

APPENDIX B

NOISE STUDY

March 22, 2023

Project No. ACE157-001

ace environmental

Mr. José A. Batlle Montalvo, PE
José Batlle & Associates CSP
65 Jose Martí, Hato Rey,
San Juan, PR 00917-3109

Via E-mail (jobatlle@jabapr.com)

Re: Addendum to Noise Study, Improvements to Intersection PR-2, PR2R (Post and San Juan Street just at the entrance to RUM Entrance, La Vita, PR-2 Km.153.90, Mayaguez, Puerto Rico [AC-200241 P000002441 MP-2 (66)].

Dear Engineer Batlle,

As per your request and based on the information provided by the Highway and Transportation Authority (ACT), and José Batlle & Associates, CSP (JBA), ACE supplemented the environmental sound study dated November 22, 2017, to include a new alternative (Alternative IA (Rev. 1) to the alignment of the proposed project. This addendum report summarizes the results of the environmental noise study in support of Alternative IA of the above referenced project.

Figure 1 (Site Location Map) in Attachment A depicts the Project location. The environmental noise study and its results are based on the proposed Project drawings provided by José Batlle & Associates CSP, Traffic Impact Study¹ and field data collected by ACE Environmental, Inc.

PROJECT DESCRIPTION

The Puerto Rico Highway and Transportation Authority (PRHTA), proposes the conversion to expressway standards of highway PR-2 from its intersection with San Juan Street and entrance to UPR Mayagüez Campus to Highway PR-2, including the study and implementation of geometrical and operational improvements.

¹ PLC Traffic Consulting Engineers, PSC. Traffic Impact Study and Access Modification Justification Highway PR-2 Km. 152.0 to KM. 154.0 Mayagüez, Puerto Rico. (Update of Traffic Counts September 2021)

REPRESENTATIVE NOISE RECEIVERS AND EXISTING NOISE LEVELS

The noise survey was carried out using a calibrated sound level meters which meets the “American National Standards Institute” (ANSI) specification for Type 1, sound level meters on its latest revision. For this noise study, a calibrated Sound Pro Series DL-2 Sound Level Meters manufactured by 3M (Quest Technologies) was used. The instrument is equipped with software and data logger and generate the data used to prepare this report. Refer to Attachment B for data on calibration of the sound level meter instrument.

The instrument calibration was verified prior and after each sound measurement. The instrument was programmed to measure between 30 dBA and 120 dBA. Existing noise levels measurements were carried out on December 22, 2022. All measurements were obtained during sunny conditions.

REPRESENTATIVE NOISE RECEIVERS

Representative receiver locations were selected based on the following criteria: (1) uses (institutional/residential), (2) proximity to roadway, and (3) valid for each alternative proposed. The representative receiver locations (noise measuring location) are shown in Figure 2, Attachment A. The results of the field measurements are summarized in the table below and included in Attachment B.

Receivers 4 and 5 are the same ones identified in the original noise study. Three (3) additional representative receivers (5A, 5B and 5C) were identified for new alternative (Alternative IA (Rev. 1) to the alignment of the proposed project the based current uses (institutional or residential) and their proximity to roadways PR-2, PR2R (Post and San Juan Street just at the entrance to RUM Entrance, La Vita, PR-2 Km.153.90). Table 1 below describes representative receivers and existing noise levels.

Table 1 Representative Receivers Description and Measured (Existing) Noise Levels			
Intersection	Receiver ID	Receiver Description	Existing Noise Level (dBA)
Alternative IA (PR-2 La Vita Intersection)	4	University of Puerto Rico Mayagüez Campus' Plant nursery / Classroom	63.0

Table 1 Representative Receivers Description and Measured (Existing) Noise Levels			
Intersection	Receiver ID	Receiver Description	Existing Noise Level (dBA)
	5	Residence Near Ramp PR-2S	64.7
	5A	Residence Near Ramp	64.1
	5B	Residence Near Ramp PR-2S	61.1
	5C	Vocational School Classroom near San Juan Street	62.4

TRAFFIC LEVELS

Traffic levels were obtained from the Traffic Study² and updated for the year 2023 using the 1.5 % growth per year mentioned in Section 6.1 (Traffic Growth) of the Traffic Study. Table 2 summarizes peak hour traffic levels for State Roads PR-2, PR-102, PR-3108, RUM entrance roundabout and San Juan Street for each roadway segment evaluated.

Traffic levels were obtained from the Traffic Study³ and updated for the year 2023 using the 1.5 % growth per year mentioned in Section 6.1 (Traffic Growth) of the Traffic Study. Table 2 summarizes peak hour traffic levels for State Roads PR-2, PR-102, PR-3108, RUM entrance roundabout and San Juan Street for each roadway segment evaluated.

Table 2 Peak Hour Traffic Levels			
Roadway Segment	Roadway	2023	2043
Alternative IA (PR-2 La Vita Intersection)	PR-2 North	1074	1461
	PR-2 South	1725	2346
	Roundabout1	2763	1888
	Roundabout 2	2512	3156

² PLC Traffic Consulting Engineers, PSC. Traffic Impact Study and Access Modification Justification Highway PR-2 Km. 152.0 to KM. 154.0 Mayagüez, Puerto Rico. (Update of Traffic Counts September 2021)

³ PLC Traffic Consulting Engineers, PSC. Traffic Impact Study and Access Modification Justification Highway PR-2 Km. 152.0 to KM. 154.0 Mayagüez, Puerto Rico. (Update of Traffic Counts September 2021)

Peak hour traffic levels were distributed by vehicle type as PRHTA guidance. Table 3 summarizes the traffic levels distribution utilized in Federal Highway Administration's (FHWA) mathematical model "Traffic Noise Model" (TNM), version 3.1.

Table 3 Traffic Levels Distribution	
Vehicle Type	Percentage (%)
Vehicles	95
Light Trucks	3
Heavy Trucks / Buses	2
Total	100

U. S. FEDERAL HIGHWAY ADMINISTRATION TRAFFIC NOISE MODEL

The estimated noise to be generated by traffic on La Vita Intersection for the years 2023 and 2043 were estimated using FHWA's "Traffic Noise Model" version 3.1. This is the current model version required by FHWA to comply with 23 CFR, Part 772.17. It is used to assess traffic noise impacts and analyze and abatement measures. The model requires the following data as a minimum: (1) Description of the road or segment of interest; (2) Receiver description; (3) Traffic levels by vehicle type; and existing equivalent sound level (Leq).

Using the data provided, the model calculates the noise level generated by traffic increase. The data in which this study is based as well as its results are presented in attachments C and D. These are:

- **Roadways**: Presents descriptive data of the segments of roads of interest supplied to the Traffic Noise Model
- **Traffic**: It presents the volume of traffic in the period of interest for the road to be modeled.
- **Receivers**: Distance and elevation data for the receivers to be evaluated.
- **Results**: This table presents the simulation results

To assess noise impacts at ground level, med-level and upper level of the representative receptors identified in Table 4 below were utilized the for the simulation.

Table 4 Representative Receivers Description Alternative IA (PR-2 La Vita Intersection)	
Receiver ID	Receiver Description
4	University of Puerto Rico Mayaguez Campus' Plant nursery / Classroom
5	Residence near PR-2
5A	Residence Near Ramp PR-2S
5B	Residence Near Ramp PR-2S
5C	Vocational School Classroom near San Juan Street

The simulation results, for the years 2023 and 2043, for a no-noise barrier scenario are included in Attachments C and D respectively. Table 5 summarizes the simulation results for a no-noise barrier scenario for the years 2023 and 2043.

Table 5 Estimated Noise Levels (dBA) (Leq).			
Roadway Segment	Receiver ID	2023 (No Barrier)	2043 (No Barrier)
Alternative IA (PR-2 La Vita Intersection)	4	61.7	62.9
	5	64.4	65.8
	5A	61.5	62.9
	5B	59.6	61.1
	5C	60.9	62.4

RESULTS

It was observed that none of the receivers approach the FHWA threshold level (> 66 dBA) and none of the calculated noise levels for the years 2023 and 2043 exceeded the regulatory limit of 67 dBA according to the Noise Abatement Criteria described in Table 1, 23 CFR Part 772.

CONCLUSION

The current FHWA regulations (23 CFR 772) establish the conditions to define noise impact associated to an increase in vehicular traffic⁴. For the year 2023, the

⁴ 23 CFR 772 define noise impact associated to an increase in vehicular traffic as: (1) A noise level of 67 dBA greater outside residential areas as the impact threshold; (2) Approaching the threshold (66 dBA or more); and (3) An increase of 10 decibels on the existing noise level (measured or estimated). Noise estimates higher than these conditions require the implementation of abatement measures.

estimated noise levels fluctuate between 59.6 dBA and 64.4 dBA while for the year 2043 estimated noise levels fluctuate between 61.1 dBA and 65.8 dBA.

Based on the results obtained for year 2023 it is concluded that the estimated noise level:

- Is lower than the impact level (67 dBA) established by current regulations.
- Does not meet the definition of "close to the threshold" (66 dBA or more) established by federal regulations.
- Does not meet the noise impact definition of "an increase of 10 decibels on the existing noise level (measured or estimated)."
- Because the study was conducted in the boundary condition of rush hour and for those receivers closest to the roads, the noise level impacting the receiver at other times and other places in the project should be lower.

