North Hollywood to Pasadena Bus Rapid Transit (BRT) Corridor Planning and Environmental Study

NOISE AND VIBRATION TECHNICAL REPORT

Prepared For:

Metro

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ACRONYMS AND ABBREVIATIONS

BMC	Burbank Municipal Code
BRT	Bus Rapid Transit
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dB	decibel
dBA	A-weighted decibel
EB	Eastbound
EIR	Environmental Impact Report
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GMC	Glendale Municipal Code
HVAC	Heating, Ventilation, and Air Conditioning
I	Interstate
LAMC	Los Angeles Municipal Code
L_{dn}	Day-Night Average Noise Level
$L_{dn.equip(30day)}$	Day-Night Average Noise Level (for equipment over 30 day average)
L_{eq}	Equivalent Noise Level
$L_{eq.equip(1hr)}$	Equivalent Noise Level (for equipment over 1-hour)
$L_{eq.equip(8hr)}$	Equivalent Noise Level (for equipment over 8-hours)
$L_{eq.equip(24hr)}$	Equivalent Noise Level (for equipment over 24-hours)
Metro	Los Angeles County Metropolitan Transportation Authority
NB	Northbound
OPR	Office of Planning and Research
PRC	Public Resources Code
PPV	Peak Particle Velocity
RMS	Root Mean Square
ROW	Right-of-Way

SB	Southbound
SR	State Route
TNM	Traffic Noise Model
TSP	Transit Signal Priority
US EPA	United States Environmental Protection Agency
VdB	Velocity in Decibels
VMT	Vehicle Miles Traveled
WB	Westbound

1. Introduction

The Los Angeles County Metropolitan Transportation Authority (Metro) is proposing the North Hollywood to Pasadena Bus Rapid Transit (BRT) Corridor Project (Proposed Project or Project) which would provide a BRT service connecting several cities and communities between the San Fernando and San Gabriel Valleys. Specifically, the Proposed Project would consist of a BRT service that runs from the North Hollywood Metro B/G Line (Red/Orange) station in the City of Los Angeles through the Cities of Burbank, Glendale, the community of Eagle Rock in the City of Los Angeles, and Pasadena, ending at Pasadena City College. The Proposed Project with route options would operate along a combination of local roadways and freeway sections with various configurations of mixed-flow and dedicated bus lanes depending on location. A Draft Environmental Impact Report (EIR) is being prepared for the following purposes:

- To satisfy the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code (PRC) Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15000, et seq.).
- To inform public agency decision-makers and the public of the significant environmental effects of the Proposed Project, as well as possible ways to minimize those significant effects, and reasonable alternatives to the Proposed Project that would avoid or minimize those significant effects.
- To enable Metro to consider environmental consequences when deciding whether to approve the Proposed Project.

This Noise and Vibration Technical Report is comprised of the following sections:

1. Introduction
2. Project Description
3. Regulatory Framework
4. Existing Setting
5. Significance Thresholds and Methodology
6. Impact Analysis
7. Cumulative Analysis
8. References
9. List of Preparers

2. Project Description

This section is an abbreviated version of the Project Description contained in the Draft EIR. This abbreviated version provides information pertinent to the Technical Reports. Please reference the Project Description chapter in the Draft EIR for additional details about the Proposed Project location and surrounding uses, project history, project components, and construction methods. The Draft EIR also includes a more comprehensive narrative description providing additional detail on the project routing, station locations, and proposed roadway configurations. Unless otherwise noted, the project description is valid for the Proposed Project and all route variations, treatments, and configurations.

2.1 PROJECT ROUTE DESCRIPTION

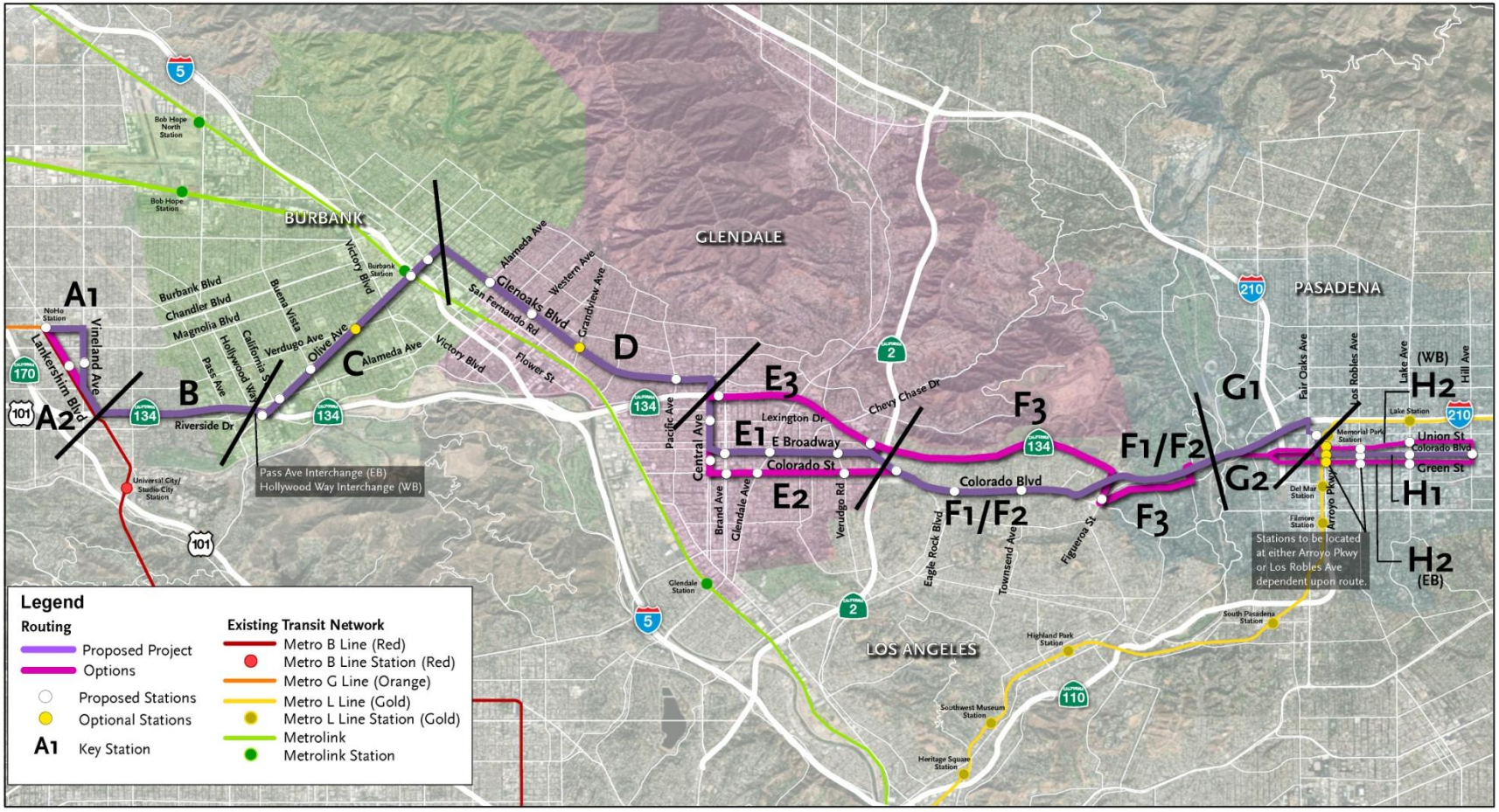
Metro is proposing the BRT service to connect several cities and communities between the San Fernando and San Gabriel Valleys. The Proposed Project extends approximately 18 miles from the North Hollywood Metro B/G Line (Red/Orange) Station on the west to Pasadena City College on the east. The BRT corridor generally parallels the Ventura Freeway (State Route 134) between the San Fernando and San Gabriel Valleys and traverses the communities of North Hollywood and Eagle Rock in the City of Los Angeles as well as the Cities of Burbank, Glendale, and Pasadena. Potential connections with existing high-capacity transit services include the Metro B Line (Red) and G Line (Orange) in North Hollywood, the Metrolink Antelope Valley and Ventura Lines in Burbank, and the Metro L Line (Gold) in Pasadena. The Study Area includes several dense residential areas as well as many cultural, entertainment, shopping and employment centers, including the North Hollywood Arts District, Burbank Media District, Downtown Burbank, Downtown Glendale, Eagle Rock, Old Pasadena and Pasadena City College (see Figure 1).

2.2 BRT ELEMENTS

BRT is intended to move large numbers of people quickly and efficiently to their destinations. BRT may be used to implement rapid transit service in heavily traveled corridors while also offering many of the same amenities as light rail but on rubber tires and at a lower cost. The Project would provide enhanced transit service and improve regional connectivity and mobility by implementing several key BRT elements. Primary components of the BRT are further addressed below and include:

- Dedicated bus lanes on city streets
- Transit signal priority (TSP)
- Enhanced stations with all-door boarding

Figure 1 – Proposed Project with Route Options



2.3 DEDICATED BUS LANES

The Proposed Project would generally include dedicated bus lanes where there is adequate existing street width, while operating in mixed traffic within the City of Pasadena. BRT service would operate in various configurations depending upon the characteristics of the roadways as shown below:

- **Center-Running Bus Lanes**: Typically includes two lanes (one for each direction of travel) located in the center of the roadway. Stations are usually provided on islands at intersections and are accessible from the crosswalk.
- **Median-Running Bus Lanes**: Typically includes two lanes (one for each direction of travel) located in the inside lane adjacent to a raised median in the center of the roadway. Stations are usually provided on islands at intersections and are accessible from the crosswalk.
- **Side-Running Bus Lanes**: Buses operate in the right-most travel lane separated from the curb by bicycle lanes, parking lanes, or both. Stations are typically provided along curb extensions where the sidewalk is widened to meet the bus lane. At intersections, right-turn bays may be provided to allow buses to operate without interference from turning vehicles and pedestrians.
- **Curb-Running Operations**: Buses operate in the right-most travel lane immediately adjacent to the curb. Stations are located along the sidewalk which may be widened to accommodate pedestrian movement along the block. Right-turning traffic merges with the bus lane approaching intersections and buses may be delayed due to interaction with right-turning vehicles and pedestrians.
- **Mixed-Flow Operations**: Where provision of dedicated bus lanes is impractical, the BRT service operates in lanes shared with other roadway vehicles, although potentially with transit signal priority. For example, where the service transitions from a center-running to side-running configuration, buses would operate in mixed-flow. Buses would also operate in mixed-flow along freeway facilities.

Table 1 provides the bus lane configurations for each route segment of the Proposed Project.

Table 1 – Route Segments

Key	Segment	From	To	Bus Lane Configuration
A1 (Proposed Project)	**Lankershim Blvd.**	**N. Chandler Blvd.**	**Chandler Blvd.**	**Mixed-Flow**
	Chandler Blvd.	**Lankershim Blvd.**	**Vineland Ave.**	**Side-Running**
	Vineland Ave.	**Chandler Blvd.**	**Lankershim Blvd.**	**Center-Running**
	Lankershim Blvd.	**Vineland Ave.**	**SR-134 Interchange**	**Center-Running** **Mixed-Flow**[1]
A2 (Route Option)	Lankershim Blvd.	N. Chandler Blvd.	SR-134 Interchange	Side-Running Curb-Running[2]
B (Proposed Project)	**SR-134 Freeway**	**Lankershim Blvd.**	**Pass Ave. (EB)** **Hollywood Wy. (WB)**	**Mixed-Flow**
C (Proposed Project)	**Pass Ave. – Riverside Dr. (EB)** **Hollywood Wy. – Alameda Ave. (WB)**	**SR-134 Freeway**	**Olive Ave.**	**Mixed-Flow**[3]
	Olive Ave.	**Hollywood Wy. (EB)** **Riverside Dr. (WB)**	**Glenoaks Blvd.**	**Curb-Running**
D (Proposed Project)	**Glenoaks Blvd.**	**Olive Ave.**	**Central Ave.**	**Curb-Running** **Median-Running**[4]
E1 (Proposed Project)	**Central Ave.**	**Glenoaks Blvd.**	**Broadway**	**Mixed Flow** **Side-Running**[5]
	Broadway	**Central Ave.**	**Colorado Blvd.**	**Side-Running**
E2 (Route Option)	Central Ave.	Glenoaks Blvd.	Colorado St.	Side-Running
	Colorado St. – Colorado Blvd.	Central Ave.	Broadway	Side-Running
E3 (Route Option)	Central Ave.	Glenoaks Blvd.	Goode Ave. (WB) Sanchez Dr. (EB)	Mixed-Flow
	Goode Ave. (WB) Sanchez Dr. (EB)	Central Ave.	Brand Blvd.	Mixed-Flow
	SR-134[6]	Brand Blvd.	Harvey Dr.	Mixed-Flow
F1 (Route Option)	Colorado Blvd.	Broadway	Linda Rosa Ave. (SR-134 Interchange)	**Side-Running**
				Side-Running Center Running[7]
F2 (Proposed Project)	**Colorado Blvd.**	**Broadway**	**Linda Rosa Ave.** **(SR-134 Interchange)**	**Side-Running**

Key	Segment	From	To	Bus Lane Configuration
F3 (Route Option)	SR-134	Harvey Dr.	Figueroa St.	Mixed-Flow
	Figueroa St.	SR-134	Colorado Blvd.	**Mixed-Flow**
	Colorado Blvd.	Figueroa St.	SR-134 via N. San Rafael Ave. Interchange	**Mixed-Flow**
G1 (Proposed Project)	**SR-134**	**Colorado Blvd.**	**Fair Oaks Ave. Interchange**	**Mixed-Flow**
	Fair Oaks Ave.	**SR-134**	**Walnut St.**	**Mixed-Flow**
	Walnut St.	**Fair Oaks Ave.**	**Raymond Ave.**	**Mixed-Flow**
	Raymond Ave.	**Walnut St.**	**Colorado Blvd. or Union St./Green St.**	**Mixed-Flow**
G2 (Route Option)	SR-134	Colorado Blvd.	Colorado Blvd. Interchange	Mixed-Flow
	Colorado Blvd. or Union St./Green St.	Colorado Blvd. Interchange	Raymond Ave.	Mixed-Flow
H1 (Proposed Project)	**Colorado Blvd.**	**Raymond Ave.**	**Hill Ave.**	**Mixed-Flow**
H2 (Route Option)	Union St. (WB) Green St. (EB)	Raymond Ave.	Hill Ave.	Mixed-Flow

2.4 TRANSIT SIGNAL PRIORITY

TSP expedites buses through signalized intersections and improves transit travel times. Transit priority is available areawide within the City of Los Angeles and is expected to be available in all jurisdictions served by the time the Proposed Project is in service. Basic functions are described below:

- **Early Green**: When a bus is approaching a red signal, conflicting phases may be terminated early to obtain the green indication for the bus.
- **Extended Green**: When a bus is approaching the end of a green signal cycle, the green may be extended to allow bus passage before the green phase terminates.
- **Transit Phase**: A dedicated bus-only phase is activated before or after the green for parallel traffic to allow the bus to proceed through the intersection. For example, a queue jump may be implemented in which the bus departs from a dedicated bus lane or a station ahead of other traffic, so the bus can weave across lanes or make a turn.

2.5 ENHANCED STATIONS

It is anticipated that the stations servicing the Proposed Project may include the following elements:

- Canopy and wind screen
- Seating (benches)
- Illumination, security video and/or emergency call button
- Real-time bus arrival information
- Bike racks
- Monument sign and map displays

Metro is considering near-level boarding which may be achieved by a combination of a raised curb along the boarding zone and/or ramps to facilitate loading and unloading. It is anticipated that BRT buses will support all door boarding with on-board fare collection transponders in lieu of deployment of ticket vending machines at stations.

The Proposed Project includes 21 proposed stations and two “optional” stations, and additional optional stations have been identified along the Route Options, as indicated in **Table 2**. Of the 21 proposed stations, four would be in the center of the street or adjacent to the median, and the remaining 17 stations would be situated on curbs on the outside of the street.

Table 2 – Proposed/Optional Stations

Jurisdiction	Proposed Project	Route Option
North Hollywood (City of Los Angeles)	North Hollywood Transit Center (Metro B/G Lines (Red/Orange) Station)	
	Vineland Ave./Hesby St.	Lankershim Blvd./Hesby St.
City of Burbank	Olive Ave./Riverside Dr.	
	Olive Ave./Alameda Ave.	
	Olive Ave./Buena Vista St.	
	Olive Ave./Verdugo Ave. (optional station)	
	Olive Ave./Front St. (on bridge at Burbank-Downtown Metrolink Station)	
	Olive Ave./San Fernando Blvd.	
City of Glendale	Glenoaks Blvd./Alameda Ave.	
	Glenoaks Blvd./Western Ave.	
	Glenoaks Blvd./Grandview Ave. (optional station)	
	Central Ave./Lexington Dr.	Goode Ave. (WB) & Sanchez Dr. (EB) west of Brand Blvd.
		Central Ave./Americana Way
	Broadway/Brand Blvd.	Colorado St./Brand Blvd.
	Broadway/Glendale Ave.	Colorado St./Glendale Ave.
	Broadway/Verdugo Rd.	Colorado St./Verdugo Rd.
		SR 134 EB off-ramp/WB on-ramp west of Harvey Dr.
Eagle Rock (City of Los Angeles)	Colorado Blvd./Eagle Rock Plaza	
	Colorado Blvd./Eagle Rock Blvd.	
	Colorado Blvd./Townsend Ave.	Colorado Blvd./Figueroa St.
City of Pasadena	Raymond Ave./Holly St. [1] (near Metro L Line (Gold) Station)	
	Colorado Blvd./Arroyo Pkwy. [2]	Union St./Arroyo Pkwy. (WB)[2] Green St./Arroyo Pkwy. (EB)[2]
	Colorado Blvd./Los Robles Ave. [1]	Union St./Los Robles Ave. (WB)[1] Green St./Los Robles Ave. (EB)[1]
	Colorado Blvd./Lake Ave.	Union St./Lake Ave. (WB) Green St./Lake Ave. (EB)
	Pasadena City College (Colorado Blvd./Hill Ave.)	Pasadena City College (Hill Ave./Colorado Blvd.)

[1]With Fair Oaks Ave. interchange routing
[2]With Colorado Blvd. interchange routing

2.6 DESCRIPTION OF CONSTRUCTION

Construction of the Proposed Project will likely include a combination of the following elements dependent upon the chosen BRT configuration for the segment: restriping, curb-and-gutter/sidewalk reconstruction, right-of-way (ROW) clearing, pavement improvements, station/loading platform construction, landscaping, and lighting and traffic signal modifications. Generally, construction of dedicated bus lanes consists of pavement improvements including restriping, whereas ground-disturbing activities occur with station construction and other support structures. Existing utilities will be protected or relocated. Due to the shallow profile of construction, substantial utility conflicts are not anticipated, and relocation efforts should be brief. Construction equipment anticipated to be used for the Proposed Project consists of asphalt milling machines, asphalt paving machines, large and small excavators/backhoes, loaders, bulldozers, dump trucks, compactors/rollers, and concrete trucks. Additional smaller equipment may also be used such as walk-behind compactors, compact excavators and tractors, and small hydraulic equipment.

The construction of the Proposed Project is expected to last approximately 24 to 30 months. Construction activities will shift along the corridor so that overall construction activities should be of relatively short duration within each segment. Most construction activities would occur during daytime hours. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions. Traffic control and pedestrian control during construction would follow local jurisdiction guidelines and the Work Area Traffic Control Handbook. Typical roadway construction traffic control methods will be followed including the use of signage and barricades.

It is anticipated that publicly owned ROW or land in proximity to the Proposed Project's alignment will be available for staging areas. Because the Proposed Project is anticipated to be constructed in a linear segment-by-segment method, there will not be a need for large construction staging areas in proximity to the alignment.

2.7 DESCRIPTION OF OPERATIONS

The Proposed Project will provide BRT service from 4:00 a.m. to 1:00 a.m. or 21 hours per day Sunday through Thursday, and longer service hours (4:00 a.m. to 3:00 a.m.) will be provided on Fridays and Saturdays. The proposed service span is consistent with the Metro B Line (Red). The BRT will operate with 10-minute frequency throughout the day on weekdays tapering to 15 to 20 minutes frequency during the evenings, and with 15-minute frequency during the day on weekends tapering to 30 minutes in the evenings. The BRT service will be provided on 40-foot zero-emission electric buses with the capacity to serve up to 75 passengers, including 35-50 seated passengers and 30-40 standees, and a maximum of 16 buses are anticipated to be in service along the route during peak operations. The buses will be stored at an existing Metro facility.

3. Regulatory Framework

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (i.e., dB). Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range. This noise analysis discusses sound levels in terms of equivalent noise level (L_{eq}), maximum noise level (L_{max}) and the Community Noise Equivalent Level (CNEL).

- Equivalent Noise Level (L_{eq}): L_{eq} represents the average noise level on an energy basis for a specific time period. Average noise level is based on the energy content (acoustic energy) of sound. For example, the L_{eq} for one hour is the energy average noise level during that hour. L_{eq} can be thought of as a continuous noise level of a certain period equivalent in energy content to a fluctuating noise level of that same period. L_{eq} is expressed in units of dBA.

- Day-Night Average Noise Level (L_{dn}): L_{dn} is an adjusted noise measurement scale of average sound level during a 24-hour period. Events from 10:00 p.m. to 7:00 a.m. are increased by 10 dB to account for humans' greater sensitivity to noise during this period. Ldn is used to assess transit noise for residential uses.

- Community Noise Equivalent Level (CNEL): CNEL is an adjusted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if it were actually 5 dBA higher than had it occurred between 7:00 a.m. and 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL figures are obtained by adding an additional 5 dBA to evening noise levels between 7:00 p.m. and 10:00 p.m. and 10 dBA to nighttime noise levels between 10:00 p.m. and 7:00 a.m.

People with normal hearing sensitivity can recognize small perceptible changes in sound levels of approximately 3 dBA. Changes of at least 5 dBA can be readily noticeable and may cause community reactions. Sound level increases of 10 dBA or greater are perceived as a doubling in loudness and can provoke a community response.[1] However, few people are highly annoyed by noise levels below 55 dBA L_{eq}.[2]

Noise levels decrease as the distance from noise sources to receivers increases. For each doubling of distance, noise from stationary sources, commonly referred to as "point sources," can decrease by approximately 6 dBA over hard surfaces (e.g., reflective surfaces such as parking lots) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt and

[1] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment,* 2018.
[2] World Health Organization, *Guidelines for Community Noise*, 1999.

grass). For example, if a point source produces a noise level of 89 dBA at a reference distance of 50 feet and over an asphalt surface, its noise level would be approximately 83 dBA at a distance of 100 feet, 77 dBA at 200 feet, etc. Noises generated by mobile "line" sources such as roadways decrease by approximately 3 dBA over hard surfaces and 4.5 dBA over soft surfaces for each doubling of distance.

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between noise source and receptor. Barriers that break line of sight between sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. As a result, sound barriers can generally reduce noise levels by up to 15 dBA.[3] The effectiveness of barriers can be greatly reduced when they are not high or long enough to completely break line of sight from sources to receivers. It should be noted that because decibels are logarithmic units, they cannot just be added or subtracted. For example, two cars each producing 60 dBA of noise would not produce a combined 120 dBA.

3.1 FEDERAL REGULATIONS

3.1.1 Operational Noise

Federal methodologies for assessing noise impacts are defined in the Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Assessment Manual (Assessment Manual). As updated in 2018, the Assessment Manual provides procedures and impact criteria for noise from transit sources and the criteria apply to transit projects that seek federal funds.

These criteria include procedures for evaluating transit projects like BRT facilities. This includes guidelines for evaluating the impact of operational noise on sensitive land uses (**Table 3**). FTA generally does not consider commercial or industrial uses as noise-sensitive, as these land uses are often compatible with higher noise levels. Historic sites, parks, indoor-only uses, and undeveloped land can be considered noise-sensitive under special circumstances.

The FTA Assessment Manual provides guidance on how to evaluate the impact of noise levels from transit projects (**Table 4**). These levels of impact are to reflect a comparison of future project noise with existing noise and consider land use that reflects noise sensitivity as a function of activity and time period of concern. The higher ambient noise levels are, the lower tolerance there is to any increase in noise.

[3] California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* September 2013.

Table 3 – FTA Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Land Use Type	Noise Metric, dBA	Description of Land Use Category
1	High Sensitivity	Outdoor $L_{eq(1hr)}$*	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 L_{dn}	This category is applicable to all residential land uses and buildings where people normally sleep, such as hotels and hospitals.
3	Institutional	Outdoor $L_{eq(1hr)}$*	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.

***** $L_{eq(1hr)}$* for the loudest hour of project-related activity during hours of noise sensitivity
SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

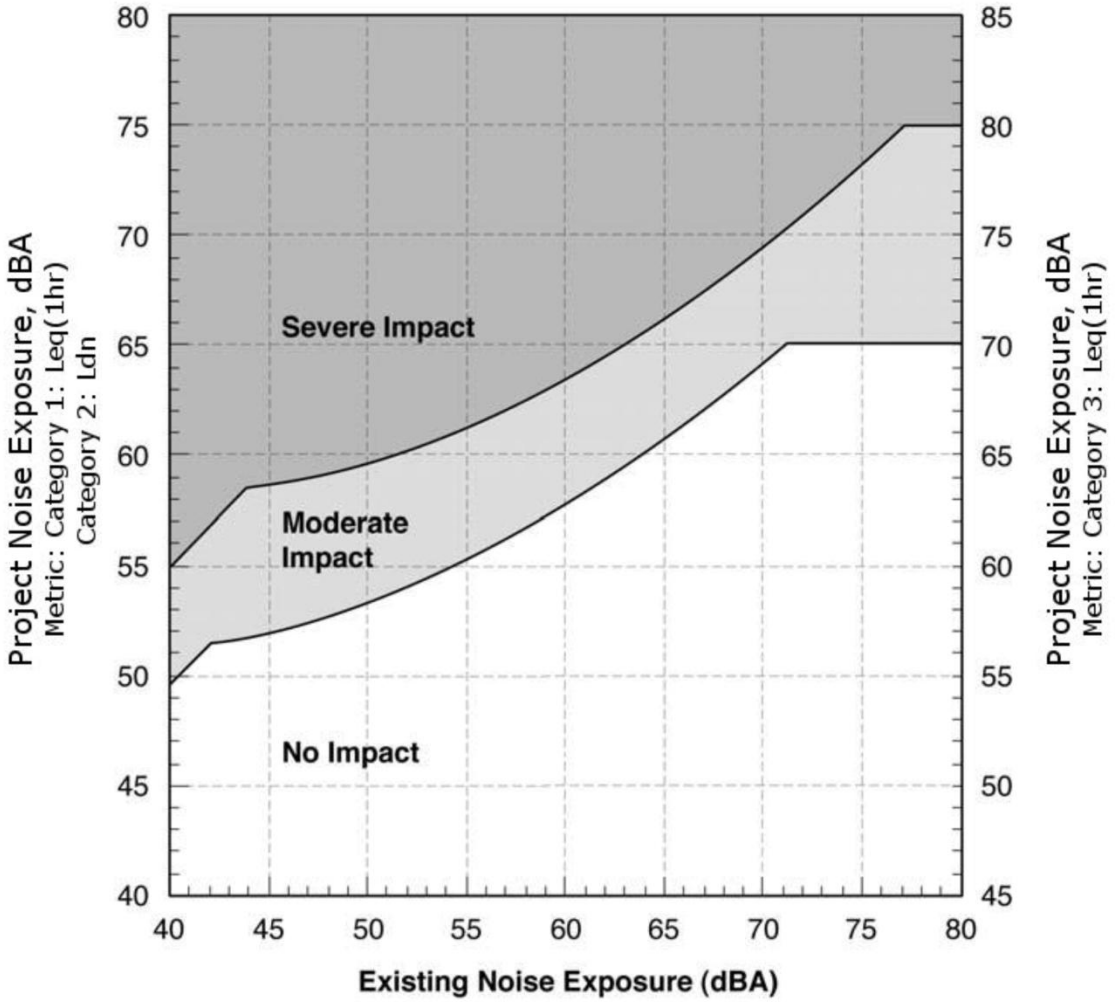
Table 4 – FTA Levels of Impact

Level of Impact	Description
No Impact	Project-generated noise is not likely to cause community annoyance. Noise projections in this range are considered acceptable by FTA and mitigation is not required.
Moderate Impact	Project-generated noise in this range is considered to cause impact at the threshold of measurable annoyance. Moderate impacts serve as an alert to project planners for potential adverse impacts and complaints from the community. Mitigation should be considered at this level of impact based on project specifics and details concerning the affected properties.
Severe Impact	Project-generated noise in this range is likely to cause a high level of community annoyance. The project sponsor should first evaluate alternative locations/alignments to determine whether it is feasible to avoid severe impacts altogether. In densely populated urban areas, evaluation of alternative locations may reveal a trade-off of affected groups, particularly for surface rail alignments. Projects that are characterized as point sources rather than line sources often present greater opportunity for selecting alternative sites. This guidance manual and FTA's environmental impact regulations both encourage project sites which are compatible with surrounding development when possible. If it is not practical to avoid severe impacts by changing the location of the project, mitigation measures must be considered.

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

The FTA Assessment Manual identifies noise significance thresholds which are a function of existing ambient noise levels and the land use category of sensitive receptors. As illustrated in **Figure 2**, the thresholds at which a moderate or severe impact occur vary as the existing noise environment changes. The noise impact criteria for transit operations are summarized in **Table 5**. The first column shows the existing noise exposure and the remaining columns show the additional noise exposure caused by a transit project that would result in the two impact levels. As the existing noise exposure increases, the amount of allowable increase in noise exposure decreases. The FTA Assessment Manual also provides guidance on evaluating cumulative noise impacts.

Figure 2 – FTA Noise Impact Criteria for Transit Projects



SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018

Table 5 – FTA Noise Impact Criteria

Existing Noise Exposure L_{eq} or L_{dn} (dBA)	Project Noise Impact Exposure, L_{eq} (h) or L_{dn} (dBA)					
	Category 1 or 2 Sites			Category 3 Sites		
	No Impact	Moderate Impact	Severe Impact	No Impact	Moderate Impact	Severe Impact
<43	< Ambient + 10	Ambient + 10 to 15	>Ambient + 15	< Ambient + 15	Ambient + 15 to 20	>Ambient + 20
43	<52	52-58	>58	<57	57-63	63
44	<52	52-58	>58	<57	57-63	63
45	<52	52-58	>58	<57	57-63	63
46	<53	53-59	>59	<58	58-64	64
47	<53	53-59	>59	<58	58-64	64
48	<53	53-59	>59	<58	58-64	64
49	<54	54-59	>59	<59	59-64	64
50	<54	54-59	>59	<59	59-64	64
51	<54	55-60	>60	<59	59-65	65
52	<55	55-60	>60	<60	60-65	6
53	<55	55-60	>60	<60	60-65	65
54	<55	55-61	>61	<60	60-66	66
55	<56	55-61	>61	<61	61-66	66
56	<56	56-62	>62	<61	61-67	67
57	<57	57-62	>62	<62	62-67	67
58	<57	57-62	>62	<62	62-67	67
59	<58	58-63	>63	<63	63-68	68
60	<58	58-63	>63	<63	63-68	68
61	<59	59-64	>64	<64	64-69	69
62	<59	59-64	>64	<64	64-69	69
63	<60	60-65	>65	<65	65-70	70

Existing Noise Exposure L_{eq} or L_{dn} (dBA)	Project Noise Impact Exposure, L_{eq} (h) or L_{dn} (dBA)					
	Category 1 or 2 Sites			Category 3 Sites		
	No Impact	Moderate Impact	Severe Impact	No Impact	Moderate Impact	Severe Impact
64	<61	61-65	>65	<66	66-70	70
65	<61	61-66	>66	<66	66-71	71
66	<62	62-67	>67	<67	67-72	72
67	<63	63-67	>67	<68	68-72	72
68	<63	63-68	>68	<68	68-73	73
69	<64	64-69	>69	<69	69-74	74
70	<65	65-69	>69	<70	70-74	74
71	<66	66-70	>70	<71	71-75	75
72	<66	66-71	>71	<71	71-76	76
73	<66	66-71	>71	<71	71-76	76
74	<66	66-72	>72	<71	71-77	77
75	<66	66-73	>73	<71	71-78	78
76	<66	66-74	>74	<71	71-79	79
77	<66	66-74	>74	<71	71-79	79
>77	<66	66-75	>75	<71	71-80	80

Note: dBA = A-weighted decibels; Leg(h) = hourly equivalent noise level; Ldn = day-night noise level
SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018

3.1.2 Construction Noise

The FTA Assessment Manual includes guidelines for assessing construction noise from transit projects. This includes an option to consider the impact of the two noisiest pieces of equipment for each phase (**Table 6**) and a second to consider all equipment for each phase of construction (**Table 7**).

Table 6 – FTA General Assessment Construction Noise Criteria

Land Use	$L_{eq.equip(1\text{-}hr)}$, dBA	
	Day	Night
Residential	90	80
Commercial	100	100
Industrial	100	100

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018

Table 7 – FTA Detailed Analysis Construction Noise Criteria

Land Use	$L_{eq.equip(8\text{-}hr)}$, dBA		$L_{eq.equip(8\text{-}hr)}$, dBA
	Day	Night	30-Day Average
Residential	80	70	75
Commercial	85	85	80[1]
Industrial	90	90	85[1]

[1] Uses a 24-hour $L_{eq(24\ hr)}$ instead of $L_{dn.equip(30day)}$

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018

However, there is an allowance to defer to local criteria from local noise ordinances for determination of significance. The Assessment Manual states that "[p]roject construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use."

3.1.3 Operational Vibration

The FTA Assessment Manual provides guidelines for evaluating the vibration impacts of operating transit projects, focusing on the maximum indoor vibration level from transit vehicles. This guidance includes criteria for a General Vibration Impact Analysis that focuses on overall vibration velocity level. These criteria do not account for existing vibration, as it is rare that roadway traffic generates perceptible groundborne vibration in the absence of irregularities in the road surface. The Assessment Manual does not require an evaluation of vibration from BRT operations.

3.1.4 Construction Vibration

The FTA Assessment Manual includes impact thresholds to assess the risk of damage from construction activities to off-site structures. As show in **Table 8**, this includes thresholds for four building categories that are presented in both Peak Particle Velocity (PPV) and Root Mean Square (RMS) vibration velocity. PPV is commonly used to describe and quantify vibration impacts to buildings and other structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are usually measured in inches per second. RMS correlates with human perception and response and represents "smoothed" vibration levels over an extended period of time and is used to gauge the long-term chronic impact of a project's operation on the adjacent environment. It is most commonly measured in decibel notation (VdB).

Table 8 – FTA Construction Vibration Damage Criteria

Building Category	Peak Particle Velocity (in/sec)	Approximate Lv (VdB)[1]
I. Reinforced concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

[1] RMS velocity in decibel (VdB) ref 1 micro-inch/second
SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018

The FTA Assessment Manual also includes impact thresholds to assess the risk of annoyance to humans. As show in **Table 9**, this includes thresholds for five types of land uses that are measured in decibel notation (VdB).

Table 9 – FTA Land Use Disruption Vibration Thresholds

Land Use	Significance Thresholds (VdB)		
	Frequent Events	Occasional Events	Infrequent Events
Buildings where vibration would interfere with interior operations.	65	65	65
Residences and buildings where people normally sleep.	72	75	80
Institutional land uses with primarily daytime use	75	78	83
Concert halls, TV studios, and recording studios	65	65	65
Auditoriums and theaters	72	80	80

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018

3.2 STATE REGULATIONS

3.2.1 Operational Noise

In 2013, the California Department of Transportation (Caltrans) published the Transportation and Construction Vibration Assessment Manual to aid in the estimation and analysis of vibration impacts.

Further, the State's 2017 General Plan Guidelines establish county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. **Table 10** illustrates State compatibility considerations between land uses and exterior noise levels.

California Government Code Section 65302 also requires each county and city to prepare and adopt a comprehensive long-range general plan for its physical development. Section 65302(f) requires a noise element to be included in the general plan. This noise element must identify and appraise noise problems in the community, recognize Office of Noise Control guidelines, and analyze and quantify current and projected noise levels.

The State has also established noise insulation standards for new multi-family residential units, hotels, and motels that are subject to relatively high levels of noise from transportation. The noise insulation standards, collectively referred to as the California Noise Insulation Standards (Title 24, California Code of Regulations) set forth an interior standard of 45 dBA CNEL for habitable rooms. The standards require an acoustical analysis which indicates that dwelling units meet this interior standard where such units are proposed in areas subject to exterior noise levels greater than 60 dBA CNEL. Local jurisdictions typically enforce the California Noise Insulation Standards through the building permit application process.

3.2.2 Construction Noise

While Caltrans' 2013 Transportation and Construction Vibration Assessment Manual provides guidance on how to evaluate construction noise impacts, the State has not established limits for construction noise, deferring instead to local ordinances and criteria.

3.2.3 Operational Vibration

The State has not established limits for operational vibration.

3.2.4 Construction Vibration

The State has not established limits for construction vibration.

Table 10 – State of California Noise/Land Use Compatibility Matrix

Land Use Category	Community Noise Exposure (dB, L_{dn} or CNEL)					
	55	60	65	70	75	80
Residential - Low Density Single-Family, Duplex, Mobile Homes						
Residential - Multi-Family						
Transient Lodging - Motels Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

	Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
	Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.
	Normally Unacceptable - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable - New construction or development should generally not be undertaken.

SOURCE: California Office of Planning and Research "General Plan Guidelines, Noise Element Guidelines (Appendix D, Figure 2), 2017.

3.3 LOCAL REGULATIONS

3.3.1 City of Los Angeles

General Plan

City of Los Angeles General Plan Noise Element. The City of Los Angeles General Plan Noise Element includes policies and standards in order to guide the control of noise to protect residents, workers, and visitors. Its primary goal is to regulate long-term noise impacts to preserve acceptable noise environments for all types of land uses. There are also references to programs applicable to construction projects that call for protection of noise sensitive uses and use of best practices to minimize short-term noise impacts. However, the Noise Element contains no quantitative or other thresholds of significance for evaluating a project's noise or vibration impacts. Instead, it adopts the State's guidance on noise and land use compatibility, shown in **Table 10** above, "to help guide determination of appropriate land use and mitigation measures vis-à-vis existing or anticipated ambient noise levels." Relevant Noise Element objectives and policies are shown in **Table 11**.

Table 11 – City of Los Angeles Relevant Noise and Vibration Objectives and Policies

Objective/Policy	Description
Objective 1	Reduce airport and harbor related noise impacts.
Policy 1.1	Incompatibility of airports declared by Los Angeles County to be "noise problem airports" (LAX, Van Nuys and Burbank) and land uses shall be reduced to achieve zero incompatible uses within a CNEL of 65 dB airport noise exposure area, as required by the California Department of Transportation pursuant to the California Code of Regulations Title 21, Section 5000, et seq., or any amendment thereto.
Objective 2	Reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses.
Policy 2.2	Enforce and/or implement applicable city, state and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.
Objective 3	Reduce or eliminate noise impacts associated with proposed development of land and changes in land use.
Policy 3.1	Develop land use policies and programs that will reduce or eliminate potential and existing noise impacts.
Policy 11	For a proposed development project that is deemed to have a potentially significant noise impact on noise sensitive uses…require mitigation measures, as appropriate, in accordance with California Environmental Quality Act and city procedures.
Policy 12	When issuing discretionary permits for a proposed noise-sensitive use or a subdivision of four or more detached single-family units and which use is determined to be potentially significantly impacted by existing or proposed noise sources, require mitigation measures, as appropriate, in accordance with procedures set forth in the California Environmental Quality Act so as to achieve an interior noise level of a CNEL of 45 dB, or less, in any habitable room, as required by Los Angeles Municipal Code Section 91.

SOURCE: City of Los Angeles, *Noise Element of the Los Angeles General Plan*, 1999.

City of Los Angeles Municipal Code

The City of Los Angeles Municipal Code (LAMC) contains regulations that would regulate noise from the Project's temporary construction activities and operational activities.

Section 41.40(a) would prohibit specific Project construction activities from occurring between the hours of 9:00 p.m. and 7:00 a.m., Monday through Friday. Subdivision (c) would further prohibit such activities from occurring before 8:00 a.m. or after 6:00 p.m. on any Saturday or national holiday, or at any time on any Sunday. These restrictions serve to limit specific Project construction activities to Monday through Friday 7:00 a.m. to 9:00 p.m., and 8:00 a.m. to 6:00 p.m. on Saturdays or national holidays. The City can issue a variance from these Municipal Code requirements on a case-by-case basis.

> SECTION 41.40. NOISE DUE TO CONSTRUCTION, EXCAVATION WORK—WHEN PROHIBITED.
>
> (a) No person shall, between the hours of 9:00 p.m. and 7:00 a.m. of the following day, perform any construction or repair work of any kind upon, or any excavating for, any building or structure, where any of the foregoing entails the use of any power drive drill, riveting machine excavator or any other machine, tool, device or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling, hotel or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this Code.
>
> (c) No person, other than an individual homeowner engaged in the repair or construction of his single-family dwelling shall perform any construction or repair work of any kind upon, or any earth grading for, any building or structure located on land developed with residential buildings under the provisions of Chapter I of this Code, or perform such work within 500 feet of land so occupied, before 8:00 a.m. or after 6:00 p.m. on any Saturday or national holiday nor at any time on any Sunday. In addition, the operation, repair, or servicing of construction equipment and the job-site delivering of construction materials in such areas shall be prohibited on Saturdays and on Sundays during the hours herein specific…

Section 112.05 of the LAMC establishes noise limits for powered equipment and hand tools operated in a residential zone or within 500 feet of any residential zone. Of particular importance to construction activities is subdivision (a), which institutes a maximum noise limit of 75 dBA as measured at a distance of 50 feet from the activity for the types of construction vehicles and equipment that would likely be used in the construction of the Project. However, the LAMC notes that these limitations would not necessarily apply if it can be proven that the Project's compliance would be technically infeasible despite the use of noise-reducing means or methods.

SECTION 112.05. MAXIMUM NOISE LEVEL OF POWERED EQUIPMENT OR POWERED HAND TOOLS

Between the hours of 7:00 a.m. and 10:00 p.m., in any residential zone of the City or within 500 feet thereof, no person shall operate or cause to be operated any powered equipment or powered hand tool that produces a maximum noise level exceeding the following noise limits at a distance of 50 feet therefrom:

(a) 75 dBA for construction, industrial, and agricultural machinery including crawler-tractors, dozers, rotary drills and augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors and pneumatic or other powered equipment;

(b) 75 dBA for powered equipment of 20 HP or less intended for infrequent use in residential areas, including chain saws, log chippers and powered hand tools;

(c) 65 dBA for powered equipment intended for repetitive use in residential areas, including lawn mowers, backpack blowers, small lawn and garden tools and riding tractors.

Said noise limitations shall not apply where compliance therewith is technically infeasible. The burden of proving that compliance is technically infeasible shall be upon the person or persons charged with a violation of this section. Technical infeasibility shall mean that said noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or other noise reduction device or techniques during the operation of the equipment.

In addition, the LAMC regulates long-term operations of land uses, including but not limited to the following regulations.

Section 111.02 discusses the measurement procedure and criteria regarding the sound level of “offending” noise sources. A noise source causing a 5 dBA increase over the existing average ambient noise levels of an adjacent property is considered to create a noise violation. However, Section 111.02(b) provides a 5 dBA allowance for noise sources lasting more than five but less than 15 minutes in any 1-hour period, and a 10 dBA allowance for noise sources causing noise lasting 5 minutes or less in any 1-hour period. In accordance with these regulations, a noise level increase from certain city-regulated noise sources of five dBA over the existing or presumed ambient noise level at an adjacent property is considered a violation.

The LAMC also provides regulations regarding vehicle-related noise, including Sections 114.02, 114.03, and 114.06. Section 114.02 prohibits the operation of any motor driven vehicles upon any property within the City in a manner that would cause the noise level on the premises of any occupied residential property to exceed the ambient noise level by more than 5 dBA. Section 114.03 prohibits loading and unloading causing any impulsive sound, raucous or unnecessary noise within 200 feet of any residential building between the hours of 10:00 p.m. and 7:00 a.m. Section 114.06 requires vehicle theft alarm systems to be silenced within five minutes.

3.3.2 City of Burbank

General Plan

The City of Burbank's General Plan is a comprehensive, long-range declaration of purposes, policies and programs. The Noise Element contains goals and policies to minimize noise impacts in the community. Relevant goals and policies are listed below in **Table 12**.

Table 12 – City of Burbank Noise and Vibration Goals and Policies

Goals/Policy	Description
Goal 1	Noise Compatible Land Uses: Burbank's diverse land use pattern is compatible with current and future noise levels.
Policy 1.1	Ensure the noise compatibility of land uses when making land use planning decisions.
Policy 1.2	Provide spatial buffers in new development projects to separate excessive noise generating uses from noise-sensitive uses.
Policy 1.3	Incorporate design and construction features into residential and mixed-use projects that shield residents from excessive noise.
Policy 1.4	Maintain acceptable noise levels at existing noise-sensitive land uses.
Policy 1.5	Reduce noise from activity centers located near residential areas, in cases where noise standards are exceeded.
Policy 1.6	Consult with movie studios and residences that experience noise from filming activities to maintain a livable environment.
Goal 3	Vehicular Traffic Noise: Burbank's vehicular transportation network reduces noise levels affecting sensitive land uses.
Policy 3.1	Support noise-compatible land uses along existing and future roadways, highways, and freeways.
Policy 3.2	Encourage coordinated site planning and traffic management that minimize traffic noise affecting noise-sensitive land uses.
Policy 3.3	Advocate the use of alternative transportation modes such as walking, bicycling, mass transit, and non-motorized vehicles to minimize traffic noise.
Policy 3.4	Install, maintain, and renovate freeway and highway right-of-way buffers and sound walls through continued work with Caltrans and Los Angeles County Metropolitan Transportation Authority (Metro).
Policy 3.5	Monitor noise levels in residential neighborhoods and reduce traffic noise exposure through implementation of the neighborhood protection plans.
Policy 3.6	Prohibit heavy trucks from driving through residential neighborhoods.
Policy 3.7	Where feasible, employ noise-cancelling technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise on sensitive receptors.
Policy 3.8	Within the Airport Influence Area, seek to inform residential property owners of airport generated noise and any land use restrictions associated with high noise exposure.
Goal 7	Construction, Maintenance, and Nuisance Noise: Construction, maintenance, and nuisance noise is reduced in residential areas and at noise-sensitive land uses.
Policy 7.1	Avoid scheduling city maintenance and construction projects during evening, nighttime, and early morning hours.
Policy 7.2	Require project applicants and contractors to minimize noise in construction activities and maintenance operations.

Goals/Policy	Description
Policy 7.3	Limit the allowable hours of construction activities and maintenance operations located adjacent to noise-sensitive land uses.
Policy 7.4	Limit the allowable hours of operation for and deliveries to commercial, mixed-use, and industrial uses located adjacent to residential areas.

SOURCE: City of Burbank, *Burbank 2035 General Plan,* February 19, 2013.

The City's 2035 General Plan Noise Element provides a policy framework for the control of noise sources in the City. Its noise standards are codified here and provide guidance on how to site land uses that are compatible with the local noise environment. The City's land use compatibility guidelines are summarized in **Table 13**.

Table 13 – City of Burbank Land Use/Noise Compatibility Standards

Categories	Exterior Normally Acceptable[1] (dBA CNEL)	Exterior Possibly Acceptable[2] (dBA CNEL)	Exterior Normally Unacceptable[3] (dBA CNEL)	Interior Acceptable[4] (dBA CNEL)
Residential, single family	Up to 60	61-70	71 and higher	45
Residential, multi-family	Up to 65	66-70	71 and higher	45
Residential, multi-family mixed-use	Up to 65	66-70	71 and higher	45
Transient lodging	Up to 65	66-70	71 and higher	45
Hospitals, nursing homes	Up to 60	61-70	71 and higher	45
Theaters, auditoriums, music halls	Up to 60	61-70	71 and higher	35 L_{eq}[5]
Churches, meeting halls	Up to 60	61-70	71 and higher	40 L_{eq}
Playgrounds, neighborhood parks	Up to 70	71-75	75 and higher	-
Schools, libraries, museums[6]	-	-	-	45 L_{eq}
Offices[7]	-	-	-	45 L_{eq}
Retail/commercial[7]	-	-	-	-
Industrial	-	-	-	-

[1] Normally acceptable means that land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances.
[2] Possibly acceptable means that land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the project or noise levels in exterior areas can be mitigated to the normally acceptable level.
[3] Normally unacceptable means that land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the project in addressing other Burbank2035 goals and policies outweigh concerns about noise, the use should be established only where exterior areas are omitted from the project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible.
[4] Interior acceptable means that the building must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use.
[5] dBA Leq is as determined for a typical worst-case hour during periods of use.
[6] Within the Airport Influence Area, these uses are not acceptable above 65 dBA CNEL if subject to the City's discretionary review procedures.
[7] Within the Airport Influence Area, these uses may be acceptable up to 75 dBA CNEL following review for additional noise attenuation; in excess of 75 dBA CNEL these uses are not acceptable.
SOURCE: City of Burbank, *Noise Element of the Burbank General Plan*, 2013.

City of Burbank Municipal Code

The City's noise standards are codified in the City of Burbank Municipal Code (BMC) Chapter 9-3-208 and Chapter 9-1-1-105.8. These set forth sound measurement criteria, maximum ambient noise levels for different land use zoning classifications, sound emission levels for specific uses, hours of operation for certain uses, standards for determining when noise is deemed to be a disturbance, and legal remedies for violations. The Noise Regulation establishes acceptable ambient sound levels to regulate intrusive noises (e.g., stationary mechanical equipment) within specific land use zones. In accordance with the Noise Regulation, a noise level from any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device that would exceed 5 dBA over the ambient noise level at an adjacent property line is considered a noise violation. The City's noise standards establish the ambient noise base levels in the zones and during the times as shown in **Table 14**.

Table 14 – City of Burbank Ambient Noise Levels

Base Levels	Time	Zone
55 dBA	Daytime	Residential
65 dBA	Anytime	Commercial
70 dBA	Anytime	All other zones

SOURCE: City of Burbank Municipal Code, Section 9-3-208.

According to Section 9-3-208, when the ambient noise base level for the property on which the machinery, equipment, pump, fan, air conditioning apparatus or similar mechanical device is located is higher than the ambient noise base level for adjacent property, the ambient noise base levels for the adjacent property shall apply. Properties separated by a street are deemed to be adjacent to one another.

Chapter 9-1-1-105.8 of the BMC prohibits construction activity which would create disturbing, excessive, or offensive noise between 7:00 p.m. and 7:00 a.m. Monday through Friday, between 5:00 p.m. and 8:00 a.m. on Saturdays, and at any time on Sundays or national holidays. The Community Development Director, Planning Board, or City Council may grant exceptions pursuant to land use entitlements or wherever there are practical difficulties involved in carrying out the provisions of the abovementioned chapter or other specific on-site activity that warrants unique consideration.

Section 9-3-208 of the BMC prohibits any person from operating any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in such a manner to cause the ambient noise levels to be exceeded by more than five decibels.

3.3.3 City of Glendale

General Plan

The City of Glendale's General Plan is a comprehensive, long-range declaration of purposes, policies, and programs. The Noise Element contains goals and policies to minimize noise impacts in the community. Relevant goals, policies, and programs are listed below in **Table 15**.

Table 15 – City of Glendale Noise and Vibration Goals, Policies, and Programs

Goal/Policy/ Program	Description
Goal 1	Reduce Noise Impacts from Transportation Noise Sources
Policy 1.1	Coordinate with the California Department of Transportation (Caltrans) and the Metropolitan Transportation Authority (Metro) to reduce noise impacts from existing or proposed freeway projects with respect to existing noise sensitive land uses.
Program 1.1	Investigate the opportunity for Caltrans or Metro to construct barriers to mitigate existing sound emissions where necessary and where feasible.
Program 1.2	Actively pursue with Caltrans or Metro the potential for noise barriers for the apartments west of Paula Avenue and the residential areas along the Ventura Freeway near Isabel.
Program 1.3	Include noise mitigation measures in the design or improvement of freeways and arterial roadways consistent with funding capability and support efforts by Caltrans, Metro and the City to provide for acoustical protection for existing noise sensitive land uses affected by these projects.
Policy 1.2	Ensure the inclusion of noise mitigation measures in the design of new roadway projects in Glendale.
Program 1.4	Attempt to reduce transportation noise through proper design and traffic calming techniques in public projects.
Program 1.5	Encourage the use of noise-reducing paving materials for road surfacing projects.
Policy 1.3	Reduce transportation noise through proper design and coordination of routing.
Program 1.6	Continue evaluating truck and bus movements and routes in the City to balance noise protection with transit needs.
Program 1.7	Review desired truck routes and establishment of truck prohibitions, such as prohibiting through traffic while exempting local deliveries, on noise sensitive streets.
Program 1.8	Regulate truck routes, access, and delivery times by conditions of approval when reviewing new land uses.
Policy 1.4	Ensure the effective enforcement of City, State and Federal noise levels by all appropriate City Departments.
Program 1.9	Encourage the enforcement of State Motor Vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Glendale Police Department.
Policy 1.5	Consider noise reduction measures when making revisions to the Circulation Element.
Policy 1.6	Include noise considerations in evaluating city purchases of buses and other noise generating equipment and take actions as appropriate to quiet existing City owned bus fleet.
Program 1.10	Evaluate the costs and benefits of purchasing quieter buses as new buses are needed. If appropriate, include a noise specification in the purchase of new buses.
Program 1.11	Evaluate the costs and benefits of retrofitting existing buses with quieter mufflers. If appropriate, implement a program of replacing existing mufflers with quieter muffler on City-owned buses.
Goal 2	Reduce Noise from Non-Transportation Sources
Policy 2.1	Improve enforcement of required noise control measures in building design.

Goal/Policy/ Program	Description
Program 2.1	Require that all Building Permit applicants, including contractors, sign a form acknowledging requirements of the Noise Ordinance, and assume responsibility for compliance with the Noise Ordinance. This is particularly important for the non-resident contractor installing mechanical equipment.
Program 2.2	Ensure that required noise control features are installed and that conditions of approval related to noise control are fulfilled prior to building occupancy.
Policy 2.2	Coordinate noise abatement efforts among city departments.
Program 2.3	Promote regular coordination among City departments involved in noise abatement efforts, such as issuing warnings or citations. Include proactive measures as abatement tools to reduce the re-occurrence of problems.
Goal 3	Continue Incorporating Noise Considerations into Land Use Planning Decisions
Policy 3.1	Ensure that land uses comply with adopted standards.
Program 3.1	Use the criteria and standards in the Noise Element of the General Plans to assess the compatibility of proposed land uses with the noise environment. New land uses, as described in Table 2 [of the Noise Element of the General Plan], in a 60 CNEL or higher noise contour may be subject to potentially significant environmental impacts that must be addressed by a noise study. The study, prepared by a qualified consultant, shall address the noise environment and propose appropriate conditions of approval or mitigation measures to comply with the interior and exterior noise standards as shown in Table 2 [of the Noise Element of the General Plan]. Interior tenant improvements, signs, and exterior noise standards as shown will not normally be subject to review under this Program.
Policy 3.2	Encourage acoustical mitigation design in new construction when necessary.
Program 3.2	Continue to enforce the State of California Building Code that specifies that the indoor noise levels for residential living spaces not exceed 45 dB CNEL due to the combined effect of all noise sources.
Goal 4	Enhance Measures to Control Construction Noise Impacts
Policy 4.1	Amend the Noise Ordinance to address construction noise problems.
Program 4.1	Change the permitted hours of construction to Monday through Friday, 7:00 a.m. to 7:00 p.m. and on Saturday from 9:00 a.m. to 5:00 PM. Maintain the ban on construction on Sundays and Holidays. Continue to allow emergency repair work, and work to correct safety hazards, at any time.
Goal 5	Promote Noise Awareness in the Community
Policy 5.1	Inform residents of the ways that they can assist in noise abatement.
Program 5.1	Provide information via the Internet and cable television on ways residents can abate noise, such as retrofitting their homes, being “good neighbors” when attending late-night events, etc.
Policy 5.2	Inform the public of the provisions of the Noise Ordinance and its enforcement.
Program 5.2	Provide information via the Internet and cable television on the provisions of the Noise Ordinance.

SOURCE: City of Glendale, *Noise Element of the General Plan*, 2007.

The Noise Element of the General Plan identifies sources of noise in the City and provides objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. Goals and policies are outlined in the document to achieve and maintain land uses that are compatible with environmental noise levels. Based on these

standards, exterior noise levels of 60 dBA CNEL and lower are “normally acceptable” for single-family residential uses, while exterior noise levels of 65 dBA CNEL and lower are “normally acceptable” for multi-family residential uses. “Normally acceptable” is defined as the highest noise level that should be considered for the construction of new buildings that incorporate conventional construction techniques, but without any special noise insulation requirements.

City of Glendale Municipal Code

The Glendale Municipal Code includes an adopted Noise Ordinance, Chapter 8.36 Noise Control, Articles I and II, which identifies noise standards for amplified noise sources, specific noise restrictions, noise insulation standards, and construction noise limits. Noise limits are regulated through the assessment of the offending noise sources, which influence the existing ambient noise environment. In order to assess potential noise impacts, Section 8.36.040 outlines a list of presumed ambient noise levels applicable to a designated zone and times of day which are used to address compliance. These presumed noise standards are shown below in **Table 16**. As defined in Section 8.36.020, a nighttime period occurs between the hours of 10:00 p.m. to 7:00 a.m. A specific definition of daytime periods is not provided in the Glendale Municipal Code. Interior noise standards are shown below in **Table 17**. The City can issue a variance from these Municipal Code requirements on a case-by-case basis.

Table 16 – City of Glendale – Presumed Noise Standards

Zone	Decibels (dBA)	Time
Cemetery and residential (single-family and duplex)	45	Nighttime
Cemetery and residential (single-family and duplex)	55	Daytime
Residential (multi-family, hotels, motels, transient lodgings)	60	Anytime
Central business district and commercial	65	Anytime
Industrial	70	Anytime

SOURCE: City of Glendale Municipal Code Section 8.36.040.

Table 17 – City of Glendale – Interior Noise Standards

Zone	Decibels (dBA)	Time
Residential	45	Nighttime
Residential	55	All other times

SOURCE: City of Glendale Municipal Code Section 8.36.040.

As discussed in Section 8.36.030 Decibel Measurement Criteria and Section 8.36.050 Minimum and Maximum Ambient Noise Levels, exterior or interior noise levels measured while the offending noise source is active, is compared with the presumed noise standards, applicable to the land use type. Section 8.36.050 continues to elaborate on the various conditions that affect impact assessment by providing the following assessment scenarios:

- If ambient noise levels measured at the receiver while the offending noise source is inactive are below the applicable presumed noise standard, the resulting 5-minute (or

more) Leq of this measurement constitutes the actual ambient noise standard at the receiver, and violations would occur if acoustic contribution from the offending noise source elevated the measured ambient noise level by more than 5 dBA.

- If ambient noise levels measured at the receiver while the offending noise source is inactive are at or above the applicable presumed noise standard, the resulting 5-minute (or more) Leq of this measurement constitutes the actual ambient noise standard at the receiver, and violations would occur if acoustic contribution from the offending noise source elevated the measured ambient noise level by more than 5 dBA. However, the measured ambient noise levels may not exceed the presumed noise standard by 5 dBA. By way of example, if the presumed standard is 45 dBA and the measured ambient is 48 dBA, the resulting violation threshold would be 53 dBA (48 dBA + 5 dBA). However, if the measured ambient was 57 dBA, the resulting violation threshold would be capped at 55 dBA (45 dBA [presumed standard] + 5 dBA [allowable increase due to elevated measured ambient] + 5 dBA [increase leading to violation]).
- In cases where the assessment location occurs at the boundary line between two zones, the arithmetic average of the presumed noise standard is used.

Section 8.36.080, Construction on Buildings, prohibits construction activity from occurring during the "prohibited hours" that have been established in the Glendale Municipal Code. "Prohibited hours" refers to any time after the hour of 7:00 p.m. of any day; any time before the hour of 7:00 a.m. of any day; any time on Sunday; and any time on holidays. Section 8.36.140 allows the City Director of Community Development or the building official to require an acoustic analysis as a condition of approval as a part of the building permit process or other approval procedures when either has reason to believe that a new development project, addition, modification or any other changes thereto would not conform with the permitted noise level standards.

Section 8.36.210 prohibits operation of any device that creates a vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet from the source, if on a public space or public ROW. Section 8.36.290 contains a list of activities that are exempted from the provisions of Glendale Municipal Code Chapter 8.36. The ordinance also exempts any activity, operation or noise which cannot feasibly be brought into compliance when it is technically infeasible to do so. The party responsible for the exceedance is also responsible to prove that compliance cannot be achieved despite use of mufflers, shields, sound barriers, and/or any other noise reduction device or techniques during the operation of the offending equipment.

3.3.4 City of Pasadena

General Plan

The City of Pasadena General Plan contains policies and programs to achieve and maintain noise levels compatible with various types of land uses. The Noise Element contains objectives and policies to minimize noise impacts from various noise sources. Relevant objectives and policies are listed below in **Table 18**.

Table 18 – City of Pasadena Noise and Vibration Policies

Objective/Policy	Description
Objective 1	The City will work to reduce the effects of noise from freeway traffic on residential and other sensitive land uses
Policy 1a	The City will encourage noise-compatible land uses near existing freeways.
Policy 1b	The City will cooperate with Caltrans and Metropolitan Transportation Authority (Metro) to landscape or install noise attenuation along freeways adjacent to residential or noise sensitive uses
Objective 2	The City will work to reduce the effects of traffic-generated noise from major roadways on residential and other sensitive land uses
Policy 2a	The City will encourage noise-compatible land uses along major roadways.
Policy 2b	The City will encourage site planning and traffic control measures that minimize the effects of traffic noise in residential zones.
Policy 2c	The City will encourage the use of alternative transportation modes as stipulated in the Mobility Element (walking, bicycling, transit use, electric vehicles) to minimize traffic noise in the City.
Policy 2d	The City will work with local and regional transit agencies and businesses to provide transportation services that reduce traffic and associated noise as stipulated in the Mobility Element.
Policy 2e	The City will work to reduce the effects of traffic-related noise in residential neighborhoods, including but not limited to neighborhoods adjacent to South Orange Grove Boulevard, Saint John Avenue, Pasadena Avenue, California Boulevard, and other busy streets passing through residential neighborhoods.
Objective 6	The City will minimize noise spillovers from commercial and industrial operations into adjacent residential neighborhoods and other sensitive uses, while maximizing the Land Use Element's objectives to encourage mixed-use development in the Central District and other Specific Plan areas as well as to promote economic vitality.
Policy 6a	The City will encourage automobile and truck access to industrial and commercial properties abutting residential zones to be located at the maximum practical distance from residential zones.
Policy 6b	The City will limit the use of motorized landscaping equipment, parking lot sweepers, and other high-noise equipment on commercial properties if their activity will result in noise that adversely affects residential zones.
Policy 6c	The City will encourage limitations on the hours of truck deliveries to industrial and commercial properties abutting residential zones unless there is no feasible alternative or there are substantial transportation benefits for scheduling deliveries at another hour.
Objective 7	The City will minimize the effects of nuisance noise on sensitive land uses to the degree feasible.
Policy 7a	Whenever possible, City-sponsored events that generate noise will be scheduled during hours when effects would be minimal.
Policy 7b	The City will encourage limitations on construction activities adjacent to sensitive noise receptors.
Policy 7c	The City will encourage construction and landscaping activities that employ techniques to minimize noise.
Policy 7d	The City will enforce noise level restrictions contained in the City of Pasadena Noise Regulations (Chapter 9.36 of the Municipal Code), except during federal, State, or local emergencies (such as power generators required for energy emergencies).

SOURCE: City of Pasadena, *Revised Noise Element of the General Plan*, 2002.

City of Pasadena Municipal Code

The City has jurisdiction over noise regulation, as stated in the City of Pasadena Municipal Code, Title 9, Chapter 36 Noise Restrictions (Noise Ordinance). The Noise Ordinance is intended to enforce the City's policy to prohibit "unnecessary, excessive, and annoying noises from all sources." The Noise Ordinance generally limits the generation of noise that exceeds the actual measured existing ambient noise level by 5 dB(A) at neighboring properties, with adjustments made for steady audible tones, repeated impulsive noise, and noise occurring for limited periods. Section 9.36.060 sets interior noise level standards for multifamily residential development at 60 dB(A) during daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dB(A) during nighttime hours (10:00 p.m. to 7:00 a.m.).

The City's noise ordinance includes provisions regarding construction noise. Section 9.36.070 of the Pasadena Municipal Code prohibits the operation of construction equipment and construction activity except from 7:00 a.m. to 7:00 p.m. Monday through Friday, and from 8:00 a.m. to 5:00 p.m. on Saturday in or within 500 feet of a residential district. Operation of construction equipment is prohibited on Sunday and on defined holidays. Section 9.36.080 of the Municipal Code prohibits the operation of powered construction equipment that generates a noise level of 85 dB(A) when measured at 100 feet. The City can issue a variance from these Municipal Code requirements on a case-by-case basis.

Table 19 lists the acceptable interior noise levels within any dwelling unit on the same property or within 20 feet from the outside of the dwelling unit in which a noise source is located per Pasadena Municipal Code Section 9.36.060.

Table 19 – City of Pasadena Ambient Interior, Residential Noise Levels

Time Interval	Interior Noise Standard (dBA)
7:00 a.m. to 10:00 PM	60
10:00 p.m. to 7:00 a.m.	50

SOURCE: Pasadena Municipal Code, Section 9.36.060.

The City of Pasadena also regulates vibration levels that could adversely affect its citizens. Section 17.40.090 of the Pasadena Municipal Code prohibits the use, activity, or process that produces vibrations that causes the discomfort or annoyance to reasonable persons of normal sensitivity, or which endangers the comfort, repose, health, or peace of residents.

4. Existing Setting

The Proposed Project is located in an urban portion of Southern California that extends 18 miles from the North Hollywood Metro B/G Line (Red/Orange) Station on the west to Pasadena City College on the east. The Project corridor generally parallels the Ventura Freeway (State Route 134) between the San Fernando and San Gabriel Valleys and traverses the communities of North Hollywood and Eagle Rock in the City of Los Angeles as well as the cities of Burbank, Glendale, and Pasadena. Transportation noise is the main source of noise in this area and other urban environments, largely from the operation of internal combustion engines and frictional contact between vehicle tires and the ground and air.

Due to public health restrictions associated with the COVID-19 pandemic, field measurements of ambient noise were not possible in early 2020, primarily due to lower traffic volumes on arterials along the Project corridor. Instead, the existing noise environment along the corridor was modeled using the FTA's Traffic Noise Model (version 3.0) methodologies via the SoundPLAN Essential software package (version 5.0). This approach utilized traffic volumes and other activity data from the traffic impact analysis for this project to estimate how traffic-based noise propagates over the urban environment (see Transportation Technical Report for detailed assumptions about vehicle fleet mix, travel speeds, and constraint factors to estimate noise conditions near roadways).

Ambient noise levels were predicted for sensitive receptor locations throughout the 18-mile corridor. These locations were selected to represent average noise conditions in each jurisdiction representing a range of land uses that address FTA's three land use categories (see **Table 3**).

4.1 EXISTING NOISE LEVELS (CATEGORY 1 DAYTIME LAND USES)

Ambient noise levels were predicted for the Project existing year 2017 throughout the 18-mile corridor. **Table 20** summarizes the estimated one-hour ambient L_{eq} noise levels for a sampling of Category 1 sensitive receptors (e.g., outdoor amphitheaters, concert pavilions, recording studios, concert halls) along the 18-mile BRT corridor that could be impacted by daytime noise from the operation of BRT service. These predicted noise levels were based on existing year 2017 traffic volumes modeled in the traffic impact analysis for the Project. One-hour L_{eq} noise levels ranged from 71.1 to 72.8 dBA.

Table 20 – Existing (2017) Ambient Noise Levels at Category 1 (Daytime Sensitive Receptors)

Location	Jurisdiction	FTA Land Use Category	dBA L_{eq} (1-Hour)
Burbank Studios 3000 W. Alameda Ave.	Burbank	1	71.1
Hollywood Production Center 225 E. Broadway	Glendale	1	71.8
School of Rock 1240 E. Colorado Blvd.	Pasadena	1	72.8

SOURCE: Impact Sciences, 2020.

4.2 EXISTING NOISE LEVELS (CATEGORY 2 24-HOUR LAND USES)

Because the proposed BRT services would operate in the evening and nighttime hours throughout the week, ambient noise levels were estimated at Category 2 sensitive receptors, which are residential, hotel, and other uses where people could be sensitive to noise from bus operations. These predicted noise levels were based on existing year 2017 traffic volumes modeled in the traffic impact analysis for the Project. As illustrated in **Table 21**, ambient noise levels were modeled for such land uses and expressed as L_{dn}, which is the cumulative noise exposure over a 24-hour period. Events between 10:00 p.m. and 7:00 a.m. are increased by 10 dB to account for people's greater nighttime sensitivity to noise. Per FTA guidelines, L_{dn} is used to assess transit noise for residential, hotel, and other 24-hour land uses.

Table 21 – Existing (2017) Ambient Noise Levels at Category 2 (24-Hour Sensitive Receptors)

Location	Jurisdiction	FTA Land Use Category	dBA L_{dn} (24-Hour)
Gallery at NoHo Commons 5416 Fair Ave.	Los Angeles	2	65.9
Multi-Family Residences 112 Buena Vista St.	Burbank	2	72.0
Multi-Family Residences 3205 W. Alameda Ave.	Burbank	2	72.0
Multi-Family Residences 114 Sparks St.	Burbank	2	65.7
Multi-Family Residences 150 San Fernando Blvd.	Burbank	2	67.9
Multi-Family Residences 1112 Alameda Ave.	Burbank	2	69.6
Single-Family Residence 1068 Willard Ave.	Glendale	2	64.3
Eleve Lofts and Skydeck Apts 200 E. Broadway	Glendale	2	76.0
Multi-Family Residences 5116 Rockland Ave.	Los Angeles	2	61.3
385 Western Asset Plaza 385 Colorado Blvd.	Pasadena	2	74.2
Hill and Colorado Hotel 1336 E. Colorado Blvd.	Pasadena	2	74.6

SOURCE: Impact Sciences, 2020.

These Category 2 sensitive receptors were generally residential uses on the primary arterials used for BRT service or on adjacent side streets impacted by traffic noise on these arterials. 24-hour Ldn noise levels ranged from 61.3 to 76.0 dBA.

4.3 EXISTING NOISE LEVELS (CATEGORY 3 DAYTIME LAND USES)

Ambient noise levels were predicted for the Project existing year 2017 throughout the 18-mile corridor. **Table 22** summarizes the estimated one-hour ambient L_{eq} noise levels for a sampling of Category 3 sensitive receptors (e.g., schools, churches) along the 18-mile BRT corridor that could be impacted by daytime noise from the operation of BRT service. These predicted noise levels were based on existing year 2017 traffic volumes modeled in the traffic impact analysis for the Project. One-hour L_{eq} noise levels ranged from 60.1 to 73.5 dBA.

Table 22 – Existing (2017) Ambient Noise Levels at Category 3 (Daytime Sensitive Receptors)

Location	Jurisdiction	FTA Land Use Category	dBA L_{eq} (1-Hour)
East Valley High School 5525 Vineland Ave.	Los Angeles	3	70.3
Gray Studios 5250 Vineland Ave.	Los Angeles	3	70.2
Saint Finbar School 2120 W. Olive Ave.	Burbank	3	73.5
Burbank Central Library 110 N. Glenoaks Blvd.	Burbank	3	69.4
Thomas Jefferson Elementary 1540 5th St.	Glendale	3	60.1
John Marshall Elementary 1201 E. Broadway	Glendale	3	70.8
Center for the Arts Eagle Rock 2225 Colorado Blvd.	Los Angeles	3	60.6
Dahlia Heights Elementary School 5063 Floristan Ave.	Los Angeles	3	67.1
Southern California Children's Museum 459 E. Colorado Blvd.	Pasadena	3	69.8
Holliston United Methodist Church 1305 E. Colorado Blvd.	Pasadena	3	66.9

SOURCE: Impact Sciences, 2020.

4.4 EXISTING VIBRATION LEVELS

Vibration levels in the Project Area are driven largely by vehicular traffic. The FTA finds that "[i]t is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads." Because ambient vibration levels are often too low to be noticed, FTA recommends a limited survey of conditions where there are sources of perceptible vibration. Site visits indicate that roadway vibration is not typically perceptible outside of the surface street ROW.

5. Significance Thresholds and Methodology

5.1 SIGNIFICANCE THRESHOLDS

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant impact related to noise and vibration if it would result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
b) Generation of excessive groundborne vibration or groundborne noise levels; and/or
c) For a project located within-the vicinity of a private airstrip or-an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

The CEQA Guidelines do not provide a definition for “substantial increase” in noise and they do not provide a threshold of significance for potential noise or vibration impacts. There are no federal significance thresholds for construction noise that are applicable to the Proposed Project. As such, this analysis relies on local thresholds to determine significance. When analyzing operational noise impacts, this analysis evaluates the Proposed Project against FTA’s thresholds for Severe impacts, though noise mitigation measures are considered for any Moderate noise impact. This analysis further evaluates impacts against any applicable thresholds set by the four jurisdictions impacted by the BRT service.

Therefore, the following thresholds of significance were developed for this noise analysis based upon the General Plan Noise Elements for the Cities of Los Angeles, Burbank, Glendale, and Pasadena.

5.1.1 City of Los Angeles

Construction Noise Thresholds

Based on guidelines from the City of Los Angeles Department of Planning, construction noise impacts would be considered significant if:

- Construction activities lasting more than one day would exceed existing ambient exterior sound levels by 10 dBA (hourly L_{eq}) or more at a noise-sensitive use;
- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or

- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at any time on Sunday.

Operational Noise Thresholds

This analysis uses the criteria from FTA's Assessment Manual to assess operational noise impacts (see **Table 3**, **Table 4**, and **Figure 2**).

In addition to applicable City standards and guidelines that would regulate or otherwise moderate the Project's operational noise impacts, the following criteria are adopted to assess the impact of the Project's operational noise sources:

- Project operations would cause ambient noise levels at off-site locations to increase by 3 dBA CNEL or more to or within "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories, as defined by the State's 2017 General Plan Guidelines. This threshold would apply at residential uses and schools where the predicted future noise level is at least 70 dBA L_{dn}.
- Project operations would cause any 5 dBA CNEL or greater noise increase.[4]

5.1.2 City of Burbank

Construction Noise Thresholds

Construction noise impacts would be considered significant if:

- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 5:00 p.m. on Saturday, or at any time on Sunday.

[4] As a 3 dBA increase represents a slightly noticeable change in noise level, this threshold considers any increase in ambient noise levels to or within a land use's "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories to be significant so long as the noise level increase can be considered barely perceptible. In instances where the noise level increase would not necessarily result in "normally unacceptable" or "clearly unacceptable" noise/land use compatibility, a readily noticeable 5 dBA increase is still considered to be significant. Increases less than 3 dBA are unlikely to result in noticeably louder ambient noise conditions and would therefore be considered less than significant.

Operational Noise Thresholds

In addition to applicable City standards and guidelines that would regulate or otherwise moderate the Project's operational noise impacts, this analysis uses the following criteria:

- Operations activities would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Operations would exceed noise levels specified in FTA's Assessment Manual (see **Table 5** and **Figure 2**).

5.1.3 City of Glendale

Construction Noise Thresholds

Construction noise impacts would be considered significant if:

- Construction activities lasting more than 10 days in a three-month period would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Construction activities would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 7:00 p.m. and 7:00 a.m. Monday through Saturday, or at any time on Sunday.

Operational Noise Thresholds

In addition to applicable City standards and guidelines that would regulate or otherwise moderate the Project's operational noise impacts, this analysis uses the following criteria:

- Operations activities would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Operations would exceed noise levels specified in FTA's Assessment Manual (see **Table 5** and **Figure 2**).

5.1.4 City of Pasadena

Construction Noise Thresholds

Construction noise impacts would be considered significant if:

- Construction equipment would exceed 85 dBA Leq at 100 feet of distance; or
- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly L_{eq}) at a noise-sensitive use between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 5:00 p.m. on Saturday, or at any time on Sunday.

Operational Noise Thresholds

In addition to applicable City standards and guidelines that would regulate or otherwise moderate the Project's operational noise impacts, this analysis uses the following criteria:

- Operations activities would exceed existing ambient exterior noise levels by 5 dBA (hourly L_{eq}) or more at a noise-sensitive use; or
- Operations would exceed noise levels specified in FTA's Assessment Manual (see **Table 5** and **Figure 2**).

5.1.5 Vibration

The cities of Los Angeles, Burbank, Glendale, or Pasadena do not identify numerical thresholds of significance at which a vibration impact is deemed significant. This analysis uses criteria from the FTA's Assessment Manual to determine when construction impacts on buildings and humans are considered significant (see **Table 8**).

5.2 METHODOLOGY

This analysis is consistent with the Detailed Noise Assessment guidelines outlined in the FTA Assessment Manual and City guidelines, where applicable.

