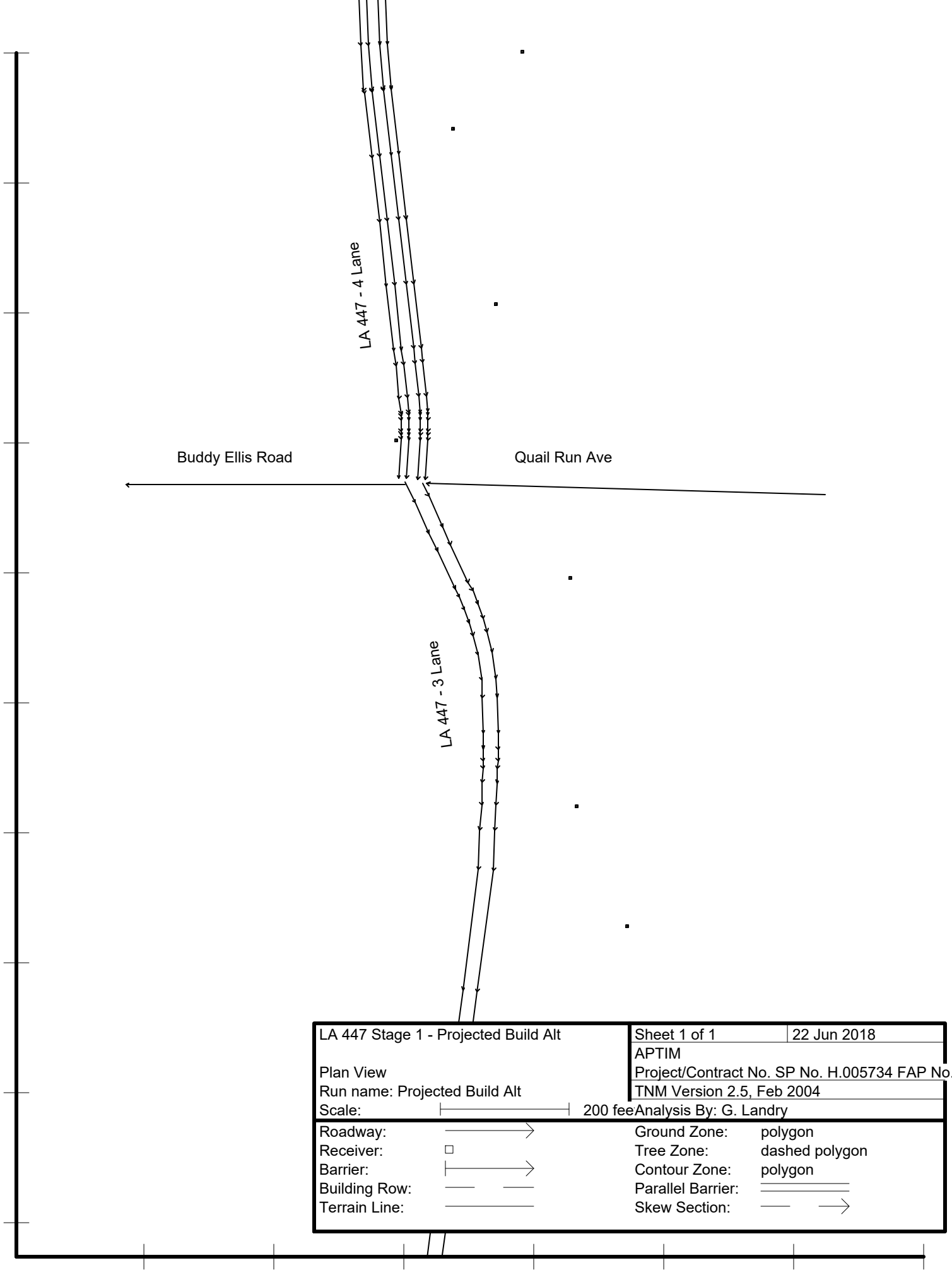
APPENDIX G-1
2030 BUILD MODEL PLAN VIEW


I-12 EB Off Ramp
Miller Road
Milton Road
4 Lane Section
LA 447
Buddy Ellis Road
Quail Run Ave.
Bonnie Bleu Road
LA 447
3 Lane Section
Joe May Road
LA 447 Stage 1 - Projected Build Alt
Plan View
Run name: Projected Build Alt
Scale: 1000 feet
Sheet 1 of 1
20 Jun 2018
APTIM
Project/Contract No. SP No. H.005734 FAP No. H
TNM Version 2.5, Feb 2004
Analysis By: G. Landry
Roadway:
Receiver:
Barrier:
Building Row:
Terrain Line:
Ground Zone: polygon
Tree Zone: dashed polygon
Contour Zone: polygon
Parallel Barrier:
Skew Section:
000 3426000 3427000 3428000 3429000 3430000 3431000 3432000 3433000 3434000 3435000 3436000 3437000 3438000


I-12 EB Off Ramp
Miller Road
Milton Rd
LA 447 4 Lane Build Alternative
Buddy Ellis Road
Quail Run Road
Bonnie Bleu Road
LA 447 3 Lane Build Alternative



LA 447 Stage 1 - Projected Build Alt		Sheet 2 of 2	22 Jun 2018
		APTIM	
Plan View		Project/Contract No. SP No. H.005734 FAP No. H	
Run name: Projected Build Alt		TNM Version 2.5, Feb 2004	
Approx. Scale: 1 inch = 800.00 feet		Analysis By: G. Landry	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	



LA 447 Stage 1 - Projected Build Alt		Sheet 1 of 1	22 Jun 2018
		APTIM	
Plan View		Project/Contract No. SP No. H.005734 FAP No. H	
Run name: Projected Build Alt		TNM Version 2.5, Feb 2004	
Scale:	200 fee	Analysis By: G. Landry	

Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

APPENDIX G-2
2030 BUILD MODEL ROADWAYS

APTIM	20 June 2018
G. Landry	TNM 2.5
INPUT: ROADWAYS	Average pavement type shall be used unless
PROJECT/CONTRACT:	SP No. H.005734 FAP No. H005734 a State highway agency substantiates the use
RUN:	LA 447 Stage 1 - Projected Build Alt of a different type with the approval of FHWA

Roadway		Points					Flow Control			Segment	
Name	Width	Name	No.	Coordinates (pavement) X	Y	Z	Control Device	Speed Constraint	Percent Vehicles Affected	Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Milton Rd	12.0	point193	193	3,430,301.0	715,471.6	0.00				Average	
		point194	194	3,429,149.0	715,465.7	0.00					
Quail Ridge Run	12.0	point199	199	3,429,847.2	710,923.8	0.00				Average	
		point200	200	3,429,233.2	710,939.9	0.00					
Joe May Rd	12.0	point202	202	3,430,434.0	703,602.8	0.00				Average	
		point203	203	3,430,185.8	703,263.1	0.00					
Bonnie Bleu Rd	12.0	point204	204	3,427,646.2	708,651.8	0.00				Average	
		point205	205	3,428,948.5	708,650.2	0.00					
Buddy Ellis Rd	12.0	point206	206	3,429,199.0	710,938.4	0.00				Average	
		point201	201	3,428,769.5	710,937.6	0.00					
Miller Rd	12.0	point207	207	3,429,104.0	715,463.8	0.00				Average	
		point195	195	3,428,902.0	715,444.8	0.00				Average	
		point196	196	3,428,839.2	715,476.2	0.00				Average	
		point197	197	3,428,796.0	715,510.8	0.00				Average	
		point198	198	3,428,503.0	715,996.6	0.00					
I-12 EB Off Ramp	12.0	point210	210	3,428,600.5	715,994.4	0.00				Average	
		point211	211	3,428,742.8	715,831.3	0.00				Average	
		point213	212	3,428,830.5	715,779.6	0.00				Average	
		point214	213	3,429,061.8	715,754.7	0.00				Average	
		point216	214	3,429,060.0	715,751.0	0.00					
3Ln-SB	12.0	point215	215	3,429,200.5	710,941.9	0.00				Average	
		point216	216	3,429,215.0	710,910.6	0.00				Average	
		point217	217	3,429,236.8	710,863.5	0.00				Average	
		point218	218	3,429,249.5	710,836.0	0.00				Average	
		point219	219	3,429,276.8	710,777.7	0.00				Average	

