

Plank-Nicholson Bus Rapid Transit Technical Memorandum: General Noise Assessment

To: Capital Area Transit System	Date: January 17, 2019
From: HNTB Corporation	
Cc: Federal Transit Administration	
Project: Plank-Nicholson Bus Rapid Transit	

PROJECT DESCRIPTION

The City-Parish of East Baton Rouge (City), along with the Capital Area Transit System (CATS) and in partnership with the Federal Transit Administration (FTA), will be implementing Baton Rouge's first Bus Rapid Transit (BRT) route known as the Plank-Nicholson BRT (Project). The Project route is approximately nine miles in length (one way) between North Baton Rouge (Airline Highway) and the Louisiana State University (LSU) campus. The Project is intended to deliver a premium transit service to the City, conveniently and efficiently linking the north and south side of the city with downtown. Plank Road is one of CATS' highest volume corridors and serves a high percentage of transit-dependent passengers. The route passes through well-organized neighborhoods that are characterized by high concentrations of minority and low-income residents, and recent focus along the Plank and Nicholson corridors has spurred investment in infrastructure and economic development opportunities. The Project will expand local and regional mobility options, improve job access, support transit-oriented development (TOD) and enhance livability along the corridor.

Most station improvements will be within existing right-of-way. However, some station areas may require the acquisition of small portions of right-of-way from adjacent properties. The scope of work proposed for the Project includes the following:

- Construction of up to 44 station locations (22 station pairs), a transfer center, and a layover location at LSU. The proposed standard station design has a typical total footprint of 10 feet by 55 feet.
- High-amenity, modern stations will be constructed and will each include a shelter, level boarding platform, station marker, real-time arrival (RTA) displays, bicycle facilities, benches, trash receptacles, and ADA accommodations.
- A 2.55-acre parcel located along Airline Highway just east of Plank Road has been identified by CATS to serve as the transfer center. The property will provide transfer connections to several local routes serving North Baton Rouge and provide premium transit amenities, waiting areas, and park-and-ride facilities.

- Guideway improvements include transit signal priority (TSP) and narrowed travel lanes to
 reduce vehicles speeds, thus improving safety in the corridor. Queue jumps may be located
 at intersections, where appropriate, and will provide preferences to buses at intersections
 through the addition of travel lane at the intersection approach to signalized intersections.
- Roadway improvements include roadway resurfacing, new curb construction, restriping and
 utility adjustments in the vicinity of station locations necessary to accommodate station
 improvements and narrow the four-lane roadway section to four 11-foot lanes (two lanes in
 each direction).
- Construction of new sidewalks along sections of both sides of Plank Road from the Denham stations south to I-10.
- The Plank-Nicholson BRT will feature a fleet of specifically designed BRT vehicles that will be uniquely stylized and branded. The BRT fleet is planned to utilize all-electric propulsion technology to enhance air quality and passenger experience.

NOISE SCREENING METHODOLOGY

The FTA Transit Noise and Vibration Impact Assessment Manual, September 2018, (hereinafter referred to as The Manual) was used to perform the screening procedure and subsequent general noise assessment.

The Project is located along existing street corridors, in an urban setting in Baton Rouge, Louisiana, and will not significantly increase the number of vehicles on the roadways. To determine the potential for noise impacts, the screening procedure was used to determine if noise-sensitive receptors are located within the screening distance at the proposed transit center, the bus layover area, the 44 proposed individual stations, and areas along the project corridor. Although the proposed individual bus stations are not considered "transit centers," the screening distances designated for transit centers by FTA were used to determine locations of potential noise receptors as the most conservative assumption for this type of project. Single buses stopping, idling, and then moving on from any station would be expected to generate less noise than multiple buses moving within a transit center. Therefore, the screening distances determined for the Project noise assessment are 225 feet for unobstructed receptors and 150 feet for receptors that have intervening buildings between the station and the receptor (Table 4-7 of The Manual). These same distances were applied to the linear project area, between the station areas.

A 225-foot screening buffer was applied to the proposed transit center areas, the bus layover areas, and individual station areas, and along the linear project area to identify potential noise-sensitive receptors. The three noise-sensitive land use categories (1, 2, and 3) used by FTA were used to identify potential noise sensitive receptors, and are shown below in Table 1, which is excerpted from Table 4-3 of The Manual. The FTA Noise Impact Assessment Spreadsheet. (http://www.fta.dot.gov/12347_2233.html) utilizes these three categories and describes them as 1: Outdoor – Quiet, 2: Residential, and 3: Institutional. According to FTA guidelines, buildings used for commercial or industrial purposes, and which are located within busy commercial areas, were not considered to be noise-sensitive and the noise impact criteria does not apply. Under FTA environmental reviews, some historic structures may be evaluated as sensitive resources as defined in The Manual, but because The Manual and regulations under Section 106 of the National Historic Preservation Act have different criteria for determining effect, identifying a severe noise impact for a structure under the Manual does not necessarily mean there would be an adverse effect under Section 106. Therefore, only the historic structures that qualify as sensitive resources within the three land use categories were evaluated.

Table 1 - FTA Land Use Categories

Land Use Category	Land Use Type	Noise Metric, dBA	Description of Land Use Category
P	High Sensitivity	Outdoor L _{eq(1No} *	Land where quiet is an essential element of its intended purpose. Example land uses include preserved land for serenity and quiet, outdoor amphitheaters and concert pavilions, and national historic landmarks with considerable outdoor use. Recording studios and concert halls are also included in this category.
.2	Residential	Outdoor Lan	This category is applicable all residential land use and buildings where people normally sleep, such as hotels and hospitals.
3	Institutional	Outdoor Leg(Ihri*	This category is applicable to institutional land uses with primarily daytime and evening use. Example land uses include schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities are also included in this category.

Legithm for the loudest hour of project-related activity during hours of noise sensitivity.

Source: FTA Transit Noise and Vibration Manual, September 2018.

In addition to the receptors identified within the screening distance of the proposed transit centers and stations, receptors were identified within these distances along the project street corridors and were carried forward into the general noise assessment. Each noise sensitive receptor within the screening buffers was given a unique identification number (R-1, R-2, etc.). The locations of the receptors, in relation to the proposed transit centers and stations, and along the project street corridors, are shown on **Exhibit 1, Pages 1** through **17**.

GENERAL NOISE ASSESSMENT

The busy urban streets along the proposed BRT project are primary transportation corridors that have existing transportation noise, including noise from existing buses, and the Project would not introduce a new atypical noise source. It was anticipated that there would be very little change in the noise environment of the project area as a result of the increased bus service of the proposed BRT project. The proposed stations would provide 3 buses per hour during off-peak hours, 2 buses per hour in evening and early am, and the peak hours running 4 buses per hour; totaling 47 buses throughout the daytime during the week (see **Table 2**). This corresponds to an average of 3.1 buses per hour, through the 15-hour period during the weekday (between 7am and 10pm). The FTA considers "nighttime" to be between 10pm and 7am, in which there would be a total of 11 buses, although no BRT buses would run between the hours of 12:00am and 5:00am. This results in an average of 1.2 buses per hour through the 9-hour period during the night.

For the transfer center on Airline Highway, the local buses that will serve the facility were added, resulting in an average of 10.0 buses per hour through the daytime period, and an average of 2.3 buses per hour through the nighttime period. At the proposed downtown transfer center, at Florida St and 10th Street, there are no noise sensitive receptors in the screening buffer zone.

Table 2 - BRT Service Plan

	Weekday								
Time Period	Nigh	ttime		Daytime					
	Early AM	AM Peak	AM Peak	Midday	PM Peak	Evening	Night	Nighttime Night	
Service Hours	5:00a - 5:30a	5:30a - 7:00a	7:00a - 9:00a	9:00a - 3:00p	3:00p - 6:30p	6:30p - 7:30p	7:30p - 10:00p	10:00p - 12:00a	
Service Frequency (Minutes)	30	15	15	20	15	30	30	30	
Number of Buses	1	6	8	18	14	2	5	4	

Noise Assessment for Proposed Stations and Transit Centers

FTA's *Noise Impact Assessment Spreadsheet* was used to calculate the increase and change in noise levels at the noise sensitive receptors within the buffer zones, as a result of implementing the proposed BRT project. The spreadsheet calculates the level of impact (no impact or "none", moderate, severe) by utilizing input data including project type, land use category, estimated existing noise levels (derived from Table 5-7 in The Manual), the average number of buses per hour for daytime and nighttime service, estimated noise levels from the noise source (buses), and the distance from the receptor to the noise source.

To determine whether the noise levels from the proposed BRT project may have an impact on a noise sensitive receptor (based on the FTA noise impact criteria) a comparison is made between the estimated existing outdoor noise levels in the vicinity of the proposed project and the estimated outdoor noise levels from the proposed project when it is implemented ("project noise").

Noise Assessment for Proposed Stations and Transit Centers

A total of 125 noise sensitive receptors were identified within the screening buffers of the stations and transit centers, including 2 receptors in Category 1, 106 receptors in Category 2, and 17 receptors in Category 3. Through the general noise assessment for each transit center or station, it was determined that there would be "no impact" on any receptors. The impact results of the spreadsheet analyses of the general noise assessment are summarized in Table A in Appendix A. The detailed results of the spreadsheet calculations for the receptors in each land use category that are the shortest distance from the transit centers and stations (representing a worst case) are presented in Appendix B.

One urban park at Convention Street and North Seventh (#R-46) and one recording studio at Saint Ferdinand Street and Spain Street (#R-39) are located within proposed station areas and were evaluated as Category 1. However, these properties are surrounded by busy urban streets with existing bus routes and/or bus stops. For both properties, "quiet is an essential element in their intended purpose", as described in Section 4.1 of The Manual. However, these properties are sufficiently distant from the stations to not be impacted (moderately or severely) by project noise.

Noise Assessment for the Project Street Corridors

Several noise sensitive receptors were identified within the screening distance for the project street corridors (between the station areas). The FTA spreadsheet was used to determine impact levels from the noise source. Data entered into the spreadsheet included estimated existing noise levels, distance between the source and the receptor, the average number of buses per hour, bus speed (mph), land use category, and the type of bus (diesel, electric, or hybrid).

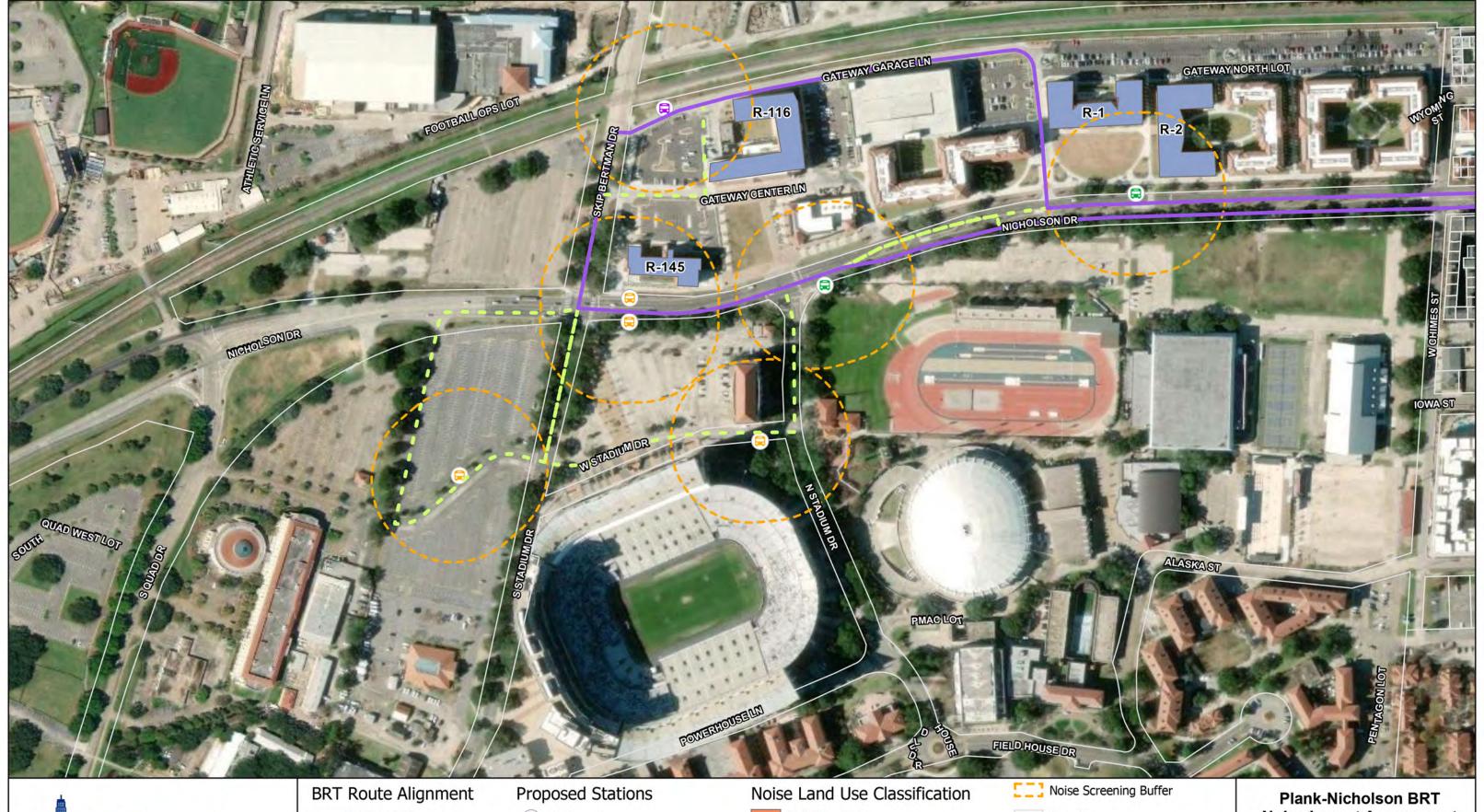
Based on the large number of identified receptors, the spreadsheet analysis was completed for the receptors with the shortest distance between the source and the receptor for each land use category. If a receptor was farther from the source than the distance for a moderate or severe impact, it was determined to have no impact. The spreadsheet analysis indicated that the moderate and severe impact distances for each land use category would be minimal and would not be outside of the street, as shown in **Table 3**. Therefore, the Project would have no impact on any receptors outside of the station buffer zones.

Table 3 – Impact Distances for Project Street Corridors

Land Use Category	Shortest Distance to Receptor	Distance Resulting in Moderate Impact	Distance Resulting in Severe Impact
1	141 ft.	6 ft.	3 ft.
2	35 ft.	4 ft.	2 ft.
3	60 ft.	2 ft.	1 ft.

CONCLUSION

A General Noise Assessment was conducted for the noise sensitive receptors at the proposed bus layover area, the transfer center, the 44 individual station areas, and along the project street corridors, in accordance with FTA Guidance. The results of the assessment indicated that the proposed BRT project would have "no impact" on any of the receptors in the project area.