5.2.1 Operational Noise

Pursuant to the FTA Assessment Manual, the basic approach used to identify potential operational noise impacts includes the following steps:

1. Identify sensitive receivers. Noise-sensitive land uses along the corridor are identified using aerial photography and field visits. Sensitive receivers are grouped into clusters based on:
    - Jurisdiction. Receptors from all four jurisdictions representing a sampling of locations throughout the Project corridor were used.
    - Land Use. Noise-sensitive land uses were selected that address the three Land Use Categories in the FTA Assessment Manual and include spaces where quiet is an important element of their intended uses. This includes noise-sensitive daytime uses (e.g., schools, churches) and nighttime uses (e.g., homes).
    - Distance from Project Alignment. Pursuant to the FTA's Assessment Manual, receptors were selected that were consistent with the screening distance recommendations (i.e., 500 feet for unobstructed receptors, 250 feet when there are intervening buildings).[5] These distances are measured from the right-of-way (ROW) on both sides of a roadway.

[5] FTA, *Transit Noise and Vibration Impact Assessment Manual (Table 4-7)*, September 2018

2. Determine existing and future conditions. Using traffic volumes from the traffic impact analysis for the Project, existing noise levels were modeled throughout the project corridor using the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM) version 3.0 methodologies with the SoundPLAN Essential modeling package (version 5.0) and model and traffic data from this Project's traffic impact analysis. These estimates reflect both one-hour (L_{eq}) and 24-hour periods (L_{dn}) for land uses that are considered Category 1 (High Sensitivity), Category 2 (Residential), and Category 3 (Institutional).

   Using peak hour traffic volumes from the traffic impact analysis for the Project, 24-hour average traffic volumes were extrapolated and used in the SoundPLAN model to predict existing and future noise conditions along the corridor in the 2017 existing conditions, as well as the Project Design year of 2042. These estimates serve as the basis for the evaluation of impacts under CEQA. More information about this process is included in **Appendix A**.

3. Apply prediction models. Where appropriate, modeling was performed to predict noise impacts from long-term operational activities associated with the Proposed Project in the Project Design year of 2042. The traffic volumes used in the noise modeling include both the operation of BRT coaches as well as the reduction in passenger vehicles because of the BRT transit enhancements. As such, the modeling assumes use of conventional 40-foot coaches, average speed consistent with posted speed limits, and service headways consistent with those assumed in the traffic analysis. These estimates reflect both one-hour (L_{eq}) and 24-hour periods (L_{dn}).

4. Evaluate predicted increases in ambient noise levels at receivers. The prediction models were used to estimate future noise for each cluster of sensitive receivers. Predictions for each receptor are compared to the applicable FTA impact thresholds and CEQA thresholds to identify potential noise impacts.

5. Evaluate mitigation options. Mitigation options are evaluated for all sensitive receivers where the predicted noise levels exceed the applicable threshold.

5.2.2 Construction Noise

To evaluate construction impacts, this analysis identified the range of construction equipment anticipated for an average worksite, used reference noise levels from the FTA's 2018 Assessment Manual as adjusted by projected usage factor, and used logarithmic formulae to estimate projected noise impacts at nearby receptors. This includes construction of improvements around sidewalks associated with curb-running operations and the presence of residential and/or non-residential sensitive receptors within ten feet of a construction site. Cumulative noise impacts from other station construction is not assumed, given that construction work would shift along the corridor and the distance between stations.

Construction activities could include roadway activities, like restriping of lanes on major arterials along the alignment. They would also include activities at each of the proposed stations, where construction could include curb-and-gutter/sidewalk reconstruction, ROW clearing, pavement improvements, station/loading platform construction, landscaping, and lighting and traffic signal

modifications. Each platform was assumed to be approximately ten feet by 100 feet and would include amenities that support the BRT service. These include a canopy and wind screen, bench seating, bike racks, and a monument sign and map displays. This analysis assumes construction equipment could include but not be limited to asphalt milling machines, asphalt pavers, excavators and backhoes, loaders, bulldozers, dump trucks, compactors, rollers, and concrete trucks. Smaller equipment may also include compactors, compact excavators and tractors, and small hydraulic equipment.

Because of the modest area of each construction site (i.e., 1,000 square feet), the analysis assumes nine types of equipment operating concurrently with a cumulative noise level of 87 dBA L_{eq} at 50 feet of distance (**Table 22**). Staging areas would use publicly-owned ROW or land near the linear alignment.

Short-term (1-hour) L_{eq} estimates were made to represent noise levels during the day as the basis for analyzing noise impacts during daytime for sensitive uses, as construction activities would be limited by local ordinance to certain hours of operation.

5.2.3 Operational Vibration

Pursuant to the FTA Assessment Manual, BRT projects that rely on rubber-tire vehicles do not require a detailed analysis provided they do not meet the following conditions:

- Roadway irregularity. Expansion joints, speed bumps, or other design features that result in unevenness in the road surface can result in perceptible ground-borne vibration at distances up to 75 feet away.
- Operation close to vibration-sensitive buildings. Buses, trucks, or other heavy vehicles operating close to a vibration-sensitive building (within approximately 100 feet from the property line) may impact vibration-sensitive activities, such as research that uses electron microscopes or manufacturing of computer chips.
- Vehicles operating within buildings. Special considerations are often required for shared use facilities where vehicles operate inside or directly underneath buildings such bus stations located inside an office building complex.

5.2.4 Construction Vibration

The analysis of vibration impacts during the construction of BRT improvements would be performed pursuant to the FTA's Assessment Manual (Section 7.2). Based on FTA's four-step screening process, a qualitative construction vibration analysis was performed, as prolonged annoyance or damage is not expected. This is due to the use of equipment that generates little or no ground vibration (e.g., light trucks, hydraulic loaders, air compressors). Actual vibration levels would depend on the means and methods decided upon by the contractor, which are not available at this time. Nevertheless, the predicted construction vibration levels are based on hypothetical scenarios developed from similar projects for the purposes of modeling.

6. Impact Analysis

The following section includes the impact analysis, mitigation measures (if necessary), and significance after mitigation measures (if applicable). The potential for the Proposed Project to result in an impact to noise and vibration is independent of the specific alignment and Project components. The following impact conclusions are valid for the Proposed Project and all route variations, treatments, and configurations.

Impact a) Would the Proposed Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Less-Than-Significant Impact with Mitigation. Construction would require the use of heavy equipment, pneumatic tools, generators, concrete pumps, and similar equipment. **Table 23** shows the equipment likely to be used during the noisiest periods of construction, the typical noise generated by this equipment, estimated usage factors (percent of time the equipment is operating under full load), and the predicted L_{eq} noise levels.

Table 23 – Construction Noise Levels for Proposed Project

Equipment	Typical Noise Level dBA L_{eq} (1-Hour) at 50 Feet	Usage Factor (% of Time Under Full Load)	Adjusted Noise Level dBA L_{eq} (1-Hour) at 50 Feet
Concrete Saw	76 dBA	30%	72 dBA
Loader/Backhoe	80 dBA	30%	74 dBA
Dozer	85 dBA	30%	80 dBA
Rough Terrain Forklift	80 dBA	20%	72 dBA
Skid Steer Loader	80 dBA	30%	74 dBA
Roller	85 dBA	30%	80 dBA
Paver	85 dBA	30%	80 dBA
Paving Equipment	85 dBA	30%	80 dBA
Combined			87 dBA

SOURCE: Impact Sciences, 2020, and FTA, *Transit Noise and Vibration Impact Assessment Manual,* September 2018. This is a worst-case scenario for noise levels at 50 feet, as some local ordinances will require equipment to operate at lower noise levels (e.g., the City of Los Angeles sets 75 dBA limit at 50 feet per Municipal Code Section 112.05).

As shown in **Table 23**, the predicted noise level from a typical construction project is 87 dBA L_{eq} at 50 feet, though adherence to local ordinance restrictions on powered equipment would likely reduce the cumulative noise level for this mix of equipment. For example, the City of Los

Angeles restricts construction equipment to emitting no more than 75 dBA L_{eq} at 50 feet of distance. When added to existing ambient noise levels along the corridor that range from 60.1 to 74.1 dBA L_{eq}, construction activities that generate 65.5 and 79.5 dBA L_{eq} at 50 feet of distance, respectively, could increase ambient noise levels by 5 dBA L_{eq} or more. These increases would exceed local thresholds of significance for all four jurisdictions. Activity at staging areas typically results in less noise as there is less equipment operations, although there would still be a potential for threshold exceedance.

The actual increases in ambient noise would depend on several factors, including:

- Existing ambient noise levels;
- The scope of construction at a given station location (e.g., full BRT station with shelters and other improvements vs. reduced improvements);
- Location of station improvements. Construction projects that support median or center-running segments would potentially be 40 to 60 feet further from noise-sensitive land uses than projects build on sidewalk rights-of-way;
- Location of sensitive receptors; and
- Any attenuation from the built environment or other factors between a construction site and nearby receptors.

The Proposed Project relies mostly on use of arterials for running BRT service, where buses would operate in all lanes of arterials depending on operational circumstances and right-of-way availability. When local service is based on curb-running, side-running, or mixed-flow service, construction of improvements would be closer to sensitive receptors, potentially resulting in significant short-term impacts. Approximately six stations would be constructed at center-running or median-running segments while the remainder are built on sidewalk rights-of-way or curb extensions.

In the North Hollywood end of the alignment, service would be a blend of center-running, mixed-flow and side-running service on Lankershim and Chandler Boulevards, with curbside stations to support this service. An increase of 15 dBA L_{eq} or more given the proximity of receptors along Chandler Boulevard would exceed the City of Los Angeles significance threshold of 5 dBA (hourly L_{eq}). Service on Vineland Avenue would be center-running, requiring construction of median-based stations at key intersections. Impacts here would be lesser given the approximately 100 feet of distance from the centerline of Vineland Avenue and residences that flank this street. Construction would typically take place between the hours of 7:00 a.m. and 9:00 PM. within the City of Los Angeles, in accordance with the Los Angeles Municipal Code Section 41.40(a). If construction is needed outside of these hours, Metro may seek a variance from Municipal Code requirements. Within the City of Burbank, stations would be built curbside on sidewalks to accommodate curb-running operations on Olive Avenue and Glenoaks Boulevard.

Construction activities would likely exceed the significance threshold of 5 dBA (hourly L_{eq}). Construction of stations along median-running segments of Glenoaks Boulevard are approximately 45 feet further from sensitive receptors than stations constructed along the curb,

given the very wide center medians. Toward the eastern end of Burbank, stations would be built in the median along Glenoaks Boulevard to serve median-running service. In Burbank, work would occur between 7:00 a.m. and 7:00 p.m. in accordance with Chapter 9-1-1-105.8 of the BMC. If construction is needed outside of these hours, Metro may seek a variance from Municipal Code requirements.

Within the City of Glendale, the Proposed Project would include stations on median islands to accommodate median-running bus lanes along Glenoaks Boulevard, creating substantial distance from receptors along this corridor. Construction activities would likely exceed the significance threshold of 5 dBA (hourly L_{eq}). Along Central Avenue and Broadway, stations would be built on sidewalks to support side-running bus lanes and curb-running operations. Construction activities in Glendale would be limited to the hours of 7:00 a.m. and 7:00 p.m. in accordance with Glendale Municipal Code Section 8.36.080. If construction is needed outside of these hours, Metro may seek a variance from Municipal Code requirements.

In the Eagle Rock area, side-running service on Colorado Boulevard would require construction of curbside stations that are closer to existing receptors. An increase of 15 dBA L_{eq} or more given the proximity of receptors along Colorado Boulevard would exceed the City of Los Angeles significance threshold of 5 dBA (hourly L_{eq}). Project construction would typically take place between the hours of 7:00 a.m. and 9:00 PM. within the City of Los Angeles, in accordance with the Los Angeles Municipal Code Section 41.40(a). If construction is needed outside of these hours, Metro may seek a variance from Municipal Code requirements.

Within Pasadena, buses would operate exclusively in mixed-flow lanes on Fair Oaks Avenue, Walnut Street, Raymond Avenue, and Colorado Boulevard. As such, the proximity of sensitive receptors built to the sidewalk would increase the potential for noise impacts. For example, the proposed station at Colorado Boulevard and Los Robles Avenue in Pasadena would be built on existing right-of-way in front of housing developments (e.g., 385 Western Asset Plaza). At this and other curbside construction sites, noise could exceed the City's threshold of 85 dBA L_{eq} at 100 feet of distance for construction activities. As noted above in **Table 23**, construction noise could generate 87 dBA L_{eq} at 50 feet. As noise attenuates approximately 6 dB per doubling of distance for point sources, construction activities could produce noise levels of approximately 81 dBA L_{eq} at a distance of 100 feet and not exceed the threshold of 85 dBA L_{eq} at 100 feet. However, the City also has a 5 dBA incremental threshold (hourly $L_{eq)}$ which would likely be exceeded by an increase of 15 dBA L_{eq}. Construction in Pasadena would occur between 7:00 a.m. and 7:00 PM, in accordance with Pasadena Municipal Code Section 9.36.070. If construction is needed outside of these hours, Metro may seek a variance from Municipal Code requirements.

Given the ambient noise levels along the corridor, construction activities are likely to generate noise impacts that could increase ambient noise levels by 5 dBA L_{eq} or more. This level of noise increase would likely exceed local significance thresholds within one or more jurisdictions along the BRT alignment. Therefore, without mitigation, the Proposed Project would result in a significant impact related to construction activities.

Nighttime activities are not anticipated to be needed to construct the Proposed Project. However, at this stage of the planning process and without a construction contractor, it cannot be confirmed if nighttime construction would be necessary for specialized construction tasks. Nighttime activities could result in a significant impact should those activities involve heavy equipment or pneumatic tools.

Route Options

This analysis evaluates the noise impacts of route options to the Proposed Project. The route options would have noise impacts similar to the Proposed Project, with slight variations due to the number of stations, location of the route segments, and location of the stations. Construction equipment used during construction of the route options would be similar to the Proposed Project. Differences in the route alignments and station locations for the route options are described below.

In North Hollywood, a route option would shift construction activities from Vineland Avenue to Lankershim Boulevard. This would generally increase construction noise exposure, as Lankershim Boulevard service would be either side-running or curb-running. This would place construction closer to more receptors than the median-based construction that would occur on Vineland Avenue.

Through Glendale, construction noise impacts for any route options would be similar to those for the Proposed Project. For example, a route option through central Glendale that shifts station construction from East Broadway to Colorado Street two blocks to the south would have similar impacts, as both would have side-running service. A route option using Central Avenue, Goode Avenue, and Sanchez Drive would also require construction of curbside stations that support mixed-flow bus service.

Through Eagle Rock, a route option that would include some center-running service at the transition between Ellenwood Drive and El Rio Avenue would not differ considerably from the side-running service on Colorado Boulevard. While the scope of construction for center-running stations in this segment may be more than for side-running service, exposure to construction noise would be lower due to the greater distance between construction work and sensitive receptors along Colorado Boulevard.

Within the City of Pasadena, route options proposed on Colorado Boulevard, Union Street, and Green Street would not change the nature of construction noise impacts, as all service in the City would operate in mixed-flow lanes that require curbside construction.

This level of noise increase would likely exceed local significance thresholds within one or more jurisdictions along the Project alignment. Therefore, without mitigation, the route options would result in a significant impact related to construction activities.

Operations

Less-Than-Significant Impact. Operating the proposed BRT service would impact the noise environment along the corridor in two key ways. First, it would increase the number of buses traveling in the study area, with 90,200 annual revenue hours and 1,348,500 annual revenue miles in 2042. However, Metro would reduce service from its Line 180 and Line 501 service, which overlap with the Proposed Project's BRT service. This would reduce 52,353 annual revenue hours and 488,565 annual revenue miles, resulting in a net increase of 37,847 annual revenue hours and 791,689 revenue miles. This service would operate during early morning (4:00 a.m. to 6:00 a.m.), daytime (6:00 a.m. to 7:00 PM), evening (7:00 p.m. to 9:00 PM) and into nighttime hours (after 9:00 PM) seven days a week. This additional bus-related volume on local arterials would not audibly elevate ambient noise levels, as it takes a doubling of traffic volumes on arterials and/or freeways to increase ambient noise levels by 3 dBA L_{eq}. When buses transition to freeway operations on the SR-134, the impact of adding up to 220 daily trips on a freeway that carries 240,000 average annual daily trips at the Brand Boulevard exits, for example, would be negligible.

Second, the service would shift drivers from personal vehicles to BRT services, reducing 86,659 vehicle miles of travel throughout the region by 2042, of which 13,339 miles would be entirely reduced within the study area and 68,278 miles would be reduced from trips that start or end in the study area. This would reduce ambient noise levels from traffic on local streets. It should be noted that over time, traffic patterns shift with development and transportation infrastructure, changing how traffic is distributed over local roadways. Implementation of BRT service would further reduce traffic volumes on many roadways along the alignment, though some trips could be diverting to parallel roadways based on any reduction in capacity along the BRT alignment.

Table 24 summarizes the changes in traffic-related noise at Category 1 sensitive receptors along arterial segments. **Table 25** summarizes the changes in traffic-related noise at Category 2 residential receptors along arterial segments throughout the BRT corridor. These selected segments are consistent with FTA guidance on evaluating operational impacts of bus transit services and represent a cross-section of local jurisdictions, proximity to Category 2 land uses, and service to stations in both the medians and curbs along the alignment. **Table 26** illustrates changes at Category 3 institutional uses along these same segments. **Figure 3** illustrates the location of roadway segments modeled for traffic noise.

Table 24 – Predicted Noise Levels for Proposed Project, Category 1 (High Sensitivity) Receivers

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{eq})	FTA Impact Assessment				Local Jurisdiction Impact Assessment			
				Predicted Project Noise (dBA L_{eq})	FTA Moderate Impact Threshold (dBA L_{eq})	FTA Severe Impact Threshold (dBA L_{eq})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{eq})	Predicted Increase (dBA L_{eq})	Local Jurisdiction Impact Threshold (dBA CNEL)	Local Jurisdiction Impact Before Mitigation
C (Proposed Project)	Olive Ave. from California St. and Alameda Ave.	Burbank	71	62	71	75	--	72	1	N/A	--
E1 (Proposed Project)	Broadway from Brand Blvd. to Louise St.	Glendale	72	62	71	76	--	72	0	N/A	--
H1 (Proposed Project)	Colorado Blvd. from Michigan Ave. to Chester Ave.	Pasadena	73	64	71	76	--	73	1	N/A	--

Note: N/A: City does not have its own quantitative threshold. Instead, defers to FTA severe impact threshold for significance finding.
SOURCE: Impact Sciences, 2020

Table 25 – Predicted Noise Levels for Proposed Project, Category 2 (Residential) Receivers

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{dn})	FTA Impact Assessment				Local Jurisdiction Impact Assessment			
				Predicted Project Noise (dBA L_{dn})	FTA Moderate Impact Threshold (dBA L_{dn})	FTA Severe Impact Threshold (dBA L_{dn})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{dn})	Predicted Increase (dBA L_{dn})	Local Jurisdiction Impact Threshold (dBA CNEL)	Local Jurisdiction Impact Before Mitigation
A1 (Proposed Project)	Chandler Blvd. from Lankershim Blvd. and Blakeslee Ave.	Los Angeles	66	57	62	67	--	66	1	5	--
C (Proposed Project)	Olive Ave. from Myers St. to Keystone St.	Burbank	75	66	66	73	--	74	1	N/A	--
	Olive Ave. from California St.to Alameda Ave.	Burbank	72	64	66	72	--	73	1	N/A	--
	Olive Ave. from Buena Vista St. to Brighton St.	Burbank	72	64	66	71	--	73	1	N/A	--
	Olive Ave. from Sparks St. to Beachwood St.	Burbank	66	47	62	67	--	66	0	N/A	--
	Olive Ave. from San Fernando Blvd. to 3rd St.	Burbank	68	59	63	68	--	68	1	N/A	--

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{dn})	FTA Impact Assessment				Local Jurisdiction Impact Assessment			
				Predicted Project Noise (dBA L_{dn})	FTA Moderate Impact Threshold (dBA L_{dn})	FTA Severe Impact Threshold (dBA L_{dn})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{dn})	Predicted Increase (dBA L_{dn})	Local Jurisdiction Impact Threshold (dBA CNEL)	Local Jurisdiction Impact Before Mitigation
D (Proposed Project)	Glenoaks Blvd. from Alameda Ave. to Spazier Ave.	Glendale	70	60	63	68	--	70	1	N/A	--
	Glenoaks Blvd. from Willard Ave. to Grandview	Glendale	64	53	61	65	--	65	0	N/A	--
E1 (Proposed Project)	Broadway from Brand Blvd. to Louise St.	Glendale	76	66	66	74	--	76	0	N/A	--
F2 (Proposed Project)	Colorado Blvd. from Rockland Ave. to Eagle Rock Blvd.	Los Angeles	61	60	59	64	--	64	2	5	--
H1 (Proposed Project)	Colorado Blvd. from Euclid to Los Robles	Pasadena	74	66	66	70	--	75	1	N/A	--
	Colorado Blvd. from Holliston Ave. to Hill Ave.	Pasadena	75	64	65	69	--	65	0	N/A	--

Note: N/A: City does not have its own quantitative threshold. Instead, defers to FTA severe impact threshold for significance finding.
There is a marginal difference between L_{dn} and CNEL (CNEL is typically 0.5 dBA higher than L_{dn}) and there would not be a difference in the impact determinations.
SOURCE: Impact Sciences, 2020

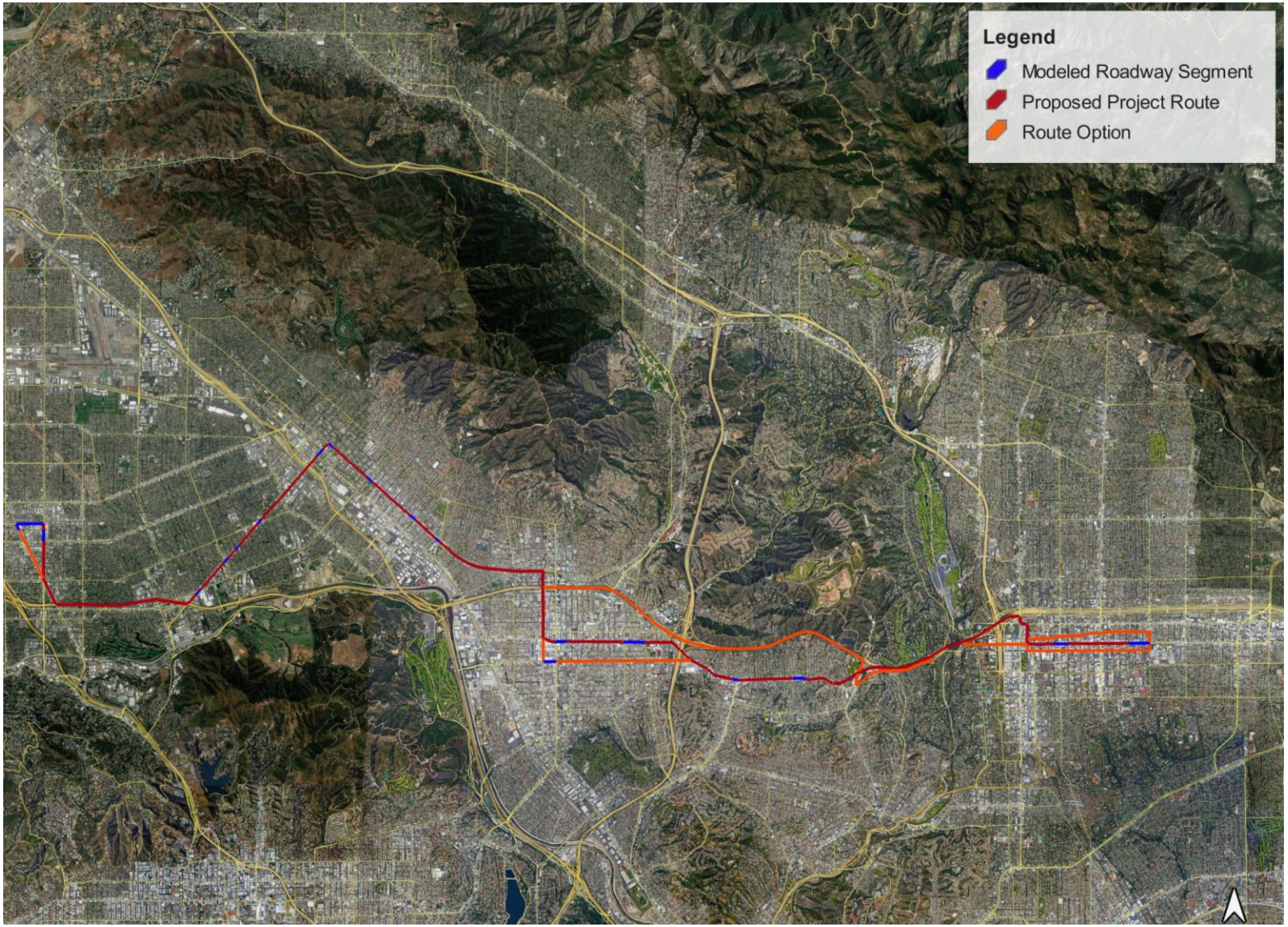
Table 26 – Predicted Noise Levels for Proposed Project, Category 3 (Institutional) Receivers

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{eq})	FTA Impact Assessment				Local Jurisdiction Impact Assessment			
				Predicted Project Noise (dBA L_{eq})	FTA Moderate Impact Threshold (dBA L_{eq})	FTA Severe Impact Threshold (dBA L_{eq})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{eq})	Predicted Increase (dBA L_{eq})	Local Jurisdiction Impact Threshold (dBA CNEL	Local Jurisdiction Impact Before Mitigation
A1 (Proposed Project)	Chandler Blvd. from Blakeslee Ave. to Vineland Ave.	Los Angeles	70	59	70	74	--	71	0	3[1]	--
	Vineland Ave. from Weddington St. to Magnolia Blvd.	Los Angeles	70	50	71	76	--	70	0	3[1]	--
D (Proposed Project)	Glenoaks Blvd. from Olive Ave. to Angeleno Ave.	Glendale	69	59	69	74	--	70	0	N/A	--
	Glenoaks Blvd. from Justin Ave. to Ruberta Ave	Glendale	60	48	63	68	--	60	0	N/A	--
E1 (Proposed Project)	Broadway between Chevy Chase Dr. and Verdugo Rd.	Glendale	71	61	71	75	--	71	0	N/A	--
F2 (Proposed Project)	Colorado Blvd. from Rockland Ave. and Eagle Rock	Los Angeles	61	53	63	68	--	61	2	5	--
	Colorado Blvd. from Townsend Ave. to Floristan Ave.	Los Angeles	67	53	68	72	--	67	0	5	--

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{eq})	FTA Impact Assessment				Local Jurisdiction Impact Assessment			
				Predicted Project Noise (dBA L_{eq})	FTA Moderate Impact Threshold (dBA L_{eq})	FTA Severe Impact Threshold (dBA L_{eq})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{eq})	Predicted Increase (dBA L_{eq})	Local Jurisdiction Impact Threshold (dBA CNEL	Local Jurisdiction Impact Before Mitigation
H1 (Proposed Project)	Colorado Blvd. from Los Robles Ave. to Oakland Ave.	Pasadena	70	61	70	74	--	70	1	N/A	--
	Colorado Blvd. from Chester Ave. to Holliston Ave.	Pasadena	67	56	67	72	--	67	0	N/A	--

Note: N/A: City does not have its own quantitative threshold. Instead, defers to FTA severe impact threshold for significance finding.
This threshold would apply at residential uses and schools where the predicted future noise level is at least 70 dBA L_{dn} in the City of Los Angeles.
SOURCE: Impact Sciences, 2020

Figure 3 – Roadway Segments Modeled for Traffic Noise



Using the FTA TNM 3.0 model, this analysis included several key assumptions intended to provide a conservative estimate of operational noise impacts:

- As 24-hour ambient noise measurements were not possible because of unusual conditions from the COVID-19 pandemic, average daily trip volumes were estimated by converting peak a.m. and p.m. hourly traffic volumes in the design year of 2042 (see Appendix A for more details) with Project volumes included. This included an estimate of daytime, evening, and nighttime traffic volumes.
- The posted speed limit on arterials used for BRT service was assumed for 2042 Baseline and project analyses. This ensures that noise levels would reflect faster travel speeds and the elevated noise associated with faster travel on paved roads.
- Noise propagated from all lanes of arterials to reflect the dynamic nature of travel on local arterials as the Project's BRT service shifts from center- and median-running operations to mixed-flow, side-, and curb-running operations.
- Vehicle fleet mixed derived from California Air Resources Board EMFAC2017 estimates for Los Angeles County.
- Average 30 percent of vehicles on an arterial with traffic light control devices constrained by red lights.

Ambient noise levels along the arterials used for BRT service would increase by no more than 2 dBA Ldn for Category 2 residences along the alignment. This impact accounts for traffic volumes throughout a 24-hour cycle and the "penalties" associated with noise generated by traffic during evening and night hours. These Ldn noise levels also capture the anticipated span of service, which ranges from 21 to 23 hours per day. These increases of no more than 1 dBA are inaudible, as 3 dBA increases are generally recognized as the threshold at which the most sensitive ears can detect changes in the noise environment. These increases are also below the thresholds of significance established by the City of Los Angeles that ranges from a 3 to 5 dBA CNEL increase in ambient noise levels. It should be noted that the cities of Burbank, Glendale, and Pasadena defer to FTA thresholds of significance in evaluating the significance of operational noise impacts. In all cases, the Proposed Project would not result in Moderate or Severe impacts under FTA noise impact criteria.

The Proposed Project would increase noise levels for Category 1 sensitive uses and three Category 3 institutional uses along the corridor by no more than 2 dBA L_{eq} during the day. As with the 24-hour land uses, these increases would be inaudible and would not exceed any local thresholds of significance for operational noise.

It should be noted that when the alignment uses the SR-134 in two locations, bus service would operate on freeway mixed-flow travel lanes, where noise impacts would be negligible given the volume of traffic on the freeway. In addition, the SR-134 is generally elevated or depressed compared to land uses along this alignment, reducing the potential for line-of-sight propagation of noise impacts at sensitive receptors.

The Proposed Project includes electric charging infrastructure. Charging is a passive use that would not generate audible noise past the property line of the charging location. There would no potential for a noise impact related to charging.

Based on the above detailed analysis, the Proposed Project would result in a less than significant impact related to operational activities.

Route Options

Any route options would shift noise from electric-powered buses to other streets, but like the Proposed Project, would not result in any significant noise impacts. Actual impacts would be a function of the location of stations, proximity of sensitive receptors to the street, and other localized factors.

The North Hollywood route option would use Lankershim Boulevard instead of Vineland Avenue, shifting bus operations to side-running service, as opposed to the center-running segment along Vineland Avenue. This portion of the Lankershim Boulevard corridor is mostly commercial retail and office uses, but more residential uses are being built that would be considered sensitive receptors.

At the intersection of Lankershim Boulevard and Weddington Avenue, there are sensitive uses that would be impacted by noise from traffic over time. However, as shown in **Table 27**, noise levels along Lankershim Boulevard near Weddington Avenue would increase by less than 1 dBA L_{eq} at Category 3 receptors near the street.

After traveling on the SR-134 from North Hollywood to the curb-running segment along Olive Avenue in the City of Burbank, a route option would skip a station at the Olive Avenue/Verdugo Avenue intersection and at the Glenoaks Boulevard/Grandview Avenue intersection. Instead, this option would stop at a side-running station at Central Avenue and Lexington Drive in Glendale. Here, this route option would deviate from the Proposed Project by continuing south along Central Avenue, with a station at the intersection of Central Avenue and Americana Way.

This route option would head east along Colorado Street, making station stops at the Colorado Street/Brand Avenue, Colorado Street/Glendale Avenue, and Colorado Street/Verdugo Road intersections. The route would continue east along Colorado Street/Colorado Boulevard until the station at the Eagle Rock Plaza, located within the boundaries of the City of Los Angeles.

This route option would take Colorado Boulevard through Eagle Rock. This route option would primarily have center-running bus lanes through this segment as opposed to side-running lanes under the Proposed Project. Therefore, the two stations (Colorado Boulevard/Eagle Rock Boulevard and Colorado Boulevard/Townsend Avenue intersections) would be constructed in the median in contrast to stations constructed in the curb under the Proposed Project.

Table 27 – Predicted Noise Levels for Route Options

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{eq})	Predicted Project Noise (dBA L_{eq})	FTA Moderate Impact Threshold (dBA L_{eq})	FTA Severe Impact Threshold (dBA L_{eq})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{eq})	Predicted Increase (dBA L_{eq})	Local Jurisdiction Impact Threshold (dBA L_{eq})	Local Jurisdiction Impact Before Mitigation
A2 (Route Option)	Lankershim Blvd. from Chandler Ave. to Weddington Ave.	Los Angeles	72	63	71	76	--	72	1	3[1]	--
E2 (Route Option)	Colorado St. from Central Ave. to Brand Blvd.	Glendale	68	61	63	67	--	68	1	N/A	--

[1] This threshold would apply at residential uses and schools where the predicted future noise level is at least 70 dBA L_{dn} within the City of Los Angeles.
SOURCE: Impact Sciences, 2020

The route would then use SR-134 and the Colorado Boulevard interchange to enter the City of Pasadena. On Colorado Boulevard in Pasadena, this route would have a station at three intersections: Colorado Boulevard/Arroyo Parkway, Colorado Boulevard/Lake Avenue, and Colorado Boulevard/Hill Avenue. With the exception of a different location for the Colorado Boulevard/Arroyo Parkway station, which would be used only for the Colorado Boulevard interchange, the stations for this route option would be the same as under the Proposed Project. Like under the Proposed Project, stations would be along the curb, due to the mixed-flow alignment along Colorado Boulevard.

Another route option would deviate from the Proposed Project route by locating a station at SR-134 at Brand Boulevard in Glendale. It would take SR-134 through Glendale and Eagle Rock, exiting at Harvey Drive to stop at a station, and then exiting at Figueroa Street in Eagle Rock to stop at a station located at Colorado Boulevard and Figueroa Street. The route option would then continue east along Colorado Boulevard before reentering SR-134.

After exiting the Fair Oaks Avenue interchange in Pasadena, another route option would stop at the Raymond Avenue/Holly Street station as under the Proposed Project route. However, this service would head south to Green Street and head east, stopping at station located at the intersections of Green Street/Los Robles Avenue and Green Street/Lake Avenue. It would then turn north on Hill Avenue, making a station stop at Hill Avenue/Colorado Boulevard. Continuing north, this route option would head west at Union Street, stopping at two more stations located at the intersections of Union Street/Lake Avenue and Union Street/Los Robles Avenue.

Similar to the Proposed Project, the route options would result in a less than significant impact for operational noise.

Mitigation Measures

NOI-1: Where construction cannot be performed in accordance with the FTA 1-hour L_{eq} construction noise standards, elevates existing ambient noise levels by 5 dBA L_{eq} or more, or exceeds other applicable noise thresholds of significance, Metro's contractor shall develop a Noise Control Plan demonstrating how noise criteria would be achieved during construction. The Noise Control Plan shall be designed to follow Metro requirements, include construction noise control measures, measurements of existing noise, a list of the major pieces of construction equipment that would be used, and predictions of the noise levels at the closest noise-sensitive receivers (residences, hotels, schools, churches, temples, and similar facilities). The Noise Control Plan shall be approved by Metro prior to initiating construction.

The Noise Control Plan shall require weekly noise monitoring at land uses adjacent to construction activities. Noise reducing measures shall be required should the following performance standards be exceeded within the following jurisdictions:

- City of Los Angeles: Construction noise levels that exceed the existing ambient exterior noise level at a noise sensitive use by 10 dBA L_{eq} within one hour for construction lasting more than one day, 5 dBA L_{eq} for construction lasting more than 10 days in a three-month period, and any exceedance of 5 dBA during the hours of 9:00 p.m. to 7:00 a.m. Monday through Friday and between 6:00 p.m. to 8:00 a.m. on Saturday or any time Sunday.
- City of Burbank: Construction noise levels that exceed the existing ambient exterior noise level between 7:00 a.m. and 7:00 p.m. at a noise sensitive use by 5 dBA L_{eq} for construction lasting more than 10 days in a three-month period. Construction noise levels of any duration that exceed existing ambient exterior noise levels by 5 dBA L_{eq} at a noise sensitive use between the hours of 7:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 5:00 p.m. on Saturday, or at any time on Sunday.
- City of Glendale: Construction noise levels that exceed the existing ambient exterior noise level between 7:00 a.m. and 7:00 p.m. at a noise sensitive use by 5 dBA L_{eq} for construction lasting more than 10 days in a three-month period. Construction noise levels of any duration that exceed existing ambient exterior noise levels by 5 dBA L_{eq} at a noise sensitive use between 7:00 p.m. and 7:00 a.m. Monday through Saturday or at any time on Sunday.
- City of Pasadena: Construction noise levels that exceed 85 dBA L_{eq} at 100 feet of distance or any duration that exceed existing ambient exterior noise levels by 5 dBA L_{eq} at a noise sensitive use between 7:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 5:00 p.m. on Saturday, or at any time on Sunday.

Noise-reducing methods that may be implemented by Metro include:

- Where construction occurs near noise sensitive land uses, specialty equipment with enclosed engines, acoustically attenuating shields, and/or high-performance mufflers shall be used.
- Limit unnecessary idling of equipment.
- Install temporary noise barriers or noise-control curtains, where feasible and desirable.
- Reroute construction-related truck traffic away from local residential streets and/or sensitive receivers.
- Use electric instead of diesel-powered equipment and hydraulic instead of pneumatic tools where feasible.

Significance of Impacts after Mitigation

Mitigation Measure **NOI-1** incudes noise monitoring and performance standards that ensure construction noise levels would not exceed the significance thresholds and would not elevate ambient noise levels above standards. If monitoring indicates an exceedance, noise levels would be mandated to be reduced through a variety of control measures. Therefore, with mitigation, the Proposed Project would result in a less-than-significant impact related to construction activities. In addition, should nighttime construction be necessary, the construction contractor would be required to coordinate with the jurisdictions to obtain necessary permits, such as a variance to the Noise Ordinance in the City of Los Angeles.

Impact b) Would the Proposed Project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Less-Than-Significant Impact with Mitigation. Implementing bus service would require construction of stations along the service corridor that could generate groundborne vibration or elevate groundborne noise levels. These activities could include but not be limited to breaking concrete, trenching for utilities, erecting station improvements, and repaving surfaces. Equipment such as rollers, pavers, dozers, backhoes, rough terrain forklifts, and skid steer loaders could generate marginal groundborne vibration. Activity at staging areas typically results in less vibration as there is less equipment operations, although there would still be a potential for vibration.

As shown in **Table 28**, most equipment operating near buildings and structures would not exceed the FTA's recommended limit of 0.2 in/sec PPV for any non-engineered timber and masonry buildings within 25 feet of construction activity. However, any use of vibratory rollers or more impactful equipment could exceed this limit based on the mix of equipment used and the proximity and condition of any nearby structures. Therefore, without mitigation, the Proposed Project would result in potentially significant impacts to nearby buildings and structures.

Table 28 – Construction Vibration Levels for Construction Equipment

Equipment	PPV at 25 feet (in/sec)	VdB at 25 feet
Vibratory Roller	0.21	94
Hoe Ram	0.09	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

As such, there could be groundborne vibration impacts that could damage buildings and structures during the construction phase. A Construction Noise Control Plan should include measures to ensure damage to nearby buildings do not occur through vibration reduction measures identified in Mitigation Measure **NOI-2**.

Construction activities could also disrupt land uses near the proposed station construction sites. While proposed construction equipment is anticipated to generate little ground vibration (e.g., light trucks, hydraulic loaders, air compressors), actual vibration levels would depend on the means and methods decided upon by the contractor, which are not available at this time. Many stations would involve construction in the median of streets, where any sources of vibration would be set back substantially from residences and other sensitive receptors. In case where construction sites are located on curbs near adjacent residences, however, vibration from bulldozers and similar equipment could annoy those in institutional uses (e.g., schools, churches) during the day, and residents at any time during the day or evening. As illustrated in Table 28, equipment such as large bulldozers could generate 87 VdB of vibration at 25 feet, which would exceed the 75 VdB significance threshold for occasional events impacting residences and the 78 VdB threshold for institutional daytime land uses. While vibration impacts would generally be occasional or infrequent, construction activities could exceed the FTA's land use disruption thresholds summarized in **Table 9**.

A Construction Vibration Control Plan should include measures to ensure disruption to nearby residents, workers, students, and others do not occur through vibration reduction measures identified in Mitigation Measure **NOI-3**.

Operations

No Impact. The Proposed Project would introduce a new BRT service that uses rubber-tired electric-powered buses to provide transportation options on local arterials and freeways. The FTA has stated that BRT projects that rely on rubber-tire vehicles do not require a detailed analysis if they meet certain conditions regarding roadway irregularity, operations close to vibration sensitive buildings, and vehicles operating within buildings. The Proposed Project and route options do not include substantial infrastructure irregularities like expansion joints, speed bumps, or other design features that create unevenness in the road surface. Electric charging infrastructure would not generate perceptible vibration. The Proposed Project and route options would not operate within 100 feet of vibration-sensitive buildings, such as research involving electron microscopes or manufacturing of computer chips and would not operate inside or underneath buildings. As all of the FTA conditions would be met, the Proposed Project does not require a detailed operational vibration analysis as impacts would be unlikely. The absence of internal combustion engines on the electric-powered coaches would further reduce any vibration from idling or moving buses. Therefore, the Proposed Project would result in no impact related to BRT operations.

Mitigation Measures

NOI-2: Where equipment such as a vibratory roller that produces high levels of vibration is used within 25 feet of buildings or typical equipment such as large bulldozer is used within 15 feet of buildings, the 0.2 PPV inches per second vibration damage risk threshold would be exceeded. The Construction Vibration Control Plan shall include mitigation measures to minimize vibration impacts during construction. Recommended construction vibration mitigation measures that shall be considered and implemented where feasible include:

- The contractor shall minimize the use of tracked vehicles.
- The contractor shall avoid vibratory compaction.
- The contractor shall monitor vibration levels near sensitive receivers during activities that generate high vibration levels to ensure thresholds are not exceeded.

NOI-3: Where equipment such as a vibratory roller that produces high levels of vibration is used within 105 feet of residences or institutional daytime land uses or equipment such as large bulldozers are used within 65 feet of such uses, the 75 VdB vibration threshold for human annoyance could be exceeded at residences of the 75 VdB threshold at institutional uses. The Construction Vibration Control Plan shall include mitigation measures to minimize vibration impacts during construction. Recommended construction vibration mitigation measures that shall be considered and implemented where feasible include:

- The contractor shall minimize the use of tracked vehicles and vibratory equipment.
- The contractor shall avoid vibratory compaction.
- The contractor shall monitor vibration levels near sensitive receivers during activities that generate high vibration levels to ensure thresholds are not exceeded.

Significance of Impacts after Mitigation

Mitigation Measure **NOI-2** would reduce potential groundborne vibration impacts by requiring best practices to ensure buildings and structures are not damaged during the construction of the Proposed Project. Further, Mitigation Measure **NOI-3** would reduce potential groundborne vibration impacts by requiring best practices to minimize disruption of persons living, working, or staying nearby during the construction of the Proposed Project. Therefore, with mitigation, the Proposed Project would result in a less-than-significant impact related to construction activities.

Impact c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Construction and Operations

No Impact. The Proposed Project would implement 18 miles of BRT service on local arterials and freeways across several jurisdictions, including service as close as 1.9 miles south of the nearest runway associated with the Hollywood Burbank Airport. However, the Project would be located outside of the Airport Influence Area and runway protection zones of the Hollywood Burbank Airport. The Proposed Project would not expose people residing or working in the project area to excessive noise levels (i.e., 65 dBA CNEL noise levels). Therefore, the Proposed Project would not result in a significant impact related to construction and operational activities.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts after Mitigation

Less than significant.

7. Cumulative Analysis

CEQA Guidelines Section 15355 defines cumulative impacts as two or more individual actions that, when considered together, are considerable or will compound other environmental impacts. CEQA Guidelines Section 15130(a) requires that an EIR discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." As set forth in CEQA Guidelines Section 15065(a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. Thus, the cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions to more accurately gauge the effects of multiple projects.

In accordance with CEQA Guidelines Section 15130(a)(3), a project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. In addition, the lead agency is required to identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.

CEQA Guidelines Section 15130(b) further provides that the discussion of cumulative impacts reflects "the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone." Rather, the discussion is to "be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute." CEQA Guidelines Sections 15130(b)(1)(A) and (B) include two methodologies for assessing cumulative impacts. One method is a list of past, present, and probable future projects producing related or cumulative impacts. The other method is a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a general plan, regional transportation plan, or plans for reducing greenhouse gas emissions. The cumulative effect on the noise and vibration environment of the Project Area is best addressed through consideration of Related Projects.

Related Projects that are considered in the cumulative impact analysis are those projects that may occur in the Project Site's vicinity within the same timeframe as the Proposed Project. In this context, "Related Projects" includes past, present, and reasonably foreseeable future projects. Related Projects associated with this growth and located within half a mile of the Project Site are depicted graphically in **Figures 4a** through **4c** and listed in **Table 29**. Related projects of particular relevance to the Proposed Project are discussed below.

Figure 4a – Cumulative Impact Study Area

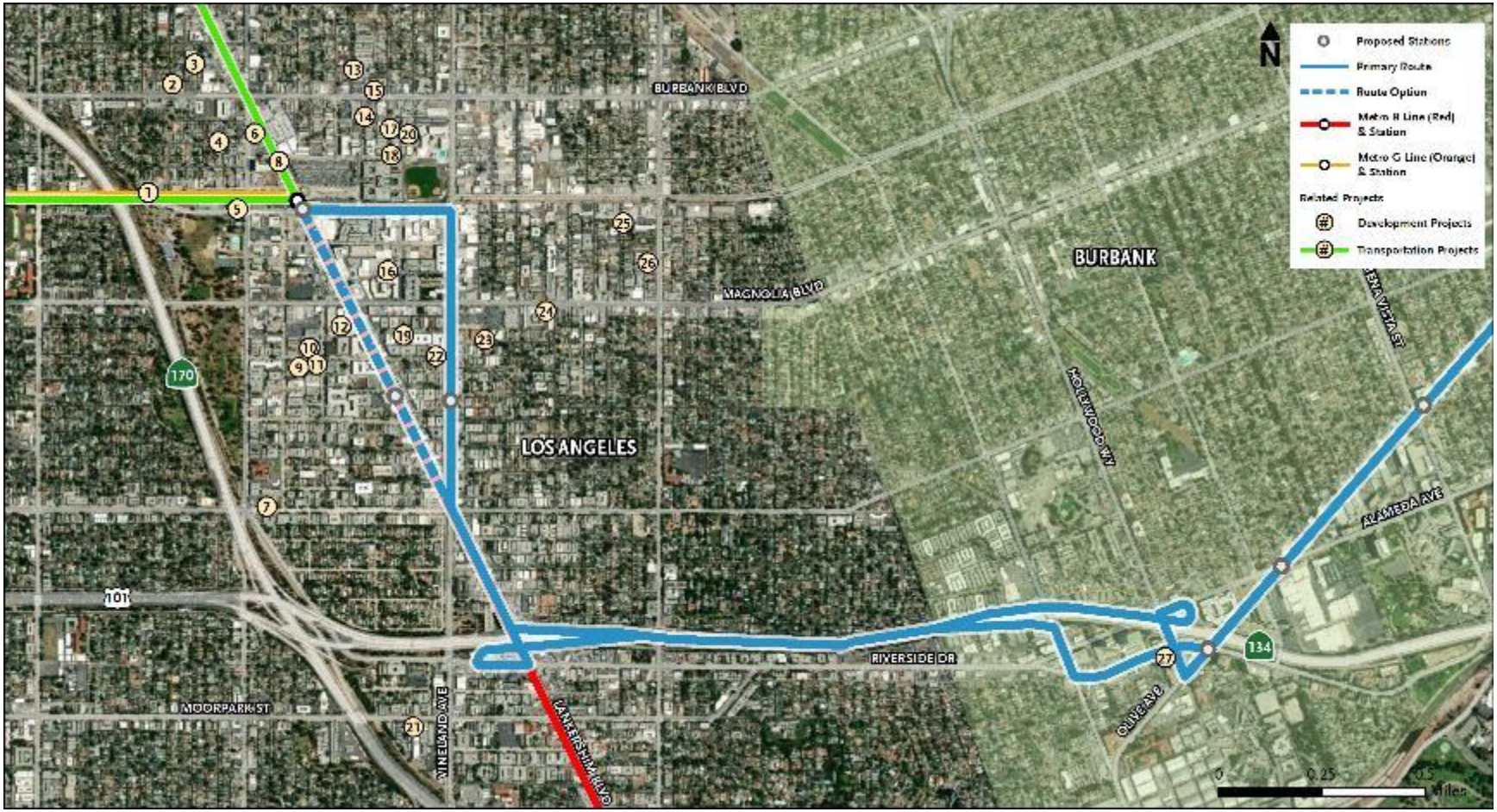


Figure 4b – Cumulative Impact Study Area

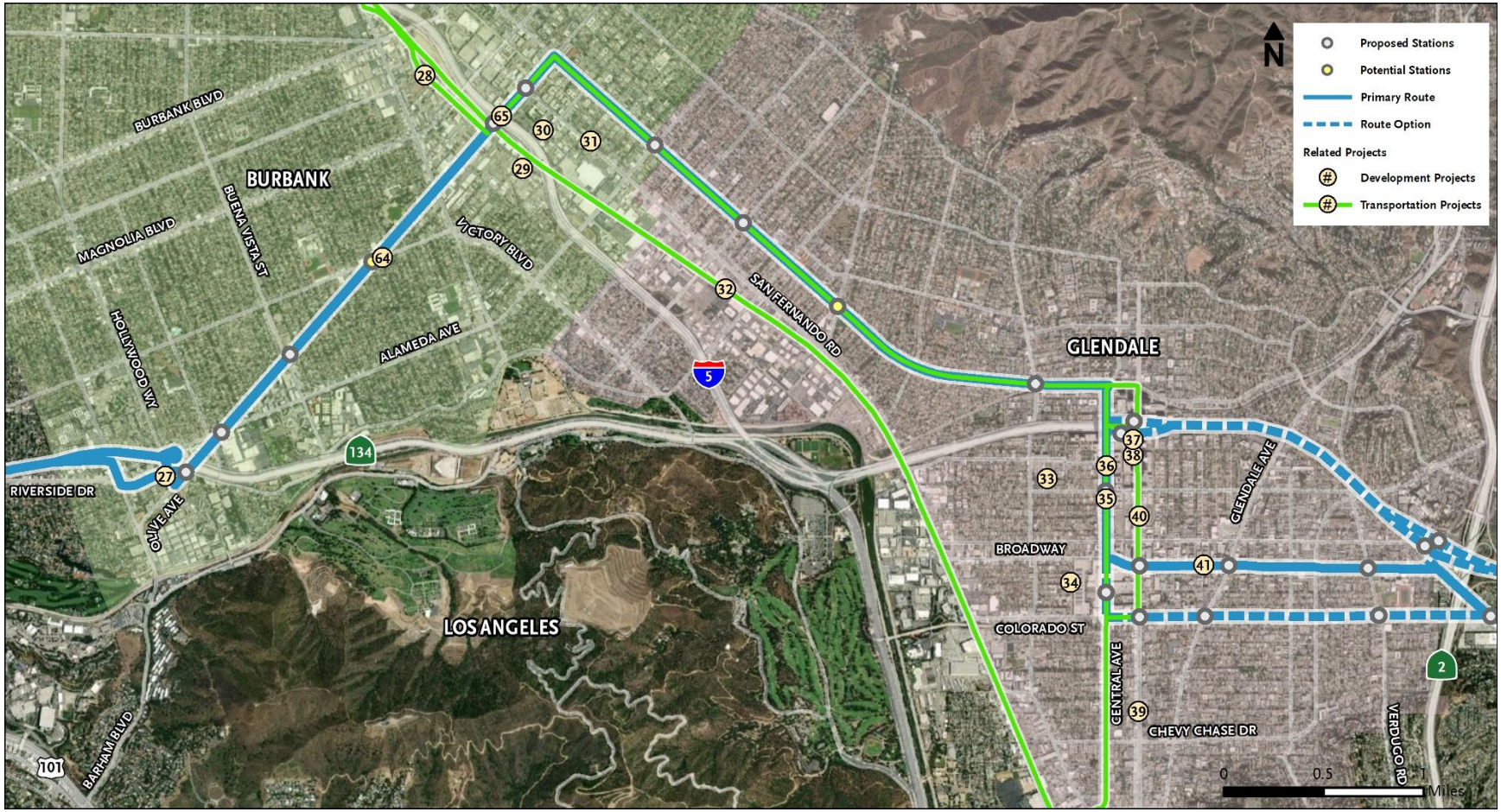


Figure 4c – Cumulative Impact Study Area

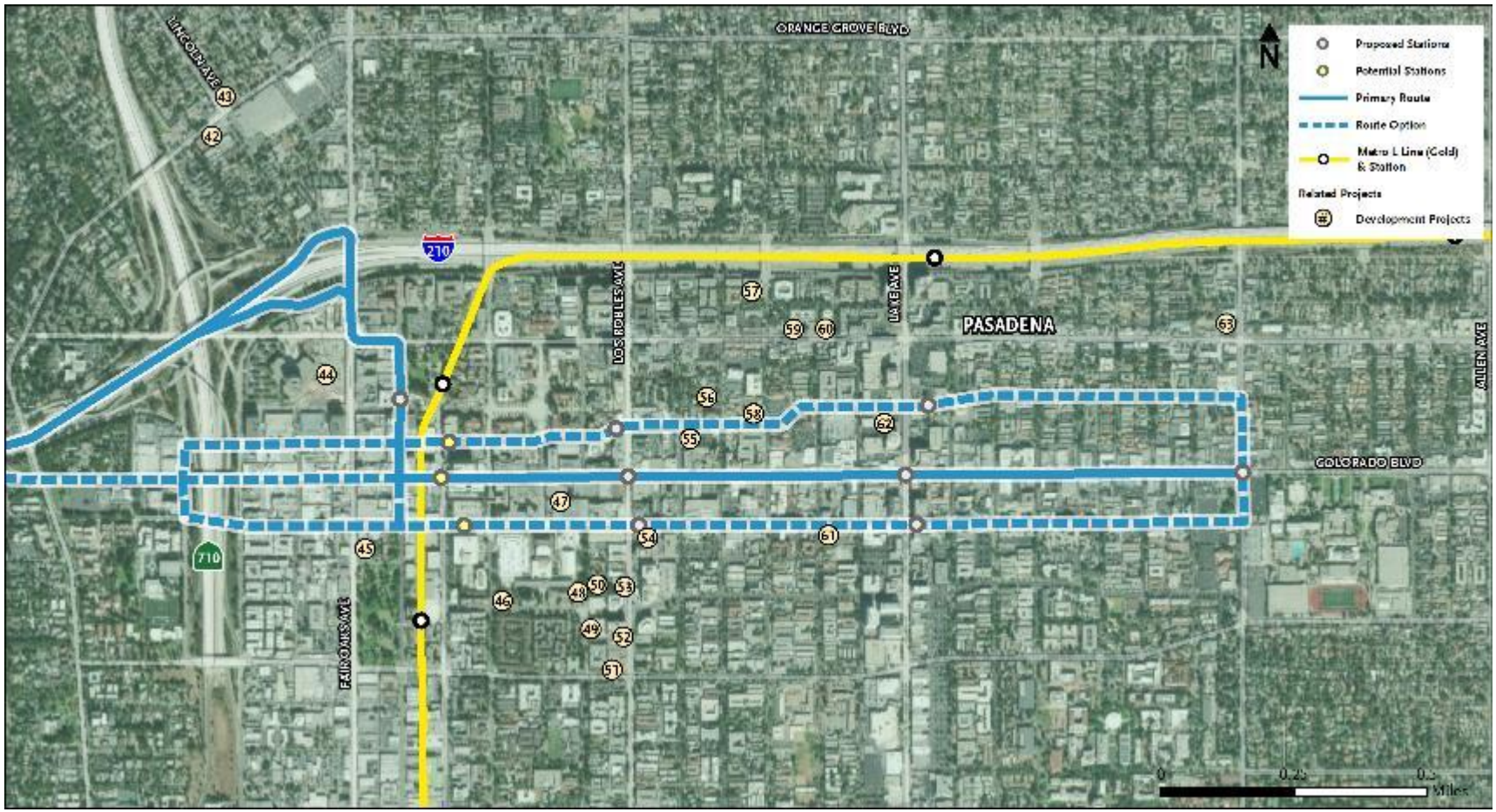


Table 29 – Related Projects

Map ID	Project Name	Location	Description	Status
REGIONAL				
N/A	NextGen Bus Plan	Los Angeles County	The NextGen Bus Plan will revise the existing Metro bus network to improve ridership and make bus use more attractive to current and future riders. The Plan will adjust bus routes and schedules based upon existing origin/destination ridership data with a phased approach to future infrastructure investments in transit convenience, safety, and rider experience.	Implementation early 2021
N/A	East San Fernando Valley LRT Project	San Fernando Valley	New 9-mile LRT line that will extend north from the Van Nuys Metro G Line (Orange) station to the Sylmar/San Fernando Metrolink Station.	Planning
8	North San Fernando Valley BRT Project	San Fernando Valley	New 18-mile BRT line from North Hollywood B/G Line (Red/Orange) Station to Chatsworth.	Planning
32	Los Angeles – Glendale-Burbank Feasibility Study	Amtrak corridor from Los Angeles Union Station to Bob-Hope Airport	Metro is studying a 13-mile transit corridor between Los Angeles Union Station and the Hollywood Burbank Airport. A range of options are under study including both light rail and enhanced commuter rail.	Planning and feasibility
BURBANK				
27	Mixed-Use Development	3700 Riverside Dr.	49-unit residential condominium and 2,000 sq. ft. of retail	Active Project Submission
28	San Fernando Bikeway	San Fernando Blvd. Corridor	Three-mile Class I bike path along San Fernando Blvd. near the Downtown Metrolink Station in the City of Burbank. This project will complete a 12-mile long regional bike path extending from Sylmar to the Downtown Burbank Metrolink Station along the San Fernando Blvd. rail corridor	Planning

Map ID	Project Name	Location	Description	Status
29	Commercial Development	411 Flower St.	Commercial building (size unknown)	Active Project Submission
30	Mixed-Use Development	103 Verdugo Ave.	Two mixed-use buildings (size unknown)	Active Project Submission
31	Mixed-Use Development	624 San Fernando Blvd.	42-unit, 4-story mixed-use building with 14,800 sq. ft. of ground-floor commercial	Active Project Submission
64	Olive Ave./Sparks St./Verdugo Ave. Intersection Improvements	Olive Ave./Sparks St./Verdugo Ave.	Various intersection improvements.	Planning
65	Olive Ave. Overpass Rehabilitation	Olive Ave. over Interstate 5	Improvements to operational efficiency, pedestrian safety, and bicycle connections.	Planning
GLENDALE				
33	Multi-Family Development	452 Milford St.	15-unit building	Active Project Submission
34	Multi-Family Development	401 Hawthorne St.	23-unit building	Active Project Submission
35	Commercial Development	340 Central Ave.	14,229 sq. ft. office	Active Project Submission
36	Multi-Family Development	520 Central Ave.	98-unit building	Active Project Submission
37	Commercial Development	611 Brand Blvd.	Hotel (857 hotel rooms and 7,500 sq. ft. of restaurant/retail)	Active Project Submission
38	Multi-Family Development	601 Brand Blvd.	604 units in 3 buildings	Active Project Submission
39	Commercial Development	901 Brand Blvd.	34,228 sq. ft. parking structure for car dealership	Active Project Submission
40	Glendale Streetcar	Downtown Glendale	Streetcar connecting the Larry Zarian Transportation Center with Downtown Glendale	Planning and feasibility
41	Commercial Development	517 Broadway	Medical/office/retail building (size unknown)	Active Project Submission
LOS ANGELES				
N/A	Orange Line Transit Neighborhood Plan	North Hollywood, Van Nuys, and Sepulveda BRT Stations	Develop regulatory tools and strategies for the areas around these three Orange Line stations to encourage transit ridership, enhance the urban built environment, and focus new growth and housing in proximity to transit and along corridors	Undergoing Environmental Review

Map ID	Project Name	Location	Description	Status
N/A	Take Back The Boulevard Initiative	Colorado Blvd.	The mission of the Take Back the Boulevard initiative is to serve as a catalyst for the community-drive revitalization of Colorado Boulevard in Eagle Rock. The Take Back the Boulevard initiative seeks to utilize broad community feedback and involvement to make this central corridor through Eagle Rock a safe, sustainable, and vibrant street in order to stimulate economic growth, increase public safety, and enhance community pride and wellness.	Active Initiative
1	Multi-Family Development	11525 Chandler Blvd.	60-unit building	Active Building Permit
2	Multi-Family Development	5610 Camellia Ave.	62-unit building	Active Building Permit
3	Multi-Family Development	5645 Farmdale Ave.	44-unit building	Active Building Permit
4	Multi-Family Development	11433 Albers St.	59-unit building	Active Building Permit
5	Mixed-Use Development	11405 Chandler Blvd.	Mixed-use building with residential and commercial components (size unknown).	Active Building Permit
6	Mixed-Use Development	5530 Lankershim Blvd.	15-acre joint development at the North Hollywood Metro Station. Includes 1,275-1,625 residential units (275-425 affordable units), 125,000-150,000 sq. ft. of retail, and 300,000-400,000 sq. ft. of office space	Active Project Submission
7	Mixed-Use Development	11311 Camarillo St.	Mixed-use building (size unknown)	Active Building Permit
9	Multi-Family Development	11262 Otsego St.	49-unit building	Active Building Permit
10	Multi-Family Development	11241 Otsego St.	42-unit building	Active Building Permit
11	Multi-Family Development	11246 Otsego St.	70-unit building	Active Building Permit
12	Mixed-Use Development	5101 Lankershim Blvd.	297 units in a mixed-use housing complex	Active Building Permit
13	Multi-Family Development	5630 Fair Ave.	15-unit building	Active Building Permit
14	Multi-Family Development	5550 Bonner Ave.	48-unit building	Active Building Permit

Map ID	Project Name	Location	Description	Status
15	Commercial Development	11135 Burbank Blvd.	4-story hotel with 70 guestrooms	Active Building Permit
16	Commercial Development	11115 McCormick St.	Apartment/Office building (size unknown)	Active Building Permit
17	Multi-Family Development	5536 Fulcher Ave.	36-unit building	Active Building Permit
18	Multi-Family Development	11111 Cumpston St.	41-unit building	Active Building Permit
19	Multi-Family Development	11050 Hartsook St.	48-unit building	Active Building Permit
20	Multi-Family Development	5525 Case Ave.	98-unit building	Active Building Permit
21	Multi-Family Development	11036 Moorpark St.	96-unit building	Active Building Permit
22	Multi-Family Development	11011 Otsego St.	144-unit building	Active Building Permit
23	Multi-Family Development	10925 Hartsook St.	42-unit building	Active Building Permit
24	Multi-Family Development	10812 Magnolia Blvd.	31-unit building	Active Building Permit
25	Multi-Family Development	5338 Cartwright Ave.	21-unit building	Active Building Permit
26	Multi-Family Development	5252 Willow Crest Ave.	25-unit building	Active Building Permit
PASADENA				
42	Mixed-Use Development	690 Orange Grove Blvd.	48-unit building with commercial space	Active Project Submission
43	Multi-Family Development	745 Orange Grove Blvd.	35-unit building	Active Project Submission
44	Mixed-Use Development	100 Walnut St.	Mixed-use planned development: office building, 93-unit apartment building, and a 139-unit building	Active Building Permit
45	Multi-Family Development	86 Fair Oaks Ave.	87-unit building with commercial space	Active Project Submission
46	Commercial Development	190 Marengo Ave.	7-story hotel with 200 guestrooms	Active Project Submission
47	Multi-Family Development	39 Los Robles Ave.	Residential units above commercial space (size unknown)	Active Building Permit
48	Mixed-Use Development	178 Euclid Ave.	42-unit building with 940 sq. ft. of office space	Active Building Permit
49	Multi-Family Development	380 Cordova St.	48-unit building	Active Building Permit
50	Mixed-Use Development	170 Euclid Ave.	42-unit building with 10,000 sq. ft. of commercial space	Active Project Submission
51	Multi-Family Development	399 Del Mar Blvd.	55-unit building	Active Building Permit

Map ID	Project Name	Location	Description	Status
52	Multi-Family Development	253 Los Robles Ave.	92-unit building	Active Project Submission
53	Mixed-Use Development	171 Los Robles Ave.	8-unit building	Active Project Submission
54	Commercial Development	98 Los Robles Ave.	school of medicine building	Active Building Permit
55	Multi-Family Development	530 Union St.	55-unit building with retail space	Active Building Permit
56	Multi-Family Development	119 Madison Ave.	81-unit building	Active Building Permit
57	Multi-Family Development	289 El Molino Ave.	105-unit building	Active Building Permit
58	Multi-Family Development	99 El Molino Ave.	40-unit building	Active Building Permit
59	Commercial Development	711 Walnut St.	Mixed-use building with condominiums, commercial space, food facility, parking structure (size unknown)	Active Building Permit
60	Commercial Development	737 Walnut St.	42-unit building with commercial space	Active Project Submission
61	Mixed-Use Development	740 Green St.	273-unit building	Active Project Submission
62	Mixed-Use Development	83 Lake Ave.	54-unit building with office space	Active Project Submission
63	Multi-Family Development	231 Hill Ave.	59-unit building	Active Project Submission

SOURCE: Terry A. Hayes Associates Inc., 2020.

North San Fernando Valley (SFV) Bus Rapid Transit (BRT) Project. The North SFV BRT Project is a proposed 18-mile BRT line that is intended to serve the portions of the San Fernando Valley that are north of the Metro G Line (Orange) service area. The project would provide a new, high-quality bus service between the communities of Chatsworth to the west and North Hollywood to the east. The project would enhance existing bus service and increase transit system connectivity.

Joint Development - North Hollywood Station Project. The Joint Development - North Hollywood Station project would construct facilities at the North Hollywood B/G Line (Red/Orange) Station that would be shared by the Proposed Project. The project has been identified in the Measure M Expenditure Plan, with a projected opening date between Fiscal Year 2023-25 and $180 million of funding.

NextGen Bus Plan. In January 2018, Metro began the NextGen Bus Plan aimed at reimagining the bus network to be more relevant, reflective of, and attractive to the diverse customer needs within Los Angeles County. The NextGen Bus Plan will realign Metro's bus network based upon data of existing ridership and adjust bus service routes and schedules to improve the overall network. The Proposed Project would be included in the Plan and replace some select bus services in the region. The NextGen Bus Plan is anticipated to begin implementation in the beginning of 2021.

East SFV Light Rail Transit (LRT) Project. The East SFV LRT Project will be a 9-mile LRT line that will extend north from the Van Nuys Metro G Line (Orange) station to the Sylmar/San Fernando Metrolink Station. Light rail trains will operate in the median of Van Nuys Boulevard for 6.7 miles to San Fernando Road. From San Fernando Road, the trains will transition onto the existing railroad right-of-way that's adjacent to San Fernando Road, which it will share with Metrolink for 2.5 miles to the Sylmar/San Fernando Metrolink Station. The project includes 14 at-grade stations. The Draft EIR/Environmental Impact Statement (EIR/EIS) was published in August 2017 and the Final EIR/EIS is being prepared by Metro as of August 2020.

There is an existing cumulative impact in the Project Area related to noise as existing noise levels adjacent roadways exceed the State Land Use and Noise Compatibility Guidelines. The cumulative setting for noise is adjacent to the ROW. State, regional, and local agencies and jurisdictions have published a wide range of documents intended to control noise levels and reduce community exposure.

Regarding construction, the Proposed Project could increase ambient noise levels by approximately 15 dBA L_{eq} near any of the potential 23 station construction sites along the alignment, generating significant increases before mitigation measures are applied. Mitigation Measure **NOI-1** would reduce the impact to less than significant by requiring noise monitoring and control measures when levels exceed allowable standards. Although the Proposed Project would generate short-term construction noise, the effect to the existing environment would not be significant. Therefore, Proposed Project construction activities would not contribute to the existing cumulatively considerable impact.

Regarding operations, the Proposed Project would reduce VMT and associated transportation noise from operation of motor vehicles in the Project Area as people shift to public transit. As a result, even with the addition of BRT service, permanent increases in noise would be minimal and not significant. Therefore, Proposed Project operational activities would not contribute to the existing cumulatively considerable impact.

There is no cumulative vibration impact in the Project Area and the Proposed Project would not result in a significant vibration impact with implementation of Mitigation Measures **NOI-2** and **NOI-3** for construction activities. There is no potential for the Proposed Project to contribute to a cumulative impact.

8. References

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City of Los Angeles, *Los Angeles General Plan Framework*, 1996.

City of Los Angeles, *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*, Re-adopted August 8, 2001.

City of Pasadena, *Land Use Element of the City of Pasadena General Plan*, 2015, amended 2016.

Federal Highway Administration, *Traffic Data Computation Method*, August 2018.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manua*l, 2018.

Hollywood Burbank Airport, *Airport Influence Area Ma*p, 2003.