		point220	220	3,429,282.8	710,764.7	0.00				Average	
		point221	221	3,429,291.0	710,745.6	0.00				Average	
		point222	222	3,429,298.8	710,724.7	0.00				Average	
		point223	223	3,429,304.5	710,705.6	0.00				Average	
		point224	224	3,429,311.8	710,675.7	0.00				Average	
		point225	225	3,429,317.5	710,637.2	0.00				Average	
		point226	226	3,429,319.2	710,609.7	0.00				Average	
		point227	227	3,429,320.2	710,554.8	0.00				Average	
		point228	228	3,429,320.0	710,530.8	0.00				Average	
		point229	229	3,429,319.8	710,512.5	0.00				Average	
		point230	230	3,429,319.5	710,501.3	0.00				Average	
		point231	231	3,429,319.0	710,479.1	0.00				Average	
		point232	232	3,429,317.5	710,445.0	0.00				Average	
		point233	233	3,429,315.0	710,406.3	0.00				Average	
		point234	234	3,429,313.2	710,344.8	0.00				Average	
		point235	235	3,429,288.5	710,159.4	0.00				Average	
		point236	236	3,429,246.5	709,845.2	0.00				Average	
		point237	237	3,429,222.2	709,664.2	0.00				Average	
		point238	238	3,429,193.8	709,453.5	0.00				Average	
		point239	239	3,429,160.5	709,287.4	0.00				Average	
		point240	240	3,429,134.8	709,195.1	0.00				Average	
		point241	241	3,429,102.5	709,100.8	0.00				Average	
		point242	242	3,429,052.0	708,964.8	0.00				Average	
		point243	243	3,428,985.0	708,784.5	0.00				Average	
		point244	244	3,428,951.0	708,650.5	0.00				Average	
		point245	245	3,428,940.8	708,539.0	0.00				Average	
		point246	246	3,428,944.5	708,464.9	0.00				Average	
		point247	247	3,428,960.0	708,375.1	0.00				Average	
		point248	248	3,429,019.8	708,124.7	0.00				Average	
		point249	249	3,429,037.5	708,052.9	0.00				Average	
		point250	250	3,429,056.2	707,995.8	0.00				Average	
		point251	251	3,429,071.0	707,960.3	0.00				Average	
		point252	252	3,429,089.5	707,922.3	0.00				Average	
		point253	253	3,429,108.2	707,888.6	0.00				Average	
		point254	254	3,429,146.2	707,831.8	0.00				Average	
		point255	255	3,429,172.8	707,798.2	0.00				Average	
		point256	256	3,429,198.2	707,769.9	0.00				Average	
		point257	257	3,429,711.2	707,227.9	0.00				Average	
		point258	258	3,429,755.5	707,177.9	0.00				Average	

		point259	259	3,429,795.8	707,126.2	0.00				Average	
		point260	260	3,429,829.0	707,077.8	0.00				Average	
		point261	261	3,429,867.0	707,013.7	0.00				Average	
		point262	262	3,429,899.0	706,949.9	0.00				Average	
		point263	263	3,429,924.0	706,890.9	0.00				Average	
		point264	264	3,429,948.5	706,819.2	0.00				Average	
		point265	265	3,429,965.0	706,759.1	0.00				Average	
		point266	266	3,429,976.5	706,703.4	0.00				Average	
		point267	267	3,430,053.8	706,276.4	0.00				Average	
		point268	268	3,430,062.5	706,221.7	0.00				Average	
		point269	269	3,430,066.2	706,180.9	0.00				Average	
		point270	270	3,430,068.0	706,132.2	0.00				Average	
		point271	271	3,430,066.5	706,085.2	0.00				Average	
		point272	272	3,430,062.8	706,044.4	0.00				Average	
		point273	273	3,430,058.2	706,014.0	0.00				Average	
		point274	274	3,430,050.2	705,972.6	0.00				Average	
		point275	275	3,429,976.2	705,642.6	0.00				Average	
		point276	276	3,429,965.0	705,580.4	0.00				Average	
		point277	277	3,429,960.8	705,542.7	0.00				Average	
		point278	278	3,429,958.5	705,510.2	0.00				Average	
		point279	279	3,429,957.5	705,473.1	0.00				Average	
		point280	280	3,429,958.8	705,430.6	0.00				Average	
		point281	281	3,429,961.0	705,399.8	0.00				Average	
		point282	282	3,429,964.8	705,368.1	0.00				Average	
		point283	283	3,429,968.5	705,342.8	0.00				Average	
		point284	284	3,429,973.2	705,318.1	0.00				Average	
		point285	285	3,429,978.5	705,293.8	0.00				Average	
		point286	286	3,429,984.5	705,270.6	0.00				Average	
		point287	287	3,430,703.2	702,608.5	0.00					
3Ln-NB	12.0	point288	288	3,429,226.2	710,940.8	0.00				Average	
		point289	289	3,429,235.8	710,920.2	0.00				Average	
		point290	290	3,429,257.8	710,873.2	0.00				Average	
		point291	291	3,429,270.5	710,845.7	0.00				Average	
		point292	292	3,429,297.5	710,787.4	0.00				Average	
		point293	293	3,429,303.8	710,774.1	0.00				Average	
		point294	294	3,429,312.2	710,754.2	0.00				Average	
		point295	295	3,429,320.5	710,732.1	0.00				Average	
		point296	296	3,429,326.8	710,711.6	0.00				Average	
		point297	297	3,429,334.5	710,680.1	0.00				Average	

		point298	298	3,429,340.5	710,639.7	0.00				Average	
		point299	299	3,429,342.2	710,610.6	0.00				Average	
		point300	300	3,429,343.2	710,554.9	0.00				Average	
		point301	301	3,429,343.0	710,530.6	0.00				Average	
		point302	302	3,429,342.8	710,512.1	0.00				Average	
		point303	303	3,429,342.5	710,500.7	0.00				Average	
		point304	304	3,429,342.0	710,478.2	0.00				Average	
		point305	305	3,429,340.2	710,443.8	0.00				Average	
		point306	306	3,429,338.0	710,405.2	0.00				Average	
		point307	307	3,429,336.2	710,342.9	0.00				Average	
		point308	308	3,429,311.2	710,156.4	0.00				Average	
		point309	309	3,429,269.2	709,842.1	0.00				Average	
		point310	310	3,429,245.0	709,661.1	0.00				Average	
		point311	311	3,429,216.5	709,449.7	0.00				Average	
		point312	312	3,429,182.8	709,282.1	0.00				Average	
		point313	313	3,429,156.5	709,188.3	0.00				Average	
		point314	314	3,429,124.2	709,093.1	0.00				Average	
		point315	315	3,429,073.5	708,956.8	0.00				Average	
		point316	316	3,429,006.8	708,777.3	0.00				Average	
		point317	317	3,428,974.5	708,651.4	0.00				Average	
		point318	318	3,428,963.8	708,538.4	0.00				Average	
		point319	319	3,428,967.5	708,467.5	0.00				Average	
		point320	320	3,428,982.5	708,379.8	0.00				Average	
		point321	321	3,429,042.0	708,130.1	0.00				Average	
		point322	322	3,429,059.5	708,059.2	0.00				Average	
		point323	323	3,429,078.0	708,003.8	0.00				Average	
		point324	324	3,429,092.0	707,969.8	0.00				Average	
		point325	325	3,429,109.8	707,932.9	0.00				Average	
		point326	326	3,429,128.0	707,900.6	0.00				Average	
		point327	327	3,429,164.8	707,845.4	0.00				Average	
		point328	328	3,429,190.5	707,813.0	0.00				Average	
		point329	329	3,429,215.0	707,785.5	0.00				Average	
		point330	330	3,429,728.2	707,243.4	0.00				Average	
		point331	331	3,429,773.2	707,192.6	0.00				Average	
		point332	332	3,429,814.5	707,139.8	0.00				Average	
		point333	333	3,429,848.5	707,090.1	0.00				Average	
		point334	334	3,429,887.2	707,024.8	0.00				Average	
		point335	335	3,429,920.0	706,959.5	0.00				Average	
		point336	336	3,429,945.5	706,899.1	0.00				Average	