200 400 Feet



 Preferred Alignment Alignment Alternative

Preferred

Alternate

Layover

Transit Center

Local Bus Stop Improvement

High Sensitivity

Residential

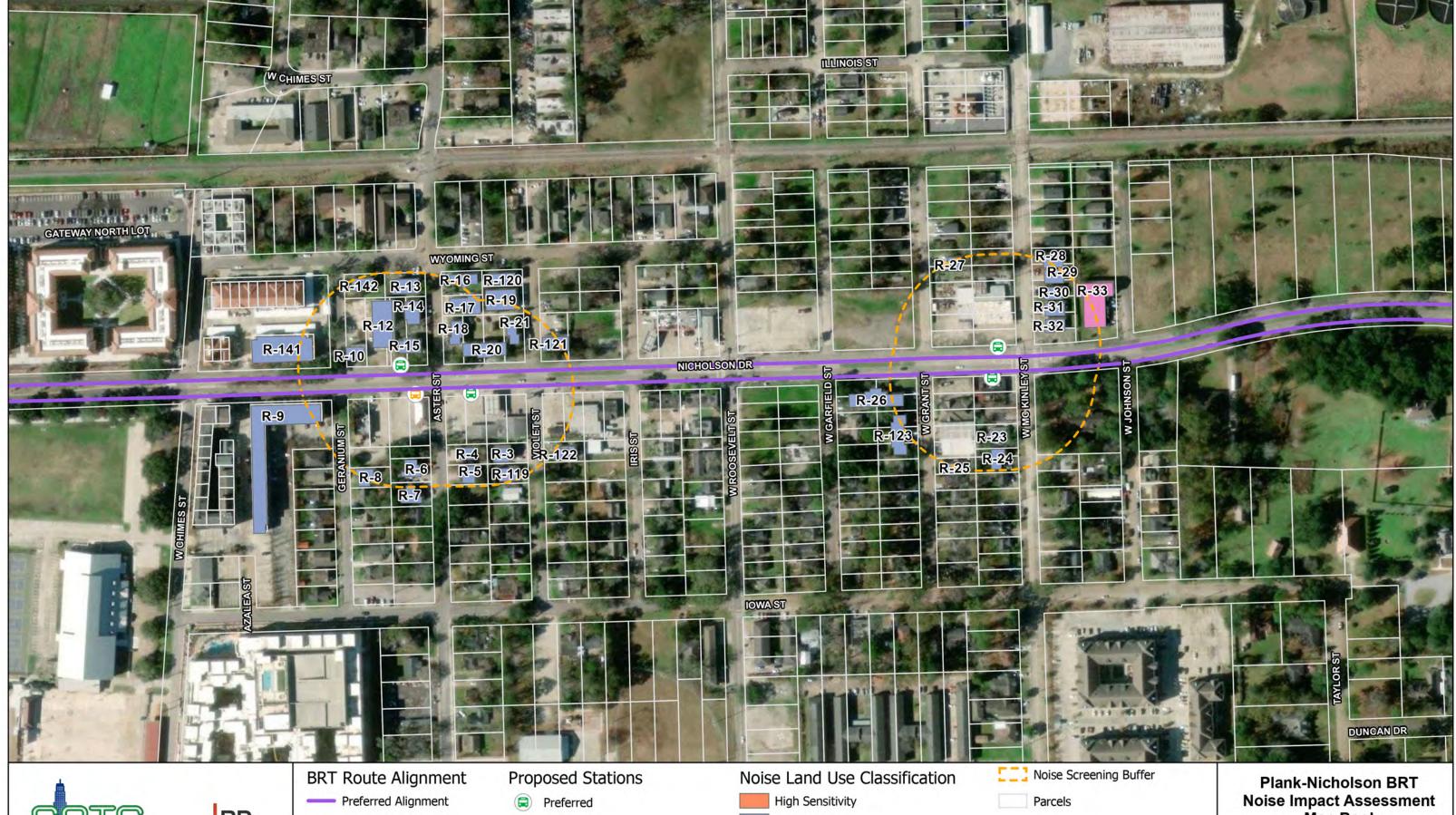
Institutional

Parcels

Noise Impact Assessment Map Book

> Exhibit 1 1/17/2020

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200 400 Feet



Alignment Alternative

- Alternate
- Layover
- Transit Center
- Local Bus Stop Improvement

Residential

Institutional

Map Book

Exhibit 1 1/17/2020

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200



400 Feet

Alignment Alternative

Alternate

Layover

Transit Center

Local Bus Stop Improvement

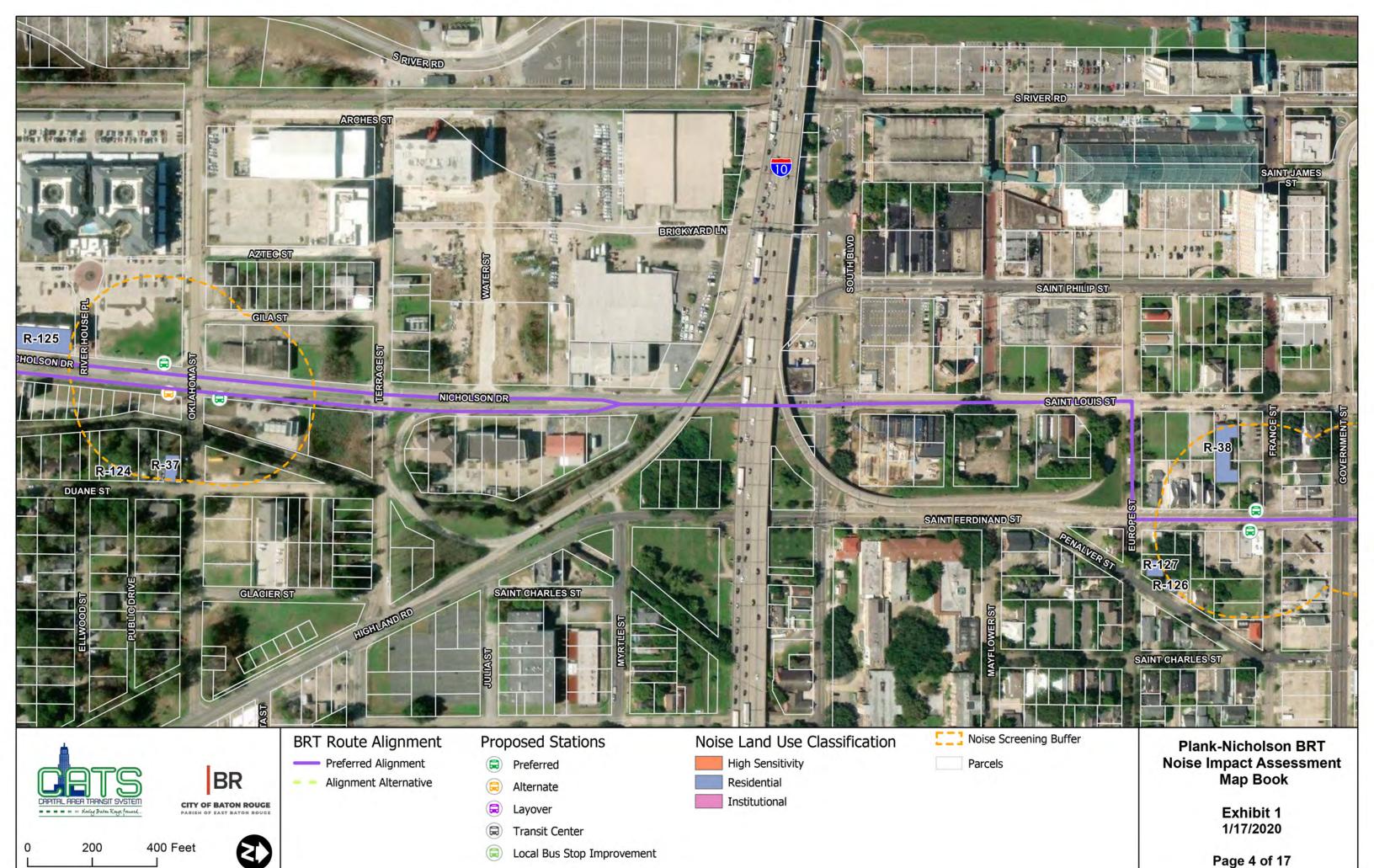
Residential

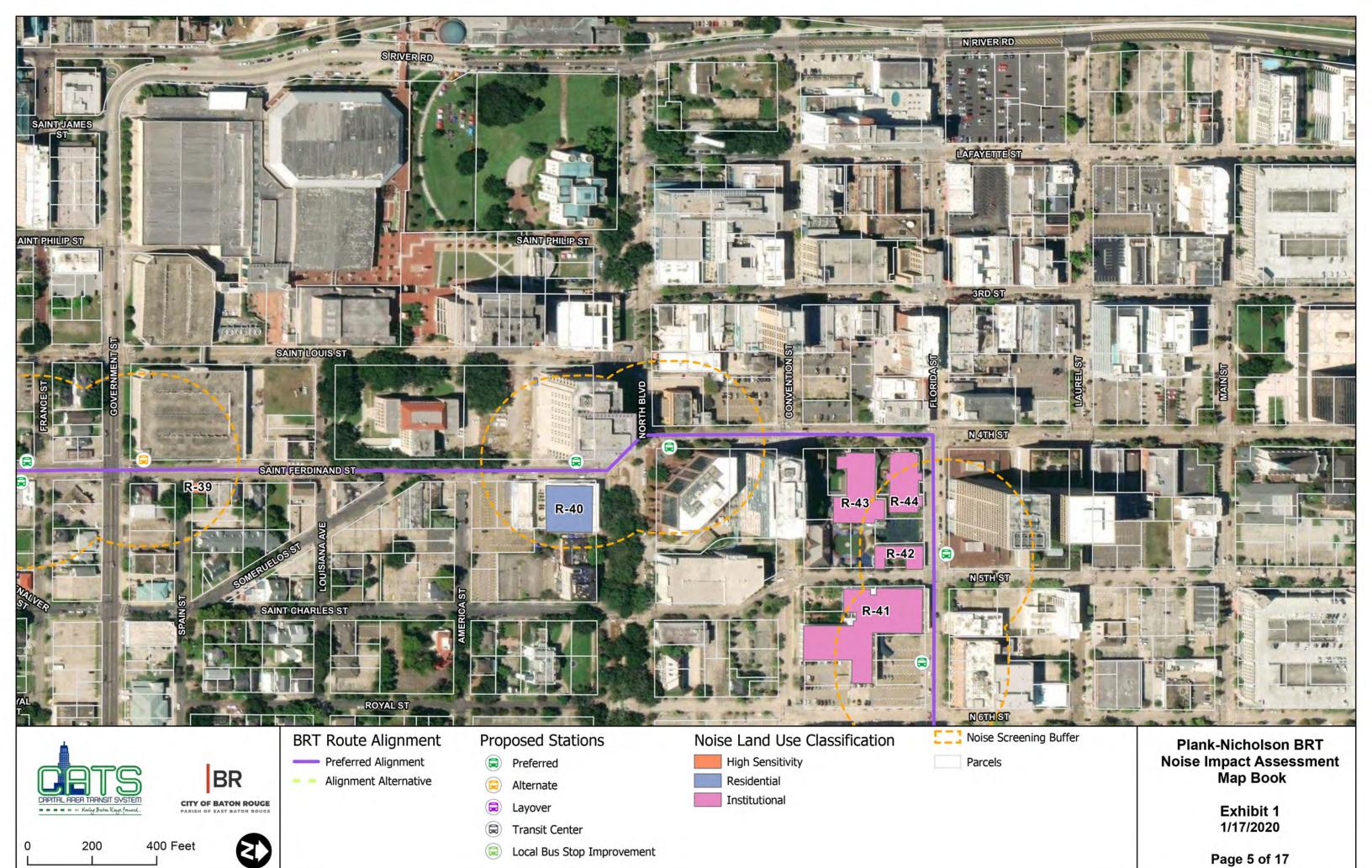
Institutional

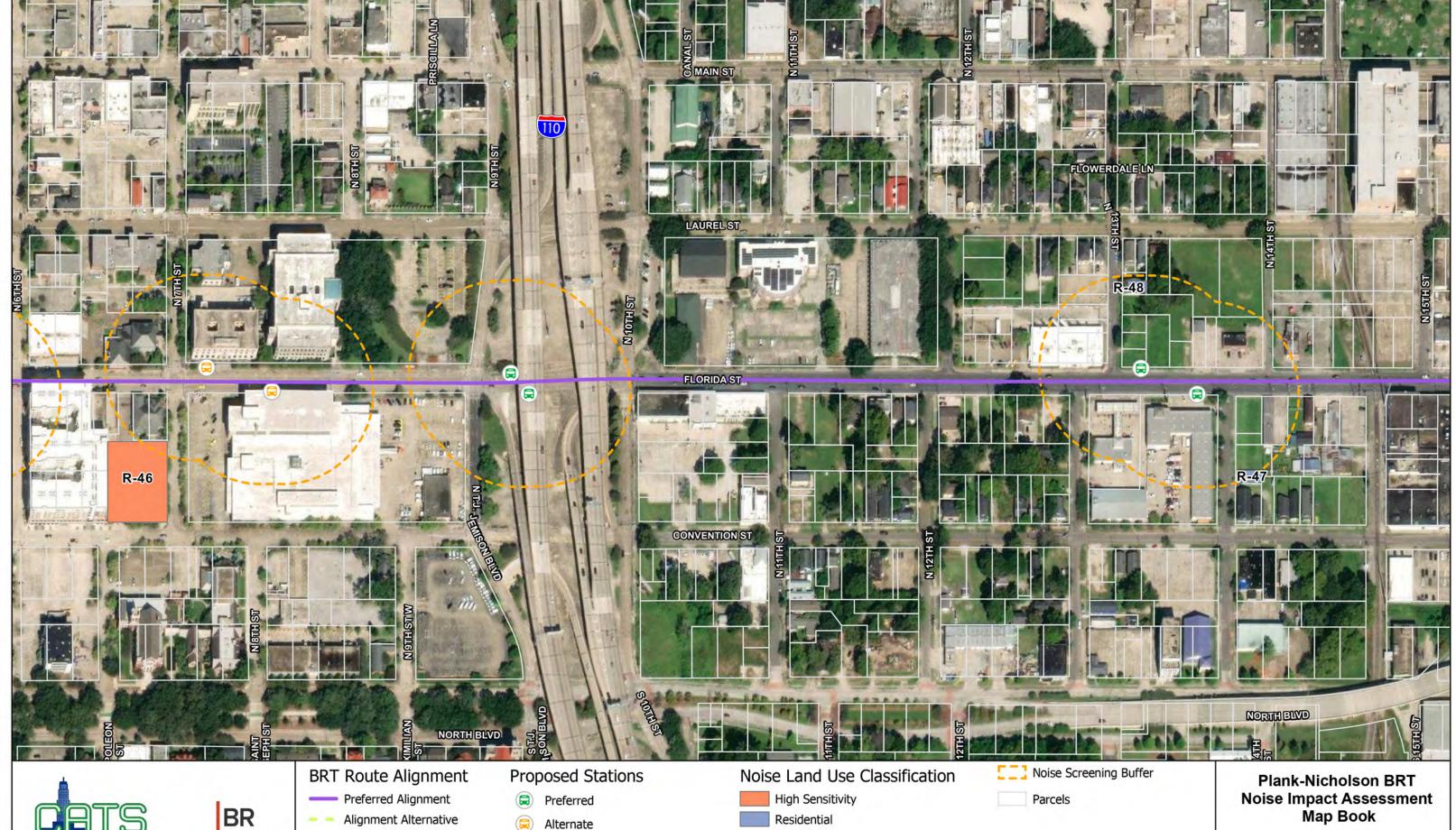
Map Book

Exhibit 1 1/17/2020

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200 400 Feet



Layover

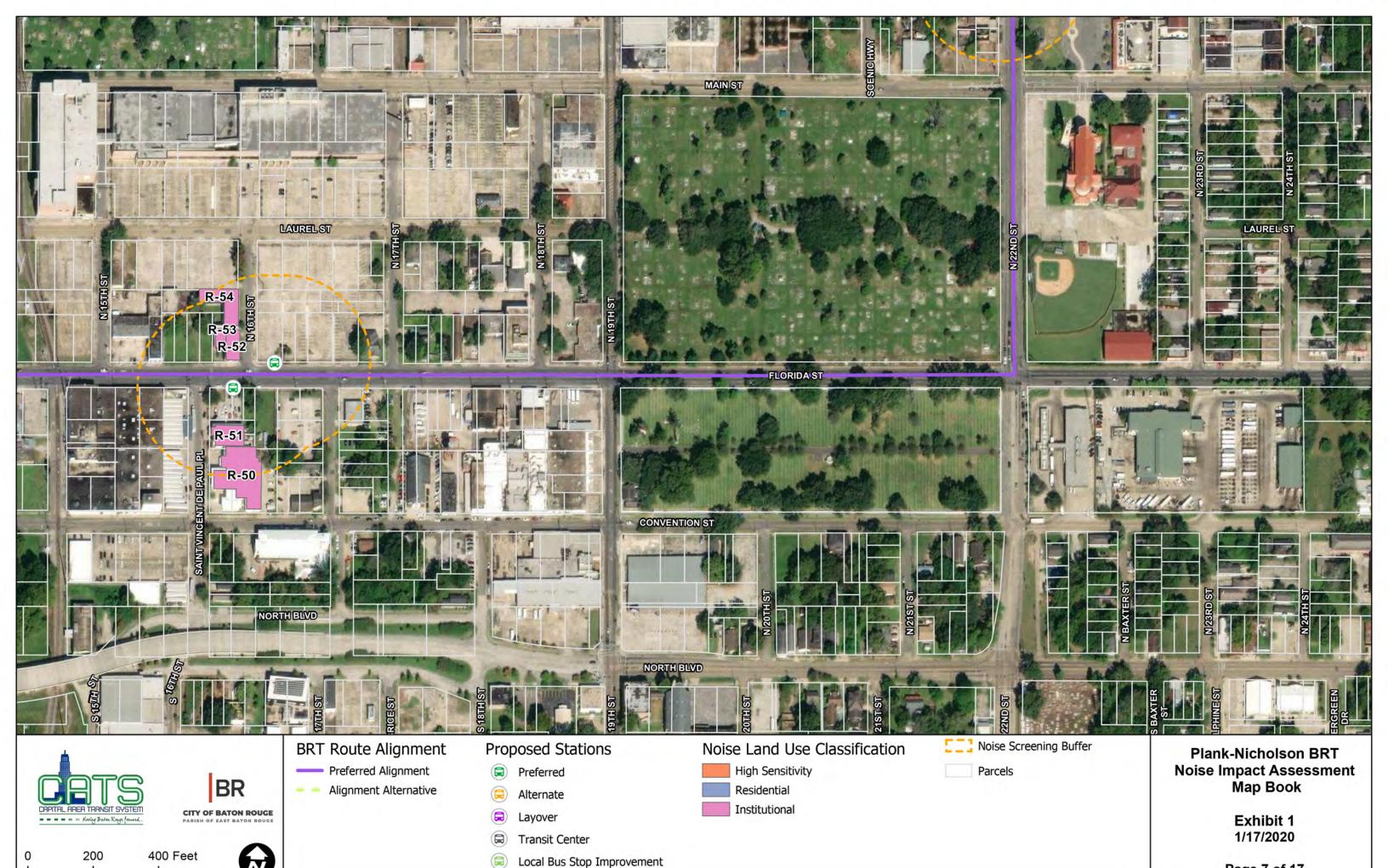
Transit Center

Local Bus Stop Improvement

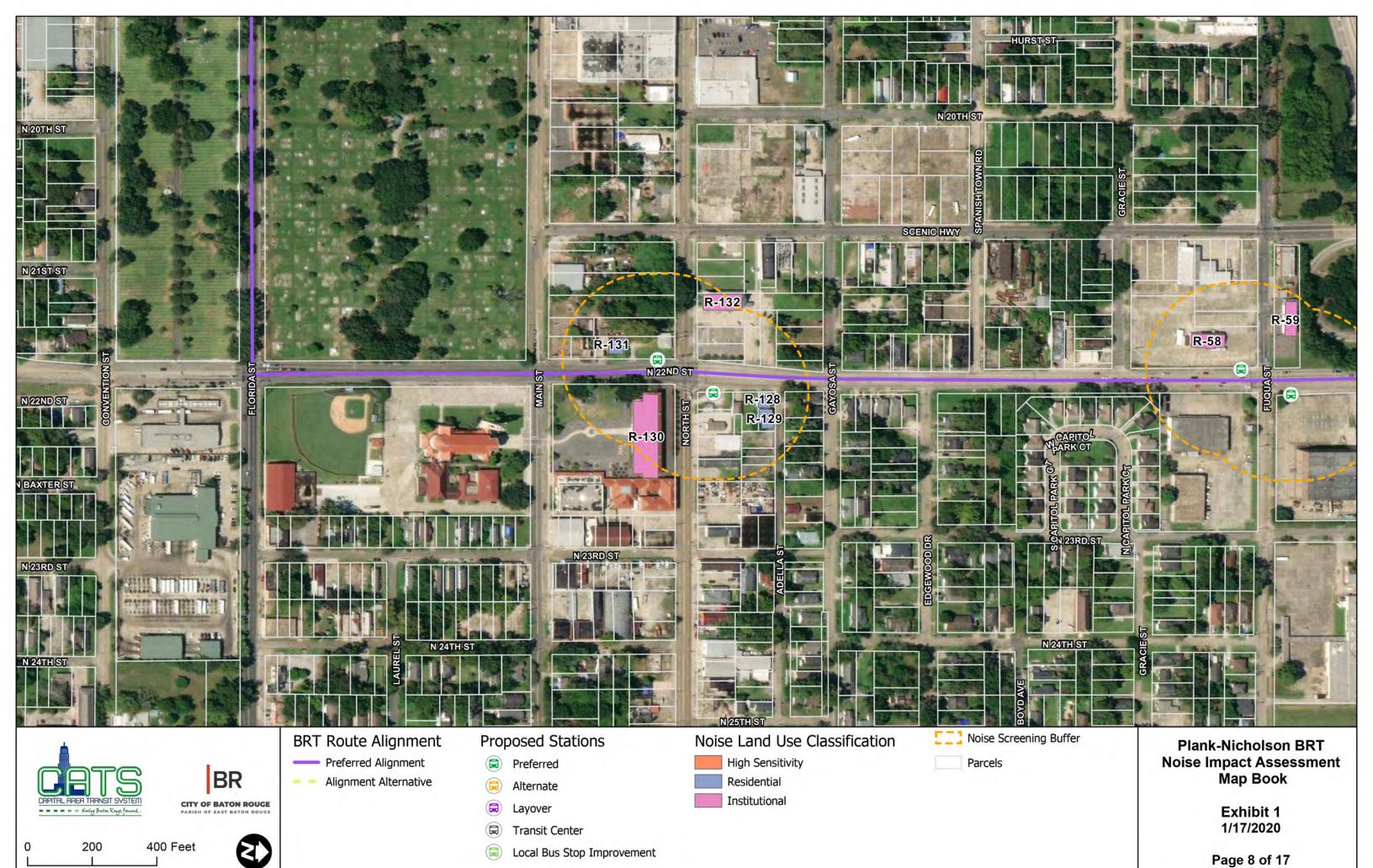
Institutional

Exhibit 1 1/17/2020

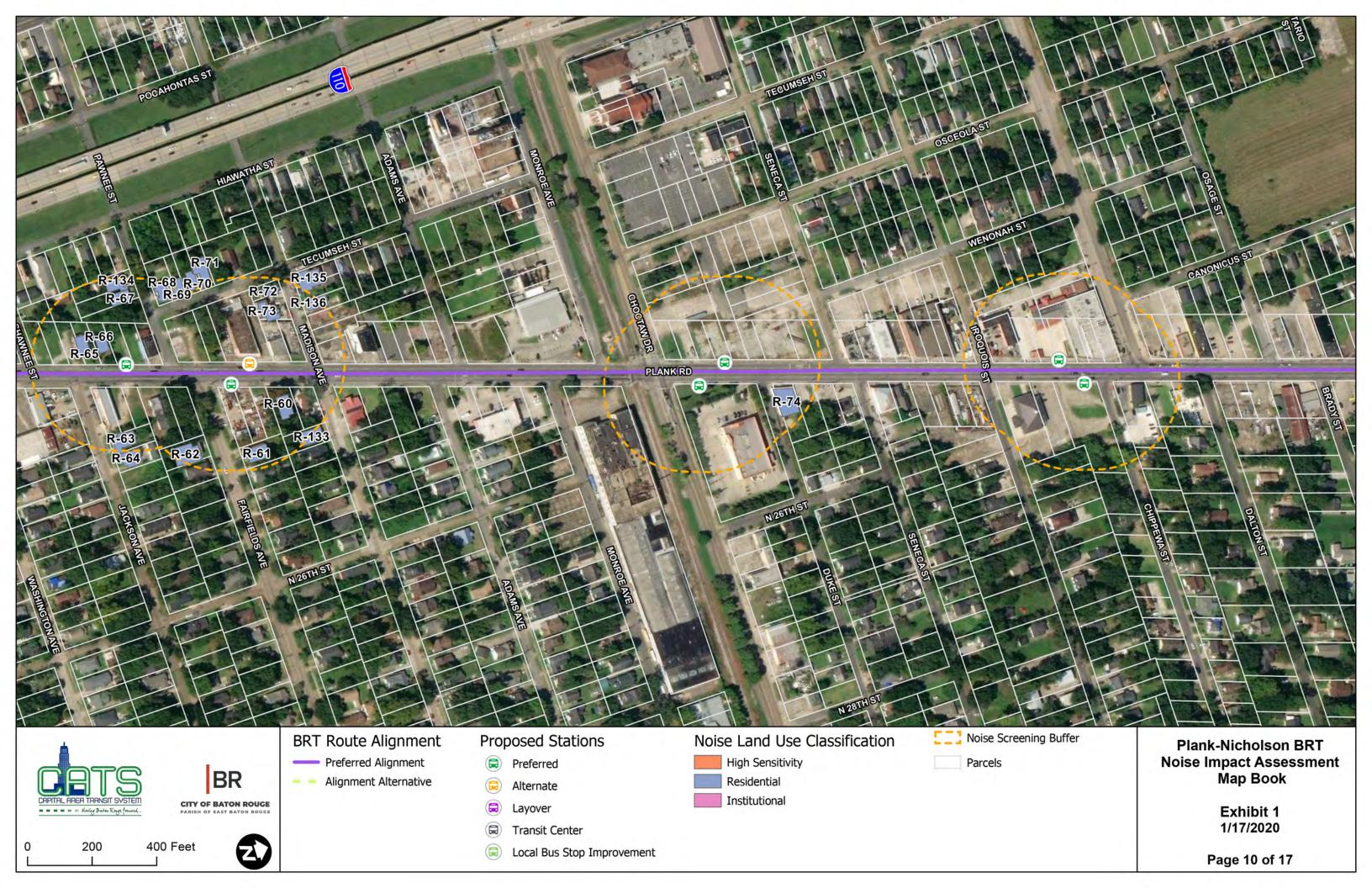
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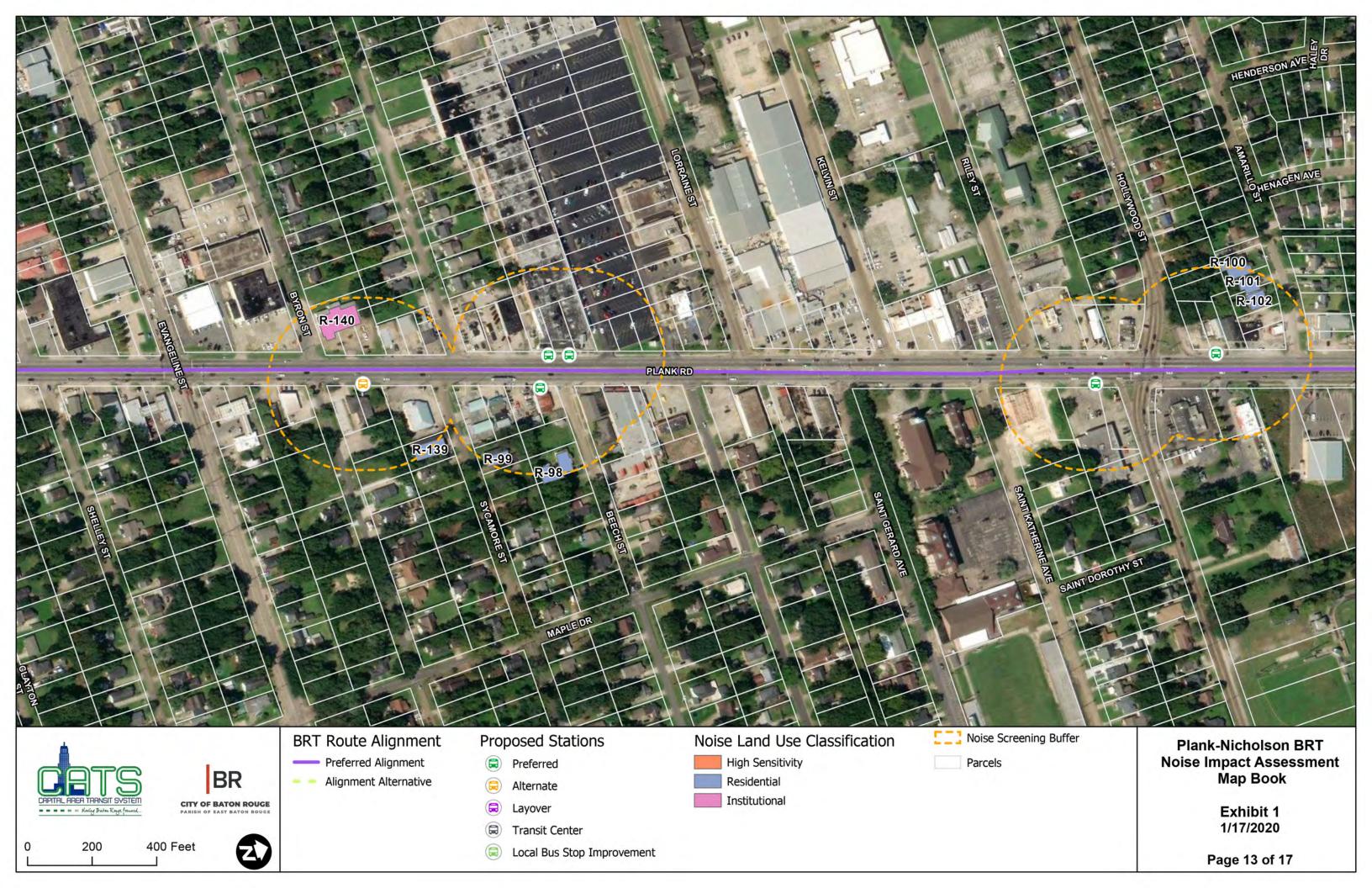