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9. List of Preparers

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Appendices to the Noise Technical Report

APPENDIX A

Noise and Vibration Modeling Worksheets

TRAFFIC NOISE MODELING SUMMARY

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2019
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

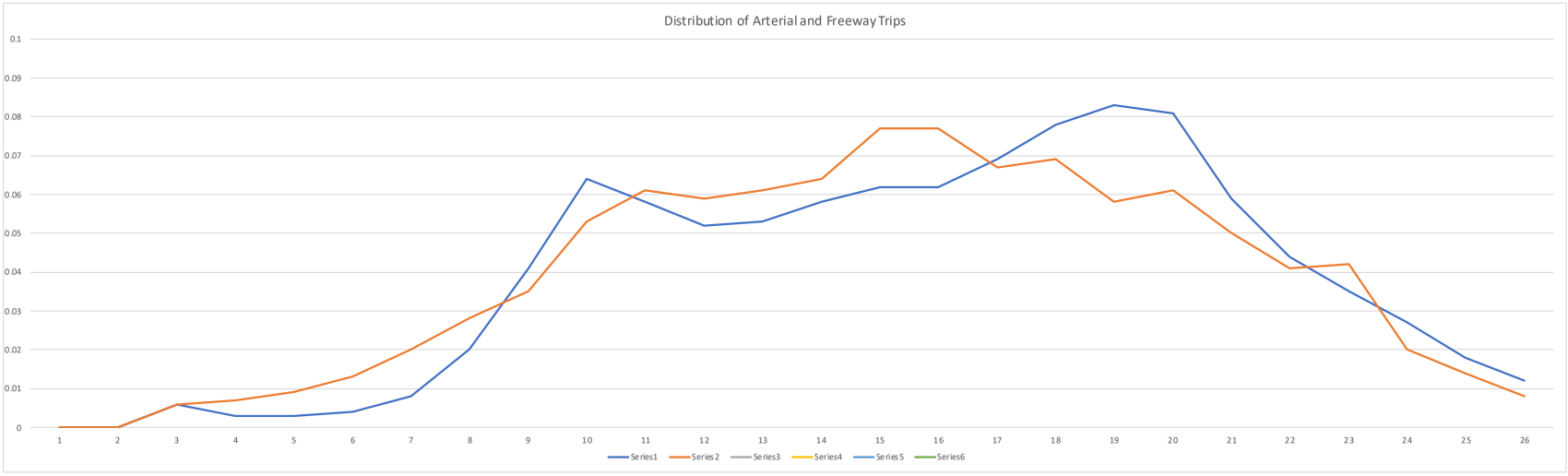
Region	Calendar Yea	Vehicle Categ	Model Year	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMBW	PM2.5_PMTW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMBW	PM10_PMTW	CO_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSO	ROG_RUNLO	ROG_RESTL	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSO	TOG_RUNLO	TOG_RESTL	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
Los Angeles	2019	All Other Bus	Aggregated	Aggregated	DSL	36	1,912	301	4.97853682	7.04219074	1.12680027	0.16468308	0.06515672	0	0	0.003	0.05938002	0.17170826	0.06810282	0	0.012	0.13034004	1041.86412	656.741289	0	0.01470942	0.01404147	0	0.16408039	0.11012059	0	0.31668895	0.22394088	0	0	0	0	0	0.36052729	0.25491964	0	0	0	0	0	0.98612721	2.586817	0	0.00984191	0.00620457	0
Los Angeles	2019	LDA	Aggregated	Aggregated	GAS	85,941	4,161,150	401,907	0.07705566	0	0.24998778	0.00168624	0	0.00193987	0	0.002	0.01575001	0.00183386	0	0.00210916	0.008	0.03675001	299.92013	0	0.60448644	0.00518267	0	0.07229837	0.00772563	0	0.03087139	0.02218208	0	0.34202671	0.13953878	0.26195154	0.2859866	0.35241848	0.03233717	0	0.37445016	0.13953878	0.26195154	0.2859866	0.35241848	1.1040693	0	2.55959489	0.00296795	0	0.00059839
Los Angeles	2019	LDA	Aggregated	Aggregated	DSL	670	32,717	3,149	0.1880252	0	0	0.01477522	0	0	0	0.002	0.01575001	0.01594329	0	0	0.008	0.03675001	227.311747	0	0.00141029	0	0	0.01573024	0	0	0.03816274	0	0	0	0	0	0	0.03945696	0	0	0	0	0	0	0.36012767	0	0	0.00214891	0	0
Los Angeles	2019	LDA	Aggregated	Aggregated	ELEC	580	23,828	2,941	0	0	0	0	0	0	0	0.002	0.01575001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0	0	0.00488803	0	0.02400154	0	0	0	0.01060559	0.02400154	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0	0
Los Angeles	2019	LDT1	Aggregated	Aggregated	GAS	8,280	355,387	36,737	0.26035634	0	0.42663474	0.00330879	0	0.00344134	0	0.002	0.01575001	0.00359789	0	0.00374401	0.008	0.03675001	351.72046	0	72.5777457	0.01589761	0	0.12776954	0.01704864	0	0.03785339	0.07309198	0	0.68980161	0.37288627	1.28257408	0.78317788	1.08090566	0.33606906	0	0.77522201	0.37288627	1.28257408	0.78317788	1.08090566	2.77252985	0	2.91754007	0.00348056	0	0.00071822
Los Angeles	2019	LDT1	Aggregated	Aggregated	ELEC	7	170	23	1.4981737	0	0	0.23986156	0	0	0	0.002	0.01575001	0.25070704	0	0	0.008	0.03675001	429.129469	0	0	0.01274775	0	0	0.07474318	0	0	0.27445163	0	0	0	0	0	0	0.31244494	0	0	0	0	0	0	1.42964477	0	0	0.00405682	0	0
Los Angeles	2019	LDT1	Aggregated	Aggregated	ELEC	8	291	37	0	0	0	0	0	0	0	0.002	0.01575001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0.01060559	0.02400154	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0	0
Los Angeles	2019	LDT2	Aggregated	Aggregated	GAS	23,688	1,076,876	108,823	0.11729412	0	0.46381577	0.00184447	0	0.00202482	0	0.002	0.01575001	0.00203562	0	0.00220216	0.008	0.03675001	389.306981	0	80.6383091	0.00844556	0	0.11018867	0.02118879	0	0.04248753	0.0367017	0	0.50194264	0.19018136	0.59842197	0.43949092	0.51157541	0.05323671	0	0.54955039	0.19018136	0.59842197	0.43949092	0.51157541	1.64213237	0	3.4201488	0.00385251	0	0.00079798
Los Angeles	2019	LDT2	Aggregated	Aggregated	DSL	68	3,772	341	0.06071405	0	0	0.02680979	0	0	0	0.002	0.01575001	0.00849413	0	0	0.008	0.03675001	29.4709302	0	0	0.00115612	0	0	0.00432288	0	0	0.02489055	0	0	0.02813623	0	0	0	0.17062098	0	0	0.02813623	0	0	0	0.17062098	0	0	0.00273598	0	0
Los Angeles	2019	LDT2	Aggregated	Aggregated	ELEC	72	2,640	367	0	0	0	0	0	0	0	0.002	0.01575001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0.01060559	0.02400154	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0	0
Los Angeles	2019	LHD1	Aggregated	Aggregated	GAS	2,539	85,426	37,828	0.42980401	0.04113027	0.58380688	0.00160551	0	0.00060044	0	0.002	0.03276001	0.00172498	0	0.00065409	0.008	0.07644002	818.380924	124.07723	19.9813289	0.01477174	0.13493494	0.03770021	0.02380818	0.00932633	0.04430593	0.07659501	0.47037576	0.19152147	0.1990979	1.35777898	0.04966183	0.09415967	0.10707093	0.68172624	0.21175074	0.1990979	1.35777898	0.04966183	0.09415967	1.90188801	3.71668404	2.16213084	0.0080986	0.00322815	0.00019773
Los Angeles	2019	LHD1	Aggregated	Aggregated	DSL	2,388	84,836	30,036	1.97659024	2.44840143	0	0.02516532	0.02655495	0	0	0.003	0.03276001	0.02681534	0.02775564	0	0.012	0.07644002	495.721237	140.414546	0	0	0	0.07793048	0.02207121	0	0.12414078	0.10975971	0	0	0	0	0	0.14316018	0.12495413	0	0	0	0	0	0.72356869	0.90974508	0	0.00468635	0.00132742	0
Los Angeles	2019	LHD2	Aggregated	Aggregated	GAS	318	11,242	4,738	0.31407336	0.04113826	0.58581639	0.00125095	0	0.00040187	0	0.002	0.03822001	0.00133052	0	0.00045537	0.008	0.08918003	932.530277	142.743444	22.1256776	0.00887346	0.12867105	0.03297298	0.02047863	0.00931359	0.04494248	0.04093777	0.47083181	0.16507795	0.15897879	1.09348894	0.03839309	0.07208293	0.05973629	0.68703667	0.18079358	0.15897879	1.09348894	0.03839309	0.07208293	1.04426617	3.7377682	2.00928593	0.00932814	0.00141256	0.00021895
Los Angeles	2019	LHD2	Aggregated	Aggregated	DSL	887	33,854	11,152	1.11873653	2.48273936	0	0.02237407	0.02623174	0	0	0.003	0.03822001	0.02328121	0.02741788	0	0.012	0.08918003	544.233788	225.006363	0	0.00486663	0.00509813	0	0.08617315	0.03536787	0	0.10474649	0.10975971	0	0	0	0	0	0.13182791	0.12495413	0	0	0	0	0	0.89774518	0.90974508	0	0.00518269	0.00122712	0
Los Angeles	2019	MCY	Aggregated	Aggregated	GAS	4,627	56,594	9,254	1.18252705	0	0.26382568	0.0018767	0	0.00319639	0	0.001	0.00504	0.00199737	0	0.00358648	0.004	0.01176	21.7389847	0	6.64268474	0.38233864	0	0.26842211	0.06802683	0	0.03536721	0.26735093	0	0.27015443	0.91216838	2.56111039	1.64732946	2.58061505	0.23312303	0	2.25194568	0.91216838	2.56111039	1.64732946	2.58061505	2.23102123	0	9.90625826	0.00215125	0	0.00063599
Los Angeles	2019	MDV	Aggregated	Aggregated	GAS	21,657	916,237	97,740	0.23272301	0	0.57610781	0.00158877	0	0.00221897	0	0.002	0.01575001	0.00211904	0	0.00247965	0.008	0.03675001	472.792376	0	99.4534315	0.01213803	0	0.13308736	0.01562141	0	0.04813237	0.05919508	0	0.66819627	0.21547015	0.64047718	0.51122877	0.69368621	0.08154442	0	0.74678601	0.21547015	0.64047718	0.51122877	0.69368621	2.12163941	0	4.43800919	0.00467866	0	0.00098417
Los Angeles	2019	MDV	Aggregated	Aggregated	GAS	334	17,224	1,629	0.5102739	0	0	0.00748647	0	0	0	0.002	0.01575001	0.00783498	0	0	0.008	0.03675001	407.61292	0	0	0.00093548	0	0	0.00407108	0	0	0.02014039	0	0	0.02229285	0	0	0	0.31453641	0	0	0.02229285	0	0	0	0.31453641	0	0	0.00383341	0	0
Los Angeles	2019	MDV	Aggregated	Aggregated	ELEC	17	614	85	0	0	0	0	0	0	0	0.002	0.01575001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0.01060559	0.02400154	0	0	0.00488803	0	0.01060559	0.02400154	0	0	0	0
Los Angeles	2019	MH	Aggregated	Aggregated	GAS	1,063	9,038	106	0.66033052	0	0.32218012	0.00158971	0	0.00041484	0	0.003	0.05586002	0.0017269	0	0.00044967	0.012	0.13034004	1730.93006	0	27.6462211	0.02166737	0	0.06360684	0.03407626	0	0.03118402	0.10148158	0	0.16291611	0.11106252	2.68894495	0.0650163	0.16837899	0.144973	0	0.17828938	0.11106252	2.68894495	0.0650163	0.16837899	2.99921952	0	3.43251681	0.01712896	0	0.00027358
Los Angeles	2019	MH	Aggregated	Aggregated	GAS	282	2,600	28	5.44677377	0	0	0.13659037	0	0	0	0.004	0.05586002	0.14276639	0	0	0.016	0.17370033	1008.06952	0	0	0.00467137	0	0	0.15845402	0	0	0.30057186	0	0	0.31449438	0	0	0	0.45611366	0	0	0	0	0	0	0.45611366	0	0	0.00352985	0	0
Los Angeles	2019	Motor Coach	Aggregated	Aggregated	DSL	14	1,805	209	5.53994671	101.0056528	1.29069115	0.11009235	0.52316958	0	0	0.003	0.05586002	0.11507023	0.54733714	0	0.012	0.13034004	1547.20807	11283.5937	0	0.01279239	0.30836407	0	0.24313956	1.7736238	0	0.27541638	6.63903696	0	0	0	0	0	0	0.31354081	7.55380382	0	0	0	0	0	0.10302053	55.5574816	0	0.01461726	0.1066018	0
Los Angeles	2019	OBUS	Aggregated	Aggregated	GAS	56	4,921	1,123	0.82229665	0.06470582	0.36092189	0.00170879	0	0.00024324	0	0.003	0.05586002	0.00082526	0	0.00026364	0.012	0.13034004	1715.67683	387.726422	27.9301294	0.02126068	0.20470073	0.03609647	0.03182684	0.00540791	0.02818468	0.09912133	0.74098503	0.81185956	0.03510689	0.42039585	0.03013128	0.06415586	0.34516722	1.08124359	0.19911133	0.03510689	0.42039585	0.03013128	0.06415586	2.60941175	5.74271442	3.82607921	0.01697801	0.00188587	0.00027639
Los Angeles	2019	PTO	Aggregated	Aggregated	DSL	-	2,595	-	10.0923307	0	0	0.23283704	0	0	0	0	0	0	0	0	0	0	24.3144	0	0	0.03497819	0	0	0.34029762	0	0	0.75260165	0	0	0	0	0	0	0.85078197	0	0	0	0	0	0	2.52781356	0	0	0.00343983	0	0
Los Angeles	2019	SBUS	Aggregated	Aggregated	GAS	11	954	42	0.47659362	0.93847449	0.55898579	0.00154616	0	0.00054953	0	0.002	0.03920009	0.00166159	0	0.00059767	0.008	0.7448002	871.678545	2598.22871	51.4897267	0.01389013	2.62347309	0.06892879	0.02672115	0.09252722	0.05533882	0.06605357	10.5237921	0.36785954	0.07886268	0.58481715	0.01758023	0.04394851	0.09618522	35.3562927	0.40275989	0.07886268	0.58481715	0.01758023	0.04394851	1.38449866	81.5260367	0.17661839	0.00862597	0.02751358	0.00090953
Los Angeles	2019	SBUS	Aggregated	Aggregated	DSL	455	13,607	5,017	9.16217671	48.2060047	0.92244653	0.06448619	0.08142091	0	0	0.003	0.03920009	0.06740218	0.08719311	0	0.012	0.7448021	12.78.81131	3681.89702	0	0.00768824	0.01607457	0	0.20301133	0.59784294	0	0.3659257	0.34618303	0	0	0	0	0	0.38438949	0.93198691	0	0	0	0	0	0.49667784	4.97002312	0	0.01208158	0.03478474	0
Los Angeles	2019	T6 CAIRP hea	Aggregated	Aggregated	DSL	63	12,644	922	1.73017211	4.7295432	1.00672085	0.08103026	0.01185363	0	0	0.003	0.05586002	0.03149262	0.0123896	0	0.012	0.13034004	930.471812	648.262128	0	0.00251501	0.00348554	0	0.14627251	0.01089778	0	0.05414753	0.07504278	0	0	0	0	0	0.06164284	0.08543049	0	0	0	0	0	0.2104985	1.98709847	0	0.00879064	0.00612446	0
Los Angeles	2019	T6 CAIRP sm	Aggregated	Aggregated	DSL	34	1,803	493	2.10762402	5.29022951	0.94941889	0.05445218	0.01685967	0	0	0.003	0.05586002	0.05691426	0.0176178	0	0.012	0.13034004	975.499227	652.450832	0	0.00449119	0.0040593	0	0.15133489	0.01035619	0	0.09669417	0.08730942	0	0	0	0	0	0.11078696	0.09939513	0	0	0	0	0	0.34623795	2.06468269	0	0.00921603	0.00616403	0
Los Angeles	2019	T6 instate ca	Aggregated	Aggregated	DSL	20	1,354	91	4.81569224	7.58904163	1.10632935	0.1278845	0.06600229	0	0	0.003	0.05586002	0.11306687	0.06794141	0	0.012	0.13034004	1044.07911	673.263148	0	0.00134894	0.00358516	0	0.11641147	0.01058275	0	0.24737536	0.22738984	0	0	0	0	0	0.28161779	0.22944662	0	0	0	0	0	0.79290466	2.3911444	0	0.00984394	0.00636066	0
Los Angeles	2019	T6 instate ca	Aggregated	Aggregated	DSL	279	14,080	1,262	3.60623879	7.3700022	1.37134267	0.11570286	0.03491273	0	0	0.003	0.05586002	0.12093324	0.03649133	0	0.012	0.13034004	1026.77653	679.972045	0	0.00988772	0.00599151	0	0.16319497	0.01068214	0	0.21287994	0.12899552	0	0	0	0	0	0.24324761	0.14685158	0	0	0	0	0	0.71294328	2.17985099	0	0.00970048	0.00642404	0
Los Angeles	2019	T6 instate he	Aggregated	Aggregated	DSL	250	30,872	2,888	4.78317725	7.79197865	0.87644046	0.12155631	0.04018513	0	0	0.003	0.05586002	0.12705255	0.04503125	0	0.012	0.13034004	1008.31929	683.1806	0	0.00112704	0.00071593	0	0.15849175	0.01038648	0	0.24283462	0.15431417	0	0	0	0	0	0.27644873	0.17547002	0	0	0	0	0	0.82732522	2.22245042	0	0.00975705	0.0064319	0
Los Angeles	2019	T6 instate m	Aggregated	Aggregated	DSL	827	38,835	9,540	3.92234457	7.94564446	0.9890705	0.13621241	0.0596764	0	0	0.003	0.05586002	0.14273133	0.04147039	0	0.012	0.13034004	1032.76518	684.190921	0	0.00146818	0.00048268	0	0.16218163	0.01094329	0	0.24690686	0.13597039	0	0	0	0	0	0.28108467	0.15389026	0	0	0	0	0	0.82732522	2.22245042	0	0.00975705	0.0064319	0
Los Angeles	2019	T6 OOS heav	Aggregated	Aggregated	DSL	36	7,335	533	1.69255668	4.66889936	1.0163608	0.03072363	0.01181898	0	0	0.003	0.05586002	0.03211281	0.01235424	0	0.012	0.13034004	929.470414	647.580802	0	0.00254842	0.0034855	0	0.14609981	0.01079183	0	0.0548668	0.07504186	0	0	0	0	0	0.06246167	0.08542945	0	0	0	0	0	0.21419918	2.00868302	0	0.00878138	0.00611809	0
Los Angeles	2019	T6 OOS smal	Aggregated	Aggregated	DSL	19	1,016	280	2.15634185	5.37632592	0.93816542	0.05691445	0.01754501	0	0	0.003	0.05586002	0.05949818	0.01838331	0	0.012	0.13034004	977.944859	653.891231	0	0.00463128	0.00412773	0	0.1537256	0.01078291	0	0.10082963	0.08868686	0	0	0	0	0	0.11478686	0.10117054	0	0	0	0	0	0.3401446	2.06876567	0	0.00923952	0.00617766	0
Los Angeles	2019	T6 Public	Aggregated	Aggregated	DSL	77	1,190	232	5.35415302	41.9938837	1.23873998	0.02716175	0.07061975	0	0	0.003	0.05586002	0.0283939	0.07381286	0	0.012	0.13034004	1058.84004	3484.04466	0	0.00206168	0.01561915	0	0.16642868	0.01476432	0	0.04418742	0.3362759	0	0	0	0	0	0.0505317	0.38282452	0	0	0	0	0	0.34863916	6.05989517	0	0.01003302	0.03291553	0
Los Angeles	2019	T6 utility	Aggregated	Aggregated	DSL	17	289	199	1.76923775	12.8032966	1.47109877	0.00852867	0.00578156	0	0	0.003	0.05586002	0.0089141	0.02604298	0	0.012	0.13034004	1000.76397	1809.18688	0	0.00097704	0.00657113	0	0.15730616	0.28437898	0	0.02103543	0.14147465	0	0	0	0	0	0.02394723	0.16105812	0	0	0	0	0	0.08846293	4.64854316	0	0.00945472	0.0170923	0
Los Angeles	2019	TETS	Aggregated	Aggregated	DSL	155	15,978	3,107	0.93440531	0.08815207	0.41427199	0.0012319	0	0.00059408	0	0.003	0.05586002	0.00114705	0	0.00064506	0.012	0.13034004	1685.34348	535.63306	42.4596943	0.02713116	0.26032725	0.05901025	0.0421379	0.00703134	0.03024189	0.13260825	0.98711245	0.27352523	0.12123805	0.72007196	0.08184776	0.07057636	0.19278632	1.43958339	0.29911436	0.12123805	0.72007196	0.08184776	0.07057636	3.54020504	14.1770414	6.12051707	0.01667784	0.00549842	0.00042015
Los Angeles	2019	TT CAIRP	Aggregated	Aggregated	DSL	339	63,674	4,950	3.46706416	13.65096	1.72735246	0.04079929	0.03602089	0	0	0.009	0.02646001	0.04264405	0.1198579	0	0.03600001	0.06174002	1386.83189	25994.1733	0	0.00422742	0.05009471	0	0.21799066	4.08592206	0	0.09100515	10.7669002	0	0	0	0	0	0.10361383	12.2572984	0	0	0	0	0	0.40299751	128.273373	0	0.0131021	0.24580606	0
Los Angeles	2019	TT CAIRP con	Aggregated	Aggregated	DSL	5	972	23	3.41634073	22.2367818	3.5534526	0.00401945	0.00367186	0	0	0.009	0.02646001	0.04224704	0.02792697	0	0.03600001	0.06174002	1428.09718	3983.03411	0	0.00419329	0.00743606	0	0.22447702	0.6260775	0	0.09320033	1.60138229	0	0	0	0	0	0.10277728	1.82305184	0	0	0	0	0	0.39966346	20.3015437	0	0.01349196	0.03762973	0
Los Angeles	2019	TT NNOOS	Aggregated	Aggregated	DSL	381	77,640	5,556	3.05002384	151.694807	1.78875421	0.04887019	0.05972674	0	0	0.009	0.02646001	0.05107988	0.02402736	0	0.03600001	0.06174002	1331.30699	30044.0235	0	0.0044734	0.64311572	0	0.20926252	4.72232211	0	0.09431112	13.8461052	0	0	0	0	0	0.09643188	15.7627367	0	0	0	0	0	0.43096694	161.882612	0	0.03257733	0.28384104	0
Los Angeles	2019	TT NOOS	Aggregated	Aggregated	DSL	134	25,015	1,950	3.48148441	165.801932	1.72291364	0.04143305	0.03952919	0	0	0.009	0.02646001	0.04330647	0.14116492	0	0.03600001	0.06174002	1388.51621	32312.8309	0	0.00431404	0.64201899	0	0.21825141	5.07912703	0	0.09287998	13.4349577	0	0	0	0	0	0.10573679	15.2946767	0	0	0	0	0	0.40815589	158.956417	0	0.01313801	0.3052756	0
Los Angeles	2019	TT POLA	Aggregated	Aggregated	DSL	31	3,624	234	6.07001412	58.7582736	0.98052852	0.01830993	0.0189067	0	0	0.009	0.02646001	0.01997362	0.01976158	0	0.03600001	0.06174002	1780.85557	9493.28115	0	0.00113806	0.15193772	0	0.27892157	1.4922116	0	0.24087592	3.27117735	0	0	0	0	0	0.27421289	3.7239864	0	0	0	0	0	0.78155114	32.9490466	0	0.01683464	0.08868781	0
Los Angeles	2019	TT Public	Aggregated	Aggregated	DSL	28	575	86	11.5495298	46.1012235	0.76510148	0.05931079	0.0210688	0	0	0.009	0.02646001	0.0622036	0.10741354	0	0.03600001	0.06174002	1746.27953	3582.83198	0	0.00515834	0.0508847	0	0.27763615	0.5631729	0	0.11305916	1.09153353	0	0	0	0	0	0.13641241	1.24718153	0	0	0	0	0	0.41372112	6.13896363	0	0.01668693	0.03184882	0
Los Angeles	2019	TT Single	Aggregated	Aggregated	DSL	199	13,069	2,295	7.76877819	90.5850248	1.49747282	0.15418661	0.17903112	0	0	0.009	0.02646001	0.16111825	0.18712616	0	0.03600001	0.06174002	1566.60852	3920.55204	0	0.01600034	0.1085964	0	0.24624904	0.66326518	0	0.344483	2.31845071	0	0	0	0	0	0.39216768	2.66169276	0	0	0	0	0	1.2770172	19.5604386	0	0.01480054	0.03703943	0
Los Angeles	2019	TT single con	Aggregated	Aggregated	DSL	35	2,412	157	6.75587315	23.9679306	2.12784496	0.14482942	0.14806042	0	0	0.009	0.02646001	0.15137796	0.15559123	0	0.03600001	0.06174002	1546.35379	3224.42292	0	0.00351123	0.00834172	0	0.24345628	0.50683418	0	0.29089318	1.92330365	0	0	0	0	0	0.33119957	2.18976135	0	0	0	0	0	1.1025304	16.3031025	0	0.01469318	0.03046275	0
Los Angeles	2019	TT SWCV	Aggregated	Aggregated	DSL	13	538	51	17.9330832	63.0969537	0.812051	0.01482342	0.13517677	0	0	0.009	0.02646001	0.01549367	0.14128886	0	0.03600001	0.06174002	4777.67161	4327.06907	0	0.00023269	0.0522195	0	0.75093844	0.680155	0	0.00500972	1.12427142	0	0	0	0	0	0.00570818	1.27989743	0	0	0	0	0	0.02642228	7.03582956	0	0.04513707	0.04088	0
Los Angeles	2019	TT SWCV	Aggregated	Aggregated	NG	3	120	11	19.1103454	48.3192676	0	0.04473043	0.3543182	0	0	0.009	0.02646001	0.04466251	0.37033888	0	0.03600001	0.06174002	3426.36088	4253.60265	0	12.2812201	2.50337808	0	0.69348608	0.86721473	0	1.83792228	0.35441398	0	0	0	0	0	14.2281731	2.91796014	0	0	0	0	0	7.71654499	24.8414041	0	0	0	0
Los Angeles	2019	TT tractor	Aggregated	Aggregated	DSL	125	17,578	1,590	5.51740226	28.2765139	1.03010141	0.0944345	0.0624482	0	0	0.009	0.02646001	0.09870941	0.06527189	0	0.03600001	0.06174002	1476.5557	4161.44846	0	0.01078398	0.0859648	0	0.23283199	0.68535896	0	0.23217634	1.85079865	0	0	0	0	0	0.26431486	2.10099318	0	0	0	0	0	0.86090524	19.8226391	0	0.01394977	0.0412048	0
Los Angeles	2019	TT tractor co	Aggregated	Aggregated	DSL	28	1,990	128	6.30834098	25.690933	2.50545885	0.11866473	0.08423284	0	0	0.009	0.02646001	0.12401141	0.08804158	0	0.03600001	0.06174002	1547.36851	3702.93574	0	0.01348975	0.0809374	0	0.24325622	0.58204993	0	0.29043054	1.74255991	0	0	0	0	0	0.33063306	1.98377181	0	0	0	0	0	1.06034573	16.9095905	0	0.01462066	0.0349835

TIME OF DAY DISTRIBUTION OF ROADWAY TRIPS

Hour	Ohio Department of Transportatio	Federal Highway Administration		
0	0.6%	0.6%		
1	0.3%	0.7%		
2	0.3%	0.9%		
3	0.4%	1.3%		
4	0.8%	2.0%		
5	2.0%	2.8%		
6	4.1%	3.5%		
7	6.4%	5.3%		8.0%
8	5.8%	6.1%	6.8%	
9	5.2%	5.9%		
10	5.3%	6.1%		
11	5.8%	6.4%		
12	6.2%	7.7%		
13	6.2%	7.7%		
14	6.9%	6.7%		8.8%
15	7.8%	6.9%		
16	8.3%	5.8%		
17	8.1%	6.1%	6.9%	
18	5.9%	5.0%		
19	4.4%	4.1%		
20	3.5%	4.2%		
21	2.7%	2.0%		
22	1.8%	1.4%		
23	1.2%	0.8%		
	100.0%	100.0%	13.7%	16.8%
Day % of Total	76.1%	74.2%		
Evening % of Total	16.5%	15.3%		
Night % of Total	7.4%	10.5%		
Peak 2-Hour % of 24-Hours	14.7%	13.8%		
Peak 2-Hour % of Daytime	0.1932	18.6%		
Peak 2-Hour % of Evening	0.8909	90.2%		
Peak 2-Hour % of Night	1.9865	131.4%		

Reference http://www.dot.state.oh.us/Divi; https://www.fhwa.dot.gov/policyinformation/pubs/pl18027_traffi; https://dot.ca.g; https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/census/peak-hour/f0017710-peak-hour-definitions-k-and-d-factors.pdf

Notes For Urban Principal Arterial Truck Trips SR 1 PM 27.1



2019 TRAFFIC VOLUME DATA FOR ANALYZED ROAD SEGMENTS

Intersection	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2
Chandler Blvd & Fair Ave	0	14	0	16	0	0	153	0	259	0	0	177	855	19	0	0	8	485	127	0
Chandler Blvd & Vineland Ave	0	155	1369	0	0	0	0	1879	449	0	0	671	0	367	0	0	0	0	0	0
Vineland Ave & W Magnolia Blvd	**0**	**317**	**1121**	**212**	**0**	**0**	**515**	**1494**	**361**	**0**	**0**	**127**	**994**	**92**	**0**	**0**	**190**	**1491**	**259**	**0**
Lankershim Blvd & Weddington St	0	53	944	180	0	0	102	1436	39	0	0	34	76	66	0	0	96	96	149	0
Olive Ave & W Alameda Ave/N Ontario St	0	0	0	0	0	0	0	0	0	0	0	468	943	81	0	0	459	1035	35	0
Olive Ave & N Buena Vista St	0	210	1215	307	0	0	190	1443	674	0	0	482	1423	221	0	0	243	1514	136	0
Olive Ave & Keystone St	0	39	65	38	0	0	23	65	49	0	0	45	1773	23	0	0	37	1765	28	0
Olive Ave & W Verdugo Ave/Sparks St	17	35	59	85	29	7	39	46	69	29	19	433	553	33	14	0	179	405	20	3
Olive Ave & San Fernando Blvd	0	128	279	87	0	0	32	211	107	0	0	102	1136	146	0	0	70	1477	63	0
Olive Ave & Glenoaks Blvd	0	293	1686	111	0	0	166	2289	357	0	0	353	486	249	0	0	190	748	105	0
Glenoaks Blvd & Alameda Ave	0	574	437	398	0	0	131	578	44	0	0	131	1854	517	0	0	433	1556	77	0
Glenoaks Blvd & Justin Ave	0	0	0	129	0	0	0	0	97	0	0	0	2562	102	0	0	0	2326	84	0
Glenoaks Blvd & Grandview Ave	0	164	198	49	0	0	300	187	106	0	0	206	2541	119	0	0	158	2229	195	0
E Broadway & N Maryland Ave/Artsakh Ave	0	130	16	101	0	0	62	18	74	0	0	53	939	187	0	0	91	1155	60	0
E Broadway & Chevy Chase Dr	0	314	865	331	0	0	187	903	245	0	0	246	586	187	0	0	288	795	330	0
Colorado Blvd & S Brand Blvd	0	394	911	331	0	0	157	871	243	0	0	239	1392	306	0	0	478	1368	174	0
Colorado Blvd & Eagle Rock Blvd	0	852	130	808	0	0	97	185	43	0	0	61	1461	637	0	0	758	1628	46	0
Colorado Blvd & Townsend Ave(S)	0	374	0	548	0	0	0	0	0	0	0	0	2059	212	0	0	326	2186	0	0
Colorado Blvd & Townsend Ave(N)	0	0	0	0	0	0	90	0	47	0	0	48	2542	0	0	0	0	2455	44	0
Colorado Blvd & Los Robles Ave	0	148	1447	92	0	0	246	1183	181	0	0	131	927	132	0	0	90	1155	176	0
Colorado Blvd & Lake Ave	0	259	1570	153	0	0	264	1696	361	0	0	288	764	184	0	0	231	1102	315	0
Colorado Blvd & Hill Ave	0	146	1044	308	0	0	296	962	323	0	0	262	793	95	0	0	284	1041	329	0

	NORTH-SOUTH								EAST-WEST							
	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
Chandler Blvd & Fair Ave	716	3,849	794	545	5,188	321	198	68	1644	8,839	1,823	1,251	11,912	737	456	156
Chandler Blvd & Vineland Ave	4368	23,484	4,843	3,324	31,651	1,957	1,211	416	0	-	-	-	-	-	-	-
Vineland Ave & W Magnolia Blvd	3877	20,844	4,298	2,951	28,093	1,737	1,075	369	3661	19,683	4,059	2,786	26,528	1,640	1,015	348
Lankershim Blvd & Weddington St	2704	14,538	2,998	2,058	19,593	1,211	749	257	699	3,758	775	532	5,065	313	194	66
Olive Ave & W Alameda Ave/N Ontario St	503	2,704	558	383	3,645	225	139	48	2472	13,290	2,741	1,881	17,912	1,108	685	235
Olive Ave & N Buena Vista St	4140	22,258	4,590	3,151	29,999	1,855	1,147	394	3813	20,500	4,227	2,902	27,629	1,708	1,057	363
Olive Ave & Keystone St	275	1,478	305	209	1,993	123	76	26	3664	19,699	4,062	2,788	26,549	1,642	1,016	349
Olive Ave & W Verdugo Ave/Sparks St	666	3,581	738	507	4,826	298	185	63	1281	6,887	1,420	975	9,282	574	355	122
Olive Ave & San Fernando Blvd	794	4,269	880	604	5,753	356	220	76	2865	15,403	3,176	2,180	20,760	1,284	794	273
Olive Ave & Glenoaks Blvd	4956	26,645	5,494	3,772	35,911	2,220	1,374	471	1806	9,710	2,002	1,374	13,086	809	501	172
Glenoaks Blvd & Alameda Ave	1398	7,516	1,550	1,064	10,130	626	387	133	4449	23,919	4,932	3,386	32,238	1,993	1,233	423
Glenoaks Blvd & Justin Ave	181	973	201	138	1,312	81	50	17	5101	27,425	5,655	3,882	36,962	2,285	1,414	485
Glenoaks Blvd & Grandview Ave	1192	6,409	1,322	907	8,637	534	330	113	5472	29,419	6,067	4,164	39,650	2,452	1,517	521
E Broadway & N Maryland Ave/Artsakh Ave	283	1,522	314	215	2,051	127	78	27	2408	12,946	2,670	1,833	17,448	1,079	667	229
E Broadway & Chevy Chase Dr	2776	14,925	3,078	2,113	20,115	1,244	769	264	2517	13,532	2,790	1,916	18,238	1,128	698	239
Colorado Blvd & S Brand Blvd	2595	13,952	2,877	1,975	18,803	1,163	719	247	3900	20,968	4,324	2,968	28,260	1,747	1,081	371
Colorado Blvd & Eagle Rock Blvd	562	3,022	623	428	4,072	252	156	53	4798	25,796	5,319	3,651	34,766	2,150	1,330	456
Colorado Blvd & Townsend Ave(S)	0	-	-	-	-	-	-	-	5119	27,522	5,675	3,896	37,092	2,293	1,419	487
Colorado Blvd & Townsend Ave(N)	229	1,231	254	174	1,659	103	63	22	5131	27,586	5,688	3,905	37,179	2,299	1,422	488
Colorado Blvd & Los Robles Ave	3364	18,086	3,729	2,560	24,376	1,507	932	320	2686	14,441	2,978	2,044	19,463	1,203	744	256
Colorado Blvd & Lake Ave	4494	24,161	4,982	3,420	32,564	2,013	1,246	428	2829	15,210	3,136	2,153	20,499	1,267	784	269
Colorado Blvd & Hill Ave	3216	17,290	3,565	2,447	23,303	1,441	891	306	3051	16,403	3,382	2,322	22,108	1,367	846	290

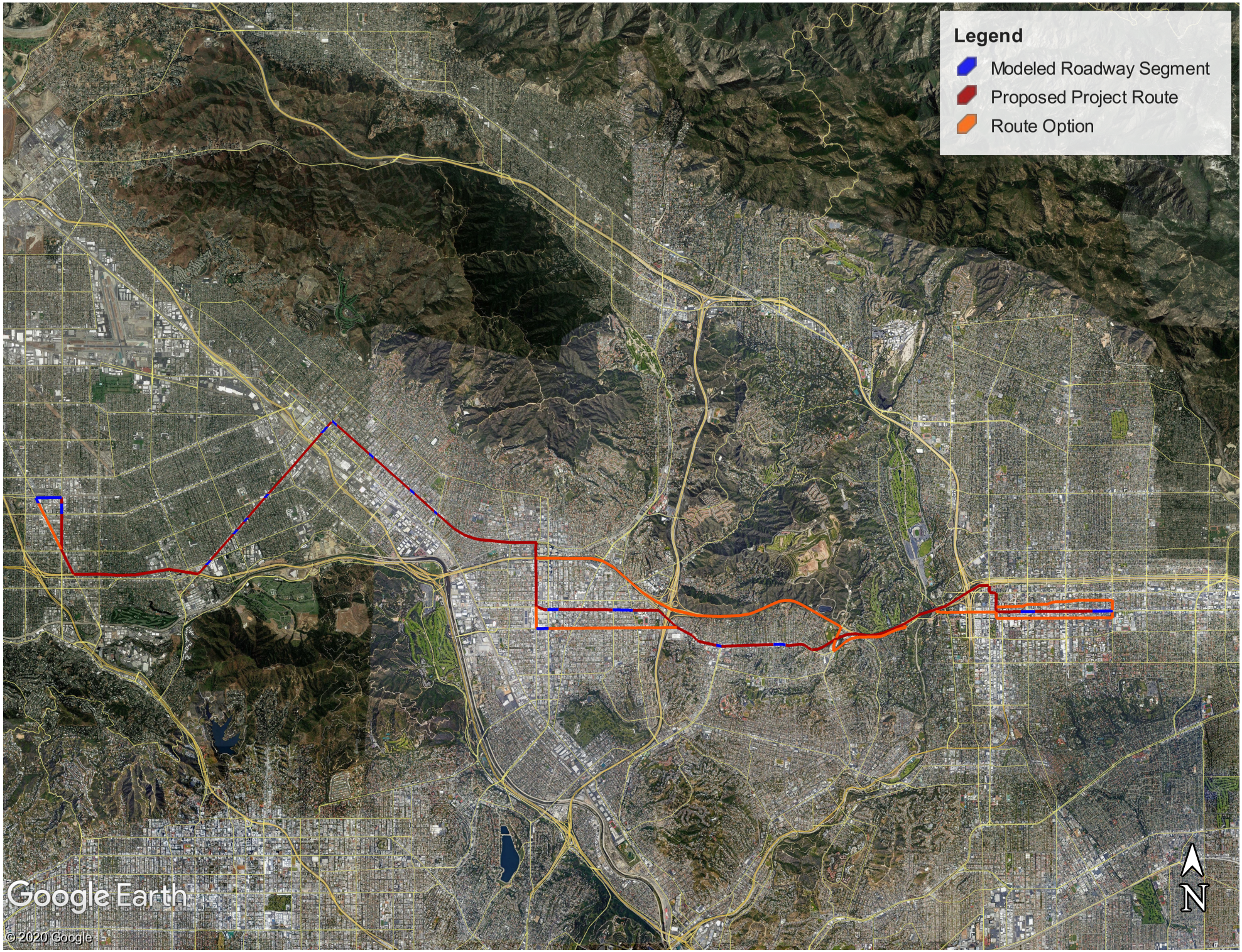
2042 TRAFFIC VOLUME DATA FOR ANALYZED ROAD SEGMENTS

Intersection	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2
Chandler Blvd & Fair Ave	0	20	0	20	0	0	180	0	300	0	0	210	920	30	0	0	20	530	150	0
Chandler Blvd & Vineland Ave	0	190	1,460	0	0	0	0	2,010	510	0	0	760	0	420	0	0	0	0	0	0
Vineland Ave & W Magnolia Blvd	0	370	1,200	240	0	0	590	1,600	420	0	0	150	1,120	110	0	0	220	1,680	300	0
Lankershim Blvd & Weddington St	0	70	1,070	210	0	0	130	1,620	50	0	0	50	90	80	0	0	120	110	170	0
Olive Ave & W Alameda Ave/N Ontario St	0	0	0	0	0	0	0	0	0	0	0	530	1,060	100	0	0	530	1,170	50	0
Olive Ave & N Buena Vista St	0	250	1,370	360	0	0	220	1,620	760	0	0	550	1,520	260	0	0	280	1,620	160	0
Olive Ave & Keystone St	0	50	80	50	0	0	30	80	60	0	0	60	1,890	30	0	0	50	1,880	40	0
Olive Ave & W Verdugo Ave/Sparks St	30	40	70	100	40	20	50	60	80	40	30	490	630	40	30	0	210	460	30	10
Olive Ave & San Fernando Blvd	0	150	330	100	0	0	40	250	130	0	0	120	1,220	170	0	0	90	1,570	80	0
Olive Ave & Glenoaks Blvd	0	330	1,800	130	0	0	190	2,440	410	0	0	400	520	280	0	0	220	800	130	0
Glenoaks Blvd & Alameda Ave	0	650	500	450	0	0	150	660	60	0	0	160	1,980	590	0	0	500	1,670	100	0
Glenoaks Blvd & Justin Ave	0	0	0	150	0	0	0	0	120	0	0	0	2,690	120	0	0	0	2,440	100	0
Glenoaks Blvd & Grandview Ave	0	190	220	60	0	0	330	220	120	0	0	230	2,670	140	0	0	180	2,340	220	0
E Broadway & N Maryland Ave/Artsakh Ave	0	150	20	120	0	0	80	30	90	0	0	70	990	220	0	0	110	1,220	70	0
E Broadway & Chevy Chase Dr	0	360	960	370	0	0	220	1,000	280	0	0	280	620	210	0	0	320	840	370	0
Colorado Blvd & S Brand Blvd	0	440	1,030	370	0	0	180	980	280	0	0	270	1,560	350	0	0	530	1,550	200	0
Colorado Blvd & Eagle Rock Blvd	0	940	150	890	0	0	120	210	60	0	0	100	1,580	700	0	0	890	1,750	60	0
Colorado Blvd & Townsend Ave(S)	0	420	0	610	0	0	0	0	0	0	0	0	2,220	240	0	0	470	2,400	0	0
Colorado Blvd & Townsend Ave(N)	0	0	0	0	0	0	0	0	0	0	0	0	2,740	0	0	0	0	2,640	50	0
Green St & Los Robles Ave	0	0	1,430	100	0	0	210	1,450	0	0	0	350	1,360	180	0	0	0	0	0	0
Colorado Blvd & Los Robles Ave	0	170	1,580	110	0	0	280	1,300	210	0	0	150	1,010	150	0	0	110	1,250	200	0
Colorado Blvd & Lake Ave	0	290	1,720	180	0	0	290	1,860	400	0	0	330	830	210	0	0	260	1,190	360	0
Colorado Blvd & Hill Ave	0	170	1,150	350	0	0	330	1,060	370	0	0	300	860	120	0	0	320	1,120	370	0

	NORTH-SOUTH								EAST-WEST							
	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
Chandler Blvd & Fair Ave	840	4,516	931	639	6,087	376	233	80	1,820	9,785	2,018	1,385	13,188	815	504	173
Chandler Blvd & Vineland Ave	4,740	25,484	5,255	3,607	34,346	2,124	1,314	451	0	-	-	-	-	-	-	-
Vineland Ave & W Magnolia Blvd	4,260	22,903	4,723	3,242	30,868	1,909	1,181	405	4,150	22,312	4,601	3,158	30,071	1,859	1,150	395
Lankershim Blvd & Weddington St	3,090	16,613	3,426	2,352	22,390	1,384	856	294	830	4,462	920	632	6,014	372	230	79
Olive Ave & W Alameda Ave/N Ontario St	580	3,118	643	441	4,203	260	161	55	2,810	15,108	3,115	2,139	20,361	1,259	779	267
Olive Ave & N Buena Vista St	4,680	25,161	5,188	3,562	33,911	2,097	1,297	445	4,160	22,366	4,612	3,166	30,143	1,864	1,153	396
Olive Ave & Keystone St	350	1,882	388	266	2,536	157	97	33	3,940	21,183	4,368	2,998	28,549	1,765	1,092	375
Olive Ave & W Verdugo Ave/Sparks St	780	4,194	865	594	5,652	349	216	74	1,480	7,957	1,641	1,126	10,724	663	410	141
Olive Ave & San Fernando Blvd	950	5,108	1,053	723	6,884	426	263	90	3,100	16,667	3,437	2,359	22,463	1,389	859	295
Olive Ave & Glenoaks Blvd	5,370	28,871	5,953	4,087	38,911	2,406	1,488	511	1,990	10,699	2,206	1,514	14,420	892	552	189
Glenoaks Blvd & Alameda Ave	1,630	8,763	1,807	1,240	11,811	730	452	155	4,850	26,075	5,377	3,691	35,143	2,173	1,344	461
Glenoaks Blvd & Justin Ave	220	1,183	244	167	1,594	99	61	21	5,380	28,925	5,965	4,094	38,984	2,410	1,491	512
Glenoaks Blvd & Grandview Ave	1,340	7,204	1,486	1,020	9,710	600	371	127	5,800	31,183	6,430	4,414	42,027	2,599	1,608	552
E Broadway & N Maryland Ave/Artsakh Ave	360	1,935	399	274	2,609	161	100	34	2,590	13,925	2,871	1,971	18,767	1,160	718	246
E Broadway & Chevy Chase Dr	3,110	16,720	3,448	2,367	22,535	1,393	862	296	2,740	14,731	3,038	2,085	19,854	1,228	759	261
Colorado Blvd & S Brand Blvd	2,940	15,806	3,259	2,237	21,303	1,317	815	280	4,390	23,602	4,867	3,341	31,810	1,967	1,217	418
Colorado Blvd & Eagle Rock Blvd	700	3,763	776	533	5,072	314	194	67	5,290	28,441	5,865	4,026	38,331	2,370	1,466	503
Colorado Blvd & Townsend Ave(S)	0	-	-	-	-	-	-	-	5,700	30,645	6,319	4,338	41,302	2,554	1,580	542
Colorado Blvd & Townsend Ave(N)	50	269	55	38	362	22	14	5	5,430	29,194	6,020	4,132	39,346	2,433	1,505	517
Green St & Los Robles Ave	3,440	18,495	3,814	2,618	24,926	1,541	953	327	1,670	8,978	1,851	1,271	12,101	748	463	159
Colorado Blvd & Los Robles Ave	3,720	20,000	4,124	2,831	26,955	1,667	1,031	354	2,960	15,914	3,282	2,253	21,448	1,326	820	282
Colorado Blvd & Lake Ave	4,960	26,667	5,499	3,775	35,940	2,222	1,375	472	3,110	16,720	3,448	2,367	22,535	1,393	862	296
Colorado Blvd & Hill Ave	3,580	19,247	3,969	2,725	25,941	1,604	992	341	3,350	18,011	3,714	2,549	24,274	1,501	928	319

Key	Overall Segment	From	To	Sub-Segment Modeled	From	to	Receptor	Category	Existing Noise Level (Leq)	Existing Noise Level (Ldn)	Predicted Project Noise (Leq)	Predicted Project Noise (Ldn)	FTA Moderate Impact Threshold (Ldn)	FTA Severe Impact Thresholds (Ldn)	FTA Moderate Impact Threshold (Leq)	FTA Severe Impact Thresholds (Leq)	Future Build Noise Level (Leq)	Future Build Noise Level (Ldn)	Predicted Increase (Leq)	Predicted Increase (Ldn)	CEQA Impact Threshold (dBA) Leq	CEQA Impact Threshold (dBA) Ldn	CEQA Impact
A1	Chandler Blvd.	Lankershim Blvd.	Vineland Ave.	Chandler Blvd.	Lankershim Blvd.	Blakeslee Ave.	**1546 Fair Ave.**	2	64.1	65.9		57	62	67			64.5	66.4	0.4	0.5	5	5	--
				Chandler Blvd.	Blakeslee Ave.	Vineland Ave	**5525 Vineland Ave.**	3	70.3	72.1	59				70	74	70.6	72.4	0.3	0.3	3	3	--
	Vineland Ave.	Chandler Blvd.	Lakershim Blvd.	Vineland Ave.	Weddington St.	Magnolia Blvd.	**5250 Vineland Ave.**	3	70.2	72.0	50				71	76	70.2	72.0	0.0	0.0	3	3	--
A2	Lankershim Blvd.	No. Chandler Blvd.	SR-134 Interchange	Lankershim Blvd.	Chandler Blvd.	Weddington Ave.	**Kaiser Permanente**	3	71.9	73.6	63				71	76	72.4	74.3	0.5	0.7	3	3	--
				Lankershim Blvd.	Chandler Blvd.	Weddington Ave.	**Lofts at Noho**	2	63.5	65.4	58		61	66			64.3	66.1	0.8	0.7	4	5	--
B	SR-134 Freeway	Lankershim Blvd.	Pass Ave (EB) Hollywood Way (WB)																				
C	Pass Ave-Riverside Dr (EB) Hollywood Wa	SR-134 Freeway	Olive Ave.																				
C	Olive Ave.	Hollywood Way (EB) Riverside	Glenoaks Blvd.	Olive Ave.	Myers St.	Keystone St.	**2120 W. Olive Ave.**	2	73.5	75.3		66	66	73			74.0	75.8	0.5	0.5	5	5	--
				Olive Ave.	California St.	Alameda Ave.	**3205 W. Alameda Ave.**	2	70.1	72.0		64	66	71			70.6	72.6	0.5	0.6	5	5	--
				Olive Ave.	California St.	Alameda Ave.	**Burbank Studios**	1	71.1	73.1	62				71	75	71.6	73.7	0.5	0.6			
				Olive Ave.	Buena Vista St.	Brighton St.	**112 Buena Vista St.**	2	70.2	72.0		64	66	71			70.9	72.7	0.7	0.7	5	5	--
				Olive Ave.	Sparks St.	Beachwood Dr.	**114 Sparks St.**	2	63.8	65.7		47	62	67			63.9	65.7	0.1	0.0	5	5	--
				Olive Ave.	San Fernando Blvd.	3rd St.	**150 San Fernando Blvd.**	2	66.0	67.9		59	63	68			66.5	68.4	0.5	0.5	5	5	--
D	Glenoaks Blvd.	Olive Ave.	Central Ave.	Glenoaks Blvd.	Olive Ave.	Angeleno Ave.	**110 N. Glenoaks Ave**	3	69.4	71.2	59				69	74	69.8	71.6	0.4	0.4	5	5	--
				Glenoaks Blvd.	Justn Ave.	Ruberta Ave.	**1540 5th Street**	3	60.1	62.0	48				63	68	60.4	62.3	0.3	0.3	5	5	--
				Glenoaks Blvd.	Alameda Ave.	Spazier Ave.	**1112 Alameda Ave.**	2	67.8	69.6		60	63	68			68.3	70.1	0.5	0.5	5	5	--
				Glenoaks Blvd.	Willard Ave.	Grandview Ave.	**1068 Willard Ave.**	2	62.5	64.3		53	61	65			62.8	64.6	0.3	0.3	5	5	--
E1	Broadway	Central Ave.	Colorado Blvd.	Broadway	Chevy Chase Dr.	Verdugo Rd.	**1201 Broadway**	3	70.8	72.6	61				71	75	71.2	73.0	0.4	0.4	5	5	--
				Broadway	Brand Blvd.	Louise St.	**Hollywood Production Cen**	1	71.8	73.7	62				71	76	72.2	74.0	0.4	0.3	5	5	--
				Broadway	Brand Blvd.	Louise St.	**200 E. Broadways**	2	74.1	76.0		66	66	74			74.5	76.4	0.4	0.4	5	5	--
E2	Colorado St-Colorado Blvd.	Central Ave.	Broadway	Colorado St.	Central Ave.	Brand Blvd.	**Hampton Inn & Suites**	2	67.5	69.3		61	63	67			68.0	69.9	0.5	0.6	5	5	--
F2	Colorado Blvd.	Broadway	Linda Rosa Ave.	Colorado Blvd.	Rockland Ave.	Eagle Rock Blvd.	**2225 Colorado Blvd.**	3	60.6	61.7	53				63	68	61.4	63.3	0.8	1.6	5	5	--
				Colorado Blvd.	Rockland Ave.	Eagle Rock Blvd.	**5116 Rockland Ave.**	2	60.0	61.3		60.0	59	64			61.8	63.7	1.8	2.4	5	5	--
				Colorado Blvd.	Townsend Ave.	Floristan Ave.	**5063 Floristan Ave.**	3	67.1	68.9	53				68	72	67.3	69.1	0.2	0.2	5	5	--
H1	Colorado Blvd.	Raymond Ave.	Hill Ave.	Colorado Blvd.	Euclid Ave.	Los Robles Ave.	**385 E. Colorado Ave.**	2	71.8	74.2		66	66	70			72.3	74.8	0.5	0.6	5	5	--
				Colorado Blvd.	Los Robles Ave.	Oakland Ave.	**459 E. Colorado**	3	69.8	72.2	61				70	74	70.4	72.8	0.6	0.6	5	5	--
				Colorado Blvd.	Michigan Ave.	Chester Ave.	**School of Rock**	1	72.8	77.1	64				71	76	73.3	77.5	0.5	0.4	5	5	--
				Colorado Blvd.	Chester Ave.	Holliston Ave.	**1305 E. Colorado Blvd.**	3	66.5	70.8	56				67	72	66.9	71.2	0.4	0.4	5	5	--
				Colorado Blvd.	Holliston Ave.	Hill Ave.	**1336 E. Colorado Blvd**	2	70.3	74.6		64	65	69			70.8	75.0	0.5	0.4	5	5	--

AMBIENT NOISE MODELING


Legend
Modeled Roadway Segment
Proposed Project Route
Route Option
Google Earth
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KEY C

OLIVE AVENUE AT ALAMEDA AVENUE AND ONTARIO STREET

BURBANK STUDIOS
CATEGORY 1

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	17920	Total	-	1108	686	235	-	Traffic li	-	30.0	Average (of DGAC a	0.1
		Automobiles	-	841	520	178	56					
		Medium trucks	-	155	96	33	56					
		Heavy trucks	-	43	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	20	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+31	-							-	-	-	-	-
Alameda Avenue							Traffic direction: In entry direction					
0+00	17920	Total	-	1108	686	235	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	841	520	178	56					
		Medium trucks	-	155	96	33	56					
		Heavy trucks	-	43	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	20	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+34	-							-	-	-	-	-
Ontario Street							Traffic direction: In entry direction					
0+00	3640	Total	-	225	139	48	-	Traffic li	-	30.0	Average (of DGAC a	0.1 / 0.
		Automobiles	-	202	105	36	46					
		Medium trucks	-	13	19	7	46					
		Heavy trucks	-	7	5	2	46					
		Buses	-	0	1	0	46					
		Motorcycles	-	2	4	1	46					
		Auxiliary vehicle	-	1	4	1	46					
0+15	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Studios	11376964.1	3780240.02	North	GF	163.33	-	-	71.1	73.1	-	-
2	West Alameda Avenue 3205	11376866.2	3780244.66	South	GF	164.55	-	-	70.1	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Studios	GF	71.1	73.1		
Alameda Avenue		-		69.0	70.9
Olive Avenue		-		64.9	66.6
Ontario Street		-		62.5	65.8
West Alameda Avenue 3205	GF	70.1	72.0		
Alameda Avenue		-		68.7	70.6
Olive Avenue		-		64.0	65.7
Ontario Street		-		53.6	57.1

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Studios	GF	Day	40.	48.	52.	55.	56.	57.	57.	58.	59.	58.	59.	60.	60.	60.	59.	58.	58.	57.	57.	55.	52.	48.	44.	40.
			Lden	42.	50.	54.	57.	58.	59.	59.	61.	61.	60.	61.	62.	62.	62.	61.	60.	60.	59.	59.	57.	54.	50.	46.	42.
2	West Alameda Ave	GF	Day	39.	47.	51.	54.	55.	56.	56.	58.	58.	57.	58.	59.	59.	59.	58.	57.	57.	56.	56.	53.	51.	47.	42.	37.
			Lden	41.	49.	53.	56.	57.	58.	58.	60.	60.	59.	60.	61.	61.	61.	60.	59.	59.	58.	58.	55.	53.	49.	44.	39.

KEY E1

BROADWAY FROM BRAND TO LOUISE

HOLLYWOOD PRODUCTION CENTER
CATEGORY 1

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00	15056	Total	-	979	567	130	-	Traffic li	-	40.0	Average (of DGAC a	1.0
		Automobiles	-	743	430	98	56					
		Medium trucks	-	137	79	18	56					
		Heavy trucks	-	38	22	5	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	29	17	4	56					
		Auxiliary vehicle	-	28	16	4	56					
0+29	-							-	-	-	-	-
Artsakh Avenue							Traffic direction: In entry direction					
0+00	2052	Total	-	127	78	27	-	Traffic li	-	30.0	Average (of DGAC a	-1.5
		Automobiles	-	96	59	20	65					
		Medium trucks	-	18	11	4	65					
		Heavy trucks	-	5	3	1	65					
		Buses	-	0	0	0	65					
		Motorcycles	-	4	2	1	65					
		Auxiliary vehicle	-	4	2	1	65					
0+24	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	70.3	74.6	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	66.5	70.8	-	-
3	School of Rock	11396294.9	3778893.71	North	GF	245.49	-	-	72.8	77.1	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	70.3	74.6		
Colorado Boulevard		-		69.3	73.5
Hill Avenue		-		63.8	68.1
Holliston United Methodist Church	GF	66.5	70.8		
Colorado Boulevard		-		66.5	70.8
Hill Avenue		-		44.5	48.9
School of Rock	GF	72.8	77.1		
Colorado Boulevard		-		72.8	77.1
Hill Avenue		-		37.2	41.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	39.4	46.8	51.4	53.7	54.8	55.9	56.6	59.3	58.3	57.0	59.8	59.8	59.9	60.3	58.2	57.7	57.9	56.7	56.0	54.3	52.7	49.4	45.9	39.7
			Lden	42.9	50.3	55.2	57.8	59.0	59.9	61.3	64.7	63.4	60.0	63.0	62.9	64.0	64.2	62.4	61.7	61.0	61.7	60.0	59.0	56.8	54.7	50.2	44.1
2	Holliston United M	GF	Day	36.7	44.2	49.0	51.0	52.9	53.8	54.7	54.4	53.8	53.0	55.3	55.7	55.3	56.2	54.8	53.9	53.3	52.7	52.3	50.9	48.0	44.0	38.4	31.4
			Lden	39.7	47.8	53.0	55.9	57.3	58.2	58.4	58.8	57.8	57.7	60.0	59.8	59.4	60.1	59.0	58.0	57.4	57.2	57.3	55.0	53.1	49.7	43.8	36.5
3	School of Rock	GF	Day	41.9	49.7	54.0	57.3	58.0	59.4	59.8	61.0	61.2	60.4	61.2	61.0	61.8	61.9	61.0	60.7	60.4	59.0	59.4	57.7	54.0	50.0	45.9	41.7
			Lden	44.9	52.9	58.4	61.4	63.0	63.8	64.2	65.7	65.9	64.8	65.8	65.2	65.9	65.8	65.7	64.0	64.8	64.0	64.2	61.9	59.0	55.3	50.7	46.5

E Broadway
E Broadway
E Broadway
Artsakh Ave
Art
N
1 74.1 76.0
1 71.8 73.7
1
2
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 84
0 20 40 80 120 160
feet

KEY H1
COLORADO BOULEVARD FROM MICHIGAN TO CHESTER

SCHOOL OF ROCK
CATEGORY 1

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00	19460	Total	-	1203	744	256	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	914	565	142	56					
		Medium trucks	-	168	104	27	56					
		Heavy trucks	-	47	29	70	56					
		Buses	-	5	3	6	56					
		Motorcycles	-	35	22	6	56					
		Auxiliary vehicle	-	34	21	6	56					
0+48	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00	23304	Total	-	1441	891	306	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1095	676	170	56					
		Medium trucks	-	201	125	32	56					
		Heavy trucks	-	56	35	84	56					
		Buses	-	6	3	7	56					
		Motorcycles	-	42	26	7	56					
		Auxiliary vehicle	-	41	25	7	56					
0+31	-							-	-	-	-	-

Receiver list

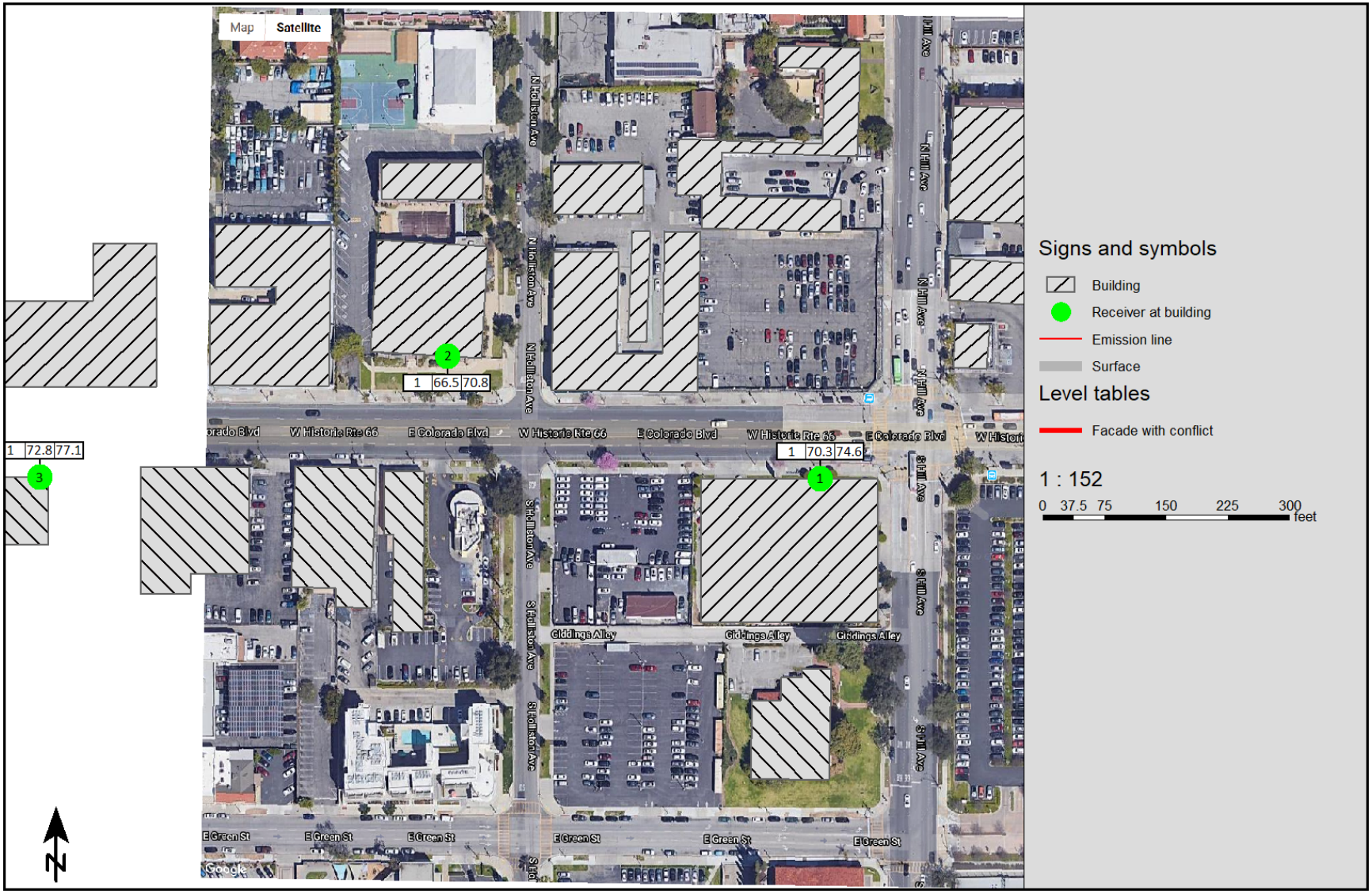
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	70.3	74.6	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	66.5	70.8	-	-
3	School of Rock	11396294.9	3778893.71	North	GF	245.49	-	-	72.8	77.1	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	70.3	74.6		
Colorado Boulevard		-		69.3	73.5
Hill Avenue		-		63.8	68.1
Holliston United Methodist Church	GF	66.5	70.8		
Colorado Boulevard		-		66.5	70.8
Hill Avenue		-		44.5	48.9
School of Rock	GF	72.8	77.1		
Colorado Boulevard		-		72.8	77.1
Hill Avenue		-		37.2	41.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	39.4	46.8	51.4	53.7	54.8	55.9	56.6	59.3	58.3	57.0	59.8	59.8	59.9	60.3	58.2	57.7	57.9	56.7	56.0	54.3	52.7	49.4	45.9	39.7
			Lden	42.9	50.3	55.2	57.8	59.0	59.9	61.3	64.7	63.4	60.0	63.0	62.9	64.0	64.2	62.4	61.7	61.0	61.7	60.0	59.0	56.8	54.7	50.2	44.1
2	Holliston United M	GF	Day	36.7	44.2	49.0	51.0	52.9	53.8	54.7	54.4	53.8	53.0	55.3	55.7	55.3	56.2	54.8	53.9	53.3	52.7	52.3	50.9	48.0	44.0	38.4	31.4
			Lden	39.7	47.8	53.0	55.9	57.3	58.2	58.4	58.8	57.8	57.7	60.0	59.8	59.4	60.1	59.0	58.0	57.4	57.2	57.3	55.0	53.1	49.7	43.8	36.5
3	School of Rock	GF	Day	41.9	49.7	54.0	57.3	58.0	59.4	59.8	61.0	61.2	60.4	61.2	61.0	61.8	61.9	61.0	60.7	60.4	59.0	59.4	57.7	54.0	50.0	45.9	41.7
			Lden	44.9	52.9	58.4	61.4	63.0	63.8	64.2	65.7	65.9	64.8	65.8	65.2	65.9	65.8	65.7	64.0	64.8	64.0	64.2	61.9	59.0	55.3	50.7	46.5


Map
Satellite
N Hollister Ave
N Hill Ave
W Historic Rte 66
E Colorado Blvd
S Hollister Ave
S Hill Ave
Giddings Alley
E Green St
Google
1 66.5 70.8
1 72.8 77.1
1 70.3 74.6
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 152
0 37.5 75 150 225 300
feet

KEY A1

CHANDLER BOULEVARD FROM LANKERSHIM AND BLAKESLEE

5416 FAIR AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

5525 VINELAND AVENUE
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	31656	Total	-	1957	1211	416	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1485	918	316	56					
		Medium trucks	-	274	170	59	56					
		Heavy trucks	-	77	47	16	56					
		Buses	-	8	5	1	56					
		Motorcycles	-	57	36	12	56					
		Auxiliary vehicle	-	56	35	12	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	11916	Total	-	737	456	156	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -
		Automobiles	-	559	346	118	56					
		Medium trucks	-	103	64	22	56					
		Heavy trucks	-	29	18	6	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	22	14	5	56					
		Auxiliary vehicle	-	21	13	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	5188	Total	-	321	198	68	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	244	150	52	48					
		Medium trucks	-	45	28	10	48					
		Heavy trucks	-	13	8	3	48					
		Buses	-	1	1	0	48					
		Motorcycles	-	9	6	2	48					
		Auxiliary vehicle	-	9	6	2	48					
0+06(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1	3781696.23	-	GF	191.40	-	-	70.3	72.1	-	-
2	Gallery at NoHo Commons	11373425.6	3781689.51	South	GF	194.08	-	-	64.1	65.9	-	-
3	Gray Studios	11373713.1	3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.3	72.1		
Chandler Ave b/t Fair and Vineland		-		59.3	61.1
Fair Ave N of Chandller		-		34.4	36.2
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.0	70.8
Gallery at NoHo Commons	GF	64.1	65.9		
Chandler Ave b/t Fair and Vineland		-		63.5	65.3
Fair Ave N of Chandller		-		52.5	54.3
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		49.6	51.5
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.0	43.9
Fair Ave N of Chandller		-		30.3	32.1
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.4	56.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.	48.	53.	56.	57.	58.	59.	59.	57.	56.	57.	58.	58.	58.	57.	57.	56.	56.	56.	54.	51.	47.	42.	35.
			Lden	43.	50.	55.	58.	59.	60.	61.	61.	59.	58.	59.	60.	60.	60.	59.	59.	58.	57.	58.	56.	53.	49.	44.	37.
2	Gallery at NoHo C	GF	Day	35.	42.	47.	50.	51.	52.	52.	53.	51.	50.	51.	52.	52.	52.	51.	51.	50.	50.	50.	47.	45.	42.	36.	30.
			Lden	36.	44.	49.	52.	53.	54.	54.	55.	53.	52.	53.	54.	54.	54.	53.	53.	52.	51.	52.	49.	47.	43.	38.	32.
3	Gray Studios	GF	Day	39.	47.	51.	54.	55.	56.	57.	58.	58.	58.	59.	59.	59.	60.	59.	57.	57.	55.	54.	51.	50.	49.	45.	38.
			Lden	41.	48.	53.	56.	57.	58.	58.	60.	60.	60.	61.	61.	61.	62.	60.	59.	58.	57.	56.	53.	52.	51.	47.	40.

Metro BRT NoHo to Pasadena

Signs and symbols

- Building
- Receiver
- Receiver at building
- Emission line
- Surface

Level tables

- Facade with conflict

1 : 183

0 45 90 180 270 360 feet

KEY C

OLIVE AVENUE FROM MYERS TO KEYSTONE

2120 WEST OLIVE AVENUE
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Ave b/t Buena Vista and Keystone							Traffic direction: In entry direction					
0+00	26528	Total	-	1640	1016	348	-	Traffic li	-	30.0	Average (of DGAC a	-0.1
		Automobiles	-	1245	771	264	56					
		Medium trucks	-	230	142	49	56					
		Heavy trucks	-	64	40	14	56					
		Buses	-	6	4	1	56					
		Motorcycles	-	48	30	10	56					
		Auxiliary vehicle	-	47	29	10	56					
0+25	-							-	-	-	-	-
Keystone Avenue							Traffic direction: In entry direction					
0+00	1988	Total	-	123	76	26	-	Traffic li	-	30.0	Average (of DGAC a	-0.8 / 0
		Automobiles	-	93	58	20	46					
		Medium trucks	-	17	11	4	46					
		Heavy trucks	-	5	3	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	4	2	1	46					
		Auxiliary vehicle	-	4	2	1	46					
0+42	-							-	-	-	-	-

Receiver list

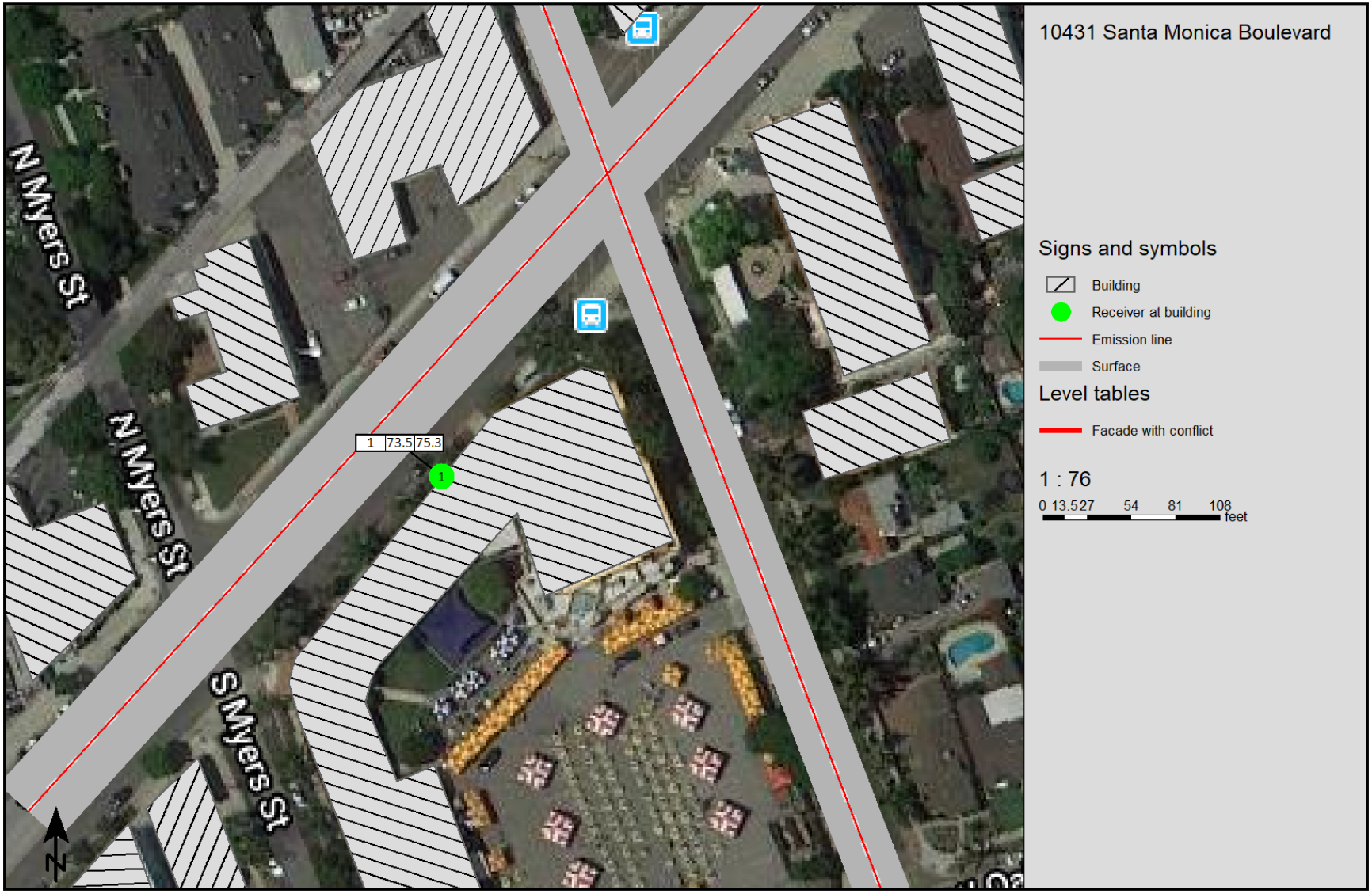
No.	Receiver name	Coordinates X	Y	Building side	Floor	Height abv.grd. m	Limit Day	Limit Lden	Level Day	Level Lden	Conflict Day	Conflict Lden
		in meter					dB(A)		dB(A)		dB	
1	St. Finbar School	11377724.5	3781109.46	North we	GF	167.06	-	-	73.5	75.3	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
St. Finbar School	GF	73.5	75.3		
Keystone Avenue		-		47.0	48.8
Olive Ave b/t Buena Vista and Keystone		-		73.4	75.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	St. Finbar School	GF	Day	41.4	49.	53.9	56.4	57.8	58.0	59.4	61.4	62.2	60.9	61.9	63.	63.	63.4	62.4	61.0	60.4	59.3	58.2	55.	52.4	51.	48.8	44.
			Lden	43.3	51.0	55.8	58.4	59.	60.4	61.3	63.	64.0	62.8	63.8	65.4	65.0	65.	64.3	63.4	62.4	61.2	60.	57.0	54.4	52.9	50.0	45.