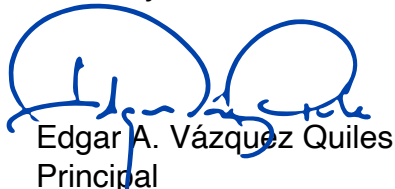
Based on the results obtained for year 2043 it is concluded that the estimated noise level:

- Is lower than the impact level (67 dBA) established by current regulations.
- Does not meet the definition of "close to the threshold" (66 dBA or more) established by federal regulations.
- Does not meet the noise impact definition of "an increase of 10 decibels on the existing noise level (measured or estimated)."
- Because the study was conducted in the boundary condition of rush hour and for those receivers closest to the roads, the noise level impacting the receiver at other times and other places in the project should be lower.

Based on the results obtained and considering that none of the receivers exceeded the regulatory limit of 67 dBA and because the definition of "an increase of 10 decibels on the existing noise level (measured or estimated)" was not met, based on the study data, noise abatement measures are not necessary.

If you have questions or would like to clarify any point of this report, please contact the undersigned at (787) 567-1301 or Mr. William Sarriera at (787) 567-1302.

Cordially,

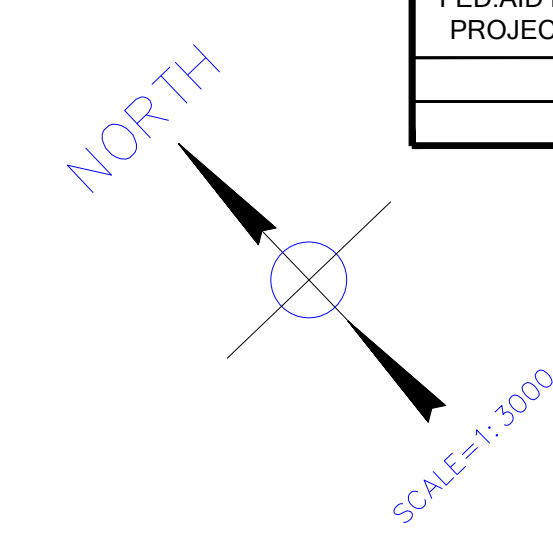


Edgar A. Vázquez Quiles
Principal

Enclosures

**ATTACHMENT A
FIGURES**

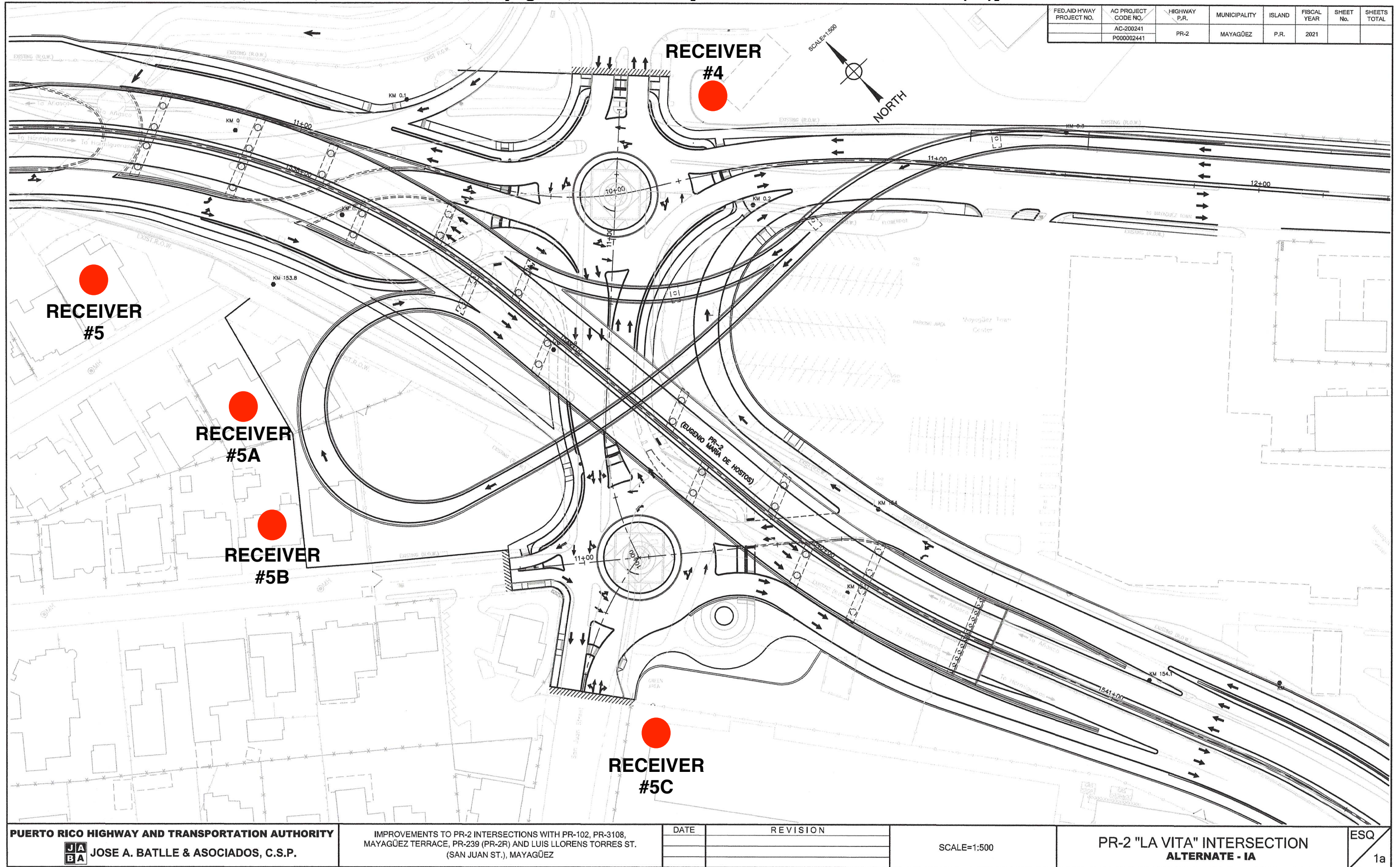
FED AID H'WAY PROJECT NO.	AC PROJECT CODE NO.	HIGHWAY P.R.	MUNICIPALITY	ISLAND	FISCAL YEAR	SHEET No.	SHEETS TOTAL
	AC-200241	PR-2	MAYAGÜEZ	P.R.	2021		
	P00002441						



2/21/2023 1:51:18 PM Jose A. Batlle & Asociados, C.S.P.

PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY JOSE A. BATLLE & ASOCIADOS, C.S.P.	IMPROVEMENTS TO PR-2 INTERSECTIONS WITH PR-102, PR-3108, MAYAGÜEZ TERRACE, PR-239 (PR-2R) AND LUIS LLORENS TORRES ST. (SAN JUAN ST.), MAYAGÜEZ	DATE	REVISION	SCALE=1:3000	GENERAL SITE PR-2 "LA VITA" INTERSECTION	GS
		JAN.21/2022	REVISION NO.1 SAN JUAN ST. ROUNDABOUT & ACCESS			1

Figure 2
Noise Study Receivers Location
Addendum to Noise Study, Improvements to Intersection PR-2, PR2R (Post and San Juan Street just at the entrance to RUM Entrance, La Vita, PR-2 Km.153.90, Mayaguez, Puerto Rico [AC-200241 P00002441 MP-2 (66)]



10/21/2021 8:19:02 AM, Jose A. Batlle & Asociados, C.S.P.

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José A. Batlle Montalvo, PE
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ATTACHMENT B
NOISE MEASUREMENTS AND CALIBRATION CERTIFICATE



FA00901

An ISO 9001
Registered Company

Certificate of Calibration

Certificate No:1031916 BGM080005

Submitted By: ECO-RENTAL SOLUTIONS LLC
3002 DOW AVE
TUSTIN, CA 92780-7248

Serial Number: BGM080005

Date Received: 7/25/2022

Customer ID: FA00901

Date Issued: 8/1/2022

Model: SOUNDPRO DL-2 SLM

Valid Until: 6/1/2023

Test Conditions:

Model Conditions:

Temperature: 18°C to 29°C
Humidity: 20% to 80%
Barometric Pressure: 890 mbar to 1050 mbar

As Found: OUT OF TOLERANCE
As Left: IN TOLERANCE

SubAssemblies:

Description:

TYPE 2 PREAMP
MICROPHONE QE 7052 1/2 IN. ELECTRET

Serial Number:

0518 3009
43337

Calibrated per Procedure:53V899

Reference Standard(s):

Last Calibration	Date Calibration Due
10/26/2021	10/26/2022
5/16/2021	5/16/2023

I.D. Number	Device
EF000352	QUEST-CAL
ET0000556	B&K ENSEMBLE

Measurement Uncertainty:

ACOUSTIC +/- 0.19dB
Estimated at 95% Confidence Level (k=2)

Calibrated By:


WILLIAM MALONEY Service Technician 8/1/2022

This report certifies that all calibration equipment used in the test is traceable to NIST, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of TSI Incorporated.