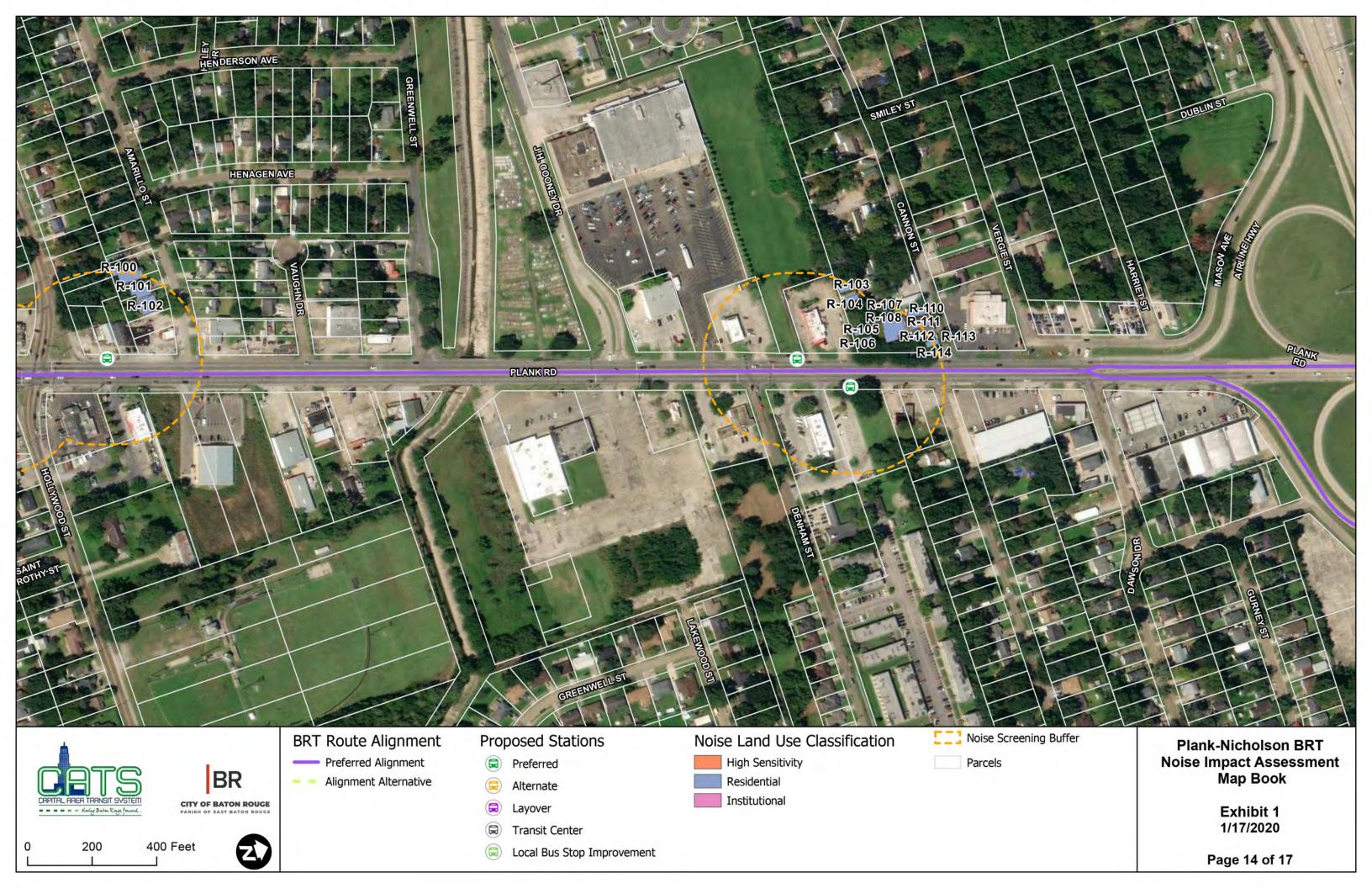


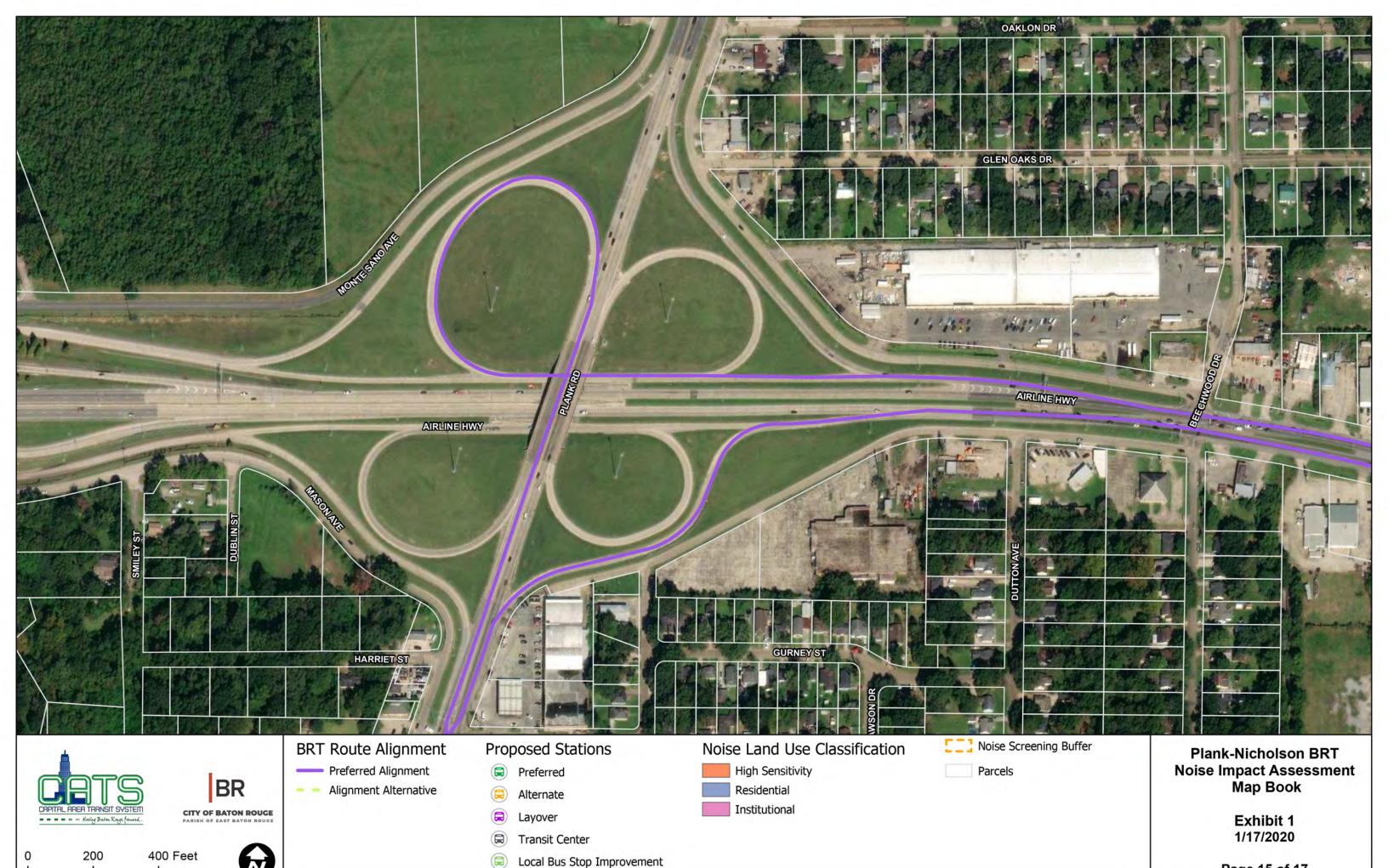




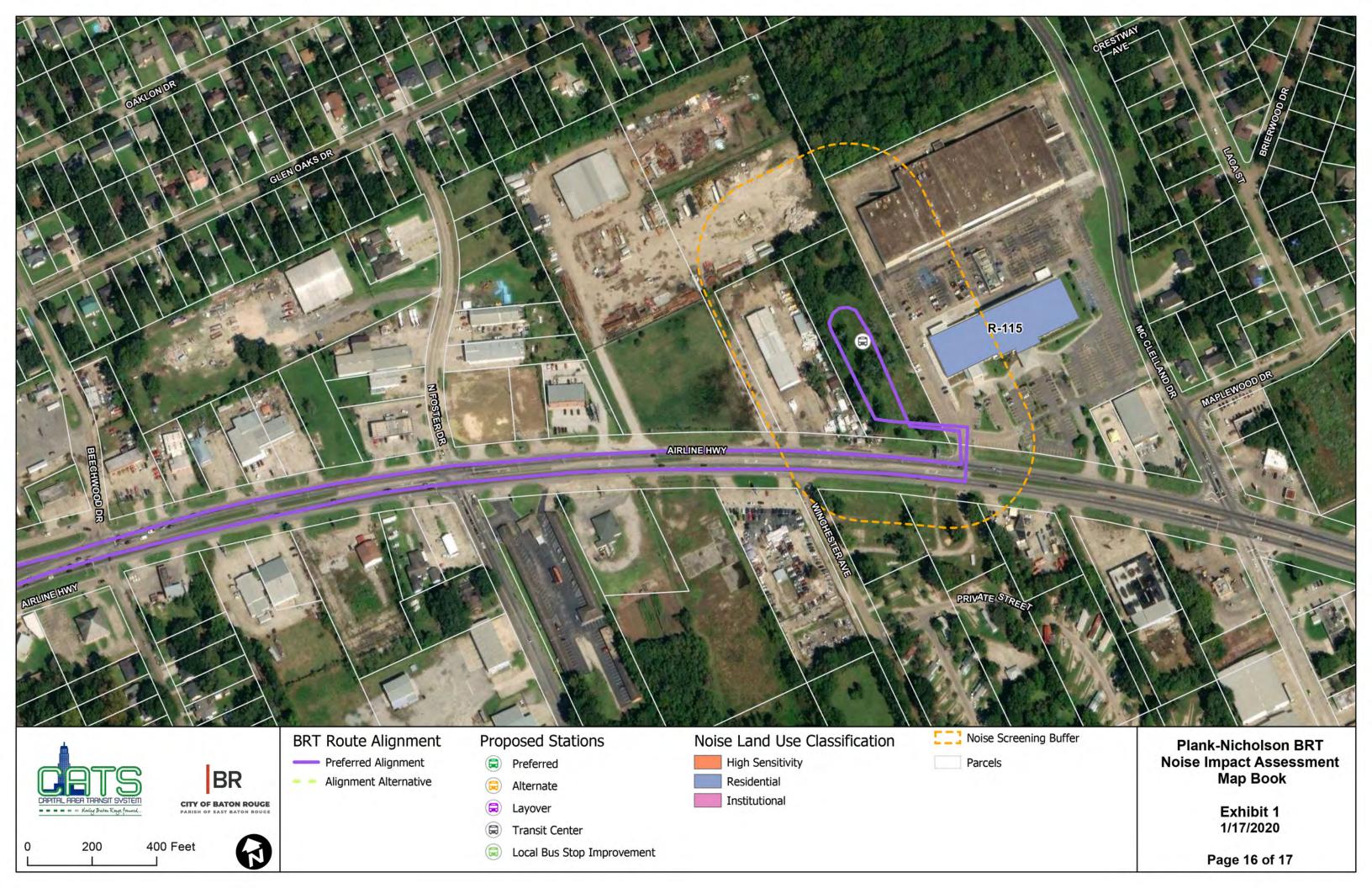


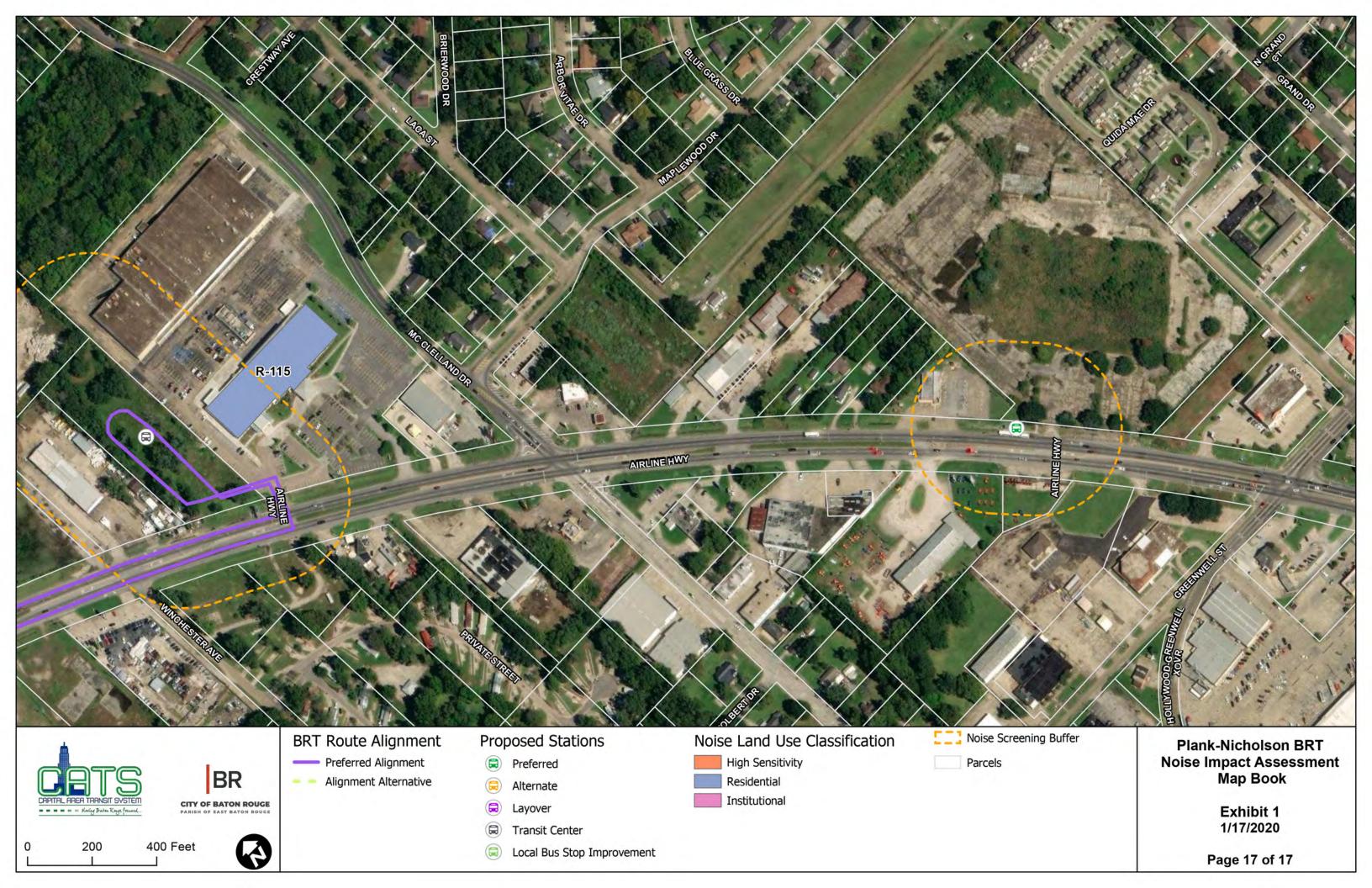






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Appendix A Noise Assessment Summary

APPENDIX A

Table A - Noise Assessment Summary

Project: Plank-Nicholson BRT

Receiver: All

					Noise Criteria				
	Receiver	Land Use Category	Distance	Project Noise*	Existing Noise*	Total Noise	Mod. Impact**	Sev. Impact**	Impact?
1	R-1	2. Residential	222 ft	44.3 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
2	R-2	2. Residential	66 ft	57.5 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
3	R-3	2. Residential	155 ft	43.7 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
4	R-4	2. Residential	150 ft	44.1 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
5	R-5	2. Residential	203 ft	39.3 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
6	R-6	2. Residential	182 ft	46.5 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
7	R-7	2. Residential	257 ft	38.2 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
8	R-8	2. Residential	227 ft	44.1 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
9	R-9	2. Residential	243 ft	43.3 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
10	R-10	2. Residential	72 ft	56.5 dBA	60 dBA	62 dBA	58 dBA	63 dBA	None
11	R-12	2. Residential	46 ft	61.4 dBA	70 dBA	71 dBA	64 dBA	69 dBA	None
12	R-13	2. Residential	199 ft	41.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
13	R-14	2. Residential	110 ft	47.4 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
14	R-15	2. Residential	35 ft	64.4 dBA	70 dBA	71 dBA	64 dBA	69 dBA	None
15	R-16	2. Residential	249 ft	38.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
16	R-17	2. Residential	187 ft	41.7 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
17	R-18	2. Residential	121 ft	50.9 dBA	65 dBA	65 dBA	61 dBA	66 dBA	None
18	R-19	2. Residential	230 ft	39.4 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
19	R-20	2. Residential	148 ft	48.7 dBA	70 dBA	70 dBA	64 dBA	69 dBA	None
20	R-21	2. Residential	156 ft	43.6 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
21	R-23	2. Residential	145 ft	44.4 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
22	R-24	2. Residential	200 ft	37.9 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
23	R-25	2. Residential	243 ft	35.8 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
24	R-26	2. Residential	228 ft	44.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
25	R-27	2. Residential	226 ft	39.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
26	R-28	2. Residential	241 ft	38.9 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
27	R-29	2. Residential	203 ft	45.3 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
28	R-30	2. Residential	164 ft	47.6 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
29	R-31	2. Residential	132 ft	49.9 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
30	R-32	2. Residential	108 ft	52.1 dBA	60 dBA	61 dBA	58 dBA	63 dBA	None
31	R-33	3. Institutional	222 ft	37.7 dBA	55 dBA	55 dBA	60 dBA	66 dBA	None
32	R-34	2. Residential	128 ft	50.3 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
33	R-35	2. Residential	211 ft	44.8 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
34	R-36	2. Residential	241 ft	43.4 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
35	R-37	2. Residential	184 ft	46.3 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
36	R-38	2. Residential 1. Outdoor	85 ft	54.7 dBA	65 dBA	65 dBA	61 dBA	66 dBA	None
37	R-39	Quiet	141 ft	47.2 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None

38	R-40	2. Residential	70 ft	56.8 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
39	R-41	3. Institutional	58 ft	56.8 dBA	65 dBA	66 dBA	66 dBA	71 dBA	None
40	R-42	3. Institutional	60 ft	56.4 dBA	65 dBA	66 dBA	66 dBA	71 dBA	None
41	R-43	3. Institutional	200 ft	43.4 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
42	R-44	3. Institutional 1. Outdoor	125 ft	48.5 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
43	R-46	Quiet	223 ft	37.7 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
44	R-47	2. Residential	232 ft	39.3 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
45	R-48	2. Residential	213 ft	44.7 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
46	R-50	3. Institutional	172 ft	40.5 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
47	R-51	3. Institutional	109 ft	49.9 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
48	R-52	3. Institutional	74 ft	54.2 dBA	65 dBA	65 dBA	66 dBA	71 dBA	None
49	R-53	3. Institutional	128 ft	43.7 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
50	R-54	3. Institutional	134 ft	47.7 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
51	R-58	3. Institutional	64 ft	55.7 dBA	65 dBA	65 dBA	66 dBA	71 dBA	None
52	R-59	3. Institutional	142 ft	47.1 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
53	R-60	2. Residential	112 ft	51.7 dBA	60 dBA	61 dBA	58 dBA	63 dBA	None
54	R-61	2. Residential	204 ft	45.2 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
55	R-62	2. Residential	195 ft	45.7 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
56	R-63	2. Residential	205 ft	45.2 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
57	R-64	2. Residential	263 ft	38.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
58	R-65	2. Residential	80 ft	55.4 dBA	65 dBA	65 dBA	61 dBA	66 dBA	None
59	R-66	2. Residential	44 ft	61.9 dBA	70 dBA	71 dBA	64 dBA	69 dBA	None
60	R-67	2. Residential	188 ft	46.1 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
51	R-68	2. Residential	202 ft	40.8 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
62	R-69	2. Residential	272 ft	37.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
63	R-70	2. Residential	261 ft	38.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
64	R-71	2. Residential	249 ft	38.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
55	R-72	2. Residential	200 ft	39.4 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
56	R-73	2. Residential	126 ft	45.9 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
57	R-74	2. Residential	140 ft	49.3 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
58	R-81	3. Institutional	203 ft	43.2 dBA	55 dBA	55 dBA	60 dBA	66 dBA	None
59	R-82	2. Residential	167 ft	42.9 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
70	R-83	2. Residential	259 ft	36.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
71	R-84	2. Residential	185 ft	41.8 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
72	R-85	2. Residential	254 ft	36.8 dBA	65 dBA	65 dBA	61 dBA	66 dBA	None
73	R-86	2. Residential	229 ft	39.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
74	R-87	2. Residential	185 ft	46.3 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
75	R-88	2. Residential	172 ft	41.1 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
76	R-89	2. Residential	58 ft	58.9 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
77	R-90	2. Residential	136 ft	45.1 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
78	R-91	2. Residential	83 ft	55.0 dBA	65 dBA	65 dBA	61 dBA	66 dBA	None
79	R-92	2. Residential	175 ft	42.4 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
80	R-93	3. Institutional	200 ft	43.4 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
81	R-98	2. Residential	196 ft	45.6 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
82	R-99	2. Residential	201 ft	45.4 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
83	R-100	2. Residential	222 ft	44.3 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
84	R-101	2. Residential	188 ft	46.1 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
85	R-102	2. Residential	150 ft	48.6 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
86	R-103	2. Residential	284 ft	37.1 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
87	R-104	2. Residential	250 ft	43.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None

8	R-42 - Corridor	3. Institutional	60 ft	44.9 dBA	65 dBA	65 dBA	66 dBA	71 dBA	None
7	Corridor	2. Residential	35 ft	50.5 dBA	70 dBA	70 dBA	64 dBA	69 dBA	None
6	R-39 - Corridor R-15 -	1. Outdoor Quiet	141 ft	37.5 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
5	R-145	2. Residential	73 ft	56.4 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
4	R-144	2. Residential	225 ft	39.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
3	R-143	2. Residential	237 ft	39.1 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
2	R-142	2. Residential	214 ft	40.2 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
1	R-141	2. Residential	220 ft	39.9 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
0	R-140	3. Institutional	146 ft	46.8 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
9	R-139	2. Residential	226 ft	44.1 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
8	R-138	2. Residential	259 ft	42.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
7	R-137	2. Residential	219 ft	39.9 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
6	R-136	2. Residential	217 ft	44.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
5	R-135	2. Residential	250 ft	43.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
4	R-134	2. Residential	219 ft	39.9 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
3	R-133	2. Residential	229 ft	39.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
2	R-132	3. Institutional	183 ft	39.8 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
1	R-131	2. Residential	70 ft	56.8 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
0	R-130	3. Institutional	111 ft	49.8 dBA	60 dBA	60 dBA	63 dBA	68 dBA	None
9	R-129	2. Residential	118 ft	46.7 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
8	R-128	2. Residential	108 ft	52.1 dBA	60 dBA	61 dBA	58 dBA	63 dBA	None
7	R-127	2. Residential	251 ft	38.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
6	R-126	2. Residential	240 ft	38.9 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
5	R-125	2. Residential	263 ft	42.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
4	R-124	2. Residential	240 ft	43.4 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
3	R-123	2. Residential	239 ft	43.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
2	R-122	2. Residential	250 ft	38.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
1	R-121	2. Residential	208 ft	45.0 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
0	R-120	2. Residential	225 ft	38.1 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
9	R-119	2. Residential	217 ft	38.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
8	R-116	2. Residential	65 ft	57.6 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
7	R-115***	2. Residential	82 ft	60.4 dBA	65 dBA	66 dBA	61 dBA	66 dBA	None
6	R-114	2. Residential	236 ft	43.6 dBA	65 dBA	65 dBA	61 dBA	66 dBA	None
5	R-113	2. Residential	239 ft	43.5 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
4	R-112	2. Residential	215 ft	44.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
3	R-111	2. Residential	236 ft	39.1 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
2	R-110	2. Residential	256 ft	38.2 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
1	R-108	2. Residential	155 ft	48.2 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
0	R-107	2. Residential	237 ft	37.6 dBA	55 dBA	55 dBA	55 dBA	61 dBA	None
9	R-106	2. Residential	122 ft	50.8 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None
8	R-105	2. Residential	151 ft	44.0 dBA	60 dBA	60 dBA	58 dBA	63 dBA	None

^{*}Lorente State Sta

Appendix B Noise Impact Calculation Spreadsheets

version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-1
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source F	Parameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	222
Distance	Humber of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

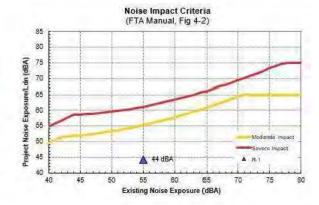
	State de la constanta de la co
Noise Barrier? Joint Track/Crossover?	No.
Embedded Track? Aerial Structure?	No No

Project Results Summarg

Existing Ldn:	
Total Project Ldn:	44 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

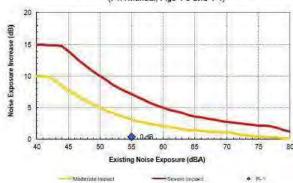
Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact
Contour (Source 1): 47 ft



Source 1 Results

Leq(dag): 41.1dBA Leq(night): 37.0dBA Ldn: 44.3dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-2
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	65 dBA

Noise Source Parameters Number of Noise Sources: 1

Parameters	Source 1	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Avg. Number of Buses/hr	3.1	
Avg. Number of Buses/hr	12	
Distance from Source to Receiver (ft)	. \$6 0	
Noise Barrier?	Ñċ	
	Source Type: Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of Intervaing Rows of Buildings	

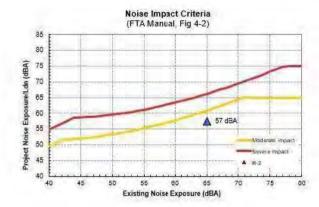
<u> </u>	
· · · · · · · · · · · · · · · · · · ·	
Marian Province	No
Noise Barrier? Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	65 dBA
Total Project Ldn:	57 dBA
Total Noise Exposure:	66 dBA
Increase:	1dB
Impact?:	None

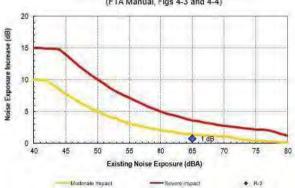
Distance to Impact Contours

sistanot to impact conto	45.0
Dist to Mod. Impact	
Contour (Source 1):	48 ft
Dist to Sev. Impact	
Contour (Source 1)-	30.6



Source 1 Results

Leq(dag): 54.3 dBA Leq(night): 50.2 dBA Ldn: 57.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-3
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	.12	
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	155 	
Adjustments	Noise Barrier?	No	

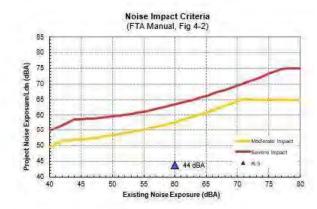


Project Results Summary

Ezisting Ldn:	60 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

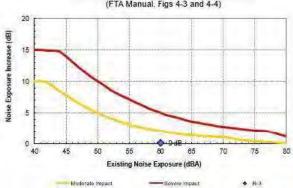
Distance to Impact Contours

Disc to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 40.5 dBA Leq(night): 36.4 dBA Ldn: 43.7 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-4
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
7	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	3,1	
	<u></u>	***************************************	
Nighttime hrs	Avg. Number of Buses/hr	12	
	10	01	
Distance	Distance from Source to Receiver (ft)	150	
	Number of Intervening Rows of Buildings	1.	
Adjustments	Noise Barrier?	No	
	<u> </u>		
	<u> </u>		

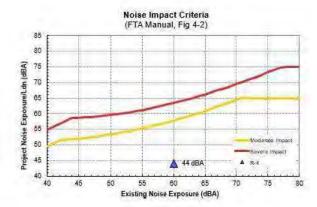
Somononono	
<u>{</u>	
1	
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

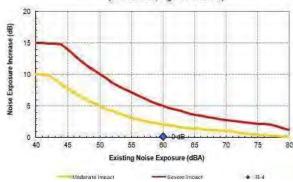
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 40,9 dBA Leq(night): 36.8 dBA Ldn: 44.1 dBA



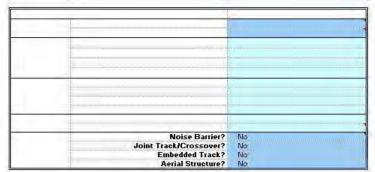
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-5
Land Use Categorg:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
gtime hrs	Avg. Number of Buses/hr	3.1	
- wnw	กอกอากอากอากอากอากอากอากอากอากอากอากอากอ		
ghttime hrs	Avg. Number of Buses/hr	1.2	
\$			
stance I	Distance from Source to Receiver (ft)	203	
	Number of Intervening Rows of Buildings	2	
ljustments	Noise Barrier?	No	
ljustments	Number of latervening Rows of Buildings Noise Barrier?	2 No	

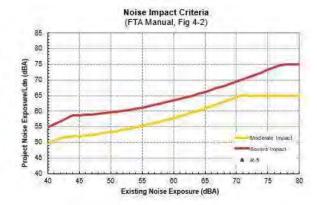


Project Results Summare

Ezisting Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

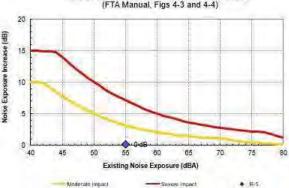
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47 ft



Source 1 Results

Leq(day): 36.1dBA Leq(night): 32.0dBA Ldn: 39.3dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-6
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	3.1	
	(c) (c)		
Nighttime hrs	Avg. Number of Buses/hr	12	
	100100100100100100100100100100100100100	010110110110110110110110110110110110110	
Distance	Distance from Source to Receiver (ft)	182	
	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	
	<u> </u>		

	аналанананананананалалалалананан-н-по-н-н
	w.w.m.m.m.m.m.m.m.m.m.m.m.m.m.m.m.m.m.m
Noise Barrier? Joint Track/Crossover? Embedded Track? Aerial Structure?	No No No No No

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Ezposure:	60 dBA
Increase:	0 dB
Impact?:	None