10431 Santa Monica Boulevard
N Myers St
N Myers St
S Myers St
1 73.5 75.3
1
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 76
0 13.527 54 81 108
feet
N

KEY D

GLENOAKS BOULEVARD FROM OLIVE TO ANGELENO

110 NORTH GLENOAKS BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	35876	Total	-	2218	1373	471	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1685	1043	358	46					
		Medium trucks	-	311	192	66	46					
		Heavy trucks	-	87	54	18	46					
		Buses	-	7	5	2	46					
		Motorcycles	-	65	40	14	46					
		Auxiliary vehicle	-	63	39	13	46					
0+25	-							-	-	-	-	-
North Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	13088	Total	-	809	501	172	-	Traffic li	-	30.0	Average (of DGAC a	-1.9
		Automobiles	-	615	381	131	46					
		Medium trucks	-	113	70	24	46					
		Heavy trucks	-	32	20	7	46					
		Buses	-	3	2	1	46					
		Motorcycles	-	24	15	5	46					
		Auxiliary vehicle	-	23	14	5	46					
0+22	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Central LIbrary	11379602.4	13783293.5	South we	GF	202.86	-	-	69.4	71.2	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Central LIbrary	GF	69.4	71.2		
North Glenoaks Boulevard		-		68.0	69.9
Olive Avenue		-		63.7	65.5

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Central L	GF	Day	39.(	46.(	51.2	53.7	54.(	55.4	56.(	58.2	58.(	56.4	58.7	59.4	58.2	58.4	57.7	56.(	56.(	56.(	55.2	52.7	49.(	45.(	42.(	37.7
			Lden	40.(	48.4	53.7	55.(	56.7	57.2	57.(	60.(	59.(	58.2	59.(	61.2	60.(	60.2	59.(	58.(	58.(	58.(	57.(	57.(	54.(	51.7	47.(	44.7	39.(

1
1 69.4 71.2
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 68
0 12 24 48 72 96
feet

KEY D
GLENOAKS BOUELVARD FROM JUSTIN TO RUBERTA

1540 5th STREET
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 1
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	36956	Total	-	2285	1414	485	-	Traffic li	30.0	100.0	Average (of DGAC a	-1.4
		Automobiles	-	1735	1074	368	56					
		Medium trucks	-	320	198	68	56					
		Heavy trucks	-	89	55	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	67	42	14	56					
		Auxiliary vehicle	-	65	40	14	56					
0+43	-							-	-	-	-	-
Justin Avenue							Traffic direction: In entry direction					
0+00	1308	Total	-	81	50	17	-	Traffic li	30.0	100.0	Average (of DGAC a	3.3
		Automobiles	-	62	38	13	46					
		Medium trucks	-	11	7	2	46					
		Heavy trucks	-	3	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	2	1	0	46					
		Auxiliary vehicle	-	2	1	0	46					
0+30	-							-	-	-	-	-

Receiver list

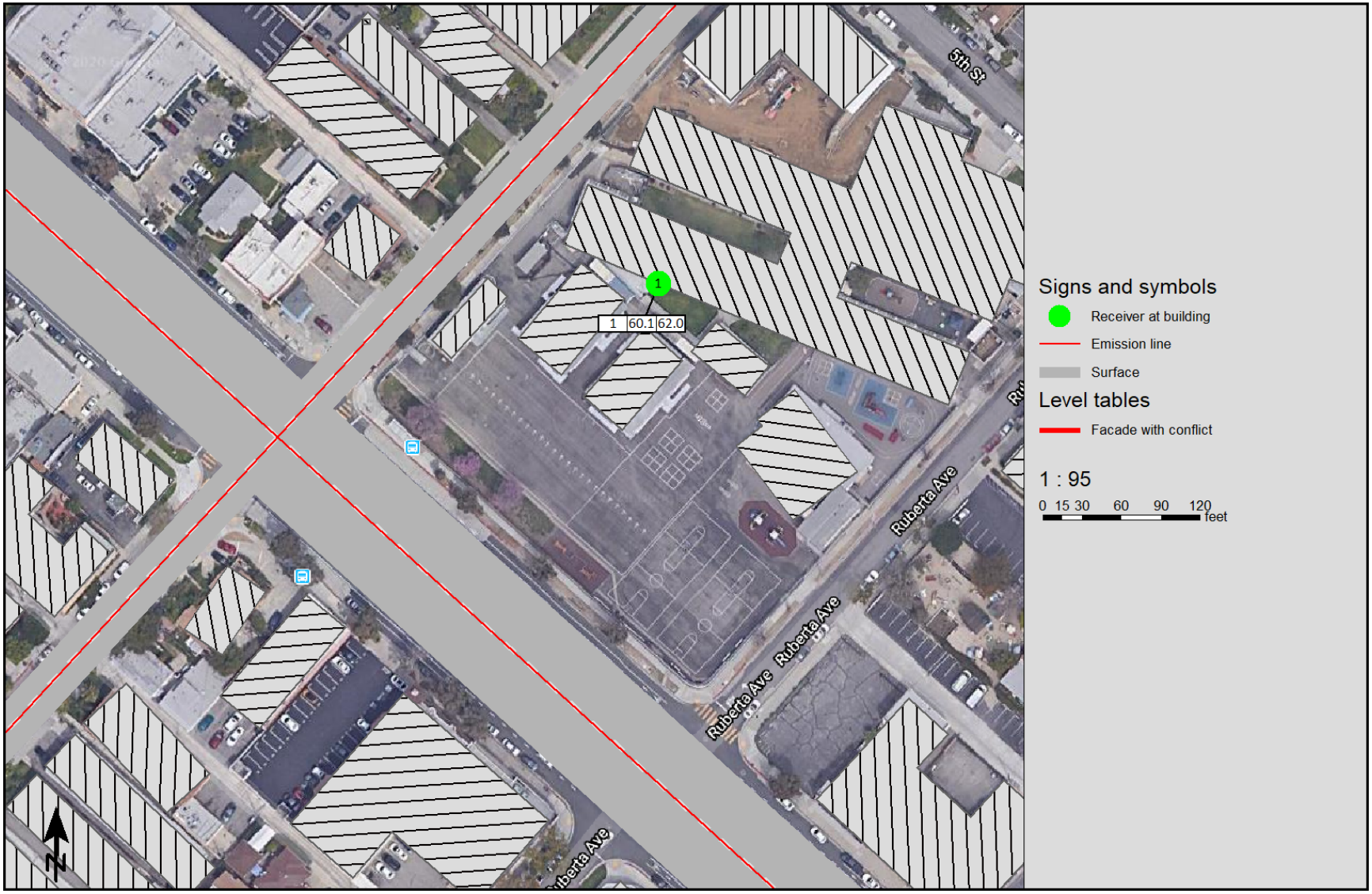
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Thomas Jefferson Elementary	11381398.4	3781760.33	South we	GF	169.93	-	-	60.1	62.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Thomas Jefferson Elementary	GF	60.1	62.0		
1		-		-	-
Glenoaks Boulevard		-		59.9	61.8
Justin Avenue		-		46.5	48.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Thomas Jefferson	GF	Day	30.(	38.4	42.7	44.(	45.4	46.7	46.8	47.9	47.2	46.8	48.(	49.9	49.9	50.7	48.7	48.2	47.2	45.(	46.4	43.(	39.(	34.9	27.7	18.(
			Lden	31.9	40.2	44.(	46.4	47.2	48.(	48.7	49.8	49.(	48.(	50.(	51.7	51.8	52.(	50.4	50.(	49.2	47.(	48.2	45.4	41.4	36.(	29.(	19.4


5th St
Ruberta Ave
Ruberta Ave
Ruberta Ave
Ruberta Ave
1
1 60.1 62.0
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 95
0 15 30 60 90 120
feet

KEY E1

BROADWAY BETWEEN CHEVY CHASE AND VERDUGO

1201 EAST BROADWAY
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00	18224	Total	-	1127	699	238	-	Traffic li	-	30.0	Average (of DGAC a	0.0 / 0.
		Automobiles	-	856	530	181	56					
		Medium trucks	-	158	98	33	56					
		Heavy trucks	-	44	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	21	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+26	-							-	-	-	-	-
Chevy Chase Drive							Traffic direction: In entry direction					
0+00	20116	Total	-	1244	769	264	-	Traffic li	-	30.0	Average (of DGAC a	-1.8
		Automobiles	-	945	583	201	56					
		Medium trucks	-	174	108	37	56					
		Heavy trucks	-	49	30	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	36	23	8	56					
		Auxiliary vehicle	-	35	22	8	56					
0+17	-							-	-	-	-	-

Receiver list

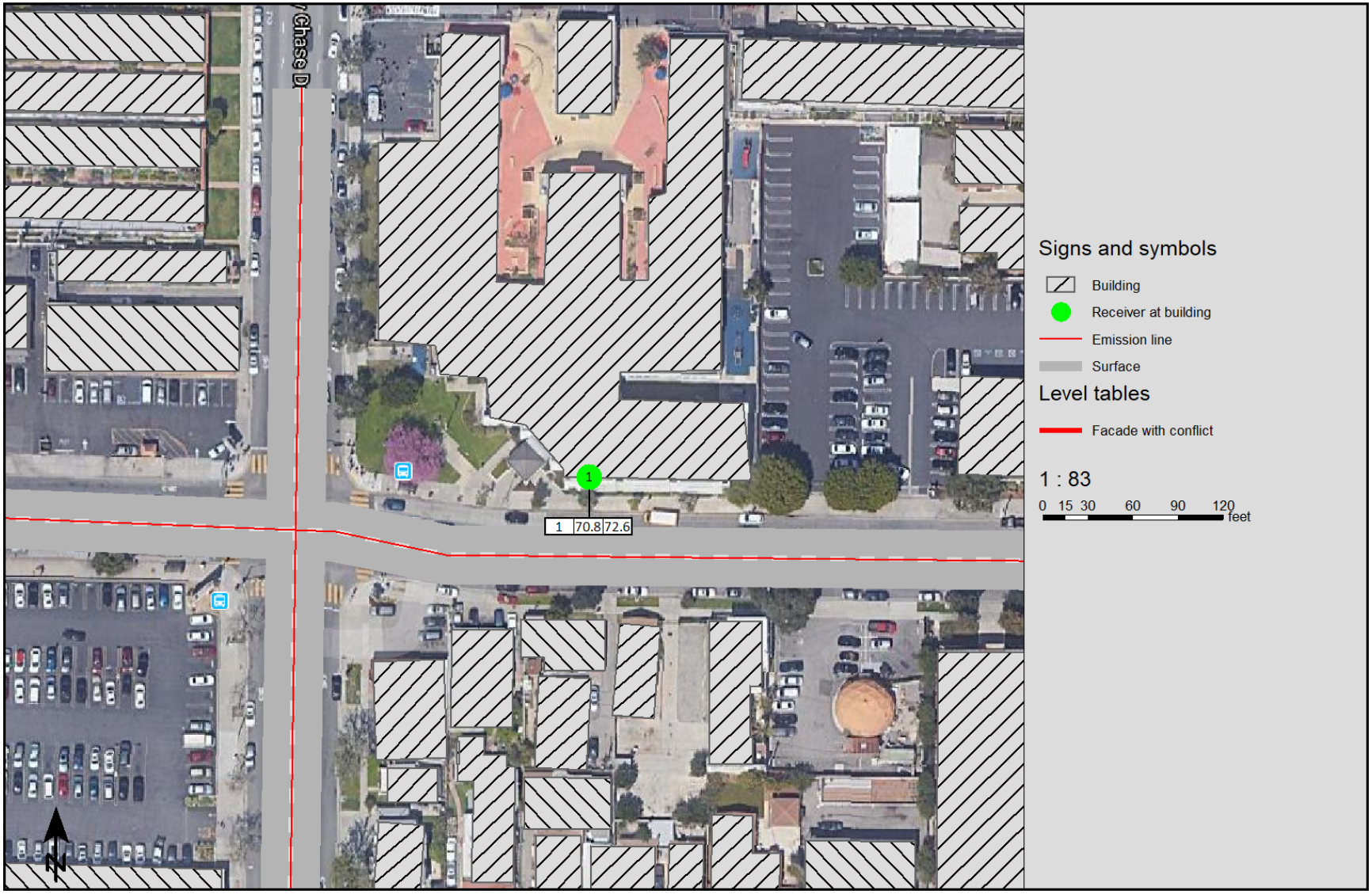
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	John Marshall Elementary	11385774.8	3779074.69	South	GF	180.53	-	-	70.8	72.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
John Marshall Elementary	GF	70.8	72.6		
Broadway		-		70.5	72.3
Chevy Chase Drive		-		59.3	61.2

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	John Marshall Eler	GF	Day	39.	46.(	51.2	53.(	54.(	55.(	57.3	60.	59.2	58.2	60.(	61.2	59.(	60.(	58.(	57.7	57.(	57.4	56.(	53.7	52.	48.3	45.(	40.3
			Lden	40.(	48.(	53.(	55.4	56.7	57.7	59.	61.(	61.(	60.(	62.4	63.	61.(	61.(	60.(	59.(	59.(	59.3	58.4	55.(	53.(	50.2	47.(	42.7


Chase D
1
1 70.8 72.6
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 15 30 60 90 120
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND AND EAGLE ROCK

2225 COLORADO BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1								Traffic direction: Both directions				
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard								Traffic direction: In entry direction				
0+00	4072	Total	-	252	156	53	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	191	118	40	56					
		Medium trucks	-	35	22	7	56					
		Heavy trucks	-	10	6	2	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	7	5	2	56					
		Auxiliary vehicle	-	7	4	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard								Traffic direction: In entry direction				
0+00	27220	Total	-	2149	252	53	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -1
		Automobiles	-	1632	191	40	56					
		Medium trucks	-	301	35	7	56					
		Heavy trucks	-	84	10	2	56					
		Buses	-	8	1	0	56					
		Motorcycles	-	63	7	2	56					
		Auxiliary vehicle	-	61	7	2	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	60.6	61.7	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.3	60.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	60.6	61.7		
1		-		-	-
Colorado Boulevard		-		55.1	53.2
Eagle Rock Boulevard		-		59.2	61.0
Rockland Avenue 5116	GF	61.3	60.0		
1		-		-	-
Colorado Boulevard		-		60.9	59.0
Eagle Rock Boulevard		-		51.5	53.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	31.4	39.0	43.7	46.0	47.7	47.0	47.8	48.3	47.9	48.0	49.7	50.0	49.9	50.3	48.8	47.9	47.2	46.0	46.4	44.4	41.4	37.2	31.3	24.1
			Lden	32.2	39.8	44.4	46.9	48.0	48.0	48.8	49.1	48.9	49.0	50.7	51.2	50.6	51.4	49.8	49.0	48.4	47.4	47.4	45.8	42.9	38.8	33.0	26.0
2	Rockland Avenue	GF	Day	33.8	40.9	43.8	45.0	45.7	44.9	46.0	49.1	50.0	49.1	50.8	51.4	50.0	50.0	49.7	48.9	48.3	49.0	48.9	45.0	43.7	38.2	32.7	24.0
			Lden	32.4	39.2	42.8	43.7	43.9	43.8	44.8	47.8	48.7	47.9	49.8	50.7	48.7	49.3	48.3	47.4	46.9	47.0	47.2	43.8	41.7	36.8	30.8	22.9

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Caspar Ave
Merton Ave
2
1 61.3 60.0
1
1 60.6 61.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY F2

COLORADO BOULEVARD FROM TOWNSEND TO FLORISTAN

5063 FLORISTAN AVENUE
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

1597 WALDRAN AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	37220	Total	-	2303	1422	487	-	Traffic li	-	30.0	Average (of DGAC a	0.4 / 3.
		Automobiles	-	1746	1080	370	56					
		Medium trucks	-	322	199	68	56					
		Heavy trucks	-	90	55	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	68	42	14	56					
		Auxiliary vehicle	-	68	41	14	56					
0+41(	-							-	-	-	-	-
Townsend Avenue							Traffic direction: In entry direction					
0+00(	1664	Total	-	103	63	22	-	Stop sig	-	100.0	Average (of DGAC a	-2.2
		Automobiles	-	78	48	17	46					
		Medium trucks	-	14	9	3	46					
		Heavy trucks	-	4	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	3	2	1	46					
		Auxiliary vehicle	-	3	2	1	46					
0+17(	-							-	-	-	-	-

Receiver list

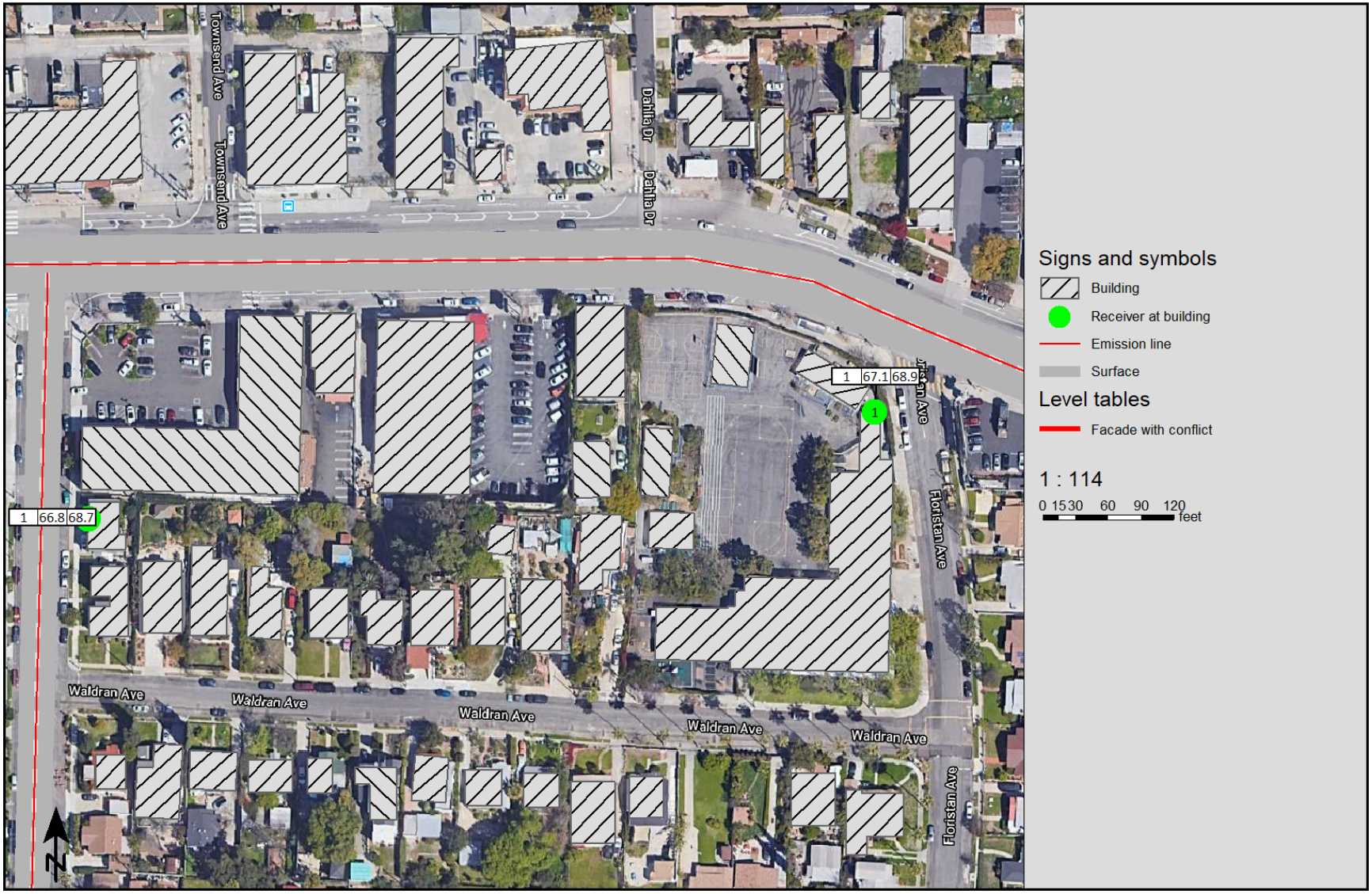
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Dahlia Heights Elementary Sc	11389451.0	3778232.14	North	GF	206.73	-	-	67.1	68.9	-	-
2	Waldran Avenue 1068	11389232.4	3778202.50	West	GF	202.83	-	-	66.8	68.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Dahlia Heights Elementary School	GF	67.1	68.9		
Colorado Boulevard		-		67.1	68.9
Townsend Avenue		-		30.3	32.1
Waldran Avenue 1068	GF	66.8	68.7		
Colorado Boulevard		-		58.8	60.6
Townsend Avenue		-		66.1	67.9

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Dahlia Heights Ele	GF	Day	37.	44.9	49.	51.8	53.4	54.	55.8	57.	55.	54.	55.	55.2	55.9	55.	54.4	54.2	53.0	52.2	52.9	50.	48.2	44.0	40.9	33.9
			Lden	39.0	46.2	51.0	53.0	55.2	56.0	57.0	58.9	57.9	56.0	56.9	57.	57.2	57.9	56.2	56.	55.9	54.2	54.	52.9	50.0	46.4	42.2	35.1
2	Waldran Avenue 1	GF	Day	35.2	43.2	48.	50.0	51.8	52.	54.0	56.	55.2	53.9	56.	56.0	55.0	56.2	55.2	54.2	53.0	52.0	51.0	49.2	46.9	44.0	42.	37.
			Lden	37.0	45.0	49.9	52.4	53.0	54.9	55.8	58.9	57.0	55.8	58.0	58.4	57.9	58.0	57.	56.	55.4	54.4	53.9	51.0	48.2	46.4	43.9	38.9


Townsend Ave
Townsend Ave
Dahlia Dr
Dahlia Dr
1 67.1 68.9
1
Floristan Ave
Floristan Ave
1 66.8 68.7
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Floristan Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 114
0 15 30 60 90 120
feet

KEY H1
COLORADO BOULEVARD FROM LOS ROBLES TO OAKLAND

459 EAST COLORADO BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

385 EAST COLORADO BOULEVARD
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00	18868	Total	-	1167	744	236	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	913	565	179	56					
		Medium trucks	-	168	104	33	56					
		Heavy trucks	-	47	29	9	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	34	22	7	56					
		Auxiliary vehicle	-	-	21	7	56					
0+46	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00	24372	Total	-	1507	932	320	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1179	708	243	56					
		Medium trucks	-	217	130	45	56					
		Heavy trucks	-	61	36	12	56					
		Buses	-	6	4	1	56					
		Motorcycles	-	44	28	9	56					
		Auxiliary vehicle	-	-	26	9	56					
0+29	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	69.8	72.2	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	71.8	74.2	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	69.8	72.2		
Colorado Boulevard		-		69.6	71.9
Los Robles Avenue		-		57.5	60.0
Western Asset Plaza 385	GF	71.8	74.2		
Colorado Boulevard		-		71.3	73.6
Los Robles Avenue		-		62.1	64.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's I	GF	Day	37.	45.(	49.4	51.(	53.2	54.2	55.2	57.2	57.(	57.4	58.9	60.(	59.9	60.	59.2	58.4	57.4	55.(	54.2	51.4	48.	44.4	41.4	38.
			Lden	39.(	47.	51.	54.2	55.(	56.(	57.(	59.9	60.2	59.	61.2	62.	62.2	62.4	61.(	60.(	59.	58.2	56.(	54.(	50.(	47.2	44.(	40.(
2	Western Asset Pla	GF	Day	39.9	46.9	51.4	53.(	55.2	56.2	57.(	59.9	59.9	59.9	61.	62.(	61.9	61.(	60.(	59.	58.	57.2	56.(	53.	50.	48.9	46.(	41.
			Lden	41.(	49.(	53.	56.2	57.9	58.	60.2	62.	62.	61.(	64.(	64.9	63.(	64.	63.	61.9	61.(	59.(	58.	55.9	53.(	51.2	48.(	43.(

Union St
N Eldridge Ave
N Oakland Ave
Converse Alley
E Green St
2
1 71.8 74.2
1
1 69.8 72.2
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 30 60 120 180 240
feet

KEY H1

COLORADO BOULEVARD FROM CHESTER TO HOLLISTON

1305 EAST COLORADO BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

1336 EAST COLORADO BOULEVARD
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

KEY A1

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00	19460	Total	-	1203	744	256	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	914	565	142	56					
		Medium trucks	-	168	104	27	56					
		Heavy trucks	-	47	29	70	56					
		Buses	-	5	3	6	56					
		Motorcycles	-	35	22	6	56					
		Auxiliary vehicle	-	34	21	6	56					
0+48	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00	23304	Total	-	1441	891	306	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1095	676	170	56					
		Medium trucks	-	201	125	32	56					
		Heavy trucks	-	56	35	84	56					
		Buses	-	6	3	7	56					
		Motorcycles	-	42	26	7	56					
		Auxiliary vehicle	-	41	25	7	56					
0+31	-							-	-	-	-	-

Receiver list

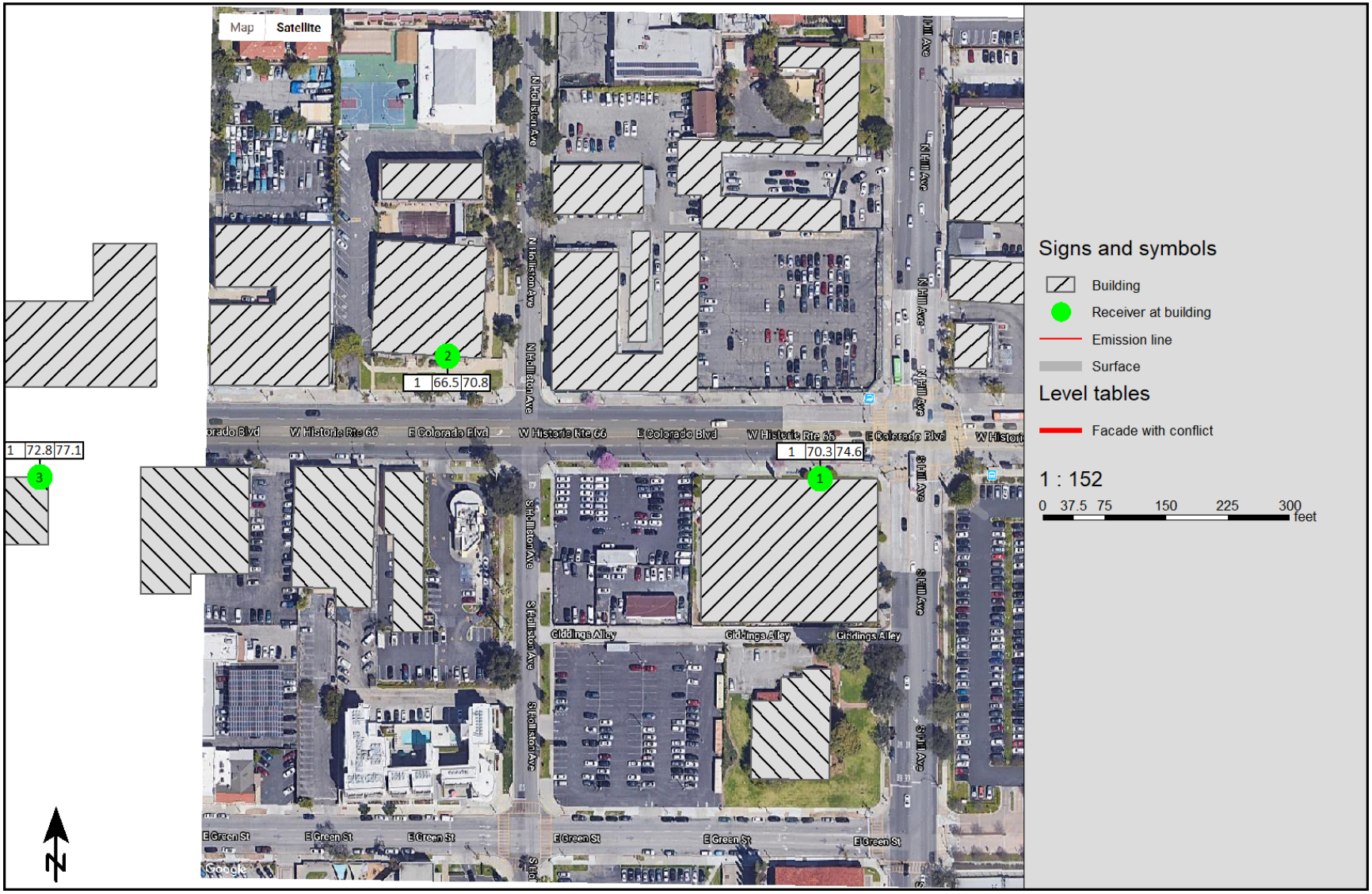
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	70.3	74.6	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	66.5	70.8	-	-
3	School of Rock	11396294.9	3778893.71	North	GF	245.49	-	-	72.8	77.1	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	70.3	74.6		
Colorado Boulevard		-		69.3	73.5
Hill Avenue		-		63.8	68.1
Holliston United Methodist Church	GF	66.5	70.8		
Colorado Boulevard		-		66.5	70.8
Hill Avenue		-		44.5	48.9
School of Rock	GF	72.8	77.1		
Colorado Boulevard		-		72.8	77.1
Hill Avenue		-		37.2	41.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	39.4	46.8	51.4	53.7	54.8	55.9	56.6	59.3	58.3	57.0	59.8	59.8	59.9	60.3	58.2	57.7	57.9	56.7	56.0	54.3	52.7	49.4	45.9	39.7
			Lden	42.9	50.3	55.2	57.8	59.0	59.9	61.3	64.7	63.4	60.0	63.0	62.9	64.0	64.2	62.4	61.7	61.0	61.7	60.0	59.0	56.8	54.7	50.2	44.1
2	Holliston United M	GF	Day	36.7	44.2	49.0	51.0	52.9	53.8	54.7	54.4	53.8	53.0	55.3	55.7	55.3	56.2	54.8	53.9	53.3	52.7	52.3	50.9	48.0	44.0	38.4	31.4
			Lden	39.7	47.8	53.0	55.9	57.3	58.2	58.4	58.8	57.8	57.7	60.0	59.8	59.4	60.1	59.0	58.0	57.4	57.2	57.3	55.0	53.1	49.7	43.8	36.5
3	School of Rock	GF	Day	41.9	49.7	54.0	57.3	58.0	59.4	59.8	61.0	61.2	60.4	61.2	61.0	61.8	61.9	61.0	60.7	60.4	59.0	59.4	57.7	54.0	50.0	45.9	41.7
			Lden	44.9	52.9	58.4	61.4	63.0	63.8	64.2	65.7	65.9	64.8	65.8	65.2	65.9	65.8	65.7	64.0	64.8	64.0	64.2	61.9	59.0	55.3	50.7	46.5


Map
Satellite
N Hollister Ave
N Hill Ave
W Historic Rte 66
E Colorado Blvd
S Hollister Ave
S Hill Ave
Giddings Alley
E Green St
Google
1 66.5 70.8
1 72.8 77.1
1 70.3 74.6
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 152
0 37.5 75 150 225 300
feet

KEY C
OLIVE AVENUE FROM BUENA VISTA TO BRIGHTON

112 BUENA VISTA STREET
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Drive							Traffic direction: In entry direction					
0+00	29996	Total	-	1855	1148	393	-	Traffic li	-	30.0	Average (of DGAC a	0.7
		Automobiles	-	1408	871	299	56					
		Medium trucks	-	260	161	55	56					
		Heavy trucks	-	72	45	15	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	55	34	12	56					
		Auxiliary vehicle	-	53	33	11	56					
0+25	-							-	-	-	-	-
Olive Drive1							Traffic direction: In entry direction					
0+00	27628	Total	-	1708	1057	363	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1296	802	276	56					
		Medium trucks	-	239	148	51	56					
		Heavy trucks	-	66	41	14	56					
		Buses	-	6	4	1	56					
		Motorcycles	-	51	31	11	56					
		Auxiliary vehicle	-	49	30	10	56					
0+21	-							-	-	-	-	-

Receiver list

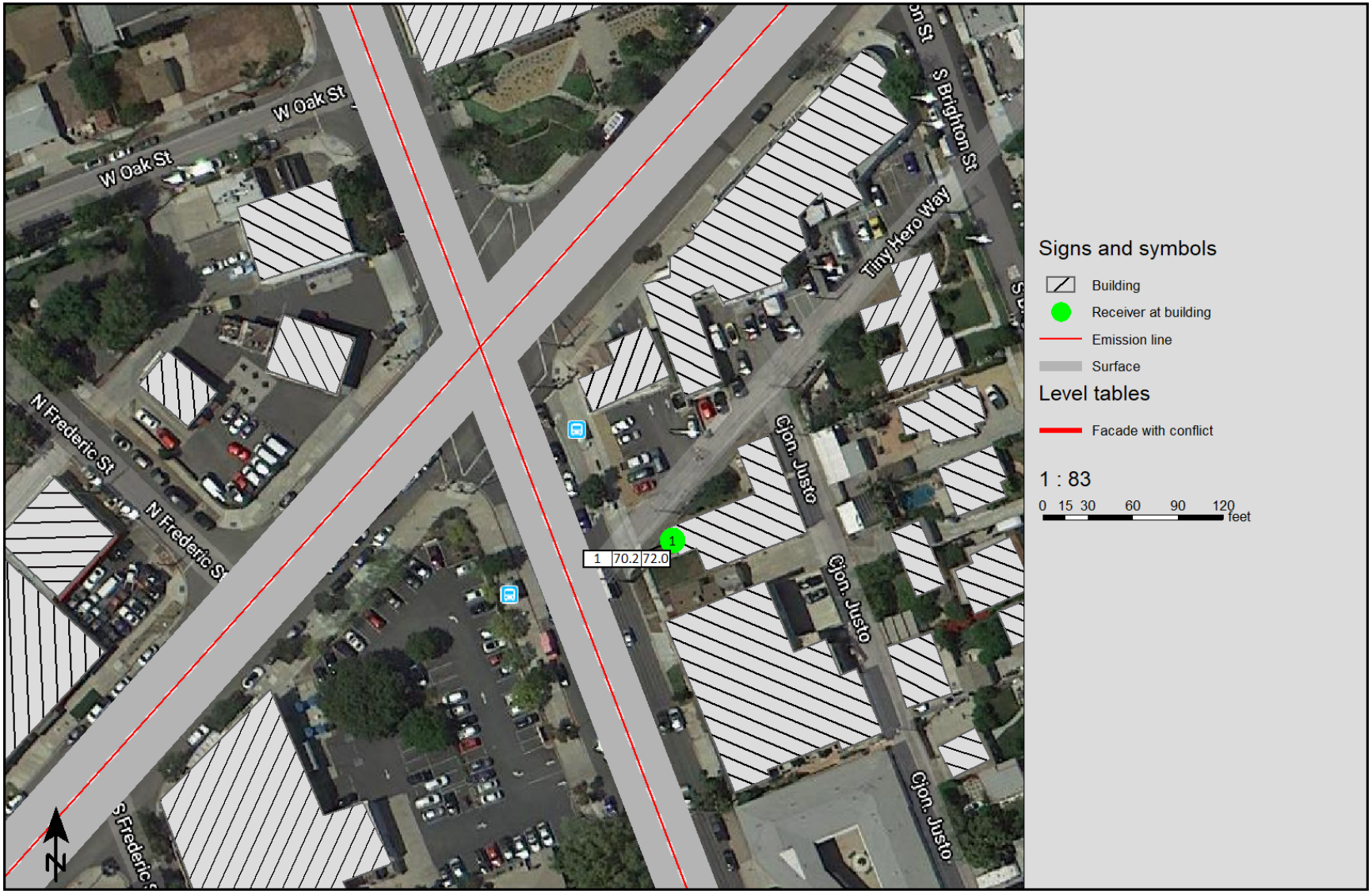
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Buena Vista Street 112	11377485.8	3780785.08	West	GF	163.97	-	-	70.2	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Buena Vista Street 112	GF	70.2	72.0		
Olive Drive		-		63.3	65.1
Olive Drive1		-		69.2	71.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Buena Vista Stree	GF	Day	40.2	47.9	52.6	55.7	56.4	57.0	57.3	58.2	58.3	57.0	58.9	59.8	59.3	58.9	57.8	57.4	56.0	56.2	56.4	55.2	52.0	48.7	45.4	38.9
			Lden	42.7	49.7	54.4	56.9	58.2	58.9	59.7	60.0	60.7	59.4	60.7	61.7	61.7	60.8	59.7	59.2	58.8	58.2	58.2	57.0	53.8	50.8	47.2	40.7


W Oak St
W Oak St
N Frederic St
N Frederic St
S Brighton St
Tiny Hero Way
Cjon. Justo
Cjon. Justo
Cjon. Justo
1
1 70.2 72.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE AT ALAMEDA AVENUE AND ONTARIO STREET

3205 WEST ALAMEDA AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	17920	Total	-	1108	686	235	-	Traffic li	-	30.0	Average (of DGAC a	0.1
		Automobiles	-	841	520	178	56					
		Medium trucks	-	155	96	33	56					
		Heavy trucks	-	43	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	20	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+31	-							-	-	-	-	-
Alameda Avenue							Traffic direction: In entry direction					
0+00	17920	Total	-	1108	686	235	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	841	520	178	56					
		Medium trucks	-	155	96	33	56					
		Heavy trucks	-	43	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	20	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+34	-							-	-	-	-	-
Ontario Street							Traffic direction: In entry direction					
0+00	3640	Total	-	225	139	48	-	Traffic li	-	30.0	Average (of DGAC a	0.1 / 0.
		Automobiles	-	202	105	36	46					
		Medium trucks	-	13	19	7	46					
		Heavy trucks	-	7	5	2	46					
		Buses	-	0	1	0	46					
		Motorcycles	-	2	4	1	46					
		Auxiliary vehicle	-	1	4	1	46					
0+15	-							-	-	-	-	-

Receiver list

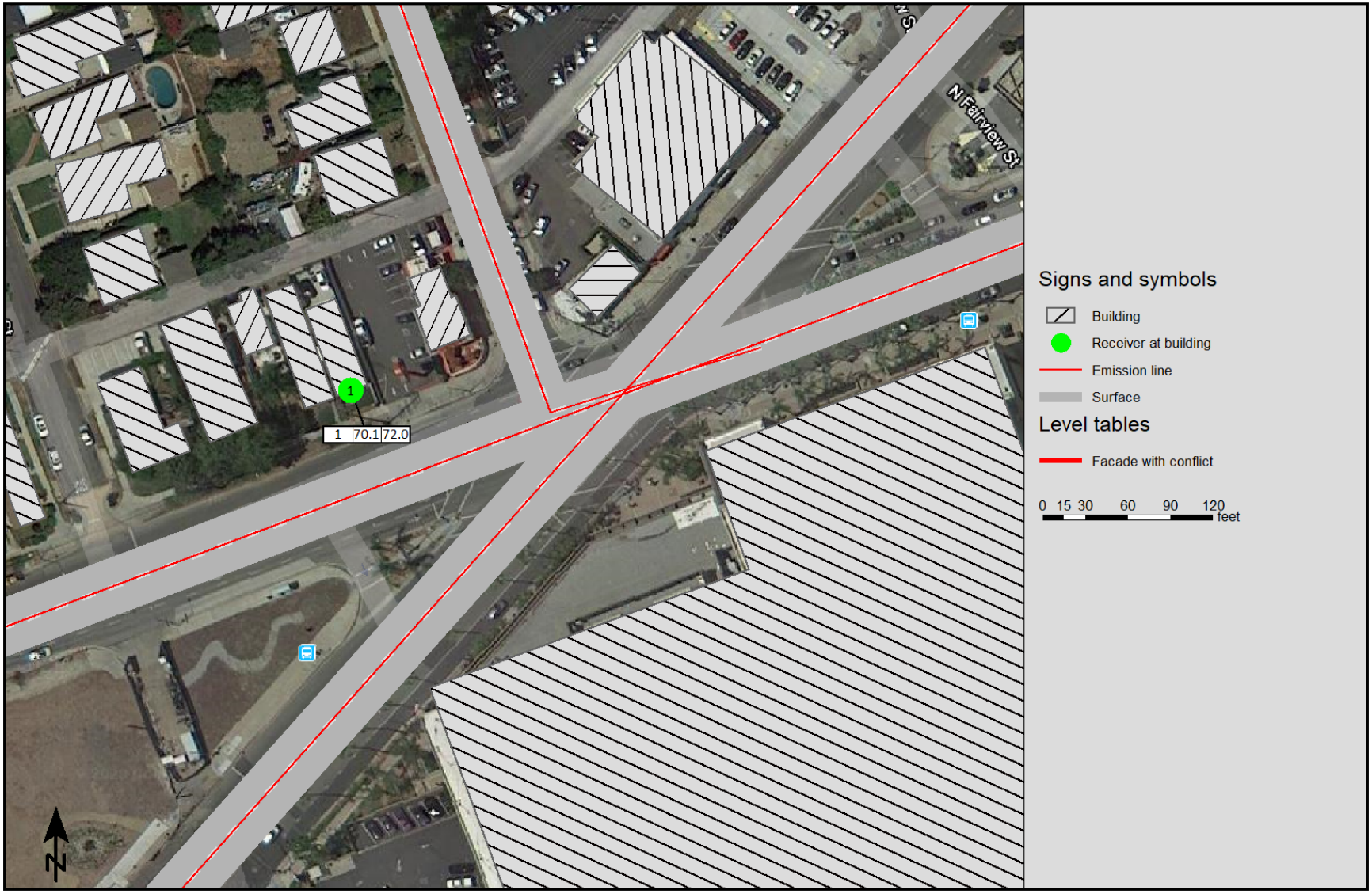
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Studios	11376964.1	3780240.02	North	GF	163.33	-	-	71.1	73.1	-	-
2	West Alameda Avenue 3205	11376866.2	3780244.66	South	GF	164.55	-	-	70.1	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Studios	GF	71.1	73.1		
Alameda Avenue		-		69.0	70.9
Olive Avenue		-		64.9	66.6
Ontario Street		-		62.5	65.8
West Alameda Avenue 3205	GF	70.1	72.0		
Alameda Avenue		-		68.7	70.6
Olive Avenue		-		64.0	65.7
Ontario Street		-		53.6	57.1

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Studios	GF	Day	40.	48.	52.	55.	56.	57.	57.	58.	59.	58.	59.	60.	60.	60.	59.	58.	58.	57.	57.	55.	52.	48.	44.	40.
			Lden	42.	50.	54.	57.	58.	59.	59.	61.	61.	60.	61.	62.	62.	62.	61.	60.	60.	59.	59.	57.	54.	50.	46.	42.
2	West Alameda Ave	GF	Day	39.	47.	51.	54.	55.	56.	56.	58.	58.	57.	58.	59.	59.	59.	58.	57.	57.	56.	56.	53.	51.	47.	42.	37.
			Lden	41.	49.	53.	56.	57.	58.	58.	60.	60.	59.	60.	61.	61.	61.	60.	59.	59.	58.	58.	55.	53.	49.	44.	39.


N Fairview St
1
1 70.1 72.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE FROM SPARKS TO BEACHWOOD

114 SPARKS STREET
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	9236	Total	-	570	355	122	-	Traffic li	-	30.0	Average (of DGAC a	-0.2
		Automobiles	-	436	270	93	56					
		Medium trucks	-	80	50	17	56					
		Heavy trucks	-	22	14	5	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	15	10	4	56					
		Auxiliary vehicle	-	15	10	3	56					
0+17	-							-	-	-	-	-
Verdugo Avenue							Traffic direction: In entry direction					
0+00	6952	Total	-	430	266	91	-	Traffic li	-	30.0	Average (of DGAC a	-0.8
		Automobiles	-	329	202	69	56					
		Medium trucks	-	60	37	13	56					
		Heavy trucks	-	17	10	4	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	11	7	3	56					
		Auxiliary vehicle	-	11	7	2	56					
0+22	-							-	-	-	-	-
Sparks Street							Traffic direction: In entry direction					
0+00	4820	Total	-	298	185	63	-	Traffic li	-	30.0	Average (of DGAC a	-1.2
		Automobiles	-	228	141	48	46					
		Medium trucks	-	42	26	9	46					
		Heavy trucks	-	12	7	3	46					
		Buses	-	1	1	-	46					
		Motorcycles	-	8	5	2	46					
		Auxiliary vehicle	-	8	5	2	46					
0+19	-							-	-	-	-	-

Receiver list

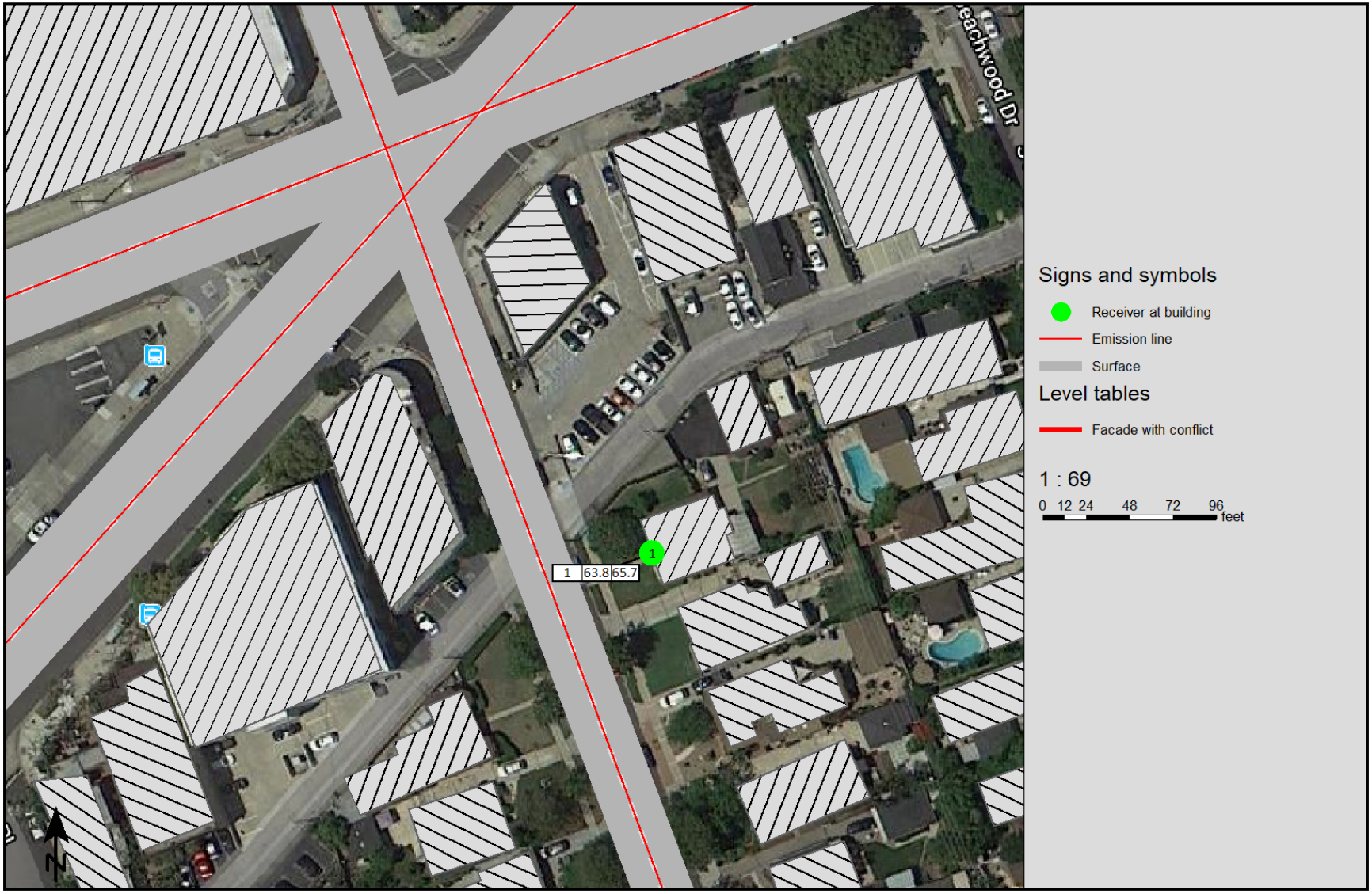
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Sparks Street 114	11378176.1	3781526.97	West	GF	167.01	-	-	63.8	65.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Sparks Street 114	GF	63.8	65.7		
Olive Avenue		-		54.5	56.4
Sparks Street		-		63.0	64.8
Verdugo Avenue		-		52.1	54.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Sparks Street 114	GF	Day	34.2	41.4	46.0	48.4	49.7	50.3	50.7	52.3	52.6	51.0	52.4	53.3	53.7	53.0	51.8	51.2	50.7	50.2	49.4	47.3	44.7	40.7	37.4	33.7
			Lden	36.0	43.2	47.9	50.3	51.4	52.2	52.6	54.2	54.4	53.4	54.2	55.1	54.9	54.4	53.7	53.1	52.0	52.1	51.4	49.7	46.0	42.0	39.4	35.9


Beachwood Dr
1
1 63.8 65.7
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 69
0 12 24 48 72 96
feet

KEY C

OLIVE AVENUE FROM SAN FERNANDO TO 3RD

150 SAN FERNANDO BOULEVARD
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
San Fernando Boulevard							Traffic direction: In entry direction					
0+00	20780	Total	-	1285	794	273	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	975	603	207	56					
		Medium trucks	-	180	111	38	56					
		Heavy trucks	-	50	31	11	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	38	23	8	56					
		Auxiliary vehicle	-	37	23	8	56					
0+29	-							-	-	-	-	-
Olive Avenue							Traffic direction: In entry direction					
0+00	5760	Total	-	356	220	76	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	270	167	58	56					
		Medium trucks	-	50	31	11	56					
		Heavy trucks	-	14	9	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	11	6	2	56					
		Auxiliary vehicle	-	10	6	2	56					
0+24	-							-	-	-	-	-

Receiver list

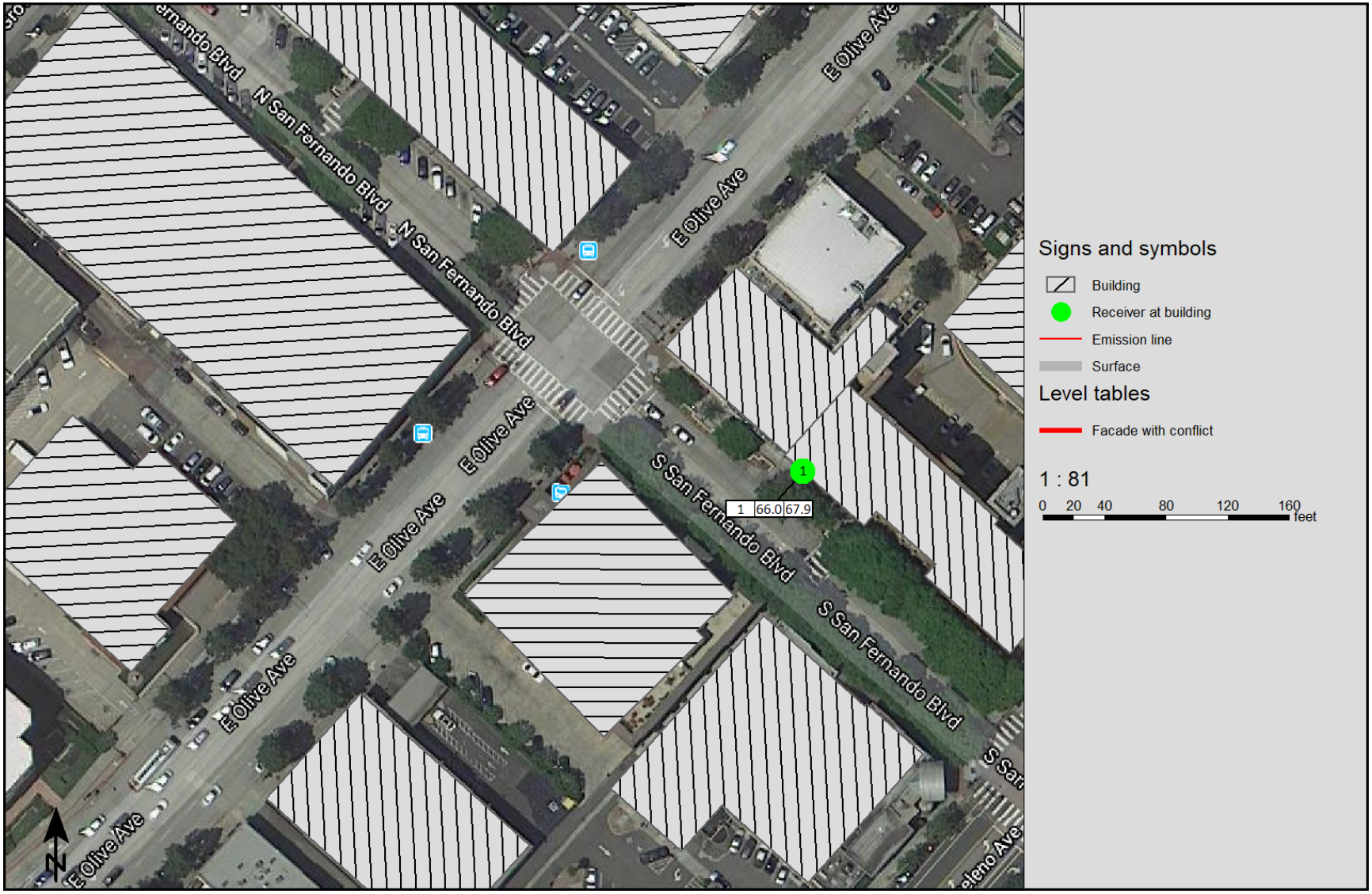
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	San Fernando Blvd. 150	11379442.0	3782961.24	South we	GF	186.64	-	-	66.0	67.9	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
San Fernando Blvd. 150	GF	66.0	67.9		
Olive Avenue		-		64.8	66.7
San Fernando Boulevard		-		59.6	61.5

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	San Fernando Blvd	GF	Day	35.2	42.8	47.6	50.3	51.7	52.6	53.3	54.5	54.3	53.7	54.5	55.0	55.3	55.4	54.2	53.0	53.0	52.0	51.7	49.3	46.2	43.3	40.0	35.2
			Lden	37.7	44.7	49.5	52.2	53.6	54.5	55.7	56.4	56.2	55.5	56.4	56.9	57.2	57.3	56.7	55.4	54.5	53.5	53.0	51.2	48.7	45.2	41.5	37.7


N San Fernando Blvd
E Olive Ave
S San Fernando Blvd
1
1 66.0 67.9
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 81
0 20 40 80 120 160
feet

KEY D

GLENOAKS BOULEVARD FROM ALAMEDA TO SPAZIER

1112 ALAMEDA AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00	32244	Total	-	1994	1233	423	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1513	936	321	56					
		Medium trucks	-	279	173	59	56					
		Heavy trucks	-	78	48	17	56					
		Buses	-	8	5	2	56					
		Motorcycles	-	59	36	12	56					
		Auxiliary vehicle	-	57	35	12	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	10124	Total	-	626	387	133	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	475	294	101	56					
		Medium trucks	-	88	54	19	56					
		Heavy trucks	-	24	15	5	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	19	11	4	56					
		Auxiliary vehicle	-	18	11	4	56					
0+23	-							-	-	-	-	-

Receiver list

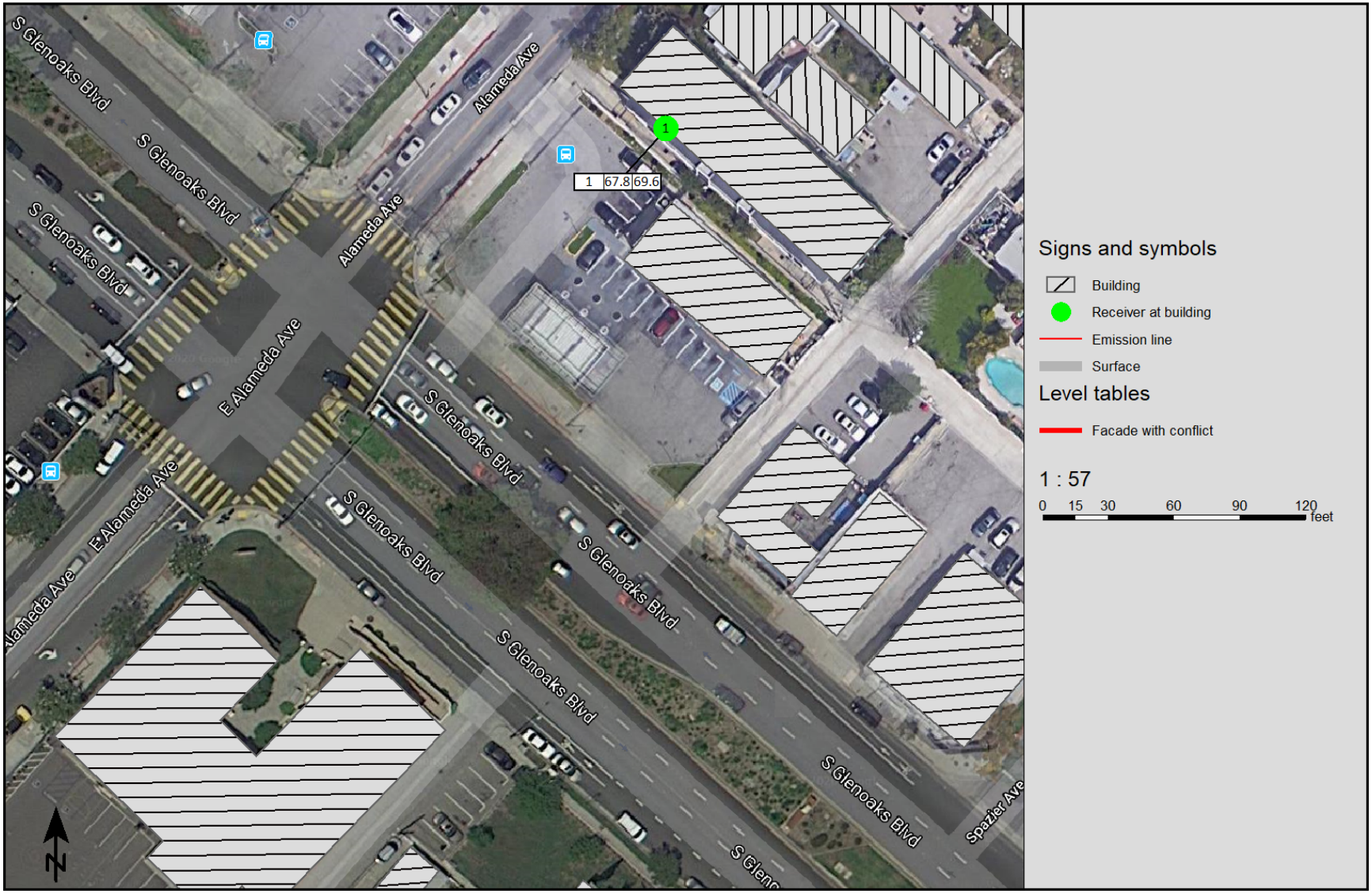
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	67.8	69.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Alameda Avenue 1112	GF	67.8	69.6		
Alameda Avenue		-		65.1	67.0
Glenoaks Boulevard		-		64.4	66.2

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	37.9	45.9	50.3	52.9	54.3	55.	55.6	56.	55.9	54.9	55.9	57.6	56.	56.9	55.9	55.2	54.6	53.9	53.2	51.	48.6	43.8	39.9	34.6
			Lden	39.8	47.4	52.2	54.8	56.2	57.6	57.4	58.6	57.8	56.8	57.8	58.8	58.6	58.	57.2	57.	56.9	55.	55.6	53.6	49.9	45.	41.4	36.3


S Glenoaks Blvd
S Glenoaks Blvd
Alameda Ave
S Glenoaks Blvd
Alameda Ave
S Glenoaks Blvd
E Alameda Ave
S Glenoaks Blvd
E Alameda Ave
Alameda Ave
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
Spazier Ave
1
1 67.8 69.6
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY D

GLENOAKS BOULEVARD FROM WILLARD TO GRANDVIEW

1068 WILLARD AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	39660	Total	-	2452	1517	521	-	Traffic li	-	100.0	Average (of DGAC a	-1.1
		Automobiles	-	1862	1152	396	56					
		Medium trucks	-	343	212	73	56					
		Heavy trucks	-	96	59	20	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	72	45	15	56					
		Auxiliary vehicle	-	70	43	15	56					
0+42	-							-	-	-	-	-
Grandview Avenue							Traffic direction: In entry direction					
0+00	8632	Total	-	534	330	113	-	Traffic li	-	100.0	Average (of DGAC a	-3.1
		Automobiles	-	406	251	86	56					
		Medium trucks	-	75	46	16	56					
		Heavy trucks	-	21	13	4	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	16	10	3	56					
		Auxiliary vehicle	-	15	9	3	56					
0+28	-							-	-	-	-	-

Receiver list

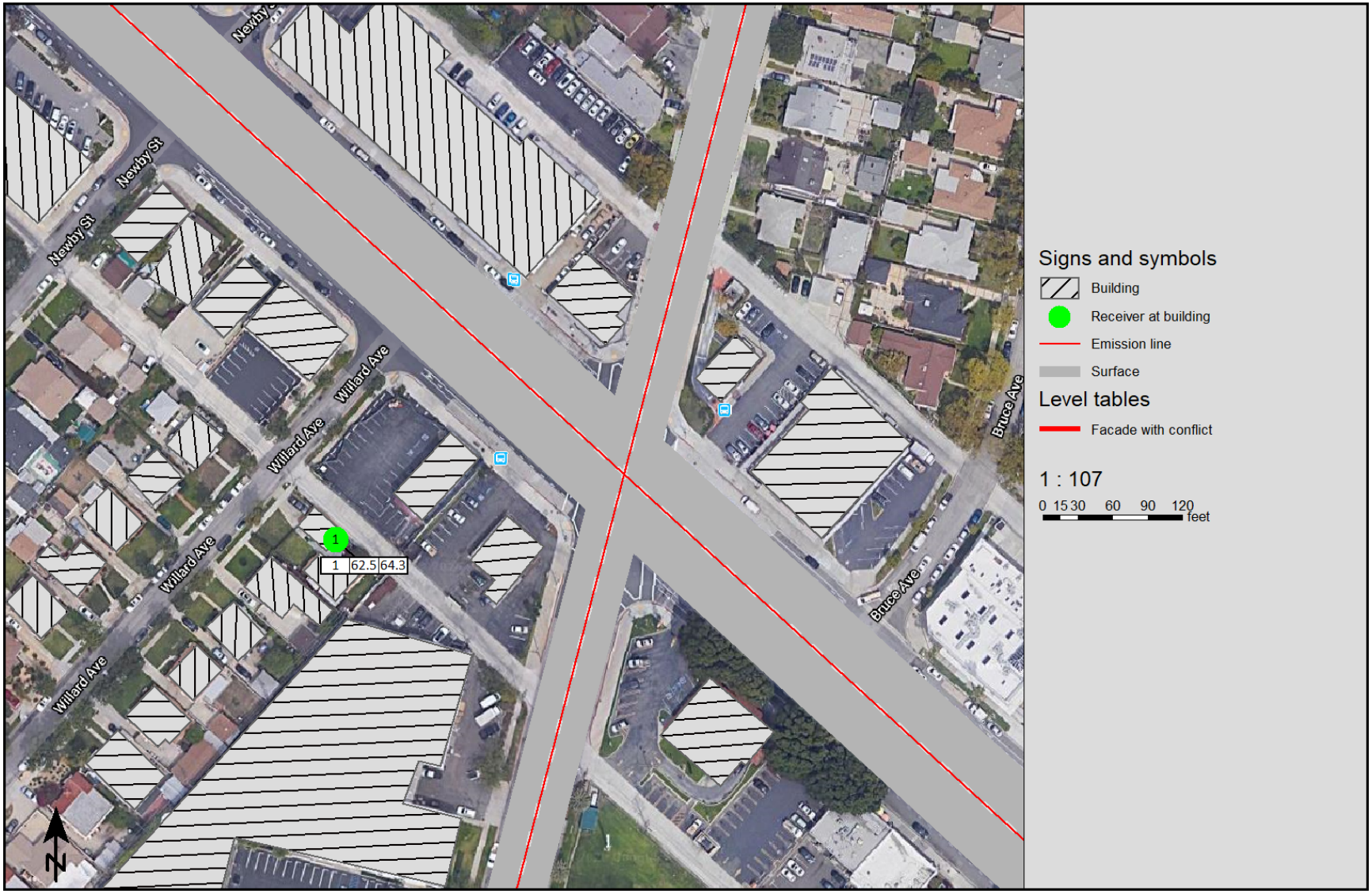
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Willard Avenue 1068	11381817.3	3781184.57	South ea	GF	154.34	-	-	62.5	64.3	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Willard Avenue 1068	GF	62.5	64.3		
Glenoaks Boulevard		-		61.5	63.3
Grandview Avenue		-		55.7	57.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Willard Avenue 10	GF	Day	33.9	42.9	47.7	49.4	50.8	51.9	51.6	52.9	50.3	48.2	49.4	50.2	50.7	51.7	49.8	48.7	48.8	48.4	47.2	45.6	41.2	37.3	31.7	21.8
			Lden	35.8	44.4	49.0	51.2	52.6	53.3	53.4	54.2	52.7	50.7	51.2	52.0	52.9	53.0	51.6	50.0	50.0	50.0	49.0	46.8	43.7	39.7	33.0	23.7


Newby St
Newby St
Newby St
Willard Ave
Willard Ave
Willard Ave
Willard Ave
Bruce Ave
Bruce Ave
1
1 62.5 64.3
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 107
0 15 30 60 90 120
feet

KEY E1

BROADWAY FROM BRAND TO LOUISE

200 EAST BROADWAY
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00	15056	Total	-	979	567	130	-	Traffic li	-	40.0	Average (of DGAC a	1.0
		Automobiles	-	743	430	98	56					
		Medium trucks	-	137	79	18	56					
		Heavy trucks	-	38	22	5	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	29	17	4	56					
		Auxiliary vehicle	-	28	16	4	56					
0+29	-							-	-	-	-	-
Artsakh Avenue							Traffic direction: In entry direction					
0+00	2052	Total	-	127	78	27	-	Traffic li	-	30.0	Average (of DGAC a	-1.5
		Automobiles	-	96	59	20	65					
		Medium trucks	-	18	11	4	65					
		Heavy trucks	-	5	3	1	65					
		Buses	-	0	0	0	65					
		Motorcycles	-	4	2	1	65					
		Auxiliary vehicle	-	4	2	1	65					
0+24	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	70.3	74.6	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	66.5	70.8	-	-
3	School of Rock	11396294.9	3778893.71	North	GF	245.49	-	-	72.8	77.1	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	70.3	74.6		
Colorado Boulevard		-		69.3	73.5
Hill Avenue		-		63.8	68.1
Holliston United Methodist Church	GF	66.5	70.8		
Colorado Boulevard		-		66.5	70.8
Hill Avenue		-		44.5	48.9
School of Rock	GF	72.8	77.1		
Colorado Boulevard		-		72.8	77.1
Hill Avenue		-		37.2	41.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	39.4	46.8	51.4	53.7	54.8	55.9	56.6	59.3	58.3	57.0	59.8	59.8	59.9	60.3	58.2	57.7	57.9	56.7	56.0	54.3	52.7	49.4	45.9	39.7
			Lden	42.9	50.3	55.2	57.8	59.0	59.9	61.3	64.7	63.4	60.0	63.0	62.9	64.0	64.2	62.4	61.7	61.0	61.7	60.0	59.0	56.8	54.7	50.2	44.1
2	Holliston United M	GF	Day	36.7	44.2	49.0	51.0	52.9	53.8	54.7	54.4	53.8	53.0	55.3	55.7	55.3	56.2	54.8	53.9	53.3	52.7	52.3	50.9	48.0	44.0	38.4	31.4
			Lden	39.7	47.8	53.0	55.9	57.3	58.2	58.4	58.8	57.8	57.7	60.0	59.8	59.4	60.1	59.0	58.0	57.4	57.2	57.3	55.0	53.1	49.7	43.8	36.5
3	School of Rock	GF	Day	41.9	49.7	54.0	57.3	58.0	59.4	59.8	61.0	61.2	60.4	61.2	61.0	61.8	61.9	61.0	60.7	60.4	59.0	59.4	57.7	54.0	50.0	45.9	41.7
			Lden	44.9	52.9	58.4	61.4	63.0	63.8	64.2	65.7	65.9	64.8	65.8	65.2	65.9	65.8	65.7	64.0	64.8	64.0	64.2	61.9	59.0	55.3	50.7	46.5

E Broadway
E Broadway
E Broadway
Artsakh Ave
Art
N
1 74.1 76.0
1 71.8 73.7
1
2
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 84
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND AND EAGLE ROCK

5116 ROCKLAND AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1								Traffic direction: Both directions				
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard								Traffic direction: In entry direction				
0+00	4072	Total	-	252	156	53	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	191	118	40	56					
		Medium trucks	-	35	22	7	56					
		Heavy trucks	-	10	6	2	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	7	5	2	56					
		Auxiliary vehicle	-	7	4	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard								Traffic direction: In entry direction				
0+00	27220	Total	-	2149	252	53	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -1
		Automobiles	-	1632	191	40	56					
		Medium trucks	-	301	35	7	56					
		Heavy trucks	-	84	10	2	56					
		Buses	-	8	1	0	56					
		Motorcycles	-	63	7	2	56					
		Auxiliary vehicle	-	61	7	2	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	60.6	61.7	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.3	60.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	60.6	61.7		
1		-		-	-
Colorado Boulevard		-		55.1	53.2
Eagle Rock Boulevard		-		59.2	61.0
Rockland Avenue 5116	GF	61.3	60.0		
1		-		-	-
Colorado Boulevard		-		60.9	59.0
Eagle Rock Boulevard		-		51.5	53.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	31.4	39.0	43.7	46.0	47.7	47.0	47.8	48.3	47.9	48.0	49.7	50.0	49.9	50.3	48.8	47.9	47.2	46.0	46.4	44.4	41.4	37.2	31.3	24.1
			Lden	32.2	39.8	44.4	46.9	48.0	48.0	48.8	49.1	48.9	49.0	50.7	51.2	50.6	51.4	49.8	49.0	48.4	47.4	47.4	45.8	42.9	38.8	33.0	26.0
2	Rockland Avenue	GF	Day	33.8	40.9	43.8	45.0	45.7	44.9	46.0	49.1	50.0	49.1	50.8	51.4	50.0	50.0	49.7	48.9	48.3	49.0	48.9	45.0	43.7	38.2	32.7	24.0
			Lden	32.4	39.2	42.8	43.7	43.9	43.8	44.8	47.8	48.7	47.9	49.8	50.7	48.7	49.3	48.3	47.4	46.9	47.0	47.2	43.8	41.7	36.8	30.8	22.9

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Caspar Ave
Merton Ave
2
1 61.3 60.0
1
1 60.6 61.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

2042 PROJECT
TRAFFIC NOISE MODELING

CATEGORY 1 RECEIVERS

BURBANK STUDIOS
CATEGORY 1

FUTURE AMBIENT LEVELS WITH PROJECT (2042)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue								Traffic direction: In entry direction				
0+00(	20796	Total	-	1289	788	272	-	Traffic li	-	30.0	Average (of DGAC a	0.1
		Automobiles	-	978	597	206	56					
		Medium trucks	-	180	110	38	56					
		Heavy trucks	-	50	31	10	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	38	23	8	56					
		Auxiliary vehicle	-	37	23	8	56					
0+31	-							-	-	-	-	-
Alameda Avenue								Traffic direction: In entry direction				
0+00(	20360	Total	-	1259	779	267	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	956	590	202	56					
		Medium trucks	-	176	109	37	56					
		Heavy trucks	-	49	31	10	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	37	23	8	56					
		Auxiliary vehicle	-	36	23	8	56					
0+34	-							-	-	-	-	-
Ontario Street								Traffic direction: In entry direction				
0+00(	4204	Total	-	260	161	55	-	Traffic li	-	30.0	Average (of DGAC a	0.1 / 0.
		Automobiles	-	233	122	42	46					
		Medium trucks	-	16	23	8	46					
		Heavy trucks	-	8	6	2	46					
		Buses	-	1	1	0	46					
		Motorcycles	-	2	5	2	46					
		Auxiliary vehicle	-	1	5	2	46					
0+15	-							-	-	-	-	-

Receiver list

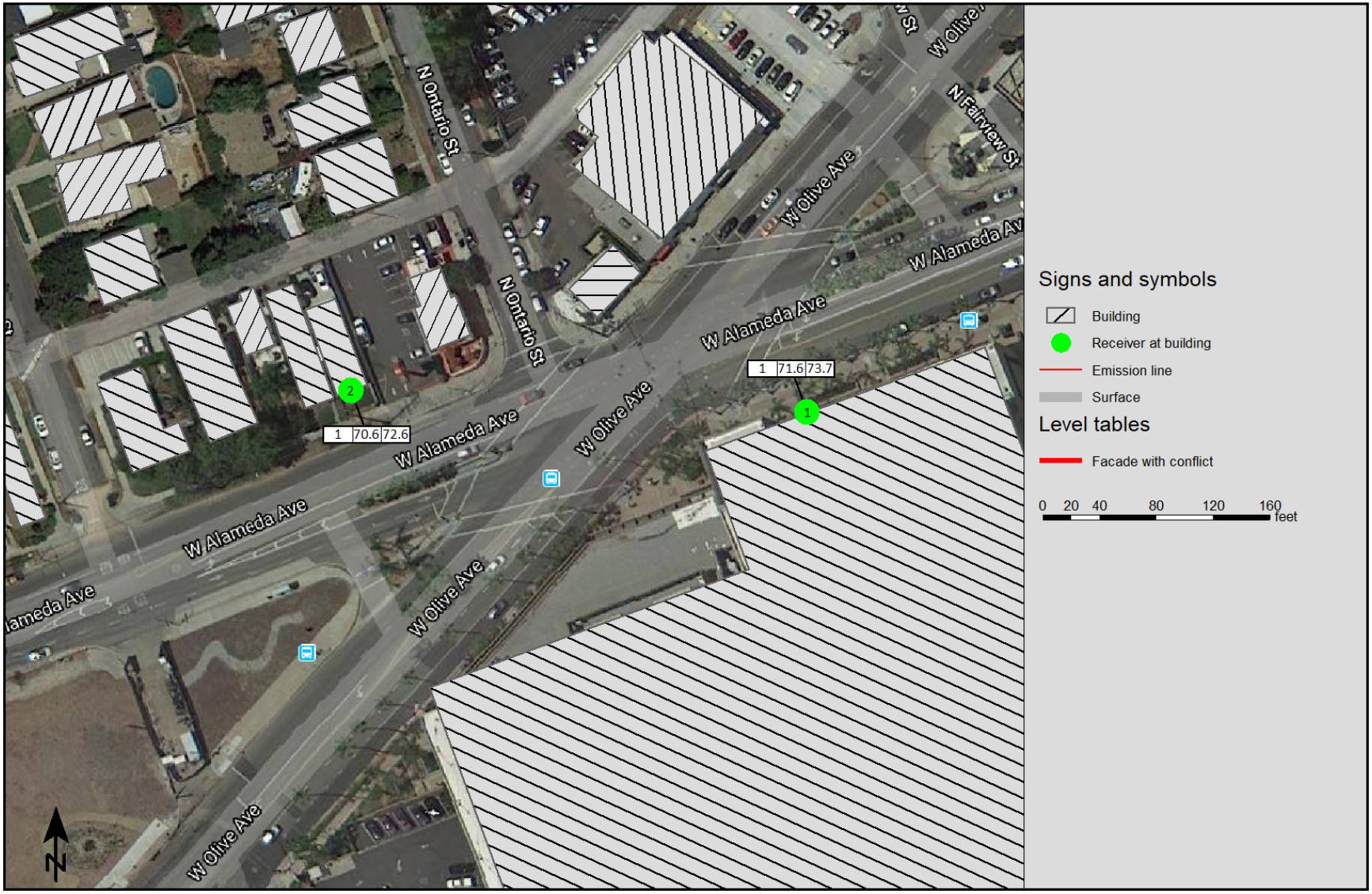
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	West Alameda Avenue 3205	11376866.2	3780244.66	South	GF	164.55	-	-	70.6	72.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
West Alameda Avenue 3205	GF	70.6	72.6		
Alameda Avenue		-		69.3	71.2
Olive Avenue		-		64.5	66.3
Ontario Street		-		54.2	57.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	West Alameda Ave	GF	Day	40.	47.(	52.(	55.(	56.(	57.	57.(	58.(	58.(	58.	59.(	59.(	60.(	60.(	58.(	58.(	57.(	57.	56.(	54.(	52.	47.(	42.(	38.
			Lden	42.(	49.(	54.(	56.(	58.(	59.(	59.(	60.(	60.	60.	61.	61.(	61.(	61.(	60.(	60.(	59.	59.	58.	56.(	54.(	49.(	44.	40.


N Ontario St
W Olive Ave
N Fairview St
W Alameda Ave
2
1 70.6 72.6
1 71.6 73.7
1
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
0 20 40 80 120 160
feet
N

HOLLYWOOD PRODUCTION CENTER
CATEGORY 1

FUTURE AMBIENT LEVELS WITH PROJECT (2042)

SCHOOL OF ROCK
CATEGORY 1

FUTURE AMBIENT LEVELS WITH PROJECT (2042)

CATEGORY 2 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM LANKERSHIM AND BLAKESLEE

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.4	49.2	54.7	56.8	58.2	59.7	59.9	60.7	58.2	57.7	58.7	58.0	58.8	58.0	57.4	57.8	57.0	56.4	56.8	54.7	52.0	48.0	43.0	35.0
			Lden	43.2	51.0	55.9	58.0	60.7	61.0	61.4	62.0	60.7	59.0	60.0	60.5	60.7	60.5	59.2	59.0	58.8	58.2	58.7	56.0	53.9	49.9	44.8	37.4
2	Gallery at NoHo C	GF	Day	35.8	43.2	48.7	50.8	52.2	53.0	53.3	53.7	51.7	50.8	51.9	52.7	53.0	53.7	52.7	51.9	50.0	50.4	51.7	47.9	46.0	42.8	37.2	31.1
			Lden	37.2	45.7	50.0	52.7	54.7	54.9	55.7	55.9	53.0	52.0	53.8	54.8	54.9	54.9	54.0	53.8	52.4	52.2	53.0	49.7	47.9	44.4	39.0	32.9
3	Gray Studios	GF	Day	39.4	47.0	51.8	54.4	55.8	56.0	57.7	58.7	58.2	58.7	59.2	59.3	59.7	60.7	59.0	57.8	57.0	55.0	54.2	51.8	50.0	49.9	45.0	38.4
			Lden	41.2	48.9	53.0	56.2	57.0	58.9	59.0	60.0	60.2	60.0	61.7	61.7	61.0	62.0	60.9	59.7	58.9	57.9	56.7	53.7	52.7	51.4	47.0	40.1

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.6	72.4		
Chandler Ave b/t Fair and Vineland		-		59.7	61.6
Fair Ave N of Chandller		-		35.1	36.9
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.3	71.2
Gallery at NoHo Commons	GF	64.5	66.4		
Chandler Ave b/t Fair and Vineland		-		63.9	65.8
Fair Ave N of Chandller		-		53.2	55.0
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.0	51.8
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.3
Fair Ave N of Chandller		-		31.0	32.8
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.8	56.6

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1	3781696.23	-	GF	191.40	-	-	70.6	72.4	-	-
2	Gallery at NoHo Commons	11373425.6	3781689.51	South	GF	194.08	-	-	64.5	66.4	-	-
3	Gray Studios	11373713.1	3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	34352	Total	-	2124	1314	451	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1612	996	342	56					
		Medium trucks	-	297	184	64	56					
		Heavy trucks	-	83	51	17	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	62	39	13	56					
		Auxiliary vehicle	-	61	38	13	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13180	Total	-	815	504	173	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -
		Automobiles	-	619	382	131	56					
		Medium trucks	-	114	71	24	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	23	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	6084	Total	-	376	233	80	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	285	177	61	48					
		Medium trucks	-	53	33	11	48					
		Heavy trucks	-	15	9	3	48					
		Buses	-	2	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	11	7	2	48					
0+06(	-							-	-	-	-	-

Metro BRT NoHo to Pasadena
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet
Chandler Blvd
Chandler Blvd
Weddington St
Weddington St
Weddington St
McCormick St
McCormick St
McCormick St
Blakeslee Ave
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Vineland Ave
1 64.5 66.4
70.6 72.4
1 70.2 72.0
N

KEY C

OLIVE AVENUE AT ALAMEDA AVENUE AND ONTARIO STREET

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue								Traffic direction: In entry direction				
0+00(	20796	Total	-	1289	788	272	-	Traffic li	-	30.0	Average (of DGAC a	0.1
		Automobiles	-	978	597	206	56					
		Medium trucks	-	180	110	38	56					
		Heavy trucks	-	50	31	10	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	38	23	8	56					
		Auxiliary vehicle	-	37	23	8	56					
0+31	-							-	-	-	-	-
Alameda Avenue								Traffic direction: In entry direction				
0+00(	20360	Total	-	1259	779	267	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	956	590	202	56					
		Medium trucks	-	176	109	37	56					
		Heavy trucks	-	49	31	10	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	37	23	8	56					
		Auxiliary vehicle	-	36	23	8	56					
0+34	-							-	-	-	-	-
Ontario Street								Traffic direction: In entry direction				
0+00(	4204	Total	-	260	161	55	-	Traffic li	-	30.0	Average (of DGAC a	0.1 / 0.
		Automobiles	-	233	122	42	46					
		Medium trucks	-	16	23	8	46					
		Heavy trucks	-	8	6	2	46					
		Buses	-	1	1	0	46					
		Motorcycles	-	2	5	2	46					
		Auxiliary vehicle	-	1	5	2	46					
0+15	-							-	-	-	-	-

Receiver list

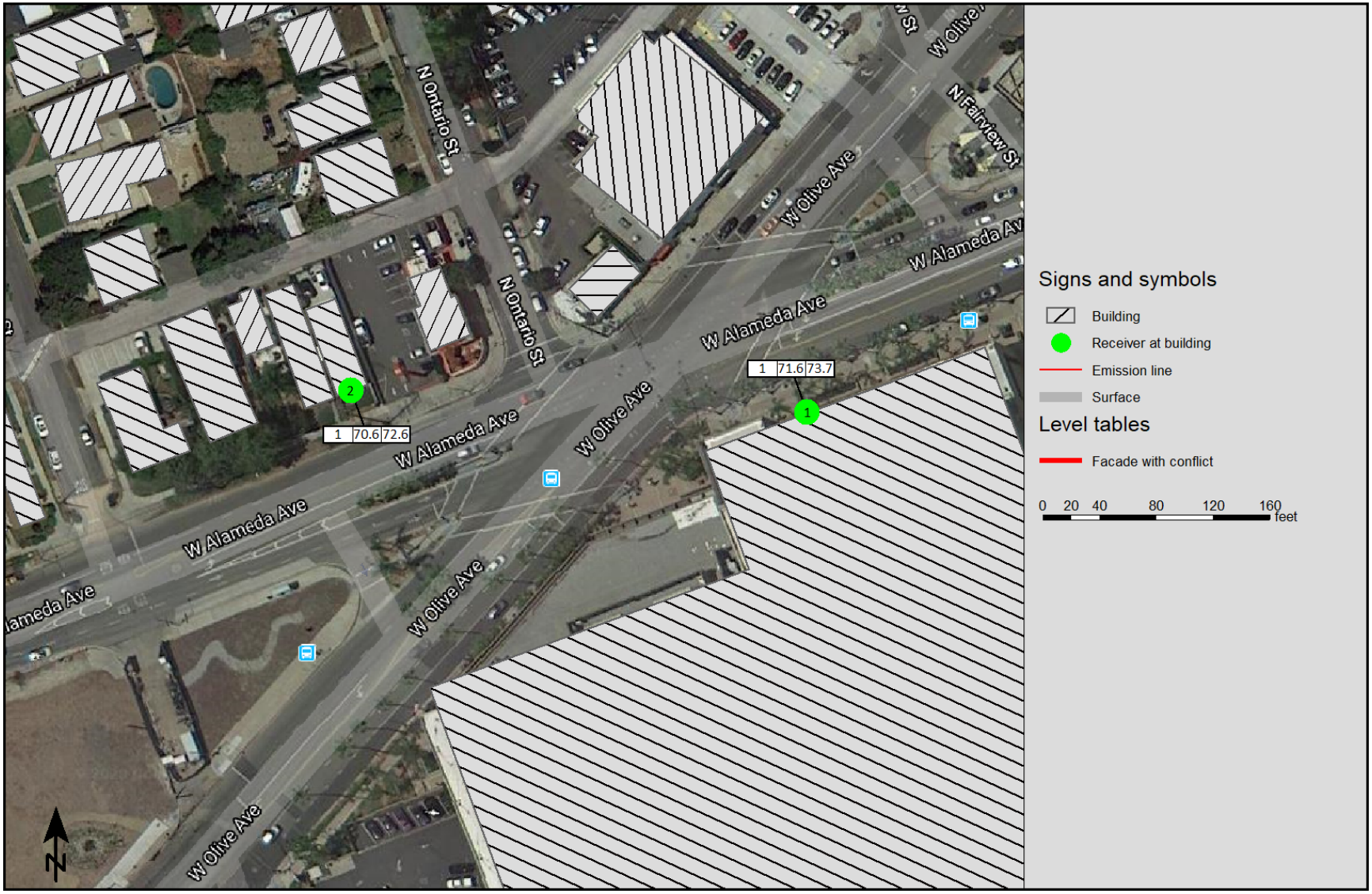
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	West Alameda Avenue 3205	11376866.2	3780244.66	South	GF	164.55	-	-	70.6	72.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
West Alameda Avenue 3205	GF	70.6	72.6		
Alameda Avenue		-		69.3	71.2
Olive Avenue		-		64.5	66.3
Ontario Street		-		54.2	57.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	West Alameda Ave	GF	Day	40.	47.(	52.(	55.(	56.(	57.	57.(	58.(	58.(	58.	59.(	59.(	60.(	60.(	58.(	58.(	57.(	57.	56.(	54.(	52.	47.(	42.(	38.
			Lden	42.(	49.(	54.(	56.(	58.(	59.(	59.(	60.(	60.	60.	61.	61.(	61.(	61.(	60.(	60.(	59.	59.	58.	56.(	54.(	49.(	44.	40.