		point337	337	3,429,970.5	706,826.0	0.00				Average	
		point338	338	3,429,987.2	706,764.5	0.00				Average	
		point339	339	3,429,999.0	706,707.9	0.00				Average	
		point340	340	3,430,076.5	706,280.3	0.00				Average	
		point341	341	3,430,085.2	706,224.6	0.00				Average	
		point342	342	3,430,089.2	706,182.4	0.00				Average	
		point343	343	3,430,091.0	706,132.2	0.00				Average	
		point344	344	3,430,089.5	706,083.9	0.00				Average	
		point345	345	3,430,085.5	706,041.6	0.00				Average	
		point346	346	3,430,081.0	706,010.2	0.00				Average	
		point347	347	3,430,072.8	705,967.9	0.00				Average	
		point348	348	3,429,998.8	705,638.1	0.00				Average	
		point349	349	3,429,987.8	705,577.0	0.00				Average	
		point350	350	3,429,983.5	705,540.6	0.00				Average	
		point351	351	3,429,981.5	705,509.1	0.00				Average	
		point352	352	3,429,980.5	705,473.2	0.00				Average	
		point353	353	3,429,981.8	705,431.8	0.00				Average	
		point354	354	3,429,984.0	705,401.9	0.00				Average	
		point355	355	3,429,987.5	705,371.2	0.00				Average	
		point356	356	3,429,991.2	705,346.7	0.00				Average	
		point357	357	3,429,995.8	705,322.7	0.00				Average	
		point358	358	3,430,001.0	705,299.1	0.00				Average	
		point359	359	3,430,006.8	705,276.4	0.00				Average	
		point360	360	3,430,725.5	702,614.5	0.00					
4Ln-SB-IS	12.1	point361	361	3,429,114.5	715,487.6	0.00				Average	
		point362	362	3,429,126.8	715,410.7	0.00				Average	
		point363	363	3,429,142.8	715,327.0	0.00				Average	
		point364	364	3,429,163.8	715,234.5	0.00				Average	
		point365	365	3,429,201.5	715,092.5	0.00				Average	
		point366	366	3,429,249.8	714,916.9	0.00				Average	
		point367	367	3,429,303.8	714,719.1	0.00				Average	
		point368	368	3,429,342.5	714,574.3	0.00				Average	
		point369	369	3,429,383.0	714,371.8	0.00				Average	
		point370	370	3,429,388.2	714,328.3	0.00				Average	
		point371	371	3,429,388.5	714,322.6	0.00				Average	
		point372	372	3,429,388.8	714,311.8	0.00				Average	
		point373	373	3,429,388.8	714,306.3	0.00				Average	
		point374	374	3,429,388.0	714,280.6	0.00				Average	
		point375	375	3,429,383.0	714,194.7	0.00				Average	

		point376	376	3,429,382.5	714,123.1	0.00				Average	
		point377	377	3,429,382.2	714,094.1	0.00				Average	
		point378	378	3,429,382.8	714,081.5	0.00				Average	
		point379	379	3,429,383.8	714,069.9	0.00				Average	
		point380	380	3,429,385.8	714,057.3	0.00				Average	
		point381	381	3,429,388.0	714,046.7	0.00				Average	
		point382	382	3,429,396.8	714,006.1	0.00				Average	
		point383	383	3,429,400.5	713,983.1	0.00				Average	
		point384	384	3,429,403.8	713,956.8	0.00				Average	
		point385	385	3,429,405.8	713,930.1	0.00				Average	
		point386	386	3,429,406.8	713,909.8	0.00				Average	
		point387	387	3,429,407.5	713,894.1	0.00				Average	
		point388	388	3,429,407.5	713,815.1	0.00				Average	
		point389	389	3,429,391.2	713,654.3	0.00				Average	
		point390	390	3,429,377.8	713,564.7	0.00				Average	
		point391	391	3,429,359.2	713,468.3	0.00				Average	
		point392	392	3,429,332.2	713,340.4	0.00				Average	
		point393	393	3,429,297.8	713,178.1	0.00				Average	
		point394	394	3,429,267.2	713,033.8	0.00				Average	
		point395	395	3,429,230.5	712,860.1	0.00				Average	
		point396	396	3,429,196.8	712,701.6	0.00				Average	
		point397	397	3,429,166.8	712,559.1	0.00				Average	
		point398	398	3,429,138.8	712,422.6	0.00				Average	
		point399	399	3,429,129.0	712,349.7	0.00				Average	
		point400	400	3,429,123.5	712,278.6	0.00				Average	
		point401	401	3,429,122.2	712,223.4	0.00				Average	
		point402	402	3,429,123.0	712,182.1	0.00				Average	
		point403	403	3,429,131.2	711,939.9	0.00				Average	
		point404	404	3,429,134.8	711,841.4	0.00				Average	
		point405	405	3,429,139.2	711,711.4	0.00				Average	
		point406	406	3,429,143.0	711,614.6	0.00				Average	
		point407	407	3,429,148.5	711,545.4	0.00				Average	
		point408	408	3,429,148.8	711,542.5	0.00				Average	
		point409	409	3,429,160.8	711,443.3	0.00				Average	
		point410	410	3,429,172.0	711,344.0	0.00				Average	
		point411	411	3,429,183.2	711,244.6	0.00				Average	
		point412	412	3,429,194.8	711,145.2	0.00				Average	
		point413	413	3,429,197.2	711,123.1	0.00				Average	
		point414	414	3,429,203.0	711,071.8	0.00				Average	

		point415	415	3,429,205.0	711,048.2	0.00				Average	
		point416	416	3,429,205.2	711,044.3	0.00				Average	
		point417	417	3,429,205.5	711,036.8	0.00				Average	
		point418	418	3,429,205.5	711,019.7	0.00				Average	
		point419	419	3,429,205.2	711,014.2	0.00				Average	
		point420	420	3,429,205.0	711,006.9	0.00				Average	
		point421	421	3,429,202.0	710,947.2	0.00					
4Ln-SB-OS	12.1	point422	422	3,429,102.5	715,485.8	0.00				Average	
		point423	423	3,429,115.0	715,408.6	0.00				Average	
		point424	424	3,429,131.0	715,324.6	0.00				Average	
		point425	425	3,429,152.0	715,231.6	0.00				Average	
		point426	426	3,429,190.0	715,089.4	0.00				Average	
		point427	427	3,429,238.0	714,913.7	0.00				Average	
		point428	428	3,429,292.2	714,715.9	0.00				Average	
		point429	429	3,429,330.8	714,571.6	0.00				Average	
		point430	430	3,429,371.2	714,369.8	0.00				Average	
		point431	431	3,429,376.2	714,327.4	0.00				Average	
		point432	432	3,429,376.5	714,322.1	0.00				Average	
		point433	433	3,429,376.8	714,311.6	0.00				Average	
		point434	434	3,429,376.8	714,306.4	0.00				Average	
		point435	435	3,429,376.0	714,281.1	0.00				Average	
		point436	436	3,429,371.0	714,195.1	0.00				Average	
		point437	437	3,429,370.5	714,123.2	0.00				Average	
		point438	438	3,429,370.2	714,093.9	0.00				Average	
		point439	439	3,429,370.8	714,080.8	0.00				Average	
		point440	440	3,429,371.8	714,068.5	0.00				Average	
		point441	441	3,429,374.0	714,055.1	0.00				Average	
		point442	442	3,429,376.2	714,044.2	0.00				Average	
		point443	443	3,429,385.0	714,003.8	0.00				Average	
		point444	444	3,429,388.8	713,981.4	0.00				Average	
		point445	445	3,429,391.8	713,955.6	0.00				Average	
		point446	446	3,429,393.8	713,929.4	0.00				Average	
		point447	447	3,429,394.8	713,909.2	0.00				Average	
		point448	448	3,429,395.5	713,893.8	0.00				Average	
		point449	449	3,429,395.5	713,815.7	0.00				Average	
		point450	450	3,429,379.5	713,655.8	0.00				Average	
		point451	451	3,429,365.8	713,566.8	0.00				Average	
		point452	452	3,429,347.5	713,470.7	0.00				Average	
		point453	453	3,429,320.5	713,342.9	0.00				Average	