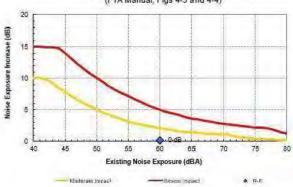
Distance to Impact Contours

Distance to impact Contol	Irs .
Dist to Mod. Impact	1.0
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1)-	386

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 97 75 70 85 80 45 40 45 50 55 80 65 70 75 80 Existing Noise Exposure (dBA)

Source 1 Results

Leq(dag):	43.3 dBA
Leq(night):	39.2 dBA
Ldn:	46.5 dBA



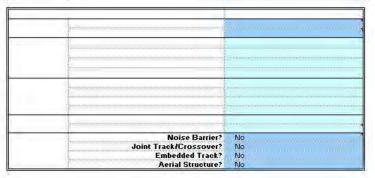
version: 1/29/2019

Project BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-7
Land Use Categors:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source F	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	257
	Number of Intervening Rows of Buildings	i
Adjustments	Noise Barrier?	No



Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

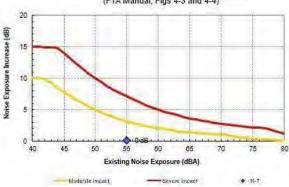
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	
Dist to Sev. Impact	
Contour (Source 1):	

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 70 (4BV) 70 85 65 60 55 Moderate Impact 50 Severe Impact 45 A R-7 40 40 45 50 55 60 70 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 35.0 dBA Leq(night): 30.9 dBA Ldn: 38.2 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-8
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source P	arameters	Source 1
1	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
		010110110110110110110110110110110110110
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	227
Jack Comment	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

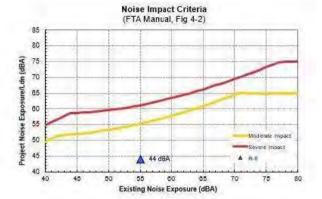
	n'acacacacacacacacacacacacacacacacacacac
P40404040404040404040404040404040404040	8 801 851 851 851 851 851 851 851 851 851 85
	mu pa
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summare

Existing Ldn:	55 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

Distance to Impact Contours

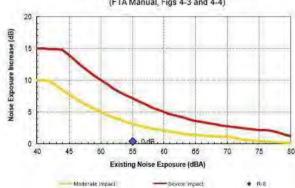
Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47ft



Source 1 Results

Leq(day): 40.9 dBA Leq(night): 36.8 dBA Ldn: 44.1dBA

Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)



Moderale Impaci

-Severe impact

Tersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-9
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters	A TO FEE STATE	9
	Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	3.1
	พอการแกรกแกะเอกอนอนอนอนอนอนอนอนอนอนอนอนอนอนอนอนอนอนอ	
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	243
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No
1		

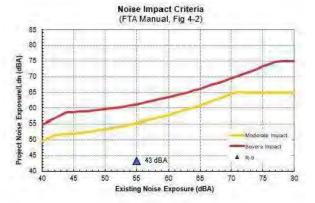
<u> </u>

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	43 dBA
Total Noise Exposure:	55 dBA
Increase:	
Impact?:	None

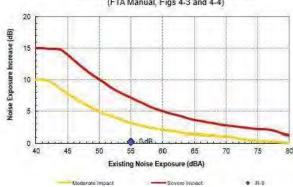
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47ft



Source 1 Results

Leq(day): 40.1dBA Leq(night): 36.0dBA Ldn: 43.3dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-10	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Value):	60 dBA	

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	72
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

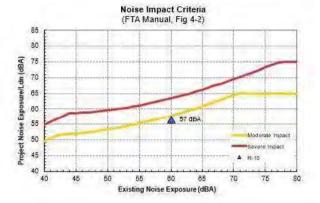
4	
Noise Barrier? Joint Track/Crossover?	No.
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	57 dBA
Total Noise Exposure:	62 dBA
Increase:	2dB
Impact?:	None

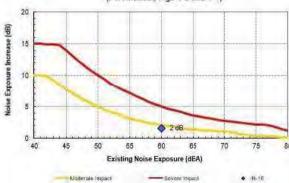
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Course 1).	206



Source 1 Results

Leq(day): 53.3 dBA Leq(night): 49.2 dBA Ldn: 56.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-12
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	70 dBA

Noise Source Parameters Number of Noise Sources: 1

arameters	Source 1	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Avg. Number of Buses/hr	31	
Avg. Number of Buses/hr	12	
	46	
	0	
Noise Barrier?	No	
	Source Type: Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of latervesing Rows of Buildings Noise Barrier?	

20000000000000000000000000000000000000	i non on
405050000000000000000000000000000000000	
A 3000303030000000000000000000000000000	
	n jo ja panananananananananananananananananana
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	70 dBA
Total Project Ldn:	61dBA
Total Noise Exposure:	71dBA
Increase:	1dB
Impact?:	None

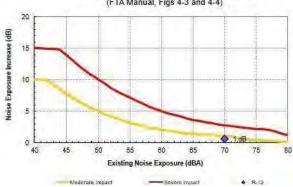
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	35 ft
Dist to Sev. Impact	ninamin.
Contour (Source 1):	22 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 85 ▲ 61 dBA 60 55 Moderate Impact 50 Severe Impact 45 A R-12 40 45 55 60 70 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 58.2dBA Leq(night): 54.1dBA Ldn: 61.4dBA



Tersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-13
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters	email restrictions	3
	Number of Noise Sources:	1

arameters	Source 1
Source Type: Specific Source:	Stationary Source Bus Transit Center
Avg. Number of Buses/hr	31
Avg. Number of Buses/hr	12
Distance from Source to Receiver (ft)	199
Noise Barrier?	No.
	Source Type: Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings

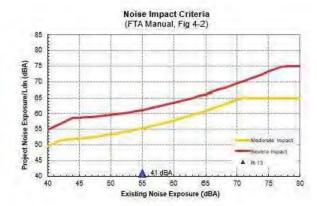
	плининополонополонопонополонополотополительный при
•••••••••••••••••	
Maira Parriar	
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track? Aerial Structure?	No.

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	41dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

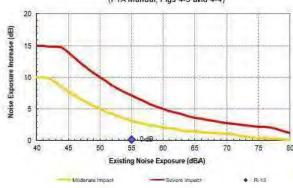
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	ci-arminamen
Contour (Source 1):	47 ft



Source 1 Results

Leq(day): 37.8dBA Leq(night): 33.7dBA Ldn: 41.0dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-14
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	_	- 37
Number of Noise Sources:	1	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	. 3.1	
Nighttime hrs	Avg. Number of Buses/hr	. 1.2	
Distance	Distance from Source to Receiver (ft)	110	
	Number of Intervening Rows of Buildings	1	
	Noise Barrier?	No	

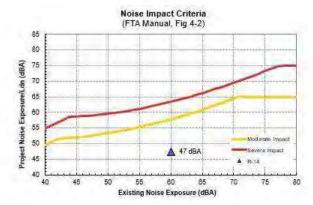
i		
	\$	
	Noise Barrier? Joint Track/Crossover?	No No
	Embedded Track? Aerial Structure?	No No

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	47 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

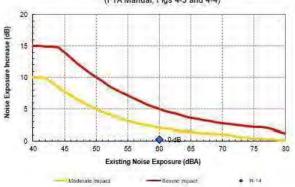
Distance to Impact Contours

Dist to Mod. Impact	-
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 44.2 dBA Leq(night): 40.1 dBA Ldn: 47.4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-15
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	70 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr		
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft). Number of Intervening Rows of Buildings	35.	
Adjustments	Noise Barrier?	No.	

-		
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	X	
	<u></u>	<u> </u>
	Noise Barrier?	No
	Joint Track/Crossover?	No
	Embedded Track?	No
	Aerial Structure?	No

Project Results Summarq

Existing Ldn:	70 dBA
Total Project Ldn:	64 dBA
Total Noise Exposure:	71dBA
Increase:	1dB
Impact?;	None

Distance to Impact Contours

_	Dist to Mod. Impact
	Contour (Source 1): 35ft
	Dist to Sev. Impact
	Contour (Source 1): 22ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 70 70 85 86 87 88 84 dBA 84 dBA 84 dBA 85 86 defined innext Severe Impact A R-15 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 61.2 dBA Leq(night): 57.1 dBA Ldn: 64.4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-16
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
N	umber of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Wumber of Buses/hr	12
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	249 1
Adjustments	Noise Barrier?	No

k-ususususususususususususususususususus	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No No
Aerial Structure?	No

Project Results Summary

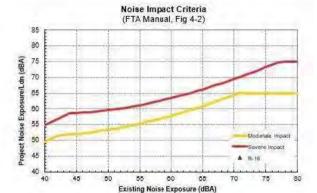
Ezisting Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

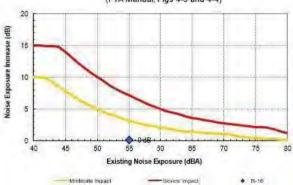
Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact
Contour (Source 1): 47ft

Source 1 Results

Leg(day):	35.4 dBA
Leq(night):	31.3 dBA
Ldn:	38.5 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-17	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Value):	60 dBA	

Noise Source Parameters		
Number of Noise Sources:	1	

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft) Number of Intervaling Rows of Buildings	187
Adjustments	Noise Barrier?	No

<u> </u>	
Waterpress and the second seco	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Ezisting Ldn:	60 dBA
Total Project Ldn:	42 dBA
Total Noise Exposure:	60 dBA
Increase:	0dB
Impact?:	None

Distance to Impact Contours Dist to Mod. Impact

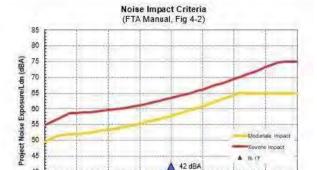
DISCLO MOU. IIIIPACC	- 1
Contour (Source 1):	64 ft
Dist to Sev. Impact	1
Contour (Source 1):	38 ft

Source 1 Results

Leq(day): 38.5 dBA Leq(night): 34.4 dBA Ldn: 41.7 dBA 40

45

50



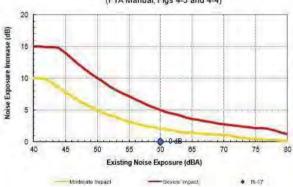
Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

60

Existing Noise Exposure (dBA)

85

75



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-18
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	65 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	
Distance	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

	Saskaku Arri Arri Arri Arri Arri Arri Arri Arr
Noise Barrier?	No No
Joint Track/Crossover?	No No
Aerial Structure?	No No

Project Results Summary

Ezisting Ldn:	65 dBA
Total Project Ldn:	51dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

sistance to impact contot	11.3
Dist to Mod. Impact	
Contour (Source 1):	48 ft
Dist to Sev. Impact	
Contour (Source 1):	30 ft

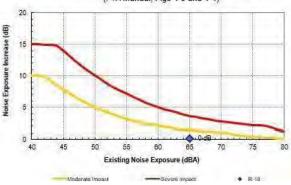
Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 65 55 - Moderate Impact 50 Severe impact A R-18 40 L 40 45 50 55 70 75 60

Source 1 Results

Leq(day): 47.7 dBA Leq(night): 43.6 dBA Ldn: 50.9 dBA

Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-19
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
		nocecocecocecececececececececececececece
Distance	Distance from Source to Receiver (ft)	230
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

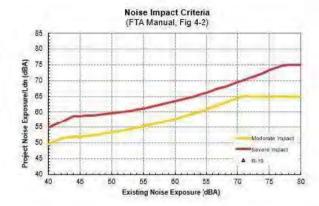
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Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

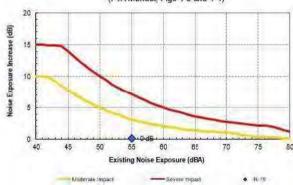
Distance to Impact Contours

Dist to Mod. Im	pact
Contour (Source	e 1): 81ft
Dist to Sev. Im	pact
Contour (Source	e 1): 47ft



Source 1 Results

Leq(day): 36.2 dBA Leq(night): 32.1 dBA Ldn: 39.4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-20
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	70 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
Distance	Distance from Source to Receiver (ft)	148	
	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	

Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summara

Ezisting Ldn:	70 dBA
Total Project Ldn:	49 dBA
Total Noise Exposure:	70 dBA
Increase:	0 dB
Impact?:	None

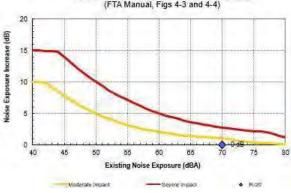
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	35 ft
Dist to Sev. Impact	
Contour (Source 1)	226

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 85 60 55 50 Moderate Impact Severe impact 45 A R-20 40 45 50 55 60 70 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(dag): 45.5 dBA Leq(night): 41.4 dBA Ldn: 48.7 dBA



version: 1/29/2019

Project:	BR Pla	nk-Nich	olson BRI

Receiver Parameters	
Receiver:	R-21
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Busesthr	31,	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
		0.000,001,001,001,001,001,001,001,001,00	
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	156	
Adjustments	Noise Barrier?	No	

-	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No-

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38.6

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 Project Noise Exposure/Ldn (dBA) 75 70 85 60 55 Moderate Impact 50 Severe Impact 45 A R-21 A 44 dBA 50 75 45 40 60 65 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 40.4 dBA Leq(night): 36.3 dBA Ldn: 43.6 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-23	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Yalue):	60 dBA	

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	33
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	1 No
Aujustinents	NOS SAITE!	

<u> </u>	

Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

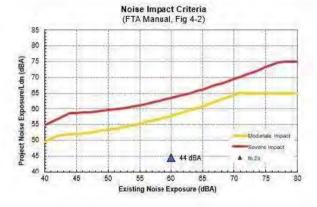
Ezisting Ldn:	60 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	60 dBA
Increase:	0dB
Impact?:	None

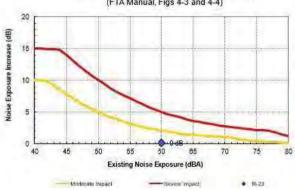
Distance to Impact Contours

istance to impact contours	
Dist to Mod. Impact	
Contour (Source 1): 64ft	
Dist to Sev. Impact	•
Contour (Source 1): 38ft	

Source 1 Results

Leq(day): 41.2 dBA Leq(night): 37.1 dBA Ldn: 44.4 dBA





version: 1/29/2019

Project BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-24
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
***************************************	Number of Noise Sources:	1.

arameters	Source 1	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Avg. Number of Buses <i>t</i> hr	3.1	
Avg. Number of Buses/hr	12	
Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	200	
Noise Barrier?	No	
	Source Type: Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings Noise Barrier?	

	, 100000 10 10 10 10 10 10 10 10 10 10 10
3	oritoral control to a to
 Noise Barrier?	No.
Joint Track/Crossover?	
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Ezisting Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 d B
Impact?:	None

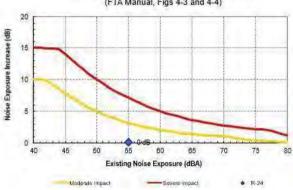
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 77 75 75 80 40 40 45 50 55 60 65 70 75 80 Existing Noise Exposure (dBA)

Source 1 Results

Leq(dag):	34.8 dBA
Leq(night):	30.6 dBA
Ldn:	37.9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-25
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	. 31
Nighttime hrs	Avg. Number of Buses/hr	. 12.
Distance	Distance from Source to Receiver (ft)	243
ALL STATE OF THE PARTY OF THE P	Number of Intervening Rows of Buildings	3
Adjustments	Noise Barrier?	No

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0	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	36 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

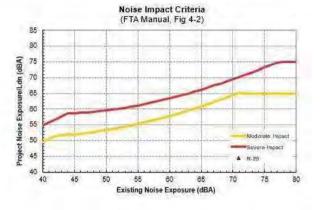
Stance to impact contours		
Dist to Mod. Impact		
Contour (Source 1):	81ft	
Dist to Sev. Impact		
Contour (Source 1).	176	

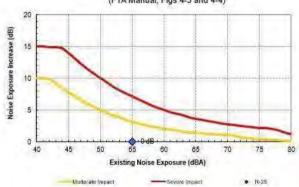
Source 1 Results

Leq(dag): 32.6dBA

Leq(night): 28.5dBA

Ldn: 35.8dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-26
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source F	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Busesihr	31
Nighttime hrs	Avg, Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	228 0
Adjustments	Noise Barrier?	No

1	
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V 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
3	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No No
Aerial Structure?	No

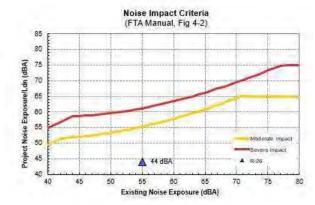
Project Results Summara

roject results culturally		
Ezisting Ldn:	55 dBA	
Total Project Ldn:	44 dBA	
Total Noise Ezposure:	55 dBA	
Increase:	0 dB	
Impact?:	None	

Distance to Impact Contours

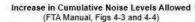
Dist to Mod. Impact

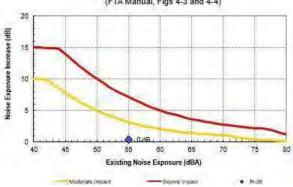
Contour (Source 1): 81/tt Dist to Sev. Impact Contour (Source 1): 47ft



Source 1 Results

Leq(day): 40.8 dBA Leq(night): 36.7 dBA Ldn: 44.0 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-27	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Value):	55 dBA	

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
	// // // // // // // // / / / / / / /	
Distance	Distance from Source to Receiver (ft)	226
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

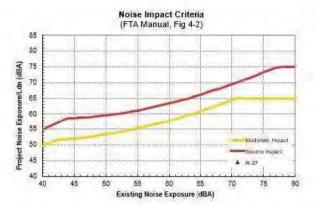
5	
	munonum and an analysis and an
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track? Aerial Structure?	No No

Project Results Summary

r toles the parts outlined	
Existing Ldn:	55 dBA
Total Project Ldn:	40 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

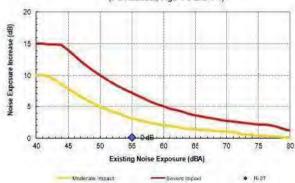
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	,oautumum
Contour (Source 1):	476



Source 1 Results

Leq(day): 36.4 dBA Leq(night): 32.3 dBA Ldn: 39.6 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Regeiver:	R-28
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters			
Per and the second	Number of Noise Sources:		

rce T gpe: Stationary Source Source: Bus Transh Center Buses/hr 3.1 Buses/hr 1.2
Buses/hr 1.2
eiver [ft] 241
Beildings 1 Barrier? No.

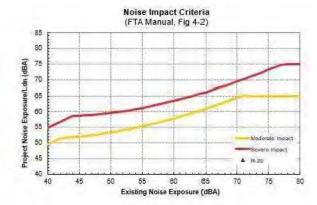
ļ	
Noise Barrier?	No
Joint Track/Crossover?	No- No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

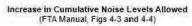
Distance to Impact Contours

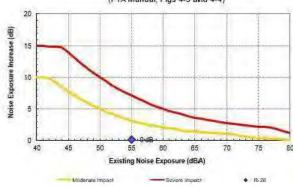
Dist to Mod. Impact	t i
Contour (Source 1)	81ft
Dist to Sev. Impact	1
Contour (Source 1)	47ft



Source 1 Results

Leq(day): 35.7 dBA Leq(night): 31.6 dBA Ldn: 38.9 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-29
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters	
Number of Noise Sc	ources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	203
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

1		
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	Noise Barrier?	No
	Joint Track/Crossover?	No
	Embedded Track?	No
	Aerial Structure?	No

Project Results Summary

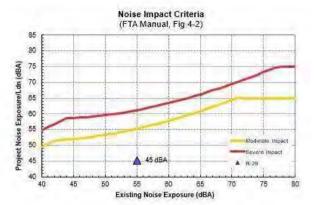
Existing Ldn:	55 dBA
Total Project Ldn:	45 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

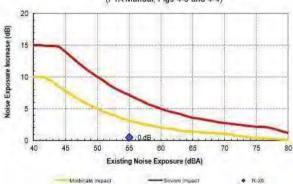
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47ft

Source 1 Results

Leq(dag): 42.1dBA Leq(night): 38.0dBA Ldn: 45.3dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-30
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
		w
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	164
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	

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	011011011011011011011011011011011011011
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No.
Aerial Structure?	No

Project Results Summarg

Existing Ldn:	60 dBA
Total Project Ldn:	48 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

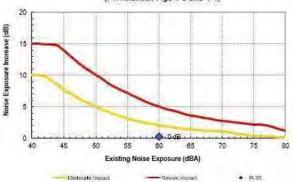
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Course 1).	206

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 Project Noise Exposure/Ldn (dBA) 75 70 65 60 55 50 ▲ 48 dBA Severe Impact 45 À R-30 45 50 60 65 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(dag): 44.4 dBA Leq(night): 40.3 dBA Ldn: 47.6 dBA



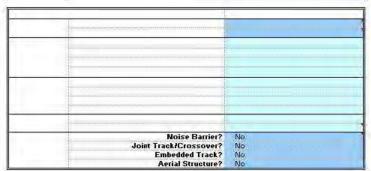
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-31
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
Number of Noise Sources:	1	

Noise Source l	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Dagtime hrs	Avg. Number of Buses(hr	31
Nighttime hrs	Avg. Number of Buses/hr	.12
Distance	Distance from Source to Receiver (ft) Number of Interreming Rows of Buildings	132
Adjustments	Noise Barrier?	No

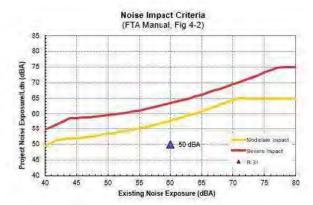


Project Results Summary

Ezisting Ldn:	60 dBA
Total Project Ldn:	50 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

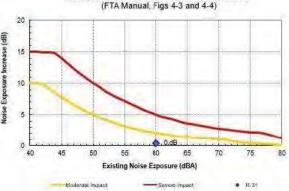
Distance to Impact Contours

Dist to Mod. Impact	1-
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 46.8 dBA Leq(night): 42.6 dBA Ldn: 49.9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-32
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	
Number of Noise Sources:	4

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
	Avg. Number of Buses/hr	
Distance	Distance from Source to Receiver (ft)	108
	Number of Intervening Rows of Buildings	0
7.30	Noise Barrier?	No

3		
5		
	Noise Barrier?	No
1	Joint Track/Crossover?	No
	Embedded Track?	No
	Aerial Structure?	No

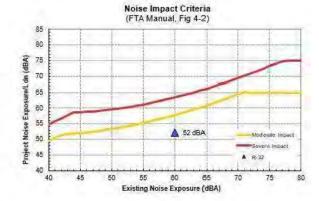
Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	
Total Noise Exposure:	61dBA
Increase:	1dB
Impact?:	None

Distance to Impact Contours

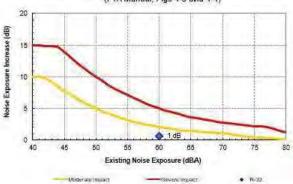
Dist to Mod. Impact
Contour (Source 1): 64 ft

Dist to Sev. Impact
Contour (Source 1): 38 ft



Source 1 Results

Leq(day): 48,9 dBA Leq(night): 44,8 dBA Ldn: 52,1 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-33
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

arameters	Source 1
Source Type: Specific Source:	Stationary Source Bus Transit Center
Number of Buses/hr	4
Distance from Source to Receiver (ft)	222
Number of Intervening Rows of Buildings	1
Noise Barrier?	No
	Specific Source: Number of Buses/hr Number of Buses/hr Distance from Source to Receiver (ft) Number of laterrening Rows of Buildings Noise Barrier?