N Ontario St
W Olive Ave
N Fairview St
W Alameda Ave
2
1 70.6 72.6
1 71.6 73.7
1
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
0 20 40 80 120 160
feet
N

CATEGORY 2 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM LANKERSHIM AND BLAKESLEE

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.4	49.2	54.7	56.8	58.2	59.7	59.9	60.7	58.2	57.7	58.7	58.0	58.8	58.0	57.4	57.8	57.0	56.4	56.8	54.7	52.0	48.0	43.0	35.0
			Lden	43.2	51.0	55.9	58.0	60.7	61.0	61.4	62.0	60.7	59.0	60.0	60.5	60.7	60.5	59.2	59.0	58.8	58.2	58.7	56.0	53.9	49.9	44.8	37.4
2	Gallery at NoHo C	GF	Day	35.8	43.2	48.7	50.8	52.2	53.0	53.3	53.7	51.7	50.8	51.9	52.7	53.0	53.7	52.7	51.9	50.0	50.4	51.7	47.9	46.0	42.8	37.2	31.1
			Lden	37.2	45.7	50.0	52.7	54.7	54.9	55.7	55.9	53.0	52.0	53.8	54.8	54.9	54.9	54.0	53.8	52.4	52.2	53.0	49.7	47.9	44.4	39.0	32.9
3	Gray Studios	GF	Day	39.4	47.0	51.8	54.4	55.8	56.0	57.7	58.7	58.2	58.7	59.2	59.3	59.7	60.7	59.0	57.8	57.0	55.0	54.2	51.8	50.0	49.9	45.0	38.4
			Lden	41.2	48.9	53.0	56.2	57.0	58.9	59.0	60.0	60.2	60.0	61.7	61.7	61.0	62.0	60.9	59.7	58.9	57.9	56.7	53.7	52.7	51.4	47.0	40.1

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.6	72.4		
Chandler Ave b/t Fair and Vineland		-		59.7	61.6
Fair Ave N of Chandller		-		35.1	36.9
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.3	71.2
Gallery at NoHo Commons	GF	64.5	66.4		
Chandler Ave b/t Fair and Vineland		-		63.9	65.8
Fair Ave N of Chandller		-		53.2	55.0
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.0	51.8
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.3
Fair Ave N of Chandller		-		31.0	32.8
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.8	56.6

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1	3781696.23	-	GF	191.40	-	-	70.6	72.4	-	-
2	Gallery at NoHo Commons	11373425.6	3781689.51	South	GF	194.08	-	-	64.5	66.4	-	-
3	Gray Studios	11373713.1	3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	34352	Total	-	2124	1314	451	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1612	996	342	56					
		Medium trucks	-	297	184	64	56					
		Heavy trucks	-	83	51	17	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	62	39	13	56					
		Auxiliary vehicle	-	61	38	13	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13180	Total	-	815	504	173	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -
		Automobiles	-	619	382	131	56					
		Medium trucks	-	114	71	24	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	23	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	6084	Total	-	376	233	80	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	285	177	61	48					
		Medium trucks	-	53	33	11	48					
		Heavy trucks	-	15	9	3	48					
		Buses	-	2	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	11	7	2	48					
0+06(	-							-	-	-	-	-

Metro BRT NoHo to Pasadena
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet
Chandler Blvd
Chandler Blvd
Weddington St
Weddington St
Weddington St
McCormick St
McCormick St
McCormick St
Blakeslee Ave
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Vineland Ave
1 64.5 66.4
70.6 72.4
1 70.2 72.0
N

KEY C

OLIVE AVENUE FROM MYERS TO KEYSTONE

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Ave b/t Buena Vista and Keystone							Traffic direction: In entry direction					
0+00(	33912	Total	-	2097	1297	445	-	Traffic li	-	30.0	Average (of DGAC a	-0.1
		Automobiles	-	1592	984	338	56					
		Medium trucks	-	294	181	63	56					
		Heavy trucks	-	82	51	18	56					
		Buses	-	8	5	1	56					
		Motorcycles	-	61	38	13	56					
		Auxiliary vehicle	-	60	37	13	56					
0+25:	-							-	-	-	-	-
Keystone Avenue							Traffic direction: In entry direction					
0+00(	2536	Total	-	157	97	33	-	Traffic li	-	30.0	Average (of DGAC a	-0.8 / 0
		Automobiles	-	119	74	25	46					
		Medium trucks	-	22	14	5	46					
		Heavy trucks	-	6	4	1	46					
		Buses	-	1	0	0	46					
		Motorcycles	-	5	3	1	46					
		Auxiliary vehicle	-	4	3	1	46					
0+42:	-							-	-	-	-	-

Receiver list

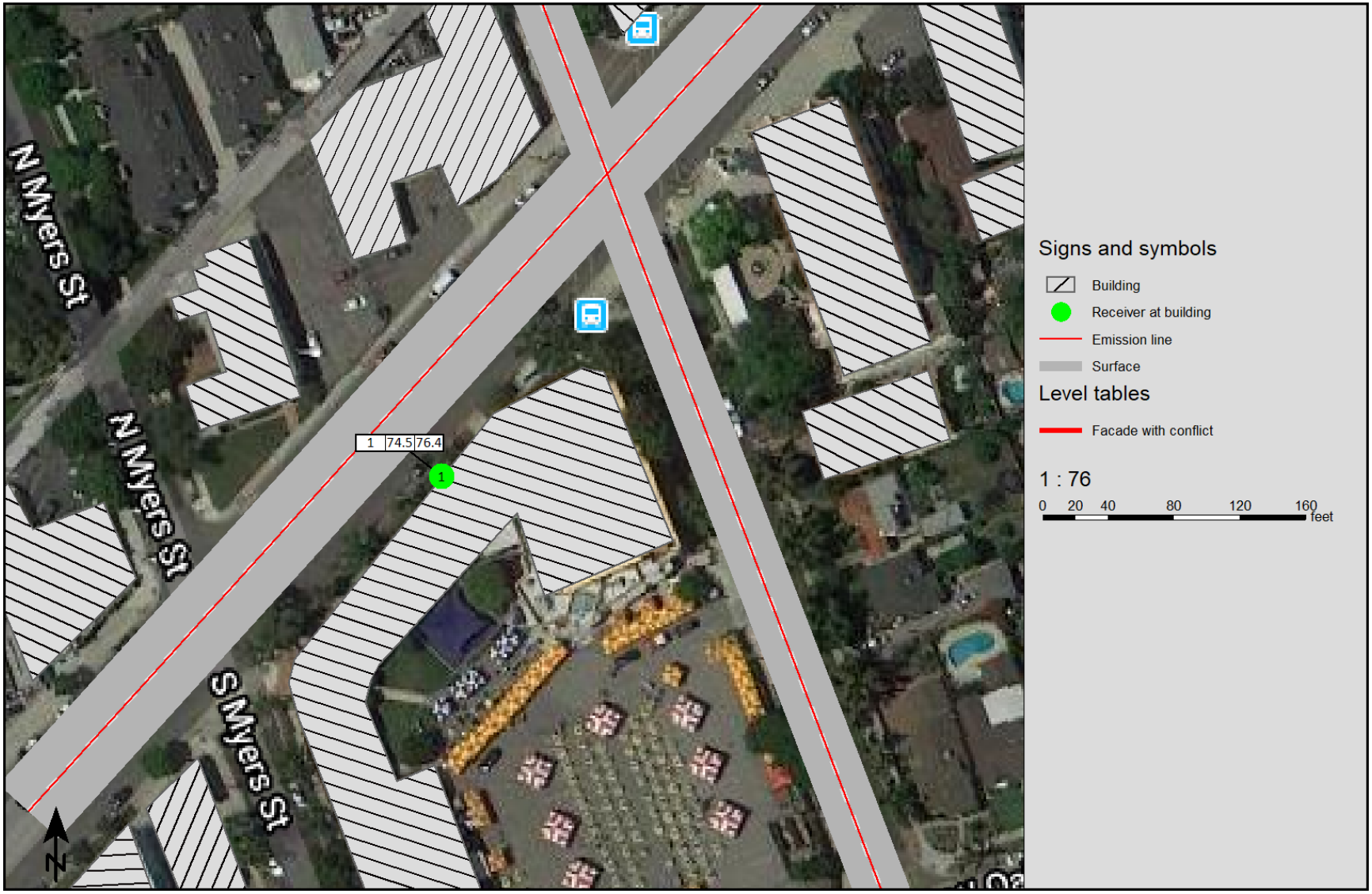
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	St. Finbar School	11377724.5	3781109.46	North we	GF	167.06	-	-	74.5	76.4	-	-

Contribution levels of the receivers

Source name	Traffic lane	Level Day	Level Lden
		dB(A)	
St. Finbar School GF	74.5 76.4		
Keystone Avenue	-	48.0	49.9
Olive Ave b/t Buena Vista and Keystone	-	74.5	76.4

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	St. Finbar School	GF	Day	42.4	50.2	55.0	57.0	58.9	59.7	60.9	62.9	63.2	62.0	63.0	64.7	64.2	64.4	63.9	62.7	61.0	60.4	59.2	56.2	53.0	52.7	49.0	45.
			Lden	44.2	52.7	56.9	59.4	60.8	61.0	62.4	64.8	65.7	63.9	64.9	66.0	66.0	66.4	65.4	64.0	63.9	62.2	61.7	58.0	55.4	54.0	51.7	46.9


N Myers St
N Myers St
S Myers St
1 74.5 76.4
1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 76
0 20 40 80 120 160
feet

KEY C

OLIVE AVENUE FROM CALIFORNIA TO ALAMEDA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	38.4	46.0	50.8	53.4	54.8	55.0	56.0	57.2	56.5	55.4	56.4	57.5	57.2	57.3	56.0	55.7	55.2	54.4	53.7	51.0	48.0	44.3	40.	35.
			Lden	40.2	47.9	52.7	55.3	56.7	57.4	57.9	59.	58.3	57.3	58.3	59.4	59.	59.2	57.9	57.0	57.0	56.2	55.0	53.5	50.4	46.2	41.9	37.

Contribution levels of the receivers

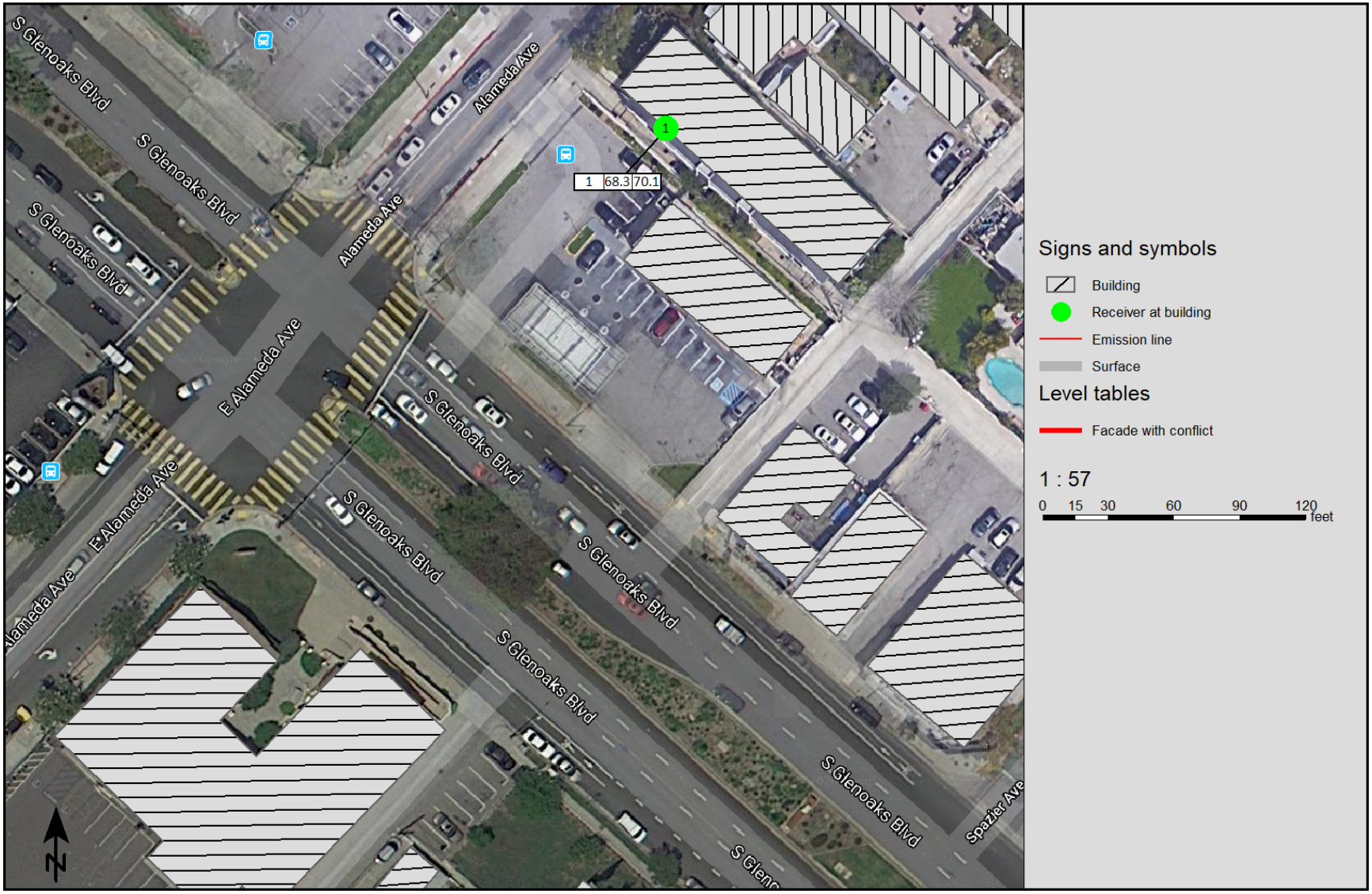
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Alameda Avenue 1112	GF	68.3	70.1		
Alameda Avenue		-		65.5	67.3
Glenoaks Boulevard		-		65.0	66.9

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	68.3	70.1	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00	35140	Total	-	2173	1344	461	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1649	1020	350	56					
		Medium trucks	-	304	189	64	56					
		Heavy trucks	-	85	52	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	64	39	13	56					
		Auxiliary vehicle	-	62	38	13	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	11808	Total	-	730	452	155	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	554	343	118	56					
		Medium trucks	-	102	63	22	56					
		Heavy trucks	-	29	18	6	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	22	13	4	56					
		Auxiliary vehicle	-	21	13	4	56					
0+23	-							-	-	-	-	-


S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
Alameda Ave
Alameda Ave
E Alameda Ave
E Alameda Ave
Alameda Ave
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
Spazier Ave
1
1 68.3 70.1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY C
OLIVE AVENUE FROM BUENA VISTA TO BRIGHTON

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Buena Vista Stree	GF	Day	40.9	48.0	53.3	55.8	57.7	57.8	58.0	59.0	59.7	58.4	59.6	60.0	60.0	59.0	58.9	58.0	57.3	56.9	57.7	55.9	52.8	49.4	46.3	39.7
			Lden	42.8	50.4	55.7	57.6	58.9	59.0	59.8	60.8	60.9	60.3	61.5	62.4	61.8	61.5	60.3	59.9	59.7	58.8	59.0	57.3	54.0	51.3	48.0	41.6

Contribution levels of the receivers

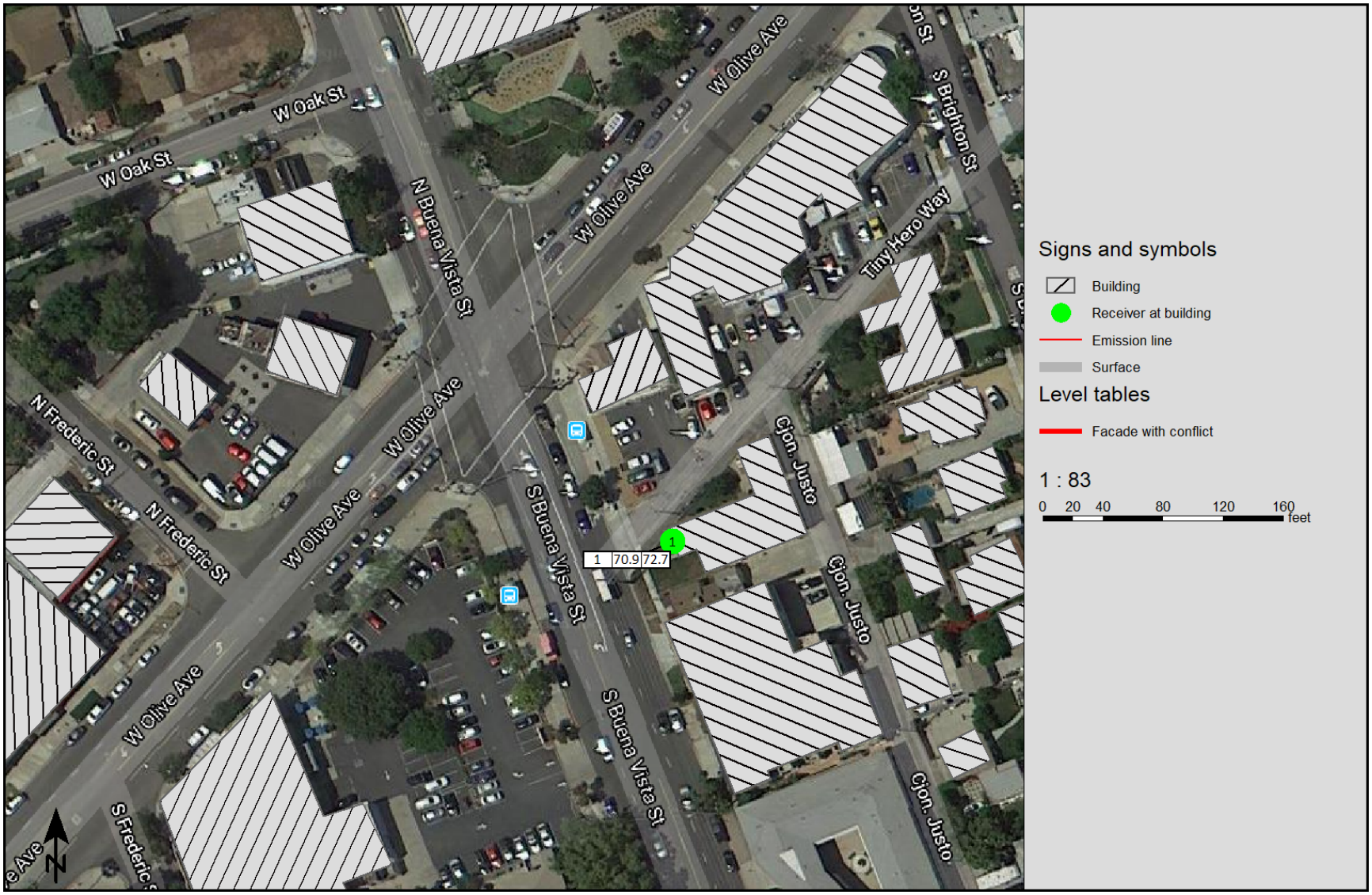
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Buena Vista Street 112	GF	70.9	72.7		
Buena Vista Street		-		70.1	71.9
Olive Avenue		-		63.3	65.2

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Buena Vista Street 112	11377485.8	3780785.08	West	GF	163.97	-	-	70.9	72.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	30148	Total	-	1864	1153	396	-	Traffic li	-	30.0	Average (of DGAC a	0.7
		Automobiles	-	1415	875	301	56					
		Medium trucks	-	261	162	55	56					
		Heavy trucks	-	72	45	15	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	55	34	12	56					
		Auxiliary vehicle	-	53	33	11	56					
0+25	-							-	-	-	-	-
Buena Vista Street							Traffic direction: In entry direction					
0+00	33912	Total	-	2097	1297	445	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1592	984	339	56					
		Medium trucks	-	294	182	62	56					
		Heavy trucks	-	81	51	17	56					
		Buses	-	8	5	1	56					
		Motorcycles	-	62	38	14	56					
		Auxiliary vehicle	-	60	37	12	56					
0+21	-							-	-	-	-	-


W Oak St
W Oak St
W Olive Ave
W Olive Ave
W Olive Ave
W Olive Ave
W Olive Ave
N Buena Vista St
S Buena Vista St
S Buena Vista St
S Brighton St
Tiny Hero Way
N Frederic St
N Frederic St
Cjon. Justo
Cjon. Justo
Cjon. Justo
1
1 70.9 72.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 20 40 80 120 160
feet

KEY C

OLIVE AVENUE FROM SPARKS TO BEACHWOOD

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Sparks Street 114	GF	Day	34.2	41.4	46.7	48.4	49.7	50.4	50.8	52.2	52.6	51.0	52.4	53.2	53.7	53.0	51.8	51.2	50.7	50.2	49.4	47.2	44.7	40.7	37.0	33.7
			Lden	36.7	43.4	47.9	50.4	51.6	52.2	52.7	54.2	54.4	53.4	54.2	55.7	55.6	54.4	53.7	53.7	52.6	52.1	51.4	49.2	46.6	42.6	39.4	35.9

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Sparks Street 114	GF	63.9	65.7		
Olive Avenue		-		55.1	57.0
Sparks Street		-		63.0	64.8
Verdugo Avenue		-		51.2	53.0

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Sparks Street 114	11378176.1	3781526.97	West	GF	167.01	-	-	63.9	65.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	10724	Total	-	663	410	141	-	Traffic li	-	30.0	Average (of DGAC a	-0.2
		Automobiles	-	507	312	107	56					
		Medium trucks	-	93	58	20	56					
		Heavy trucks	-	26	16	6	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	17	12	5	56					
		Auxiliary vehicle	-	17	12	3	56					
0+17	-							-	-	-	-	-
Verdugo Avenue							Traffic direction: In entry direction					
0+00	5644	Total	-	349	216	74	-	Traffic li	-	30.0	Average (of DGAC a	-0.8
		Automobiles	-	267	164	56	56					
		Medium trucks	-	49	30	10	56					
		Heavy trucks	-	13	9	3	56					
		Buses	-	1	1	-	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+22	-							-	-	-	-	-
Sparks Street							Traffic direction: In entry direction					
0+00	4820	Total	-	298	185	63	-	Traffic li	-	30.0	Average (of DGAC a	-1.2
		Automobiles	-	228	141	48	46					
		Medium trucks	-	42	26	9	46					
		Heavy trucks	-	12	7	3	46					
		Buses	-	1	1	-	46					
		Motorcycles	-	8	5	2	46					
		Auxiliary vehicle	-	8	5	2	46					
0+19	-							-	-	-	-	-

N Sparks St
W Verdugo Ave
Beachwood Dr
W Verdugo Ave
W Olive Ave
S Sparks St
W Olive Ave
S Sparks St
W Olive Ave
W Olive Ave
1
1 63.9 65.7
S Sparks St
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 69
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE FROM SAN FERNANDO TO 3RD

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	San Fernando Blvd	GF	Day	35.	43.	48.	50.	52.	53.	53.	55.	54.	54.	55.	55.	55.	55.	54.	54.	53.	52.	52.	49.	46.	43.	40.	36.
			Lden	37.	45.	50.	52.	54.	55.	55.	56.	56.	56.	56.	57.	57.	57.	56.	55.	55.	54.	54.	51.	48.	45.	42.	38.

Contribution levels of the receivers

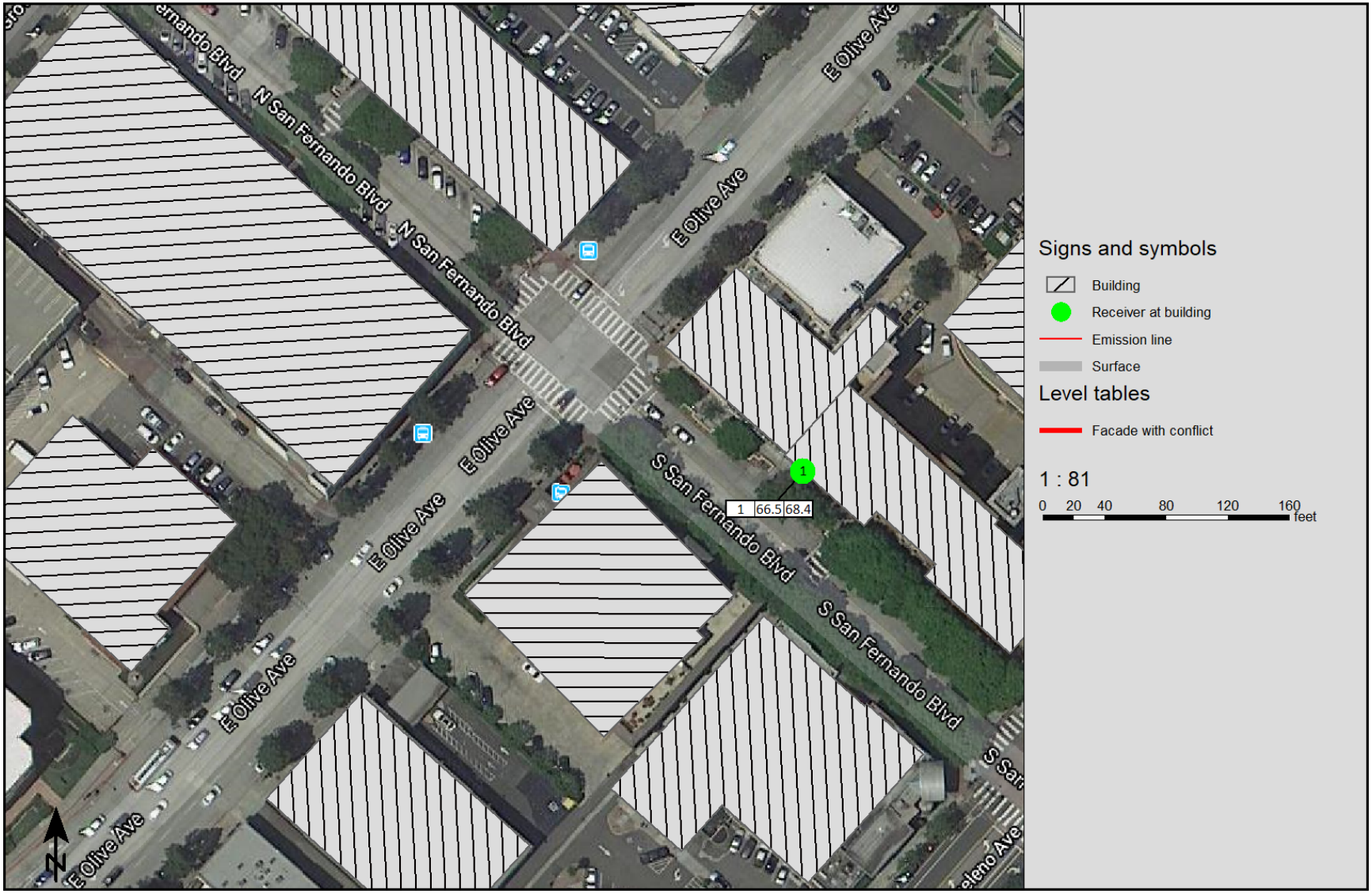
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
San Fernando Blvd. 150	GF	66.5	68.4		
Olive Avenue		-		65.3	67.2
San Fernando Boulevard		-		60.1	62.0

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	San Fernando Blvd. 150	11379442.0	3782961.24	South we	GF	186.64	-	-	66.5	68.4	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
San Fernando Boulevard							Traffic direction: In entry direction					
0+00	23252	Total	-	1438	889	305	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1091	675	231	56					
		Medium trucks	-	201	124	42	56					
		Heavy trucks	-	56	35	12	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	43	26	9	56					
		Auxiliary vehicle	-	41	26	9	56					
0+29	-							-	-	-	-	-
Olive Avenue							Traffic direction: In entry direction					
0+00	6456	Total	-	399	247	85	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	303	188	64	56					
		Medium trucks	-	56	35	12	56					
		Heavy trucks	-	16	10	3	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	12	7	2	56					
		Auxiliary vehicle	-	11	7	2	56					
0+24	-							-	-	-	-	-


N San Fernando Blvd
E Olive Ave
S San Fernando Blvd
1 66.5 68.4
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 81
0 20 40 80 120 160
feet

KEY D

GLENOAKS BOULEVARD FROM ALAMEDA TO SPAZIER

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00	35140	Total	-	2173	1344	461	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1649	1020	350	56					
		Medium trucks	-	304	189	64	56					
		Heavy trucks	-	85	52	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	64	39	13	56					
		Auxiliary vehicle	-	62	38	13	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	11808	Total	-	730	452	155	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	554	343	118	56					
		Medium trucks	-	102	63	22	56					
		Heavy trucks	-	29	18	6	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	22	13	4	56					
		Auxiliary vehicle	-	21	13	4	56					
0+23	-							-	-	-	-	-

Receiver list

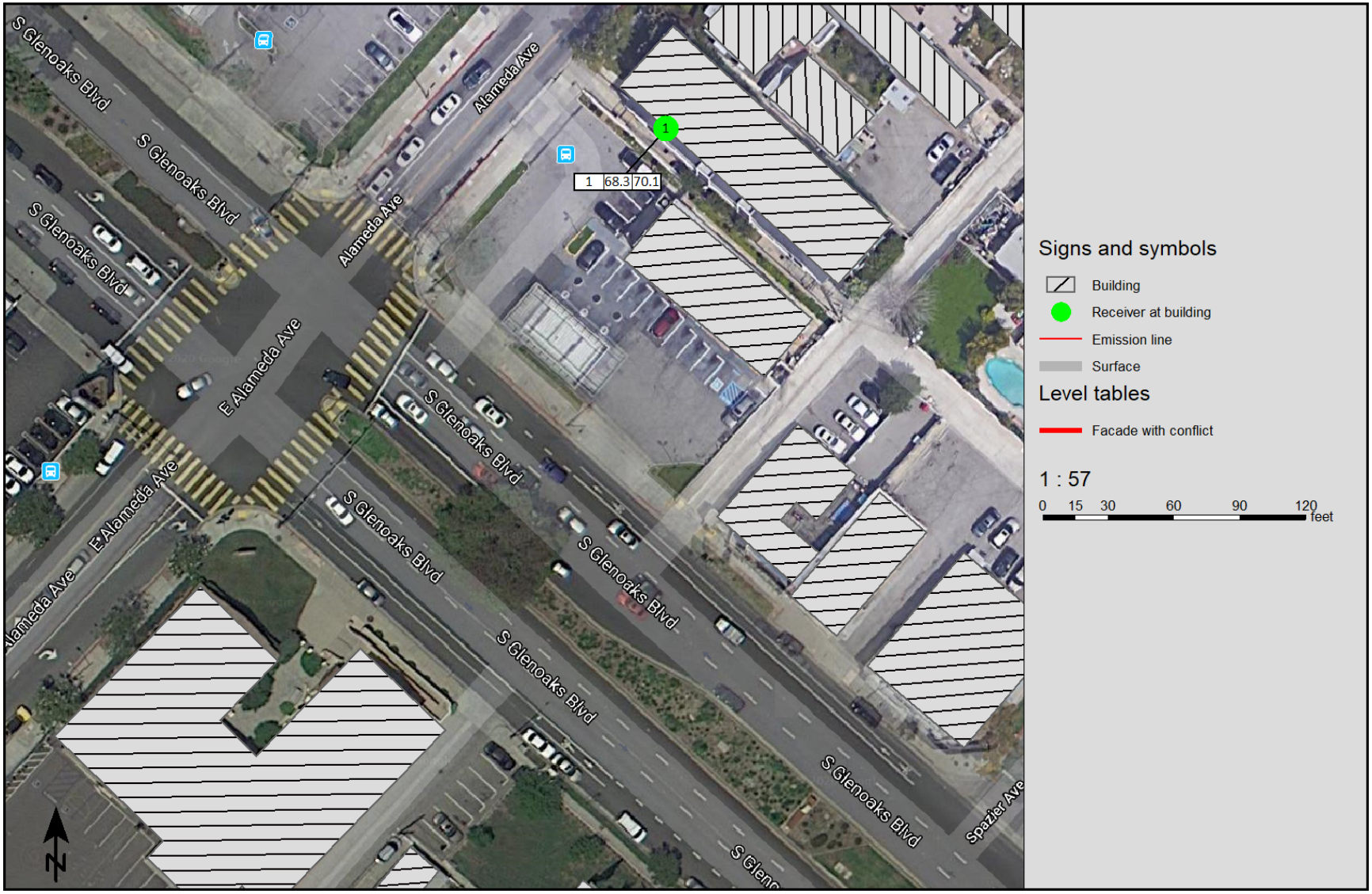
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	68.3	70.1	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Alameda Avenue 1112	GF	68.3	70.1		
Alameda Avenue		-		65.5	67.3
Glenoaks Boulevard		-		65.0	66.9

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	38.4	46.0	50.8	53.4	54.8	55.0	56.0	57.2	56.5	55.4	56.4	57.5	57.2	57.3	56.0	55.7	55.2	54.4	53.7	51.0	48.0	44.3	40.	35.
			Lden	40.2	47.9	52.7	55.3	56.7	57.4	57.9	59.	58.3	57.3	58.3	59.4	59.	59.2	57.9	57.0	57.0	56.2	55.0	53.5	50.4	46.2	41.9	37.


S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
Alameda Ave
Alameda Ave
E Alameda Ave
E Alameda Ave
Alameda Ave
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
S Glenoaks Blvd
Spazier Ave
1
1 68.3 70.1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY D

GLENOAKS BOULEVARD FROM WILLARD TO GRANDVIEW

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Willard Avenue 10	GF	Day	34.2	42.9	47.4	49.7	51.7	51.8	51.9	52.8	50.6	48.9	49.7	50.9	51.6	51.4	50.7	49.0	49.7	49.	47.9	45.2	41.6	37.6	31.9	22.2
			Lden	36.7	44.7	49.2	51.6	53.6	53.6	53.7	54.6	52.4	50.4	51.9	52.2	52.8	53.2	51.9	50.9	50.9	50.9	49.2	47.7	43.4	39.4	33.2	24.6

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Willard Avenue 1068	GF	62.8	64.6		
Glenoaks Boulevard		-		61.7	63.6
Grandview Avenue		-		56.3	58.1

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Willard Avenue 1068	11381817.3	3781184.57	South ea	GF	154.34	-	-	62.8	64.6	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	42036	Total	-	2599	1608	552	-	Traffic li	-	100.0	Average (of DGAC a	-1.1
		Automobiles	-	1974	1221	420	56					
		Medium trucks	-	364	225	77	56					
		Heavy trucks	-	102	63	21	56					
		Buses	-	10	6	2	56					
		Motorcycles	-	76	48	16	56					
		Auxiliary vehicle	-	74	46	16	56					
0+42	-							-	-	-	-	-
Grandview Avenue							Traffic direction: In entry direction					
0+00	9700	Total	-	600	371	127	-	Traffic li	-	100.0	Average (of DGAC a	-3.1
		Automobiles	-	456	282	97	56					
		Medium trucks	-	84	52	18	56					
		Heavy trucks	-	23	14	5	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	18	11	4	56					
		Auxiliary vehicle	-	17	11	4	56					
0+28	-							-	-	-	-	-

W Glenoaks Blvd
Newby St
Grandview Ave
Willard Ave
Bruce Ave
1
1 62.8 64.6
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 107
0 25 50 100 150 200
feet

KEY E1

BROADWAY FROM BRAND TO LOUISE

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Eleve Lofts	GF	Day	41.2	49.1	54.1	56.9	58.8	59.1	60.0	62.2	62.4	62.8	63.1	63.0	64.1	64.1	63.1	62.8	62.1	60.8	60.0	57.8	54.1	50.8	46.8	43.1
			Lden	43.1	51.0	56.0	58.8	60.4	61.0	62.8	64.1	64.2	64.4	65.0	65.8	66.0	66.2	65.0	64.4	63.8	62.8	61.8	59.2	56.0	52.8	48.1	45.2

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Eleve Lofts	GF	74.5	76.4		
Artsakh Avenue		-		57.3	59.1
Broadway		-		74.4	76.3

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Eleve Lofts	11384430.5	3779078.67	North	GF	166.81	-	-	74.5	76.4	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00	18760	Total	-	1160	718	246	-	Traffic li	-	40.0	Average (of DGAC a	1.0
		Automobiles	-	880	545	186	56					
		Medium trucks	-	162	100	34	56					
		Heavy trucks	-	45	28	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	34	22	7	56					
		Auxiliary vehicle	-	33	20	7	56					
0+29	-							-	-	-	-	-
Artsakh Avenue							Traffic direction: In entry direction					
0+00	2604	Total	-	161	100	34	-	Traffic li	-	30.0	Average (of DGAC a	-1.5
		Automobiles	-	122	76	26	65					
		Medium trucks	-	23	14	5	65					
		Heavy trucks	-	6	4	1	65					
		Buses	-	1	0	0	65					
		Motorcycles	-	5	3	1	65					
		Auxiliary vehicle	-	5	3	1	65					
0+24	-							-	-	-	-	-

E Broadway
E Broadway
E Broadway
Artsakh Ave
1 74.5 76.4
1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 84
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND TO EAGLE ROCK

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	5080	Total	-	314	194	67	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	238	147	51	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	38328	Total	-	2370	1466	503	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -1
		Automobiles	-	1800	1113	382	56					
		Medium trucks	-	332	205	71	56					
		Heavy trucks	-	93	57	20	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	69	43	14	56					
		Auxiliary vehicle	-	67	42	14	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.4	63.3	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.8	63.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	61.4	63.3		
1		-		-	-
Colorado Boulevard		-		55.6	57.4
Eagle Rock Boulevard		-		60.1	62.0
Rockland Avenue 5116	GF	61.8	63.7		
1		-		-	-
Colorado Boulevard		-		61.3	63.2
Eagle Rock Boulevard		-		52.5	54.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	32.2	39.8	44.4	46.8	47.8	48.4	48.8	49.0	48.7	48.8	50.5	50.9	50.3	51.1	49.0	48.7	48.1	47.3	47.3	45.3	42.3	38.1	32.2	25.
			Lden	34.1	41.0	46.3	48.1	49.1	50.3	50.5	50.9	50.6	50.7	52.4	52.7	52.2	53.0	51.5	50.0	49.5	49.3	49.1	47.2	44.2	40.0	34.1	27.0
2	Rockland Avenue	GF	Day	34.3	41.0	44.3	45.5	45.0	45.4	46.5	49.0	50.5	49.0	51.3	51.5	50.4	51.1	50.2	49.4	48.7	49.5	49.0	45.5	43.0	38.1	32.0	24.5
			Lden	36.2	42.9	46.2	47.3	47.5	47.3	48.3	51.5	52.4	51.5	53.2	53.8	52.3	53.0	52.0	51.2	50.0	51.1	50.5	47.4	45.4	40.5	34.5	26.4

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Caspar Ave
Merton Ave
2
1 61.8 63.7
1
1 61.4 63.3
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY H1
COLORADO BOULEVARD FROM EUCLID TO LOS ROBLES

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	21448	Total	-	1326	820	282	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1037	623	214	56					
		Medium trucks	-	191	115	39	56					
		Heavy trucks	-	53	32	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	39	24	8	56					
		Auxiliary vehicle	-	-	23	8	56					
0+46(	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	26960	Total	-	1667	1031	354	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1304	783	269	56					
		Medium trucks	-	240	144	50	56					
		Heavy trucks	-	67	40	14	56					
		Buses	-	7	4	2	56					
		Motorcycles	-	49	30	11	56					
		Auxiliary vehicle	-	-	29	11	56					
0+29(	-							-	-	-	-	-

Receiver list

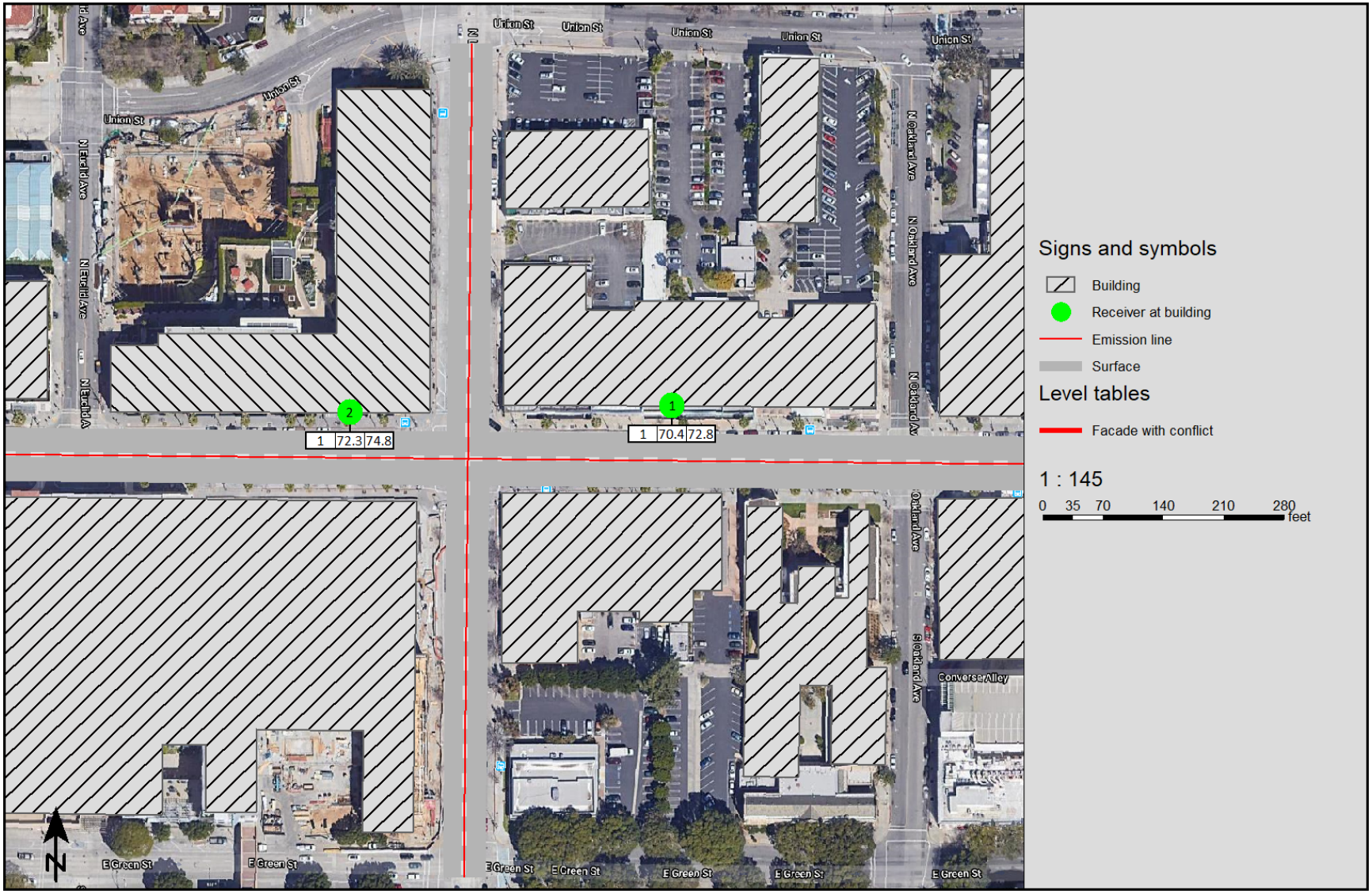
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	70.4	72.8	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	72.3	74.8	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	70.4	72.8		
Colorado Boulevard		-		70.1	72.5
Los Robles Avenue		-		58.0	60.4
Western Asset Plaza 385	GF	72.3	74.8		
Colorado Boulevard		-		71.8	74.3
Los Robles Avenue		-		62.6	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's I	GF	Day	38.2	45.8	50.0	52.4	53.7	54.8	55.7	57.8	58.2	57.9	59.8	61.2	60.8	60.0	59.8	58.8	58.0	56.3	54.8	51.9	48.0	45.0	41.9	38.9
			Lden	40.4	47.7	52.3	54.8	56.2	57.2	58.2	60.8	60.9	60.3	61.8	63.4	62.8	63.0	62.2	61.2	60.3	58.8	57.4	54.0	51.4	47.9	44.0	41.2
2	Western Asset Pla	GF	Day	40.0	47.4	51.9	54.3	55.7	56.8	58.2	60.4	60.0	60.0	62.2	63.4	62.7	62.4	61.4	60.2	59.3	57.7	56.8	53.0	51.2	49.7	46.8	41.7
			Lden	42.7	49.0	54.2	56.8	58.7	59.3	60.8	63.3	62.7	62.4	64.0	65.8	64.8	64.7	63.7	62.8	61.0	60.3	59.3	56.8	54.2	51.9	49.7	44.2


Union St
N Ethrid Ave
N Oakland Ave
E Green St
Converse Alley
1 72.3 74.8
1 70.4 72.8
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 35 70 140 210 280
feet

KEY H1

COLORADO BOULEVARD FROM HOLLISTON TO HILL

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	40.(	47.4	51.9	54.	55.	55.9	57.4	60.	58.4	58.(	60.9	61.9	59.2	60.9	59.(	58.	58.	57.3	57.	55.3	53.(	50.	46.4	40.
			Lden	43.(	50.9	55.	58.2	59.3	60.9	62.9	65.(	63.	62.4	64.(	65.(	63.2	64.3	63.	62.(	62.2	61.	61.(	60.	57.	54.8	51.(	44.
2	Holliston United M	GF	Day	38.9	46.2	51.(	53.(	54.9	55.9	55.4	55.(	55.	54.(	56.(	57.8	56.2	56.9	55.9	56.2	56.3	55.9	54.3	53.3	51.(	47.	42.2	36.
			Lden	41.3	49.(	54.9	57.9	59.3	59.9	59.9	60.	59.	59.2	61.4	61.	60.3	61.(	59.(	60.	60.3	60.	59.2	58.	55.(	52.9	47.(	41.

Contribution levels of the receivers

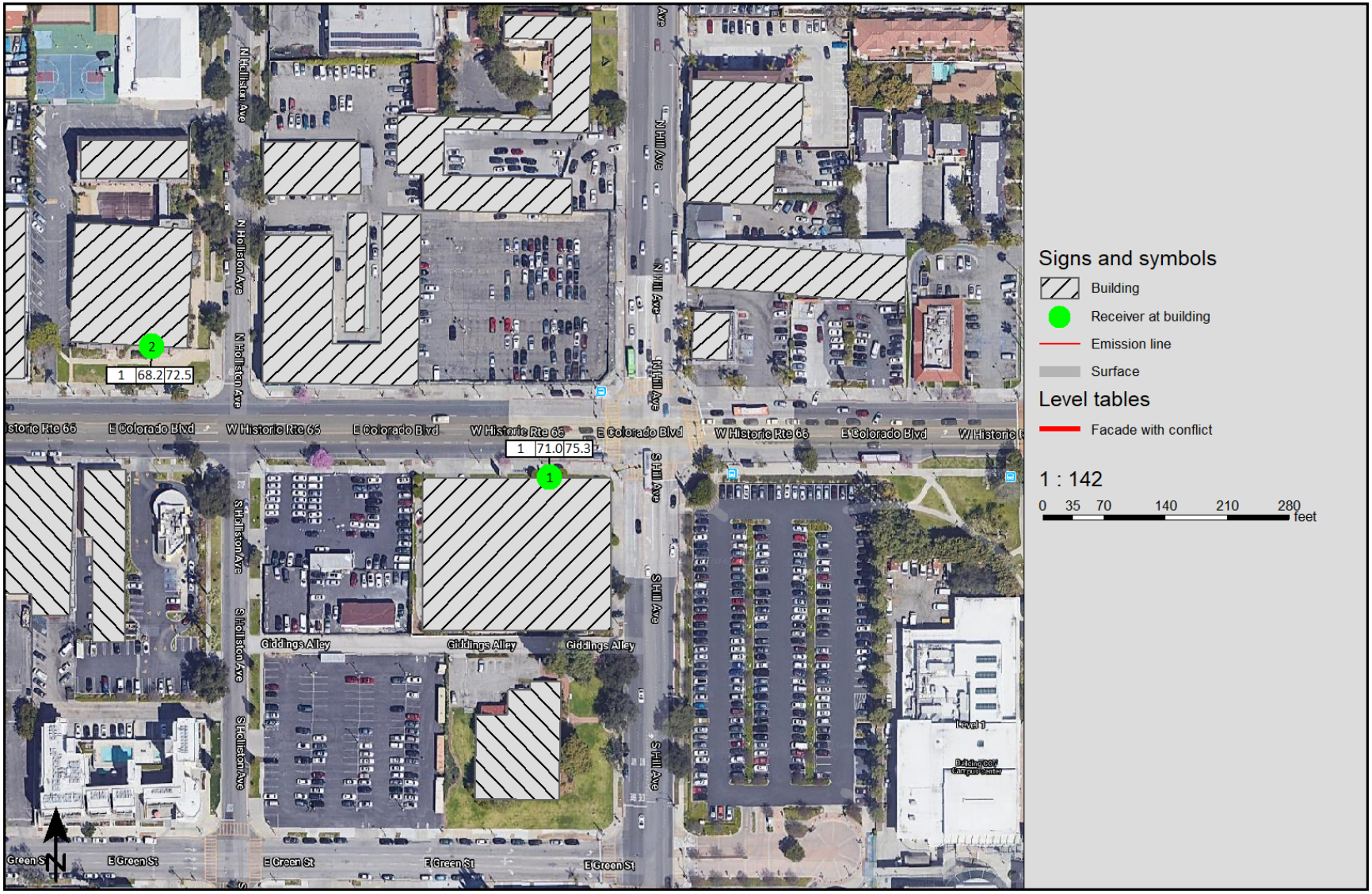
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	71.0	75.3		
Colorado Boulevard		-		70.0	74.3
Hill Avenue		-		64.2	68.5
Holliston United Methodist Church	GF	68.2	72.5		
Colorado Boulevard		-		68.2	72.5
Hill Avenue		-		44.9	49.4

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	71.0	75.3	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	68.2	72.5	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00	24276	Total	-	1501	928	319	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1141	704	177	56					
		Medium trucks	-	210	130	33	56					
		Heavy trucks	-	58	37	88	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	44	27	7	56					
		Auxiliary vehicle	-	43	26	7	56					
0+48	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00	25944	Total	-	1604	992	341	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1219	753	190	56					
		Medium trucks	-	224	139	35	56					
		Heavy trucks	-	62	39	94	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	47	29	7	56					
		Auxiliary vehicle	-	46	28	7	56					
0+31	-							-	-	-	-	-


N Hollston Ave
N Hill Ave
E Colorado Blvd
W Historic Rte 66
S Hollston Ave
S Hill Ave
Giddings Alley
E Green St
1 68.2 72.5
1 71.0 75.3
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 142
0 35 70 140 210 280
feet

CATEGORY 3 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM BLAKESLEE TO VINELANE

KEY A1

VINELAND AVENUE FROM WEDDINGTON TO MAGNOLIA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.4	49.2	54.7	56.8	58.2	59.7	59.9	60.7	58.2	57.7	58.7	58.0	58.8	58.0	57.4	57.8	57.0	56.4	56.8	54.7	52.0	48.0	43.0	35.0
			Lden	43.2	51.0	55.9	58.0	60.7	61.0	61.4	62.0	60.7	59.0	60.0	60.5	60.7	60.5	59.2	59.0	58.8	58.2	58.7	56.0	53.9	49.9	44.8	37.4
2	Gallery at NoHo C	GF	Day	35.8	43.2	48.7	50.8	52.2	53.0	53.3	53.7	51.7	50.8	51.9	52.7	53.0	53.7	52.7	51.9	50.0	50.4	51.7	47.9	46.0	42.8	37.2	31.1
			Lden	37.2	45.7	50.0	52.7	54.7	54.9	55.7	55.9	53.0	52.0	53.8	54.8	54.9	54.9	54.0	53.8	52.4	52.2	53.0	49.7	47.9	44.4	39.0	32.9
3	Gray Studios	GF	Day	39.4	47.0	51.8	54.4	55.8	56.0	57.7	58.7	58.2	58.7	59.2	59.3	59.7	60.7	59.0	57.8	57.0	55.0	54.2	51.8	50.0	49.9	45.0	38.4
			Lden	41.2	48.9	53.0	56.2	57.0	58.9	59.0	60.0	60.2	60.0	61.7	61.7	61.0	62.0	60.9	59.7	58.9	57.9	56.7	53.7	52.7	51.4	47.0	40.1

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.6	72.4		
Chandler Ave b/t Fair and Vineland		-		59.7	61.6
Fair Ave N of Chandller		-		35.1	36.9
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.3	71.2
Gallery at NoHo Commons	GF	64.5	66.4		
Chandler Ave b/t Fair and Vineland		-		63.9	65.8
Fair Ave N of Chandller		-		53.2	55.0
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.0	51.8
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.3
Fair Ave N of Chandller		-		31.0	32.8
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.8	56.6

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1	3781696.23	-	GF	191.40	-	-	70.6	72.4	-	-
2	Gallery at NoHo Commons	11373425.6	3781689.51	South	GF	194.08	-	-	64.5	66.4	-	-
3	Gray Studios	11373713.1	3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	34352	Total	-	2124	1314	451	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1612	996	342	56					
		Medium trucks	-	297	184	64	56					
		Heavy trucks	-	83	51	17	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	62	39	13	56					
		Auxiliary vehicle	-	61	38	13	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13180	Total	-	815	504	173	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -
		Automobiles	-	619	382	131	56					
		Medium trucks	-	114	71	24	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	23	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	6084	Total	-	376	233	80	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	285	177	61	48					
		Medium trucks	-	53	33	11	48					
		Heavy trucks	-	15	9	3	48					
		Buses	-	2	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	11	7	2	48					
0+06(	-							-	-	-	-	-

Metro BRT NoHo to Pasadena
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet
Chandler Blvd
Chandler Blvd
Weddington St
Weddington St
Weddington St
McCormick St
McCormick St
McCormick St
Blakeslee Ave
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Vineland Ave
1 64.5 66.4
70.6 72.4
1 70.2 72.0
N

KEY D

GLENOAKS BOULEVARD FROM OLIVE TO ANGELENO

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Central L	GF	Day	39.4	47.0	51.7	54.2	55.4	55.9	56.4	58.7	58.4	56.9	58.0	59.9	58.7	58.9	58.2	57.4	57.3	56.4	55.7	53.2	49.0	46.3	42.0	38.1
			Lden	41.4	48.9	53.0	56.7	57.2	57.8	58.3	60.4	60.3	58.8	60.4	61.7	60.9	60.7	60.0	59.3	59.7	58.3	57.4	55.0	51.0	48.7	44.0	40.1

Contribution levels of the receivers

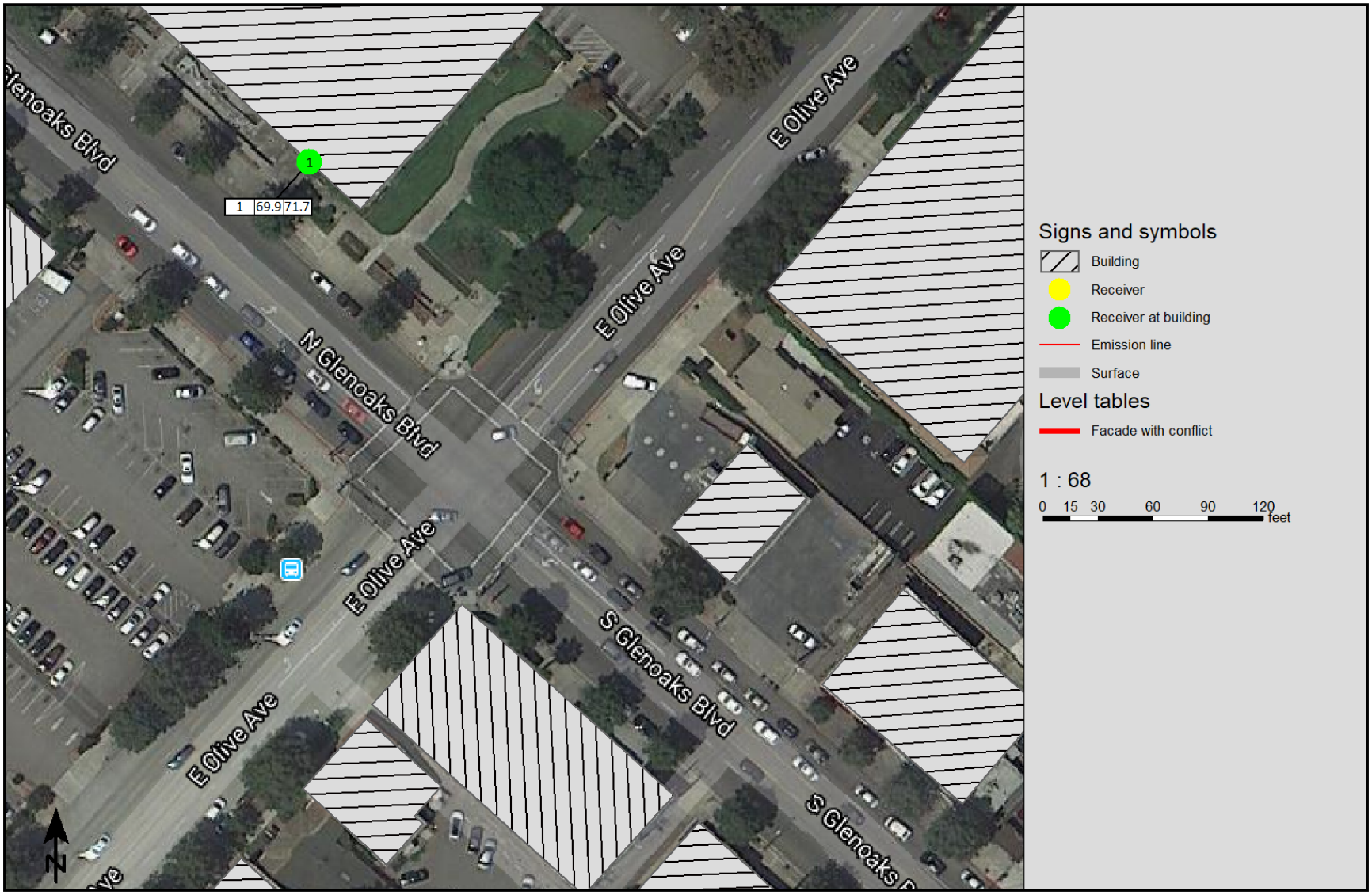
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Central LIbrary	GF	69.9	71.7		
North Glenoaks Boulevard		-		68.5	70.3
Olive Avenue		-		64.2	66.0

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Central LIbrary	11379602.4	13783293.5	South we	GF	202.86	-	-	69.9	71.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00	40208	Total	-	2486	1538	528	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1889	1168	401	46					
		Medium trucks	-	349	215	74	46					
		Heavy trucks	-	98	60	20	46					
		Buses	-	8	6	2	46					
		Motorcycles	-	73	45	16	46					
		Auxiliary vehicle	-	71	44	15	46					
0+25	-							-	-	-	-	-
North Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	14648	Total	-	906	560	192	-	Traffic li	-	30.0	Average (of DGAC a	-1.9
		Automobiles	-	688	425	146	46					
		Medium trucks	-	127	78	27	46					
		Heavy trucks	-	36	22	7	46					
		Buses	-	3	2	1	46					
		Motorcycles	-	27	16	6	46					
		Auxiliary vehicle	-	26	16	5	46					
0+22	-							-	-	-	-	-


Glenoaks Blvd
E Olive Ave
1
1 69.9 71.7
N Glenoaks Blvd
E Olive Ave
E Olive Ave
S Glenoaks Blvd
E Olive Ave
S Glenoaks
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 68
0 15 30 60 90 120
feet

KEY D
GLENOAKS BOUELVARD FROM JUSTIN TO RUBERTA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Thomas Jefferson	GF	Day	30.5	38.9	43.2	45.1	45.8	46.4	47.1	48.2	47.5	47.1	49.1	50.1	50.1	50.4	48.9	48.4	47.4	46.0	46.0	43.9	39.0	35.2	28.0	18.1
			Lden	32.5	40.1	45.1	46.9	47.1	48.2	49.0	50.1	49.2	48.9	50.9	52.0	52.0	52.2	50.0	50.2	49.4	47.9	48.0	45.0	41.1	37.1	29.9	20.1

Contribution levels of the receivers

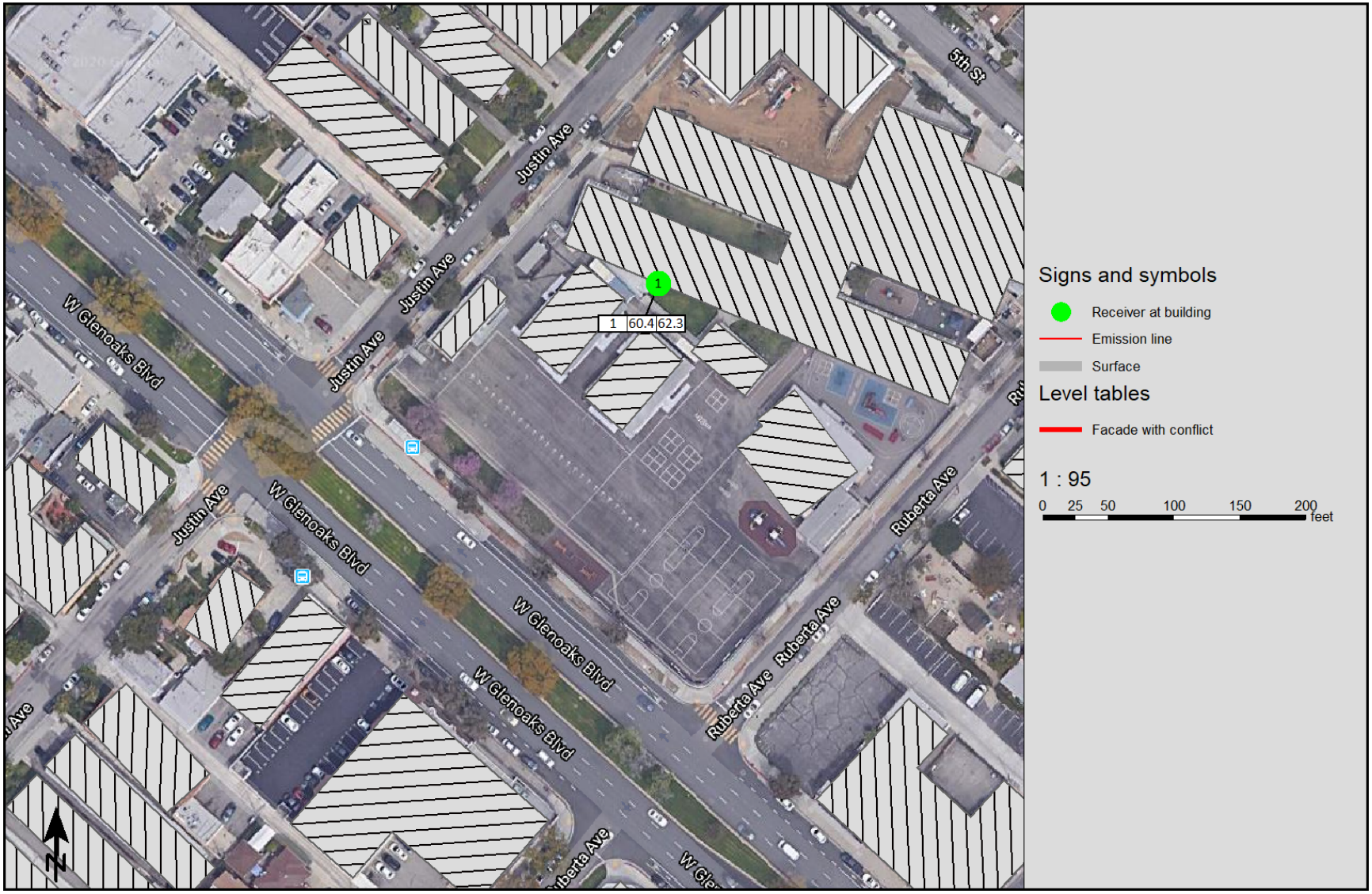
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Thomas Jefferson Elementary	GF	60.4	62.3		
1		-		-	-
Glenoaks Boulevard		-		60.2	62.0
Justin Avenue		-		47.4	49.2

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Thomas Jefferson Elementary	11381398.4	3781760.33	South we	GF	169.93	-	-	60.4	62.3	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 1
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	38980	Total	-	2410	1491	512	-	Traffic li	30.0	100.0	Average (of DGAC a	-1.4
		Automobiles	-	1830	1132	388	56					
		Medium trucks	-	338	209	72	56					
		Heavy trucks	-	94	58	20	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	71	44	15	56					
		Auxiliary vehicle	-	69	42	15	56					
0+43	-							-	-	-	-	-
Justin Avenue							Traffic direction: In entry direction					
0+00	1600	Total	-	99	61	21	-	Traffic li	30.0	100.0	Average (of DGAC a	3.3
		Automobiles	-	75	46	16	46					
		Medium trucks	-	14	9	3	46					
		Heavy trucks	-	4	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	3	2	1	46					
		Auxiliary vehicle	-	3	2	1	46					
0+30	-							-	-	-	-	-


5th St
Justin Ave
Justin Ave
Justin Ave
Justin Ave
W Glenoaks Blvd
W Glenoaks Blvd
W Glenoaks Blvd
W Glenoaks Blvd
Ruberta Ave
Ruberta Ave
Ruberta Ave
1
1 60.4 62.3
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 95
0 25 50 100 150 200
feet

KEY E1

BROADWAY BETWEEN CHEVY CHASE AND VERDUGO

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	John Marshall Eler	GF	Day	39.4	47.(	51.(	54.(	55.2	56.2	57.7	60.4	59.4	58.4	60.9	61.(	60.2	60.4	59.(	58.(	58.(	57.4	56.(	54.7	52.4	48.7	46.2	41.2
			Lden	41.2	48.(	53.4	55.(	57.7	58.7	59.(	62.2	61.4	60.4	62.(	63.(	62.(	62.2	60.(	59.(	59.(	59.7	58.(	55.(	54.2	50.(	48.7	43.2

Contribution levels of the receivers

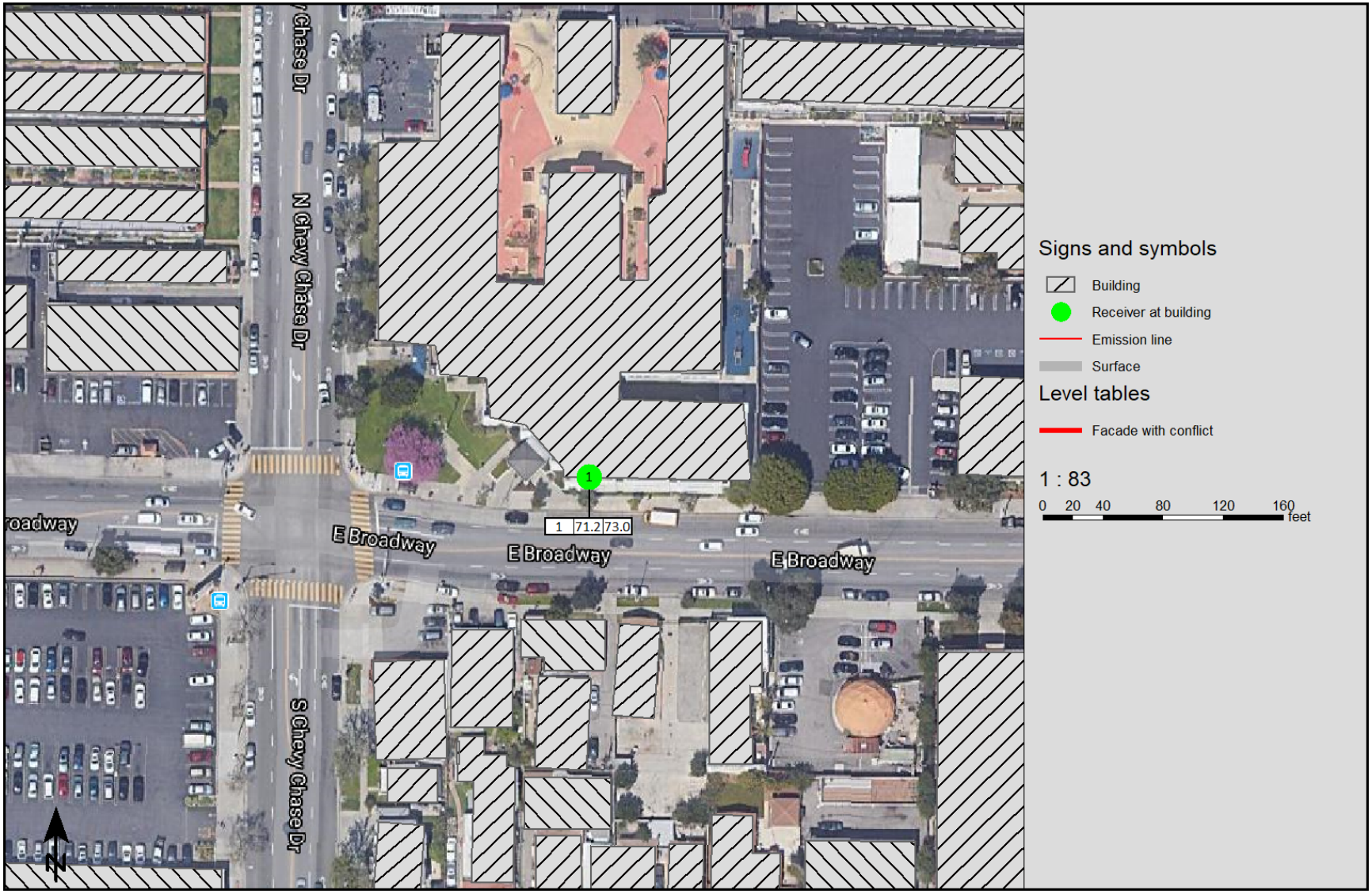
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
John Marshall Elementary	GF	71.2	73.0		
Broadway		-		70.8	72.7
Chevy Chase Drive		-		59.8	61.7

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	John Marshall Elementary	11385774.8	3779074.69	South	GF	180.53	-	-	71.2	73.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00	19860	Total	-	1228	759	261	-	Traffic li	-	30.0	Average (of DGAC a	0.0 / 0.
		Automobiles	-	933	575	198	56					
		Medium trucks	-	172	106	36	56					
		Heavy trucks	-	48	29	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	36	23	8	56					
		Auxiliary vehicle	-	35	22	8	56					
0+26	-							-	-	-	-	-
Chevy Chase Drive							Traffic direction: In entry direction					
0+00	22532	Total	-	1393	862	296	-	Traffic li	-	30.0	Average (of DGAC a	-1.8
		Automobiles	-	1058	654	225	56					
		Medium trucks	-	195	121	41	56					
		Heavy trucks	-	54	33	11	56					
		Buses	-	5	4	1	56					
		Motorcycles	-	41	26	9	56					
		Auxiliary vehicle	-	40	25	9	56					
0+17	-							-	-	-	-	-


N Chevy Chase Dr
S Chevy Chase Dr
E Broadway
E Broadway
E Broadway
1
1 71.2 73.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND AND EAGLE ROCK

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	32.2	39.8	44.4	46.8	47.8	48.4	48.8	49.0	48.7	48.8	50.5	50.9	50.3	51.1	49.0	48.7	48.1	47.3	47.3	45.3	42.3	38.1	32.2	25.
			Lden	34.1	41.0	46.3	48.1	49.1	50.3	50.5	50.9	50.6	50.7	52.4	52.7	52.2	53.0	51.5	50.0	49.5	49.3	49.1	47.2	44.2	40.0	34.1	27.0
2	Rockland Avenue	GF	Day	34.3	41.0	44.3	45.5	45.0	45.4	46.5	49.0	50.5	49.0	51.3	51.5	50.4	51.1	50.2	49.4	48.7	49.5	49.0	45.5	43.0	38.1	32.0	24.5
			Lden	36.2	42.9	46.2	47.3	47.5	47.3	48.3	51.5	52.4	51.5	53.2	53.8	52.3	53.0	52.0	51.2	50.0	51.1	50.5	47.4	45.4	40.5	34.5	26.4

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	61.4	63.3		
1		-		-	-
Colorado Boulevard		-		55.6	57.4
Eagle Rock Boulevard		-		60.1	62.0
Rockland Avenue 5116	GF	61.8	63.7		
1		-		-	-
Colorado Boulevard		-		61.3	63.2
Eagle Rock Boulevard		-		52.5	54.3

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.4	63.3	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.8	63.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	5080	Total	-	314	194	67	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	238	147	51	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	38328	Total	-	2370	1466	503	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -1
		Automobiles	-	1800	1113	382	56					
		Medium trucks	-	332	205	71	56					
		Heavy trucks	-	93	57	20	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	69	43	14	56					
		Auxiliary vehicle	-	67	42	14	56					
0+20	-							-	-	-	-	-

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Caspar Ave
Merton Ave
2
1 61.8 63.7
1
1 61.4 63.3
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY F2

COLORADO BOULEVARD FROM TOWNSEND TO FLORISTAN

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Dahlia Heights Ele	GF	Day	37.4	44.7	49.4	52.0	53.6	55.0	56.0	57.3	55.9	55.0	55.3	55.9	55.7	55.9	54.0	54.3	53.9	52.8	53.7	50.9	48.4	44.8	40.7	34.
			Lden	39.3	46.9	51.2	53.9	55.9	56.8	57.8	59.7	57.8	56.8	57.2	57.3	57.9	57.8	56.9	56.3	55.7	54.0	55.0	52.8	50.3	46.0	42.9	35.
2	Waldran Avenue 1	GF	Day	32.4	40.0	44.7	47.2	48.9	49.2	50.0	52.7	50.0	49.4	51.7	51.7	50.8	51.3	50.4	49.2	48.9	47.8	46.9	44.7	41.9	39.4	36.2	30.
			Lden	34.3	41.9	46.0	49.7	50.4	51.7	51.9	54.0	52.9	51.3	53.7	53.0	52.7	53.3	52.4	51.7	50.4	49.7	48.9	46.0	43.8	41.3	38.7	32.