		point454	454	3,429,286.0	713,180.6	0.00				Average	
		point455	455	3,429,255.5	713,036.3	0.00				Average	
		point456	456	3,429,218.8	712,862.6	0.00				Average	
		point457	457	3,429,185.0	712,704.1	0.00				Average	
		point458	458	3,429,155.0	712,561.6	0.00				Average	
		point459	459	3,429,127.0	712,424.6	0.00				Average	
		point460	460	3,429,117.0	712,350.9	0.00				Average	
		point461	461	3,429,111.5	712,279.2	0.00				Average	
		point462	462	3,429,110.2	712,223.5	0.00				Average	
		point463	463	3,429,111.0	712,181.8	0.00				Average	
		point464	464	3,429,119.2	711,939.4	0.00				Average	
		point465	465	3,429,122.8	711,841.0	0.00				Average	
		point466	466	3,429,127.2	711,710.9	0.00				Average	
		point467	467	3,429,131.0	711,613.9	0.00				Average	
		point468	468	3,429,136.5	711,544.1	0.00				Average	
		point469	469	3,429,137.0	711,541.0	0.00				Average	
		point470	470	3,429,148.8	711,441.9	0.00				Average	
		point471	471	3,429,160.0	711,342.6	0.00				Average	
		point472	472	3,429,171.5	711,243.2	0.00				Average	
		point473	473	3,429,182.8	711,143.9	0.00				Average	
		point474	474	3,429,185.2	711,121.7	0.00				Average	
		point475	475	3,429,191.0	711,070.6	0.00				Average	
		point476	476	3,429,193.0	711,047.4	0.00				Average	
		point477	477	3,429,193.2	711,043.8	0.00				Average	
		point478	478	3,429,193.5	711,036.6	0.00				Average	
		point479	479	3,429,193.5	711,019.9	0.00				Average	
		point480	480	3,429,193.2	711,014.7	0.00				Average	
		point481	481	3,429,193.0	711,007.6	0.00				Average	
		point482	482	3,429,190.0	710,947.8	0.00					
4Ln-NB-IS	12.1	point483	483	3,429,132.2	715,490.5	0.00				Average	
		point484	484	3,429,144.5	715,413.8	0.00				Average	
		point485	485	3,429,160.5	715,330.7	0.00				Average	
		point486	486	3,429,181.2	715,238.8	0.00				Average	
		point487	487	3,429,218.8	715,097.2	0.00				Average	
		point488	488	3,429,267.0	714,921.6	0.00				Average	
		point489	489	3,429,321.2	714,723.8	0.00				Average	
		point490	490	3,429,360.0	714,578.4	0.00				Average	
		point491	491	3,429,400.8	714,374.6	0.00				Average	
		point492	492	3,429,406.2	714,329.8	0.00				Average	

		point493	493	3,429,406.5	714,323.2	0.00				Average	
		point494	494	3,429,406.8	714,312.1	0.00				Average	
		point495	495	3,429,406.8	714,306.1	0.00				Average	
		point496	496	3,429,406.0	714,279.8	0.00				Average	
		point497	497	3,429,401.0	714,194.1	0.00				Average	
		point498	498	3,429,400.5	714,123.0	0.00				Average	
		point499	499	3,429,400.2	714,094.2	0.00				Average	
		point500	500	3,429,400.8	714,082.6	0.00				Average	
		point501	501	3,429,401.5	714,072.1	0.00				Average	
		point502	502	3,429,403.5	714,060.6	0.00				Average	
		point503	503	3,429,405.5	714,050.6	0.00				Average	
		point504	504	3,429,414.5	714,009.4	0.00				Average	
		point505	505	3,429,418.2	713,985.6	0.00				Average	
		point506	506	3,429,421.8	713,958.6	0.00				Average	
		point507	507	3,429,423.8	713,931.2	0.00				Average	
		point508	508	3,429,424.8	713,910.6	0.00				Average	
		point509	509	3,429,425.5	713,894.6	0.00				Average	
		point510	510	3,429,425.5	713,814.2	0.00				Average	
		point511	511	3,429,409.2	713,652.1	0.00				Average	
		point512	512	3,429,395.5	713,561.6	0.00				Average	
		point513	513	3,429,377.0	713,464.8	0.00				Average	
		point514	514	3,429,349.8	713,336.6	0.00				Average	
		point515	515	3,429,315.2	713,174.3	0.00				Average	
		point516	516	3,429,284.8	713,030.1	0.00				Average	
		point517	517	3,429,248.0	712,856.4	0.00				Average	
		point518	518	3,429,214.5	712,697.9	0.00				Average	
		point519	519	3,429,184.2	712,555.5	0.00				Average	
		point520	520	3,429,156.5	712,419.6	0.00				Average	
		point521	521	3,429,146.8	712,347.8	0.00				Average	
		point522	522	3,429,141.5	712,277.8	0.00				Average	
		point523	523	3,429,140.2	712,223.4	0.00				Average	
		point524	524	3,429,141.0	712,182.6	0.00				Average	
		point525	525	3,429,149.2	711,940.5	0.00				Average	
		point526	526	3,429,152.8	711,842.1	0.00				Average	
		point527	527	3,429,157.2	711,712.0	0.00				Average	
		point528	528	3,429,161.0	711,615.7	0.00				Average	
		point529	529	3,429,166.2	711,547.4	0.00				Average	
		point530	530	3,429,166.8	711,544.8	0.00				Average	
		point531	531	3,429,178.5	711,445.4	0.00				Average	

		point532	532	3,429,190.0	711,346.0	0.00				Average	
		point533	533	3,429,201.2	711,246.6	0.00				Average	
		point534	534	3,429,212.5	711,147.3	0.00				Average	
		point535	535	3,429,215.0	711,125.1	0.00				Average	
		point536	536	3,429,221.0	711,073.6	0.00				Average	
		point537	537	3,429,223.0	711,049.3	0.00				Average	
		point538	538	3,429,223.2	711,045.0	0.00				Average	
		point539	539	3,429,223.5	711,037.1	0.00				Average	
		point540	540	3,429,223.5	711,019.5	0.00				Average	
		point541	541	3,429,223.2	711,013.6	0.00				Average	
		point542	542	3,429,223.0	711,006.1	0.00				Average	
		point543	543	3,429,219.8	710,946.2	0.00					
4Ln-NB-OS	12.1	point544	544	3,429,144.0	715,492.4	0.00				Average	
		point545	545	3,429,156.2	715,415.9	0.00				Average	
		point546	546	3,429,172.2	715,333.1	0.00				Average	
		point547	547	3,429,192.8	715,241.7	0.00				Average	
		point548	548	3,429,230.5	715,100.4	0.00				Average	
		point549	549	3,429,278.5	714,924.8	0.00				Average	
		point550	550	3,429,332.8	714,726.9	0.00				Average	
		point551	551	3,429,371.8	714,581.2	0.00				Average	
		point552	552	3,429,412.8	714,376.4	0.00				Average	
		point553	553	3,429,418.0	714,330.8	0.00				Average	
		point554	554	3,429,418.5	714,323.6	0.00				Average	
		point555	555	3,429,418.8	714,312.3	0.00				Average	
		point556	556	3,429,418.8	714,305.9	0.00				Average	
		point557	557	3,429,418.0	714,279.3	0.00				Average	
		point558	558	3,429,413.0	714,193.7	0.00				Average	
		point559	559	3,429,412.5	714,122.9	0.00				Average	
		point560	560	3,429,412.2	714,094.4	0.00				Average	
		point561	561	3,429,412.8	714,083.3	0.00				Average	
		point562	562	3,429,413.5	714,073.6	0.00				Average	
		point563	563	3,429,415.2	714,062.8	0.00				Average	
		point564	564	3,429,417.2	714,053.1	0.00				Average	
		point565	565	3,429,426.2	714,011.6	0.00				Average	
		point566	566	3,429,430.2	713,987.3	0.00				Average	
		point567	567	3,429,433.5	713,959.8	0.00				Average	
		point568	568	3,429,435.8	713,931.9	0.00				Average	
		point569	569	3,429,436.8	713,911.2	0.00				Average	
		point570	570	3,429,437.5	713,894.9	0.00				Average	