TSI INCORPORATED – OCONOMOWOC

1060 Corporate Center Drive, Oconomowoc, WI 53066 USA
tel 651 490 2811 + toll free 800 245 0779 + web www.tsi.com

FA00901

Certificate of Calibration

Certificate No:1031916 QIM080010

Submitted By: ECO-RENTAL SOLUTIONS LLC
3002 DOW AVE
TUSTIN, CA 92780-7248

Serial Number: QIM080010

Date Received: 7/25/2022

Customer ID: FA00901

Date Issued: 8/1/2022

Model: QC-10 CALIBRATOR

Valid Until: 8/1/2023

Test Conditions:

Model Conditions:

Temperature: 18°C to 29°C
Humidity: 20% to 80%
Barometric Pressure: 890 mbar to 1050 mbar

As Found: IN TOLERANCE

As Left: IN TOLERANCE

SubAssemblies:

Description:

Serial Number:

Calibrated per Procedure:56V981

Reference Standard(s):

I.D. Number	Device
ET0000556	B&K ENSEMBLE
ET000176	FLUKE 45 MULTIMETER

Last Calibration	Date Calibration Due
5/16/2021	5/16/2023
2/24/2021	2/24/2023

Measurement Uncertainty:

ACOUSTIC +/- 0.19dB AC VOLTAGE +/- 1.4% FREQUENCY +/- 0.058%
Estimated at 95% Confidence Level (k=2)

Calibrated By:

WILLIAM MALONEY

Service Technician

8/1/2022

This report certifies that all calibration equipment used in the test is traceable to NIST, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of TSI Incorporated.

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**ATTACHMENT C
TNM RUNS 2023**

REPORT:

Results: Sound Levels - No Barrier Objects

TNM VERSION 3.1.7970.37608
 CALCULATED WITH: 3.1.7970.37608
 CASE: Run 2023
 UNITS: Metric
 DEFAULT GROUND TYPE: HardSoil
 ATMOSPHERICS: 20°C, 76%
 PAVEMENT TYPE(S) USED: Average

REPORT DATE: 23 March 2023
 CALCULATION DATE: 3/23/2023 9:22:23 AM
 ORGANIZATION: ACEnvironmental
 ANALYSIS BY: EVazquez
 PROJECT/CONTRACT Addendum to Noise Study La Vita Mayaguez 2023
 Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.

Receiver				Modeled Traffic Noise Levels					
Name	No.	Nb. R.R.	Existing LAeq dBA	LAeq		Increase over Existing		Type of Impact	
				Calc.	Absolute Criterion	Calc.	Relative Criterion		
				dBA	dBA	dBA	dBA		
Receiver-4	1	1	63.0	61.7	0.0	-1.3	10.0	Sound Level	
Receiver-5	2	1	64.7	64.4	0.0	-0.3	10.0	Sound Level	
Receiver-5A	3	1	64.1	61.5	0.0	-2.6	10.0	Sound Level	
Receiver-5B	4	1	61.1	59.6	0.0	-1.5	10.0	Sound Level	
Receiver-5C	5	1	62.4	60.9	0.0	-1.5	10.0	Sound Level	

REPORT:

Sound-level Input: Receivers

TNM VERSION: 3.1.7970.37608

REPORT DATE: 23 March 2023

CALCULATED WITH: 3.1.7970.37608

CALCULATION DATE: 3/23/2023 9:22:23 AM

CASE: Run 2023

ORGANIZATION: ACEnvironmental

ANALYSIS BY: EVazquez

PROJECT/CONTRACT: Addendum to Noise Study La Vita Mayaguez 2023

Receiver Name	Sequence Number	Nb. R.R.	Coordinates (ground)			Height above Ground [m]	Input Sound Levels and Criteria				Active in Calc.	Notes
							Existing LAeq [dBA]	Absolute Criterion [dBA]	Relative Criterion [dBA]	Noise Reduction Goal [dBA]		
			X [m]	Y [m]	Z [m]							
Receiver-4	1	1	124744.60	241925.50	14.00	1.50	63	0	10	8	Y	
Receiver-5	2	1	124568.10	242013.10	15.00	1.50	64.7	0	10	8	Y	
Receiver-5A	3	1	124586.00	241954.60	13.00	1.50	64.1	0	10	8	Y	
Receiver-5B	4	1	124556.90	241921.60	17.00	1.50	61.1	0	10	8	Y	
Receiver-5C	5	1	124602.30	241799.50	8.00	1.50	62.4	0	10	8	Y	

REPORT:

INPUT ROADWAYS

TNM VERSION:

3.1.7970.37608

REPORT DATE:

23 March 2023

CALCULATED WITH:

3.1.7970.37608

CALCULATION DATE:

3/23/2023 9:22:23 AM

CASE:

Run 2023

ORGANIZATION:

ACEnvironmental

ANALYSIS BY:

EVazquez

PROJECT/CONTRACT:

Addendum to Noise Study La Vita Mayaguez
2023

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width [m]	Point Notes	Road Segment		
		Start Point		X [m]	Y [m]	Z [m]			Road Category	Pavement Type	On Structure
		Name	Number								
Roadway-1 (EF-3)		Point-0	0	124699.40	241794.30	6.41	3.66		Mainline	Average	No
		Point-1	1	124687.40	241841.40	7.31	3.66		Mainline	Average	No
Roadway-2 (PR-2S)		Point-14	8	124781.90	241880.70	5.81	7.30		Mainline	Average	No
		Point-15	9	124761.00	241899.70	5.73	7.30		Mainline	Average	No
		Point-17	10	124749.90	241910.40	5.60	7.30		Mainline	Average	No
		Point-19	11	124735.50	241924.60	5.60	7.30		Mainline	Average	No
		Point-21	12	124732.40	241929.90	5.44	7.30		Mainline	Average	No
		Point-22	13	124732.80	241939.30	5.29	7.30		Mainline	Average	No
		Point-25	14	124742.70	241949.00	5.13	7.30		Mainline	Average	No
Roadway-3 (Roundabout 2)		Point-26	15	124723.60	241919.00	9.87	9.80		Mainline	Average	No
		Point-27	16	124727.50	241927.70	9.87	9.80		Mainline	Average	No
		Point-29	17	124726.00	241936.30	9.87	9.80		Mainline	Average	No
		Point-31	18	124720.30	241940.80	9.97	9.80		Mainline	Average	No
		Point-33	19	124713.10	241939.00	9.87	9.80		Mainline	Average	No
		Point-35	20	124708.20	241932.60	9.87	9.80		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-3 (Roundabout 2)		Point-37	21	124708.20	241925.80	9.87	9.80		Mainline	Average	No
		Point-39	22	124713.00	241919.40	9.87	9.80		Mainline	Average	No
		Point-41	23	124719.90	241918.70	9.87	9.80		Mainline	Average	No
Roadway-4 (Roundabout 1)		Point-42	24	124618.30	241845.80	8.42	9.80		Mainline	Average	No
		Point-43	25	124619.80	241853.40	8.42	9.80		Mainline	Average	No
		Point-45	26	124625.90	241859.00	8.42	9.80		Mainline	Average	No
		Point-47	27	124632.60	241857.20	8.42	9.80		Mainline	Average	No
		Point-49	28	124636.50	241853.10	8.42	9.80		Mainline	Average	No
		Point-51	29	124637.90	241846.60	8.42	9.80		Mainline	Average	No
		Point-53	30	124633.60	241839.70	8.42	9.80		Mainline	Average	No
		Point-55	31	124626.10	241838.00	8.42	9.80		Mainline	Average	No
		Point-57	32	124619.30	241842.10	8.42	9.80		Mainline	Average	No
Roadway-5 (WF-3)		Point-0	33	124638.60	241842.50	7.96	7.30		Mainline	Average	No
		Point-1	34	124649.30	241845.10	7.96	7.30		Mainline	Average	No
		Point-3	35	124658.70	241841.10	7.81	7.30		Mainline	Average	No
		Point-5	36	124673.80	241807.20	9.41	7.30		Mainline	Average	No
Roadway-1_Divided (EF-3)		Point-1	2	124687.40	241841.40	7.31	7.30		Mainline	Average	No
		Point-3	3	124687.50	241867.70	8.19	7.30		Mainline	Average	No
		Point-5	4	124695.20	241882.90	8.61	6.00		Mainline	Average	No
		Point-7	5	124709.70	241892.10	8.36	6.00		Mainline	Average	No
		Point-9	6	124729.30	241889.20	7.69	7.54		Mainline	Average	No
		Point-11	7	124750.00	241876.70	7.01	7.54		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-1_Divided (EF-3)		Point-13	37	124773.40	241852.10	6.41	7.54		Mainline	Average	No
Roadway-7 (Ramp PR2S)		Point-0	38	124779.80	241879.10	13.51	4.00		Mainline	Average	No
		Point-1	39	124764.80	241892.50	14.71	4.00		Mainline	Average	No
		Point-3	40	124750.60	241897.90	19.51	4.00		Mainline	Average	No
		Point-5	41	124718.80	241896.90	20.71	4.00		Mainline	Average	No
		Point-7	42	124677.40	241889.60	21.91	4.00		Mainline	Average	No
		Point-9	43	124658.20	241879.10	25.60	4.00		Mainline	Average	No
		Point-11	44	124614.90	241874.40	21.50	4.00		Mainline	Average	No
		Point-13	45	124594.20	241879.90	20.10	4.00		Mainline	Average	No
		Point-15	46	124582.60	241897.10	18.77	4.60		Mainline	Average	No
		Point-17	47	124582.10	241916.00	18.77	4.60		Mainline	Average	No
		Point-19	48	124587.00	241929.50	17.86	4.60		Mainline	Average	No
		Point-21	49	124605.20	241943.80	17.44	4.60		Mainline	Average	No
		Point-23	50	124624.20	241943.20	17.52	4.60		Mainline	Average	No
		Point-25	51	124633.30	241934.10	17.52	3.77		Mainline	Average	No
		Point-27	52	124642.50	241905.90	17.52	3.66		Mainline	Average	No
		Point-29	53	124647.60	241892.90	17.52	3.66		Mainline	Average	No
		Point-31	54	124652.20	241880.10	17.52	3.66		Mainline	Average	No
Roadway-8 (PR-2)		Point-32	55	124654.50	241874.40	15.10	7.30		Mainline	Average	No
		Point-33	56	124669.50	241824.60	10.11	7.30		Mainline	Average	No
		Point-35	57	124683.50	241786.70	7.00	7.30		Mainline	Average	No
Roadway-9 (RAMP PR-2 N)		Point-36	58	124724.50	241899.40	18.92	4.00		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-9 (RAMP PR-2 N)		Point-37	59	124702.10	241898.60	21.04	4.00		Mainline	Average	No
		Point-39	60	124672.90	241906.10	19.85	4.00		Mainline	Average	No
		Point-41	61	124654.20	241921.40	19.11	4.00		Mainline	Average	No
		Point-43	62	124647.20	241936.90	18.86	4.00		Mainline	Average	No
Roadway-10 (PR-2N)		Point-44	63	124692.90	241791.20	7.00	7.30		Mainline	Average	No
		Point-45	64	124663.00	241879.20	15.10	7.30		Mainline	Average	No
Roadway-11 (PR-2 N)		Point-48	65	124658.40	241892.00	18.07	7.30		Mainline	Average	No
		Point-49	66	124648.60	241921.70	17.09	7.30		Mainline	Average	No
		Point-51	67	124639.10	241968.80	16.39	7.30		Mainline	Average	No
		Point-53	68	124632.10	241992.20	14.64	7.30		Mainline	Average	No
		Point-55	69	124612.10	242032.40	10.63	7.30		Mainline	Average	No
		Point-57	70	124603.40	242046.80	4.04	7.30		Mainline	Average	No
		Point-59	71	124592.50	242061.30	3.32	7.30		Mainline	Average	No
Roadway-12 (PR-2 S)		Point-60	72	124581.00	242052.50	14.63	7.30		Mainline	Average	No
		Point-61	73	124597.60	242026.50	15.58	7.30		Mainline	Average	No
		Point-63	74	124608.90	242006.40	16.39	7.30		Mainline	Average	No
		Point-65	75	124617.90	241980.20	17.04	7.30		Mainline	Average	No
		Point-67	76	124631.00	241939.80	17.88	7.30		Mainline	Average	No
Roadway-13 (San Juan Street W)		Point-69	77	124586.30	241809.40	6.84	7.30		Mainline	Average	No
		Point-68	78	124622.10	241836.90	8.42	7.30		Mainline	Average	No
Roadway-14 (San Juan Street W)		Point-71	79	124616.80	241840.60	8.42	7.30		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-14 (San Juan Street W)		Point-70	80	124582.90	241815.00	6.84	7.30		Mainline	Average	No
Roadway-15 (Central Street)		Point-72	81	124614.00	241857.50	8.42	3.66		Mainline	Average	No
		Point-73	82	124601.00	241868.00	9.00	3.66		Mainline	Average	No
Roadway-16 (Central Street)		Point-74	83	124598.10	241864.60	9.00	3.66		Mainline	Average	No
		Point-75	84	124614.00	241852.20	8.42	3.66		Mainline	Average	No
		Point-77	85	124617.20	241849.00	8.42	3.66		Mainline	Average	No
Roadway-17 (San Juan Street)		Point-78	86	124649.40	241875.80	8.42	3.66		Mainline	Average	No
		Point-79	87	124644.10	241870.10	8.42	3.66		Mainline	Average	No
		Point-81	88	124633.80	241859.10	8.42	3.66		Mainline	Average	No
Roadway-18 (From UPR)		Point-82	89	124736.90	241954.00	9.87	7.30		Mainline	Average	No
		Point-83	90	124728.10	241945.30	9.87	7.30		Mainline	Average	No
		Point-85	91	124716.20	241945.70	9.87	7.30		Mainline	Average	No
		Point-87	92	124704.50	241944.90	9.87	7.30		Mainline	Average	No
Roadway-19 (PR-2 Ramp N)		Point-88	93	124699.70	241946.30	8.93	3.66		Mainline	Average	No
		Point-89	94	124673.40	241965.30	9.09	3.66		Mainline	Average	No
		Point-91	95	124631.80	241996.80	9.21	3.66		Mainline	Average	No
Roadway-20 (Desvio PR-2S hacia Rotonda 2)		Point-92	96	124649.20	241942.30	3.75	3.66		Mainline	Average	No
		Point-93	97	124665.60	241926.40	4.01	3.66		Mainline	Average	No
		Point-95	98	124678.40	241921.60	5.76	3.66		Mainline	Average	No
		Point-97	99	124681.40	241911.10	7.52	3.66		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-20 (Desvio PR-2S hacia Rotonda 2)		Point-99	100	124679.40	241907.20	8.09	3.66		Mainline	Average	No
Roadway-21 (San Juan Street)		Point-100	101	124675.10	241902.10	8.42	3.66		Mainline	Average	No
		Point-101	102	124659.80	241888.10	8.42	3.66		Mainline	Average	No
Roadway-22 (Desvio PR-2 hacia Rotonda 1)		Point-102	103	124622.10	241976.20	3.75	3.66		Mainline	Average	No
		Point-103	104	124630.50	241959.80	4.01	3.66		Mainline	Average	No
		Point-105	105	124641.60	241946.00	5.78	3.66		Mainline	Average	No
Roadway-23 Desvio (PR-2 S)		Point-106	106	124622.10	241981.80	3.45	3.66		Mainline	Average	No
		Point-107	107	124637.40	241966.00	3.75	3.66		Mainline	Average	No
Roadway-24 (Frontage Road East)		Point-108	108	124642.80	241962.90	7.20	7.30		Mainline	Average	No
		Point-109	109	124652.70	241958.90	7.66	7.30		Mainline	Average	No
		Point-111	110	124677.90	241949.80	7.82	7.30		Mainline	Average	No
		Point-113	111	124691.90	241936.20	7.84	7.30		Mainline	Average	No
		Point-115	112	124695.20	241924.00	7.84	7.30		Mainline	Average	No
Roadway-25 (San Juan Street)		Point-116	113	124640.50	241853.20	8.42	7.30		Mainline	Average	No
		Point-117	114	124654.90	241867.20	8.42	7.30		Mainline	Average	No
Roadway-26 (San Juan Street)		Point-118	115	124657.40	241869.80	8.42	7.30		Mainline	Average	No
		Point-119	116	124662.80	241874.80	8.42	7.30		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-27 (San Juan Street)		Point-120	117	124665.70	241877.30	8.42	7.30		Mainline	Average	No
		Point-121	118	124675.90	241887.40	8.42	7.30		Mainline	Average	No
Roadway-28 (San Juan Street)		Point-122	119	124678.50	241891.30	8.42	7.30		Mainline	Average	No
		Point-123	120	124685.10	241901.20	8.42	7.30		Mainline	Average	No
Roadway-29 (San Juan East)		Point-124	121	124688.10	241904.80	8.42	7.30		Mainline	Average	No
		Point-125	122	124699.90	241909.80	9.75	7.30		Mainline	Average	No
		Point-127	123	124712.10	241913.80	9.75	7.30		Mainline	Average	No
		Point-129	124	124727.10	241910.40	9.46	7.30		Mainline	Average	No
		Point-131	125	124738.10	241900.50	9.63	7.30		Mainline	Average	No
Roadway-30 (PR-2S)		Point-132	126	124740.70	241895.10	5.73	7.30		Mainline	Average	No
		Point-133	127	124752.30	241882.60	5.73	7.30		Mainline	Average	No
		Point-135	128	124769.80	241866.20	5.81	7.30		Mainline	Average	No
Roadway-31 (Central)		Point-136	129	124674.00	241834.90	9.50	7.30		Mainline	Average	No
		Point-137	130	124662.60	241850.10	9.11	7.30		Mainline	Average	No
Roadway-32 (Central)		Point-138	131	124659.80	241852.30	9.11	7.30		Mainline	Average	No
		Point-139	132	124651.20	241860.90	8.29	7.30		Mainline	Average	No
Roadway-33 (San Juan Street)		Point-140	133	124704.20	241928.20	8.42	7.30		Mainline	Average	No
		Point-141	134	124682.30	241908.00	8.42	7.30		Mainline	Average	No

REPORT:

INPUT TRAFFIC FOR TNM VEHICLES (LAeq)

TNM VERSION:

3.1.7970.37608

REPORT DATE:

23 March 2023

CALCULATED WITH:

3.1.7970.37608

CALCULATION DATE:

3/23/2023 9:22:23 AM

CASE:

Run 2023

ORGANIZATION:

ACEnvironmental

ANALYSIS BY:

EVazquez

PROJECT/CONTRACT:

Addendum to Noise Study La Vita Mayaguez
2023

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-1 (EF-3)	Point-0	0	312	32	10	32	6	24	0	0	0	0
	Point-1	1	312	32	10	32	6	24	0	0	0	0
Roadway-2 (PR-2S)	Point-14	8	45	24	1	24	1	24	0	0	0	0
	Point-15	9	45	24	1	24	1	24	0	0	0	0
	Point-17	10	45	24	1	24	1	24	0	0	0	0
	Point-19	11	45	24	1	24	1	24	0	0	0	0
	Point-21	12	45	24	1	24	1	24	0	0	0	0
	Point-22	13	45	24	1	24	1	24	0	0	0	0
	Point-25	14	45	24	1	24	1	24	0	0	0	0
Roadway-3 (Roundabout 2)	Point-26	15	537	32	17	32	11	32	0	0	0	0
	Point-27	16	537	32	17	32	11	32	0	0	0	0
	Point-29	17	537	32	17	32	11	32	0	0	0	0
	Point-31	18	537	32	17	32	11	32	0	0	0	0
	Point-33	19	537	32	17	32	11	32	0	0	0	0
	Point-35	20	537	32	17	32	11	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-3 (Roundabout 2)	Point-37	21	537	32	17	32	11	32	0	0	0	0
	Point-39	22	537	32	17	32	11	32	0	0	0	0
	Point-41	23	537	32	17	32	11	32	0	0	0	0
Roadway-4 (Roundabout 1)	Point-42	24	836	32	26	32	17	32	0	0	0	0
	Point-43	25	836	32	26	32	17	32	0	0	0	0
	Point-45	26	836	32	26	32	17	32	0	0	0	0
	Point-47	27	836	32	26	32	17	32	0	0	0	0
	Point-49	28	836	32	26	32	17	32	0	0	0	0
	Point-51	29	836	32	26	32	17	32	0	0	0	0
	Point-53	30	836	32	26	32	17	32	0	0	0	0
	Point-55	31	836	32	26	32	17	32	0	0	0	0
	Point-57	32	836	32	26	32	17	32	0	0	0	0
Roadway-5 (WF-3)	Point-0	33	144	24	5	24	3	24	0	0	0	0
	Point-1	34	144	24	5	24	3	24	0	0	0	0
	Point-3	35	144	24	5	24	3	24	0	0	0	0
	Point-5	36	144	24	5	24	3	24	0	0	0	0
Roadway-1_Divided (EF-3)	Point-1	2	312	32	10	32	6	24	0	0	0	0
	Point-3	3	312	32	10	32	6	24	0	0	0	0
	Point-5	4	312	32	10	32	6	24	0	0	0	0
	Point-7	5	312	32	10	32	6	24	0	0	0	0
	Point-9	6	312	32	10	32	6	24	0	0	0	0
	Point-11	7	312	32	10	32	6	24	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-1_Divided (EF-3)	Point-13	37	312	32	10	32	6	24	0	0	0	0
Roadway-7 (Ramp PR2S)	Point-0	38	254	32	8	32	5	32	0	0	0	0
	Point-1	39	254	32	8	32	5	32	0	0	0	0
	Point-3	40	254	32	8	32	5	32	0	0	0	0
	Point-5	41	254	32	8	32	5	32	0	0	0	0
	Point-7	42	254	32	8	32	5	32	0	0	0	0
	Point-9	43	254	32	8	32	5	32	0	0	0	0
	Point-11	44	254	32	8	32	5	32	0	0	0	0
	Point-13	45	254	32	8	32	5	32	0	0	0	0
	Point-15	46	254	32	8	32	5	32	0	0	0	0
	Point-17	47	254	32	8	32	5	32	0	0	0	0
	Point-19	48	254	32	8	32	5	32	0	0	0	0
	Point-21	49	254	32	8	32	5	32	0	0	0	0
	Point-23	50	254	32	8	32	5	32	0	0	0	0
	Point-25	51	254	32	8	32	5	32	0	0	0	0
	Point-27	52	254	32	8	32	5	32	0	0	0	0
	Point-29	53	254	32	8	32	5	32	0	0	0	0
	Point-31	54	254	32	8	32	5	32	0	0	0	0
Roadway-8 (PR-2)	Point-32	55	1639	64	52	64	33	64	0	0	0	0
	Point-33	56	1639	64	52	64	33	64	0	0	0	0
	Point-35	57	1639	64	52	64	33	64	0	0	0	0
Roadway-9 (RAMP PR-2 N)	Point-36	58	12	32	1	32	1	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-9 (RAMP PR-2 N)	Point-37	59	12	32	1	32	1	32	0	0	0	0
	Point-39	60	12	32	1	32	1	32	0	0	0	0
	Point-41	61	12	32	1	32	1	32	0	0	0	0
	Point-43	62	12	32	1	32	1	32	0	0	0	0
Roadway-10 (PR-2N)	Point-44	63	1021	64	32	64	20	64	0	0	0	0
	Point-45	64	1021	64	32	64	20	64	0	0	0	0
Roadway-11 (PR-2 N)	Point-48	65	1021	64	32	64	20	64	0	0	0	0
	Point-49	66	1021	64	32	64	20	64	0	0	0	0
	Point-51	67	1021	64	32	64	20	64	0	0	0	0
	Point-53	68	1021	64	32	64	20	64	0	0	0	0
	Point-55	69	1021	64	32	64	20	64	0	0	0	0
	Point-57	70	1021	64	32	64	20	64	0	0	0	0
	Point-59	71	1021	64	32	64	20	64	0	0	0	0
Roadway-12 (PR-2 S)	Point-60	72	1639	64	52	64	33	64	0	0	0	0
	Point-61	73	1639	64	52	64	33	64	0	0	0	0
	Point-63	74	1639	64	52	64	33	64	0	0	0	0
	Point-65	75	1639	64	52	64	33	64	0	0	0	0
	Point-67	76	1639	64	52	64	33	64	0	0	0	0
Roadway-13 (San Juan Street W)	Point-69	77	277	32	9	32	6	32	0	0	0	0
	Point-68	78	277	32	9	32	6	32	0	0	0	0
Roadway-14 (San Juan Street W)	Point-71	79	299	32	9	32	6	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]		
Roadway-14 (San Juan Street W)	Point-70	80	299	32	9	32	6	32	0	0	0	0
Roadway-15 (Central Street)	Point-72	81	10	24	1	24	0	0	0	0	0	0
	Point-73	82	10	24	1	24	0	0	0	0	0	0
Roadway-16 (Central Street)	Point-74	83	10	24	1	24	0	0	0	0	0	0
	Point-75	84	10	24	1	24	0	0	0	0	0	0
	Point-77	85	10	24	1	24	0	0	0	0	0	0
Roadway-17 (San Juan Street)	Point-78	86	299	32	9	32	6	32	0	0	0	0
	Point-79	87	299	32	9	32	6	32	0	0	0	0
	Point-81	88	299	32	9	32	6	32	0	0	0	0
Roadway-18 (From UPR)	Point-82	89	113	24	4	24	2	24	0	0	0	0
	Point-83	90	113	24	4	24	2	24	0	0	0	0
	Point-85	91	113	24	4	24	2	24	0	0	0	0
	Point-87	92	113	24	4	24	2	24	0	0	0	0
Roadway-19 (PR-2 Ramp N)	Point-88	93	113	24	4	24	2	24	0	0	0	0
	Point-89	94	113	24	4	24	2	24	0	0	0	0
	Point-91	95	113	24	4	24	2	24	0	0	0	0
Roadway-20 (Desvio PR-2S hacia Rotonda 2)	Point-92	96	496	32	16	32	10	32	0	0	0	0
	Point-93	97	496	32	16	32	10	32	0	0	0	0
	Point-95	98	496	32	16	32	10	32	0	0	0	0
	Point-97	99	496	32	16	32	10	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]		
Roadway-20 (Desvio PR-2S hacia Rotonda 2)	Point-99	100	496	32	16	32	10	32	0	0	0	0
Roadway-21 (San Juan Street)	Point-100	101	496	24	16	24	10	24	0	0	0	0
	Point-101	102	496	24	16	24	10	24	0	0	0	0
Roadway-22 (Desvio PR-2 hacia Rotonda 1)	Point-102	103	496	32	16	32	10	32	0	0	0	0
	Point-103	104	496	32	16	32	10	32	0	0	0	0
	Point-105	105	496	32	16	32	10	32	0	0	0	0
Roadway-23 Desvio (PR-2 S)	Point-106	106	536	32	17	32	11	32	0	0	0	0
	Point-107	107	536	32	17	32	11	32	0	0	0	0
Roadway-24 (Frontage Road East)	Point-108	108	536	32	17	32	11	32	0	0	0	0
	Point-109	109	536	32	17	32	11	32	0	0	0	0
	Point-111	110	536	32	17	32	11	32	0	0	0	0
	Point-113	111	536	32	17	32	11	32	0	0	0	0
	Point-115	112	536	32	17	32	11	32	0	0	0	0
Roadway-25 (San Juan Street)	Point-116	113	277	32	9	32	6	32	0	0	0	0
	Point-117	114	277	32	9	32	6	32	0	0	0	0
Roadway-26 (San Juan Street)	Point-118	115	277	32	9	32	6	32	0	0	0	0
	Point-119	116	277	32	9	32	6	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]		
Roadway-27 (San Juan Street)	Point-120	117	277	32	9	32	6	32	0	0	0	0
	Point-121	118	277	32	9	32	6	32	0	0	0	0
Roadway-28 (San Juan Street)	Point-122	119	277	32	9	32	6	32	0	0	0	0
	Point-123	120	277	32	9	32	6	32	0	0	0	0
Roadway-29 (San Juan East)	Point-124	121	312	32	10	32	6	32	0	0	0	0
	Point-125	122	312	32	10	32	6	32	0	0	0	0
	Point-127	123	312	32	10	32	6	32	0	0	0	0
	Point-129	124	312	32	10	32	6	32	0	0	0	0
	Point-131	125	312	32	10	32	6	32	0	0	0	0
Roadway-30 (PR-2S)	Point-132	126	312	32	10	32	6	32	0	0	0	0
	Point-133	127	312	32	10	32	6	32	0	0	0	0
	Point-135	128	312	32	10	32	6	32	0	0	0	0
Roadway-31 (Central)	Point-136	129	165	32	5	32	3	32	0	0	0	0
	Point-137	130	165	32	5	32	3	32	0	0	0	0
Roadway-32 (Central)	Point-138	131	165	24	5	24	3	24	0	0	0	0
	Point-139	132	165	24	5	24	3	24	0	0	0	0
Roadway-33 (San Juan Street)	Point-140	133	254	24	8	24	5	24	0	0	0	0
	Point-141	134	254	24	8	24	5	24	0	0	0	0