Contribution levels of the receivers

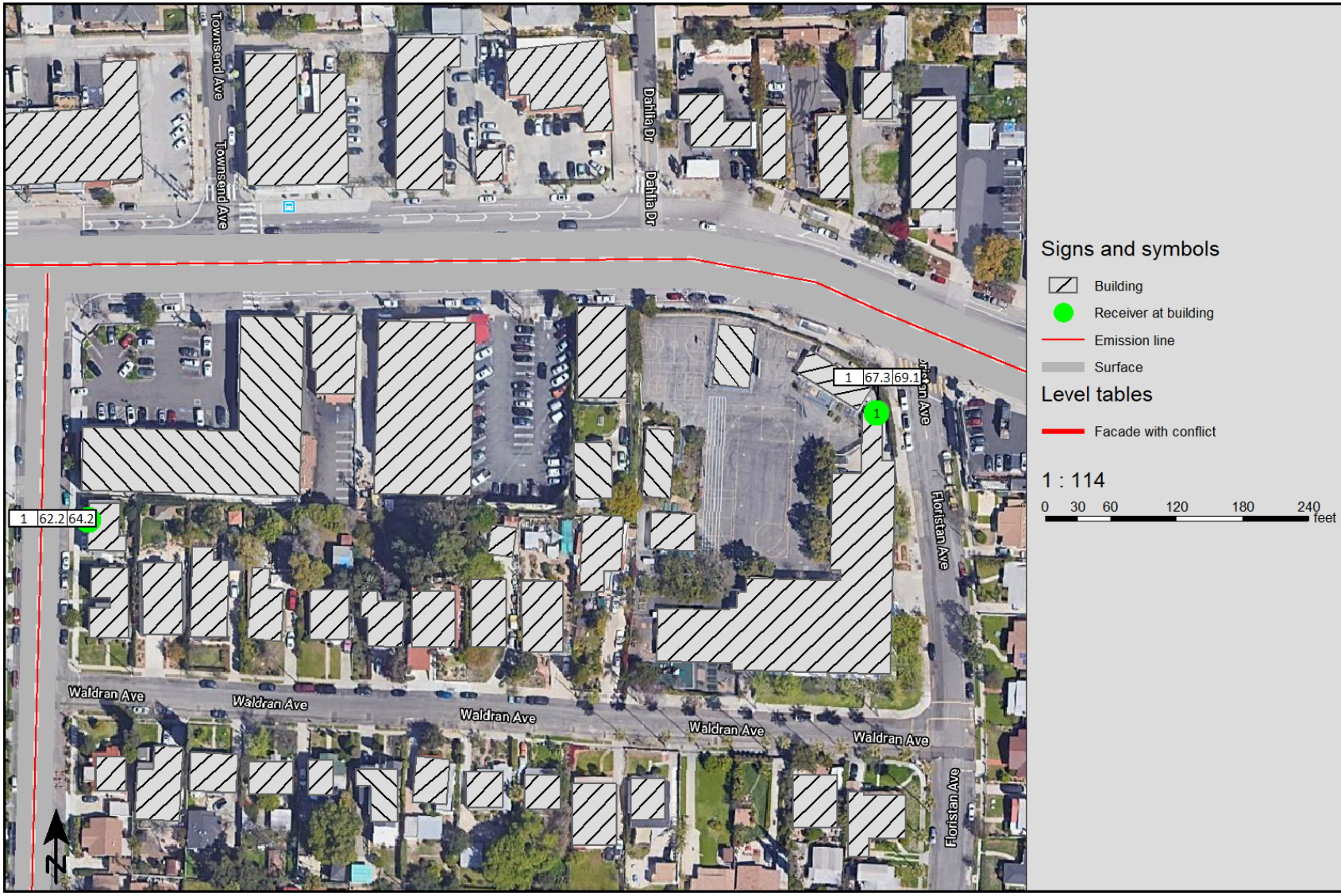
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Dahlia Heights Elementary School	GF	67.3	69.1		
Colorado Boulevard		-		67.3	69.1
Townsend Avenue		-		23.6	25.6
Waldran Avenue 1597	GF	62.2	64.2		
Colorado Boulevard		-		59.1	60.9
Townsend Avenue		-		59.4	61.4

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Dahlia Heights Elementary Sc	11389451.0	3778232.14	North	GF	206.73	-	-	67.3	69.1	-	-
2	Waldran Avenue 1597	11389232.4	3778202.50	West	GF	202.83	-	-	62.2	64.2	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	39352	Total	-	2433	1505	517	-	Traffic li	-	30.0	Average (of DGAC a	0.4 / 3.
		Automobiles	-	1845	1143	393	56					
		Medium trucks	-	340	211	72	56					
		Heavy trucks	-	95	58	20	56					
		Buses	-	10	5	2	56					
		Motorcycles	-	72	44	15	56					
		Auxiliary vehicle	-	72	43	15	56					
0+41(	-							-	-	-	-	-
Townsend Avenue							Traffic direction: In entry direction					
0+00(	360	Total	-	22	14	5	-	Stop sig	-	100.0	Average (of DGAC a	-2.2
		Automobiles	-	17	11	4	46					
		Medium trucks	-	3	2	1	46					
		Heavy trucks	-	1	1	0	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	1	0	0	46					
		Auxiliary vehicle	-	1	0	0	46					
0+17(	-							-	-	-	-	-


Townsend Ave
Townsend Ave
Dahlia Dr
Dahlia Dr
1 67.3 69.1
Floristan Ave
1 62.2 64.2
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Floristan Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 114
0 30 60 120 180 240
feet

KEY H1
COLORADO BOULEVARD FROM LOS ROBLES TO OAKLAND

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's I	GF	Day	38.2	45.8	50.0	52.4	53.7	54.8	55.7	57.8	58.2	57.9	59.8	61.2	60.8	60.0	59.8	58.8	58.0	56.3	54.8	51.9	48.0	45.0	41.9	38.9
			Lden	40.4	47.7	52.3	54.8	56.2	57.2	58.2	60.8	60.9	60.3	61.8	63.4	62.8	63.0	62.2	61.2	60.3	58.8	57.4	54.0	51.4	47.9	44.0	41.2
2	Western Asset Pla	GF	Day	40.0	47.4	51.9	54.3	55.7	56.8	58.2	60.4	60.0	60.0	62.2	63.4	62.7	62.4	61.4	60.2	59.3	57.7	56.8	53.0	51.2	49.7	46.8	41.7
			Lden	42.7	49.0	54.2	56.8	58.7	59.3	60.8	63.3	62.7	62.4	64.0	65.8	64.8	64.7	63.7	62.8	61.0	60.3	59.3	56.8	54.2	51.9	49.7	44.2

Contribution levels of the receivers

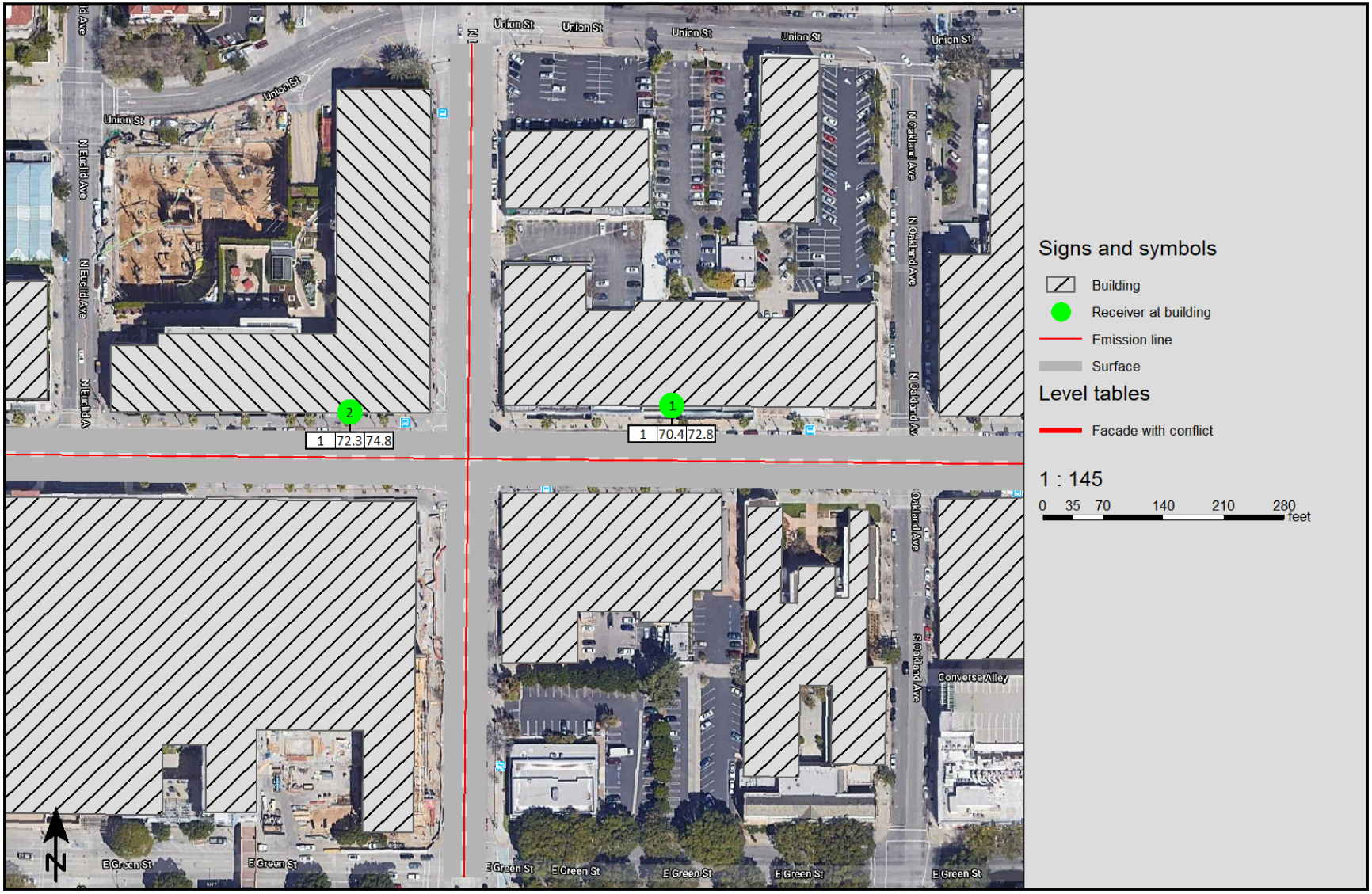
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	70.4	72.8		
Colorado Boulevard		-		70.1	72.5
Los Robles Avenue		-		58.0	60.4
Western Asset Plaza 385	GF	72.3	74.8		
Colorado Boulevard		-		71.8	74.3
Los Robles Avenue		-		62.6	65.0

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	70.4	72.8	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	72.3	74.8	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	21448	Total	-	1326	820	282	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1037	623	214	56					
		Medium trucks	-	191	115	39	56					
		Heavy trucks	-	53	32	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	39	24	8	56					
		Auxiliary vehicle	-	-	23	8	56					
0+46(	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	26960	Total	-	1667	1031	354	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1304	783	269	56					
		Medium trucks	-	240	144	50	56					
		Heavy trucks	-	67	40	14	56					
		Buses	-	7	4	2	56					
		Motorcycles	-	49	30	11	56					
		Auxiliary vehicle	-	-	29	11	56					
0+29(	-							-	-	-	-	-


Union St
N Ethrid Ave
N Oakland Ave
E Green St
Converse Alley
1 72.3 74.8
1 70.4 72.8
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 35 70 140 210 280
feet

KEY H1

COLORADO BOULEVARD FROM CHESTER TO HOLLISTON

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	40.(	47.4	51.8	54.	55.(	55.9	57.3	60.(	58.4	58.(	60.4	61.9	59.	60.9	58.9	58.	58.	57.2	57.(	55.3	52.9	50.(	46.3	40.
			Lden	43.(	50.8	55.	58.	59.3	60.9	62.4	65.9	63.	62.4	64.9	65.(	63.2	64.3	63.(	62.(	62.2	61.	61.8	60.(	57.	54.	51.(	44.
2	Holliston United M	GF	Day	38.9	46.2	51.(	53.(	54.9	55.4	55.4	55.9	55.	54.9	56.(	57.	56.2	56.9	55.4	56.3	56.3	55.9	54.2	53.3	51.(	47.	42.2	36.
			Lden	41.3	49.9	54.9	57.8	59.3	59.9	59.8	60.	59.	59.2	61.4	61.	60.3	61.(	59.	60.	60.3	60.	59.2	58.	55.(	52.9	47.(	41.

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	71.0	75.2		
Colorado Boulevard		-		70.0	74.2
Hill Avenue		-		64.1	68.4
Holliston United Methodist Church	GF	68.2	72.5		
Colorado Boulevard		-		68.1	72.5
Hill Avenue		-		44.8	49.3

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	71.0	75.2	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	68.2	72.5	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00	24148	Total	-	1493	924	317	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1134	701	176	56					
		Medium trucks	-	209	130	33	56					
		Heavy trucks	-	58	37	87	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	44	27	7	56					
		Auxiliary vehicle	-	42	26	7	56					
0+48	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00	25440	Total	-	1573	973	334	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1195	738	186	56					
		Medium trucks	-	220	137	35	56					
		Heavy trucks	-	61	38	92	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	46	29	7	56					
		Auxiliary vehicle	-	45	27	7	56					
0+31	-							-	-	-	-	-

ROUTE OPTIONS ANALYSIS

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	19436	Total	-	1212	749	237	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	919	569	180	56					
		Medium trucks	-	170	105	33	56					
		Heavy trucks	-	47	29	9	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	36	22	7	56					
		Auxiliary vehicle	-	35	21	7	56					
0+362	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	5060	Total	-	313	194	66	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	237	147	50	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	5	2	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Buildir side	Floor	Height abv.gr m	Limit Day	Limit Evenir	Limit Night	Limit Lden	Level Day	Level Evenir	Level Night	Level Lden	Conflict Day	Conflict Evenir	Conflict Night	Conflict Lden
						dB(A)				dB(A)				dB			
1	Kaiser Permanente	11373213781499	West	GF	193.07	-	-	-	-	71.9	69.8	64.8	73.6	-	-	-	-
2	Lofts at Noho	11373293781539	West	GF	192.95	-	-	-	-	63.5	61.4	56.7	65.4	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		71.9	69.8	64.8	73.6
Lankershim Boulevard		-	71.8	69.6	64.7	73.4
Weddington Street		-	57.7	55.5	50.9	59.5
Lofts at Noho	GF		63.5	61.4	56.7	65.4
Lankershim Boulevard		-	53.2	51.0	46.1	54.8
Weddington Street		-	63.1	61.0	56.4	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	39.4	47.0	51.9	54.4	55.8	56.9	58.0	60.0	60.9	59.9	61.2	63.0	61.7	61.4	60.2	58.2	56.9	56.0	56.4	56.2	54.0	50.4	47.7	40.
			Even	37.4	45.0	49.7	52.2	53.7	54.7	55.9	58.4	58.7	57.8	59.2	60.9	59.0	59.4	58.7	56.2	54.8	53.9	54.4	54.7	51.8	48.4	45.0	38.
			Night	32.4	40.0	44.8	47.2	48.7	49.8	50.9	53.4	53.8	52.8	54.2	55.9	54.0	54.4	53.2	51.2	49.9	48.9	49.4	49.2	46.9	43.4	40.0	33.
			Lden	41.2	48.8	53.4	56.7	57.4	58.0	59.7	62.2	62.0	61.0	63.0	64.7	63.4	63.2	61.9	60.0	58.0	57.7	58.2	57.9	55.0	52.2	49.4	42.
2	Lofts at Noho	GF	Day	32.7	39.4	44.7	46.4	47.8	49.7	50.0	52.9	51.4	51.4	53.4	53.9	52.4	53.7	51.7	50.7	49.4	48.7	48.2	47.3	46.2	42.0	37.2	34.
			Even	30.0	37.4	42.0	44.4	45.7	47.0	48.4	50.8	49.2	49.2	51.4	51.8	50.2	51.0	49.0	48.0	47.4	46.0	46.7	45.2	44.2	40.4	35.7	32.
			Night	25.2	32.7	37.2	39.7	41.0	42.2	43.8	46.7	44.0	44.0	46.7	47.7	45.7	46.2	44.4	43.4	42.7	41.2	41.4	40.4	39.4	35.8	30.4	27.
			Lden	33.4	41.2	45.4	48.2	49.0	50.4	52.4	54.7	53.2	53.2	55.2	55.7	54.2	54.4	53.4	52.4	51.4	50.0	50.0	49.7	48.7	44.4	39.7	36.

Metro Lankershim Option
Lankershim Blvd
Weddington St
Lankershim Blvd
1 63.5 61.4 56.7 65.4
2
1 71.9 69.8 64.8 73.6
1
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY A2

LANKERSHIM BOULEVARD FROM CHANDLER TO WEDDINGTON

2019 BASE YEAR

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	19436	Total	-	1212	749	237	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	919	569	180	56					
		Medium trucks	-	170	105	33	56					
		Heavy trucks	-	47	29	9	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	36	22	7	56					
		Auxiliary vehicle	-	35	21	7	56					
0+362	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	5060	Total	-	313	194	66	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	237	147	50	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	5	2	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Buildir side	Floor	Height abv.gr m	Limit Day	Limit Evenir	Limit Night	Limit Lden	Level Day	Level Evenir	Level Night	Level Lden	Conflict Day	Conflict Evenir	Conflict Night	Conflict Lden
						dB(A)				dB(A)				dB			
1	Kaiser Permanente	11373213781499	West	GF	193.07	-	-	-	-	71.9	69.8	64.8	73.6	-	-	-	-
2	Lofts at Noho	11373293781539	West	GF	192.95	-	-	-	-	63.5	61.4	56.7	65.4	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		71.9	69.8	64.8	73.6
Lankershim Boulevard		-	71.8	69.6	64.7	73.4
Weddington Street		-	57.7	55.5	50.9	59.5
Lofts at Noho	GF		63.5	61.4	56.7	65.4
Lankershim Boulevard		-	53.2	51.0	46.1	54.8
Weddington Street		-	63.1	61.0	56.4	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	39.4	47.0	51.9	54.4	55.8	56.9	58.0	60.0	60.9	59.9	61.2	63.0	61.7	61.4	60.2	58.2	56.9	56.0	56.4	56.2	54.0	50.4	47.7	40.
			Even	37.4	45.0	49.7	52.2	53.7	54.7	55.9	58.4	58.7	57.8	59.2	60.9	59.0	59.4	58.7	56.2	54.8	53.9	54.4	54.7	51.8	48.4	45.0	38.
			Night	32.4	40.0	44.8	47.2	48.7	49.8	50.9	53.4	53.8	52.8	54.2	55.9	54.0	54.4	53.2	51.2	49.9	48.9	49.4	49.2	46.9	43.4	40.0	33.
			Lden	41.2	48.8	53.4	56.7	57.4	58.0	59.7	62.2	62.0	61.0	63.0	64.7	63.4	63.2	61.9	60.0	58.0	57.7	58.2	57.9	55.0	52.2	49.4	42.
2	Lofts at Noho	GF	Day	32.7	39.4	44.7	46.4	47.8	49.7	50.0	52.9	51.4	51.4	53.4	53.9	52.4	53.7	51.7	50.7	49.4	48.7	48.2	47.3	46.2	42.0	37.2	34.
			Even	30.0	37.4	42.0	44.4	45.7	47.0	48.4	50.8	49.2	49.2	51.4	51.8	50.2	51.0	49.0	48.0	47.4	46.0	46.7	45.2	44.2	40.4	35.7	32.
			Night	25.2	32.7	37.2	39.7	41.0	42.2	43.8	46.7	44.0	44.0	46.7	47.7	45.7	46.2	44.4	43.4	42.7	41.2	41.4	40.4	39.4	35.8	30.4	27.
			Lden	33.4	41.2	45.4	48.2	49.0	50.4	52.4	54.7	53.2	53.2	55.2	55.7	54.2	54.4	53.4	52.4	51.4	50.0	50.0	49.7	48.7	44.4	39.7	36.

Metro Lankershim Option
Lankershim Blvd
Weddington St
Lankershim Blvd
1 63.5 61.4 56.7 65.4
2
1 71.9 69.8 64.8 73.6
1
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY A2
LANKERSHIM BOULEVARD FROM CHANDLER TO WEDDINGTON
2024 NO PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	21948	Total	-	1357	840	288	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	1029	638	219	56					
		Medium trucks	-	190	118	40	56					
		Heavy trucks	-	53	33	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	40	25	9	56					
		Auxiliary vehicle	-	39	24	9	56					
0+362	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	5672	Total	-	351	217	74	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	266	165	56	56					
		Medium trucks	-	49	30	10	56					
		Heavy trucks	-	14	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	10	6	2	56					
		Auxiliary vehicle	-	10	6	2	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Buildir side	Floor	Height abv.gr m	Limit Day	Limit Evenir	Limit Night	Limit Lden	Level Day	Level Evenir	Level Night	Level Lden	Conflict Day	Conflict Evenir	Conflict Night	Conflict Lden
						dB(A)				dB(A)				dB			
1	Kaiser Permanente	11373213781499	West	GF	193.07	-	-	-	-	72.4	70.3	65.7	74.3	-	-	-	-
2	Lofts at Noho	11373293781539	West	GF	192.95	-	-	-	-	64.0	61.9	57.3	65.9	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		72.4	70.3	65.7	74.3
Lankershim Boulevard		-	72.2	70.1	65.5	74.1
Weddington Street		-	58.2	56.0	51.4	60.0
Lofts at Noho	GF		64.0	61.9	57.3	65.9
Lankershim Boulevard		-	53.6	51.5	46.9	55.5
Weddington Street		-	63.6	61.5	56.9	65.5

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	40.(	47.(	52.3	54.9	56.3	57.4	58.9	61.	61.4	60.4	61.8	63.9	62.2	62.(	60.7	58.(	57.4	56.(	57.(	56.7	54.4	51.(	48.2	41.2
			Even	37.9	45.(	50.2	52.(	54.2	55.2	56.4	59.(	59.2	58.3	59.7	61.4	60.7	59.9	58.(	56.7	55.3	54.4	54.9	54.(	52.3	48.9	46.7	39.
			Night	33.3	40.9	45.(	48.2	49.(	50.(	51.(	54.4	54.(	53.7	55.7	56.7	55.9	55.3	54.(	52.	50.7	49.7	50.3	50.(	47.7	44.3	41.4	34.9
			Lden	41.9	49.9	54.2	56.8	58.2	59.2	60.4	63.(	63.2	62.2	63.7	65.3	64.7	63.9	62.(	60.7	59.3	58.3	58.(	58.(	56.3	52.8	50.(	43.
2	Lofts at Noho	GF	Day	32.(	40.(	44.(	47.(	48.3	49.(	51.7	53.4	51.9	51.9	54.(	54.4	52.9	53.(	52.2	51.2	50.(	48.(	48.7	47.8	46.8	43.7	37.8	35.(
			Even	30.9	37.9	42.9	44.9	46.2	47.4	48.9	51.3	49.(	49.7	51.9	52.3	50.8	51.4	50.7	49.7	47.9	46.9	46.(	45.7	44.7	40.9	35.(	32.9
			Night	25.8	33.2	37.8	40.2	41.(	42.8	44.3	46.(	45.7	45.7	47.2	47.(	46.2	46.(	45.4	44.4	43.3	41.9	41.9	41.(	40.(	36.3	31.(	28.2
			Lden	34.4	41.8	46.4	48.9	50.2	51.4	52.9	55.2	53.7	53.7	55.8	56.2	54.8	55.4	54.(	53.(	51.9	50.9	50.9	49.(	48.(	44.9	39.(	36.8

Lankershim Blvd
Weddington St
Lankershim Blvd
1 64.0 61.9 57.3 65.9
2
1 72.4 70.3 65.7 74.3
1
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY E2

LANKERSHIM BOULEVARD FROM CHANDLER TO WEDDINGTON

2024 PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	22384	Total	-	1384	856	294	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	1049	650	223	56					
		Medium trucks	-	194	120	41	56					
		Heavy trucks	-	54	33	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	41	25	9	56					
		Auxiliary vehicle	-	40	24	9	56					
0+36:	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	6016	Total	-	372	230	79	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	282	175	60	56					
		Medium trucks	-	52	32	11	56					
		Heavy trucks	-	14	9	3	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	11	7	2	56					
		Auxiliary vehicle	-	11	6	2	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Buildir side	Floor	Height abv.gr m	Limit Day	Evenir	Night	Lden	Level Day	Evenir	Night	Lden	Conflict Day	Evenir	Night	Lden
						dB(A)				dB(A)				dB			
1	Kaiser Permanente	11373213781499	West	GF	193.07	-	-	-	-	72.5	70.4	65.8	74.3	-	-	-	-
2	Lofts at Noho	11373293781539	West	GF	192.95	-	-	-	-	64.3	62.2	57.5	66.1	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		72.5	70.4	65.8	74.3
Lankershim Boulevard		-	72.3	70.2	65.6	74.2
Weddington Street		-	58.4	56.3	51.7	60.3
Lofts at Noho	GF		64.3	62.2	57.5	66.1
Lankershim Boulevard		-	53.7	51.6	47.0	55.6
Weddington Street		-	63.9	61.8	57.1	65.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	40.	47.	52.	55.	56.	57.	58.	61.	61.	60.	61.	63.	62.	62.	60.	58.	57.	56.	57.	56.	54.	51.	48.	41.
			Even	38.	45.	50.	52.	54.	55.	56.	59.	59.	58.	59.	61.	60.	60.	58.	56.	55.	54.	55.	54.	52.	49.	46.	39.
			Night	33.	41.	45.	48.	49.	50.	51.	54.	54.	53.	55.	56.	55.	55.	54.	52.	50.	49.	50.	50.	47.	44.	41.	34.
			Lden	42.	49.	54.	56.	58.	59.	60.	63.	63.	62.	63.	65.	64.	64.	62.	60.	59.	58.	58.	58.	56.	52.	50.	43.
2	Lofts at Noho	GF	Day	32.	40.	44.	47.	48.	49.	51.	53.	52.	52.	54.	54.	53.	53.	52.	51.	50.	48.	48.	48.	47.	43.	38.	35.
			Even	30.	38.	42.	45.	46.	47.	49.	51.	50.	50.	52.	52.	51.	51.	50.	49.	48.	46.	46.	45.	44.	41.	35.	33.
			Night	26.	33.	38.	40.	41.	43.	44.	46.	45.	45.	47.	47.	46.	47.	45.	44.	43.	42.	42.	41.	40.	36.	31.	28.
			Lden	34.	42.	46.	49.	50.	51.	53.	55.	54.	53.	56.	56.	55.	55.	54.	53.	52.	50.	50.	49.	48.	45.	39.	37.

Lankershim Blvd
Weddington St
Lankershim Blvd
1 64.3 62.2 57.5 66.1
2
1 72.5 70.4 65.8 74.3
1
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY E2
COLORADO STREET FROM CENTRAL TO BRAND
2019 BASE YEAR

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Brand Boulevard							Traffic direction: In entry direction					
0+00(	18756	Total	-	1162	719	242	-	Traffic li	-	30.0	Average (of DGAC a	1.1 / 1
		Automobiles	-	883	546	184	56					
		Medium trucks	-	163	101	34	56					
		Heavy trucks	-	45	28	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	34	21	7	56					
		Auxiliary vehicle	-	33	20	7	56					
0+24	-							-	-	-	-	-
Colorado Street							Traffic direction: In entry direction					
0+00(	28256	Total	-	1747	1081	371	-	Traffic li	-	30.0	Average (of DGAC a	1.0
		Automobiles	-	1328	821	282	56					
		Medium trucks	-	245	152	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	6	5	2	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	30	11	56					
0+32(	-							-	-	-	-	-

Receiver list

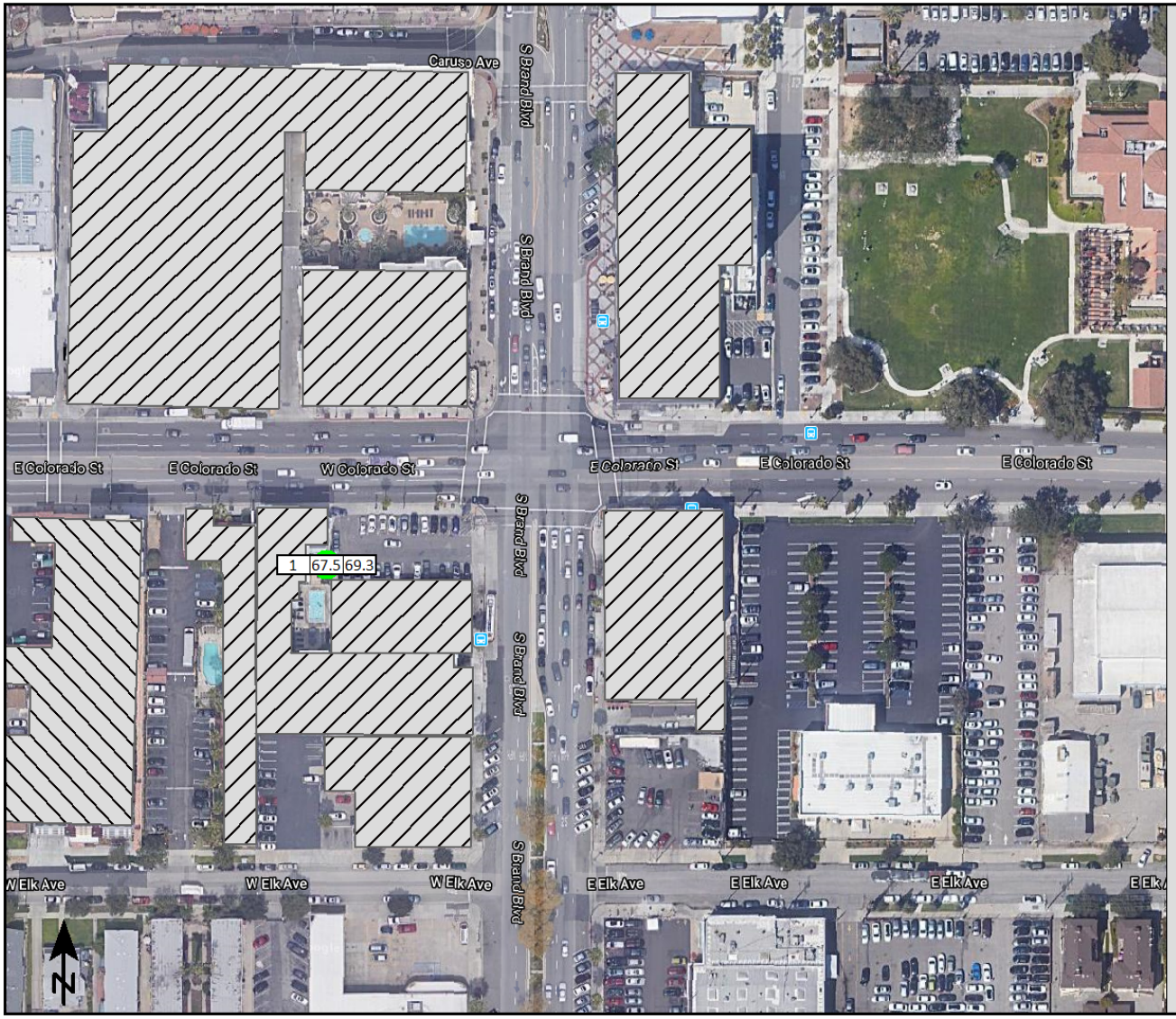
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hampton Inn & Suites	11384235.8	3778650.76	South	GF	160.48	-	-	67.5	69.3	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hampton Inn & Suites	GF	67.5	69.3		
Brand Boulevard		-		60.7	62.5
Colorado Street		-		66.5	68.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hampton Inn & Su	GF	Day	36.9	44.0	49.9	52.2	53.3	54.3	55.2	56.2	55.9	55.2	56.0	56.3	56.2	57.1	55.0	54.3	53.3	52.0	52.1	49.3	48.0	46.3	42.1	33.3
			Lden	38.9	46.9	51.2	54.0	55.9	56.9	57.2	58.3	57.2	57.3	58.9	58.9	58.3	58.9	57.0	56.9	55.9	54.0	53.9	51.9	50.4	48.9	43.9	35.0



10431 Santa Monica Boulevard

Signs and symbols

- Building
- Receiver at building
- Emission line
- Surface

Level tables

- Facade with conflict

1 : 126

0 30 60 120 180 240 feet

KEY E2
COLORADO STREET FROM CENTRAL TO BRAND
2024 NO PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Brand Boulevard							Traffic direction: In entry direction					
0+00(	18756	Total	-	1162	719	242	-	Traffic li	-	30.0	Average (of DGAC a	1.1 / 1
		Automobiles	-	883	546	184	56					
		Medium trucks	-	163	101	34	56					
		Heavy trucks	-	45	28	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	34	21	7	56					
		Auxiliary vehicle	-	33	20	7	56					
0+24	-							-	-	-	-	-
Colorado Street							Traffic direction: In entry direction					
0+00(	30988	Total	-	1916	1185	407	-	Traffic li	-	30.0	Average (of DGAC a	1.0
		Automobiles	-	1456	900	309	56					
		Medium trucks	-	269	166	57	56					
		Heavy trucks	-	74	46	15	56					
		Buses	-	7	5	2	56					
		Motorcycles	-	56	35	12	56					
		Auxiliary vehicle	-	54	33	12	56					
0+32(	-							-	-	-	-	-

Receiver list

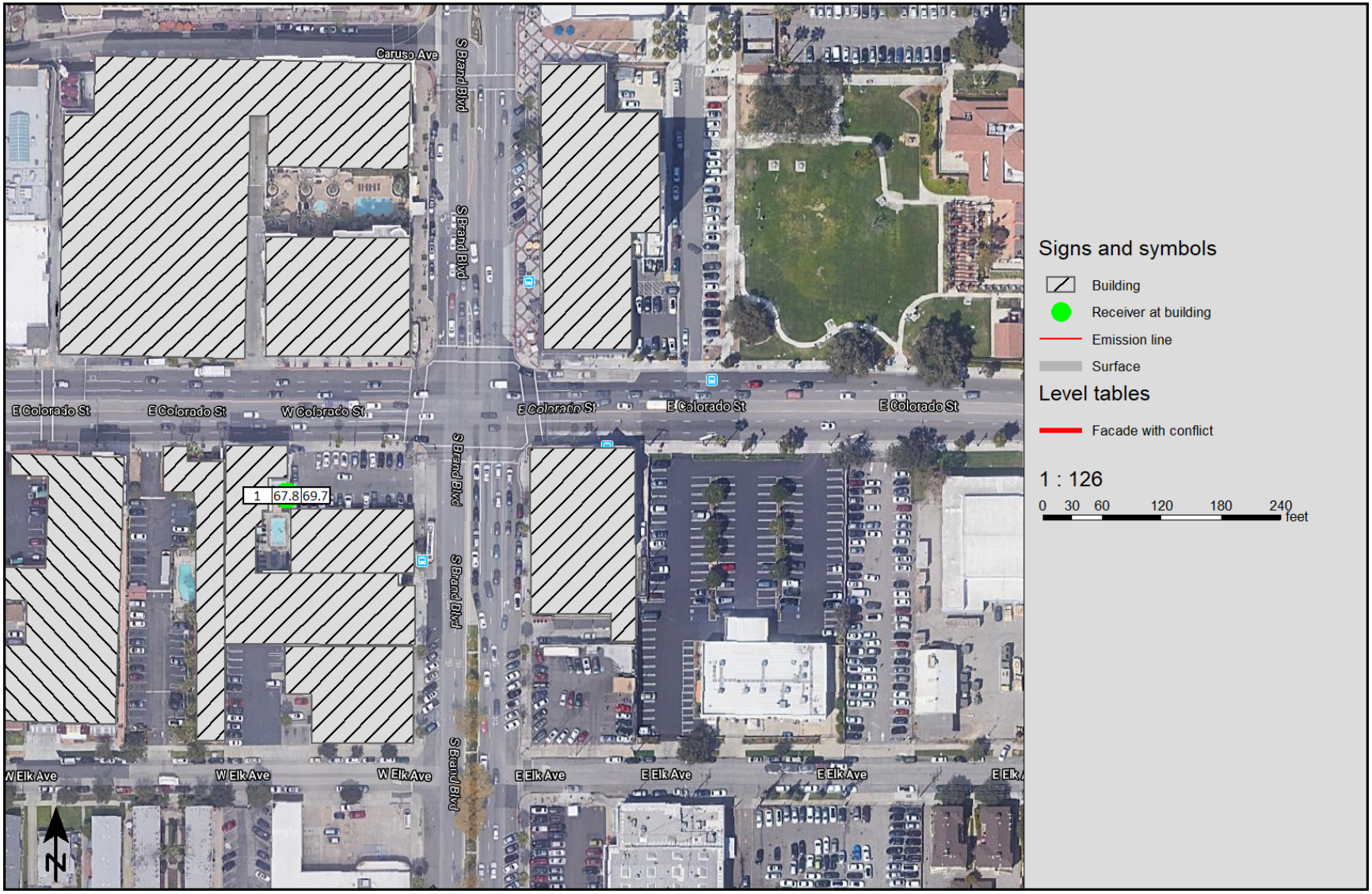
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hampton Inn & Suites	11384235.8	3778650.76	South	GF	160.48	-	-	67.8	69.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hampton Inn & Suites	GF	67.8	69.7		
Brand Boulevard		-		60.7	62.5
Colorado Street		-		66.9	68.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hampton Inn & Su	GF	Day	37.3	44.9	49.8	52.9	54.0	55.0	55.6	56.0	55.8	55.0	57.0	57.0	56.6	57.4	56.7	55.0	54.0	53.	52.4	50.0	48.9	47.7	42.9	34.
			Lden	39.7	46.8	51.0	54.4	55.8	56.8	57.4	58.4	57.7	57.4	58.8	58.9	58.4	59.2	57.9	56.8	55.8	54.9	54.2	51.8	50.0	48.9	44.3	35.9


Caruso Ave
S Brand Blvd
E Colorado St
W Colorado St
1 67.8 69.7
W Elk Ave
E Elk Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 126
0 30 60 120 180 240
feet

KEY E2
COLORADO STREET FROM CENTRAL TO BRAND
2024 PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Brand Boulevard							Traffic direction: In entry direction					
0+00(	21304	Total	-	1317	815	280	-	Traffic li	-	30.0	Average (of DGAC a	1.1 / 1
		Automobiles	-	1001	619	213	56					
		Medium trucks	-	185	114	39	56					
		Heavy trucks	-	51	32	10	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	39	24	8	56					
		Auxiliary vehicle	-	37	23	8	56					
0+24	-							-	-	-	-	-
Colorado Street							Traffic direction: In entry direction					
0+00(	31816	Total	-	1967	1217	418	-	Traffic li	-	30.0	Average (of DGAC a	1.0
		Automobiles	-	1495	924	318	56					
		Medium trucks	-	276	171	59	56					
		Heavy trucks	-	76	47	16	56					
		Buses	-	7	5	2	56					
		Motorcycles	-	58	36	12	56					
		Auxiliary vehicle	-	56	34	12	56					
0+32(	-							-	-	-	-	-

Receiver list

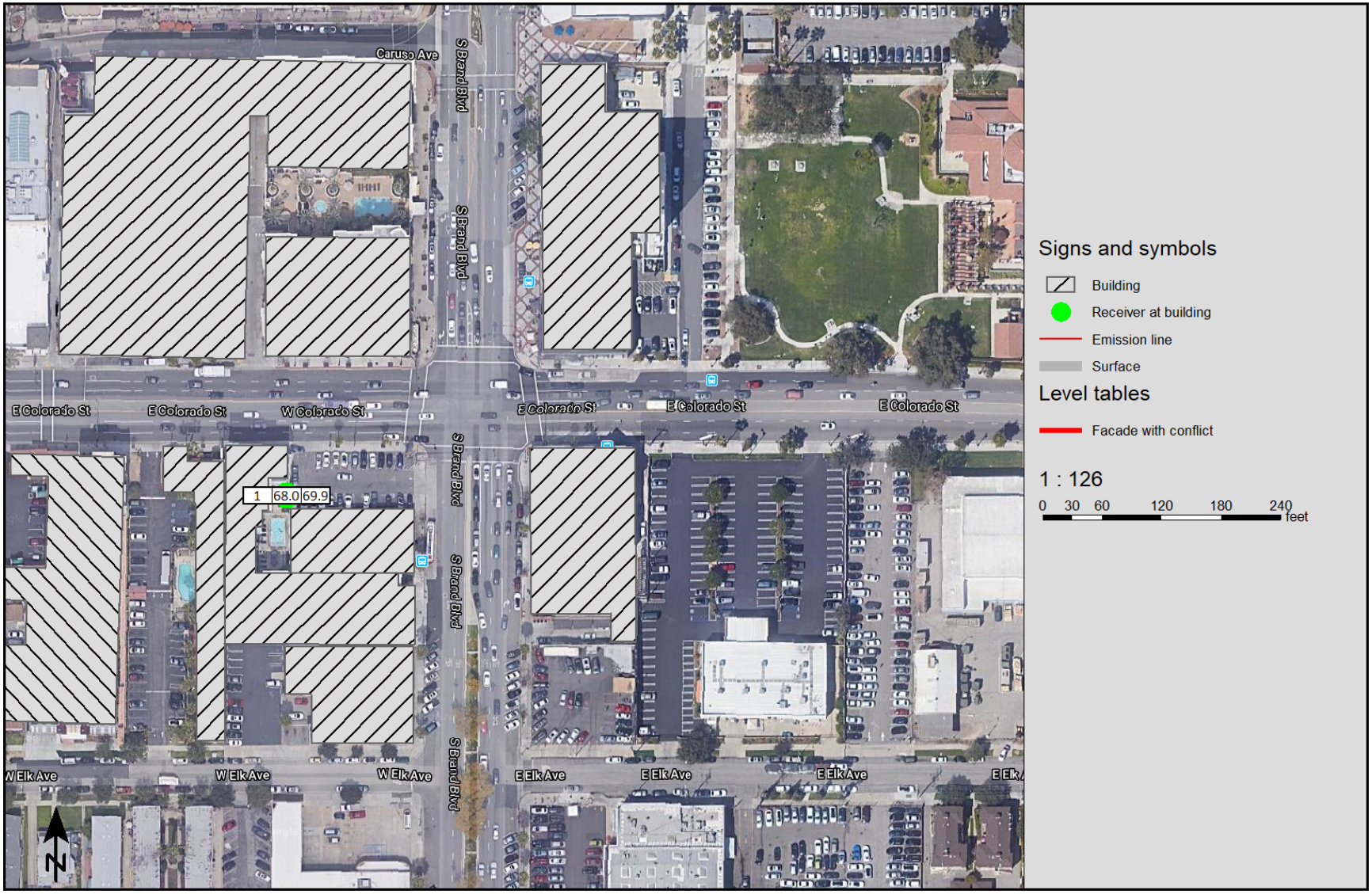
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hampton Inn & Suites	11384235.8	3778650.76	South	GF	160.48	-	-	68.0	69.9	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hampton Inn & Suites	GF	68.0	69.9		
Brand Boulevard		-		61.3	63.1
Colorado Street		-		67.0	68.8

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hampton Inn & Su	GF	Day	37.4	45.	50.(	52.	54.2	55.2	55.8	56.8	56.(	55.8	57.2	57.2	56.8	57.(	56.2	55.2	54.2	53.2	52.(	50.2	49.	47.2	42.(	34.2
			Lden	39.2	47.(	51.9	54.(	56.(	57.	57.2	58.(	57.9	57.(	59.(	59.	58.2	59.4	58.	57.(	56.	55.2	54.4	52.(	50.9	49.(	44.4	36.


Caruso Ave
S Brand Blvd
E Colorado St
W Colorado St
1 68.0 69.9
W Elk Ave
E Elk Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 126
0 30 60 120 180 240
feet

TRAFFIC NOISE MODELING SUMMARY

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Los Angeles (MD)
Calendar Year: 2019
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

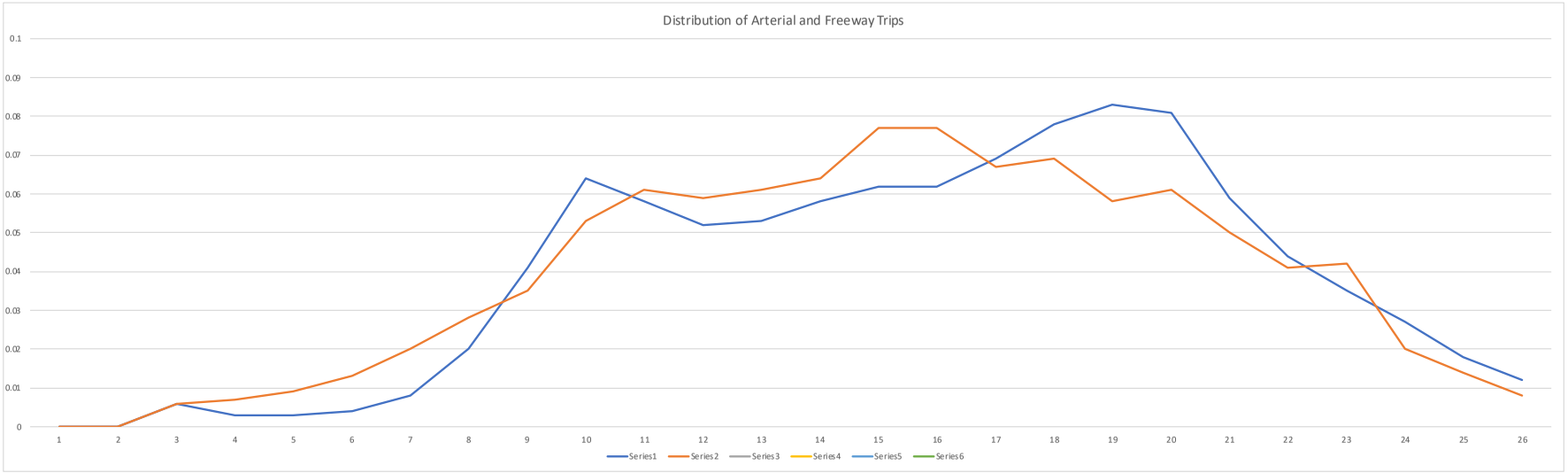
Region	Calendar Yea	Vehicle Categ	Model Year	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSO	ROG_RUNLO	ROG_RESTL	CROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSO	TOG_RUNLO	TOG_RESTL	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
Los Angeles	2019	All Other Bus	Aggregated	Aggregated	DSL	36	1,912	301	4.97831682	7.04290074	1.12680027	0.16463838	0.06515672	0	0.003	0.05586002	0.1720826	0.06810282	0	0.012	0.13304004	3043.86412	656.741289	0	0.03470942	0.01004347	0	0.16408839	0.10302059	0	0.33668985	0.22394088	0	0	0	0	0	0.36052729	0.25491964	0	0	0	0	0	0.98632721	2.586817	0	0.00986191	0.00620457	0
Los Angeles	2019	LDA	Aggregated	Aggregated	GAS	85,941	4,161,150	401,907	0.07705566	0	0.02498778	0.00168634	0	0.00193987	0.002	0.00175001	0.00183186	0	0.002	0.00198196	0.008	0.03675001	299.93013	0	60.44864448	0.005382367	0	0.07295837	0.00732503	0	0.03087119	0.02218208	0	0.03420671	0.13951878	0.26195154	0.2896866	0.35243848	0.03233717	0	0.03746106	0.13951878	0.26195154	0.2896866	0.35243848	1.1040493	0	2.55595489	0.00296795	0	0.00059819
Los Angeles	2019	LDA	Aggregated	Aggregated	DSL	670	32,717	3,149	0.3880252	0	0	0.01477522	0	0	0.002	0.00175001	0.01544329	0	0	0.002	0.00175001	0.00641029	0	0	0.03573024	0	0	0.00306274	0	0	0.03456596	0	0	0	0	0	0	0.03456596	0	0	0	0	0	0	0.3601267	0	0	0.00021489	0	0
Los Angeles	2019	LDA	Aggregated	Aggregated	ELEC	580	23,828	2,941	0	0	0	0	0	0	0.002	0.00175001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0.00488803	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0	0	0
Los Angeles	2019	LDT1	Aggregated	Aggregated	GAS	8,280	355,387	36,737	0.26035614	0	0.04261474	0.00310879	0	0.00194434	0.002	0.00175001	0.00319789	0	0.002	0.00174401	0.008	0.03675001	351.72046	0	72.57774567	0.015859761	0	0.12776954	0.01704864	0	0.03785319	0.07309198	0	0.68980361	0.37288627	1.28257408	0.78737788	1.08090566	0.32606906	0	0.77522201	0.37288627	1.28257408	0.78737788	1.08090566	2.77252985	0	2.91745007	0.00184806	0	0.00071822
Los Angeles	2019	LDT1	Aggregated	Aggregated	DSL	7	170	23	1.41917377	0	0.23986156	0	0	0	0.002	0.00175001	0.25707704	0	0	0.008	0.03675001	429.129469	0	0	0.00174775	0	0	0.06745118	0	0	0.27445163	0	0	0.31244494	0	0	0	1.42964477	0	0	0.31244494	0	0	0	1.42964477	0	0	0.00405682	0	0
Los Angeles	2019	LDT1	Aggregated	Aggregated	ELEC	8	291	37	0	0	0	0	0	0	0.002	0.00175001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0.00488803	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0	0	0
Los Angeles	2019	LDT2	Aggregated	Aggregated	GAS	23,688	1,076,876	108,823	0.17290412	0	0.04581577	0.00184447	0	0.00202482	0.002	0.00175001	0.00200562	0	0.002	0.00176	0.008	0.03675001	389.309891	0	80.63830911	0.008445516	0	0.10188867	0.01218879	0	0.04283753	0.036703.7	0	0.51059264	0.19018116	0.59842197	0.49340932	0.51157541	0.54235071	0	0.51495039	0.19018116	0.59842197	0.49340932	0.51157541	1.64213237	0	3.4201488	0.00385251	0	0.00079798
Los Angeles	2019	LDT2	Aggregated	Aggregated	DSL	68	3,772	341	0.06751405	0	0	0.00809797	0	0	0.002	0.00175001	0.00846413	0	0	0.008	0.03675001	294.700902	0	0	0.00011562	0	0	0.0463.2288	0	0	0.02489055	0	0	0	0	0	0	0.02833623	0	0	0	0	0	0	0.17062098	0	0	0.00278598	0	0
Los Angeles	2019	LDT2	Aggregated	Aggregated	ELEC	72	2,640	367	0	0	0	0	0	0	0.002	0.00175001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0.00488803	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0	0	0
Los Angeles	2019	LHD1	Aggregated	Aggregated	GAS	2,539	85,426	37,828	0.42980401	0.04113027	0.58808688	0.00160551	0	0.00106044	0.002	0.00176001	0.00174268	0	0.002	0.00065409	0.008	0.07644002	81.8386924	124.107723	19.98132899	0.034717174	0.13493494	0.0370021	0.02380818	0.00302633	0.04310593	0.07659061	0.47075736	0.01915247	0.09100979	1.35778698	0.04966183	0.09415967	0.10787093	0.68572624	0.21175074	0.09100979	1.35778698	0.04966183	0.09415967	1.90188801	3.71868404	2.16213084	0.00180986	0.00122815	0.00091773
Los Angeles	2019	LHD1	Aggregated	Aggregated	DSL	2,188	88,856	30,036	3.97609024	2.48360343	0	0.02565532	0.02655495	0	0.003	0.00176001	0.02681534	0.02775964	0	0.012	0.07644002	495.72137	140.434546	0	0.0057675	0.005093813	0	0.07793248	0.02307121	0	0.12417078	0.10975971	0	0.14136018	0.13495413	0	0	0.77356369	0.90074508	0	0.14136018	0.13495413	0	0	0.77356369	0.90074508	0	0.00468635	0.00132742	0	0
Los Angeles	2019	LHD2	Aggregated	Aggregated	GAS	318	11,242	4,718	0.34076316	0.04113826	0.05818169	0.00125095	0	0.00004187	0.002	0.00176001	0.00136052	0	0.002	0.00004537	0.008	0.08918003	93.1530277	142.743444	22.12567767	0.008187346	0.126672055	0.03129798	0.02047663	0.00312159	0.04394218	0.00409777	0.47083181	0.01607795	0.15897879	1.09348894	0.03819109	0.07208293	1.04426617	1.7377682	2.00938593	0.00922814	0.00141256	0.00021895	0	0	0	0	0	0
Los Angeles	2019	LHD2	Aggregated	Aggregated	DSL	887	33,854	11,152	3.11876783	2.48237936	0	0.02227407	0.02623174	0	0.003	0.00182001	0.02328121	0.02741783	0	0.012	0.08918003	548.227388	225.006363	0	0.00486613	0.005093813	0	0.0861.7135	0.03516787	0	0.11047693	0.10975971	0	0.11926791	0.12495413	0	0	0.59774518	0.90974508	0	0.11926791	0.12495413	0	0	0.59774518	0.90974508	0	0.00518269	0.00221732	0	0
Los Angeles	2019	MCY	Aggregated	Aggregated	GAS	4,627	96,594	9,254	1.18252705	0	0.26982568	0.00187167	0	0.00195639	0.001	0.00504	0.00199717	0	0.00195848	0.004	0.00117	21.3838847	0	64.2684674	0.338233864	0	0.36942211	0.06802683	0	0.01567221	2.67315093	0	2.07105443	0.912168.38	2.56113039	1.64732946	2.58061505	1.23172801	0	2.22519458	0.912168.38	2.56113039	1.64732946	2.58061505	22.3101223	0	9.06258126	0.00215125	0	0.00063599
Los Angeles	2019	MDV	Aggregated	Aggregated	GAS	21,637	916,237	97,740	0.23272101	0	0.05763078	0.00159877	0	0.00228397	0.002	0.00175001	0.00215904	0	0.002	0.00047665	0.008	0.03675001	472.792376	0	99.45343115	0.012113803	0	0.13080736	0.01562141	0	0.04813127	0.05911958	0	0.66823927	0.21547015	0.66047718	0.51127877	0.56388621	0.08154442	0	0.74678601	0.21547015	0.66047718	0.51127877	0.56388621	2.12163941	0	4.83809119	0.00467866	0	0.00098417
Los Angeles	2019	MDV	Aggregated	Aggregated	DSL	334	17,224	1,629	0.10212739	0	0	0.00748647	0	0	0.002	0.00175001	0.00782498	0	0	0.008	0.03675001	407.61292	0	0	0.00093548	0	0	0.00407108	0	0	0.02034039	0	0	0.02292285	0	0	0	0.31451641	0	0	0.02292285	0	0	0	0.31451641	0	0	0.00385341	0	0
Los Angeles	2019	MDV	Aggregated	Aggregated	ELEC	17	614	85	0	0	0	0	0	0	0.002	0.00175001	0	0	0	0.008	0.03675001	0	0	0	0	0	0	0	0	0	0.00488803	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0.00488803	0	0.01060159	0.02401541	0	0	0	0	0	0
Los Angeles	2019	MH	Aggregated	Aggregated	GAS	1,063	9,038	106	0.66033052	0	0.32218012	0.00158971	0	0.00041484	0.003	0.00586002	0.0017269	0	0.00044967	0.012	0.13304004	1730.93006	0	27.6462211	0.021687377	0	0.03610684	0.03607626	0	0.03118402	0.10148158	0	0.16291611	0.11106252	2.68894495	0.065013	0.36837899	0.144973	0	0.17828938	0.11106252	2.68894495	0.065013	0.36837899	2.99921952	0	3.43256188	0.01712896	0	0.00027358
Los Angeles	2019	MH	Aggregated	Aggregated	DSL	282	2,600	28	5.44677177	0	0	0.13659037	0	0	0.004	0.00586002	0.14276639	0	0	0.016	0.00001001	0.13304004	1008.06652	0	0.00467137	0	0	0.15845402	0	0	0.11057186	0	0	0.11449418	0	0	0	0.46611366	0	0	0.11449418	0	0	0	0.46611366	0	0	0.00932985	0	0
Los Angeles	2019	Motor Coach	Aggregated	Aggregated	DSL	14	1,805	209	5.35994671	10.1005628	1.29068115	0.11005235	0.52365958	0	0.003	0.05586002	0.11507023	0.54733714	0	0.012	0.13304004	1547.20807	11283.5917	0	0.01279239	0.318436407	0	0.24319956	1.7736218	0	0.27545818	6.639018696	0	0.31194581	7.55380182	0	0	0.10000353	55.5574816	0	0.31194581	7.55380182	0	0	0.10000353	55.5574816	0	0.03466726	0.1066038	0	0
Los Angeles	2019	OBUS	Aggregated	Aggregated	GAS	56	4,921	1,123	0.82229665	0.06470582	0.36092189	0.00075879	0	0.00020424	0.003	0.05586002	0.00082526	0	0.00026364	0.012	0.13304004	1715.67683	387.726422	27.93012924	0.021060.8	0.204070073	0.03609647	0.03820684	0.00540791	0.02811868	0.09962133	0.74098501	0.18185956	0.03510689	0.4203985	0.03013128	0.06415586	0.14536722	1.08124359	0.19113133	0.03510689	0.4203985	0.03013128	0.06415586	2.60941175	5.74273442	3.82607921	0.01697801	0.00883687	0.00027639	0	0	0
Los Angeles	2019	PTO	Aggregated	Aggregated	DSL	-	2,595	-	10.0901307	0	0	0.23281704	0	0	0	0	0	0.2433.44	0	0	0	21.6515623	0	0	0.00395649	0	0	0.34007462	0	0	0.75260365	0	0	0	0	0	0	0.85678197	0	0	0	0	0	0	2.52781356	0	0	0.00043983	0	0
Los Angeles	2019	SBUS	Aggregated	Aggregated	GAS	11	954	42	0.47635362	0.91847449	0.55898579	0.00154635	0	0.00054953	0.002	0.00176001	0.00181519	0	0.00055767	0.008	0.7448002	871.678545	2598.22871	51.4892767	0.013189013	2.623473809	0.06928179	0.02672115	0.09252722	0.05533382	0.06605357	10.5237921	0.36785954	0.07886268	0.58481715	0.01758023	0.04394851	0.09638522	15.3562927	0.40275989	0.07886268	0.58481715	0.01758023	0.04394851	1.28449866	81.5260167	10.1961859	0.03562597	0.02571158	0.00050953
Los Angeles	2019	SBUS	Aggregated	Aggregated	DSL	435	13,607	5,017	9.16217671	48.2060047	0.50244613	0.06448639	0.08436291	0	0.003	0.31920009	0.06740218	0.08739911	0	0.012	0.7448021	12.78.8113	3681.89702	0	0.00706824	0.016074757	0	0.20101133	0.57874294	0	0.16952577	0.34608103	0	0.18843849	0.93988691	0	0	0.43667784	4.97002312	0	0.18843849	0.93988691	0	0	0.43667784	4.97002312	0	0.01208158	0.03478474	0	0
Los Angeles	2019	T6 CAIRP he	Aggregated	Aggregated	DSL	63	12,644	922	1.73037171	4.7295462	1.00672085	0.09313026	0.01585163	0	0.003	0.05586002	0.01149362	0.0123896	0	0.012	0.13304004	930.473812	648.262128	0	0.00215921	0.003148554	0	0.14621721	0.10189778	0	0.05414753	0.07504278	0	0.06116284	0.08140949	0	0	0.23249.85	1.98709947	0	0.06116284	0.08140949	0	0	0.23249.85	1.98709947	0	0.00879084	0.00612446	0	0
Los Angeles	2019	T6 CAIRP sm	Aggregated	Aggregated	DSL	34	1,803	493	2.10782402	5.27022951	0.94949869	0.05445218	0.01585567	0	0.003	0.05586002	0.05691426	0.07167781	0	0.012	0.13304004	975.499227	652.450832	0	0.00448119	0.00405053	0	0.15313489	0.10255639	0	0.09669417	0.08703942	0	0.11007896	0.09939513	0	0	0.34623795	2.06468269	0	0.11007896	0.09939513	0	0	0.34623795	2.06468269	0	0.00921603	0.00616403	0	0
Los Angeles	2019	T6 instate co	Aggregated	Aggregated	DSL	20	1,354	91	4.83569224	7.58043463	1.10632355	0.1278845	0.06500229	0	0.003	0.05586002	0.13366887	0.06794341	0	0.012	0.13304004	1044.0791	673.263148	0	0.01148394	0.010358536	0	0.16411.47	0.10582739	0	0.24737516	0.22789842	0	0.28161779	0.25944662	0	0	0.78290466	2.39514443	0	0.28161779	0.25944662	0	0	0.78290466	2.39514443	0	0.00986394	0.00636066	0	0
Los Angeles	2019	T6 instate co	Aggregated	Aggregated	DSL	279	14,080	1,262	3.60623879	7.3700022	1.37134267	0.11573086	0.09491273	0	0.003	0.05586002	0.13095324	0.08369113	0	0.012	0.13304004	1026.77653	679.972045	0	0.00898772	0.005599151	0	0.16319497	0.10688234	0	0.23287894	0.12899552	0	0.24234761	0.14685158	0	0	0.71284328	2.17985099	0	0.24234761	0.14685158	0	0	0.71284328	2.17985099	0	0.00970048	0.00642404	0	0
Los Angeles	2019	T6 instate he	Aggregated	Aggregated	DSL	250	30,872	2,888	4.78371725	7.79397865	0.87646046	0.12155631	0.04308513	0	0.003	0.05586002	0.12705255	0.04503325	0	0.012	0.13304004	1008.31929	683.1806	0	0.01127904	0.007159.3	0	0.15849375	0.10738648	0	0.24283462	0.15413417	0	0.27644873	0.17547002	0	0	0.77347885	2.06856235	0	0.27644873	0.17547002	0	0	0.77347885	2.06856235	0	0.00995261	0.00645435	0	0
Los Angeles	2019	T6 instate sn	Aggregated	Aggregated	DSL	827	39,815	9,540	3.92234457	7.94656446	0.9890055	0.13621241	0.0396764	0	0.003	0.05586002	0.14237133	0.04147039	0	0.012	0.13304004	1032.76518	684.190921	0	0.01146818	0.00648268	0	0.16233163	0.10754529	0	0.24690686	0.13957039	0	0.28110467	0.15889026	0	0	0.88732522	2.22245042	0	0.28110467	0.15889026	0	0	0.88732522	2.22245042	0	0.00975705	0.0064639	0	0
Los Angeles	2019	T6 OOS heav	Aggregated	Aggregated	DSL	36	7,335	533	1.65925668	4.64889936	1.01636908	0.09372163	0.01118198	0	0.003	0.05586002	0.02121281	0.0123544	0	0.012	0.13304004	929.470414	647.580802	0	0.00234842	0.0034855	0	0.14609981	0.10177183	0	0.0548668	0.07504186	0	0.06242367	0.08142945	0	0	0.21419918	2.00868302	0	0.06242367	0.08142945	0	0	0.21419918	2.00868302	0	0.00878118	0.00611809	0	0
Los Angeles	2019	T6 OOS smal	Aggregated	Aggregated	DSL	19	1,016	280	2.15624185	5.37682592	0.93816542	0.05692445	0.01754501	0	0.003	0.05586002	0.05934833	0.01833831	0	0.012	0.13304004	977.984859	653.893231	0	0.00468328	0.00412773	0	0.1537256	0.10778291	0	0.10482963	0.08866896	0	0.11478686	0.10117054	0	0	0.3601446	2.06876567	0	0.11478686	0.10117054	0	0	0.3601446	2.06876567	0	0.00923952	0.00617766	0	0
Los Angeles	2019	T6 Public	Aggregated	Aggregated	DSL	77	1,190	232	5.35415302	41.5993837	1.23875958	0.0271675	0.07061975	0	0.003	0.05586002	0.0283959	0.07381286	0	0.012	0.13304004	1058.80.4	3484.04466	0	0.00206568	0.015616915	0	0.16642868	0.54764327	0	0.04438742	0.3162759	0	0.0505317	0.38282462	0	0	0.14861916	6.05895917	0	0.0505317	0.38282462	0	0	0.14861916	6.05895917	0	0.01003002	0.03291553	0	0
Los Angeles	2019	T6 utility	Aggregated	Aggregated	DSL	17	289	199	1.76920775	12.3032966	1.47109877	0.00852867	0.00578156	0	0.003	0.05586002	0.0089143	0.00604298	0	0.012	0.13304004	1000.76197	1809.18688	0	0.00397704	0.006571.3	0	0.15710616	0.28437808	0	0.02103543	0.14147465	0	0.02194723	0.16105182	0	0	0.08846292	4.68548136	0	0.02194723	0.16105182	0	0	0.08846292	4.68548136	0	0.00914572	0.0070923	0	0
Los Angeles	2019	T6TS	Aggregated	Aggregated	GAS	155	15,978	3,107	0.92440531	0.08815207	0.14327199	0.001239	0	0.00059408	0.003	0.05586002	0.0013475	0	0.00064506	0.012	0.13304004	1685.34148	955.6306	42.45169413	0.027731116	0.260327255	0.05010275	0.0421379	0.07003134	0.01202489	0.13260825	0.98711345	0.27352523	0.12123805	0.72007196	0.0834376	0.07057636	0.19278632	1.43958339	0.29911416	0.12123805	0.72007196	0.0834376	0.07057636	3.54055404	14.1770414	6.12051707	0.01667784	0.00549842	0.00040215
Los Angeles	2019	T7 CAIRP	Aggregated	Aggregated	GAS	339	61,674	4,950	3.44076416	1.13.61096	1.72739246	0.04079929	0.30602099	0	0.009	0.02646001	0.04264405	0.3198579	0	0.016	0.00001001	0.06174022	1186.83189	2599.41713	0	0.00422742	0.510090471	0	0.21799696	4.08192206	0	0.09105315	10.766902	0	0.10361383	12.2572984	0	0	0.40299751	128.273173	0	0.01310211	0.24538306	0	0
Los Angeles	2019	T7 CAIRP con	Aggregated	Aggregated	DSL	5	972	23	3.41634073	22.2367818	3.5534526	0.04041945	0.02671886	0	0.009	0.02646001	0.00424704	0.02732697	0	0.016	0.00001001	0.06174022	1838.83189	3983.03411	0	0.00419329	0.074138006	0	0.22447702	0.6260775	0	0.09028033	1.60138229	0	0.10277728	1.82305184	0	0	0.39966346	20.3015437	0	0.10149196	0.03762973	0	0
Los Angeles	2019	T7 NNOOS	Aggregated	Aggregated	DSL	381	77,640	5,556	3.05002384	15.1.694807	1.78875421	0.04887019	0.59726174	0	0.009	0.02646001	0.05107388	0.62426726	0	0.016	0.00001001	0.06174022	1331.30699	3044.04235	0	0.00447.14	0.643115572	0	0.20926292	4.72250211	0	0.09631112	13.8461052	0	0.10964288	15.7627367	0	0	0.43096594	161.882612	0	0.01257753	0.28184104	0	0
Los Angeles	2019	T7 NOOS	Aggregated	Aggregated	DSL	134	25,015	1,950	3.48148441	165.801912	1.72291364	0.04143105	0.3952819	0	0.009	0.02646001	0.04030647	0.4131.6492	0	0.016	0.00001001	0.06174022	1388.51621	3232.83409	0	0.00431404	0.624018.9	0	0.21825141	5.0791.2703	0	0.09287998	13.4349577	0	0.10757679	15.2946767	0	0	0.40381589	158.934617	0	0.01311801	0.3052756	0	0
Los Angeles	2019	T7 POLA	Aggregated	Aggregated	DSL	31	3,624	234	6.07001412	58.7582726	0.98052852	0.03820193	0.0180967	0	0.009	0.02646001	0.00393762	0.01976158	0	0.016	0.00001001	0.06174022	1780.85557	9493.28115	0	0.00111886	0.151593772	0	0.2799257	1.4922116	0	0.02487592	3.2711735	0	0.2742189	3.7239864	0	0	0.78155114	32.9940456	0	0.01682464	0.08968781	0	0
Los Angeles	2019	T7 Public	Aggregated	Aggregated	DSL	28	5.75	86	11.5495298	46.3012255	0.76510148	0.05953079	0.10276688	0	0.009	0.02646001	0.0622016	0.10741354	0	0.016	0.00001001	0.06174022	1766.27953	3582.83198	0	0.00515841	0.0508847	0	0.27763455	0.56317129	0	0.11105916	1.0955153	0	0.12641324	1.24718153	0	0	0.41372112	6.13896363	0	0.01668093	0.03384482	0	0
Los Angeles	2019	T7 Single	Aggregated	Aggregated	DSL	199	13,069	2,295	7.76877819	30.3830248	1.49747282	0.15418661	0.17903112	0	0.009	0.02646001	0.16115825	0.1871261	0	0.016	0.00001001	0.06174022	1566.60852	3920.35204	0	0.01660084	0.3085964	0	0.2462.4604	0.61625618	0	0.3.44.83	2.33805071	0	0.39216768	2.66189276	0	0	0.12.70172	19.5604386	0	0.01483054	0.03703943	0	0
Los Angeles	2019	T7 single con	Aggregated	Aggregated	DSL	35	2,412	157	6.73587315	25.9675906	2.12784496	0.14482942	0.14686042	0	0.009	0.02646001	0.15137796	0.15559123	0	0.016	0.00001001	0.06174022	1546.31579	3224.42292	0	0.01315123	0.089341272	0	0.24306528	0.50683438	0	0.29089303	1.92330265	0	0.33115957	2.18976135	0	0	1.1025304	16.3031025	0	0.01460918	0.03046275	0	0
Los Angeles	2019	T7 SWCV	Aggregated	Aggregated	DSL	13	5.38	51	17.3130832	63.0969137	0.81205	0.01482242	0.13517677	0	0.009	0.02646001	0.05149367	0.14128886	0	0.016	0.00001001	0.06174022	4777.67161	4927.06907	0	0.00021369	0.0520295	0	0.7509844	0.6801.55	0	0.00500972	1.1242742	0	0.00570318	1.27989743	0	0	0.02642228	7.03582956	0	0.04513707	0.04088	0	0
Los Angeles	2019	T7 SWCV	Aggregated	NG	3	1.20	11	19.1103654	48.3192676	0	0.04273043	0.3543182	0	0.009	0.02646001	0.04466251	0.37033889	0	0.016	0.00001001	0.06174022	3426.36088	4253.60265	0	12.082201	2.503737808	0	0.69848608	0.86712473	0	1.83792228	0.35443198	0	0	14.2281731	2.91796014	0	0	7.71654489	24.3414041	0	0	0	0	0
Los Angeles	2019	T7 tractor	Aggregated	Aggregated	DSL	125	17,578	1,590	5.51740226	28.2765393	1.03910543	0.0944345	0.06344825	0	0.009	0.02646001	0.09870441	0.06527389	0	0.016	0.00001001	0.06174022	1476.5557	4361.44846	0	0.03078398	0.0859668	0	0.23209399	0.68553896	0	0.23217614	1.85079865	0	0.26431486	2.10699318	0	0	0.86505024	19.8226391	0	0.01394977	0.0412048	0	0
Los Angeles	2019	T7 tractor co	Aggregated	Aggregated	DSL	28	1,992	128	6.30834098	25.6309313	2.50548385	0.11864673	0.08432294	0	0.009	0.02646001	0.11401141	0.08094158	0	0.016	0.00001001	0.06174022	1547.59851	3702.93574	0	0.01148975	0.0809374	0	0.24325622	0.58304993	0	0.23045054	1.74215991	0	0.33063806	1.98377381	0	0	1.06034573	16.9095905	0	0.01442066	0.0349835	0	0
Los Angeles	2019	T7 utility	Aggregated	Aggregated	DSL	2	34	19

TIME OF DAY DISTRIBUTION OF ROADWAY TRIPS

Hour	Ohio Department of Transportatio	Federal Highway Administration		
0	0.6%	0.6%		
1	0.3%	0.7%		
2	0.3%	0.9%		
3	0.4%	1.3%		
4	0.8%	2.0%		
5	2.0%	2.8%		
6	4.1%	3.5%		
7	6.4%	5.3%		8.0%
8	5.8%	6.1%	6.8%	
9	5.2%	5.9%		
10	5.3%	6.1%		
11	5.8%	6.4%		
12	6.2%	7.7%		
13	6.2%	7.7%		
14	6.9%	6.7%		8.8%
15	7.8%	6.9%		
16	8.3%	5.8%		
17	8.1%	6.1%	6.9%	
18	5.9%	5.0%		
19	4.4%	4.1%		
20	3.5%	4.2%		
21	2.7%	2.0%		
22	1.8%	1.4%		
23	1.2%	0.8%		
	100.0%	100.0%	13.7%	16.8%
Day % of Total	76.1%	74.2%		
Evening % of Total	16.5%	15.3%		
Night % of Total	7.4%	10.5%		
Peak 2-Hour% of 24-Hours	14.7%	13.8%		
Peak 2-Hour % of Daytime	0.1932	18.6%		
Peak 2-Hour % of Evening	0.8909	90.2%		
Peak 2-Hour % of Night	1.9865	131.4%		

Reference http://www.dot.state.oh.us/Divi; https://www.fhwa.dot.gov/policyinformation/pubs/pl18027_traffi; https://dot.ca.g; https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/census/peak-hour/f0017710-peak-hour-definitions-k-and-d-factors.pdf

Notes For Urban Principal Arterial Truck Trips SR 1 PM 27.1



Intersection	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2
Chandler Blvd & Fair Ave	0	14	0	16	0	0	153	0	259	0	0	177	855	19	0	0	8	485	127	0
Chandler Blvd & Vineland Ave	0	155	1369	0	0	0	0	1879	449	0	0	671	0	367	0	0	0	0	0	0
Vineland Ave & W Magnolia Blvd	**0**	**317**	**1121**	**212**	**0**	**0**	**515**	**1494**	**361**	**0**	**0**	**127**	**994**	**92**	**0**	**0**	**190**	**1491**	**259**	**0**
Olive Ave & W Alameda Ave/N Ontario St	0	0	0	0	0	0	0	0	0	0	0	468	943	81	0	0	459	1035	35	0
Olive Ave & N Buena Vista St	0	210	1215	307	0	0	190	1443	674	0	0	482	1423	221	0	0	243	1514	136	0
Olive Ave & Keystone St	0	39	65	38	0	0	23	65	49	0	0	45	1773	23	0	0	37	1765	28	0
Olive Ave & W Verdugo Ave/Sparks St	17	35	59	85	29	7	39	46	69	29	19	433	553	33	14	0	179	405	20	3
Olive Ave & San Fernando Blvd	0	128	279	87	0	0	32	211	107	0	0	102	1136	146	0	0	70	1477	63	0
Olive Ave & Glenoaks Blvd	0	293	1686	111	0	0	166	2289	357	0	0	353	486	249	0	0	190	748	105	0
Glenoaks Blvd & Alameda Ave	0	574	437	398	0	0	131	578	44	0	0	131	1854	517	0	0	433	1556	77	0
Glenoaks Blvd & Justin Ave	0	0	0	129	0	0	0	0	97	0	0	0	2562	102	0	0	0	2326	84	0
Glenoaks Blvd & Grandview Ave	0	164	198	49	0	0	300	187	106	0	0	206	2541	119	0	0	158	2229	195	0
E Broadway & N Maryland Ave/Artsakh Ave	0	130	16	101	0	0	62	18	74	0	0	53	939	187	0	0	91	1155	60	0
E Broadway & Chevy Chase Dr	0	314	865	331	0	0	187	903	245	0	0	246	586	187	0	0	288	795	330	0
Colorado Blvd & Eagle Rock Blvd	0	852	130	808	0	0	97	185	43	0	0	61	1461	637	0	0	758	1628	46	0
Colorado Blvd & Townsend Ave (S)	0	374	0	548	0	0	0	0	0	0	0	0	2059	212	0	0	326	2186	0	0
Colorado Blvd & Townsend Ave (N)	0	0	0	0	0	0	90	0	47	0	0	48	2542	0	0	0	0	2455	44	0
Colorado Blvd & Los Robles Ave	0	148	1447	92	0	0	246	1183	181	0	0	131	927	132	0	0	90	1155	176	0
Colorado Blvd & Hill Ave	0	146	1044	308	0	0	296	962	323	0	0	262	793	95	0	0	284	1041	329	0

	NORTH-SOUTH								EAST-WEST							
	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
Chandler Blvd & Fair Ave	716	3,849	794	545	5,188	321	198	68	1644	8,839	1,823	1,251	11,912	737	456	156
Chandler Blvd & Vineland Ave	4368	23,484	4,843	3,324	31,651	1,957	1,211	416	0	-	-	-	-	-	-	-
Vineland Ave & W Magnolia Blvd	3877	20,844	4,298	2,951	28,093	1,737	1,075	369	3661	19,683	4,059	2,786	26,528	1,640	1,015	348
Olive Ave & W Alameda Ave/N Ontario St	503	2,704	558	383	3,645	225	139	48	2472	13,290	2,741	1,881	17,912	1,108	685	235
Olive Ave & N Buena Vista St	4140	22,258	4,590	3,151	29,999	1,855	1,147	394	3813	20,500	4,227	2,902	27,629	1,708	1,057	363
Olive Ave & Keystone St	275	1,478	305	209	1,993	123	76	26	3664	19,699	4,062	2,788	26,549	1,642	1,016	349
Olive Ave & W Verdugo Ave/Sparks St	666	3,581	738	507	4,826	298	185	63	1281	6,887	1,420	975	9,282	574	355	122
Olive Ave & San Fernando Blvd	794	4,269	880	604	5,753	356	220	76	2865	15,403	3,176	2,180	20,760	1,284	794	273
Olive Ave & Glenoaks Blvd	4956	26,645	5,494	3,772	35,911	2,220	1,374	471	1806	9,710	2,002	1,374	13,086	809	501	172
Glenoaks Blvd & Alameda Ave	1398	7,516	1,550	1,064	10,130	626	387	133	4449	23,919	4,932	3,386	32,238	1,993	1,233	423
Glenoaks Blvd & Justin Ave	181	973	201	138	1,312	81	50	17	5101	27,425	5,655	3,882	36,962	2,285	1,414	485
Glenoaks Blvd & Grandview Ave	1192	6,409	1,322	907	8,637	534	330	113	5472	29,419	6,067	4,164	39,650	2,452	1,517	521
E Broadway & N Maryland Ave/Artsakh Ave	283	1,522	314	215	2,051	127	78	27	2408	12,946	2,670	1,833	17,448	1,079	667	229
E Broadway & Chevy Chase Dr	2776	14,925	3,078	2,113	20,115	1,244	769	264	2517	13,532	2,790	1,916	18,238	1,128	698	239
Colorado Blvd & Eagle Rock Blvd	562	3,022	623	428	4,072	252	156	53	4798	25,796	5,319	3,651	34,766	2,150	1,330	456
Colorado Blvd & Townsend Ave (S)	0	-	-	-	-	-	-	-	5119	27,522	5,675	3,896	37,092	2,293	1,419	487
Colorado Blvd & Townsend Ave (N)	229	1,231	254	174	1,659	103	63	22	5131	27,586	5,688	3,905	37,179	2,299	1,422	488
Colorado Blvd & Los Robles Ave	3364	18,086	3,729	2,560	24,376	1,507	932	320	2686	14,441	2,978	2,044	19,463	1,203	744	256
Colorado Blvd & Hill Ave	3216	17,290	3,565	2,447	23,303	1,441	891	306	3051	16,403	3,382	2,322	22,108	1,367	846	290

Intersection	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2
Chandler Blvd & Fair Ave	0	16	0	18	0	0	171	0	290	0	0	198	958	21	0	0	9	543	142	0
Chandler Blvd & Vineland Ave	0	174	1,532	0	0	0	0	2,103	503	0	0	752	0	411	0	0	0	0	0	0
Vineland Ave & W Magnolia Blvd	0	355	1,255	237	0	0	577	1,673	404	0	0	142	1,113	103	0	0	213	1,670	290	0
Olive Ave & W Alameda Ave/N Ontario	0	0	0	0	0	0	0	0	0	0	0	524	1,056	90	0	0	514	1,159	40	0
Olive Ave & N Buena Vista St	0	235	1,360	344	0	0	212	1,615	755	0	0	540	1,593	247	0	0	272	1,695	152	0
Olive Ave & Keystone St	0	44	73	43	0	0	26	73	55	0	0	50	1,985	26	0	0	42	1,977	31	0
Olive Ave & W Verdugo Ave/Sparks St	19	39	66	95	32	7	44	51	77	33	21	485	619	37	15	0	201	453	23	3
Olive Ave & San Fernando Blvd	0	143	313	97	0	0	36	237	120	0	0	114	1,272	164	0	0	79	1,654	71	0
Olive Ave & Glenoaks Blvd	0	328	1,888	124	0	0	185	2,563	399	0	0	396	544	278	0	0	213	838	118	0
Glenoaks Blvd & Alameda Ave	0	643	490	446	0	0	147	648	49	0	0	147	2,076	578	0	0	485	1,742	86	0
Glenoaks Blvd & Justin Ave	0	0	0	141	0	0	0	0	107	0	0	0	2,809	112	0	0	0	2,550	92	0
Glenoaks Blvd & Grandview Ave	0	180	217	53	0	0	329	205	116	0	0	226	2,786	130	0	0	173	2,444	214	0
E Broadway & N Maryland Ave/Artsa	0	142	18	111	0	0	67	20	81	0	0	58	1,029	205	0	0	99	1,266	66	0
E Broadway & Chevy Chase Dr	0	344	949	363	0	0	205	991	269	0	0	270	642	205	0	0	316	872	362	0
Colorado Blvd & Eagle Rock Blvd	0	930	142	883	0	0	106	202	47	0	0	66	1,595	695	0	0	828	1,777	51	0
Colorado Blvd & Townsend Ave (S)	0	408	0	599	0	0	0	0	0	0	0	0	2,248	232	0	0	356	2,386	0	0
Colorado Blvd & Townsend Ave (N)	0	0	0	0	0	0	98	0	51	0	0	53	2,775	0	0	0	0	2,681	48	0
Colorado Blvd & Los Robles Ave	0	162	1,579	101	0	0	268	1,292	197	0	0	143	1,012	144	0	0	98	1,261	192	0
Colorado Blvd & Hill Ave	0	160	1,140	337	0	0	323	1,050	353	0	0	286	866	104	0	0	310	1,137	359	0