		point571	571	3,429,437.5	713,813.6	0.00				Average	
		point572	572	3,429,421.0	713,650.6	0.00				Average	
		point573	573	3,429,407.2	713,559.6	0.00				Average	
		point574	574	3,429,388.8	713,462.4	0.00				Average	
		point575	575	3,429,361.5	713,334.2	0.00				Average	
		point576	576	3,429,327.0	713,171.8	0.00				Average	
		point577	577	3,429,296.5	713,027.6	0.00				Average	
		point578	578	3,429,259.8	712,853.9	0.00				Average	
		point579	579	3,429,226.2	712,695.4	0.00				Average	
		point580	580	3,429,196.0	712,553.1	0.00				Average	
		point581	581	3,429,168.5	712,417.6	0.00				Average	
		point582	582	3,429,158.8	712,346.6	0.00				Average	
		point583	583	3,429,153.5	712,277.1	0.00				Average	
		point584	584	3,429,152.2	712,223.4	0.00				Average	
		point585	585	3,429,153.0	712,182.9	0.00				Average	
		point586	586	3,429,161.2	711,940.9	0.00				Average	
		point587	587	3,429,164.8	711,842.4	0.00				Average	
		point588	588	3,429,169.2	711,712.4	0.00				Average	
		point589	589	3,429,172.8	711,616.4	0.00				Average	
		point590	590	3,429,178.2	711,548.6	0.00				Average	
		point591	591	3,429,178.5	711,546.3	0.00				Average	
		point592	592	3,429,190.5	711,446.8	0.00				Average	
		point593	593	3,429,201.8	711,347.4	0.00				Average	
		point594	594	3,429,213.2	711,248.0	0.00				Average	
		point595	595	3,429,224.5	711,148.6	0.00				Average	
		point596	596	3,429,227.0	711,126.4	0.00				Average	
		point597	597	3,429,232.8	711,074.8	0.00				Average	
		point598	598	3,429,235.0	711,050.1	0.00				Average	
		point599	599	3,429,235.2	711,045.5	0.00				Average	
		point600	600	3,429,235.5	711,037.2	0.00				Average	
		point601	601	3,429,235.5	711,019.3	0.00				Average	
		point602	602	3,429,235.2	711,013.2	0.00				Average	
		point603	603	3,429,235.0	711,005.6	0.00				Average	
		point604	604	3,429,231.8	710,945.6	0.00					

APPENDIX G-3
2030 BUILD MODEL TRAFFIC

APTIM **20 June 2018**
G. Landry **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **SP No. H.005734 FAP No. H005734**
RUN: **LA 447 Stage 1 - Projected Build Alt**

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Milton Rd	point193	193	135	25	5	25	9	25	2	25	5	25
	point194	194										
Quail Ridge Run	point199	199	44	25	2	25	3	25	1	25	2	25
	point200	200										
Joe May Rd	point202	202	215	25	7	25	15	25	2	25	7	25
	point203	203										
Bonnie Bleu Rd	point204	204	289	25	10	25	20	25	3	25	10	25
	point205	205										
Buddy Ellis Rd	point206	206	250	25	9	25	17	25	3	25	9	25
	point201	201										
Miller Rd	point207	207	29	25	1	25	2	25	0	0	1	25
	point195	195	29	25	1	25	2	25	0	0	1	25
	point196	196	29	25	1	25	2	25	0	0	1	25
	point197	197	29	25	1	25	2	25	0	0	1	25
	point198	198										
I-12 EB Off Ramp	point210	210	1011	45	35	45	70	45	12	45	35	45
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	point512	512	488	45	17	45	34	45	6	45	17	45
	point513	513	488	45	17	45	34	45	6	45	17	45
	point514	514	488	45	17	45	34	45	6	45	17	45
	point515	515	488	45	17	45	34	45	6	45	17	45
	point516	516	488	45	17	45	34	45	6	45	17	45
	point517	517	488	45	17	45	34	45	6	45	17	45
	point518	518	488	45	17	45	34	45	6	45	17	45
	point519	519	488	45	17	45	34	45	6	45	17	45
	point520	520	488	45	17	45	34	45	6	45	17	45
	point521	521	488	45	17	45	34	45	6	45	17	45
	point522	522	488	45	17	45	34	45	6	45	17	45
	point523	523	488	45	17	45	34	45	6	45	17	45
	point524	524	488	45	17	45	34	45	6	45	17	45
	point525	525	488	45	17	45	34	45	6	45	17	45
	point526	526	488	45	17	45	34	45	6	45	17	45
	point527	527	488	45	17	45	34	45	6	45	17	45
	point528	528	488	45	17	45	34	45	6	45	17	45
	point529	529	488	45	17	45	34	45	6	45	17	45
	point530	530	488	45	17	45	34	45	6	45	17	45
	point531	531	488	45	17	45	34	45	6	45	17	45
	point532	532	488	45	17	45	34	45	6	45	17	45
	point533	533	488	45	17	45	34	45	6	45	17	45
	point534	534	488	45	17	45	34	45	6	45	17	45
	point535	535	488	45	17	45	34	45	6	45	17	45
	point536	536	488	45	17	45	34	45	6	45	17	45
	point537	537	488	45	17	45	34	45	6	45	17	45
	point538	538	488	45	17	45	34	45	6	45	17	45
	point539	539	488	45	17	45	34	45	6	45	17	45
	point540	540	488	45	17	45	34	45	6	45	17	45
	point541	541	488	45	17	45	34	45	6	45	17	45

	point542	542	488	45	17	45	34	45	6	45	17	45
	point543	543										
4Ln-NB-OS	point544	544	488	45	17	45	34	45	6	45	17	45
	point545	545	488	45	17	45	34	45	6	45	17	45
	point546	546	488	45	17	45	34	45	6	45	17	45
	point547	547	488	45	17	45	34	45	6	45	17	45
	point548	548	488	45	17	45	34	45	6	45	17	45
	point549	549	488	45	17	45	34	45	6	45	6	45
	point550	550	488	45	17	45	34	45	6	45	17	45
	point551	551	488	45	17	45	34	45	6	45	17	45
	point552	552	488	45	17	45	34	45	6	45	17	45
	point553	553	488	45	17	45	34	45	6	45	17	45
	point554	554	488	45	17	45	34	45	6	45	17	45
	point555	555	488	45	17	45	34	45	6	45	17	45
	point556	556	488	45	17	45	34	45	6	45	17	45
	point557	557	488	45	17	45	34	45	6	45	17	45
	point558	558	488	45	17	45	34	45	6	45	17	45
	point559	559	488	45	17	45	34	45	6	45	17	45
	point560	560	488	45	17	45	34	45	6	45	17	45
	point561	561	488	45	17	45	34	45	6	45	17	45
	point562	562	488	45	17	45	34	45	6	45	17	45
	point563	563	488	45	17	45	34	45	6	45	17	45
	point564	564	488	45	17	45	34	45	6	45	17	45
	point565	565	488	45	17	45	34	45	6	45	17	45
	point566	566	488	45	17	45	34	45	6	45	17	45
	point567	567	488	45	17	45	34	45	6	45	17	45
	point568	568	488	45	17	45	34	45	6	45	17	45
	point569	569	488	45	17	45	34	45	6	45	17	45
	point570	570	488	45	17	45	34	45	6	45	17	45
	point571	571	488	45	17	45	34	45	6	45	17	45
	point572	572	488	45	17	45	34	45	6	45	17	45
	point573	573	488	45	17	45	34	45	6	45	17	45
	point574	574	488	45	17	45	34	45	6	45	17	45
	point575	575	488	45	17	45	34	45	6	45	17	45
	point576	576	488	45	17	45	34	45	6	45	17	45
	point577	577	488	45	17	45	34	45	6	45	17	45