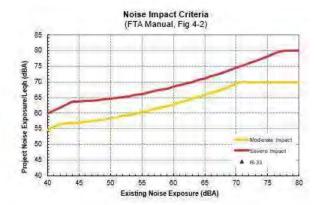
\$	
300000000000000000000000000000000000000	***************************************
- Enterior Control Con	
\$1010101010	
\$1010101010101000000000000000000000000	
Noise Barrier?	No
Joint Track/Crossover?	No. No.
5	
Aerial Structure?	No

Project Results Summary

Existing Leqh:	55 dBA
Total Project Legh:	38 dBA
Total Moise Ezposure:	55 dBA
Increase:	
Impact?:	None

Distance to Impact Contours

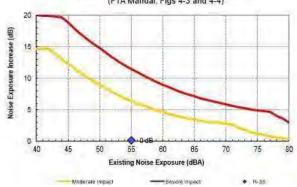
distance to impact contours	
Dist to Mod. Impact	
Contour (Source 1):	42 ft
Dist to Sev. Impact	
Contour (Source 1):	24 ft



Source 1 Results

Legh: 37.7dBA





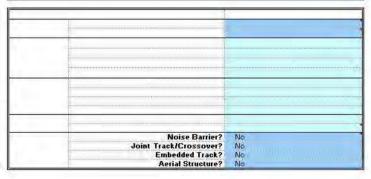
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-34
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source F	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	128
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No
	y én	



Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	50 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

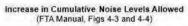
Distance to Impact Contours

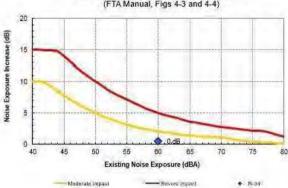
Dist to Mod. Impact	
Contour (Source 1):	
Dist to Sev. Impact	
Contour (Source 1):	38 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 65 65 60 65 40 40 45 50 55 60 65 70 75 80 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 47.1dBA Leq(night): 43.0dBA Ldn: 50.3dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-35
Land Use Categorg:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters	all and a second decreased and	
and the second second	Number of Noise Sources:	4

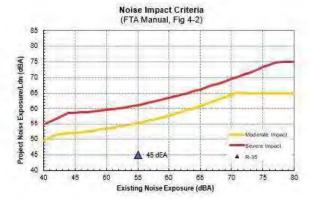
Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	211
20172220	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No



Project Results Summary

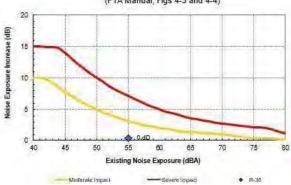
55 dBA
45 dBA
55 dBA
0 dB
None

Distance to Impact Contours
Dist to Mod. Impact
Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 41.7 dBA Leq(night): 37.5 dBA Ldn: 44.8 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-36
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source P	Parameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	241
Distance	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No
	101101101101101101101101101101101101101	

<u> </u>	
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

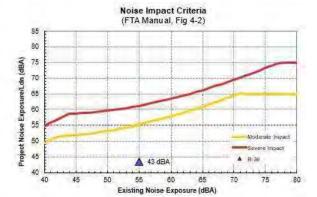
Existing Ldn:	55 dBA
Total Project Ldn:	43 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

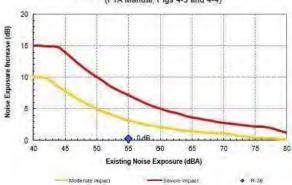
Distance to Impact Contours

Dist to Mod. Impact
 Contour (Source 1): 81ft
 Dist to Sev. Impact
 Contour (Source 1): 47ft

Source 1 Results

Leq(day):	40.2 dBA
Leq(night):	36.1dBA
Ldn:	43.4 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-37
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	184
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

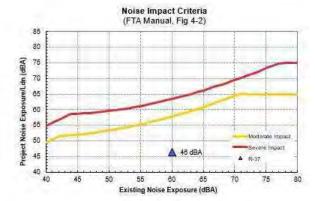
la company de	
Į	
¥	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	
Aerial Structure?	No

Project Results Summary

Ezisting Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

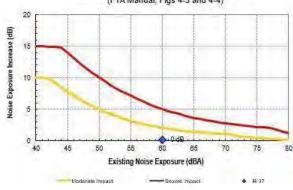
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 43.2 dBA Leq(night): 39.0 dBA Ldn: 46.3 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-38
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		- 1
Number of Noise Sources:	1	

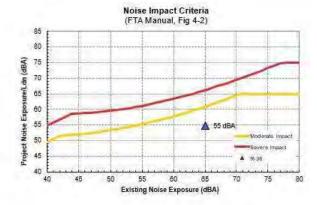
Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
		- Control of the Cont
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	85
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

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}	
	011011011011011011011011011011011011011
	71 0101010 101010101010101010101010101010
No.	No.
Noise Barrier? Joint Track/Crossover?	No.
Embedded Track?	No No
Aerial Structure?	No

Project Results Summarg

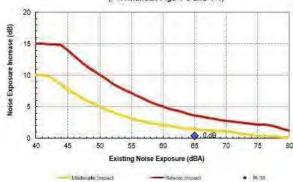
Existing Ldn:	65 dBA
Total Project Ldn:	55 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 48 ft Dist to Sev. Impact Contour (Source 1): 30 ft



Source 1 Results

Leq(day): 51.5 dBA Leq(night): 47.4 dBA Ldn: 54.7 dBA



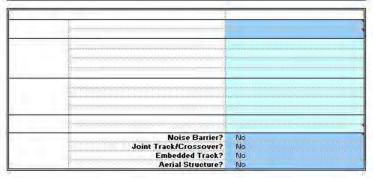
Tersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-39
Land Use Category:	1. Outdoor Quiet
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Noisiest hr of	Number of Busesthr	4	
Activity During			
Sensitive hrs	1		
1			
1			
Distance	Distance from Source to Receiver (ft)	141	
	Humber of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	

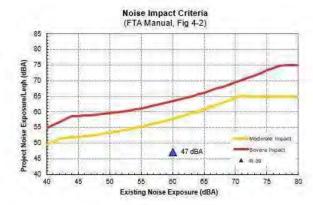


Project Results Summary

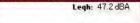
The state of the s	
Existing Legh:	60 dBA
Total Project Legh:	47 dBA
Total Noise Exposure:	60 dBA
Increase:	
Impact?:	None

Distance to Impact Contours

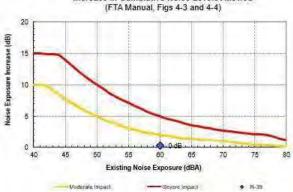
_	Dist to Mod. Impact
	Contour (Source 1): 53ft
	Dist to Sev. Impact
	Contour (Source 1): 32 ft



Source 1 Results



Increase in Cumulative Noise Levels Allowed



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-40
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Busesthr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft)	70	
	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	

	(Assistantin An
Noise Barrier?	No Ma
Joint Track/Crossover?	1910
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	65 dBA
Total Project Ldn:	57 dBA
Total Noise Exposure:	66 dBA
Increase:	1dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	48 ft
Dist to Sev. Impact	······································
Contour (Source 1):	30 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 65 ▲ 57 dBA 55 - Moderate Impact 50 45 50 55 60 70 75 40 85

Source 1 Results

Leq(day): 53.7 dBA Leq(night): 49.5 dBA Ldn: 56.8 dBA

Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)



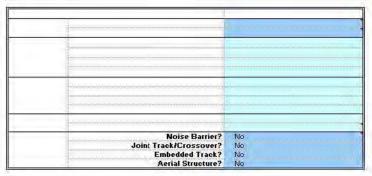
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	B-41
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Yalue):	65 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source P.	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Noisiest hr of Activity During Sensitive hrs	Number of Buses/hr	
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	\$1000000000000000000000000000000000000
	Noise Barrier?	No

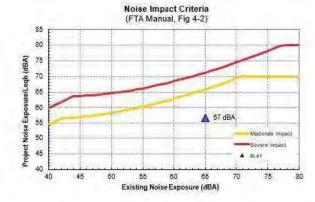


Project Results Summary

Existing Leqh:	65 dBA
Total Project Legh:	57 dBA
Total Noise Exposure:	66 dBA
Increase:	1dB
Impact?:	None

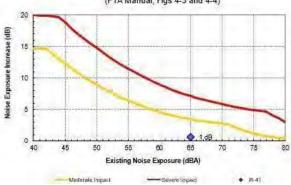
Distance to Impact Contours Dist to Mod Impact Contour (Source 1): 25 ft

Dist to Sev. Impact Contour (Source 1): 15ft



Source 1 Results

Legh: 56.8 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-42
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of Activity During	Number of Buses/hr	4
Sensitive hrs		
O Charles		
Distance	Distance from Source to Receiver (ft)	60
	Number of Intervening Rows of Buildings	.0
Adjustments	Noise Barrier?	No

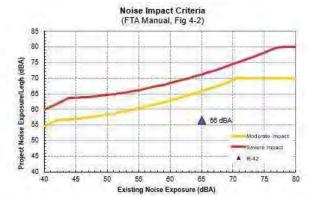
	7	
	8) 31-01101101101101101101101101101101101101	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
-	Noise Barrier?	No.
	Joint Track/Crossover? Embedded Track?	No No
	Aerial Structure?	No

Project Results Summary

Existing Legh:	65 dBA
Total Project Legh:	56 dBA
Total Noise Exposure:	66 dBA
Increase:	1dB
Impact?:	None

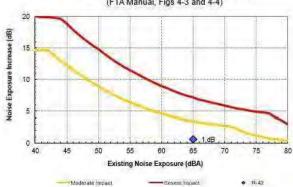
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	25 ft
Dist to Sev. Impact	
Contour (Source 1):	15 ft



Source 1 Results

Legh: 56.4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-43
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	en rech Eres	
	Number of Noise Sources:	1

Noise Source F	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Noisiest hr of Activity During Sensitive hrs	Number of Buses/hr	*
Distance	Distance from Source to Receiver (ft)	200
in a	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	

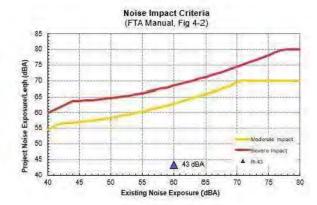
	- viction (vin) (0.000
Noise Barrier?	
Joint Track/Crossover?	No No
Embedded Track?	
Aerial Structure?	No

Project Results Summary

Existing Legh:	60 dBA
Total Project Legh:	43 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

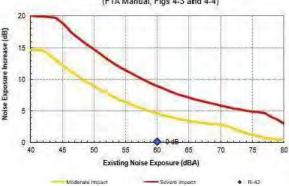
Dist to Mod. Impact	
Contour (Source 1):	33 ft
Dist to Sev. Impact	
Contour (Source 1):	20.6



Source 1 Results

Legh: 43.4 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-44	
Land Use Category:	3. Institutional	
Existing Noise (Measured or Generic Value):	60 dBA	

Noise Source Parameters Number of Noise Sources: 1

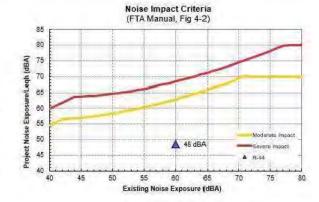
Noise Source F	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of	Number of Busesthr	4
Activity During	***************************************	
Sensitive hrs		
		0014044011011011011011011011011011011011
Distance	Distance from Source to Receiver (ft)	125
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

\$1000000000000000000000000000000000000	
	No
Joint Track/Crossover?	No
Embedded Track 2	No.
Aerial Structure?	No

Project Results Summary

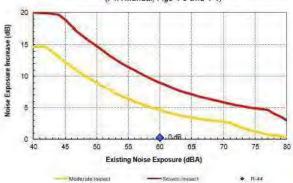
Existing Legh:	60 dBA
Total Project Legh:	48 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

	Dist to Mod. Impact
2000	Contour (Source 1): 33ft
monom	Dist to Sev. Impact
	Contour (Source 1): 20 fr



Source 1 Results

Legh: 48.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-46
Land Use Category:	1 Outdoor Quiet
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source F	Parameters :	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of	Number of Busesihr	4
Activity During		
Sensitive hrs		
Distance	Distance from Source to Receiver (ft)	223
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

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<u> </u>	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Leqh:	55 dBA
Total Project Legh:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

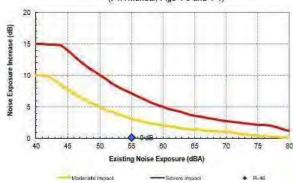
Distance to Impact Contours

	_
Dist to Mod. Impact	
Contour (Source 1):	37ft
Dist to Sev. Impact	
Contour (Source 1)-	39 fr

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 Project Noise Exposure/Legh (dBA) 70 65 60 55 Moderate Impact 50 45 55 60 65 70 75 40 Existing Noise Exposure (dBA)

Source 1 Results

Legh: 37.7 dBA



rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver	R-47
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source i	Parameters	Source I
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Busesthr	1.2
Distance	Distance from Source to Receiver (fl)	232
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No:
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В поменение	
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Noise Barrier? Joint Track/Crossover?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No.

Project Results Summary

Ezisting Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	
Impact?:	None

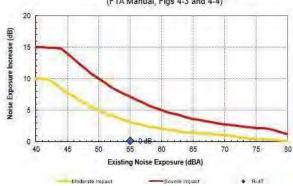
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1)	176

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 Project Noise Exposure/Ldn (dBA) 75 70 65 60 55 50 Severe Impact 45 45 60 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 36.1dBA Leq(night): 32.0dBA Ldn: 39.3dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-48	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Value):	55 dBA	

Noise Source Parameters Number of Noise Sources: 1

Noise Source F	Parameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Busesihr	12
Distance	Distance from Source to Receiver (f1)	213
200, 2002	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

300000000000000000000000000000000000000	
Noise Barrier?	-No
Joint Track (Liossover)	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

55 dBA
45 dBA
55 dBA
0 dB
None

Distance to Impact Contours

Dist to Mod. Impact	1
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47 ft

80 75 Project Noise Exposure/Ldn (dBA) 70 65 60 55 Moderate Impact 50 Severe Impact 45 ▲ 45 dBA A R 48 40 45 55 70 75

85

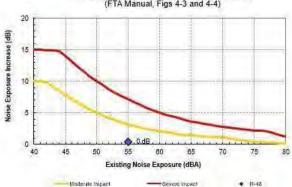
Noise Impact Criteria (FTA Manual, Fig 4-2)

Source 1 Results

Leq(day): 41.6 dBA Leq(night): 37.4 dBA Ldn: 44.7 dBA

Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)



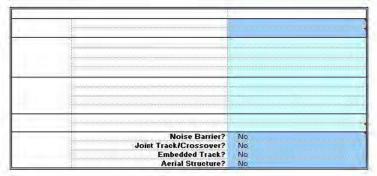
version: 1/23/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-50
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	Total Co.	
	Number of Noise Sources: 1	

arameters	Source 1	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Number of Buses/hr		
Distance from Source to Receiver (ft)	172	
Number of Intervening Rows of Buildings		
Noise Barrier?	No	
	Source Type: Specific Source: Number of Buses/hr Number of Buses/hr Distance from Source to Receiver [ft] Number of Intervaling Rows of Buildings Noise Barrier?	



Project Results Summary

Existing Legh:	60 dBA
Total Project Legh:	40 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

-	Dist to Mod Impact	100
	Contour (Source 1):	
tootini	Dist to Sev. Impact	uotytaavuuuuuuuu
	Contour (Source 1):	20 ft

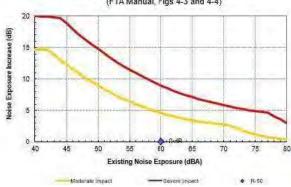
Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 Project Noise Exposure/Legh (dBA) 70 65 60 55 Moderate impact 50 Severe Impact 45 A R-50 45 70 75

Source 1 Results



Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)



Tersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-51
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of Activity During	Number of Buses/hr	
Sensitive hrs		
77,77		
Distance	Distance from Source to Receiver (ft)	109
	Humber of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

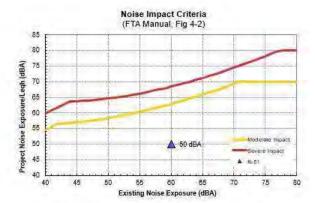
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3		0,10,10,100,000,000,000,000,000,000,000
	Mars - passage	ATC.
-	Noise Barrier?	No No
1		1610 (1811) 1 611 611 611 611 611 611 611 611 61
1	Embedded Track?	No
1	Aerial Structure?	No

Project Results Summary

Existing Leqh:	60 dBA
Total Project Legh:	50 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

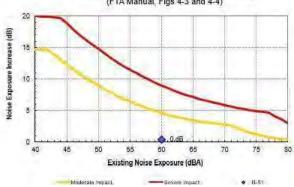
Distance to Impact Contours

Distance to impact bontours	
Dist to Mod. Impact	
Contour (Source 1):	33 ft
Dist to Sev. Impact	
Contour (Source 1):	20.6



Source 1 Results

Leqh: 49,9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-52
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source F	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Noisiest hr of Activity During Sensitive hrs	Number of Busesthr	4
Distance	Distance from Source to Receiver (ft) Mumber of Intervening Rows of Buildings	74
Adjustments	Noise Barrier?	

}	
Noise Barrier?	No No
COMM TRACE CONTROL OF	
Embedded Track?	No No
Aerial Structure?	No

Project Results Summary

Existing Legh:	65 dBA
Total Project Legh:	54 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact
Costour (Source 1): 25ft
 Dist to Sev. Impact
Contour (Source 1): 15ft

45

40

Source 1 Results

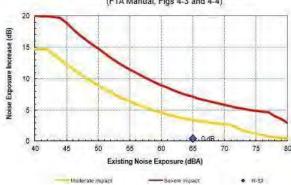
Legh: 54.2 dBA

Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)

75

70



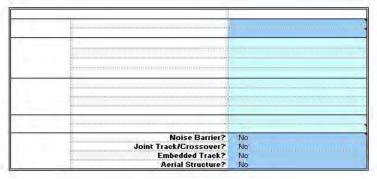
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-53
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters	-	
Number of Noise Sources:	1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of	Number of Buses/hr	4
Activity During		
Sensitive hrs		
	MANIANANANANANANANANANANANANANANANANANAN	(1-)-10-10-10-10-10-10-10-10-10-10-10-10-10-
	руки подолодини подолого подо	***************************************
1		
Distance	Distance from Source to Receiver (ft)	128
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No



Project Results Summary

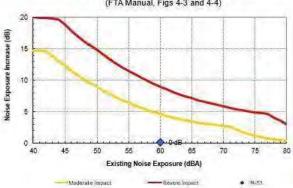
Existing Leqh:	60 dBA
Total Project Legh:	44 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	33 ft
Dist to Sev. Impact	
Contour (Course 1).	206

Source 1 Results

Legh: 43.7 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-54
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		- 4
Number of Noise Sources:	1.	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Noisiest hr of Activity During Sensitive hrs		4	
Distance	Distance from Source to Receiver (ft)	134	
	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	

300000000000000000000000000000000000000	mannananananananananananananananananana
Noise Barrier?	No
Joint Track/Crossover?	No No
Embedded Track? Aerial Structure?	No

Project Results Summary

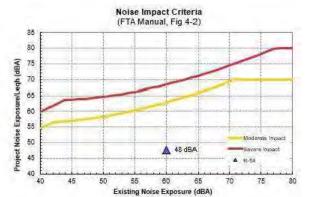
Ezisting Leqh:	60 dBA
Total Project Legh:	48 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

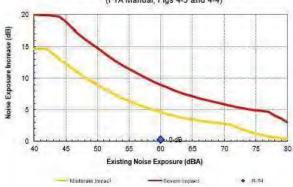
Distance to Impact Contours

Dist to Mod. Impact		
Contour (Source 1):	33 ft	
Dist to Sev. Impact		
Contour (Source 1)	20.6	

Source 1 Results

Legh: 47.7dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver	R-58
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of	Number of Buses/hr	4
Activity During	And the property of the contract of the contra	
Sensitive hrs		
220033658 800		**********************
		0310710714444444444444444444444444444444
Distance	Distance from Source to Receiver (ft)	64
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

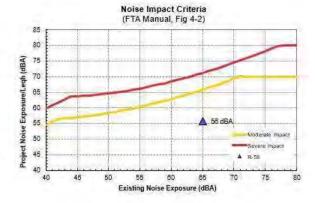
***************************************	4,14,14,14,14,14,14,14,14,14,14,14,14,14
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Legh:	65 dBA
Total Project Legh:	56 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

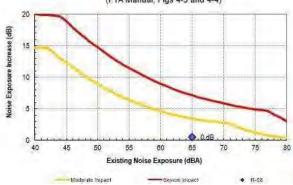
Distance to Impact Contours

Dist to Mod	. Impact
Contour (S	ource 1): 25 ft
Dist to Sev	. Impact
Contour (S	ource 11: 15 fr



Source 1 Results

Legh: 55.7 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-59
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of Activity During	Number of Buses/hr	
Sensitive hrs		
Distance	Distance from Source to Receiver (ft)	142
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

011011011011011011011011011011011011011	MI ONO NO
	m 1 0 11 0 11 0 11 0 11 0 11 0 11 0 11
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No No

Project Results Summary

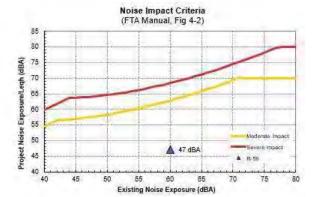
Existing Leqh:	60 dBA
Total Project Legh:	47 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?;	None

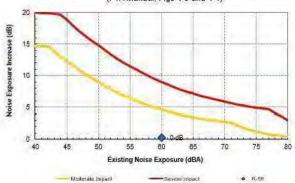
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	33 ft
Dist to Sev. Impact	
Contour (Source 1)	20 ft

Source 1 Results

Legh: 47.1dBA





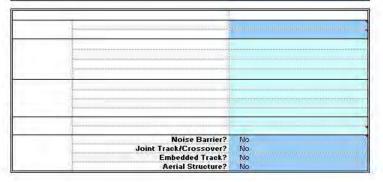
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-60
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	_	- 3
Number of Noise Sources:	1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Busesthr	
	munumumumumumumumumumumumumumumumumumum	
Distance	Distance from Source to Receiver (ft)	112
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No
1		

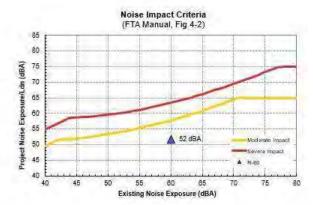


Project Results Summarg

Existing Ldn:	60 dBA
Total Project Ldn:	52 dBA
Total Noise Exposure:	61 dBA
Increase:	1dB
Impact?:	None

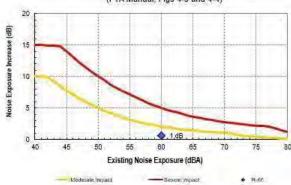
Distance to Impact Contours

Distance to impact conto	
Dist to Mod. Impact	W. C.
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38.6



Source 1 Results

Leq(dag): 48.5 dBA Leq(night): 44.4 dBA Ldn: 51.7 dBA



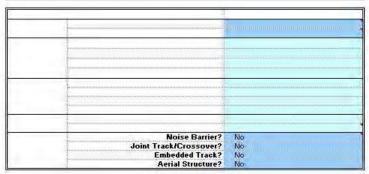
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-61
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters	-
Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	204
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No



Project Results Summary

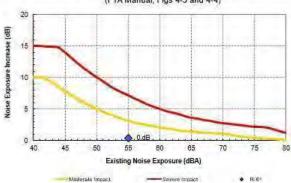
Existing Ldn:	55 dBA
Total Project Ldn:	45 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 85 85 Project Noise Expos 60 55 50 Severe Impact 45 ▲ 45 dBA 40 45 55 70 75 60 Existing Noise Exposure (dBA)

Source 1 Results

Leq(dag): 42.0 dBA Leq(night): 37.9 dBA Ldn: 45.2 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-62
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
		13,14,14,
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	195 0
Adjustments	Noise Barrier?	Ne.

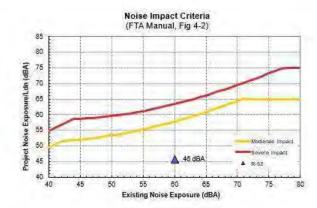
Noise Barrier?	No
Joint Track/Crossover? Embedded Track?	No No
Aerial Structure?	No

Project Results Summare

Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0dB
Impact?:	None

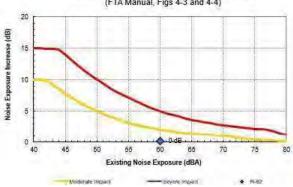
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 42.5 dBA Leq(night): 38.4 dBA Ldn: 45.7 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-63
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
Commence of the Commence of th	Number of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	12-
Distance	Distance from Source to Receiver (ft)	205
8.4No.4000004	Number of Intervening Rows of Buildings	0
	Noise Barrier?	



Project Results Summare

Existing Ldn:	55 dBA
Total Project Ldn:	45 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

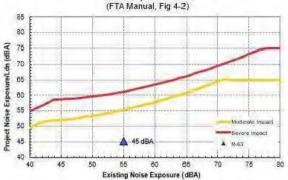
Distance to Impact Contours

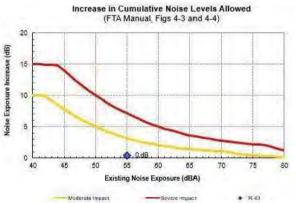
Dist to Mod. Impact	
Contour (Source 1):	
Dist to Sev. Impact	
Contour (Source 1):	47 ft

Source 1 Results

Leq(dag): 42.0 dBA Leq(night): 37.9 dBA Ldn: 45.2 dBA

Noise Impact Criteria (FTA Manual, Fig 4-2)





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-64
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	The second secon

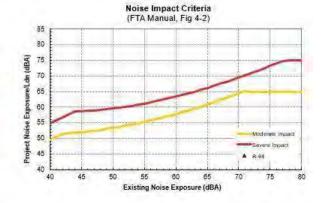
Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft)	263	
	Number of Intervening Rows of Buildings	1	
Adjustments	Noise Barrier?	No	

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Noise Barrier?	No.
Joint Track/Crossover?	
Embedded Track?	No No
Aerial Structure?	No

Project Results Summary

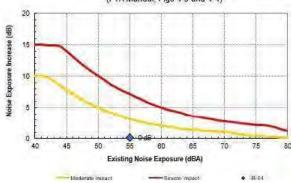
Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours		
	Dist to Mod. Impact	
	Costour (Source 1): 81ft	
	Dist to Sev. Impact	
	Costour (Source 1): 47ft	



Source 1 Results

Leq(day): 34.8 dBA Leq(night): 30.7 dBA Ldn: 38.0 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-65
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	65 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

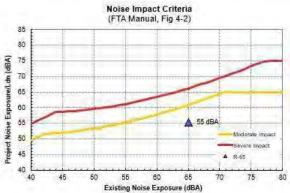
Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft)	80	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	0 No	

-		
	<u> </u>	okokulululululululululululululululululul
		ումումումումումումումումումումումումումո
		alahahahahahahahahahahahahahahahahah
	Noise Barrier? Joint Track/Crossover?	No
	Embedded Track? Aerial Structure?	No No

Project Results Summary

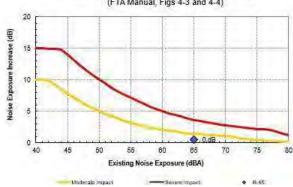
Existing Ldn:	65 dBA
Total Project Ldn:	55 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

Stunde to impust bontou	
Dist to Mod. Impact	
Contour (Source 1):	48 ft
Dist to Sev. Impact	
Contour (Source 1)	30.6



Source 1 Results

Leq(day): 52.2 dBA Leq(night): 48.1 dBA Ldn: 55.4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-66
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	70 dBA

Noise Source Parameters		- 1
Number of Noise Sources:	4	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
Distance		44	
419150331	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	Ño	

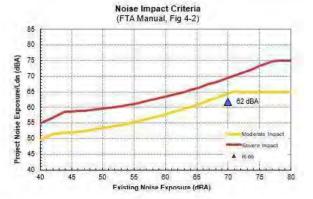
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101010101010101000000000000000000000000	
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ненопопопопопопонопонопонопонопонопонопо	Citationalisticitationalisticitationologicitoriologicitiiiii
Noise Barrier? Joint Track/Crossover?	No
Joint Track/Crossover?	No
Embedded Track? Aerial Structure?	No.