	NORTH-SOUTH								EAST-WEST							
	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR	PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
Chandler Blvd & Fair Ave	801	4,306	888	610	5,804	359	222	76	1,841	9,898	2,041	1,401	13,340	825	510	175
Chandler Blvd & Vineland Ave	4,890	26,290	5,421	3,721	35,433	2,191	1,355	465	0	-	-	-	-	-	-	-
Vineland Ave & W Magnolia Blvd	4,341	23,339	4,813	3,304	31,455	1,945	1,203	413	4,100	22,043	4,545	3,120	29,709	1,837	1,136	390
Olive Ave & W Alameda Ave/N Ontario	564	3,032	625	429	4,087	253	156	54	2,769	14,887	3,070	2,107	20,064	1,241	767	263
Olive Ave & N Buena Vista St	4,634	24,914	5,137	3,527	33,578	2,076	1,284	441	4,268	22,946	4,732	3,248	30,926	1,912	1,183	406
Olive Ave & Keystone St	308	1,656	341	234	2,232	138	85	29	4,104	22,065	4,550	3,123	29,738	1,839	1,137	390
Olive Ave & W Verdugo Ave/Sparks St	746	4,011	827	568	5,406	334	207	71	1,435	7,715	1,591	1,092	10,398	643	398	137
Olive Ave & San Fernando Blvd	891	4,790	988	678	6,456	399	247	85	3,209	17,253	3,558	2,442	23,252	1,438	889	305
Olive Ave & Glenoaks Blvd	5,549	29,833	6,152	4,223	40,208	2,486	1,538	528	2,022	10,871	2,242	1,539	14,651	906	560	192
Glenoaks Blvd & Alameda Ave	1,567	8,425	1,737	1,193	11,355	702	434	149	4,982	26,785	5,523	3,791	36,100	2,232	1,381	474
Glenoaks Blvd & Justin Ave	199	1,070	221	151	1,442	89	55	19	5,592	30,065	6,200	4,256	40,520	2,505	1,550	532
Glenoaks Blvd & Grandview Ave	1,307	7,027	1,449	995	9,471	586	362	124	5,999	32,253	6,651	4,565	43,469	2,688	1,663	571
E Broadway & N Maryland Ave/Artsa	310	1,667	344	236	2,246	139	86	29	2,638	14,183	2,925	2,008	19,115	1,182	731	251
E Broadway & Chevy Chase Dr	3,046	16,376	3,377	2,318	22,071	1,365	844	290	2,760	14,839	3,060	2,100	19,999	1,237	765	263
Colorado Blvd & Eagle Rock Blvd	614	3,301	681	467	4,449	275	170	58	5,240	28,172	5,809	3,988	37,969	2,348	1,452	498
Colorado Blvd & Townsend Ave (S)	0	-	-	-	-	-	-	-	5,589	30,048	6,196	4,253	40,498	2,504	1,549	532
Colorado Blvd & Townsend Ave (N)	250	1,344	277	190	1,812	112	69	24	5,602	30,118	6,211	4,263	40,592	2,510	1,553	533
Colorado Blvd & Los Robles Ave	3,671	19,737	4,070	2,794	26,600	1,645	1,017	349	2,932	15,763	3,251	2,231	21,245	1,314	813	279
Colorado Blvd & Hill Ave	3,511	18,876	3,892	2,672	25,441	1,573	973	334	3,332	17,914	3,694	2,536	24,144	1,493	924	317

2042 TRAFFIC VOLUMES (PROJECT)

Intersection	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT	WBR	WBR2
Chandler Blvd & Fair Ave	0	20	0	30	0	0	180	0	300	0	0	210	920	30	0	0	20	530	150	0
Chandler Blvd & Vineland Ave	0	190	1,460	0	0	0	0	2,010	510	0	0	760	0	420	0	0	0	0	0	0
Vineland Ave & W Magnolia Blvd	0	170	1,200	240	0	0	590	1,600	420	0	0	150	1,120	110	0	0	210	1,680	300	0
Olive Ave & W Alameda Ave/N Ontario St	0	0	0	0	0	0	0	0	0	0	0	530	1,060	100	0	0	530	1,170	30	0
Olive Ave & N Buena Vista St	0	250	1,370	360	0	0	220	1,620	760	0	0	550	1,520	260	0	0	280	1,620	160	0
Olive Ave & Keystone St	0	50	80	50	0	0	30	80	60	0	0	60	1,890	30	0	0	50	1,880	40	0
Olive Ave & W Verdugo Ave/Sparks St	30	40	70	100	40	20	50	60	80	40	30	490	630	40	30	0	210	460	30	10
Olive Ave & San Fernando Blvd	0	150	330	100	0	0	40	250	130	0	0	120	1,220	170	0	0	90	1,570	80	0
Olive Ave & Glenoaks Blvd	0	330	1,800	130	0	0	190	2,440	410	0	0	400	520	280	0	0	220	800	130	0
Glenoaks Blvd & Alameda Ave	0	630	500	490	0	0	150	660	60	0	0	160	1,980	590	0	0	900	1,670	100	0
Glenoaks Blvd & Justin Ave	0	0	0	190	0	0	0	0	120	0	0	0	2,690	120	0	0	0	2,440	100	0
Glenoaks Blvd & Grandview Ave	0	190	230	60	0	0	330	220	120	0	0	230	2,670	140	0	0	180	2,340	220	0
E Broadway & N Maryland Ave/Artsakh Ave	0	150	20	130	0	0	80	30	90	0	0	70	990	220	0	0	110	1,220	70	0
E Broadway & Chevy Chase Dr	0	360	960	370	0	0	220	1,000	280	0	0	280	620	210	0	0	320	840	370	0
Colorado Blvd & Eagle Rock Blvd	0	940	190	890	0	0	120	210	60	0	0	100	1,580	700	0	0	890	1,750	60	0
Colorado Blvd & Townsend Ave (S)	0	420	0	630	0	0	0	0	0	0	0	0	2,220	240	0	0	470	2,400	0	0
Colorado Blvd & Townsend Ave (N)	0	0	0	0	0	0	0	0	0	0	0	0	2,740	0	0	0	0	2,640	50	0
Colorado Blvd & Los Robles Ave	0	170	1,580	130	0	0	280	1,800	210	0	0	150	1,010	150	0	0	110	1,250	200	0
Colorado Blvd & Hill Ave	0	170	1,150	350	0	0	330	1,060	370	0	0	300	860	120	0	0	320	1,120	370	0

NORTH-SOUTH

PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
840	4,516	931	639	6,087	376	233	80
4,740	25,484	5,255	3,607	34,346	2,124	1,314	451
4,260	22,903	4,723	3,242	30,868	1,909	1,181	405
580	3,118	643	441	4,203	260	161	55
4,680	25,161	5,188	3,562	33,911	2,097	1,297	445
350	1,882	388	266	2,536	157	97	33
780	4,194	865	594	5,652	349	216	74
950	5,108	1,053	723	6,884	426	263	90
5,370	28,871	5,953	4,087	38,911	2,406	1,488	511
1,630	8,763	1,807	1,240	11,811	730	452	155
220	1,183	244	167	1,594	99	61	21
1,340	7,204	1,486	1,020	9,710	600	371	127
360	1,935	399	274	2,609	161	100	34
3,110	16,720	3,448	2,367	22,535	1,393	862	296
700	3,763	776	533	5,072	314	194	67
0	-	-	-	-	-	-	-
50	269	55	38	362	22	14	5
3,580	19,247	3,969	2,725	25,941	1,604	992	341

AVG DAY HR	AVG EVE HR	AVG NIGHT HR
815	504	173
-	-	-
1,899	1,190	395
1,259	779	267
1,864	1,153	396
1,765	1,092	375
663	410	141
1,389	859	295
892	552	189
2,173	1,344	461
2,410	1,491	512
2,599	1,608	552
1,140	718	246
1,228	759	261
2,370	1,466	503
2,594	1,580	542
2,433	1,505	517
1,326	820	282
1,501	928	319

CHANGE

PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
39	210	43	30	283	17	11	4
-150	-806	-166	-114	-1,087	-67	-42	-14
-81	-435	-90	-62	-587	-36	-22	-8
16	86	18	12	116	7	4	2
46	247	51	35	333	21	13	4
42	226	47	32	304	19	12	4
34	183	38	26	246	15	9	3
59	317	65	45	428	26	16	6
-179	-962	-198	-136	-1,297	-80	-50	-17
63	339	70	48	456	28	17	6
21	113	23	16	152	9	6	2
33	177	37	25	239	15	9	3
50	269	55	38	362	22	14	5
64	344	71	49	464	29	18	6
86	462	95	65	623	39	24	8
-250	-1,344	-277	-190	-1,812	-112	-69	-24
50	269	55	38	362	22	14	5
49	263	54	37	355	22	14	5
69	371	76	53	500	31	19	7

PEAK 2-HR	DAY HRS	EVE HRS	NIGHT HRS	ADT	AVG DAY HR	AVG EVE HR	AVG NIGHT HR
-21	-113	-23	-16	-152	-9	-6	-2
0	0	0	0	0	0	0	0
50	269	55	38	362	22	14	5
41	220	45	31	297	18	11	4
-108	-581	-120	-82	-783	-48	-30	-10
-164	-882	-182	-125	-1,188	-73	-45	-16
45	242	50	34	326	20	12	4
-109	-586	-121	-83	-790	-49	-30	-10
-32	-172	-35	-24	-232	-14	-9	-3
-132	-710	-146	-100	-956	-59	-37	-13
-212	-1,140	-235	-161	-1,536	-95	-59	-20
-199	-1,070	-221	-151	-1,442	-89	-55	-19
-48	-258	-53	-37	-348	-22	-13	-5
-20	-108	-22	-15	-145	-9	-6	-2
98	527	109	75	710	44	27	9
-172	-925	-191	-131	-1,246	-77	-48	-16
28	151	31	21	203	13	8	3
18	97	20	14	130	8	5	2

AVG DAY HR	AVG EVE HR	AVG NIGHT HR
-9	-6	-2
0	0	0
22	14	5
18	11	4
-48	-30	-10
-73	-45	-16
20	12	4
-49	-30	-10
-14	-9	-3
-59	-37	-13
-95	-59	-20
-89	-55	-19
-22	-13	-5
-9	-6	-2
44	27	9
-77	-48	-16
13	8	3
8	5	2

AMBIENT NOISE MODELING

5416 FAIR AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

5525 VINELAND AVENUE
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	31656	Total	-	1957	1211	416	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1485	918	316	56					
		Medium trucks	-	274	170	59	56					
		Heavy trucks	-	77	47	16	56					
		Buses	-	8	5	1	56					
		Motorcycles	-	57	36	12	56					
		Auxiliary vehicle	-	56	35	12	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	11916	Total	-	737	456	156	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -(
		Automobiles	-	559	346	118	56					
		Medium trucks	-	103	64	22	56					
		Heavy trucks	-	29	18	6	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	22	14	5	56					
		Auxiliary vehicle	-	21	13	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	5188	Total	-	321	198	68	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	244	150	52	48					
		Medium trucks	-	45	28	10	48					
		Heavy trucks	-	13	8	3	48					
		Buses	-	1	1	0	48					
		Motorcycles	-	9	6	2	48					
		Auxiliary vehicle	-	9	6	2	48					
0+06(	-							-	-	-	-	-

Receiver list

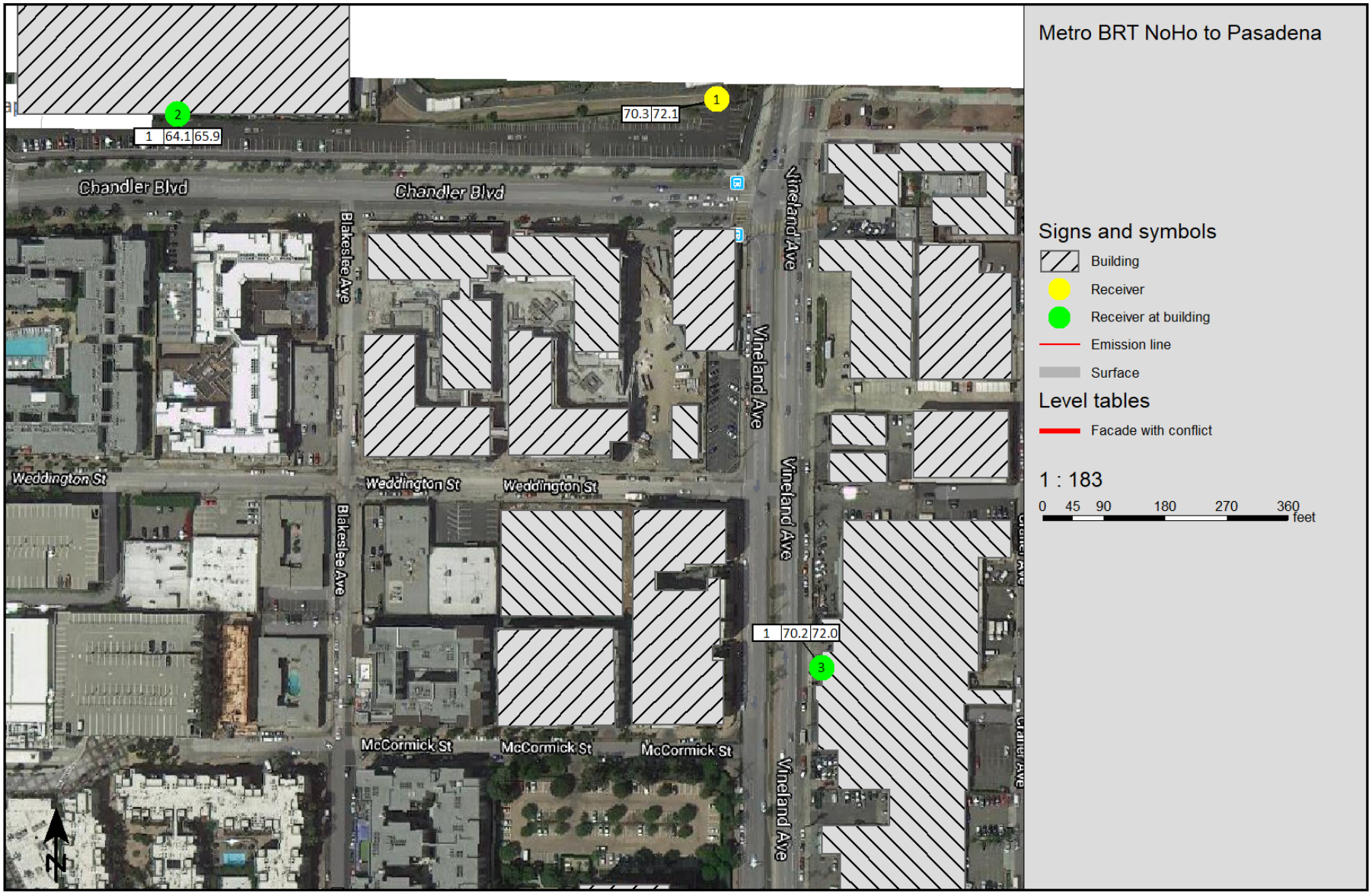
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1	3781696.23	-	GF	191.40	-	-	70.3	72.1	-	-
2	Gallery at NoHo Commons	11373425.6	3781689.51	South	GF	194.08	-	-	64.1	65.9	-	-
3	Gray Studios	11373713.1	3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.3	72.1		
Chandler Ave b/t Fair and Vineland		-		59.3	61.1
Fair Ave N of Chandller		-		34.4	36.2
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.0	70.8
Gallery at NoHo Commons	GF	64.1	65.9		
Chandler Ave b/t Fair and Vineland		-		63.5	65.3
Fair Ave N of Chandller		-		52.5	54.3
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		49.6	51.5
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.0	43.9
Fair Ave N of Chandller		-		30.3	32.1
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.4	56.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.	48.9	53.6	56.9	57.9	58.6	59.2	59.8	57.9	56.8	57.6	58.3	58.9	58.3	57.	57.4	56.	56.	56.9	54.4	51.	47.	42.	35.
			Lden	43.6	50.8	55.6	58.3	59.8	60.	61.	61.	59.8	58.	59.6	60.2	60.4	60.2	59.6	59.3	58.9	57.9	58.3	56.3	53.8	49.8	44.8	37.
2	Gallery at NoHo C	GF	Day	35.6	42.8	47.	50.4	51.8	52.6	52.8	53.2	51.3	50.3	51.8	52.3	52.6	52.6	51.	51.8	50.	50.6	50.	47.4	45.6	42.	36.	30.
			Lden	36.8	44.6	49.8	52.2	53.6	54.4	54.	55.	53.	52.2	53.4	54.	54.4	54.8	53.8	53.3	52.6	51.8	52.8	49.3	47.4	43.8	38.6	32.8
3	Gray Studios	GF	Day	39.4	47.6	51.8	54.4	55.	56.6	57.	58.	58.3	58.	59.3	59.3	59.	60.	59.6	57.8	57.6	55.6	54.2	51.8	50.8	49.8	45.6	38.4
			Lden	41.3	48.8	53.6	56.2	57.6	58.8	58.9	60.6	60.2	60.6	61.	61.	61.6	62.6	60.9	59.	58.9	57.8	56.	53.	52.	51.4	47.6	40.


Metro BRT NoHo to Pasadena
Chandler Blvd
Chandler Blvd
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Weddington St
Weddington St
Weddington St
Blakeslee Ave
McCormick St
McCormick St
McCormick St
Vineland Ave
Granger Ave
1 70.3 72.1
2
1 64.1 65.9
1 70.2 72.0
3
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet

2120 WEST OLIVE AVENUE
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Ave b/t Buena Vista and Keystone							Traffic direction: In entry direction					
0+00(	26528	Total	-	1640	1016	348	-	Traffic li	-	30.0	Average (of DGAC a	-0.1
		Automobiles	-	1245	771	264	56					
		Medium trucks	-	230	142	49	56					
		Heavy trucks	-	64	40	14	56					
		Buses	-	6	4	1	56					
		Motorcycles	-	48	30	10	56					
		Auxiliary vehicle	-	47	29	10	56					
0+25	-							-	-	-	-	-
Keystone Avenue							Traffic direction: In entry direction					
0+00(	1988	Total	-	123	76	26	-	Traffic li	-	30.0	Average (of DGAC a	-0.8 / 0
		Automobiles	-	93	58	20	46					
		Medium trucks	-	17	11	4	46					
		Heavy trucks	-	5	3	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	4	2	1	46					
		Auxiliary vehicle	-	4	2	1	46					
0+42	-							-	-	-	-	-

Receiver list

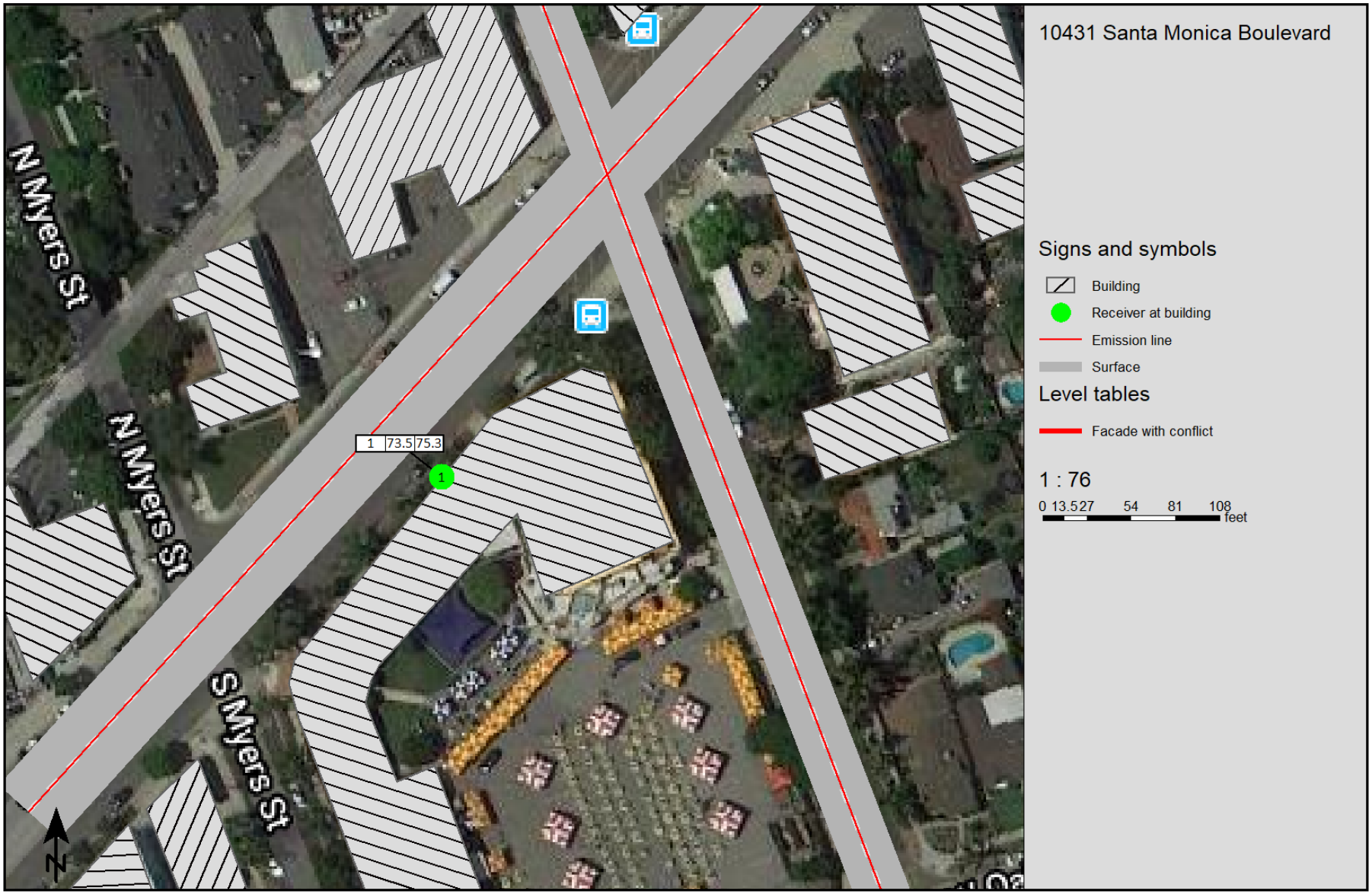
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	St. Finbar School	11377724.5	3781109.46	North we	GF	167.06	-	-	73.5	75.3	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
St. Finbar School	GF	73.5	75.3		
Keystone Avenue		-		47.0	48.8
Olive Ave b/t Buena Vista and Keystone		-		73.4	75.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	St. Finbar School	GF	Day	41.4	49.1	53.9	56.9	57.9	58.6	59.9	61.8	62.2	60.9	61.9	63.1	63.1	63.9	62.9	61.6	60.9	59.3	58.2	55.1	52.9	51.1	48.8	44.6
			Lden	43.3	51.0	55.8	58.4	59.1	60.9	61.3	63.1	64.0	62.8	63.8	65.9	65.0	65.4	64.3	63.9	62.4	61.2	60.1	57.0	54.4	52.9	50.0	45.9


10431 Santa Monica Boulevard
N Myers St
N Myers St
S Myers St
1 73.5 75.3
1
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 76
0 13.527 54 81 108
feet
N

110 NORTH GLENOAKS BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	35876	Total	-	2218	1373	471	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1685	1043	358	46					
		Medium trucks	-	311	192	66	46					
		Heavy trucks	-	87	54	18	46					
		Buses	-	7	5	2	46					
		Motorcycles	-	65	40	14	46					
		Auxiliary vehicle	-	63	39	13	46					
0+25(	-							-	-	-	-	-
North Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	13088	Total	-	809	501	172	-	Traffic li	-	30.0	Average (of DGAC a	-1.9
		Automobiles	-	615	381	131	46					
		Medium trucks	-	113	70	24	46					
		Heavy trucks	-	32	20	7	46					
		Buses	-	3	2	1	46					
		Motorcycles	-	24	15	5	46					
		Auxiliary vehicle	-	23	14	5	46					
0+22(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Central LIbrary	11379602.4	13783293.5	South we	GF	202.86	-	-	69.4	71.2	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Central LIbrary	GF	69.4	71.2		
North Glenoaks Boulevard		-		68.0	69.9
Olive Avenue		-		63.7	65.5

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Central L	GF	Day	39.(	46.!	51.:	53.'	54.!	55.4	56.(	58.:	58.(	56.4	58.'	59.4	58.:	58.4	57.'	56.!	56.(	56.(	55.:	52.'	49.:	45.(	42.:	37.
			Lden	40.!	48.4	53.'	55.(	56.'	57.:	57.(	60.(	59.(	58.:	59.!	61.:	60.(	60.:	59.!	58.(	58.(	57.(	57.(	54.!	51.'	47.(	44.'	39.

1
1 69.4 71.2
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 68
0 12 24 48 72 96
feet

1540 5th STREET
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 1
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	36956	Total	-	2285	1414	485	-	Traffic li	30.0	100.0	Average (of DGAC a	-1.4
		Automobiles	-	1735	1074	368	56					
		Medium trucks	-	320	198	68	56					
		Heavy trucks	-	89	55	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	67	42	14	56					
		Auxiliary vehicle	-	65	40	14	56					
0+43	-							-	-	-	-	-
Justin Avenue							Traffic direction: In entry direction					
0+00	1308	Total	-	81	50	17	-	Traffic li	30.0	100.0	Average (of DGAC a	3.3
		Automobiles	-	62	38	13	46					
		Medium trucks	-	11	7	2	46					
		Heavy trucks	-	3	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	2	1	0	46					
		Auxiliary vehicle	-	2	1	0	46					
0+30	-							-	-	-	-	-

Receiver list

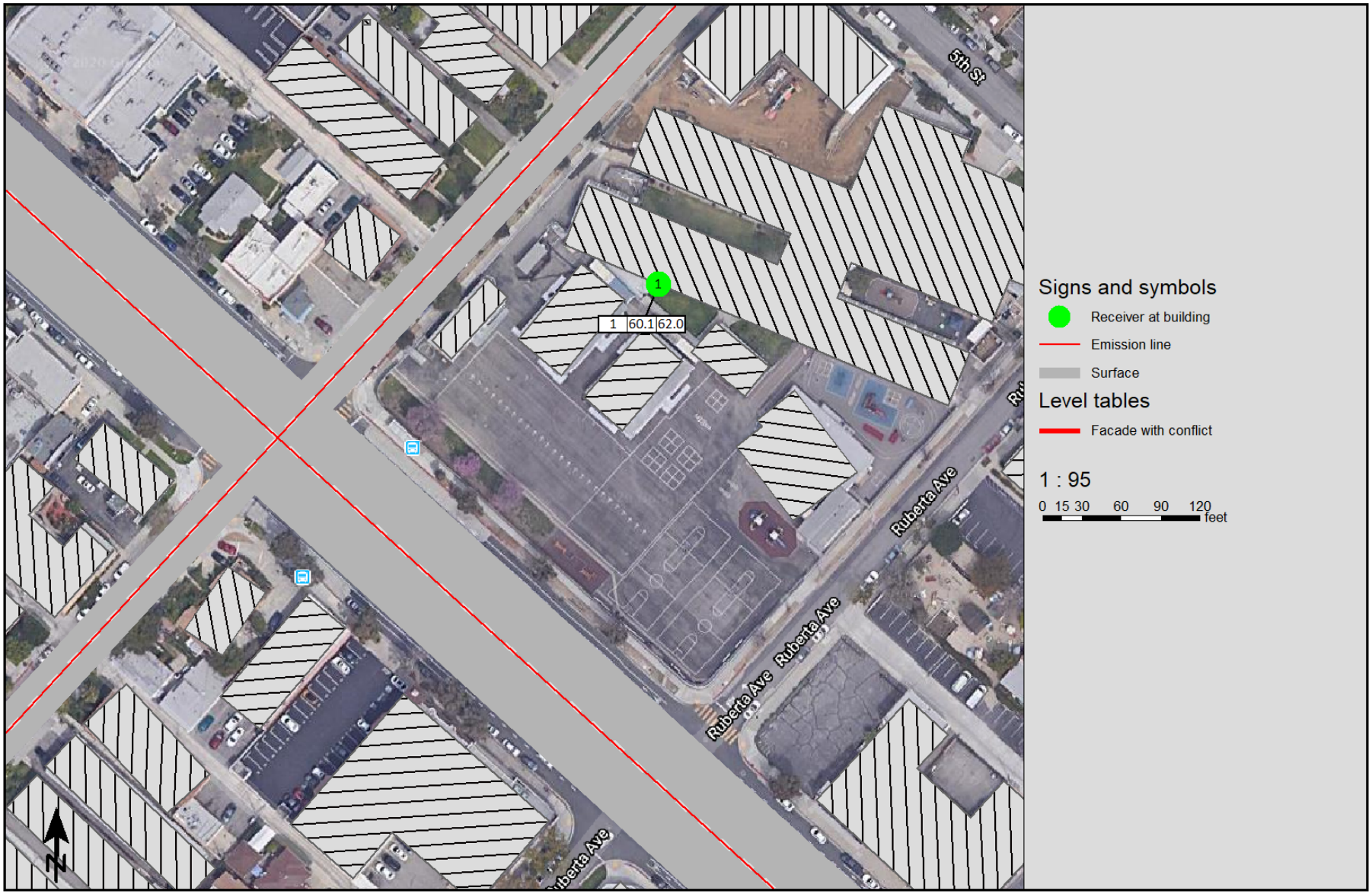
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Thomas Jefferson Elementary	11381398.4	3781760.33	South we	GF	169.93	-	-	60.1	62.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Thomas Jefferson Elementary	GF	60.1	62.0		
1		-		-	-
Glenoaks Boulevard		-		59.9	61.8
Justin Avenue		-		46.5	48.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Thomas Jefferson	GF	Day	30.(	38.4	42.3	44.(	45.4	46.3	46.(	47.(	47.2	46.(	48.(	49.(	49.(	50.3	48.3	48.2	47.2	45.(	46.4	43.(	39.(	34.(	27.3	18.(
			Lden	31.(	40.2	44.(	46.(	47.2	48.(	48.3	49.(	49.(	48.(	50.(	51.3	51.(	52.(	50.(	50.(	49.2	47.(	48.2	45.(	41.4	36.(	29.(	19.(


5th St
Ruberta Ave
Ruberta Ave
Ruberta Ave
Ruberta Ave
1
1 60.1 62.0
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 95
0 15 30 60 90 120
feet

1201 EAST BROADWAY
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00(	18224	Total	-	1127	699	238	-	Traffic li	-	30.0	Average (of DGAC a	0.0 / 0.
		Automobiles	-	856	530	181	56					
		Medium trucks	-	158	98	33	56					
		Heavy trucks	-	44	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	21	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+26	-							-	-	-	-	-
Chevy Chase Drive							Traffic direction: In entry direction					
0+00(	20116	Total	-	1244	769	264	-	Traffic li	-	30.0	Average (of DGAC a	-1.8
		Automobiles	-	945	583	201	56					
		Medium trucks	-	174	108	37	56					
		Heavy trucks	-	49	30	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	36	23	8	56					
		Auxiliary vehicle	-	35	22	8	56					
0+17	-							-	-	-	-	-

Receiver list

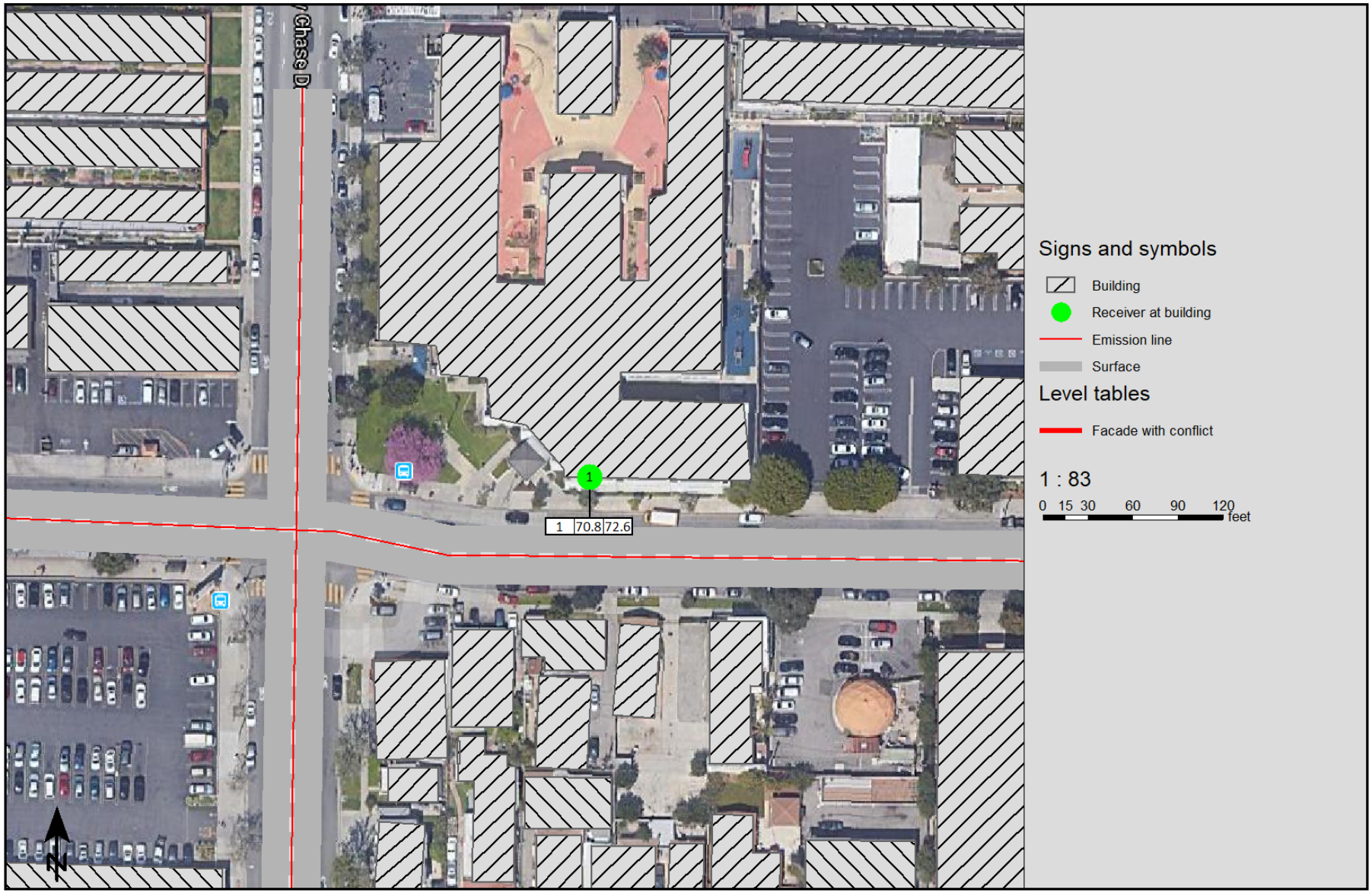
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	John Marshall Elementary	11385774.83779074.69	South	GF	180.53	-	-	70.8	72.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
John Marshall Elementary	GF	70.8	72.6		
Broadway		-		70.5	72.3
Chevy Chase Drive		-		59.3	61.2

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	John Marshall Eler	GF	Day	39.	46.(	51.:	53.(	54.(	55.(	57.:	60.	59.:	58.:	60.(	61.:	59.(	60.(	58.(	57.	57.(	57.4	56.(	53.	52.	48.:	45.(	40.:
			Lden	40.(	48.(	53.(	55.4	56.	57.	59.	61.(	61.(	60.(	62.4	63.	61.(	61.(	60.(	59.(	59.(	59.:	58.4	55.(	53.(	50.:	47.(	42.


Chase D
1
1 70.8 72.6
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 15 30 60 90 120
feet

2225 COLORADO BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	4072	Total	-	252	156	53	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	191	118	40	56					
		Medium trucks	-	35	22	7	56					
		Heavy trucks	-	10	6	2	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	7	5	2	56					
		Auxiliary vehicle	-	7	4	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	27220	Total	-	2149	252	53	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -3
		Automobiles	-	1632	191	40	56					
		Medium trucks	-	301	35	7	56					
		Heavy trucks	-	84	10	2	56					
		Buses	-	8	1	0	56					
		Motorcycles	-	63	7	2	56					
		Auxiliary vehicle	-	61	7	2	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	60.6	61.7	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.3	60.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	60.6	61.7		
1		-		-	-
Colorado Boulevard		-		55.1	53.2
Eagle Rock Boulevard		-		59.2	61.0
Rockland Avenue 5116	GF	61.3	60.0		
1		-		-	-
Colorado Boulevard		-		60.9	59.0
Eagle Rock Boulevard		-		51.5	53.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	31.9	39.0	43.7	46.0	47.7	47.0	47.8	48.2	47.9	48.0	49.7	50.0	49.9	50.3	48.8	47.9	47.2	46.0	46.4	44.4	41.4	37.2	31.3	24.1
			Lden	32.2	39.8	44.9	46.9	48.0	48.0	48.8	49.7	48.9	49.0	50.7	51.2	50.0	51.4	49.8	49.0	48.2	47.9	47.8	45.8	42.9	38.8	33.0	26.0
2	Rockland Avenue	GF	Day	33.8	40.9	43.8	45.0	45.7	44.9	46.0	49.7	50.0	49.7	50.8	51.4	50.0	50.0	49.7	48.9	48.2	49.0	48.9	45.0	43.7	38.2	32.7	24.0
			Lden	32.4	39.2	42.9	43.7	43.9	43.8	44.8	47.8	48.7	47.9	49.9	50.7	48.7	49.3	48.3	47.4	46.9	47.0	47.2	43.8	41.7	36.8	30.8	22.8

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Casper Ave
Merton Ave
2
1 61.3 60.0
1
1 60.6 61.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

5063 FLORISTAN AVENUE
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

1597 WALDRAN AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	37220	Total	-	2303	1422	487	-	Traffic li	-	30.0	Average (of DGAC a	0.4 / 3.
		Automobiles	-	1746	1080	370	56					
		Medium trucks	-	322	199	68	56					
		Heavy trucks	-	90	55	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	68	42	14	56					
		Auxiliary vehicle	-	68	41	14	56					
0+41(	-							-	-	-	-	-
Townsend Avenue							Traffic direction: In entry direction					
0+00(	1664	Total	-	103	63	22	-	Stop sig	-	100.0	Average (of DGAC a	-2.2
		Automobiles	-	78	48	17	46					
		Medium trucks	-	14	9	3	46					
		Heavy trucks	-	4	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	3	2	1	46					
		Auxiliary vehicle	-	3	2	1	46					
0+17(	-							-	-	-	-	-

Receiver list

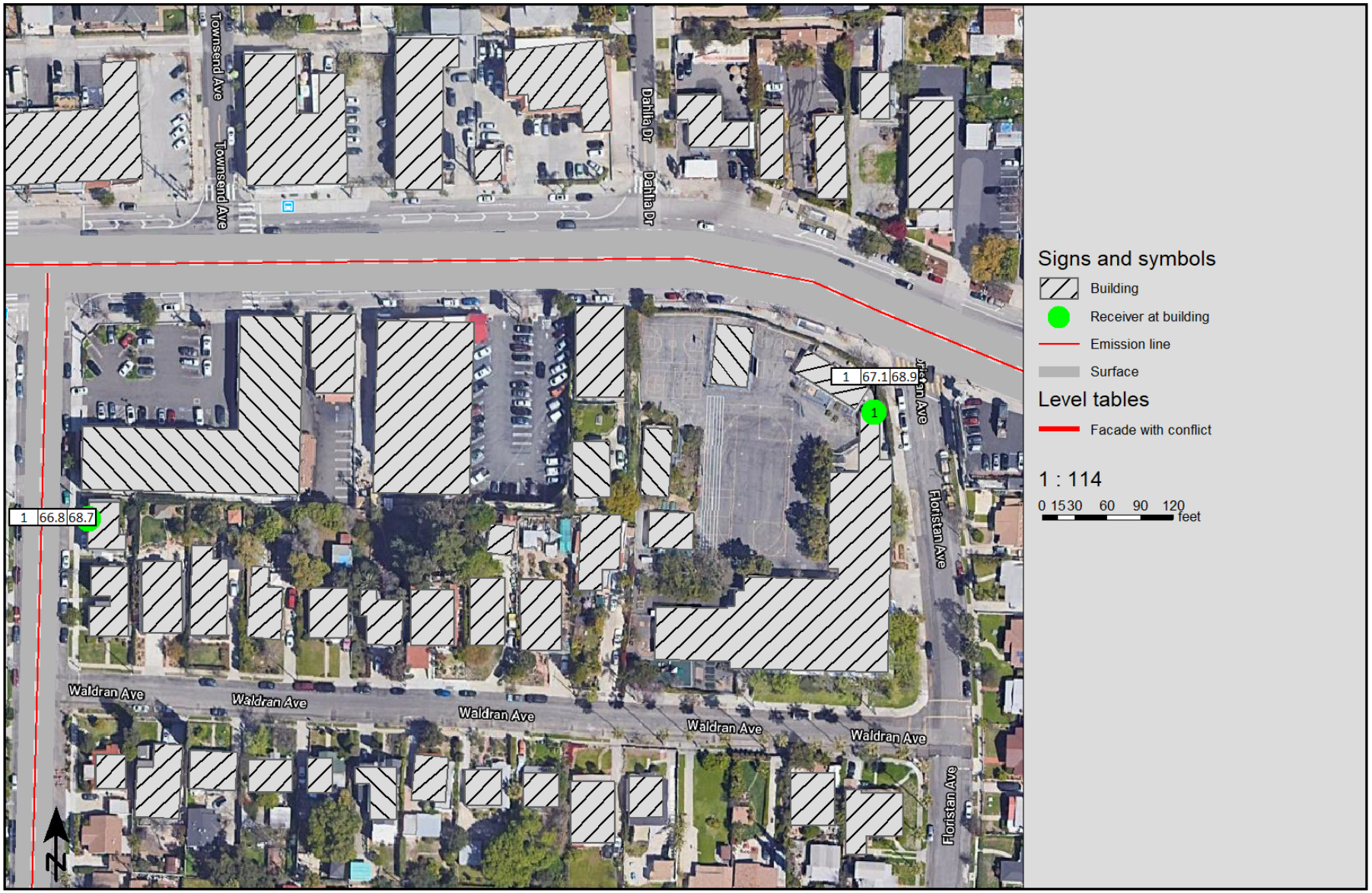
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Dahlia Heights Elementary Sc	11389451.0	3778232.14	North	GF	206.73	-	-	67.1	68.9	-	-
2	Waldran Avenue 1068	11389232.4	3778202.50	West	GF	202.83	-	-	66.8	68.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Dahlia Heights Elementary School	GF	67.1	68.9		
Colorado Boulevard		-		67.1	68.9
Townsend Avenue		-		30.3	32.1
Waldran Avenue 1068	GF	66.8	68.7		
Colorado Boulevard		-		58.8	60.6
Townsend Avenue		-		66.1	67.9

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Dahlia Heights Ele	GF	Day	37.	44.9	49.	51.8	53.4	54.	55.8	57.	55.	54.	55.	55.2	55.9	55.	54.4	54.2	53.8	52.9	52.9	50.	48.2	44.8	40.9	33.9
			Lden	39.8	46.3	51.8	53.8	55.2	56.8	57.8	58.9	57.9	56.8	56.9	57.	57.3	57.9	56.2	56.	55.9	54.3	54.	52.9	50.8	46.4	42.3	35.
2	Waldran Avenue 1	GF	Day	35.2	43.2	48.	50.8	51.8	52.	54.8	56.	55.2	53.9	56.	56.8	55.8	56.2	55.3	54.2	53.8	52.8	51.8	49.2	46.9	44.8	42.	37.
			Lden	37.8	45.8	49.9	52.4	53.8	54.9	55.8	58.9	57.8	55.8	58.8	58.4	57.9	58.8	57.	56.	55.4	54.4	53.9	51.8	48.3	46.4	43.9	38.9


Townsend Ave
Townsend Ave
Dahlia Dr
Dahlia Dr
1 67.1 68.9
1
Floristan Ave
Floristan Ave
1 66.8 68.7
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Floristan Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 114
0 15 30 60 90 120
feet

459 EAST COLORADO BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

385 EAST COLORADO BOULEVARD
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	18868	Total	-	1167	744	236	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	913	565	179	56					
		Medium trucks	-	168	104	33	56					
		Heavy trucks	-	47	29	9	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	34	22	7	56					
		Auxiliary vehicle	-	-	21	7	56					
0+46	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	24372	Total	-	1507	932	320	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1179	708	243	56					
		Medium trucks	-	217	130	45	56					
		Heavy trucks	-	61	36	12	56					
		Buses	-	6	4	1	56					
		Motorcycles	-	44	28	9	56					
		Auxiliary vehicle	-	-	26	9	56					
0+29	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	69.8	72.2	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	71.8	74.2	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	69.8	72.2		
Colorado Boulevard		-		69.6	71.9
Los Robles Avenue		-		57.5	60.0
Western Asset Plaza 385	GF	71.8	74.2		
Colorado Boulevard		-		71.3	73.6
Los Robles Avenue		-		62.1	64.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's M	GF	Day	37.	45.(	49.4	51.8	53.2	54.2	55.2	57.2	57.(	57.4	58.9	60.(	59.9	60.	59.3	58.4	57.4	55.8	54.3	51.4	48.	44.4	41.4	38.
			Lden	39.8	47.	51.	54.2	55.(	56.(	57.(	59.9	60.2	59.	61.2	62.	62.2	62.4	61.(	60.9	59.	58.2	56.8	54.(	50.8	47.3	44.(	40.(
2	Western Asset Pla	GF	Day	39.9	46.9	51.4	53.8	55.2	56.3	57.(	59.9	59.9	59.9	61.	62.8	61.9	61.8	60.8	59.	58.	57.2	56.(	53.	50.	48.9	46.(	41.
			Lden	41.9	49.(	53.	56.2	57.9	58.	60.2	62.	62.	61.8	64.(	64.9	63.8	64.	63.	61.9	61.(	59.(	58.	55.9	53.(	51.3	48.9	43.(

Union St
N Arch St Ave
N Euclid Ave
N Oakland Ave
E Green St
Converse Alley
2
1 71.8 74.2
1
1 69.8 72.2
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 30 60 120 180 240
feet

1305 EAST COLORADO BOULEVARD
CATEGORY 3

EXISTING AMBIENT LEVELS (2019)

1336 EAST COLORADO BOULEVARD
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

KEY A1

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	19460	Total	-	1203	744	256	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	914	565	142	56					
		Medium trucks	-	168	104	27	56					
		Heavy trucks	-	47	29	70	56					
		Buses	-	5	3	6	56					
		Motorcycles	-	35	22	6	56					
		Auxiliary vehicle	-	34	21	6	56					
0+48(	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00(	23304	Total	-	1441	891	306	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1095	676	170	56					
		Medium trucks	-	201	125	32	56					
		Heavy trucks	-	56	35	84	56					
		Buses	-	6	3	7	56					
		Motorcycles	-	42	26	7	56					
		Auxiliary vehicle	-	41	25	7	56					
0+31(	-							-	-	-	-	-

Receiver list

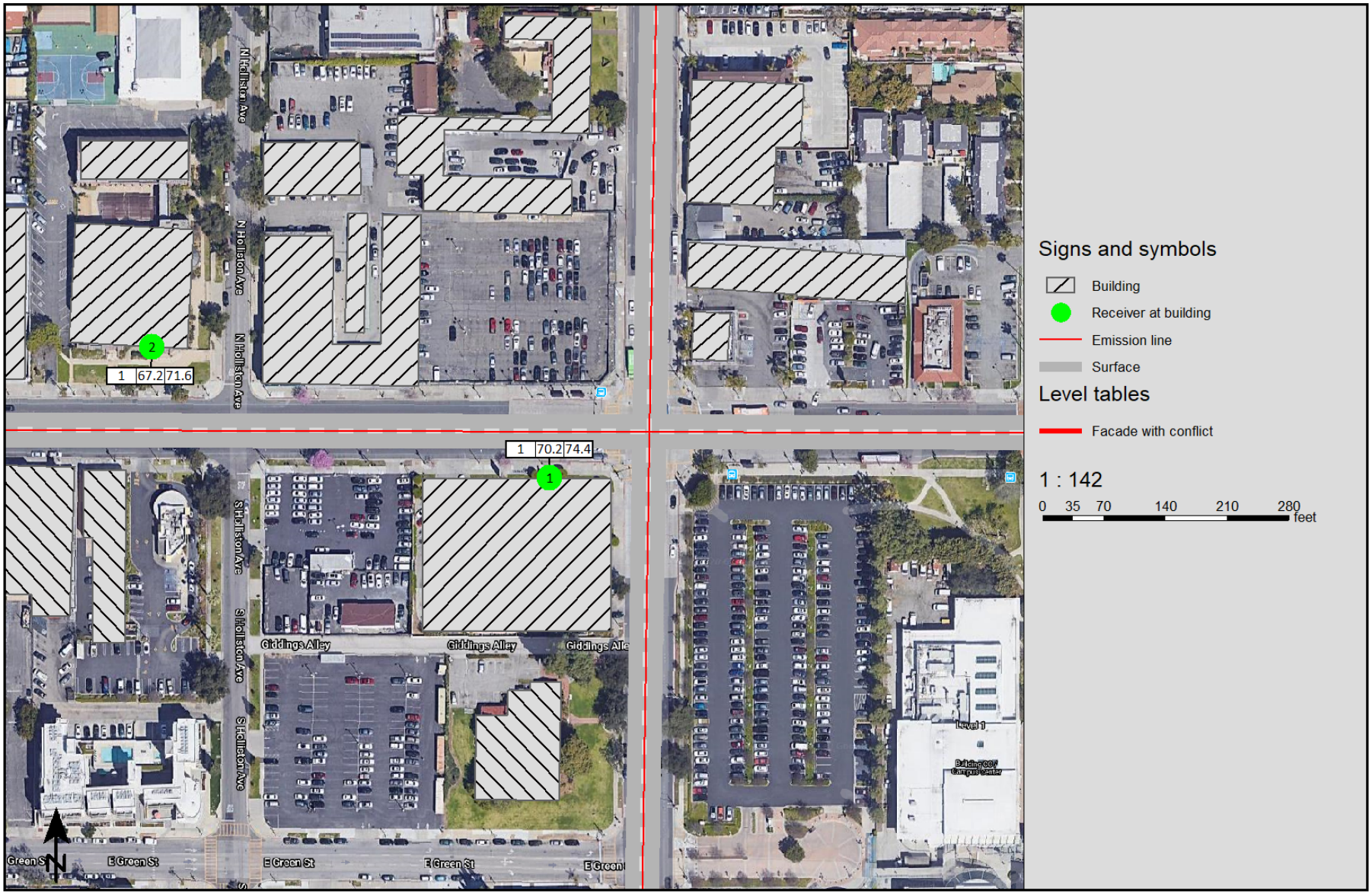
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	70.2	74.4	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	67.2	71.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	70.2	74.4		
Colorado Boulevard		-		69.1	73.3
Hill Avenue		-		63.8	68.1
Holliston United Methodist Church	GF	67.2	71.6		
Colorado Boulevard		-		67.2	71.5
Hill Avenue		-		44.5	48.9

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	39.2	46.0	51.2	53.2	54.2	55.2	56.5	59.2	57.5	57.2	59.0	61.0	58.2	59.0	58.2	57.5	57.2	56.4	56.2	54.5	52.2	49.2	45.5	39.4
			Lden	42.2	50.0	54.5	57.4	58.0	59.2	61.0	64.2	62.2	61.5	63.2	64.2	62.4	63.5	62.2	61.5	61.4	60.5	61.0	59.2	56.5	53.5	50.2	43.4
2	Holliston United M	GF	Day	37.5	45.2	50.2	52.2	53.5	54.5	54.5	54.0	54.2	53.0	55.2	56.5	55.2	55.5	54.5	55.2	55.2	54.0	53.2	52.2	50.2	46.5	41.2	35.4
			Lden	40.2	48.0	54.0	56.5	58.2	59.0	58.5	59.2	58.2	58.2	60.5	60.2	59.4	60.2	58.5	59.2	59.4	59.2	58.2	57.2	54.5	51.0	46.0	40.2


N Hollston Ave
N Hollston Ave
N Hollston Ave
2
1 67.2 71.6
1 70.2 74.4
1
S Hollston Ave
S Hollston Ave
S Hollston Ave
Giddings Alley
Giddings Alley
Giddings Alle
E Green St
E Green St
E Green St
E Green
Green St
N
Level 1
Building C07
Campus Center
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 142
0 35 70 140 210 280
feet

112 BUENA VISTA STREET
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Drive							Traffic direction: In entry direction					
0+00(	29996	Total	-	1855	1148	393	-	Traffic li	-	30.0	Average (of DGAC a	0.7
		Automobiles	-	1408	871	299	56					
		Medium trucks	-	260	161	55	56					
		Heavy trucks	-	72	45	15	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	55	34	12	56					
		Auxiliary vehicle	-	53	33	11	56					
0+25	-							-	-	-	-	-
Olive Drive1							Traffic direction: In entry direction					
0+00(	27628	Total	-	1708	1057	363	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1296	802	276	56					
		Medium trucks	-	239	148	51	56					
		Heavy trucks	-	66	41	14	56					
		Buses	-	6	4	1	56					
		Motorcycles	-	51	31	11	56					
		Auxiliary vehicle	-	49	30	10	56					
0+21	-							-	-	-	-	-

Receiver list

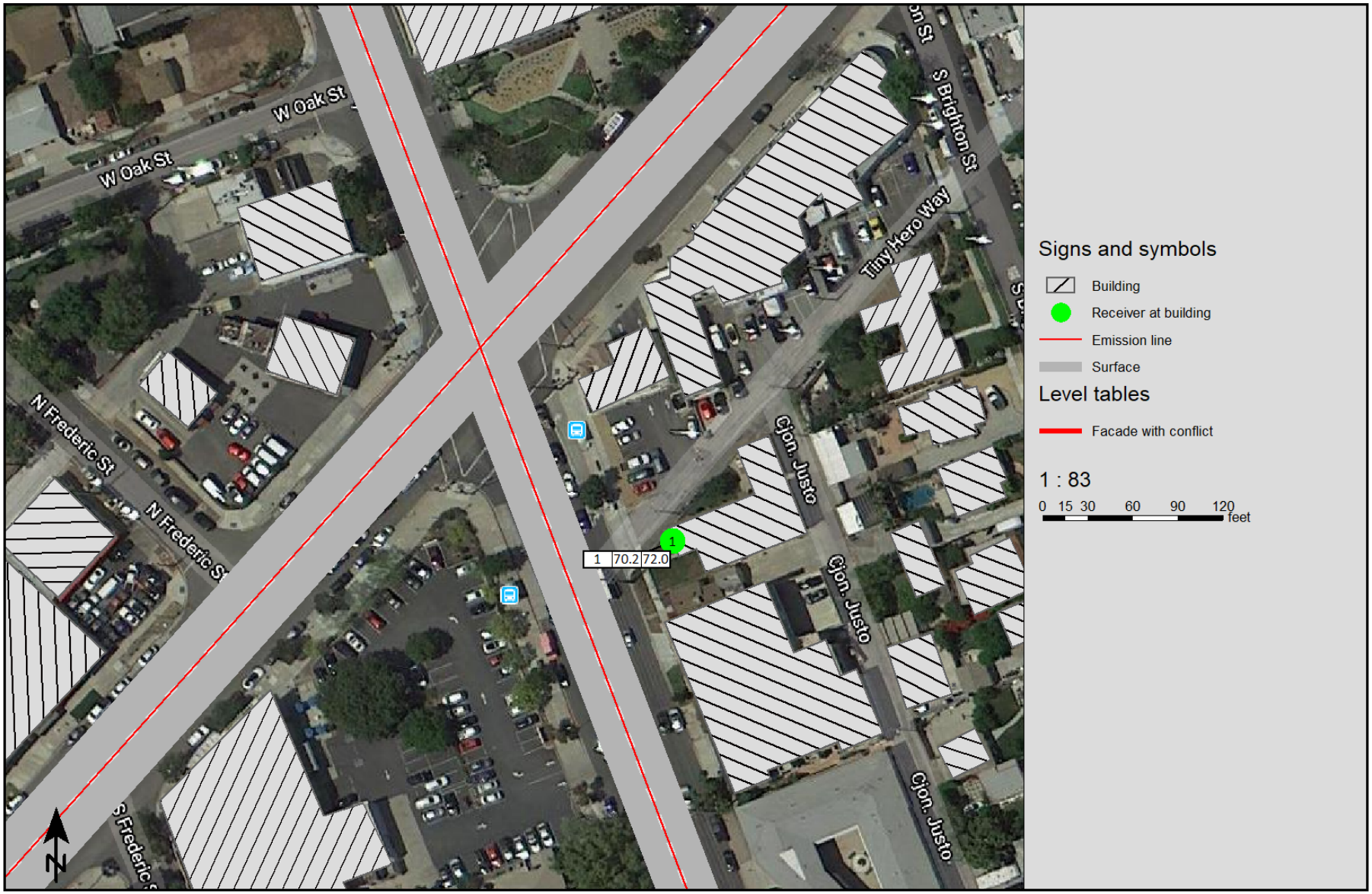
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Buena Vista Street 112	11377485.83780785.08	West	GF	163.97	-	-	70.2	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Buena Vista Street 112	GF	70.2	72.0		
Olive Drive		-		63.3	65.1
Olive Drive1		-		69.2	71.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Buena Vista Stree	GF	Day	40.2	47.9	52.6	55.1	56.4	57.0	57.2	58.2	58.2	57.6	58.9	59.8	59.2	58.9	57.8	57.4	56.0	56.2	56.4	55.2	52.0	48.1	45.4	38.9
			Lden	42.1	49.1	54.4	56.9	58.2	58.9	59.1	60.0	60.1	59.4	60.1	61.1	61.1	60.8	59.1	59.2	58.4	58.1	58.2	57.0	53.8	50.8	47.2	40.1


W Oak St
W Oak St
N Frederic St
N Frederic St
S Brighton St
Tiny Hero Way
Cjon. Justo
Cjon. Justo
Cjon. Justo
1
1 70.2 72.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 15 30 60 90 120
feet

3205 WEST ALAMEDA AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	17920	Total	-	1108	686	235	-	Traffic li	-	30.0	Average (of DGAC a	0.1
		Automobiles	-	841	520	178	56					
		Medium trucks	-	155	96	33	56					
		Heavy trucks	-	43	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	20	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+31	-							-	-	-	-	-
Alameda Avenue							Traffic direction: In entry direction					
0+00(	17920	Total	-	1108	686	235	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	841	520	178	56					
		Medium trucks	-	155	96	33	56					
		Heavy trucks	-	43	27	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	33	20	7	56					
		Auxiliary vehicle	-	32	20	7	56					
0+34	-							-	-	-	-	-
Ontario Street							Traffic direction: In entry direction					
0+00(	3640	Total	-	225	139	48	-	Traffic li	-	30.0	Average (of DGAC a	0.1 / 0.
		Automobiles	-	202	105	36	46					
		Medium trucks	-	13	19	7	46					
		Heavy trucks	-	7	5	2	46					
		Buses	-	0	1	0	46					
		Motorcycles	-	2	4	1	46					
		Auxiliary vehicle	-	1	4	1	46					
0+15	-							-	-	-	-	-

Receiver list

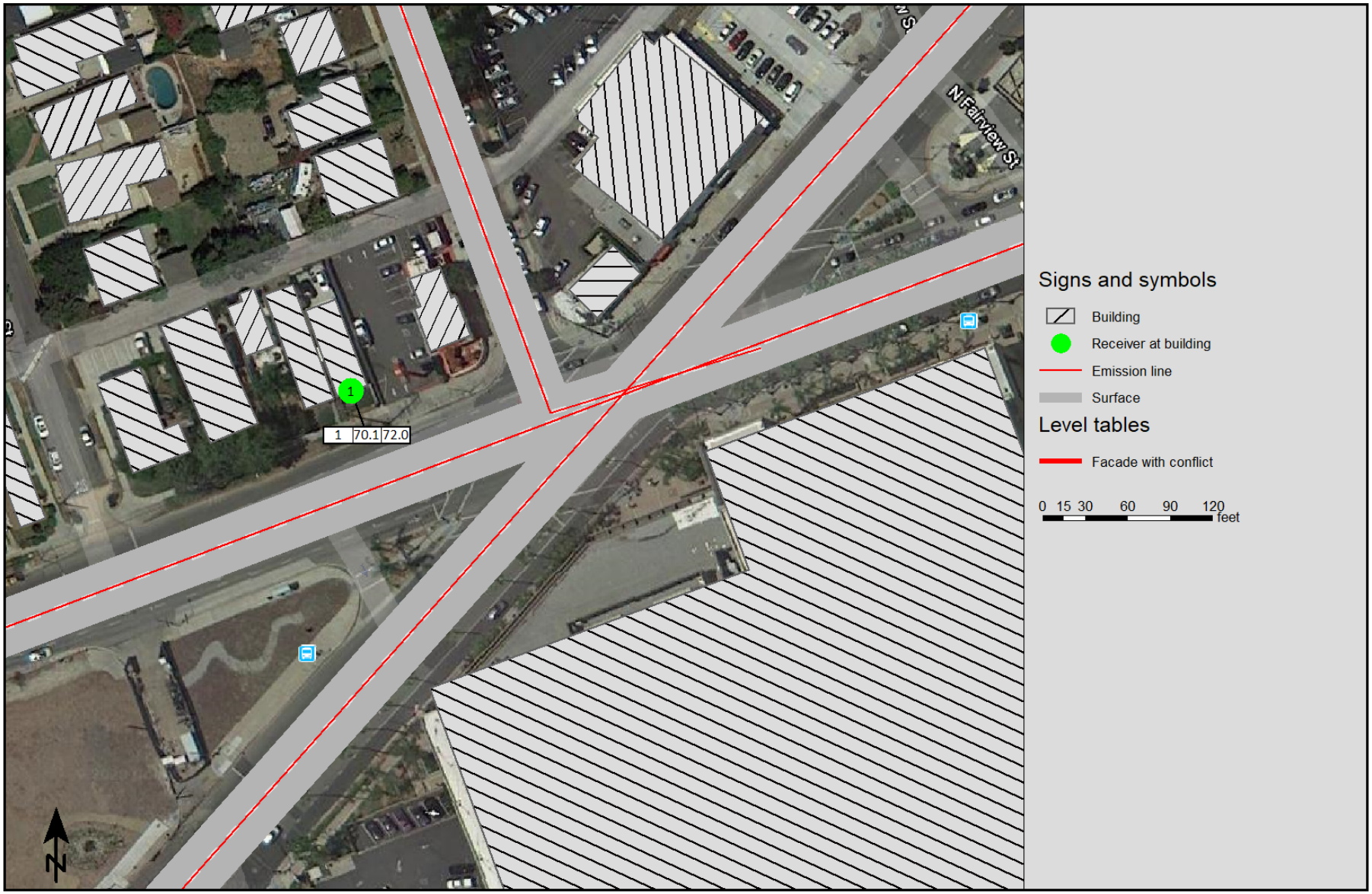
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	West Alameda Avenue 3205	11376866.2	3780244.66	South	GF	164.55	-	-	70.1	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
West Alameda Avenue 3205	GF	70.1	72.0		
Alameda Avenue		-		68.7	70.6
Olive Avenue		-		63.8	65.7
Ontario Street		-		53.6	57.1

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	West Alameda Ave	GF	Day	39.9	47.2	51.9	54.4	55.8	56.9	56.9	58.0	58.2	57.6	58.0	59.3	59.4	59.4	58.4	57.8	57.3	56.6	56.2	53.9	51.9	47.0	42.2	37.1
			Lden	41.4	49.1	53.8	56.4	57.3	58.4	58.8	60.0	60.1	59.9	60.9	61.2	61.3	61.3	60.3	59.7	59.2	58.8	58.7	55.8	53.4	49.0	44.1	39.1


N Fairview St
1
1 70.1 72.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
0 15 30 60 90 120
feet

114 SPARKS STREET
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	9236	Total	-	570	355	122	-	Traffic li	-	30.0	Average (of DGAC a	-0.2
		Automobiles	-	436	270	93	56					
		Medium trucks	-	80	50	17	56					
		Heavy trucks	-	22	14	5	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	15	10	4	56					
		Auxiliary vehicle	-	15	10	3	56					
0+17	-							-	-	-	-	-
Verdugo Avenue							Traffic direction: In entry direction					
0+00(	6952	Total	-	430	266	91	-	Traffic li	-	30.0	Average (of DGAC a	-0.8
		Automobiles	-	329	202	69	56					
		Medium trucks	-	60	37	13	56					
		Heavy trucks	-	17	10	4	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	11	7	3	56					
		Auxiliary vehicle	-	11	7	2	56					
0+22	-							-	-	-	-	-
Sparks Street							Traffic direction: In entry direction					
0+00(	4820	Total	-	298	185	63	-	Traffic li	-	30.0	Average (of DGAC a	-1.2
		Automobiles	-	228	141	48	46					
		Medium trucks	-	42	26	9	46					
		Heavy trucks	-	12	7	3	46					
		Buses	-	1	1	-	46					
		Motorcycles	-	8	5	2	46					
		Auxiliary vehicle	-	8	5	2	46					
0+19	-							-	-	-	-	-

Receiver list

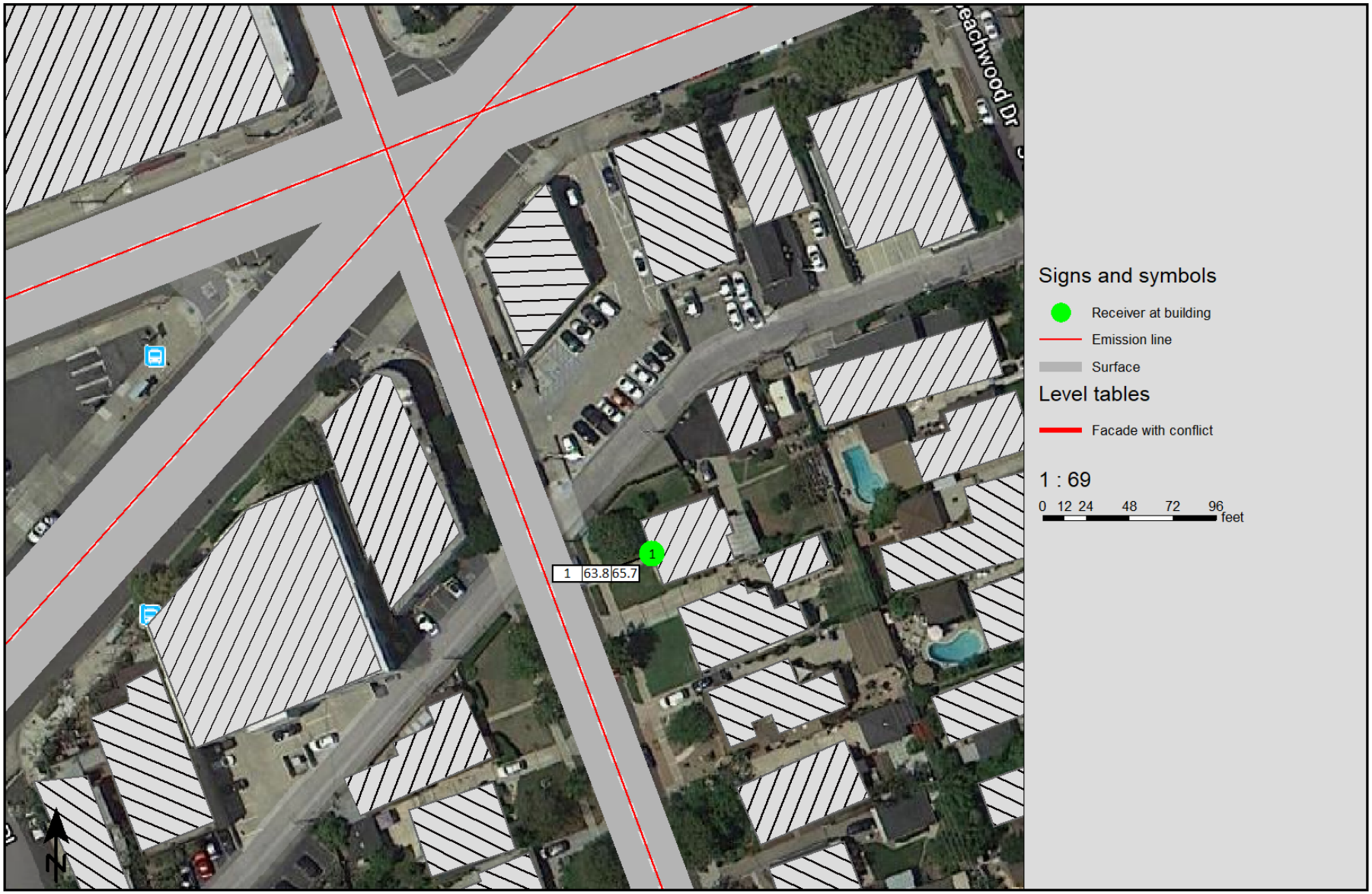
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Sparks Street 114	11378176.13781526.97	West	GF	167.01	-	-	63.8	65.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Sparks Street 114	GF	63.8	65.7		
Olive Avenue		-		54.5	56.4
Sparks Street		-		63.0	64.8
Verdugo Avenue		-		52.1	54.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Sparks Street 114	GF	Day	34.2	41.5	46.0	48.4	49.7	50.2	50.7	52.2	52.0	51.0	52.4	53.2	53.7	53.0	51.8	51.2	50.7	50.2	49.5	47.2	44.7	40.7	37.5	33.1
			Lden	36.0	43.2	47.5	50.2	51.5	52.2	52.0	54.2	54.4	53.5	54.2	55.7	54.5	54.5	53.7	53.7	52.0	52.7	51.4	49.7	46.0	42.0	39.4	35.2


Beachwood Dr
1
1 63.8 65.7
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 69
0 12 24 48 72 96
feet
N

150 SAN FERNANDO BOULEVARD
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
San Fernando Boulevard							Traffic direction: In entry direction					
0+00(	20780	Total	-	1285	794	273	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	975	603	207	56					
		Medium trucks	-	180	111	38	56					
		Heavy trucks	-	50	31	11	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	38	23	8	56					
		Auxiliary vehicle	-	37	23	8	56					
0+29-	-							-	-	-	-	-
Olive Avenue							Traffic direction: In entry direction					
0+00(	5760	Total	-	356	220	76	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	270	167	58	56					
		Medium trucks	-	50	31	11	56					
		Heavy trucks	-	14	9	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	11	6	2	56					
		Auxiliary vehicle	-	10	6	2	56					
0+24-	-							-	-	-	-	-

Receiver list

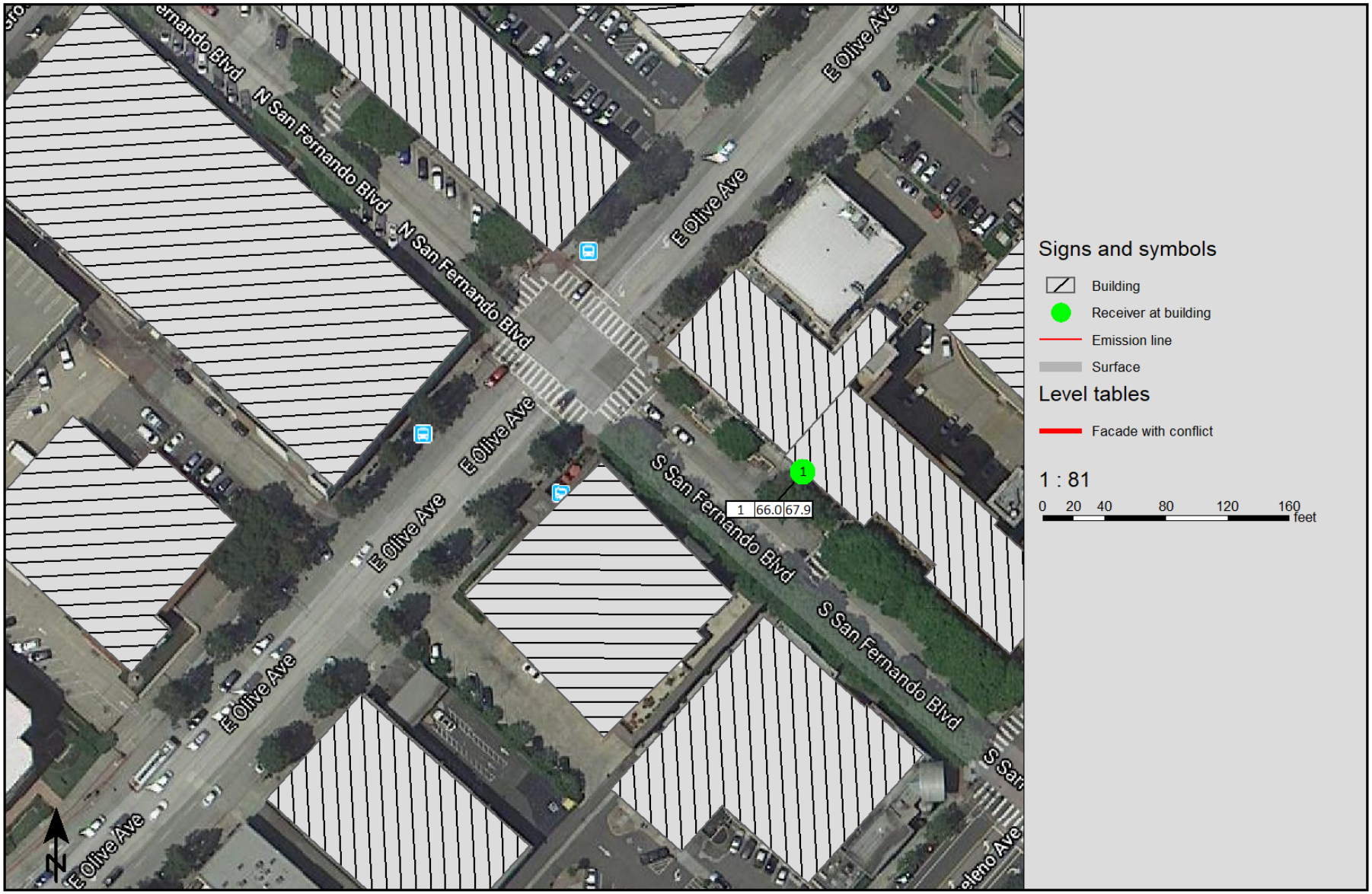
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	San Fernando Blvd. 150	11379442.03	782961.24	South we	GF	186.64	-	-	66.0	67.9	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
San Fernando Blvd. 150	GF	66.0	67.9		
Olive Avenue		-		64.8	66.7
San Fernando Boulevard		-		59.6	61.5

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	San Fernando Blvd	GF	Day	35.2	42.8	47.8	50.3	51.7	52.8	53.3	54.5	54.3	53.7	54.5	55.0	55.3	55.4	54.2	53.0	53.0	52.0	51.7	49.3	46.2	43.3	40.0	35.8
			Lden	37.7	44.7	49.5	52.2	53.0	54.5	55.7	56.4	56.2	55.5	56.4	56.9	57.2	57.3	56.7	55.4	54.5	53.5	53.0	51.2	48.7	45.2	41.9	37.7


N San Fernando Blvd
E Olive Ave
S San Fernando Blvd
1
1 66.0 67.9
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 81
0 20 40 80 120 160
feet

1112 ALAMEDA AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00(	32244	Total	-	1994	1233	423	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1513	936	321	56					
		Medium trucks	-	279	173	59	56					
		Heavy trucks	-	78	48	17	56					
		Buses	-	8	5	2	56					
		Motorcycles	-	59	36	12	56					
		Auxiliary vehicle	-	57	35	12	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	10124	Total	-	626	387	133	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	475	294	101	56					
		Medium trucks	-	88	54	19	56					
		Heavy trucks	-	24	15	5	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	19	11	4	56					
		Auxiliary vehicle	-	18	11	4	56					
0+23	-							-	-	-	-	-