	point578	578	488	45	17	45	34	45	6	45	17	45
	point579	579	488	45	17	45	34	45	6	45	17	45
	point580	580	488	45	17	45	34	45	6	45	17	45
	point581	581	488	45	17	45	34	45	6	45	17	45
	point582	582	488	45	17	45	34	45	6	45	17	45
	point583	583	488	45	17	45	34	45	6	45	17	45
	point584	584	488	45	17	45	34	45	6	45	17	45
	point585	585	488	45	17	45	34	45	6	45	17	45
	point586	586	488	45	17	45	34	45	6	45	17	45
	point587	587	488	45	17	45	34	45	6	45	17	45
	point588	588	488	45	17	45	34	45	6	45	17	45
	point589	589	488	45	17	45	34	45	6	45	17	45
	point590	590	488	45	17	45	34	45	6	45	17	45
	point591	591	488	45	17	45	34	45	6	45	17	45
	point592	592	488	45	17	45	34	45	6	45	17	45
	point593	593	488	45	17	45	34	45	6	45	17	45
	point594	594	488	45	17	45	34	45	6	45	17	45
	point595	595	488	45	17	45	34	45	6	45	17	45
	point596	596	488	45	17	45	34	45	6	45	17	45
	point597	597	488	45	17	45	34	45	6	45	17	45
	point598	598	488	45	17	45	34	45	6	45	17	45
	point599	599	488	45	17	45	34	45	6	45	17	45
	point600	600	488	45	17	45	34	45	6	45	17	45
	point601	601	488	45	17	45	34	45	6	45	17	45
	point602	602	488	45	17	45	34	45	6	45	17	45
	point603	603	488	45	17	45	34	45	6	45	17	45
	point604	604										

APPENDIX G-4
2030 BUILD MODEL RECEIVERS

APTIM 22 June 2018
G. Landry TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Projected Build Alt

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
Miller Road - Cal. Pt. 09&14 - #1	85	1	3,428,614.8	715,789.1	5.00	5.00	62.90	66	10.0	8.0	Y
Milton Road - Cal. Pt. 10&13 - #2	86	1	3,429,850.5	715,441.7	5.00	5.00	60.00	66	10.0	8.0	Y
Residence 1 - #3	87	1	3,430,836.0	702,979.4	5.00	5.00	56.90	66	10.0	8.0	Y
Fire Station - #4	88	1	3,430,624.5	703,171.9	5.00	5.00	68.70	71	10.0	8.0	Y
Church1 - #5	89	1	3,430,418.0	703,427.5	5.00	5.00	66.00	66	10.0	8.0	Y
Residence 2 - #6	90	1	3,430,566.5	703,493.2	5.00	5.00	64.90	66	10.0	8.0	Y
Residence 3 - #7	91	1	3,430,530.8	703,592.7	5.00	5.00	65.90	66	10.0	8.0	Y
Residence 4 - #8	92	1	3,430,543.2	703,667.9	5.00	5.00	62.90	66	10.0	8.0	Y
Residence 5 - #9	93	1	3,430,507.0	703,796.2	5.00	5.00	62.90	66	10.0	8.0	Y
Cemetery - #10	94	1	3,430,309.2	703,887.6	5.00	5.00	68.00	66	10.0	8.0	Y
Sibleys Grocery - #11	95	1	3,430,452.0	704,029.4	5.00	5.00	62.30	71	10.0	8.0	Y
Residence 6 - #12	96	1	3,430,379.2	704,166.4	5.00	5.00	65.40	66	10.0	8.0	Y
Residence 7 - #13	97	1	3,430,176.8	704,212.6	5.00	5.00	63.20	66	10.0	8.0	Y
Residence 8 - #14	98	1	3,430,313.2	704,382.8	5.00	5.00	66.30	66	10.0	8.0	Y
Residence 9 - #15	99	1	3,429,904.8	704,372.9	5.00	5.00	54.00	66	10.0	8.0	Y
Residence 10 - #16	100	1	3,430,312.2	704,476.9	5.00	5.00	63.90	66	10.0	8.0	Y
Residence 11 - #17	101	1	3,430,376.0	704,636.0	5.00	5.00	58.00	66	10.0	8.0	Y
Residence 12 - #18	102	1	3,430,005.2	704,703.8	5.00	5.00	61.10	66	10.0	8.0	Y
Residence 13 - #19	103	1	3,429,997.8	704,854.6	5.00	5.00	63.60	66	10.0	8.0	Y
Residence 14 - #20	104	1	3,429,967.0	704,984.1	5.00	5.00	64.10	66	10.0	8.0	Y
Residence 15 - #21	105	1	3,430,214.5	705,063.9	5.00	5.00	60.60	66	10.0	8.0	Y
Residence 16 - #22	106	1	3,429,658.5	705,272.8	5.00	5.00	53.70	66	10.0	8.0	Y

Richard Price Contracting Co - #23	107	1	3,429,790.2	705,671.2	5.00	5.00	58.20	71	10.0	8.0	Y
Residence 17 - #24	108	1	3,429,960.0	705,871.7	5.00	5.00	65.70	66	10.0	8.0	Y
Residence 18 - #25	109	1	3,429,971.2	705,919.2	5.00	5.00	65.80	66	10.0	8.0	Y
Residence 19 - #26	110	1	3,430,181.2	706,020.9	5.00	5.00	63.00	66	10.0	8.0	Y
Residence 20 - #27	111	1	3,429,978.8	706,029.6	5.00	5.00	64.30	66	10.0	8.0	Y
Residence 21 - #28	112	1	3,429,992.0	706,075.8	5.00	5.00	65.00	66	10.0	8.0	Y
Residence 22 - #29	113	1	3,429,995.5	706,128.8	5.00	5.00	65.10	66	10.0	8.0	Y
Residence 23 - #30	114	1	3,430,183.0	706,160.6	5.00	5.00	63.30	66	10.0	8.0	Y
Residence 24 - #31	115	1	3,429,877.0	706,260.8	5.00	5.00	58.50	66	10.0	8.0	Y
Residence 25 - #32	116	1	3,430,162.0	706,302.3	5.00	5.00	64.00	66	10.0	8.0	Y
Residence 26 - #33	117	1	3,430,143.0	706,550.9	5.00	5.00	62.20	66	10.0	8.0	Y
Livingston Head Start - #34	118	1	3,429,905.8	706,571.6	5.00	5.00	63.00	66	10.0	8.0	Y
Dollar General - #35	119	1	3,429,809.2	706,839.9	5.00	5.00	61.30	71	10.0	8.0	Y
Residence 27 - #36	120	1	3,430,122.0	706,749.6	5.00	5.00	61.20	66	10.0	8.0	Y
Residence 28 - #37	121	1	3,430,016.8	706,879.7	5.00	5.00	66.70	66	10.0	8.0	Y
Unnamed Business 1 - #38	122	1	3,429,735.0	707,022.2	5.00	5.00	62.60	71	10.0	8.0	Y
Residence 29 - #39	123	1	3,429,903.2	707,164.3	5.00	5.00	64.20	66	10.0	8.0	Y
Residence 30 - #40	124	1	3,429,655.2	707,154.9	5.00	5.00	63.80	66	10.0	8.0	Y
Residence 31 - #41	125	1	3,429,837.5	707,299.1	5.00	5.00	62.30	66	10.0	8.0	Y
Residence 32 - #42	126	1	3,429,475.0	707,345.8	5.00	5.00	63.80	66	10.0	8.0	Y
Residence 33 - #43	127	1	3,429,364.0	707,360.0	5.00	5.00	59.50	66	10.0	8.0	Y
Residence 34 - #44	128	1	3,429,597.0	707,486.1	5.00	5.00	65.40	66	10.0	8.0	Y
Residence 35 - #45	129	1	3,429,271.0	707,480.2	5.00	5.00	60.10	66	10.0	8.0	Y
Residence 36 - #46	130	1	3,428,482.0	708,081.3	5.00	5.00	50.30	66	10.0	8.0	Y
Residence 37 - #47	131	1	3,429,055.0	708,304.7	5.00	5.00	67.50	66	10.0	8.0	Y
Residence 38 - #48	132	1	3,429,043.2	708,369.3	5.00	5.00	66.90	66	10.0	8.0	Y
Residence 39 - #49	133	1	3,429,048.2	708,491.8	5.00	5.00	64.50	66	10.0	8.0	Y
Residence 40 - #50	134	1	3,429,046.8	708,575.1	5.00	5.00	64.80	66	10.0	8.0	Y
Residence 41 - #51	135	1	3,429,057.0	708,759.0	5.00	5.00	68.10	66	10.0	8.0	Y
Best Stop Quick Mart #3 - #52	136	1	3,428,868.5	708,774.2	5.00	5.00	63.20	71	10.0	8.0	Y
Residence 42 - #53	137	1	3,429,011.2	709,076.1	5.00	5.00	65.40	66	10.0	8.0	Y
Residence 43 - #54	138	1	3,429,010.8	709,108.4	5.00	5.00	64.40	66	10.0	8.0	Y
Residence 44 - #55	139	1	3,429,059.8	709,161.6	5.00	5.00	67.30	66	10.0	8.0	Y
Residence 45 - #56	140	1	3,429,067.8	709,213.6	5.00	5.00	66.30	66	10.0	8.0	Y
Residence 46 - #57	141	1	3,429,283.0	709,270.8	5.00	5.00	63.50	66	10.0	8.0	Y
Residence 47 - #58	142	1	3,429,298.5	709,433.2	5.00	5.00	64.80	66	10.0	8.0	Y