March 22, 2023
José A. Batlle Montalvo, PE
Page 10

ATTACHMENT D
TNM RUNS 2043

REPORT:

Results: Sound Levels - No Barrier Objects

TNM VERSION 3.1.7970.37608
 CALCULATED WITH: 3.1.7970.37608
 CASE: Run 2043
 UNITS: Metric
 DEFAULT GROUND TYPE: HardSoil
 ATMOSPHERICS: 20°C, 76%
 PAVEMENT TYPE(S) USED: Average

REPORT DATE: 23 March 2023
 CALCULATION DATE: 3/23/2023 10:44:25 AM
 ORGANIZATION: ACEnvironmental
 ANALYSIS BY: EVazquez
 PROJECT/CONTRACT Addendum to Noise Study La Vita Mayaguez 2023
 Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.

Receiver				Modeled Traffic Noise Levels				
Name	No.	Nb. R.R.	Existing LAeq dBA	LAeq		Increase over Existing		Type of Impact
				Calc.	Absolute Criterion	Calc.	Relative Criterion	
				dBA	dBA	dBA	dBA	
Receiver-1	0	0	63.0	62.9	0.0	-0.1	0.0	Sound Level
Receiver-2	0	0	64.7	65.8	0.0	1.1	0.0	Sound Level
Receiver-3	0	0	64.1	62.9	0.0	-1.2	0.0	Sound Level
Receiver-4	0	0	61.1	61.1	0.0	0.0	0.0	Sound Level
Receiver-5	0	0	62.4	61.7	0.0	-0.7	0.0	Sound Level

REPORT:

INPUT ROADWAYS

TNM VERSION:

3.1.7970.37608

REPORT DATE:

23 March 2023

CALCULATED WITH:

3.1.7970.37608

CALCULATION DATE:

3/23/2023 10:44:25 AM

CASE:

Run 2043

ORGANIZATION:

ACEnvironmental

ANALYSIS BY:

EVazquez

PROJECT/CONTRACT:

Addendum to Noise Study La Vita Mayaguez
2023

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width [m]	Point Notes	Road Segment		
		Start Point		X [m]	Y [m]	Z [m]			Road Category	Pavement Type	On Structure
		Name	Number								
Roadway-1 (EF-3)		Point-0	0	124699.40	241794.30	6.41	3.66		Mainline	Average	No
		Point-1	1	124687.40	241841.40	7.31	3.66		Mainline	Average	No
Roadway-2 (PR-2S)		Point-14	8	124781.90	241880.70	5.81	7.30		Mainline	Average	No
		Point-15	9	124761.00	241899.70	5.73	7.30		Mainline	Average	No
		Point-17	10	124749.90	241910.40	5.60	7.30		Mainline	Average	No
		Point-19	11	124735.50	241924.60	5.60	7.30		Mainline	Average	No
		Point-21	12	124732.40	241929.90	5.44	7.30		Mainline	Average	No
		Point-22	13	124732.80	241939.30	5.29	7.30		Mainline	Average	No
		Point-25	14	124742.70	241949.00	5.13	7.30		Mainline	Average	No
Roadway-3 (Roundabout 2)		Point-26	15	124723.60	241919.00	9.87	9.80		Mainline	Average	No
		Point-27	16	124727.50	241927.70	9.87	9.80		Mainline	Average	No
		Point-29	17	124726.00	241936.30	9.87	9.80		Mainline	Average	No
		Point-31	18	124720.30	241940.80	9.97	9.80		Mainline	Average	No
		Point-33	19	124713.10	241939.00	9.87	9.80		Mainline	Average	No
		Point-35	20	124708.20	241932.60	9.87	9.80		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-3 (Roundabout 2)		Point-37	21	124708.20	241925.80	9.87	9.80		Mainline	Average	No
		Point-39	22	124713.00	241919.40	9.87	9.80		Mainline	Average	No
		Point-41	23	124719.90	241918.70	9.87	9.80		Mainline	Average	No
Roadway-4 (Roundabout 1)		Point-42	24	124618.30	241845.80	8.42	9.80		Mainline	Average	No
		Point-43	25	124619.80	241853.40	8.42	9.80		Mainline	Average	No
		Point-45	26	124625.90	241859.00	8.42	9.80		Mainline	Average	No
		Point-47	27	124632.60	241857.20	8.42	9.80		Mainline	Average	No
		Point-49	28	124636.50	241853.10	8.42	9.80		Mainline	Average	No
		Point-51	29	124637.90	241846.60	8.42	9.80		Mainline	Average	No
		Point-53	30	124633.60	241839.70	8.42	9.80		Mainline	Average	No
		Point-55	31	124626.10	241838.00	8.42	9.80		Mainline	Average	No
		Point-57	32	124619.30	241842.10	8.42	9.80		Mainline	Average	No
Roadway-5 (WF-3)		Point-0	33	124638.60	241842.50	7.96	7.30		Mainline	Average	No
		Point-1	34	124649.30	241845.10	7.96	7.30		Mainline	Average	No
		Point-3	35	124658.70	241841.10	7.81	7.30		Mainline	Average	No
		Point-5	36	124673.80	241807.20	9.41	7.30		Mainline	Average	No
Roadway-1_Divided (EF-3)		Point-1	2	124687.40	241841.40	7.31	7.30		Mainline	Average	No
		Point-3	3	124687.50	241867.70	8.19	7.30		Mainline	Average	No
		Point-5	4	124695.20	241882.90	8.61	6.00		Mainline	Average	No
		Point-7	5	124709.70	241892.10	8.36	6.00		Mainline	Average	No
		Point-9	6	124729.30	241889.20	7.69	7.54		Mainline	Average	No
		Point-11	7	124750.00	241876.70	7.01	7.54		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-1_Divided (EF-3)		Point-13	37	124773.40	241852.10	6.41	7.54		Mainline	Average	No
Roadway-7 (Ramp PR2S)		Point-0	38	124779.80	241879.10	13.51	4.00		Mainline	Average	No
		Point-1	39	124764.80	241892.50	14.71	4.00		Mainline	Average	No
		Point-3	40	124750.60	241897.90	19.51	4.00		Mainline	Average	No
		Point-5	41	124718.80	241896.90	20.71	4.00		Mainline	Average	No
		Point-7	42	124677.40	241889.60	21.91	4.00		Mainline	Average	No
		Point-9	43	124658.20	241879.10	25.60	4.00		Mainline	Average	No
		Point-11	44	124614.90	241874.40	21.50	4.00		Mainline	Average	No
		Point-13	45	124594.20	241879.90	20.10	4.00		Mainline	Average	No
		Point-15	46	124582.60	241897.10	18.77	4.60		Mainline	Average	No
		Point-17	47	124582.10	241916.00	18.77	4.60		Mainline	Average	No
		Point-19	48	124587.00	241929.50	17.86	4.60		Mainline	Average	No
		Point-21	49	124605.20	241943.80	17.44	4.60		Mainline	Average	No
		Point-23	50	124624.20	241943.20	17.52	4.60		Mainline	Average	No
		Point-25	51	124633.30	241934.10	17.52	3.77		Mainline	Average	No
		Point-27	52	124642.50	241905.90	17.52	3.66		Mainline	Average	No
		Point-29	53	124647.60	241892.90	17.52	3.66		Mainline	Average	No
		Point-31	54	124652.20	241880.10	17.52	3.66		Mainline	Average	No
Roadway-8 (PR-2)		Point-32	55	124654.50	241874.40	15.10	7.30		Mainline	Average	No
		Point-33	56	124669.50	241824.60	10.11	7.30		Mainline	Average	No
		Point-35	57	124683.50	241786.70	7.00	7.30		Mainline	Average	No
Roadway-9 (RAMP PR-2 N)		Point-36	58	124724.50	241899.40	18.92	4.00		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width [m]	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]					
Roadway-9 (RAMP PR-2 N)		Point-37	59	124702.10	241898.60	21.04	4.00		Mainline	Average	No
		Point-39	60	124672.90	241906.10	19.85	4.00		Mainline	Average	No
		Point-41	61	124654.20	241921.40	19.11	4.00		Mainline	Average	No
		Point-43	62	124647.20	241936.90	18.86	4.00		Mainline	Average	No
Roadway-10 (PR-2N)		Point-44	63	124692.90	241791.20	7.00	7.30		Mainline	Average	No
		Point-45	64	124663.00	241879.20	15.10	7.30		Mainline	Average	No
Roadway-11 (PR-2 N)		Point-48	65	124658.40	241892.00	18.07	7.30		Mainline	Average	No
		Point-49	66	124648.60	241921.70	17.09	7.30		Mainline	Average	No
		Point-51	67	124639.10	241968.80	16.39	7.30		Mainline	Average	No
		Point-53	68	124632.10	241992.20	14.64	7.30		Mainline	Average	No
		Point-55	69	124612.10	242032.40	10.63	7.30		Mainline	Average	No
		Point-57	70	124603.40	242046.80	4.04	7.30		Mainline	Average	No
		Point-59	71	124592.50	242061.30	3.32	7.30		Mainline	Average	No
Roadway-12 (PR-2 S)		Point-60	72	124581.00	242052.50	14.63	7.30		Mainline	Average	No
		Point-61	73	124597.60	242026.50	15.58	7.30		Mainline	Average	No
		Point-63	74	124608.90	242006.40	16.39	7.30		Mainline	Average	No
		Point-65	75	124617.90	241980.20	17.04	7.30		Mainline	Average	No
		Point-67	76	124631.00	241939.80	17.88	7.30		Mainline	Average	No
Roadway-13 (San Juan Street W)		Point-69	77	124586.30	241809.40	6.84	7.30		Mainline	Average	No
		Point-68	78	124622.10	241836.90	8.42	7.30		Mainline	Average	No
Roadway-14 (San Juan Street W)		Point-71	79	124616.80	241840.60	8.42	7.30		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-14 (San Juan Street W)		Point-70	80	124582.90	241815.00	6.84	7.30		Mainline	Average	No
Roadway-15 (Central Street)		Point-72	81	124614.00	241857.50	8.42	3.66		Mainline	Average	No
		Point-73	82	124601.00	241868.00	9.00	3.66		Mainline	Average	No
Roadway-16 (Central Street)		Point-74	83	124598.10	241864.60	9.00	3.66		Mainline	Average	No
		Point-75	84	124614.00	241852.20	8.42	3.66		Mainline	Average	No
		Point-77	85	124617.20	241849.00	8.42	3.66		Mainline	Average	No
Roadway-17 (San Juan Street)		Point-78	86	124649.40	241875.80	8.42	3.66		Mainline	Average	No
		Point-79	87	124644.10	241870.10	8.42	3.66		Mainline	Average	No
		Point-81	88	124633.80	241859.10	8.42	3.66		Mainline	Average	No
Roadway-18 (From UPR)		Point-82	89	124736.90	241954.00	9.87	7.30		Mainline	Average	No
		Point-83	90	124728.10	241945.30	9.87	7.30		Mainline	Average	No
		Point-85	91	124716.20	241945.70	9.87	7.30		Mainline	Average	No
		Point-87	92	124704.50	241944.90	9.87	7.30		Mainline	Average	No
Roadway-19 (PR-2 Ramp N)		Point-88	93	124699.70	241946.30	8.93	3.66		Mainline	Average	No
		Point-89	94	124673.40	241965.30	9.09	3.66		Mainline	Average	No
		Point-91	95	124631.80	241996.80	9.21	3.66		Mainline	Average	No
Roadway-20 (Desvio PR-2S hacia Rotonda 2)		Point-92	96	124649.20	241942.30	3.75	3.66		Mainline	Average	No
		Point-93	97	124665.60	241926.40	4.01	3.66		Mainline	Average	No
		Point-95	98	124678.40	241921.60	5.76	3.66		Mainline	Average	No
		Point-97	99	124681.40	241911.10	7.52	3.66		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-20 (Desvio PR-2S hacia Rotonda 2)		Point-99	100	124679.40	241907.20	8.09	3.66		Mainline	Average	No
Roadway-21 (San Juan Street)		Point-100	101	124675.10	241902.10	8.42	3.66		Mainline	Average	No
		Point-101	102	124659.80	241888.10	8.42	3.66		Mainline	Average	No
Roadway-22 (Desvio PR-2 hacia Rotonda 1)		Point-102	103	124622.10	241976.20	3.75	3.66		Mainline	Average	No
		Point-103	104	124630.50	241959.80	4.01	3.66		Mainline	Average	No
		Point-105	105	124641.60	241946.00	5.78	3.66		Mainline	Average	No
Roadway-23 Desvio (PR-2 S)		Point-106	106	124622.10	241981.80	3.45	3.66		Mainline	Average	No
		Point-107	107	124637.40	241966.00	3.75	3.66		Mainline	Average	No
Roadway-24 (Frontage Road East)		Point-108	108	124642.80	241962.90	7.20	7.30		Mainline	Average	No
		Point-109	109	124652.70	241958.90	7.66	7.30		Mainline	Average	No
		Point-111	110	124677.90	241949.80	7.82	7.30		Mainline	Average	No
		Point-113	111	124691.90	241936.20	7.84	7.30		Mainline	Average	No
		Point-115	112	124695.20	241924.00	7.84	7.30		Mainline	Average	No
Roadway-25 (San Juan Street)		Point-116	113	124640.50	241853.20	8.42	7.30		Mainline	Average	No
		Point-117	114	124654.90	241867.20	8.42	7.30		Mainline	Average	No
Roadway-26 (San Juan Street)		Point-118	115	124657.40	241869.80	8.42	7.30		Mainline	Average	No
		Point-119	116	124662.80	241874.80	8.42	7.30		Mainline	Average	No