Project Results Summary

Existing Ldn:	70 dBA
Total Project Ldn:	62 dBA
Total Noise Exposure:	71dBA
Increase:	1dB
Impact?:	None

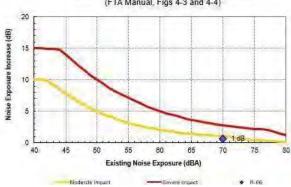
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	35 ft
Dist to Sev. Impact	
Contour (Source 1):	22 ft



Source 1 Results

Leq(day): 58.7 dBA Leq(night): 54.6 dBA Ldn: 61.9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-67
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
Number of Noise Sources:	₹ 1	

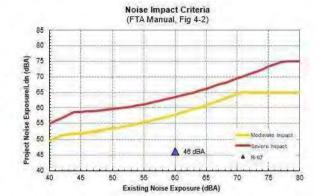
Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	- 3.1 	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (11)	188	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.	
4445			

	<u> </u>
	W-01/400000000000000000000000000000000000
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No No
Aerial Structure?	No

Project Results Summary

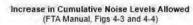
Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

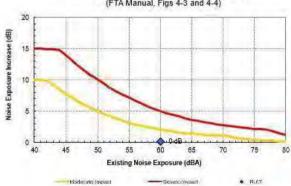
Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 64 ft Dist to Sev. Impact Contour (Source 1): 38 ft



Source 1 Results

Leq(dag): 42,9dBA Leq(night): 38,8dBA Ldn: 46,1dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-68	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Yalue):	55 dBA	

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	з	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	202	
Adjustments	Noise Barrier?	No.	

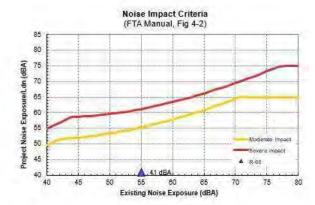
	Saskasha ka
Noise Barrier?	No
Joint Frack/Crossover?	No No
Embedded Track? Aerial Structure?	No No

Project Results Summary

Ezisting Ldn:	55 dBA
Total Project Ldn:	41dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

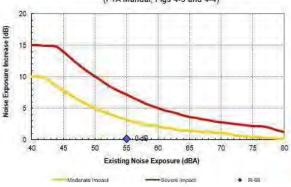
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	organia de la mante de la constanta de la cons
Contour (Source 1):	47 ft



Source 1 Results

Leq(day): 37,6dBA Leq(night): 33,5dBA Ldn: 40,8dBA



rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver	R-69
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	4

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	.1.2	
Uistance	Uistance from Source to Heceiver [ft] Number of Intervening Rows of Buildings	2/2	
Adjustments	Noise Barrier?		

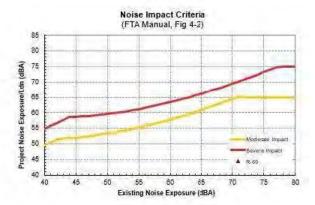
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	··/··/··/··/··/··/··/··/··/··/··/··/··/
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase-	n dB
Impact?:	None

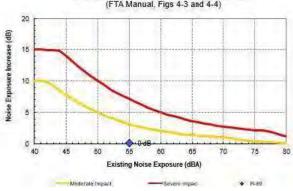
Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact
Contour (Source 1)- 476



Source 1 Results

Leq(day): 34.4dBA Leq(night): 30.3dBA Ldn: 37.6dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-70
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	31
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	261
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

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_		
	Noise Barrier?	No
	Joint Track/Crossover?	No
	Embedded Track?	Mo
	Aerial Structure?	No.

Project Results Summary

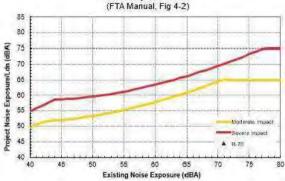
Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

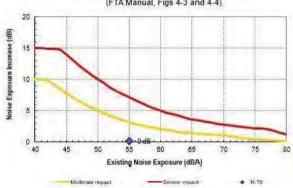
Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft

Source 1 Results

Leq(day): 34.9 dBA Leq(night): 30.7 dBA Ldn: 38.0 dBA

Noise Impact Criteria (FTA Manual, Fig 4-2)





rersion: 1/29/2019

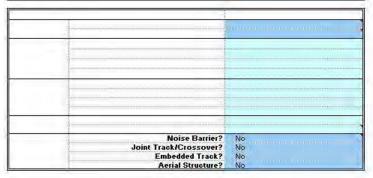
Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-71
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	

Nighttime hrs	Avg. Number of Busesthr	1.2	
Nistance	Distance from Source to Receiver (ft)	249	
9	Number of Intervening Rows of Buildings	AL	
Adjustments	Noise Barrier?	No	
4			



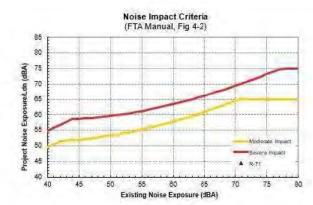
Project Results Summarg

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

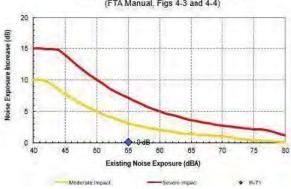
Dist to Mod. Impact

Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 35,4 dBA Leq(night): 31,3 dBA Ldn: 38,5 dBA



rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-72	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Yalue):	60 dBA	

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
	MANAMAN PARA PARA PARA PARA PARA PARA PARA PA	
Distance	Distance from Source to Receiver (ft)	200
	Number of Intervening Rows of Buildings	2
Adjustments	Noise Barrier?	No

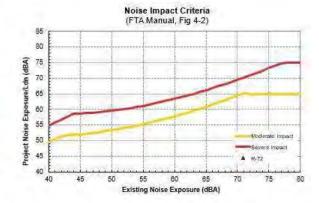
and the second s	
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appear of the control	

	,.,.,
Noise Barrier?	No
Joint Track/Crossover?	
Embedded Track?	No No
Aerial Structure?	No

Project Results Summary

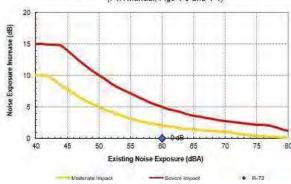
Existing Ldn:	60 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours		
	Dist to Mod. Impact Contour (Source 1): 64ft	
	Dist to Sev. Impact Contour (Source 1): 38 ft	



Source 1 Results

Leq(dag): 36.3 dBA Leq(night): 32.1dBA Ldn: 39.4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-73
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters		
V.	Number of Noise Sources: 1	

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Busesihr	12
Distance	Distance from Source to Receiver [ft]	126
	Number of Intervening Rows of Buildings	of i
Adjustments	Noise Barrier?	No

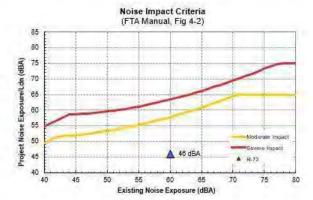
พลายสายสายสายสายสายสายสายสายสายสายสายสายสา	
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track? Aerial Structure?	No No

Project Results Summary

Ezisting Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

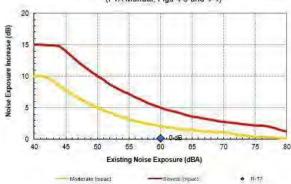
Distance to Impact Contours Dist to Mod. Impact

DISC TO M	og. Impact	
Contour	(Source 1):	64 ft
 Dist to 9	ev. Impact	
Contour	(Source 1):	38 ft



Source 1 Results

Leq(day): 42,8dBA Leq(night): 38,6dBA Ldn: 45,9dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-74	
Land Use Category:	2. Residential	
Existing Noise [Measured or Generic Yalue]:	60 dBA	

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Busesthr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
Distance	Distance from Source to Fleseiver (ft)	140	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.	

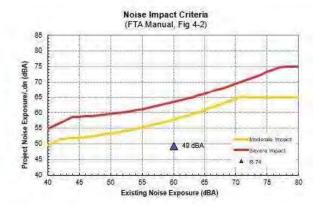


Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	49 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

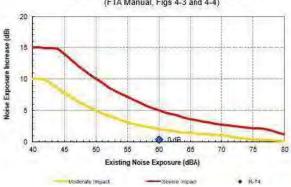
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 46.1dBA Leq(night): 42.0 dBA Ldn: 49.3 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-81	
Land Use Category:	3. Institutional	
Existing Noise (Measured or Generic Value):	55 dBA	

Noise Source Parameters		
	Number of Noise Sources:	1

Source Type: Specific Source:	Stationary Source Bus Transit Center
The second secon	Due Transit Center
Number of Buses/hr	
Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	203
Noise Barrier?	No
	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings Noise Barrier?

<u> </u>	
- Industrial Control of the Control	
Noise Barrier?	No
Noise Barrier? Joint Track/Crossover?	No No
Noise Barrier?	No

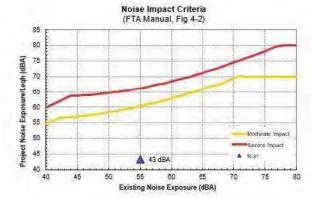
Project Results Summary

Existing Leqh:	55 dBA
Total Project Legh:	43 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

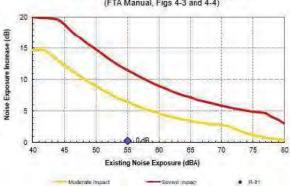
Dist to Mod. Impact

Contour (Source 1): 42 ft Dist to Sev. Impact Contour (Source 1): 24 ft



Source 1 Results

Legh: 43.2 dBA



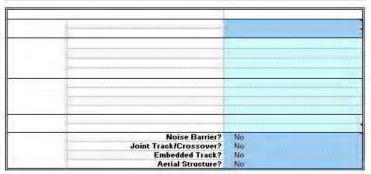
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-82
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
Number of Noise Sources:	4	

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	167
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

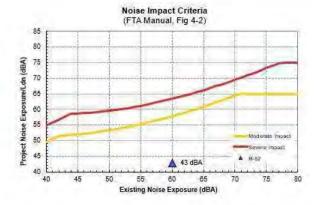


Project Results Summary

Ezisting Ldn:	60 dBA
Total Project Ldn:	43 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

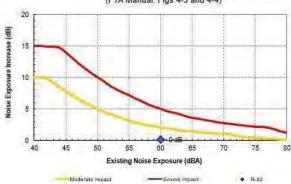
Distance to Impact Contours

Dist to Mod. Impact	1-
Contour (Source 1):	64 ft
Dist to Sev. Impact	***************************************
Cartaur (Causes I).	206



Source 1 Results

Leq(day):	39.7 dBA
Leg(night):	35.6 dBA
Ldn:	42.9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-83
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

arameters	Source 1
Source Type: Specific Source:	Stationary Source Bus Transit Center
Avg. Number of Buses/hr	31
Avg. Number of Buses/hr	12
Distance from Source to Receiver (ft)	259 2
Noise Barrier?	No
	Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of laterreaing Rows of Buildings Noise Barrier?

Noise Barrier? Joint Track/Crossover? Embedded Track? Aerial Structure?	No No No No
Noise Barrier?	No
·	
01	

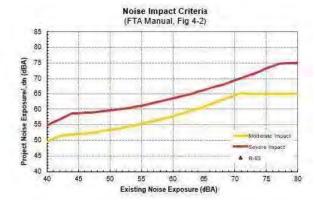
Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	37 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

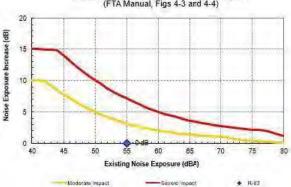
Dist to Mod. Impact

Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft



Source 1 Results

Leq(day): 33.4 dBA Leq(night): 29.3 dBA Ldn: 36.6 dBA



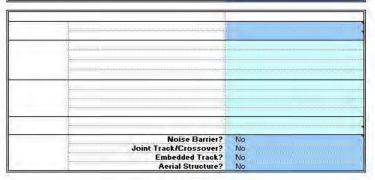
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-84
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source F	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	185
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.



Project Results Summary

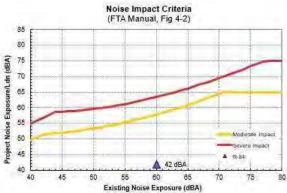
Existing Ldn:	60 dBA
Total Project Ldn:	
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

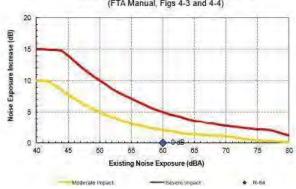
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Leq(dag): 38.6 dBA Leq(night): 34.5 dBA Ldn: 41.8 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-85
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
Number of Noise Sources:	-1	

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	254
	Number of Intervening Rows of Buildings	2.
Adjustments	Noise Barrier?	No

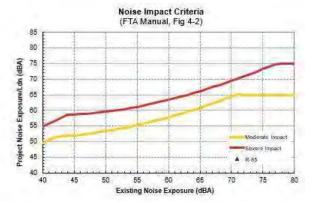
Noise Barrier? No Joint Track/Crossover? No
Embedded Track? No
Aerial Structure? No

Project Results Summary

Existing Ldn:	65 dBA
Total Project Ldn:	37 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

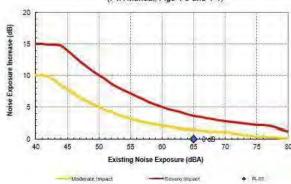
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	48 ft
Dist to Sev. Impact	
Contour (Source 1):	30 ft



Source 1 Results

Leq(dag): 33.7 dBA Leq(night): 29.5 dBA Ldn: 36.8 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT
Dh Flank Micholson Dh I

Receiver Parameters	
Receiver:	R-86
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source F	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
	, миличинанананананананананананананананананан	олополоноволополополополополополополополополо шлими
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	229
	Humber of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No:

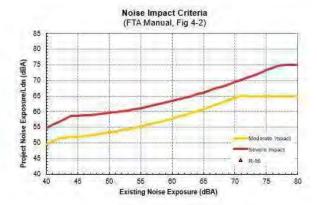
	(Secondario residente a re
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track? Aerial Structure?	No.

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Ezposure:	55 dBA
Increase:	0 dB
Impact?:	None

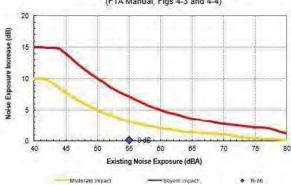
Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact
Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 36.3 dBA Leq(night): 32.2 dBA Ldn: 39.5 dBA



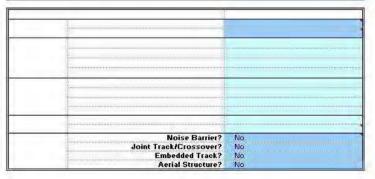
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-87
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	
Number of Noise Sources:	: 10 10 11 11 11 11 11 11 11 11 11 11 11

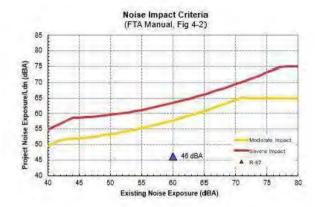
Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Busesihr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	185
462344187	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No



Project Paculte Cu

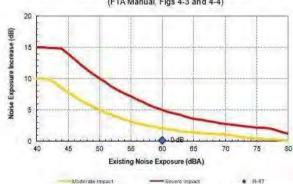
roje of the Saits Gammary	
Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours
Dist to Mod. Impact
Contour (Source 1): 64ft Dist to Sev. Impact Contour (Source 1): 38 ft



Source 1 Results

Leq(day): 43,1dBA Leq(night): 39,0dBA Ldn: 46,3dBA



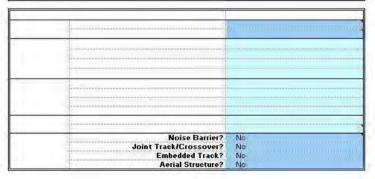
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	and the second
Receiver:	R-88
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	33
Nighttime hrs	Avg. Number of Buses/hr	en 12. On maniferantian in in in an
Distance	Distance from Source to Receiver (ft)	172
	Number of Intervening Rows of Buildings	2
Adjustments	Noise Barrier?	No



Project Results Summary

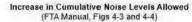
Ezisting Ldn:	
Total Project Ldn:	41dBA
Total Moise Exposure:	60 dBA
Increase:	0dB
Impact?:	None

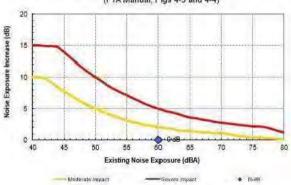
Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 64 ft Dist to Sev. Impact Contour (Source 1): 38 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 65 60 55 Woderate Impact 50 45 40 45 50 55 60 65 70 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 37.9 dBA Leq(night): 33.8 dBA Ldn: 41.1 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-89
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	65 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source F	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Dagtime hrs	Avg. Number of Busesthr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	58 0
Adjustments	Noise Barrier?	No
	kan kin kin kin kin kin kin kin kin kin ke denemen en en en en en en un un un un vord	



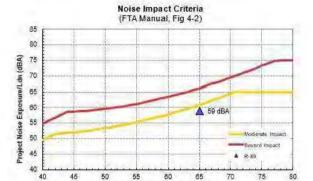
Project Results Summary

Existing Ldn:	65 dBA
Total Project Ldn:	59 dBA
Total Moise Exposure:	66 dBA
Increase:	1dB
Impact?:	None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 48ft Dist to Sev. Impact Contour (Source 1): 30 ft

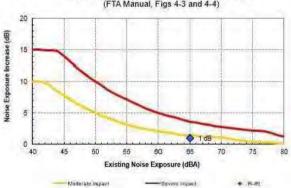
Source 1 Results

Leq(dag): 55.7 dBA Leq(night): 51.6 dBA Ldn: 58.9 dBA



Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)



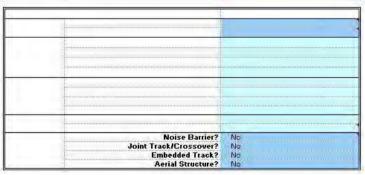
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	ACC N
Receiver:	R-90
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source F	arameters	Source 1
1.757.4	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	136
11,0013	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

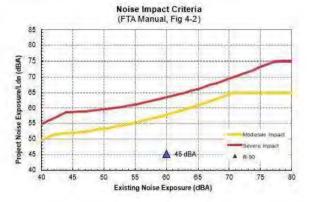


Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

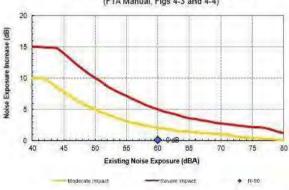
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Cantaur (Causas II)	206



Source 1 Results

Leq(day): 41.9 dBA Leq(night): 37.8 dBA Ldn: 45.1 dBA



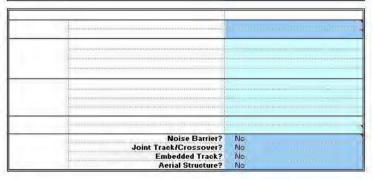
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-91
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
	Distance from Source to Receiver (ft)	83
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No.



Project Results Summary

Existing Ldn: 65 dBA Total Project Ldn: 55 dBA Total Noise Exposure: 65 dBA Increase: 0 dB Impact?: None

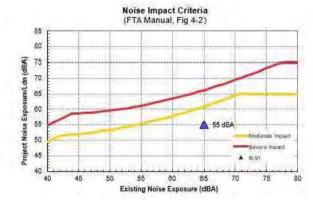
Distance to Impact Contours

Dist to Mod. Impact

Contour (Source 1): 48ft

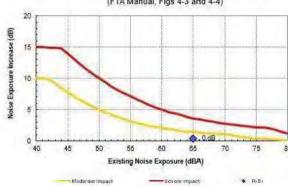
Dist to Sev. Impact

Contour (Source 1): 30 ft



Source 1 Results

Leq(day): 51.8 dBA Leq(night): 47.7 dBA Ldn: 55.0 dBA



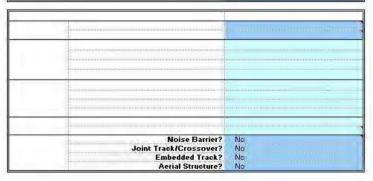
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-92
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	175
7700710	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No.



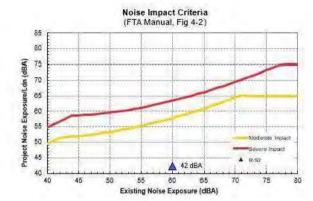
Project Results Summare

Ezisting Ldn:	60 dBA
Total Project Ldn:	42 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 64 ft
Dist to Sev. Impact

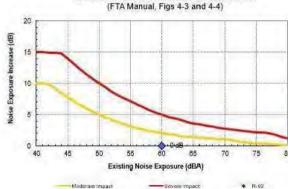
Contour (Source 1): 38ft



Source 1 Results

Leq(day): 39.2 dBA Leq(night): 35.1dBA Ldn: 42.4 dBA

Increase in Cumulative Noise Levels Allowed



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-93
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters		
Holse doubt I didnictely	Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Noisiest hr of Activity During	Number of Busesthr	#S
Sensitive hrs		
Distance	Distance from Source to Receiver (ft)	200
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

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}	
***************************************	414-14-14-14-14-14-14-14-14-14-14-14-14-

Noise Barrier?	No
COME Trackiciossover:	No.
Embedded Track? Aerial Structure?	No No

Project Results Summary

Ezisting Leqh:	60 dBA
Total Project Legh:	43 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

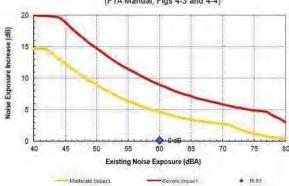
Distance to Impact Contours Dist to Mod. Impact

	Contour (Source 1): 33 ft
****	Dist to Sev. Impact
	Contour (Source 1): 20ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 Project Noise Exposure/Legh (dBA) 70 65 60 55 Moderate Impact 50 Severe Impact 45 A R-93 A 43 dBA 40 45 50 60 65 75 Existing Noise Exposure (dBA)

Source 1 Results

Legh: 43,4 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-98
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Busesthr	12
Distance	Distance from Source to Receiver (ft)	196-
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

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1	
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

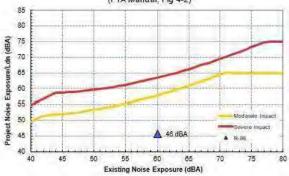
Distance to Impact Contours

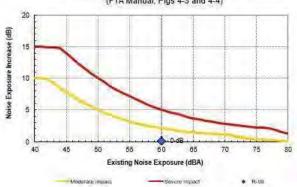
	tunot to impuot contours	
	Dist to Mod. Impact	Ī
	Contour (Source 1): 64 ft	
••••	Dist to Sev. Impact	
	Contour (Source 1): 38 ft	

Source 1 Results

Leq(day): 42.5 dBA Leq(night): 38.3 dBA Ldn: 45.6 dBA

Noise Impact Criteria (FTA Manual, Fig 4-2)





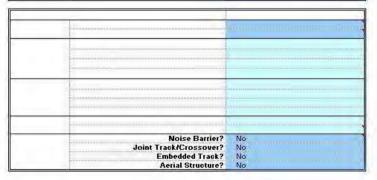
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-99
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters			
Number of Noise Sources:	1		

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
	Avg. Number of Buses/hr	3.1	
	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver [ft]	201	
22000000	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	



Project Results Summary

Existing Ldn: 60 dBA Total Project Ldn: 45 dBA Total Noise Exposure: 60 dBA Increase: 0dB Impact?: None

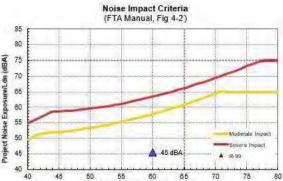
Distance to Impact Contours Dist to Mod. Impact

Contour (Source 1): 64ft Dist to Sev. Impact Contour (Source 1): 38 ft

55 50

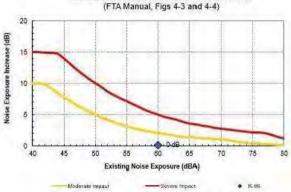
Source 1 Results

Leq(day): 42.2 dBA Leq(night): 38.1 dBA Ldn: 45.4 dBA



Increase in Cumulative Noise Levels Allowed

Existing Noise Exposure (dBA)



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-100
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source I	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	222
11,00.3	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

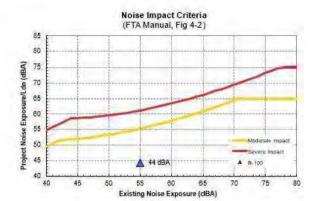
<u> </u>	
<u></u>	
ļ	
Noise Barrier?	No
Joint Track/Crossover?	No.
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

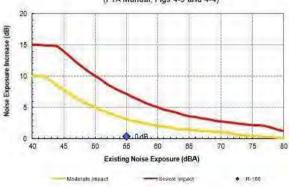
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47ft



Source 1 Results

Leq(dag): 41.1dBA Leq(night): 37.0dBA Ldn: 44.3dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-101
Land Use Category:	2. Residential
Existing Noise [Measured or Generic Yalue]:	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
Nistance	Distance from Source to Receiver (ft)	188
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

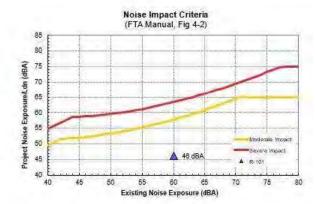


Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

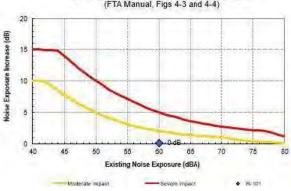
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 42.9 dBA Leq(night): 38.8 dBA Ldn: 46.1 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-101
Land Use Category:	2. Residential
Existing Noise [Measured or Generic Yalue]:	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
Nistance	Distance from Source to Receiver (ft)	188
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

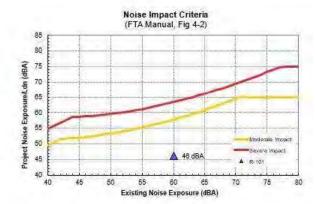


Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	46 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

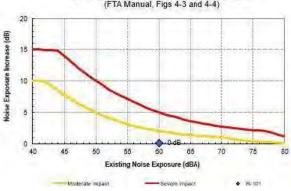
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1):	38 ft



Source 1 Results

Leq(day): 42.9 dBA Leq(night): 38.8 dBA Ldn: 46.1 dBA



version: 1/29/2019

Project BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-103
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	3

arameters	Source I	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Avg. Number of Busesthr	3.1	
Avg. Number of Buses/hr	1.2	
Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	_284 s	
Noise Barrier?	No.	
	Specific Source Avg. Number of Buses/hr Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of laterreaing Rows of Buildings Noise Barrier?	