Residence 48 - #59	143	1	3,429,333.8	709,649.4	5.00	5.00	65.10	66	10.0	8.0	Y
Residence 49 - #60	144	1	3,429,332.8	709,862.6	5.00	5.00	67.70	66	10.0	8.0	Y
Residence 50 - #61	145	1	3,429,403.0	710,024.3	5.00	5.00	63.40	66	10.0	8.0	Y
Residence 51 - #62	146	1	3,429,542.0	710,257.9	5.00	5.00	58.30	66	10.0	8.0	Y
Residence 52 - #63	147	1	3,429,463.5	710,442.0	5.00	5.00	63.40	66	10.0	8.0	Y
Residence 53 - #64	148	1	3,429,455.2	710,794.5	5.00	5.00	63.40	66	10.0	8.0	Y
Residence 54 - #65	149	1	3,429,185.8	711,006.9	5.00	5.00	67.20	66	10.0	8.0	Y
Residence 55 - #66	150	1	3,429,339.8	711,217.0	5.00	5.00	65.00	66	10.0	8.0	Y
Residence 56 - #67	151	1	3,429,273.5	711,485.8	5.00	5.00	64.90	66	10.0	8.0	Y
Residence 57 - #68	152	1	3,429,380.5	711,604.8	5.00	5.00	58.80	66	10.0	8.0	Y
Residence 58 - #69	153	1	3,429,368.8	711,786.0	5.00	5.00	58.80	66	10.0	8.0	Y
Residence 59 - #70	154	1	3,429,586.5	712,265.1	5.00	5.00	53.50	66	10.0	8.0	Y
Residence 60 - #71	155	1	3,429,461.5	713,041.4	5.00	5.00	60.50	66	10.0	8.0	Y
Residence 61 - #72	156	1	3,429,224.0	713,260.7	5.00	5.00	65.30	66	10.0	8.0	Y
Residence 62 - #73	157	1	3,429,272.0	713,505.4	5.00	5.00	65.00	66	10.0	8.0	Y
Residence 63 - #74	158	1	3,429,324.0	713,713.8	5.00	5.00	67.00	66	10.0	8.0	Y
Residence 64 - #75	159	1	3,429,539.8	714,221.5	5.00	5.00	63.10	66	10.0	8.0	Y
Residence 65 - #76	160	1	3,429,560.5	714,444.7	5.00	5.00	60.40	66	10.0	8.0	Y
Residence 66 - #77	161	1	3,429,544.2	714,652.1	5.00	5.00	59.30	66	10.0	8.0	Y
Fundemental Early Learning Center - #78	162	1	3,429,366.2	714,807.1	5.00	5.00	67.70	66	10.0	8.0	Y
Unnamed Business 2 - #79	163	1	3,429,205.2	714,809.8	5.00	5.00	67.10	71	10.0	8.0	Y
Residence 67 - #80	164	1	3,429,372.0	714,938.1	5.00	5.00	64.20	66	10.0	8.0	Y
Family RV Center - #81	165	1	3,429,164.5	714,989.4	5.00	5.00	68.30	71	10.0	8.0	Y
Bayou Self Car Wash - #82	166	1	3,429,340.8	715,044.0	5.00	5.00	64.80	71	10.0	8.0	Y
Chevron - #83	167	1	3,429,039.0	715,173.5	5.00	5.00	62.50	71	10.0	8.0	Y
Cook Portable Warehouses - #84	168	1	3,429,262.2	715,207.1	5.00	5.00	67.40	71	10.0	8.0	Y

APPENDIX G-5
2030 BUILD MODEL PREDICTED SOUND LEVEL

APTIM 20 June 2018
G. Landry TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SP No. H.005734 FAP No. H005734
RUN: LA 447 Stage 1 - Projected Build Alt
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Increase over existing Crit'n Sub'l Inc	With Barrier Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Noise Reduction Goal	Noise Reduction Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
Miller Road - Cal. Pt. 09&14 - #1	85	1	62.9	63.9	66	1.0	10	----	63.9	0.0	8	-8.0
Milton Road - Cal. Pt. 10&13 - #2	86	1	60.0	60.2	66	0.2	10	----	60.2	0.0	8	-8.0
Residence 1 - #3	87	1	56.9	59.7	66	2.8	10	----	59.7	0.0	8	-8.0
Fire Station - #4	88	1	68.7	70.4	71	1.7	10	----	70.4	0.0	8	-8.0
Church1 - #5	89	1	66.0	68.4	66	2.4	10	Snd Lvl	68.4	0.0	8	-8.0
Residence 2 - #6	90	1	64.9	66.6	66	1.7	10	Snd Lvl	66.6	0.0	8	-8.0
Residence 3 - #7	91	1	65.9	67.6	66	1.7	10	Snd Lvl	67.6	0.0	8	-8.0
Residence 4 - #8	92	1	62.9	64.6	66	1.7	10	----	64.6	0.0	8	-8.0
Residence 5 - #9	93	1	62.9	64.6	66	1.7	10	----	64.6	0.0	8	-8.0
Cemetery - #10	94	1	68.0	70.5	66	2.5	10	Snd Lvl	70.5	0.0	8	-8.0
Sibleys Grocery - #11	95	1	62.3	64.0	71	1.7	10	----	64.0	0.0	8	-8.0
Residence 6 - #12	96	1	65.4	67.3	66	1.9	10	Snd Lvl	67.3	0.0	8	-8.0
Residence 7 - #13	97	1	63.2	65.2	66	2.0	10	----	65.2	0.0	8	-8.0
Residence 8 - #14	98	1	66.3	68.2	66	1.9	10	Snd Lvl	68.2	0.0	8	-8.0
Residence 9 - #15	99	1	54.0	56.7	66	2.7	10	----	56.7	0.0	8	-8.0
Residence 10 - #16	100	1	63.9	65.5	66	1.6	10	----	65.5	0.0	8	-8.0
Residence 11 - #17	101	1	58.0	60.6	66	2.6	10	----	60.6	0.0	8	-8.0
Residence 12 - #18	102	1	61.1	62.7	66	1.6	10	----	62.7	0.0	8	-8.0
Residence 13 - #19	103	1	63.6	64.8	66	1.2	10	----	64.8	0.0	8	-8.0
Residence 14 - #20	104	1	64.1	65.3	66	1.2	10	----	65.3	0.0	8	-8.0
Residence 15 - #21	105	1	60.6	62.0	66	1.4	10	----	62.0	0.0	8	-8.0
Residence 16 - #22	106	1	53.7	56.2	66	2.5	10	----	56.2	0.0	8	-8.0
Richard Price Contracting Co - #23	107	1	58.2	60.4	71	2.2	10	----	60.4	0.0	8	-8.0
Residence 17 - #24	108	1	65.7	67.8	66	2.1	10	Snd Lvl	67.8	0.0	8	-8.0