Roadway Name	Roadway Notes	Road Segment		Coordinates (pavement)			Width	Point Notes	Road Segment		
		Start Point		X	Y	Z			Road Category	Pavement Type	On Structure
		Name	Number	[m]	[m]	[m]	[m]				
Roadway-27 (San Juan Street)		Point-120	117	124665.70	241877.30	8.42	7.30		Mainline	Average	No
		Point-121	118	124675.90	241887.40	8.42	7.30		Mainline	Average	No
Roadway-28 (San Juan Street)		Point-122	119	124678.50	241891.30	8.42	7.30		Mainline	Average	No
		Point-123	120	124685.10	241901.20	8.42	7.30		Mainline	Average	No
Roadway-29 (San Juan East)		Point-124	121	124688.10	241904.80	8.42	7.30		Mainline	Average	No
		Point-125	122	124699.90	241909.80	9.75	7.30		Mainline	Average	No
		Point-127	123	124712.10	241913.80	9.75	7.30		Mainline	Average	No
		Point-129	124	124727.10	241910.40	9.46	7.30		Mainline	Average	No
		Point-131	125	124738.10	241900.50	9.63	7.30		Mainline	Average	No
Roadway-30 (PR-2S)		Point-132	126	124740.70	241895.10	5.73	7.30		Mainline	Average	No
		Point-133	127	124752.30	241882.60	5.73	7.30		Mainline	Average	No
		Point-135	128	124769.80	241866.20	5.81	7.30		Mainline	Average	No
Roadway-31 (Central)		Point-136	129	124674.00	241834.90	9.50	7.30		Mainline	Average	No
		Point-137	130	124662.60	241850.10	9.11	7.30		Mainline	Average	No
Roadway-32 (Central)		Point-138	131	124659.80	241852.30	9.11	7.30		Mainline	Average	No
		Point-139	132	124651.20	241860.90	8.29	7.30		Mainline	Average	No
Roadway-33 (San Juan Street)		Point-140	133	124704.20	241928.20	8.42	7.30		Mainline	Average	No
		Point-141	134	124682.30	241908.00	8.42	7.30		Mainline	Average	No

REPORT:

INPUT TRAFFIC FOR TNM VEHICLES (LAeq)

TNM VERSION:

3.1.7970.37608

REPORT DATE:

23 March 2023

CALCULATED WITH:

3.1.7970.37608

CALCULATION DATE:

3/23/2023 10:44:25 AM

CASE:

Run 2043

ORGANIZATION:

ACEnvironmental

ANALYSIS BY:

EVazquez

PROJECT/CONTRACT:

Addendum to Noise Study La Vita Mayaguez
2023

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-1 (EF-3)	Point-0	0	540	32	17	32	11	24	0	0	0	0
	Point-1	1	540	32	17	32	11	24	0	0	0	0
Roadway-2 (PR-2S)	Point-14	8	62	24	2	24	1	24	0	0	0	0
	Point-15	9	62	24	2	24	1	24	0	0	0	0
	Point-17	10	62	24	2	24	1	24	0	0	0	0
	Point-19	11	62	24	2	24	1	24	0	0	0	0
	Point-21	12	62	24	2	24	1	24	0	0	0	0
	Point-22	13	62	24	2	24	1	24	0	0	0	0
	Point-25	14	62	24	2	24	1	24	0	0	0	0
Roadway-3 (Roundabout 2)	Point-26	15	407	32	13	32	8	32	0	0	0	0
	Point-27	16	407	32	13	32	8	32	0	0	0	0
	Point-29	17	407	32	13	32	8	32	0	0	0	0
	Point-31	18	407	32	13	32	8	32	0	0	0	0
	Point-33	19	407	32	13	32	8	32	0	0	0	0
	Point-35	20	407	32	13	32	8	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-3 (Roundabout 2)	Point-37	21	407	32	13	32	8	32	0	0	0	0
	Point-39	22	407	32	13	32	8	32	0	0	0	0
	Point-41	23	407	32	13	32	8	32	0	0	0	0
Roadway-4 (Roundabout 1)	Point-42	24	403	32	13	32	8	32	0	0	0	0
	Point-43	25	403	32	13	32	8	32	0	0	0	0
	Point-45	26	403	32	13	32	8	32	0	0	0	0
	Point-47	27	403	32	13	32	8	32	0	0	0	0
	Point-49	28	403	32	13	32	8	32	0	0	0	0
	Point-51	29	403	32	13	32	8	32	0	0	0	0
	Point-53	30	403	32	13	32	8	32	0	0	0	0
	Point-55	31	403	32	13	32	8	32	0	0	0	0
	Point-57	32	403	32	13	32	8	32	0	0	0	0
Roadway-5 (WF-3)	Point-0	33	196	24	6	24	4	24	0	0	0	0
	Point-1	34	196	24	6	24	4	24	0	0	0	0
	Point-3	35	196	24	6	24	4	24	0	0	0	0
	Point-5	36	196	24	6	24	4	24	0	0	0	0
Roadway-1_Divided (EF-3)	Point-1	2	540	32	17	32	11	24	0	0	0	0
	Point-3	3	540	32	17	32	11	24	0	0	0	0
	Point-5	4	540	32	17	32	11	24	0	0	0	0
	Point-7	5	540	32	17	32	11	24	0	0	0	0
	Point-9	6	540	32	17	32	11	24	0	0	0	0
	Point-11	7	540	32	17	32	11	24	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-1_Divided (EF-3)	Point-13	37	540	32	17	32	11	24	0	0	0	0
Roadway-7 (Ramp PR2S)	Point-0	38	440	32	14	32	9	32	0	0	0	0
	Point-1	39	440	32	14	32	9	32	0	0	0	0
	Point-3	40	440	32	14	32	9	32	0	0	0	0
	Point-5	41	440	32	14	32	9	32	0	0	0	0
	Point-7	42	440	32	14	32	9	32	0	0	0	0
	Point-9	43	440	32	14	32	9	32	0	0	0	0
	Point-11	44	440	32	14	32	9	32	0	0	0	0
	Point-13	45	440	32	14	32	9	32	0	0	0	0
	Point-15	46	440	32	14	32	9	32	0	0	0	0
	Point-17	47	440	32	14	32	9	32	0	0	0	0
	Point-19	48	440	32	14	32	9	32	0	0	0	0
	Point-21	49	440	32	14	32	9	32	0	0	0	0
	Point-23	50	440	32	14	32	9	32	0	0	0	0
	Point-25	51	440	32	14	32	9	32	0	0	0	0
	Point-27	52	440	32	14	32	9	32	0	0	0	0
	Point-29	53	440	32	14	32	9	32	0	0	0	0
	Point-31	54	440	32	14	32	9	32	0	0	0	0
Roadway-8 (PR-2)	Point-32	55	2229	64	70	64	45	64	0	0	0	0
	Point-33	56	2229	64	70	64	45	64	0	0	0	0
	Point-35	57	2229	64	70	64	45	64	0	0	0	0
Roadway-9 (RAMP PR-2 N)	Point-36	58	20	32	1	32	1	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]		
Roadway-9 (RAMP PR-2 N)	Point-37	59	20	32	1	32	1	32	0	0	0	0
	Point-39	60	20	32	1	32	1	32	0	0	0	0
	Point-41	61	20	32	1	32	1	32	0	0	0	0
	Point-43	62	20	32	1	32	1	32	0	0	0	0
Roadway-10 (PR-2N)	Point-44	63	1388	64	44	64	28	64	0	0	0	0
	Point-45	64	1388	64	44	64	28	64	0	0	0	0
Roadway-11 (PR-2 N)	Point-48	65	1388	64	44	64	28	64	0	0	0	0
	Point-49	66	1388	64	44	64	28	64	0	0	0	0
	Point-51	67	1388	64	44	64	28	64	0	0	0	0
	Point-53	68	1388	64	44	64	28	64	0	0	0	0
	Point-55	69	1388	64	44	64	28	64	0	0	0	0
	Point-57	70	1388	64	44	64	28	64	0	0	0	0
	Point-59	71	1388	64	44	64	28	64	0	0	0	0
Roadway-12 (PR-2 S)	Point-60	72	2229	64	70	64	45	64	0	0	0	0
	Point-61	73	2229	64	70	64	45	64	0	0	0	0
	Point-63	74	2229	64	70	64	45	64	0	0	0	0
	Point-65	75	2229	64	70	64	45	64	0	0	0	0
	Point-67	76	2229	64	70	64	45	64	0	0	0	0
Roadway-13 (San Juan Street W)	Point-69	77	318	32	10	32	6	32	0	0	0	0
	Point-68	78	318	32	10	32	6	32	0	0	0	0
Roadway-14 (San Juan Street W)	Point-71	79	356	32	11	32	7	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]		
Roadway-14 (San Juan Street W)	Point-70	80	356	32	11	32	7	32	0	0	0	0
Roadway-15 (Central Street)	Point-72	81	10	24	1	24	1	24	0	0	0	0
	Point-73	82	10	24	1	24	1	24	0	0	0	0
Roadway-16 (Central Street)	Point-74	83	10	24	1	24	1	24	0	0	0	0
	Point-75	84	10	24	1	24	1	24	0	0	0	0
	Point-77	85	10	24	1	24	1	24	0	0	0	0
Roadway-17 (San Juan Street)	Point-78	86	356	32	11	32	7	32	0	0	0	0
	Point-79	87	356	32	11	32	7	32	0	0	0	0
	Point-81	88	356	32	11	32	7	32	0	0	0	0
Roadway-18 (From UPR)	Point-82	89	105	24	3	24	2	24	0	0	0	0
	Point-83	90	105	24	3	24	2	24	0	0	0	0
	Point-85	91	105	24	3	24	2	24	0	0	0	0
	Point-87	92	105	24	3	24	2	24	0	0	0	0
Roadway-19 (PR-2 Ramp N)	Point-88	93	105	24	3	24	2	24	0	0	0	0
	Point-89	94	105	24	3	24	2	24	0	0	0	0
	Point-91	95	105	24	3	24	2	24	0	0	0	0
Roadway-20 (Desvio PR-2S hacia Rotonda 2)	Point-92	96	614	32	19	32	12	32	0	0	0	0
	Point-93	97	614	32	19	32	12	32	0	0	0	0
	Point-95	98	614	32	19	32	12	32	0	0	0	0
	Point-97	99	614	32	19	32	12	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-20 (Desvio PR-2S hacia Rotonda 2)	Point-99	100	614	32	19	32	12	32	0	0	0	0
Roadway-21 (San Juan Street)	Point-100	101	614	24	19	24	12	24	0	0	0	0
	Point-101	102	614	24	19	24	12	24	0	0	0	0
Roadway-22 (Desvio PR-2 hacia Rotonda 1)	Point-102	103	614	32	19	32	12	32	0	0	0	0
	Point-103	104	614	32	19	32	12	32	0	0	0	0
	Point-105	105	614	32	19	32	12	32	0	0	0	0
Roadway-23 Desvio (PR-2 S)	Point-106	106	729	32	23	32	15	32	0	0	0	0
	Point-107	107	729	32	23	32	15	32	0	0	0	0
Roadway-24 (Frontage Road East)	Point-108	108	729	32	23	32	15	32	0	0	0	0
	Point-109	109	729	32	23	32	15	32	0	0	0	0
	Point-111	110	729	32	23	32	15	32	0	0	0	0
	Point-113	111	729	32	23	32	15	32	0	0	0	0
	Point-115	112	729	32	23	32	15	32	0	0	0	0
Roadway-25 (San Juan Street)	Point-116	113	318	32	10	32	6	32	0	0	0	0
	Point-117	114	318	32	10	32	6	32	0	0	0	0
Roadway-26 (San Juan Street)	Point-118	115	318	32	10	32	6	32	0	0	0	0
	Point-119	116	318	32	10	32	6	32	0	0	0	0

Roadway Name	Road Segment		Auto		Medium Truck		Heavy Truck		Bus		Motorcycle	
	Start Point		Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed	Volume	Speed
	Name	No.										
			[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]	[Veh/hr]	[km/h]
Roadway-27 (San Juan Street)	Point-120	117	277	32	9	32	6	32	0	0	0	0
	Point-121	118	277	32	9	32	6	32	0	0	0	0
Roadway-28 (San Juan Street)	Point-122	119	318	32	10	32	6	32	0	0	0	0
	Point-123	120	318	32	10	32	6	32	0	0	0	0
Roadway-29 (San Juan East)	Point-124	121	540	32	17	32	11	32	0	0	0	0
	Point-125	122	540	32	17	32	11	32	0	0	0	0
	Point-127	123	540	32	17	32	11	32	0	0	0	0
	Point-129	124	540	32	17	32	11	32	0	0	0	0
	Point-131	125	540	32	17	32	11	32	0	0	0	0
Roadway-30 (PR-2S)	Point-132	126	540	32	17	32	11	32	0	0	0	0
	Point-133	127	540	32	17	32	11	32	0	0	0	0
	Point-135	128	540	32	17	32	11	32	0	0	0	0
Roadway-31 (Central)	Point-136	129	240	32	8	32	5	32	0	0	0	0
	Point-137	130	240	32	8	32	5	32	0	0	0	0
Roadway-32 (Central)	Point-138	131	240	24	8	24	5	24	0	0	0	0
	Point-139	132	240	24	8	24	5	24	0	0	0	0
Roadway-33 (San Juan Street)	Point-140	133	440	24	14	24	9	24	0	0	0	0
	Point-141	134	440	24	14	24	9	24	0	0	0	0