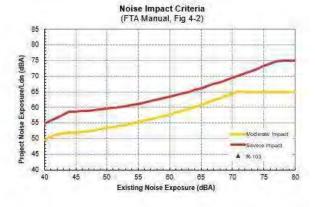
Noise Barrier? Joint Track/Crossover?	No No
find finds	
	ioliananononananonanananananananananananana

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

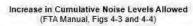
Distance to Impact Contours

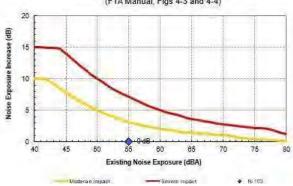
Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	0.000.000.000
Contour (Course 1).	476



Source 1 Results

Leq(day): 33.9 dBA Leq(night): 29.8 dBA Ldn: 37.1dBA





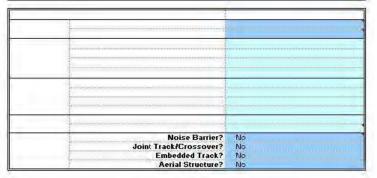
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-104
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters			
the best and the second	Number of Noise Sources:	1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	12
_	Avy: Number or Dusesmi	
Distance	Distance from Source to Receiver (ft)	250
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No



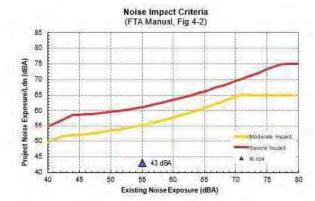
Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	43 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

Distance to Impact Contours

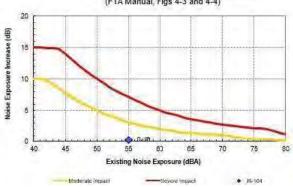
Dist to Mod. Impact

Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft



Source 1 Results

Leq(dag): 39.8 dBA Leq(night): 35.7 dBA Ldn: 43.0 dBA



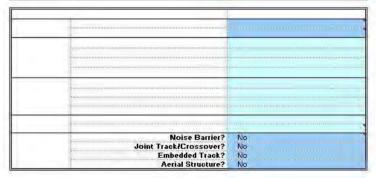
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-105
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	4

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
1	Specific Source:	Bus Transit Center
	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
10		
Distance	Distance from Source to Receiver (ft)	151
	Number of Intervening Rows of Buildings	T
Adjustments	Noise Barrier?	No.



Project Results Summare

Existing Ldn:	60 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	60 dBA
Increase:	0dB
Impact?:	None

Distance to Impact Contours

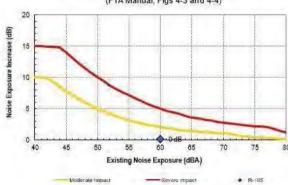
Dist to Mod. Impact

Contour (Source 1): 64ft Dist to Sev. Impact Contour (Source 1): 38ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 65 60 55 Moderate Impact 50 ▲ 44 dBA 40 45 50 60 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(dag): 40.8 dBA Leq(night): 36.7 dBA Ldn: 44.0 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-106
Land Use Categorg:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr		
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft) Mumber of Intervening Rows of Buildings	122	
Adjustments	Noise Barrier?	No	

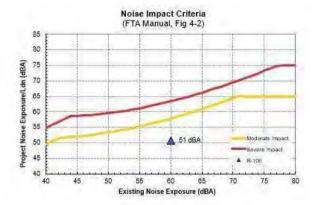
	Вършинализия положения положения положения положения положения положения положения положения положения положен

Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No:
Aerial Structure?	No

Project Results Summary

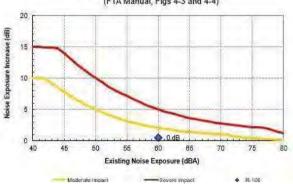
Existing Ldn:	
Total Project Ldn:	51dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours
Dist to Mod. Impact
Contour (Source 1): 64 ft Dist to Sev. Impact Contour (Source 1): 38 ft



Source 1 Results

Leq(day): 47.6 dBA Leq(night): 43.5 dBA Ldn: 50.8 dBA



rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-107
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	31	
	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft)	237	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.	
Aujustinents			



Project Results Summare

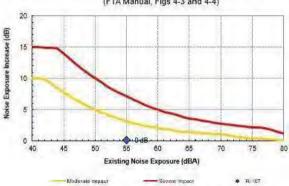
55 dBA	ī
38 dBA	i
55 dBA	•
0 dB	
None	Ĩ
	38 dBA 55 dBA 0 dB

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 75 70 65 60 55 Moderate Impact 50 45 40 40 45 55 80 65 70 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 34.4 dBA Leq(night): 30.3 dBA Ldn: 37.6 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-108
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	0.1.2. 0.1.2.	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Distance	Distance from Source to Receiver (ft)	155	
	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	

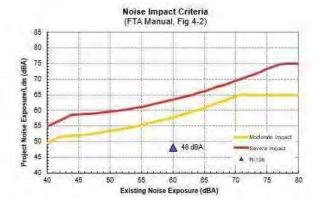
10,10,10,10	
• • • • • • • • • • • • • • • • • • • •	Material Control Contr
Embedded Track?	No. No. No
Aerial Structure?	No

Project Results Summarg

Existing Ldn:	60 dBA
Total Project Ldn:	48 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

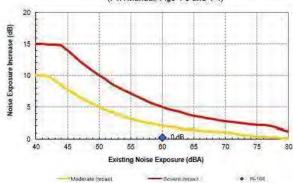
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	64 ft
Dist to Sev. Impact	
Contour (Source 1)	386



Source 1 Results

Leq(day): 45.0 dBA Leq(night): 40.9 dBA Ldn: 48.2 dBA



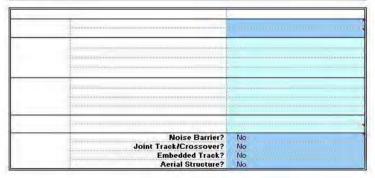
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-110
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters			
	Number of Noise Sources:	1	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Busesthr		
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	256	
Adjustments	Noise Barrier?	No.	



Project Results Summary

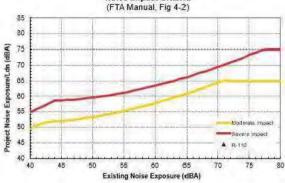
Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft

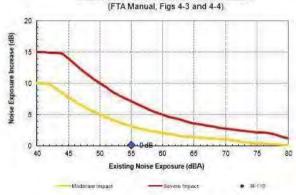


Leq(day): 35,1dBA Leq(night): 30,9dBA Ldn: 38,2dBA

Noise Impact Criteria (FTA Manual, Fig 4-2)



Increase in Cumulative Noise Levels Allowed



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-III
Land Use Categors:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters	
Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	. 1.2
Distance	Distance from Source to Receiver (ft) Number of laterrening Rows of Buildings	236
Adjustments	Noise Barrier?	

010110110110110110110110110110110110110	
	Со одолололололололоно (одолололололололоно)
	los est est est est est est est est est es
Noise Barrier?	No
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No.
Aerial Structure?	No

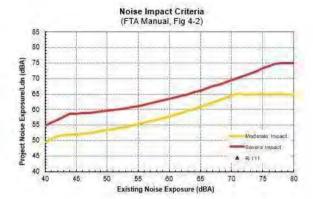
Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

Distance to Impact Contours

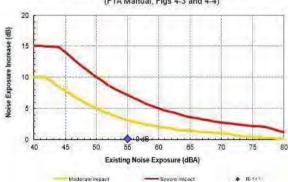
Dist to Mod. Impact

Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 36.0 dBA Leq(night): 31.8 dBA Ldn: 39.1dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-112
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft)	215	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.	
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3	
No Desired	No
No Desired	No No
	No

Project Results Summary

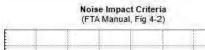
Existing Ldn:	55 dBA
Total Project Ldn:	45 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

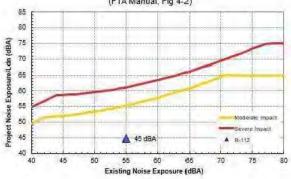
Distance to Impact Contours

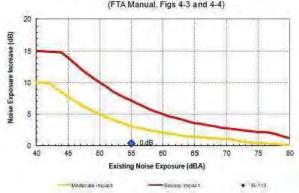
	Dist to Mod. Impact
0.000	Contour (Source 1): 81ft
	Dist to Sev. Impact
	Contour (Source 1): 47ft

Source 1 Results

Leq(day):	41.5 dBA
Leq(night):	41.5 dBA 37.3 dBA 44.6 dBA
Ldn:	44.6 dBA







version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-113	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Value):	55 dBA	

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
0.00	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3.1
	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	239
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No
-		



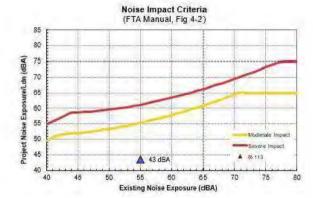
Project Results Summary

Existing Ldn: 55 dBA
Total Project Ldn: 43 dBA
Total Noise Exposure: 55 dBA
Increase: 0 dB
Impact?: None

Distance to Impact Contours
Dist to Mod. Impact

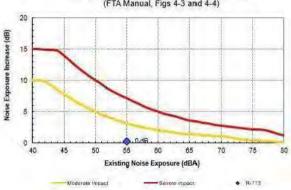
Contour (Source 1): 81ft
Dist to Sev. Impact

Contour (Source 1): 47ft



Source 1 Results

Leq(day): 40,3 dBA Leq(night): 36,2 dBA Ldn: 43,5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-114
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Busesthr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	= 236
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

	·

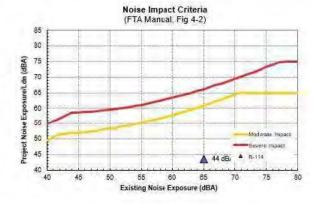
201010101010101010101010101010101010101	
Noise Barrier? Joint Track/Crossover?	No No
	No
Embedded Track?	u de la companya da
Aerial Structure?	No

Project Results Summary

Existing Ldn:	65 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?;	None
Impact?;	None

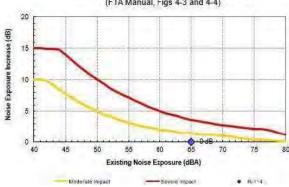
Distance to Impact Contours

DISCRO IN	ou. mipact	
Contour	(Source 1):	48 ft
 Dist to S	ev. Impact	
Contour I	Source 11:	30.6



Source 1 Results

Leq(day): 40.5 dBA Leq(night): 36.3 dBA Ldn: 43.6 dBA



version: 1/29/2013

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver	R-115
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Moise Source Parameters Number of Noise Sources: 1

Moise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Arg. Number of Buses/hi	13.1
Highttime hrs	Avg. Humber of Buses/Ar	3.6
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	82
A-961 - VIII - SELT	Moise Barrier?	No.
Adjustments	Moise Darrier:	- NO:

Embedded Track?	No
Noise Barrier? Joint Track/Crossover?	No
Noise Barrier?	No
0.00100100100100100100100100100100100100	

Project Results Summary

Existing Ldm: 65 dBA

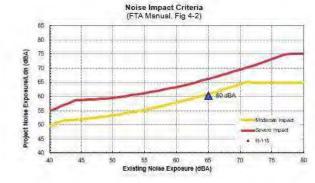
Total Noise Exposure: 66 dBA

Total Noise Exposure: 1dB Impact?: None

Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 79 ft

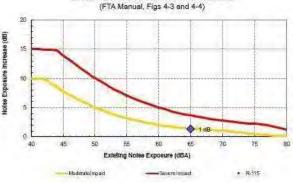
Dist to Ser. Impact Contour
(Source 1): 48 ft



Source | Results

Leq(day): 58.2 dBA Leq(night): 52.6 dBA Ldn: 60.4 dBA

Increase in Cumulative Noise Levels Allowed



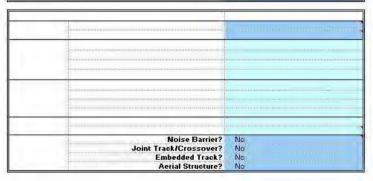
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-116
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

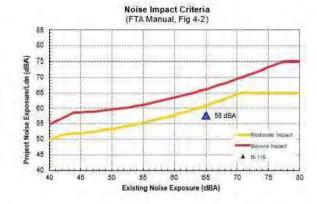
Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	12
	Distance from Source to Receiver (ft)	
Distance	Number of Intervening Rows of Buildings	0
	Noise Barrier?	No



Project Results Summary

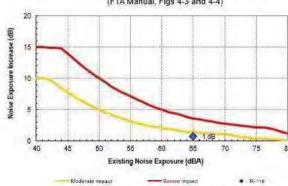
65 dBA
58 dBA
66 dBA
1dB
None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 48ft Dist to Sev. Impact Contour (Source 1): 30ft



Source 1 Results

Leq(day): 54.5 dBA Leq(night): 50.3 dBA Ldn: 57.6 dBA



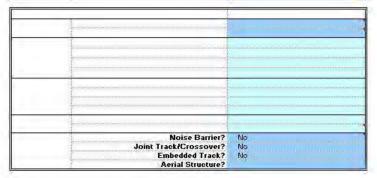
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-119
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources:

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	217
	Number of Intervening Rows of Buildings	2
Adjustments	Noise Barrier?	No



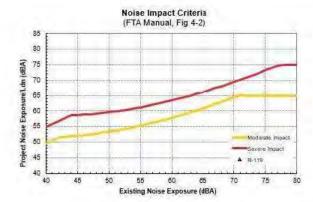
Project Results Summare

roje of rie saids Gainmary	
55 dBA	
39 dBA	
55 dBA	
0 dB	
None	

Distance to Impact Contours

Dist to Mod. Impact

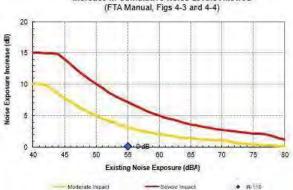
Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft



Source 1 Results

Leq(dag): 35.4 dBA Leq(night): 31.2 dBA Ldn: 38.5 dBA

Increase in Cumulative Noise Levels Allowed



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-120
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters	Surfice to the surfice of the surfic	
	Number of Noise Sources:	1

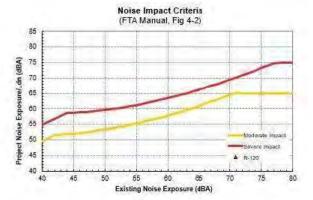
Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Fleceiver (ft) Number of Intervening Rows of Buildings	225 2
Adjustments	Noise Barrier?	

	in a manamana a manamana a manamana a manamana
9100100100100100100100100100100100100100	
	(w/w/wrenenenenenenenenenenenenenenenenenenen
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

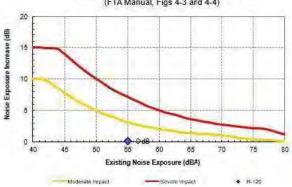
Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact
Contour (Source 1): 47ft



Source 1 Results

Leq(day): 35.0 dBA Leq(night): 30.9 dBA Ldn: 38.1dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-121
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	31	
Nighttime hrs	Avg. Number of Buses/hr	12	
Distance	Distance from Source to Receiver (ft)	208	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	0 No	

	Alabahatatata
1	***************************************
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

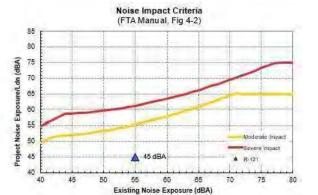
Ezisting Ldn:	55 dBA
Total Project Ldn:	45 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

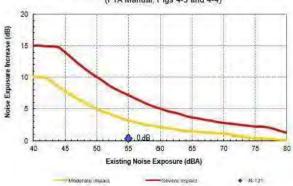
Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 81ft
 Dist to Sev. Impact
 Contour (Source 1): 47ft

Source 1 Results

Leq(dag): 41.8 dBA Leq(night): 37.7 dBA Ldn: 45.0 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-122
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Busesthr	1.2
Distance	Distance from Gource to Fleceiver (ft)	250
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.



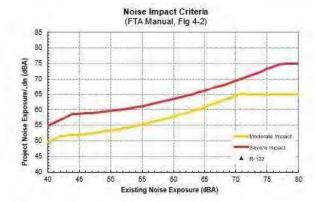
Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

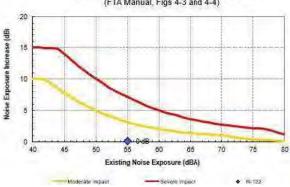
Dist to Mod. Impact

Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 35.3 dBA Leq(night): 31.2 dBA Ldn: 38.5 dBA



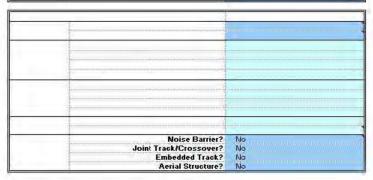
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-123
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
	ymienianaianananananananananananananananan	·	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
Distance	Distance from Source to Receiver (ft)	239	
	Number of Intervening Rows of Buildings	0	
Adjustments	Noise Barrier?	No	
	nguanguanguanguanguanguanguanguanguangua		

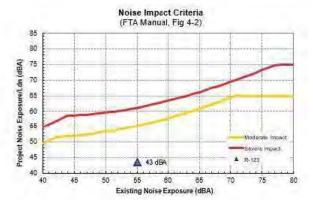


Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	43 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

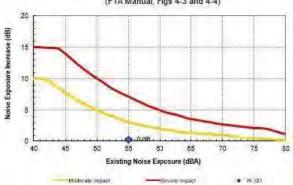
Distance to Impact Contours Dist to Mod. Impact

Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact
Contour (Source 1): 47 ft



Source 1 Results

Leq(dag): 40.3 dBA Leq(night): 36.2 dBA Ldn: 43.5 dBA



rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-124
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	3)
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	240
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	



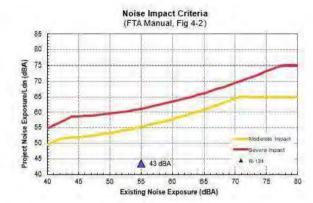
Project Results Summare

55 dBA
43 dBA
55 dBA
0 dB
None

Distance to Impact Contours

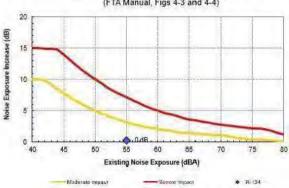
Dist to Mod. Impact
Contour (Source 1): 81ft
Dist to Sev. Impact

Contour (Source 1): 47ft



Source 1 Results

Leq(day): 40.3 dBA Leq(night): 36.2 dBA Ldn: 43.4 dBA



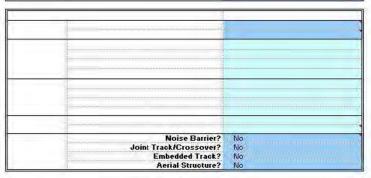
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-125
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	263
110104.25s	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No



Project Results Summary

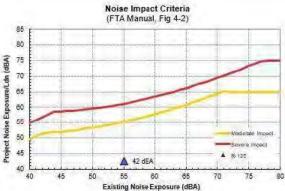
Existing Ldn:	55 dBA
Total Project Ldn:	42 dBA
Total Noise Exposure:	55 dBA 42 dBA 55 dBA 0 dB None
Increase:	0dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact

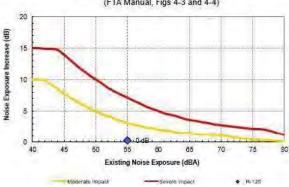
Contour (Source 1): 81ft

Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 39.3 dBA Leq(night): 35.2 dBA Ldn: 42.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-126
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
Number of Noise Sources:	-1	

Noise Source Parameters		Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Buses/hr	. 1.2
Distance	Distance from Source to Receiver (ft)	240
	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

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	0.0000
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Noise Barrier? Joint Track∤Crossover?	No
	No.
Embedded Track? Aerial Structure?	No.

Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	476

Noise Impact Criteria (FTA Manual, Fig 4-2) 85 80 Project Noise Exposure/Ldn (dBA) 75 70 65 60 55 50 Severe Impact 45 A R 126 40 45 80 65 75 Existing Noise Exposure (dBA)

Source 1 Results

Leq(day): 35.8 dBA Leq(night): 31.7 dBA Ldn: 38.9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-127
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources:

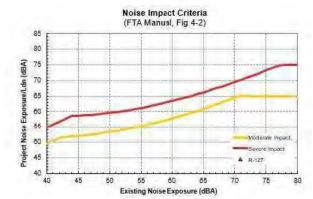
arameters	Source 1	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Avg. Number of Buses/hr		
Avg. Number of Buses/hr	12	
Distance from Source to Receiver (ft) Number of laterycaing Rows of Buildings	251	
Noise Barrier?	No	
	Source Type: Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of laterreaing Rows of Buildings Noise Barrier?	

1	
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Noise Barrier?	No No
Embedded Track?	
Aerial Structure?	No No

Project Results Summary

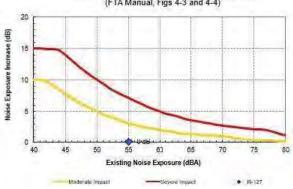
Existing Ldn:	55 dBA
Total Project Ldn:	38 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours
Dist to Mod. Impact
Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft



Source 1 Results

Leq(dag): 35.3 dBA Leq(night): 31.2 dBA Ldn: 38.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-128
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters	And the second second second	
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	31	
Nighttime hrs	Avg. Number of Buses∤hr	12	
Distance	Distance from Source to Receiver (ft)	108	
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	0 No	

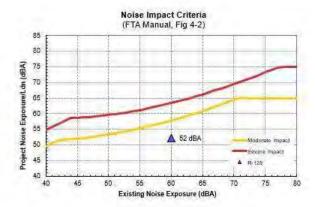
<u> </u>	
Noise Barrier?	No No
Joint Hackrufossover?	No No No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Ldn:	60 dBA
Total Project Ldn:	52 dBA
Total Noise Exposure:	61dBA
Increase:	1dB
Impact?:	None

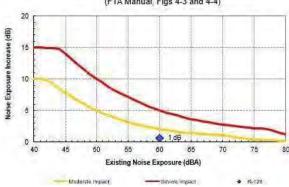
Distance to Impact Contours

7	Dist to Mod. Impact
	Contour (Source 1): 64 ft
	Dist to Sev. Impact
	Contour (Course II. 206



Source 1 Results

Leq(day): 48.9 dBA Leq(night): 44.8 dBA Ldn: 52.1 dBA



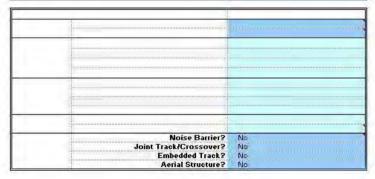
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-129
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	33
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver (ft)	118
Distance	Number of Intervening Rows of Buildings	1
Adjustments	Noise Barrier?	No

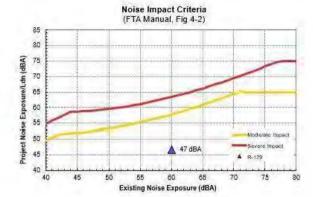


Project Results Summary

roject riesuits outlinuing	
Existing Ldn:	60 dBA
Total Project Ldn:	47 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

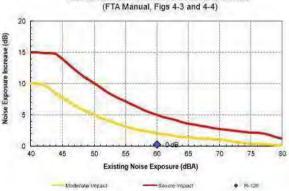
Distance to Impact Contours Dist to Mod. Impact

Dist to Mod. Impact Contour (Source 1): 64ft Dist to Sev. Impact Contour (Source 1): 38ft



Source 1 Results

Leq(dag): 43.5 dBA Leq(night): 39.4 dBA Ldn: 46.7 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-130
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source Parameters		Source 1
-	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Noisiest hr of	Number of Buses/hr	4
Activity During	TO TO THE PARTY OF	
Sensitive hrs		
		A-10-10-10-10-10-10-10-10-10-10-10-10-10-
Distance	Distance from Source to Receiver (ft)	÷111.
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

Noise Barrier? Joint Track/Crossover? Embedded Track? Aerial Structure?	No No No No

Project Results Summary

Existing Leqh:	60 dBA
Total Project Legh:	50 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	
Dist to Sev. Impact	
Contour (Source 1):	20 ft

45

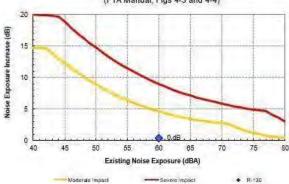
Source 1 Results

Legh: 49.8 dBA

Increase in Cumulative Noise Levels Allowed (FTA Manual, Figs 4-3 and 4-4)

Existing Noise Exposure (dBA)

75



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-131
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
Number of Noise Sources:	1	

arameters	Source 1	
Source Type: Specific Source:	Stationary Source Bus Transit Center	
Avg. Number of Busesthr	3.1	
Avg. Number of Buses/hr	1.2	
Distance from Source to Receiver (ft)	70 0	
Noise Barrier?	No	
	Source Type: Specific Source: Aug. Number of Buses/hr Aug. Number of Buses/hr Distance from Source to Receiver (ft) Number of lateryeing Rows of Buildings	

1	
	· · · · · · · · · · · · · · · · · · ·
)
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No.