Residence 18 - #25	109	1	65.8	67.8	66	2.0	10	Snd Lvl	67.8	0.0	8	-8.0
Residence 19 - #26	110	1	63.0	64.7	66	1.7	10	----	64.7	0.0	8	-8.0
Residence 20 - #27	111	1	64.3	66.2	66	1.9	10	Snd Lvl	66.2	0.0	8	-8.0
Residence 21 - #28	112	1	65.0	67.0	66	2.0	10	Snd Lvl	67.0	0.0	8	-8.0
Residence 22 - #29	113	1	65.1	67.1	66	2.0	10	Snd Lvl	67.1	0.0	8	-8.0
Residence 23 - #30	114	1	63.3	65.1	66	1.8	10	----	65.1	0.0	8	-8.0
Residence 24 - #31	115	1	58.5	61.2	66	2.7	10	----	61.2	0.0	8	-8.0
Residence 25 - #32	116	1	64.0	65.8	66	1.8	10	----	65.8	0.0	8	-8.0
Residence 26 - #33	117	1	62.2	64.0	66	1.8	10	----	64.0	0.0	8	-8.0
Livingston Head Start - #34	118	1	63.0	65.0	66	2.0	10	----	65.0	0.0	8	-8.0
Dollar General - #35	119	1	61.3	63.1	71	1.8	10	----	63.1	0.0	8	-8.0
Residence 27 - #36	120	1	61.2	63.0	66	1.8	10	----	63.0	0.0	8	-8.0
Residence 28 - #37	121	1	66.7	68.7	66	2.0	10	Snd Lvl	68.7	0.0	8	-8.0
Unnamed Business 1 - #38	122	1	62.6	63.9	71	1.3	10	----	63.9	0.0	8	-8.0
Residence 29 - #39	123	1	64.2	65.8	66	1.6	10	----	65.8	0.0	8	-8.0
Residence 30 - #40	124	1	63.8	65.3	66	1.5	10	----	65.3	0.0	8	-8.0
Residence 31 - #41	125	1	62.3	63.4	66	1.1	10	----	63.4	0.0	8	-8.0
Residence 32 - #42	126	1	63.8	65.2	66	1.4	10	----	65.2	0.0	8	-8.0
Residence 33 - #43	127	1	59.5	61.5	66	2.0	10	----	61.5	0.0	8	-8.0
Residence 34 - #44	128	1	65.4	67.2	66	1.8	10	Snd Lvl	67.2	0.0	8	-8.0
Residence 35 - #45	129	1	60.1	62.2	66	2.1	10	----	62.2	0.0	8	-8.0
Residence 36 - #46	130	1	50.3	52.6	66	2.3	10	----	52.6	0.0	8	-8.0
Residence 37 - #47	131	1	67.5	69.4	66	1.9	10	Snd Lvl	69.4	0.0	8	-8.0
Residence 38 - #48	132	1	66.9	68.9	66	2.0	10	Snd Lvl	68.9	0.0	8	-8.0
Residence 39 - #49	133	1	64.5	66.2	66	1.7	10	Snd Lvl	66.2	0.0	8	-8.0
Residence 40 - #50	134	1	64.8	66.6	66	1.8	10	Snd Lvl	66.6	0.0	8	-8.0
Residence 41 - #51	135	1	68.1	70.3	66	2.2	10	Snd Lvl	70.3	0.0	8	-8.0
Best Stop Quick Mart #3 - #52	136	1	63.2	64.9	71	1.7	10	----	64.9	0.0	8	-8.0
Residence 42 - #53	137	1	65.4	67.4	66	2.0	10	Snd Lvl	67.4	0.0	8	-8.0
Residence 43 - #54	138	1	64.4	66.2	66	1.8	10	Snd Lvl	66.2	0.0	8	-8.0
Residence 44 - #55	139	1	67.3	69.3	66	2.0	10	Snd Lvl	69.3	0.0	8	-8.0
Residence 45 - #56	140	1	66.3	68.2	66	1.9	10	Snd Lvl	68.2	0.0	8	-8.0
Residence 46 - #57	141	1	63.5	65.1	66	1.6	10	----	65.1	0.0	8	-8.0
Residence 47 - #58	142	1	64.8	66.6	66	1.8	10	Snd Lvl	66.6	0.0	8	-8.0
Residence 48 - #59	143	1	65.1	66.2	66	1.1	10	Snd Lvl	66.2	0.0	8	-8.0
Residence 49 - #60	144	1	67.7	69.3	66	1.6	10	Snd Lvl	69.3	0.0	8	-8.0
Residence 50 - #61	145	1	63.4	64.8	66	1.4	10	----	64.8	0.0	8	-8.0
Residence 51 - #62	146	1	58.3	60.9	66	2.6	10	----	60.9	0.0	8	-8.0
Residence 52 - #63	147	1	63.4	64.0	66	0.6	10	----	64.0	0.0	8	-8.0
Residence 53 - #64	148	1	63.4	62.9	66	-0.5	10	----	62.9	0.0	8	-8.0
Residence 54 - #65	149	1	67.2	77.5	66	10.3	10	Both	77.5	0.0	8	-8.0

Residence 55 - #66	150	1	65.0	65.0	66	0.0	10	----	65.0	0.0	8	-8.0
Residence 56 - #67	151	1	64.9	67.1	66	2.2	10	Snd Lvl	67.1	0.0	8	-8.0
Residence 57 - #68	152	1	58.8	61.5	66	2.7	10	----	61.5	0.0	8	-8.0
Residence 58 - #69	153	1	58.8	61.6	66	2.8	10	----	61.6	0.0	8	-8.0
Residence 59 - #70	154	1	53.5	56.0	66	2.5	10	----	56.0	0.0	8	-8.0
Residence 60 - #71	155	1	60.5	63.3	66	2.8	10	----	63.3	0.0	8	-8.0
Residence 61 - #72	156	1	65.3	67.7	66	2.4	10	Snd Lvl	67.7	0.0	8	-8.0
Residence 62 - #73	157	1	65.0	67.5	66	2.5	10	Snd Lvl	67.5	0.0	8	-8.0
Residence 63 - #74	158	1	67.0	69.3	66	2.3	10	Snd Lvl	69.3	0.0	8	-8.0
Residence 64 - #75	159	1	63.1	65.0	66	1.9	10	----	65.0	0.0	8	-8.0
Residence 65 - #76	160	1	60.4	63.5	66	3.1	10	----	63.5	0.0	8	-8.0
Residence 66 - #77	161	1	59.3	62.3	66	3.0	10	----	62.3	0.0	8	-8.0
Fundemental Early Learning Center - #78	162	1	67.7	70.5	66	2.8	10	Snd Lvl	70.5	0.0	8	-8.0
Unnamed Business 2 - #79	163	1	67.1	69.7	71	2.6	10	----	69.7	0.0	8	-8.0
Residence 67 - #80	164	1	64.2	66.7	66	2.5	10	Snd Lvl	66.7	0.0	8	-8.0
Family RV Center - #81	165	1	68.3	70.9	71	2.6	10	----	70.9	0.0	8	-8.0
Bayou Self Car Wash - #82	166	1	64.8	66.7	71	1.9	10	----	66.7	0.0	8	-8.0
Chevron - #83	167	1	62.5	64.5	71	2.0	10	----	64.5	0.0	8	-8.0
Cook Portable Warehouses - #84	168	1	67.4	69.5	71	2.1	10	----	69.5	0.0	8	-8.0

Dwelling Units	**# DUs**	**Noise Reduction**		
		Min	**Avg**	**Max**
		dB	**dB**	**dB**
All Selected	84	0.0	0.0	0.0
All Impacted	32	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0