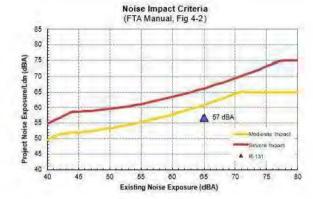
Project Results Summary

Existing Ldn:	65 dBA
Total Project Ldn:	57 dBA
Total Noise Exposure:	66 dBA
Increase:	1dB
Impact?:	None

Distance to Impact Contours

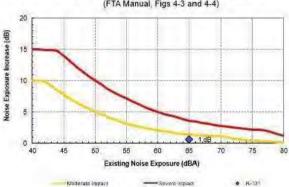
Dist to Mod. Impact

Contour (Source 1): 48ft Dist to Sev. Impact Contour (Source 1): 30 ft



Source 1 Results

Leq(dag): 53.7 dBA Leq(night): 49.5 dBA Ldn: 56.8 dBA



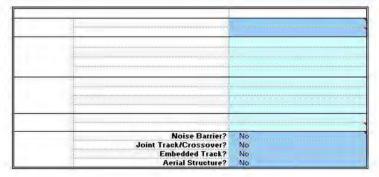
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-132
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Yalue):	60 dBA

Noise Source Parameters	
	Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Noisiest hr of Activity During Sensitive hrs	Number of Buses/hr	. \$
Distance	Distance from Source to Receiver (ft) Number of Intervening Rows of Buildings	183
Adjustments	Noise Barrier?	No

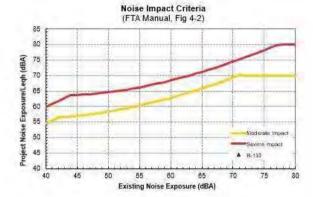


Project Results Summare

roject rie saits cummary	
Existing Leqh:	60 dBA
Total Project Legh:	40 dBA
Total Moise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

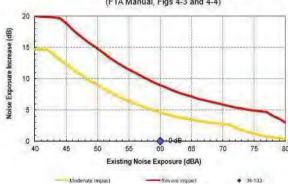
Distance to Impact Contours

Dist to Mod. Impact
Contour (Source 1): 33 ft Dist to Sev. Impact Contour (Source 1): 20 ft



Source 1 Results

Legh: 39.8 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters		
Receiver:	R-133	
Land Use Category:	2. Residential	
Existing Noise (Measured or Generic Yalue):	55 dBA	

Noise Source Parameters		
A	Number of Noise Sources:	

Noise Source P	arameters	Source 1
-	Source Type: Specific Source:	Stationary Source Bus Transit Center
	Avg. Number of Busesthr	3.1
Nighttime hrs	Avg. Number of Buses/hr	
Distance	Distance from Source to Receiver [ft]	228
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No.

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	Andreadachachachachachachachachachachachachacha
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

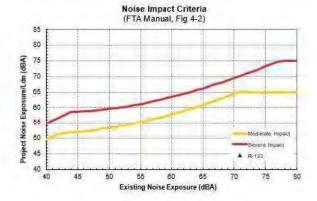
Project Results Summary

55 dBA
39 dBA
55 dBA
0 dB
None

Distance to Impact Contours

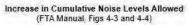
Dist to Mod. Impact
Contour (Source 1): 81ft

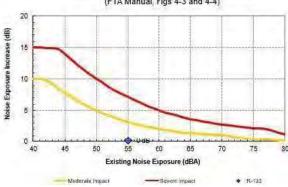
Dist to Sev. Impact
Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 36.3 dBA Leq(night): 32.2 dBA Ldn: 39.5 dBA





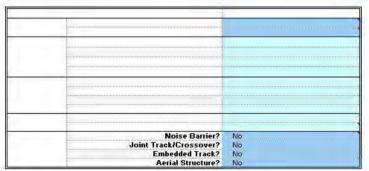
version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-134
Land Use Categorg:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters Number of Noise Sources: 1

Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31
Nighttime hrs	Avg. Number of Buses/ht	12
Distance	Distance from Source to Receiver (ft) Number of laterening Rows of Buildings	218
Adjustments	Noise Barrier?	No:



Project Results Summary

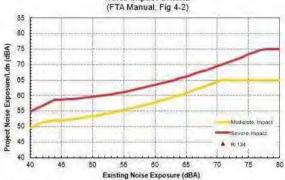
Existing Ldn:	55 dBA
Total Project Ldn:	40 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

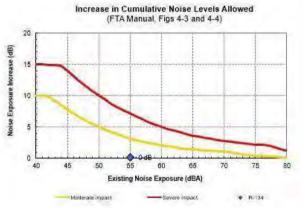
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1):	47ft

Source 1 Results Leq(dag): 36.8 dBA Leq(night): 32.6 dBA Ldn: 39.9 dBA

Noise Impact Criteria (FTA Manual, Fig 4-2)





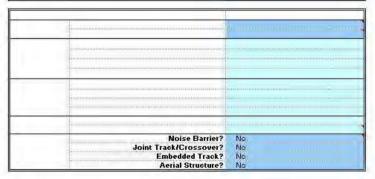
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-135
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	31.
	Avg. Number of Buses/hr	1.2
Distance	Distance from Source to Receiver (ft)	250
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No.



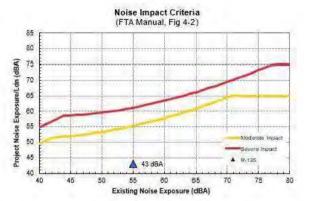
Project Results Summare

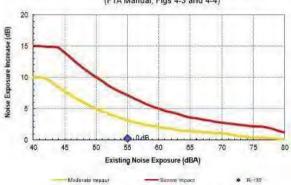
55 dBA
43 dBA
55 dBA
0 dB
None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft

Source 1 Results

Leq(day): 39.8 dBA Leq(night): 35.7 dBA Ldn: 43.0 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-136
Land Use Category:	2. Residential
Existing Noise [Measured or Generic Yalue]:	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source I	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	₹3.1
Nighttime hrs	Avg. Number of Buses/hr	1.2
Nistance		217
Adimeter	Number of Intervening Rows of Buildings Noise Barrier?	0.
Adjustments	Noise Barrier?	



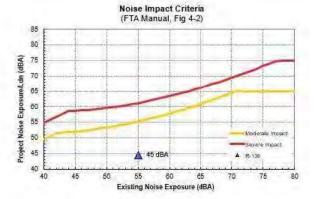
Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	45 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

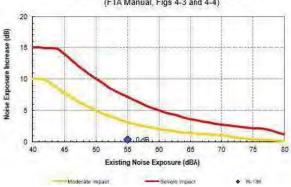
Dist to Mod. Impact

Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 41.4 dBA Leq(night): 37.2 dBA Ldn: 44.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-137
Land Use Categorg:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

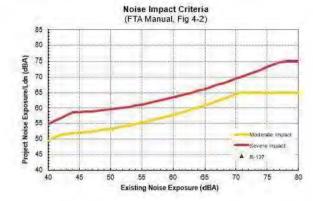
Noise Source P	arameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Daytime hrs	Avg. Number of Buses/hr	3.1
Nighttime hrs	Avg. Number of Busesthr	.12
Distance	Distance from Source to Receiver (ft)	219
Adjustments	Number of Intervening Rows of Buildings Noise Barrier?	No No

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Noise Barrier?	No
: JUINT FLACKICIUSSUVEL!	No No
Embedded Track?	
Aerial Structure?	No

Project Results Summary

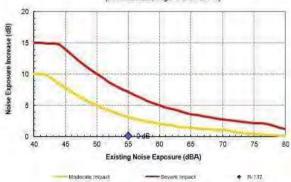
Ezisting Ldn:	55 dBA
Total Project Ldn:	40 dBA
Total Noise Exposure:	55 dBA
Increase:	
Impact?:	None

Distance to Impact Contours Dist to Mod. Impact Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47ft



Source 1 Results

Leq(day): 36.8 dBA Leq(night): 32.6 dBA Ldn: 39.9 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-138
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

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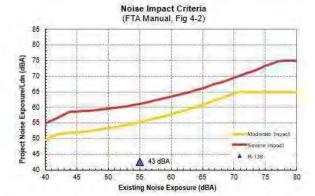
Noise Barrier? Joint Track/Crossover?	No No
Embedded Track? Aerial Structure?	No No
	Noise Barrie? Joint Track/Crossover? Embedded Track/

Project Results Summary

Ezisting Ldn:	55 dBA
Total Project Ldn:	43 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

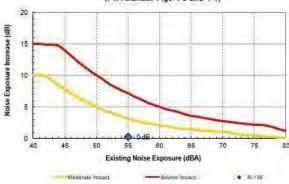
Distance to Impact Contours

Dist to Mod. Impact	1
Contour (Source 1):	81ft
Dist to Sev. Impact	
Carrena (Carrena II)	476



Source 1 Results

Leq(day):	39.4 dBA
Leg(night):	35.3 dBA
Ldn:	42.6 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-139
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
	Number of Noise Sources:	4

Noise Source P	arameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Dagtime hrs	Avg. Number of Buses/hr	
Nighttime hrs	Avg. Number of Buses/hr	12
Distance	Distance from Source to Receiver [ft]	
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

	01
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track? Aerial Structure?	No No

Project Results Summary

Ezisting Ldn:	55 dBA
Total Project Ldn:	44 dBA
Total Noise Exposure:	55 dBA
Increase:	0dB
Impact?:	None

Distance to Impact Contours

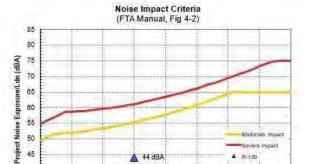
Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	0101101101
Contour (Source 1):	47ft



40

40

45



▲ 44 dBA

60

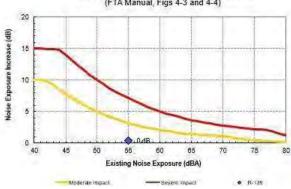
Existing Noise Exposure (dBA)

55

Severe Impact

75

70



rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-140
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

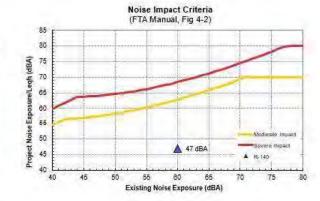
Noise Source F	Parameters	Source 1
	Source Type: Specific Source:	Stationary Source Bus Transit Center
Noisiest hr of Activity During	Number of Buses/hr	4
Sensitive hrs		
Distance	Distance from Source to Receiver (ft)	146
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	

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Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

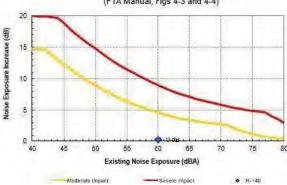
Project Results Summary

Existing Legh:	60 dBA
Total Project Legh:	
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

Dist to Mod. Impact	
Contour (Source 1):	33 ft
Dist to Sev. Impact	
Contour (Source 1):	20 ft



Source 1 Results Legh: 46.8 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	B-141
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters Number of Noise Sources:

Noise Source Parameters		Source 1	
	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
	nirairairairai+ai+ai+ai+ai+ai+ai+ai+aiminininininininininininininininininin		
Distance	Distance from Source to Receiver (ft)	220	
	Number of Intervening Rows of Buildings	1	
Adjustments	Noise Barrier?	No	

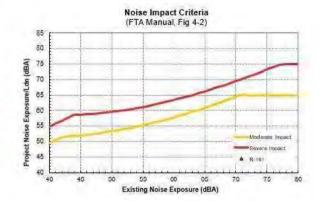
Chanaltairaitairaitairaitairaitairail->tonononononononononononon	
010110101010101010101010101010110111111	
	· · · · · · · · · · · · · · · · · · ·
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summare

Tible of Tits and Cammany		
Ezisting Ldn:	55 dBA	
Total Project Ldn:	40 dBA	
Total Noise Exposure:	55 dBA	
Increase:	0 dB	
Impact?:	None	

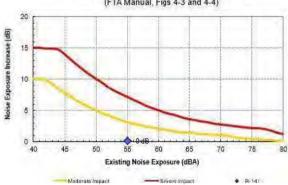
Distance to Impact Contours
Dist to Mod. Impact
Contour (Source 1): 81ft

Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 36.7 dBA Leq(night): 32.6 dBA Ldn: 39.9 dBA



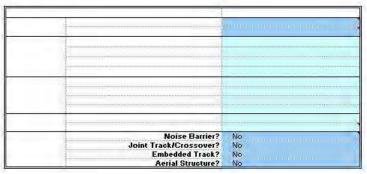
rersion: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-142
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source Parameters		Source 1	
1000	Source Type: Specific Source:	Stationary Source Bus Transit Center	
Dagtime hrs	Avg. Number of Buses/hr		
Nighttime hrs	Avg. Number of Busesthr	1.2	
Distance	Number of latervening Rows of Buildings	214	
Adjustments	Noise Barrier?		

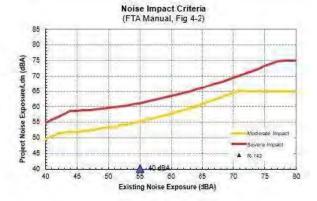


Project Results Summary

Existing Ldn:	55 dBA
Total Project Ldn:	40 dBA
Total Noise Exposure:	55 dBA
Increase:	
Impact?:	None

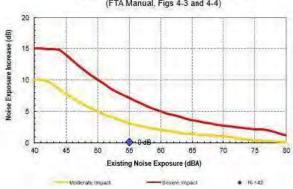
Distance to Impact Contours

DIST to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	
Contour (Source 1)	176



Source 1 Results

Leq(dag): 37.0 dBA Leq(night): 32.9 dBA Ldn: 40.2 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-143
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Yalue):	55 dBA

Noise Source Parameters		
Number of Noise Sources:	1	

Noise Source Parameters		Source I	
1	Source Type:	Stationary Source	
	Specific Source:	Bus Transit Center	
Daytime hrs	Avg. Number of Buses/hr	3.1	
Nighttime hrs	Avg. Number of Buses/hr	1.2	
Distance	Distance from Source to Receiver (ft)		
Distance	Number of Intervening Rows of Buildings	1	
Adjustments	Noise Barrier?	No	

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	о/ПО полотольно полотольно полотольно полотольной (
	о напанатална напаната на под
Знанополополополополополополополополополопо	
Noise Barrier? Joint Track/Crossover? Embedded Track?	No No No
Aerial Structure?	No

Project Results Summary

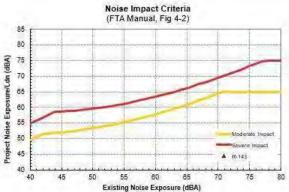
Existing Ldn:	55 dBA
Total Project Ldn:	39 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

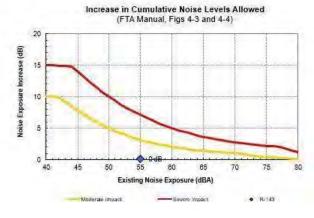
Distance to Impact Contours

Dist to Mod. Impact	
Contour (Source 1):	81ft
Dist to Sev. Impact	,
Contour (Source 1):	47ft

Source 1 Results

Leq(day): 35,9 dBA Leq(night): 31,8 dBA Ldn: 39,1 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-144
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	55 dBA

Noise Source Parameters	
Number of Noise Sources:	1.

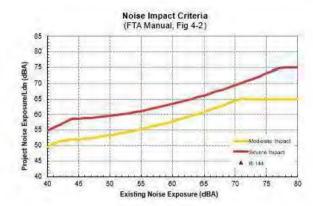
arameters	Source 1
Source Type: Specific Source:	Stationary Source Bus Transit Center
Avg. Number of Busesthr	3.1
Avg. Number of Buses/hr	1.2
Distance from Source to Receiver (ft)	225
Noise Barrier?	No
	Source Type: Specific Source: Avg. Number of Buses/hr Avg. Number of Buses/hr Distance from Source to Receiver (ft) Number of laterycaing Rows of Buildings Noise Barrier?

***************************************	***************************************
<u> </u>	
	×
J.	
Noise Barrier?	No
Joint Track/Crossover?	No.
Conhadded Track?	No
Embedded Track? Aerial Structure?	No
Menal Structure?	NO

Project Results Summary

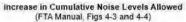
Existing Ldn:	55 dBA
Total Project Ldn:	40 dBA
Total Noise Exposure:	55 dBA
Increase:	0 dB
Impact?:	None

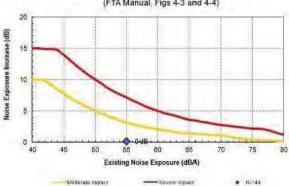
Distance to Impact Contours
Dist to Mod. Impact
Contour (Source 1): 81ft Dist to Sev. Impact Contour (Source 1): 47 ft



Source 1 Results

Leq(day): 36.5 dBA Leq(night): 32.4 dBA Ldn: 39.6 dBA





tersion: 1/29/2019

Project: Bit Plant-Nicholson BP*		Project: BR Plank-Nicholson BR
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Receiver Parameters	
Receiver:	R-145
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	65 dBA

Moise Source Parameter:		
	Number of Moise Sources: 1	

Moise Source Par	ameters	Source 1
	Source Type:	Stationary Source
	Specific Source:	Bus Transit Center
Daytime hrs	Avg. Number of Buses/br	31
	Avg. Number of Buses/hr	1,2
Distance	Distance from Source to Receiver [ft]	
Distance	Number of Intervening Rows of Buildings	0
Carrier Control	Hoise Barrier?	No
	moise parrier:	

Embedded Track? Aerial Structure?	No No
Hoise Barrier? Joint Track/Crossover?	No No No
\$417014014014014014044444444444444444444	

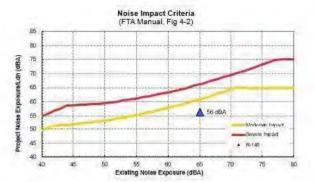
Project Results Summary Existing Ldn: | 65 dBA Total Project Ldn: | 56 dBA Total Noise Exposure: | 68 dBA Increase: | 1 dB

Impact?: None

Distance to Impact Contours

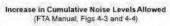
Dist to Mod. Impact
Contour (Source 1): 48 H

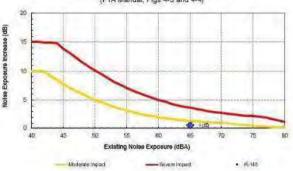
Dist to Ser. Impact Contour
(Source 1): 30 ft



Source 1 Results
Leg(d

Leq(day): 53.2 dBA Leq(night): 49.1 dBA Ldn: 56.4 dBA





version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-39
Land Use Category:	1. Outdoor Quiet
Existing Noise (Measured or Generic Value):	60 dBA

Noise Source Parameters		
	Number of Noise Sources: 1	

Noise Source F	arameters	Source 1
	Source Type: Specific Source:	Highway/Transit Buses (electric)
Noisiest hr of		
Activity During	Speed (mph)	30
Sensitive hrs	Number of Events/hr	***
Distance	Distance from Source to Receiver (ft)	141
	Number of Intervening Rows of Buildings	- 0
Adjustments	Noise Barrier?	No

P1707007007070100100100100100100100100100	· y=#10+1041041041041041041041041041041041041041
Noise Barrier?	No
Joint Track/Crossover?	No
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Legh:	60 dBA
Total Project Legh:	37 dBA
Total Noise Exposure:	60 dBA
Increase:	0 dB
Impact?:	None

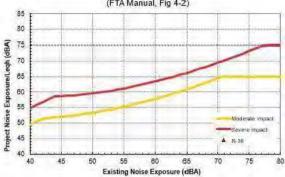
Distance to Impact Contours

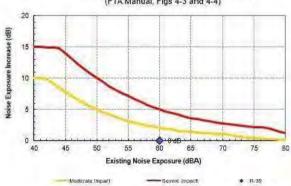
Dist to Mod. Impact	
Contour (Source 1):	8ft
Dist to Sev. Impact	
Contour (Source 1)	36

Source 1 Results

Legh: 37.5 dBA

Noise Impact Criteria (FTA Manual, Fig 4-2)





version: 1/23/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver	R-15
Land Use Category:	2. Residential
Existing Noise (Measured or Generic Value):	70 dBA

Noise Source Parameters	in the second	
	Number of Noise Sources:	1

Noise Source F	Parameters	Source 1
	Source Type: Specific Source:	Highway/Transit Buses [electric]
Daytime hrs		
and the second	Speed (mph)	35
	Avg. Number of Events/hr	31
Nighttime hrs		
	Speed (mph)	35
	Avg. Number of Events/hr	12
Distance	Distance from Source to Receiver (ft)	35
73536,0478	Number of Intervening Rows of Buildings	-0
Adjustments	Noise Barrier?	No.

4		
1		
		•••••••••••••••••••••••••••••••••••••••
1.0		Province Control Contr
	Noise Barrier? Joint Track/Crossover?	No
1	Joint Track/Crossover?	No
-	Embedded Track?	No
	Aerial Structure?	No

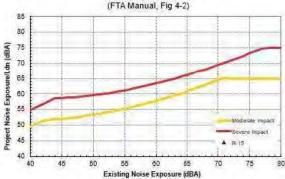
Project Results Summary

Existing Ldn:	70 dBA
Total Project Ldn:	50 dBA
Total Noise Exposure:	70 dBA
Increase-	n dB
Impact?:	None

Distance to Impact Contours

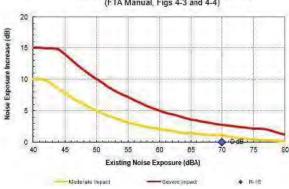
astanot to impact coi	ILOUIS .
Dist to Mod. Imp.	act
Contour (Source	1): 4 ft
Dist to Sev. Imp	act
Contour (Source	11: 2ft

Noise Impact Criteria (FTA Manual, Fig 4-2)



Source 1 Results

Leq(day): 47.3 dBA Leq(night): 43.2 dBA Ldn: 50.5 dBA



version: 1/29/2019

Project: BR Plank-Nicholson BRT

Receiver Parameters	
Receiver:	R-42
Land Use Category:	3. Institutional
Existing Noise (Measured or Generic Value):	65 dBA

Noise Source Parameters		
	Number of Noise Sources:	1

Noise Source P	arameters	Source 1
	Source Type:	Highway/Transit
	Specific Source:	Buses (electric)
Noisiest hr of		
Activity During	Speed (mph)	35
Sensitive hrs	Number of Events/hr	*
Distance	Distance from Source to Receiver (ft)	60
	Number of Intervening Rows of Buildings	0
Adjustments	Noise Barrier?	No

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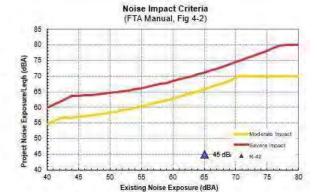
<u></u>	
***************************************	6/04040404040404040404040404040404040404
***************************************	a.,
Noise Barrier?	No.
SOUR HACKICIOSSOVEI:	- ruo
Embedded Track?	No
Aerial Structure?	No

Project Results Summary

Existing Legh:	65 dBA
Total Project Legh:	45 dBA
Total Noise Exposure:	65 dBA
Increase:	0 dB
Impact?:	None

Distance to Impact Contours

Dist to Mod. Impact	To a
Contour (Source 1):	2ft
Dist to Sev. Impact	
Contour (Source 1):	1ft



Source 1 Results

Legh: 44.9dBA