Receiver list

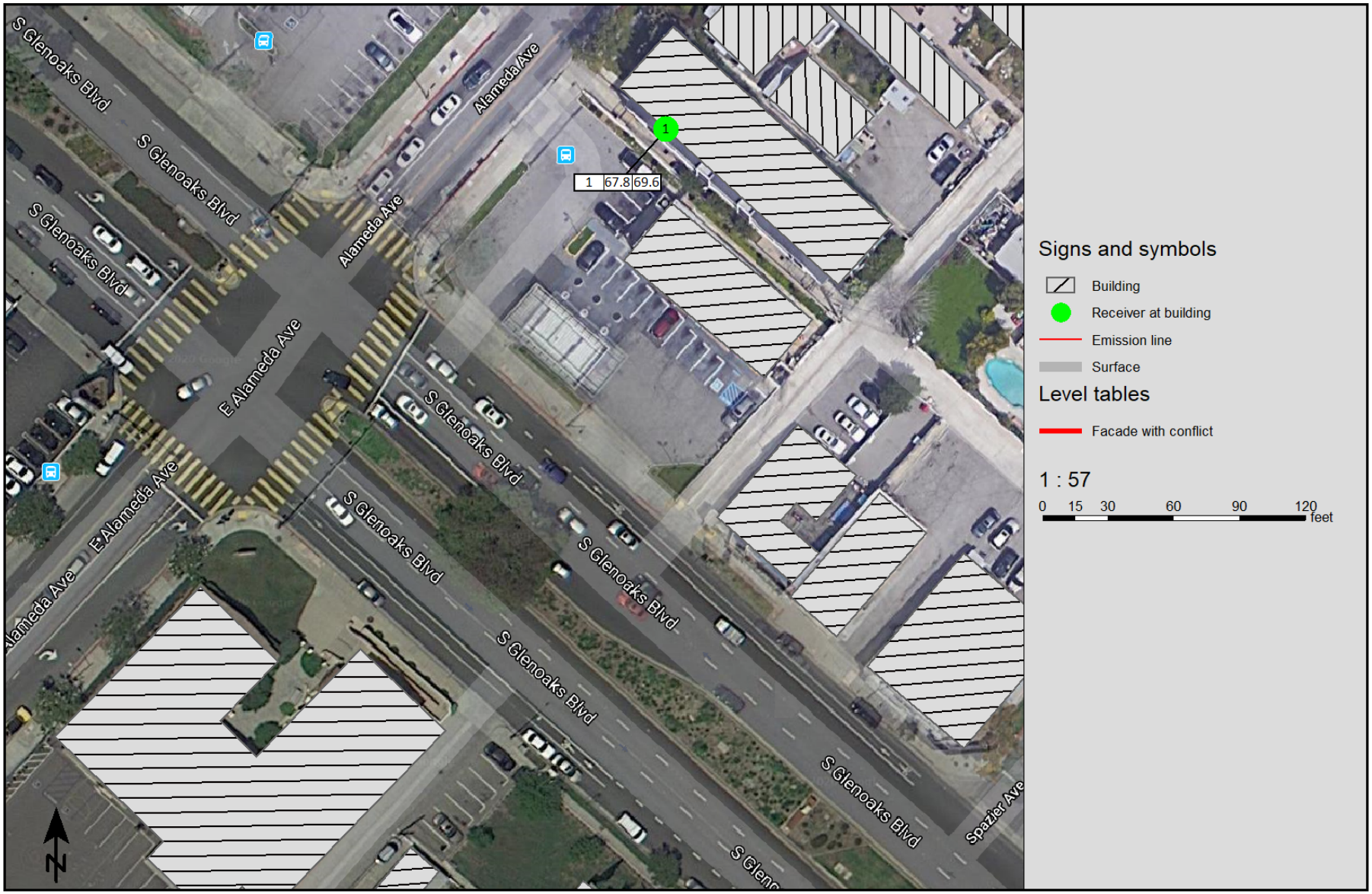
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	67.8	69.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Alameda Avenue 1112	GF	67.8	69.6		
Alameda Avenue		-		65.1	67.0
Glenoaks Boulevard		-		64.4	66.2

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	37.9	45.9	50.3	52.9	54.3	55.1	55.6	56.1	55.9	54.9	55.9	57.6	56.1	56.8	55.9	55.2	54.6	53.8	53.2	51.1	48.6	43.8	39.9	34.6
			Lden	39.8	47.4	52.2	54.8	56.2	57.0	57.4	58.0	57.8	56.8	57.8	58.8	58.6	58.1	57.3	57.1	56.4	55.1	55.0	53.6	49.9	45.1	41.4	36.3


S Glenoaks Blvd
Alameda Ave
E Alameda Ave
1
1 67.8 69.6
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet
N

1068 WILLARD AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	39660	Total	-	2452	1517	521	-	Traffic li	-	100.0	Average (of DGAC a	-1.1
		Automobiles	-	1862	1152	396	56					
		Medium trucks	-	343	212	73	56					
		Heavy trucks	-	96	59	20	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	72	45	15	56					
		Auxiliary vehicle	-	70	43	15	56					
0+42(	-							-	-	-	-	-
Grandview Avenue							Traffic direction: In entry direction					
0+00(	8632	Total	-	534	330	113	-	Traffic li	-	100.0	Average (of DGAC a	-3.1
		Automobiles	-	406	251	86	56					
		Medium trucks	-	75	46	16	56					
		Heavy trucks	-	21	13	4	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	16	10	3	56					
		Auxiliary vehicle	-	15	9	3	56					
0+28	-							-	-	-	-	-

Receiver list

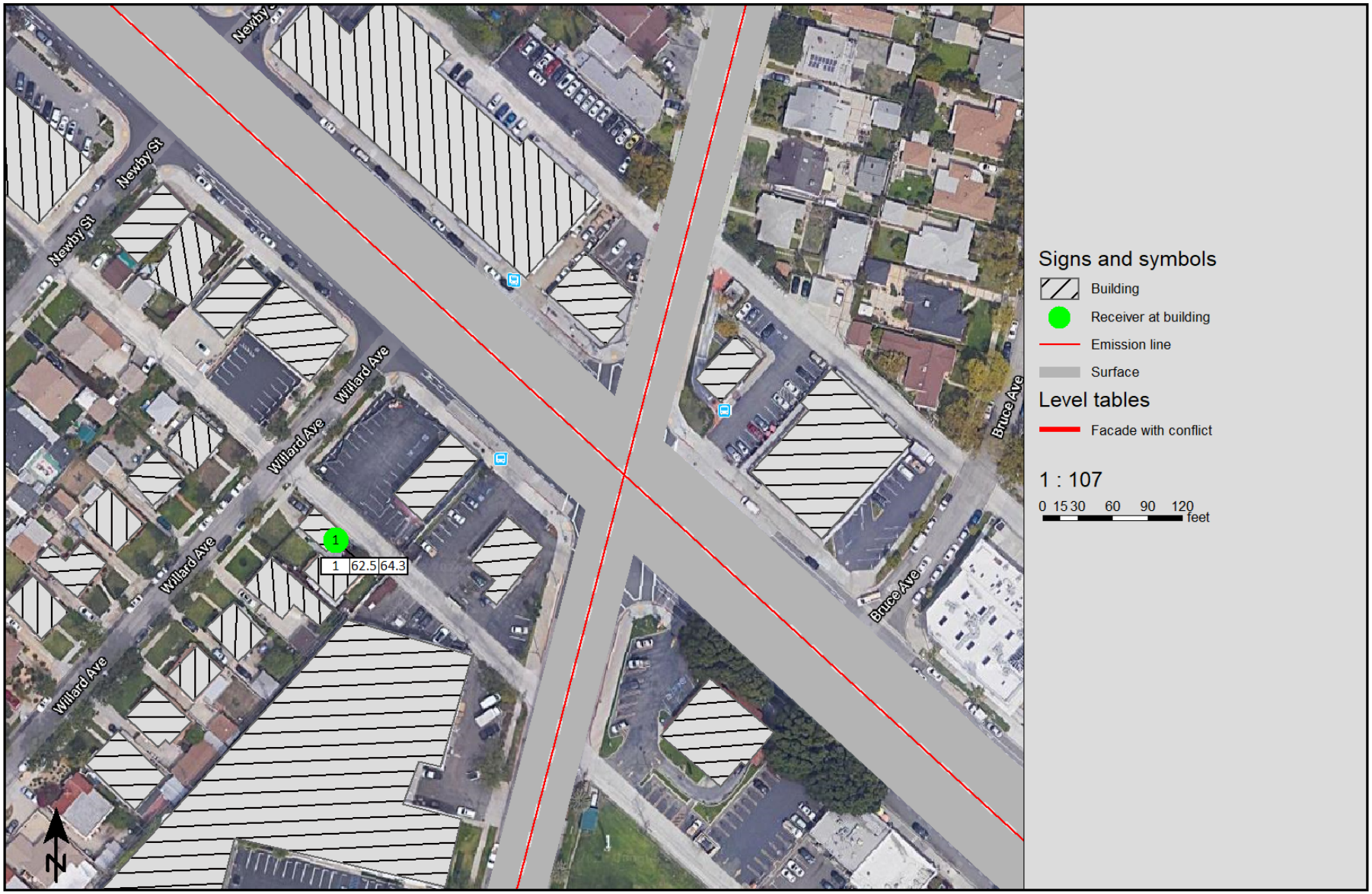
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Willard Avenue 1068	11381817.33	781184.57	South ea	GF	154.34	-	-	62.5	64.3	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Willard Avenue 1068	GF	62.5	64.3		
Glenoaks Boulevard		-		61.5	63.3
Grandview Avenue		-		55.7	57.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Willard Avenue 10	GF	Day	33.9	42.9	47.7	49.4	50.8	51.9	51.6	52.9	50.3	48.2	49.4	50.2	50.7	51.7	49.8	48.7	48.8	48.8	47.2	45.6	41.2	37.3	31.7	21.8
			Lden	35.8	44.4	49.0	51.3	52.6	53.3	53.4	54.3	52.7	50.7	51.2	52.0	52.9	53.0	51.6	50.6	50.6	50.6	49.0	46.8	43.7	39.7	33.6	23.7


Newby St
Newby St
Willard Ave
Willard Ave
Willard Ave
Willard Ave
Bruce Ave
Bruce Ave
1
1 62.5 64.3
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 107
0 15 30 60 90 120
feet

200 EAST BROADWAY
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00(	15056	Total	-	979	567	130	-	Traffic li	-	40.0	Average (of DGAC a	1.0
		Automobiles	-	743	430	98	56					
		Medium trucks	-	137	79	18	56					
		Heavy trucks	-	38	22	5	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	29	17	4	56					
		Auxiliary vehicle	-	28	16	4	56					
0+29	-							-	-	-	-	-
Artsakh Avenue							Traffic direction: In entry direction					
0+00(	2052	Total	-	127	78	27	-	Traffic li	-	30.0	Average (of DGAC a	-1.5
		Automobiles	-	96	59	20	65					
		Medium trucks	-	18	11	4	65					
		Heavy trucks	-	5	3	1	65					
		Buses	-	0	0	0	65					
		Motorcycles	-	4	2	1	65					
		Auxiliary vehicle	-	4	2	1	65					
0+24(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Eleve Lofts	11384430.53779078.67	North	GF	166.81	-	-	73.7	74.7	-	-

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Eleve Lofts	GF	Day	40.5	48.4	53.4	56.2	57.8	59.0	59.9	61.5	61.7	61.8	63.0	62.8	63.3	63.9	63.0	61.8	61.2	60.2	59.3	56.7	54.0	50.7	46.7	42.5
			Lden	41.4	49.4	54.4	57.2	58.8	60.0	60.9	62.5	62.7	62.8	64.0	63.8	64.2	64.9	63.9	62.8	62.2	61.2	60.3	57.7	55.0	51.7	47.7	43.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Eleve Lofts	GF	Day	40.2	48.3	53.0	55.0	57.2	58.8	59.4	60.9	61.2	61.2	62.2	62.2	62.9	63.4	62.2	61.7	61.2	60.0	58.9	56.2	53.2	49.2	44.8	41.2
			Lden	42.3	50.0	54.9	57.3	59.2	60.4	61.2	62.8	63.3	63.3	64.2	64.2	64.8	65.4	64.0	63.0	63.3	61.8	60.8	58.2	55.2	51.3	46.3	43.1

1 73.7 74.7
1
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 84
0 20 40 80 120 160
feet
N

5116 ROCKLAND AVENUE
CATEGORY 2

EXISTING AMBIENT LEVELS (2019)

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	4072	Total	-	252	156	53	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	191	118	40	56					
		Medium trucks	-	35	22	7	56					
		Heavy trucks	-	10	6	2	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	7	5	2	56					
		Auxiliary vehicle	-	7	4	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	27220	Total	-	2149	252	53	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -3
		Automobiles	-	1632	191	40	56					
		Medium trucks	-	301	35	7	56					
		Heavy trucks	-	84	10	2	56					
		Buses	-	8	1	0	56					
		Motorcycles	-	63	7	2	56					
		Auxiliary vehicle	-	61	7	2	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	60.6	61.7	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.3	60.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	60.6	61.7		
1		-		-	-
Colorado Boulevard		-		55.1	53.2
Eagle Rock Boulevard		-		59.2	61.0
Rockland Avenue 5116	GF	61.3	60.0		
1		-		-	-
Colorado Boulevard		-		60.9	59.0
Eagle Rock Boulevard		-		51.5	53.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	31.9	39.0	43.7	46.0	47.7	47.0	47.8	48.2	47.9	48.0	49.7	50.0	49.9	50.3	48.8	47.9	47.2	46.0	46.4	44.4	41.4	37.2	31.3	24.1
			Lden	32.2	39.8	44.9	46.9	48.0	48.0	48.8	49.7	48.9	49.0	50.7	51.2	50.0	51.4	49.8	49.0	48.2	47.9	47.8	45.8	42.9	38.8	33.0	26.0
2	Rockland Avenue	GF	Day	33.8	40.9	43.8	45.0	45.7	44.9	46.0	49.7	50.0	49.7	50.8	51.4	50.0	50.0	49.7	48.9	48.2	49.0	48.9	45.0	43.7	38.2	32.7	24.0
			Lden	32.4	39.2	42.9	43.7	43.9	43.8	44.8	47.8	48.7	47.9	49.9	50.7	48.7	49.3	48.3	47.4	46.9	47.0	47.2	43.8	41.7	36.8	30.8	22.8

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Casper Ave
Merton Ave
2
1 61.3 60.0
1
1 60.6 61.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

CONSTRUCTION NOISE CALCULATIONS

CONSTRUCTION VIBRATION CALCULATIONS

2042 NO PROJECT BASELINE
TRAFFIC NOISE MODELING

CATEGORY 2 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM LANKERSHIM AND BLAKESLEE

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	35432	Total	-	2191	1355	465	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1663	1028	353	56					
		Medium trucks	-	306	190	66	56					
		Heavy trucks	-	86	53	18	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	64	40	14	56					
		Auxiliary vehicle	-	63	39	14	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13340	Total	-	825	510	175	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -(
		Automobiles	-	626	387	133	56					
		Medium trucks	-	115	72	25	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	24	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	5804	Total	-	359	222	76	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	272	168	58	48					
		Medium trucks	-	50	31	11	48					
		Heavy trucks	-	14	9	3	48					
		Buses	-	1	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	10	6	2	48					
0+06(	-							-	-	-	-	-

Receiver list

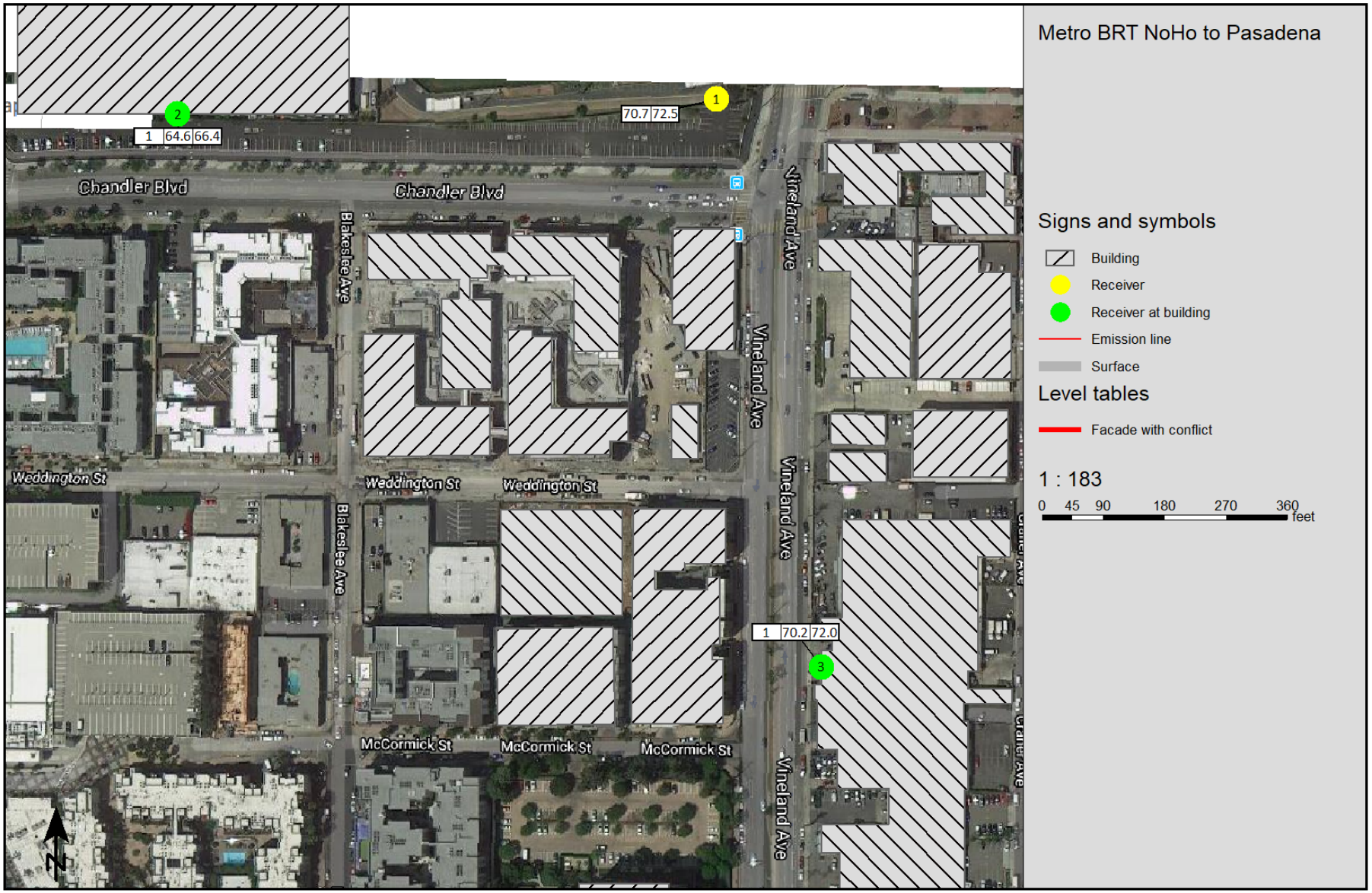
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1 3781696.23	-	GF	191.40	-	-	70.7	72.5	-	-
2	Gallery at NoHo Commons	11373425.6 3781689.51	South	GF	194.08	-	-	64.6	66.4	-	-
3	Gray Studios	11373713.1 3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.7	72.5		
Chandler Ave b/t Fair and Vineland		-		59.8	61.6
Fair Ave N of Chandller		-		34.9	36.7
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.5	71.3
Gallery at NoHo Commons	GF	64.6	66.4		
Chandler Ave b/t Fair and Vineland		-		64.0	65.8
Fair Ave N of Chandller		-		53.0	54.8
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.1	52.0
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.4
Fair Ave N of Chandller		-		30.8	32.6
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.9	56.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.9	49.3	54.2	56.9	58.3	59.2	59.6	60.2	58.3	57.3	58.2	58.7	58.9	58.6	57.9	57.9	57.7	56.9	56.9	54.8	52.7	48.7	43.7	35.1
			Lden	43.4	51.7	56.6	58.7	60.2	61.7	61.9	62.7	60.2	59.7	60.7	60.6	60.8	60.6	59.4	59.7	58.9	58.3	58.8	56.7	54.6	50.6	45.6	37.6
2	Gallery at NoHo C	GF	Day	35.9	43.3	48.7	50.8	52.2	53.6	53.3	53.7	51.8	50.8	52.6	52.7	53.6	53.7	52.2	51.9	50.6	50.9	51.2	47.9	46.7	42.6	37.2	31.2
			Lden	37.3	45.7	50.6	52.7	54.7	54.9	55.2	55.9	53.6	52.7	53.8	54.6	54.9	54.9	54.6	53.8	52.4	52.3	53.6	49.8	47.9	44.4	39.6	33.6
3	Gray Studios	GF	Day	39.4	47.6	51.8	54.4	55.8	56.6	57.7	58.7	58.3	58.7	59.3	59.3	59.7	60.7	59.6	57.8	57.6	55.6	54.2	51.8	50.8	49.9	45.8	38.4
			Lden	41.3	48.9	53.6	56.2	57.6	58.9	59.6	60.6	60.2	60.6	61.7	61.7	61.6	62.6	60.9	59.7	58.9	57.9	56.7	53.7	52.7	51.4	47.6	40.1


Metro BRT NoHo to Pasadena
Chandler Blvd
Chandler Blvd
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Weddington St
Weddington St
Weddington St
Blakeslee Ave
McCormick St
McCormick St
McCormick St
Vineland Ave
Granger Ave
1 64.6 66.4
70.7 72.5
1 70.2 72.0
1
2
3
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet

KEY C

OLIVE AVENUE FROM MYERS TO KEYSTONE

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Ave b/t Buena Vista and Keystone							Traffic direction: In entry direction					
0+00(	29736	Total	-	1839	1137	390	-	Traffic li	-	30.0	Average (of DGAC a	-0.1
		Automobiles	-	1396	863	296	56					
		Medium trucks	-	258	159	55	56					
		Heavy trucks	-	72	45	16	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	54	34	11	56					
		Auxiliary vehicle	-	53	32	11	56					
0+25	-							-	-	-	-	-
Keystone Avenue							Traffic direction: In entry direction					
0+00(	2228	Total	-	138	85	29	-	Traffic li	-	30.0	Average (of DGAC a	-0.8 / 0
		Automobiles	-	105	65	22	46					
		Medium trucks	-	19	12	4	46					
		Heavy trucks	-	5	3	1	46					
		Buses	-	1	0	0	46					
		Motorcycles	-	4	3	1	46					
		Auxiliary vehicle	-	4	2	1	46					
0+42	-							-	-	-	-	-

Receiver list

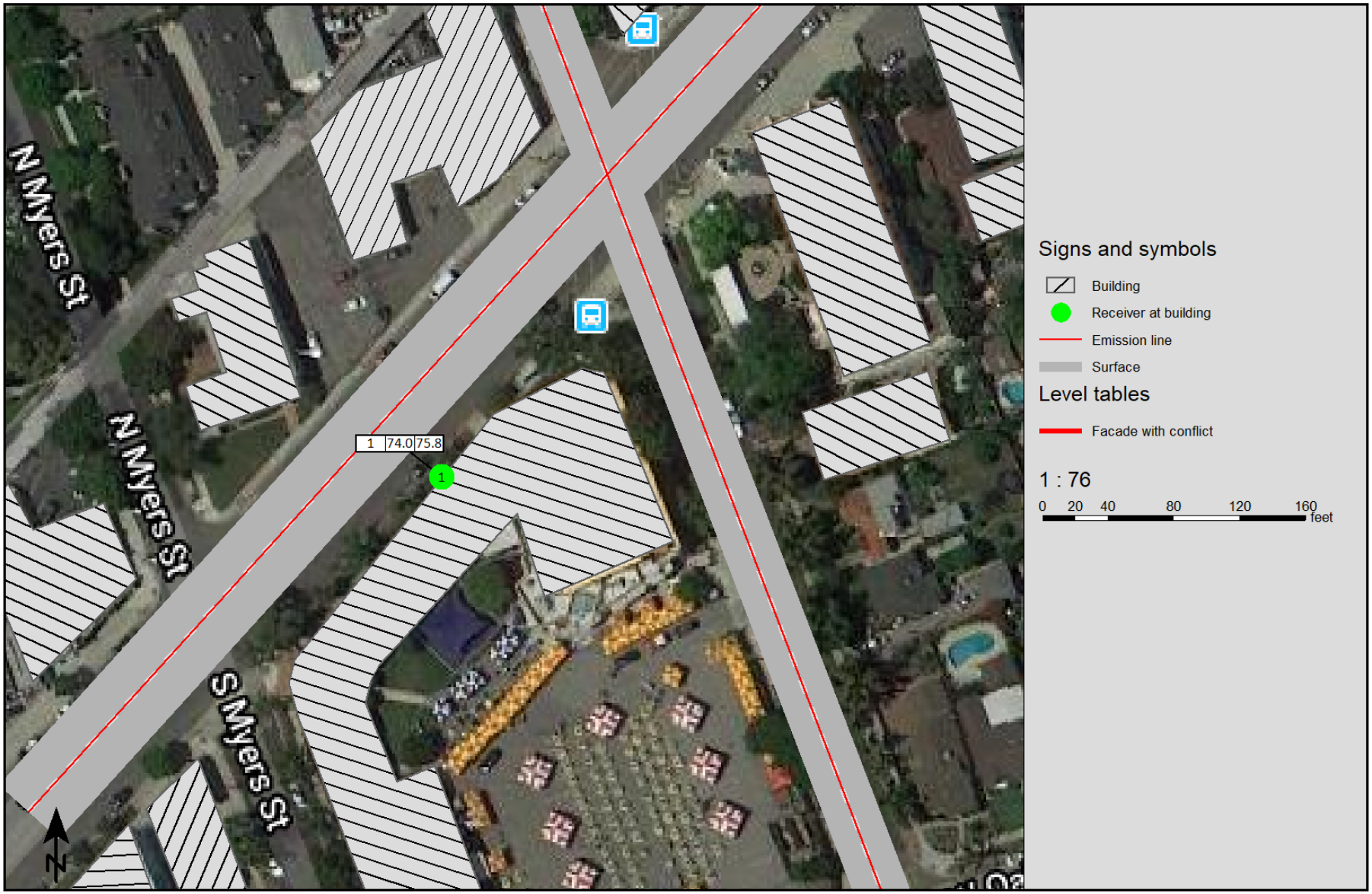
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	St. Finbar School	11377724.5	3781109.46	North we	GF	167.06	-	-	74.0	75.8	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
St. Finbar School	GF	74.0	75.8		
Keystone Avenue		-		47.5	49.3
Olive Ave b/t Buena Vista and Keystone		-		73.9	75.8

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	St. Finbar School	GF	Day	41.9	49.0	54.4	57.0	58.3	59.1	59.9	62.3	62.1	61.4	62.4	64.2	63.0	64.0	63.0	62.1	61.0	59.8	58.1	55.0	53.0	51.0	49.2	44.5
			Lden	43.8	51.9	56.3	58.9	60.2	61.0	61.8	64.2	64.9	63.3	64.3	66.0	65.9	65.8	64.8	64.0	62.9	61.1	60.0	57.9	54.9	53.4	51.1	46.4


N Myers St
N Myers St
S Myers St
1 74.0 75.8
1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 76
0 20 40 80 120 160
feet

KEY C
OLIVE AVENUE FROM CALIFORNIA TO ALAMEDA

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00(	36100	Total	-	2232	1381	474	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1694	1048	360	56					
		Medium trucks	-	312	194	66	56					
		Heavy trucks	-	87	54	19	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	66	40	13	56					
		Auxiliary vehicle	-	64	39	13	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	11352	Total	-	702	434	149	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	533	329	113	56					
		Medium trucks	-	98	61	21	56					
		Heavy trucks	-	27	17	6	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	21	13	4	56					
		Auxiliary vehicle	-	20	12	4	56					
0+23	-							-	-	-	-	-

Receiver list

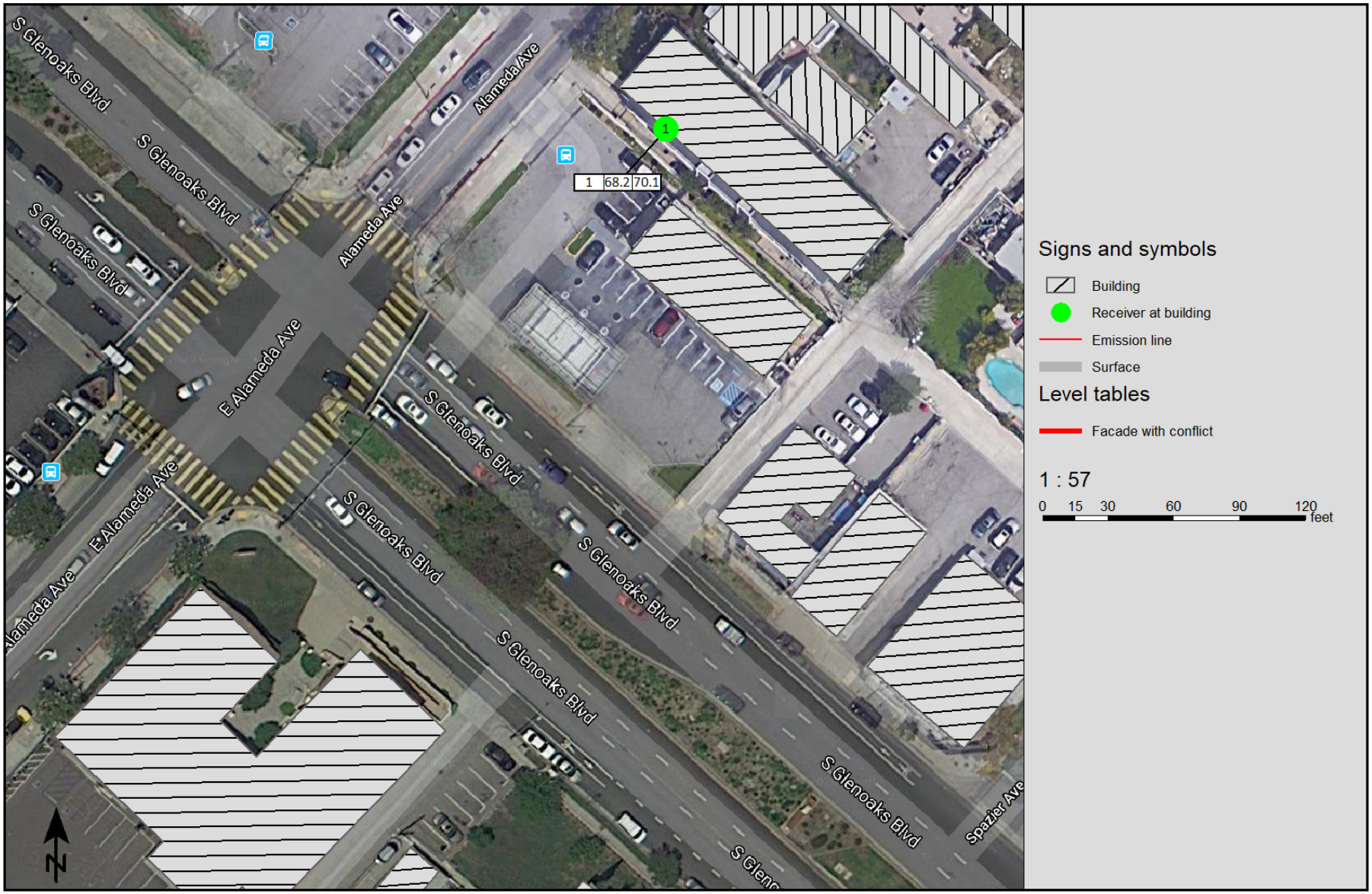
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	68.2	70.1	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Level Lden
			dB(A)	
Alameda Avenue 1112	GF	68.2 70.1		
Alameda Avenue		-	65.6	67.5
Glenoaks Boulevard		-	64.9	66.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	38.4	46.(	50.(	53.4	54.(	55.(	56.'	57.2	56.4	55.4	56.4	57.!	57.2	57.3	56.(	55.'	55.'	54.3	53.'	51.(	48.!	44.3	40.(	35.
			Lden	40.2	47.!	52.'	55.3	56.'	57.!	57.!	59.'	58.3	57.3	58.3	59.3	59.'	59.2	57.(	57.(	57.(	56.2	55.!	53.!	50.4	46.2	41.!	37.(


S Glenoaks Blvd
Alameda Ave
1
1 68.2 70.1
E Alameda Ave
Spazier Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE FROM BUENA VISTA TO BRIGHTON

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	30924	Total	-	1912	1183	406	-	Traffic li	-	30.0	Average (of DGAC a	0.7
		Automobiles	-	1451	898	309	56					
		Medium trucks	-	268	166	57	56					
		Heavy trucks	-	74	46	15	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	57	35	12	56					
		Auxiliary vehicle	-	55	34	11	56					
0+25	-							-	-	-	-	-
Buena Vista Street							Traffic direction: In entry direction					
0+00(	33576	Total	-	2076	1284	441	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1576	974	336	56					
		Medium trucks	-	291	180	62	56					
		Heavy trucks	-	81	50	17	56					
		Buses	-	8	4	1	56					
		Motorcycles	-	62	38	13	56					
		Auxiliary vehicle	-	59	37	12	56					
0+21	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Buena Vista Street 112	11377485.83	780785.08	West	GF	163.97	-	-	70.9	72.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Buena Vista Street 112	GF	70.9	72.7		
Buena Vista Street		-		70.0	71.9
Olive Avenue		-		63.4	65.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Buena Vista Stree	GF	Day	40.9	48.(	53.3	55.(	57.'	57.'	58.(	58.9	59.'	58.4	59.(	60.(	60.(	59.(	58.9	58.(	57.3	56.9	57.'	55.9	52.'	49.4	46.2	39.'
			Lden	42.8	50.4	55.'	57.(	58.9	59.(	59.8	60.8	60.9	60.2	61.9	62.4	61.8	61.4	60.3	59.9	59.'	58.8	58.9	57.'	54.(	51.2	48.(	41.9

W Oak St
W Oak St
N Buena Vista St
W Olive Ave
W Olive Ave
S Brighton St
Tiny Hero Way
N Frederic St
N Frederic St
W Olive Ave
W Olive Ave
S Buena Vista St
Cjon. Justo
Cjon. Justo
Cjon. Justo
W Olive Ave
S Buena Vista St
S Frederic
1 70.9 72.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 20 40 80 120 160
feet

KEY C

OLIVE AVENUE FROM SPARKS TO BEACHWOOD

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	10404	Total	-	643	398	137	-	Traffic li	-	30.0	Average (of DGAC a	-0.2
		Automobiles	-	492	303	104	56					
		Medium trucks	-	90	56	19	56					
		Heavy trucks	-	25	16	6	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	17	11	4	56					
		Auxiliary vehicle	-	17	11	3	56					
0+17	-							-	-	-	-	-
Verdugo Avenue							Traffic direction: In entry direction					
0+00(	5404	Total	-	334	207	71	-	Traffic li	-	30.0	Average (of DGAC a	-0.8
		Automobiles	-	255	157	54	56					
		Medium trucks	-	47	29	10	56					
		Heavy trucks	-	13	8	3	56					
		Buses	-	1	1	-	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+22	-							-	-	-	-	-
Sparks Street							Traffic direction: In entry direction					
0+00(	4820	Total	-	298	185	63	-	Traffic li	-	30.0	Average (of DGAC a	-1.2
		Automobiles	-	228	141	48	46					
		Medium trucks	-	42	26	9	46					
		Heavy trucks	-	12	7	3	46					
		Buses	-	1	1	-	46					
		Motorcycles	-	8	5	2	46					
		Auxiliary vehicle	-	8	5	2	46					
0+19	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Sparks Street 114	11378176.13781526.97	West	GF	167.01	-	-	63.8	65.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Sparks Street 114	GF	63.8	65.7		
Olive Avenue		-		55.0	56.9
Sparks Street		-		63.0	64.8
Verdugo Avenue		-		51.0	52.9

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Sparks Street 114	GF	Day	34.2	41.5	46.0	48.5	49.7	50.2	50.7	52.2	52.0	51.0	52.4	53.2	53.3	53.0	51.8	51.2	50.7	50.2	49.5	47.2	44.7	40.7	37.5	33.1
			Lden	36.0	43.2	47.5	50.2	51.5	52.2	52.0	54.2	54.4	53.5	54.2	55.7	54.5	54.5	53.0	53.7	52.0	52.7	51.4	49.2	46.0	42.0	39.4	35.2

N Sparks St
W Verdugo Ave
Beachwood Dr
W Verdugo Ave
W Olive Ave
S Sparks St
S Sparks St
W Olive Ave
W Olive Ave
W Olive Ave
1
1 63.8 65.7
S Sparks St
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 69
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE FROM SAN FERNANDO TO 3RD

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
San Fernando Boulevard							Traffic direction: In entry direction					
0+00(	23252	Total	-	1438	889	305	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1091	675	231	56					
		Medium trucks	-	201	124	42	56					
		Heavy trucks	-	56	35	12	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	43	26	9	56					
		Auxiliary vehicle	-	41	26	9	56					
0+29	-							-	-	-	-	-
Olive Avenue							Traffic direction: In entry direction					
0+00(	6456	Total	-	399	247	85	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	303	188	64	56					
		Medium trucks	-	56	35	12	56					
		Heavy trucks	-	16	10	3	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	12	7	2	56					
		Auxiliary vehicle	-	11	7	2	56					
0+24	-							-	-	-	-	-

Receiver list

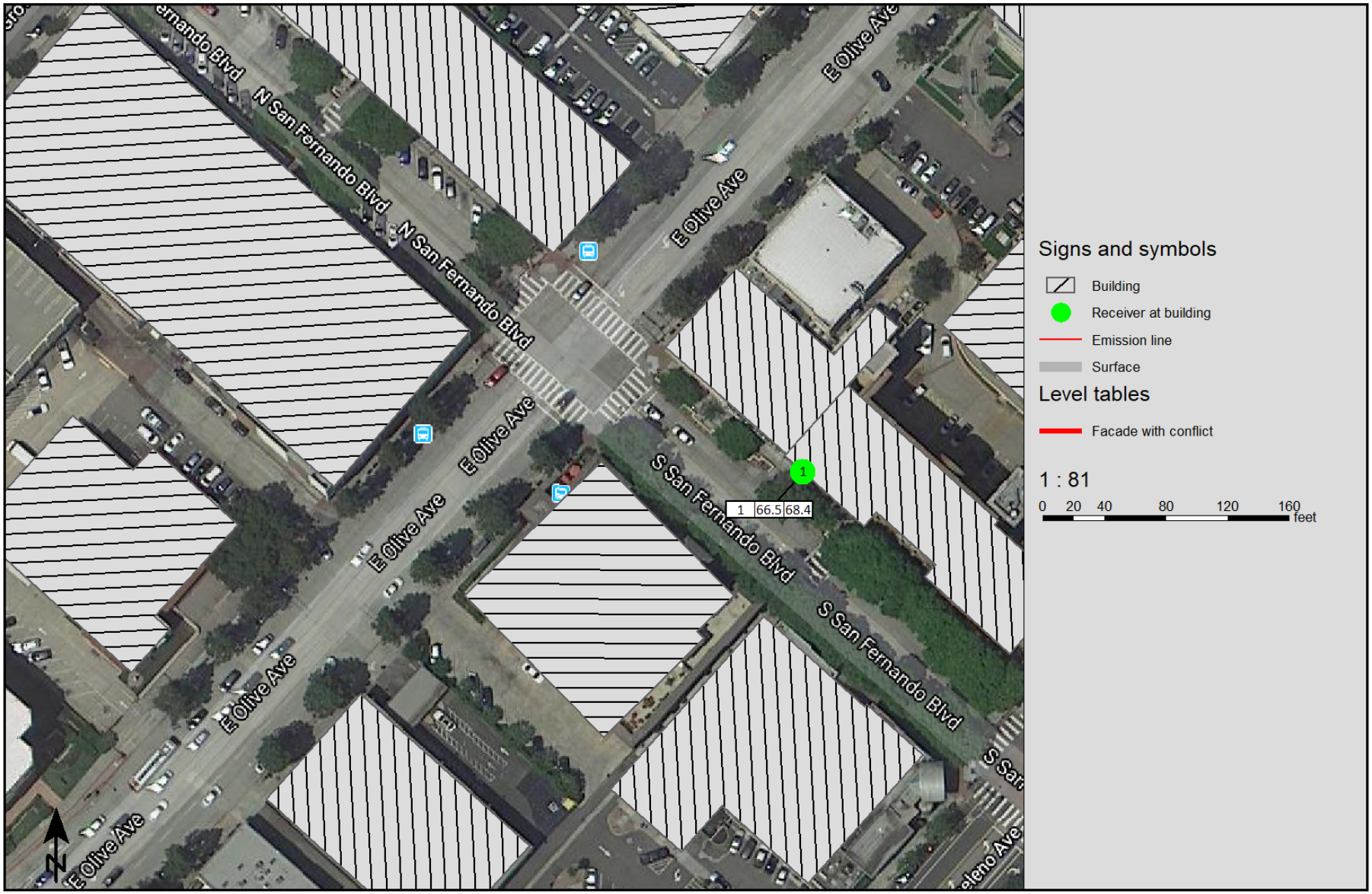
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	San Fernando Blvd. 150	11379442.03782961.24	South we	GF	186.64	-	-	66.5	68.4	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
San Fernando Blvd. 150	GF	66.5	68.4		
Olive Avenue		-		65.3	67.2
San Fernando Boulevard		-		60.1	62.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	San Fernando Blvd	GF	Day	35.	43.	48.	50.	52.	53.	53.	55.	54.	54.	55.	55.	55.	55.	54.	54.	53.	52.	52.	49.	46.	43.	40.	36.
			Lden	37.	45.	50.	52.	54.	55.	55.	56.	56.	56.	56.	57.	57.	57.	56.	55.	55.	54.	54.	51.	48.	45.	42.	38.


N San Fernando Blvd
E Olive Ave
S San Fernando Blvd
1
1 66.5 68.4
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 81
0 20 40 80 120 160
feet

KEY D

GLENOAKS BOULEVARD FROM ALAMEDA TO SPAZIER

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00(	36100	Total	-	2232	1381	474	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1694	1048	360	56					
		Medium trucks	-	312	194	66	56					
		Heavy trucks	-	87	54	19	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	66	40	13	56					
		Auxiliary vehicle	-	64	39	13	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	11352	Total	-	702	434	149	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	533	329	113	56					
		Medium trucks	-	98	61	21	56					
		Heavy trucks	-	27	17	6	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	21	13	4	56					
		Auxiliary vehicle	-	20	12	4	56					
0+23	-							-	-	-	-	-

Receiver list

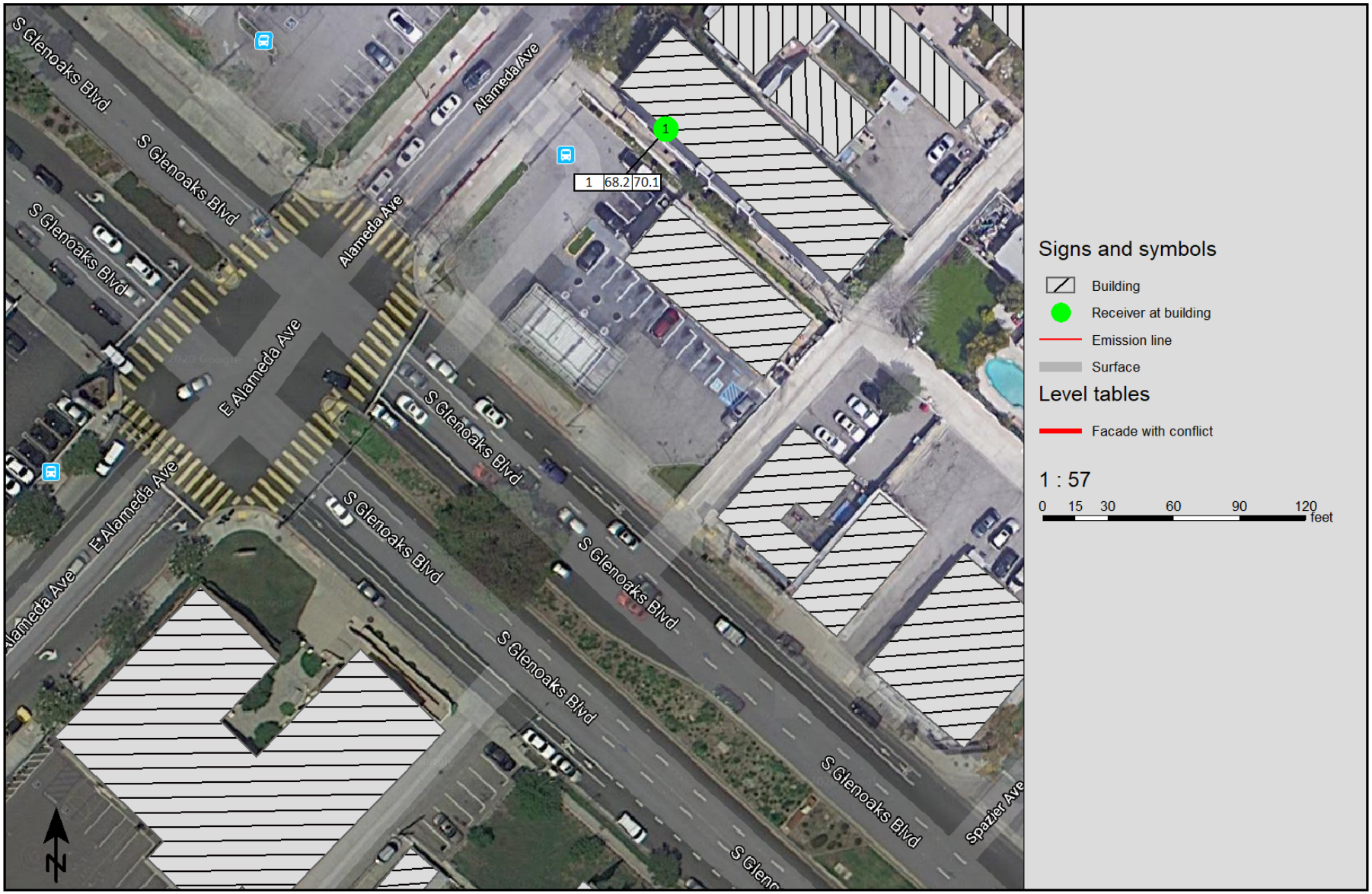
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	68.2	70.1	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Level Lden
			dB(A)	
Alameda Avenue 1112	GF	68.2 70.1		
Alameda Avenue		-	65.6	67.5
Glenoaks Boulevard		-	64.9	66.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	38.4	46.(	50.(	53.4	54.(	55.(	56.'	57.2	56.4	55.4	56.4	57.!	57.2	57.3	56.(	55.'	55.'	54.3	53.'	51.(	48.!	44.3	40.(	35.
			Lden	40.2	47.!	52.'	55.3	56.'	57.!	57.!	59.'	58.3	57.3	58.3	59.3	59.'	59.2	57.(	57.(	57.(	56.2	55.!	53.!	50.4	46.2	41.!	37.(


S Glenoaks Blvd
Alameda Ave
1
1 68.2 70.1
E Alameda Ave
Spazier Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY D

GLENOAKS BOULEVARD FROM WILLARD TO GRANDVIEW

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	43476	Total	-	2688	1663	571	-	Traffic li	-	100.0	Average (of DGAC a	-1.1
		Automobiles	-	2041	1263	434	56					
		Medium trucks	-	376	232	80	56					
		Heavy trucks	-	105	65	22	56					
		Buses	-	10	7	2	56					
		Motorcycles	-	79	49	16	56					
		Auxiliary vehicle	-	77	47	16	56					
0+42(	-							-	-	-	-	-
Grandview Avenue							Traffic direction: In entry direction					
0+00(	9472	Total	-	586	362	124	-	Traffic li	-	100.0	Average (of DGAC a	-3.1
		Automobiles	-	445	275	94	56					
		Medium trucks	-	82	51	17	56					
		Heavy trucks	-	23	14	5	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	17	11	4	56					
		Auxiliary vehicle	-	17	10	4	56					
0+28	-							-	-	-	-	-

Receiver list

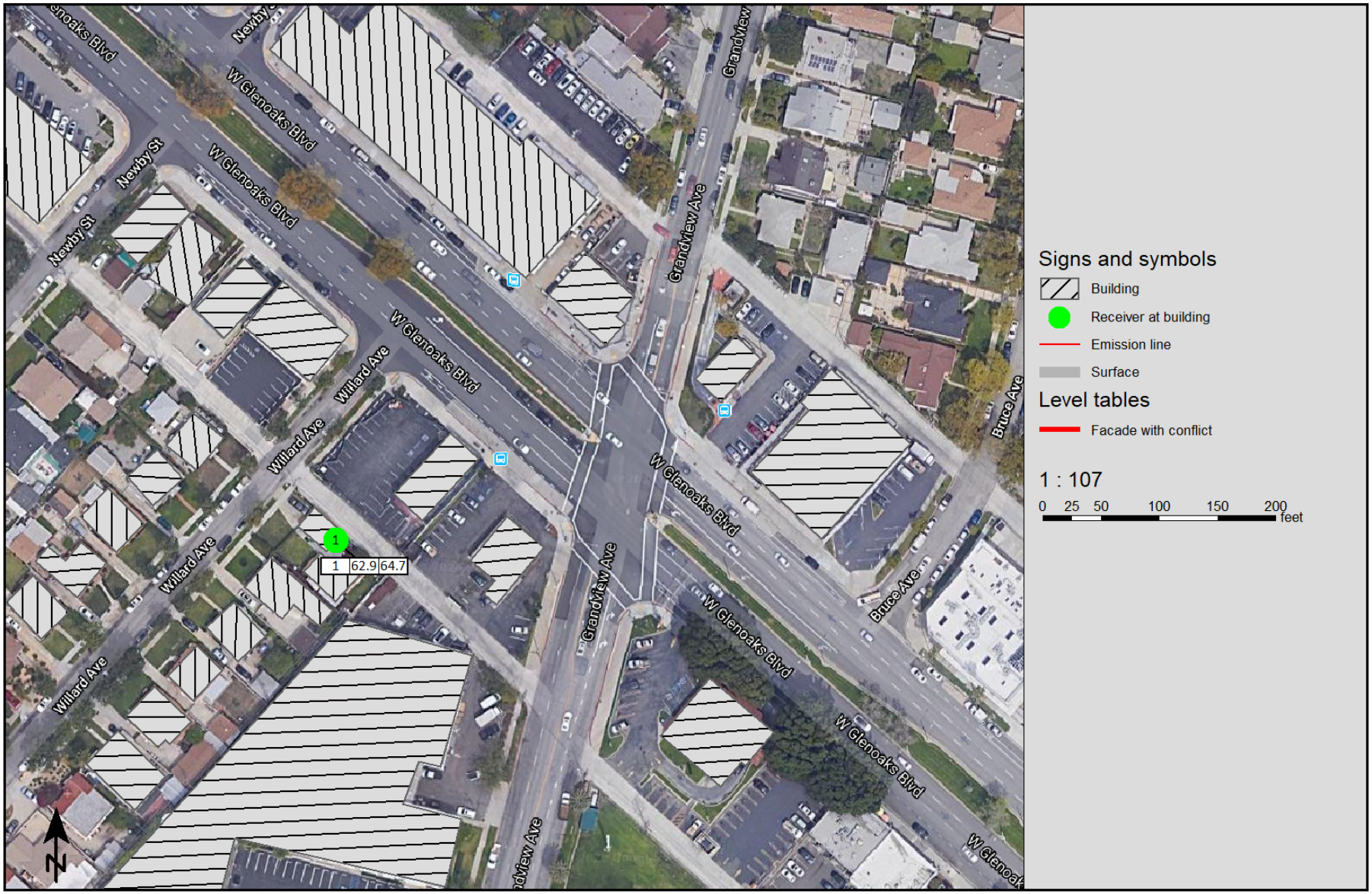
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Willard Avenue 1068	11381817.33781184.57	South ea	GF	154.34	-	-	62.9	64.7	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Level Lden
			dB(A)	
Willard Avenue 1068	GF	62.9 64.7		
Glenoaks Boulevard		-	61.9	63.7
Grandview Avenue		-	56.2	58.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Willard Avenue 10	GF	Day	34.3	42.9	47.9	49.8	51.2	51.9	52.0	52.9	50.7	48.0	49.8	50.0	51.7	51.9	50.2	49.7	49.2	49.2	47.0	45.4	41.0	37.7	31.9	22.2
			Lden	36.2	44.8	49.4	51.7	53.7	53.7	53.8	54.7	52.9	50.9	51.0	52.4	52.9	53.4	52.0	51.0	51.0	51.0	49.4	47.2	43.9	39.9	33.4	24.


W Glenoaks Blvd
Newby St
Grandview Ave
Willard Ave
Bruce Ave
1
1 62.9 64.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 107
0 25 50 100 150 200
feet

KEY E1

BROADWAY FROM BRAND TO LOUISE

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00(	19116	Total	-	1182	731	251	-	Traffic li	-	40.0	Average (of DGAC a	1.0
		Automobiles	-	897	555	190	56					
		Medium trucks	-	165	102	35	56					
		Heavy trucks	-	46	28	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	35	22	8	56					
		Auxiliary vehicle	-	34	21	8	56					
0+29	-							-	-	-	-	-
Artsakh Avenue							Traffic direction: In entry direction					
0+00(	2244	Total	-	139	86	29	-	Traffic li	-	30.0	Average (of DGAC a	-1.5
		Automobiles	-	106	65	22	65					
		Medium trucks	-	19	12	4	65					
		Heavy trucks	-	5	3	1	65					
		Buses	-	1	0	0	65					
		Motorcycles	-	4	3	1	65					
		Auxiliary vehicle	-	4	2	1	65					
0+24(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Eleve Lofts	11384430.53779078.67	North	GF	166.81	-	-	74.5	76.4	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Eleve Lofts	GF	74.5	76.4		
Artsakh Avenue		-		56.6	58.5
Broadway		-		74.5	76.4

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Eleve Lofts	GF	Day	41.3	49.2	54.2	57.0	58.0	59.0	60.1	62.3	62.9	62.0	63.0	63.1	64.2	64.1	63.0	62.0	62.1	61.0	60.1	57.9	54.0	50.9	46.9	43.4
			Lden	43.1	51.1	56.1	58.9	60.9	61.1	62.0	64.2	64.4	64.4	65.1	65.9	66.0	66.0	65.0	64.9	64.0	62.9	62.0	59.4	56.1	52.0	48.0	45.3

E Broadway
E Broadway
E Broadway
Artsakh Ave
1 74.5 76.4
1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 84
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND TO EAGLE ROCK

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	4444	Total	-	275	170	58	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	209	129	44	56					
		Medium trucks	-	39	24	8	56					
		Heavy trucks	-	11	7	2	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	8	5	2	56					
		Auxiliary vehicle	-	8	5	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	37968	Total	-	2348	1452	498	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -3
		Automobiles	-	1783	1103	378	56					
		Medium trucks	-	329	203	70	56					
		Heavy trucks	-	92	57	20	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	69	43	14	56					
		Auxiliary vehicle	-	67	41	14	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.0	62.9	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.7	63.6	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.0	62.9	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.7	63.6	-	-

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	31.8	39.4	44.1	46.4	47.4	48.0	48.2	48.1	48.3	48.4	50.0	50.4	49.9	50.1	49.2	48.3	47.1	47.0	46.8	44.8	41.8	37.0	31.1	24.5
			Lden	33.1	41.3	45.9	48.3	49.3	49.8	50.0	50.1	50.2	50.2	51.9	52.3	51.8	52.1	51.0	50.1	49.1	48.9	48.0	46.0	43.0	39.4	33.9	26.4
2	Rockland Avenue	GF	Day	34.2	40.9	44.2	45.3	45.9	45.3	46.4	49.9	50.4	49.9	51.2	51.8	50.3	51.0	50.1	49.3	48.1	49.4	48.9	45.4	43.9	38.0	32.9	24.4
			Lden	36.1	42.8	46.1	47.2	47.4	47.2	48.2	51.3	52.3	51.4	53.1	53.1	52.2	52.9	51.9	51.1	50.1	51.2	50.8	47.3	45.3	40.4	34.4	26.3

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Casper Ave
Merton Ave
2
1 61.7 63.6
1
1 61.0 62.9
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY H1
COLORADO BOULEVARD FROM EUCLID TO LOS ROBLES

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	21252	Total	-	1314	813	279	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1028	617	212	56					
		Medium trucks	-	189	114	39	56					
		Heavy trucks	-	53	32	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	38	24	8	56					
		Auxiliary vehicle	-	-	23	8	56					
0+46	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	26600	Total	-	1645	1017	349	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1287	772	265	56					
		Medium trucks	-	237	142	49	56					
		Heavy trucks	-	66	40	13	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	48	30	10	56					
		Auxiliary vehicle	-	-	29	10	56					
0+29	-							-	-	-	-	-

Receiver list

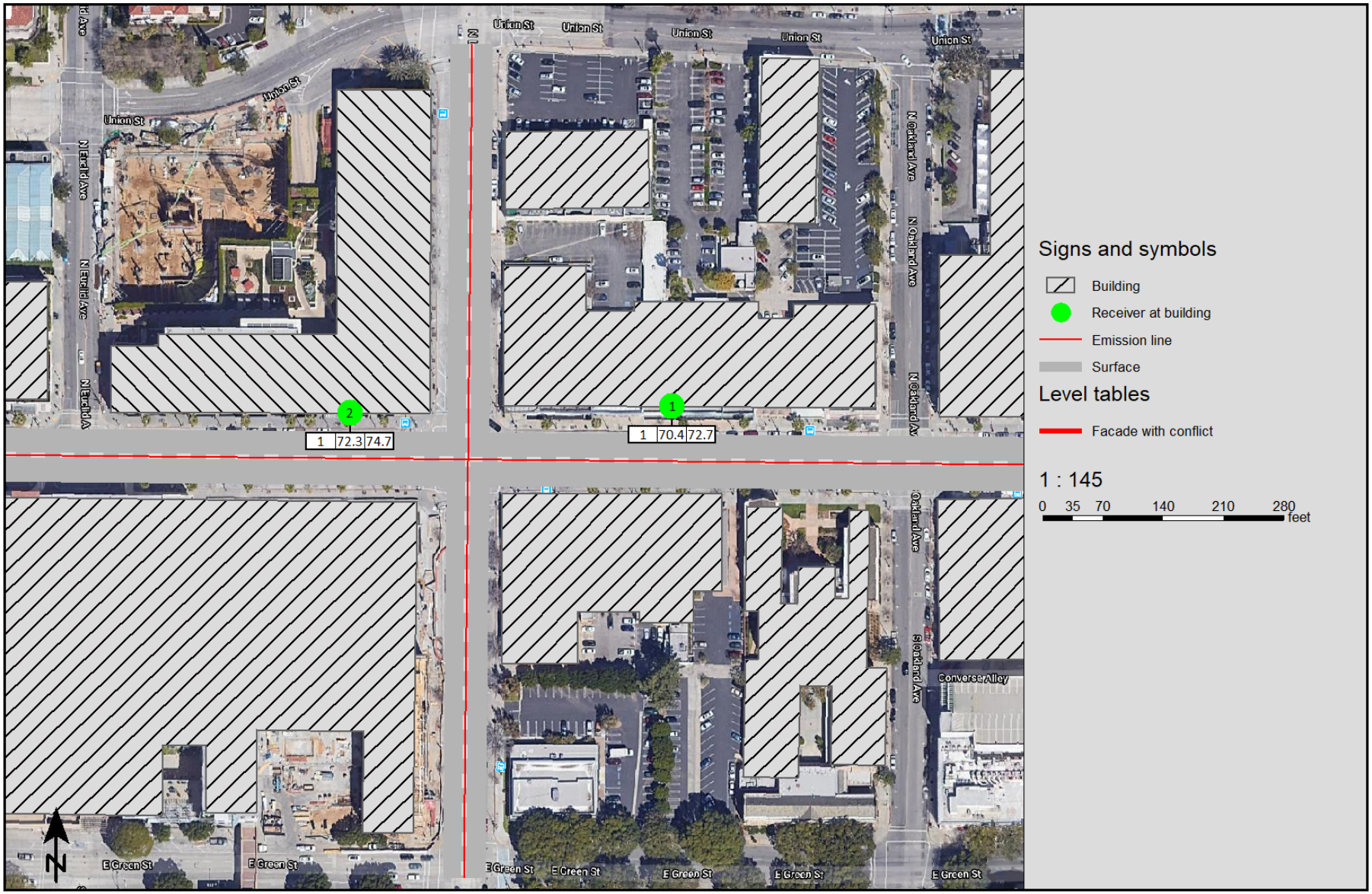
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	70.4	72.7	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	72.3	74.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	70.4	72.7		
Colorado Boulevard		-		70.1	72.5
Los Robles Avenue		-		57.9	60.4
Western Asset Plaza 385	GF	72.3	74.7		
Colorado Boulevard		-		71.8	74.2
Los Robles Avenue		-		62.5	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's M	GF	Day	38.2	45.5	49.9	52.2	53.2	54.2	55.2	57.2	58.2	57.9	59.4	61.2	60.5	60.6	59.8	58.9	57.9	56.2	54.8	51.9	48.6	44.9	41.9	38.8
			Lden	40.2	47.2	52.2	54.8	56.2	57.2	58.2	60.8	60.8	60.2	61.8	63.2	62.8	62.9	62.2	61.2	60.2	58.2	57.4	54.6	51.4	47.8	44.6	41.2
2	Western Asset Pla	GF	Day	40.6	47.4	51.9	54.2	55.6	56.8	58.2	60.4	60.6	60.6	62.2	63.2	62.6	62.2	61.2	60.2	59.2	57.2	56.9	53.6	51.2	49.6	46.9	41.2
			Lden	42.6	49.6	54.2	56.2	58.2	59.2	60.2	63.2	62.6	62.2	64.9	65.9	64.4	64.2	63.2	62.9	61.6	60.2	59.2	56.4	54.2	51.8	49.2	44.2


Union St
Union St
Union St
Union St
Union St
Union St
N Euclid Ave
N Euclid Ave
N Euclid Ave
N Oakland Ave
N Oakland Ave
N Oakland Ave
2
1 72.3 74.7
1
1 70.4 72.7
E Green St
E Green St
E Green St
E Green St
E Green St
E Green St
E Green St
S Oakland Ave
Converse Alley
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 35 70 140 210 280
feet

KEY H1
COLORADO BOULEVARD FROM HOLLISTON TO HILL

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	24148	Total	-	1493	924	317	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1134	701	176	56					
		Medium trucks	-	209	130	33	56					
		Heavy trucks	-	58	37	87	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	44	27	7	56					
		Auxiliary vehicle	-	42	26	7	56					
0+48(	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00(	25440	Total	-	1573	973	334	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1195	738	186	56					
		Medium trucks	-	220	137	35	56					
		Heavy trucks	-	61	38	92	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	46	29	7	56					
		Auxiliary vehicle	-	45	27	7	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	71.0	75.2	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	68.2	72.5	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	71.0	75.2		
Colorado Boulevard		-		70.0	74.2
Hill Avenue		-		64.1	68.4
Holliston United Methodist Church	GF	68.2	72.5		
Colorado Boulevard		-		68.1	72.5
Hill Avenue		-		44.8	49.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	40.(	47.4	51.(	54.'	55.(	55.9	57.:	60.(	58.4	58.(	60.4	61.9	59.'	60.9	58.(	58.7	58.'	57.:	57.(	55.:	52.9	50.(	46.:	40.:
			Lden	43.(	50.(	55.'	58.'	59.:	60.9	62.4	65.9	63.'	62.4	64.9	65.(	63.:	64.:	63.(	62.(	62.:	61.'	61.9	60.(	57.'	54.:	51.(	44.'
2	Holliston United M	GF	Day	38.9	46.:	51.(	53.(	54.9	55.4	55.4	55.9	55.'	54.9	56.(	57.'	56.:	56.9	55.4	56.:	56.:	55.9	54.:	53.:	51.(	47.'	42.:	36.'
			Lden	41.:	49.9	54.9	57.(	59.:	59.9	59.(	60.'	59.'	59.:	61.4	61.'	60.:	61.(	59.'	60.'	60.:	60.'	59.:	58.'	55.(	52.9	47.(	41.:

CATEGORY 3 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM BLAKESLEE TO VINELANE

KEY A1

VINELAND AVENUE FROM WEDDINGTON TO MAGNOLIA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.9	49.3	54.2	56.9	58.3	59.2	59.6	60.2	58.3	57.3	58.2	58.7	58.9	58.6	57.9	57.9	57.7	56.9	56.9	54.8	52.7	48.7	43.7	35.1
			Lden	43.4	51.7	56.6	58.7	60.2	61.7	61.9	62.7	60.2	59.7	60.7	60.6	60.8	60.6	59.4	59.7	58.9	58.3	58.8	56.7	54.6	50.6	45.6	37.6
2	Gallery at NoHo C	GF	Day	35.9	43.3	48.7	50.8	52.2	53.6	53.3	53.7	51.8	50.8	52.6	52.7	53.6	53.7	52.2	51.9	50.6	50.9	51.2	47.9	46.7	42.6	37.2	31.2
			Lden	37.3	45.7	50.6	52.7	54.7	54.9	55.2	55.9	53.6	52.7	53.8	54.6	54.9	54.9	54.6	53.8	52.4	52.3	53.6	49.8	47.9	44.4	39.6	33.6
3	Gray Studios	GF	Day	39.4	47.6	51.8	54.4	55.8	56.6	57.7	58.7	58.3	58.7	59.3	59.3	59.7	60.7	59.6	57.8	57.6	55.6	54.2	51.8	50.8	49.9	45.8	38.4
			Lden	41.3	48.9	53.6	56.2	57.6	58.9	59.6	60.6	60.2	60.6	61.7	61.7	61.6	62.6	60.9	59.7	58.9	57.9	56.7	53.7	52.7	51.4	47.6	40.1

Contribution levels of the receivers

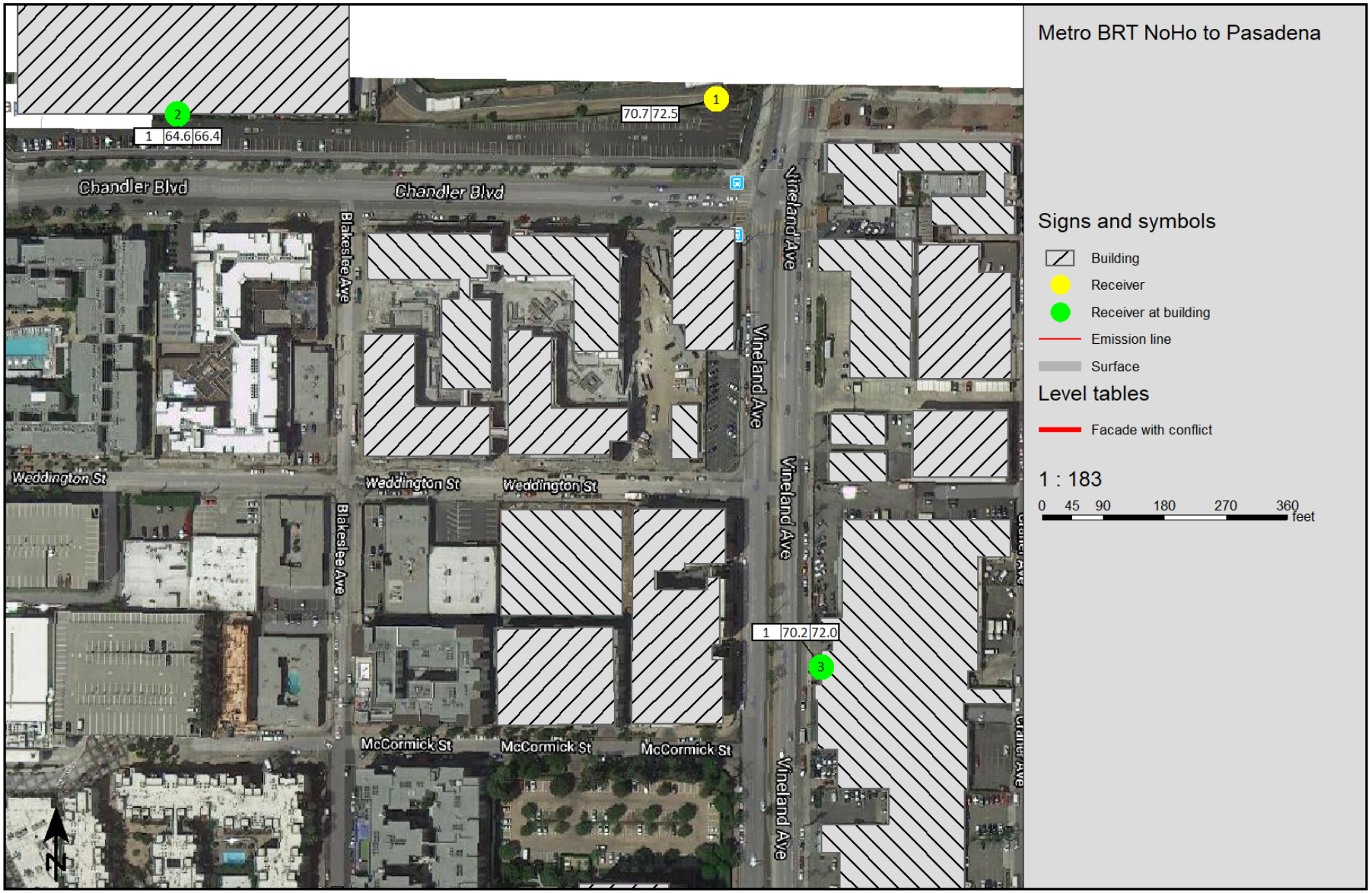
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.7	72.5		
Chandler Ave b/t Fair and Vineland		-		59.8	61.6
Fair Ave N of Chandller		-		34.9	36.7
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.5	71.3
Gallery at NoHo Commons	GF	64.6	66.4		
Chandler Ave b/t Fair and Vineland		-		64.0	65.8
Fair Ave N of Chandller		-		53.0	54.8
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.1	52.0
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.4
Fair Ave N of Chandller		-		30.8	32.6
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.9	56.7

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1 3781696.23	-	GF	191.40	-	-	70.7	72.5	-	-
2	Gallery at NoHo Commons	11373425.6 3781689.51	South	GF	194.08	-	-	64.6	66.4	-	-
3	Gray Studios	11373713.1 3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	35432	Total	-	2191	1355	465	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1663	1028	353	56					
		Medium trucks	-	306	190	66	56					
		Heavy trucks	-	86	53	18	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	64	40	14	56					
		Auxiliary vehicle	-	63	39	14	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13340	Total	-	825	510	175	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -(
		Automobiles	-	626	387	133	56					
		Medium trucks	-	115	72	25	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	24	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	5804	Total	-	359	222	76	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	272	168	58	48					
		Medium trucks	-	50	31	11	48					
		Heavy trucks	-	14	9	3	48					
		Buses	-	1	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	10	6	2	48					
0+06(	-							-	-	-	-	-


Metro BRT NoHo to Pasadena
Chandler Blvd
Chandler Blvd
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Weddington St
Weddington St
Weddington St
Blakeslee Ave
McCormick St
McCormick St
McCormick St
Vineland Ave
Granger Ave
1 64.6 66.4
70.7 72.5
1 70.2 72.0
1
2
3
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet

KEY D

GLENOAKS BOULEVARD FROM OLIVE TO ANGELENO

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	40208	Total	-	2486	1538	528	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1889	1168	401	46					
		Medium trucks	-	349	215	74	46					
		Heavy trucks	-	98	60	20	46					
		Buses	-	8	6	2	46					
		Motorcycles	-	73	45	16	46					
		Auxiliary vehicle	-	71	44	15	46					
0+25(	-							-	-	-	-	-
North Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	14648	Total	-	906	560	192	-	Traffic li	-	30.0	Average (of DGAC a	-1.9
		Automobiles	-	688	425	146	46					
		Medium trucks	-	127	78	27	46					
		Heavy trucks	-	36	22	7	46					
		Buses	-	3	2	1	46					
		Motorcycles	-	27	16	6	46					
		Auxiliary vehicle	-	26	16	5	46					
0+22(	-							-	-	-	-	-

Receiver list

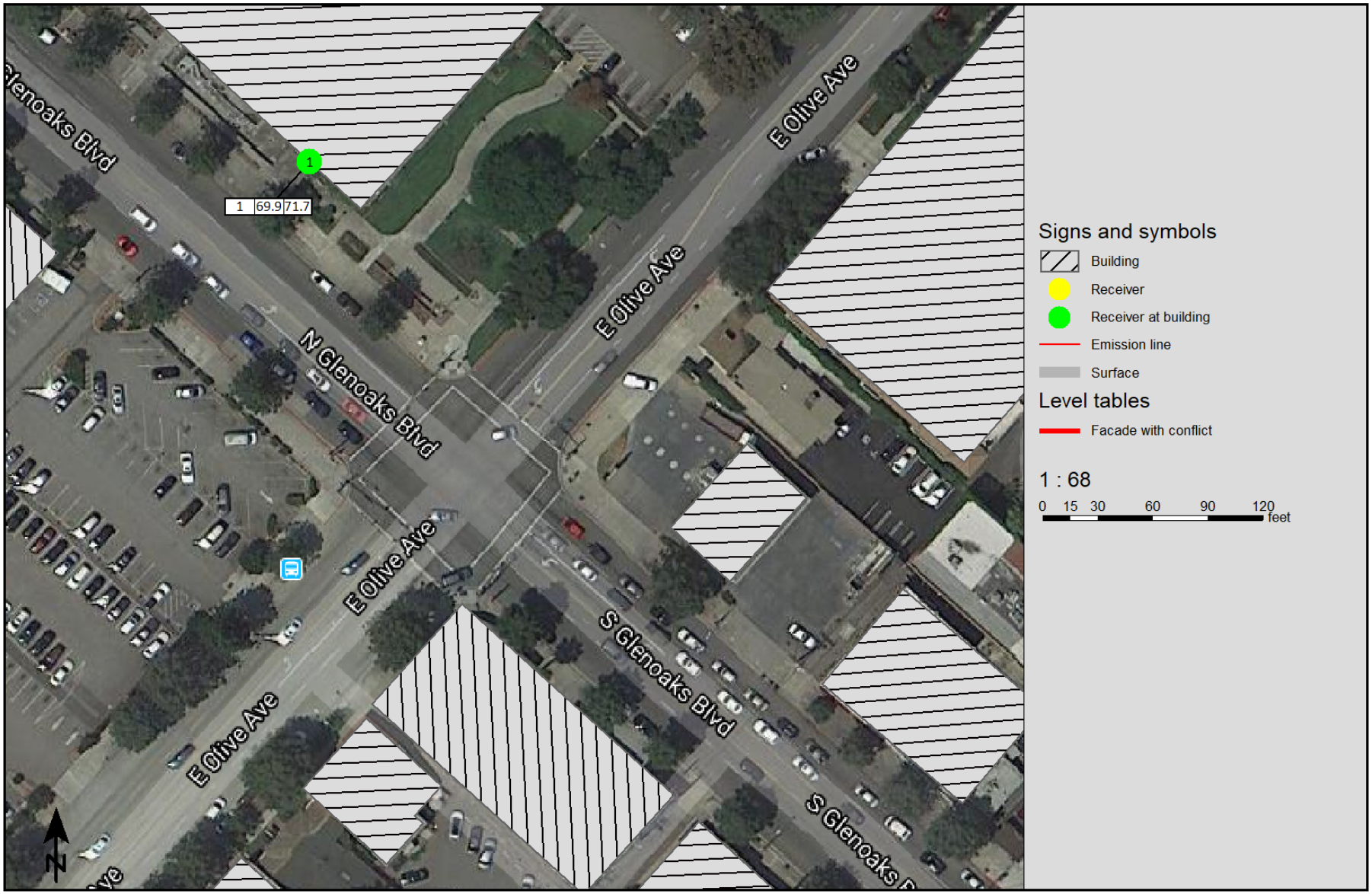
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Central LIbrary	11379602.4	13783293.5	South we	GF	202.86	-	-	69.9	71.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Central LIbrary	GF	69.9	71.7		
North Glenoaks Boulevard		-		68.5	70.3
Olive Avenue		-		64.2	66.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Central L	GF	Day	39.9	47.0	51.3	54.2	55.4	55.9	56.9	58.3	58.4	56.9	58.0	59.9	58.3	58.9	58.2	57.4	57.2	56.9	55.3	53.2	49.8	46.2	42.8	38.2
			Lden	41.4	48.9	53.0	56.3	57.2	57.8	58.2	60.9	60.2	58.8	60.4	61.3	60.9	60.3	60.0	59.2	59.3	58.2	57.9	55.0	51.0	48.3	44.0	40.1


Glenoaks Blvd
E Olive Ave
1
1 69.9 71.7
N Glenoaks Blvd
E Olive Ave
E Olive Ave
S Glenoaks Blvd
E Olive Ave
S Glenoaks
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 68
0 15 30 60 90 120
feet

KEY D
GLENOAKS BOUELVARD FROM JUSTIN TO RUBERTA

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 1
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	40516	Total	-	2505	1550	532	-	Traffic li	30.0	100.0	Average (of DGAC a	-1.4
		Automobiles	-	1902	1177	404	56					
		Medium trucks	-	351	217	75	56					
		Heavy trucks	-	98	60	21	56					
		Buses	-	10	5	2	56					
		Motorcycles	-	73	46	15	56					
		Auxiliary vehicle	-	71	44	15	56					
0+43	-							-	-	-	-	-
Justin Avenue							Traffic direction: In entry direction					
0+00	1440	Total	-	89	55	19	-	Traffic li	30.0	100.0	Average (of DGAC a	3.3
		Automobiles	-	68	42	14	46					
		Medium trucks	-	12	8	3	46					
		Heavy trucks	-	3	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	3	2	1	46					
		Auxiliary vehicle	-	3	2	1	46					
0+30	-							-	-	-	-	-

Receiver list

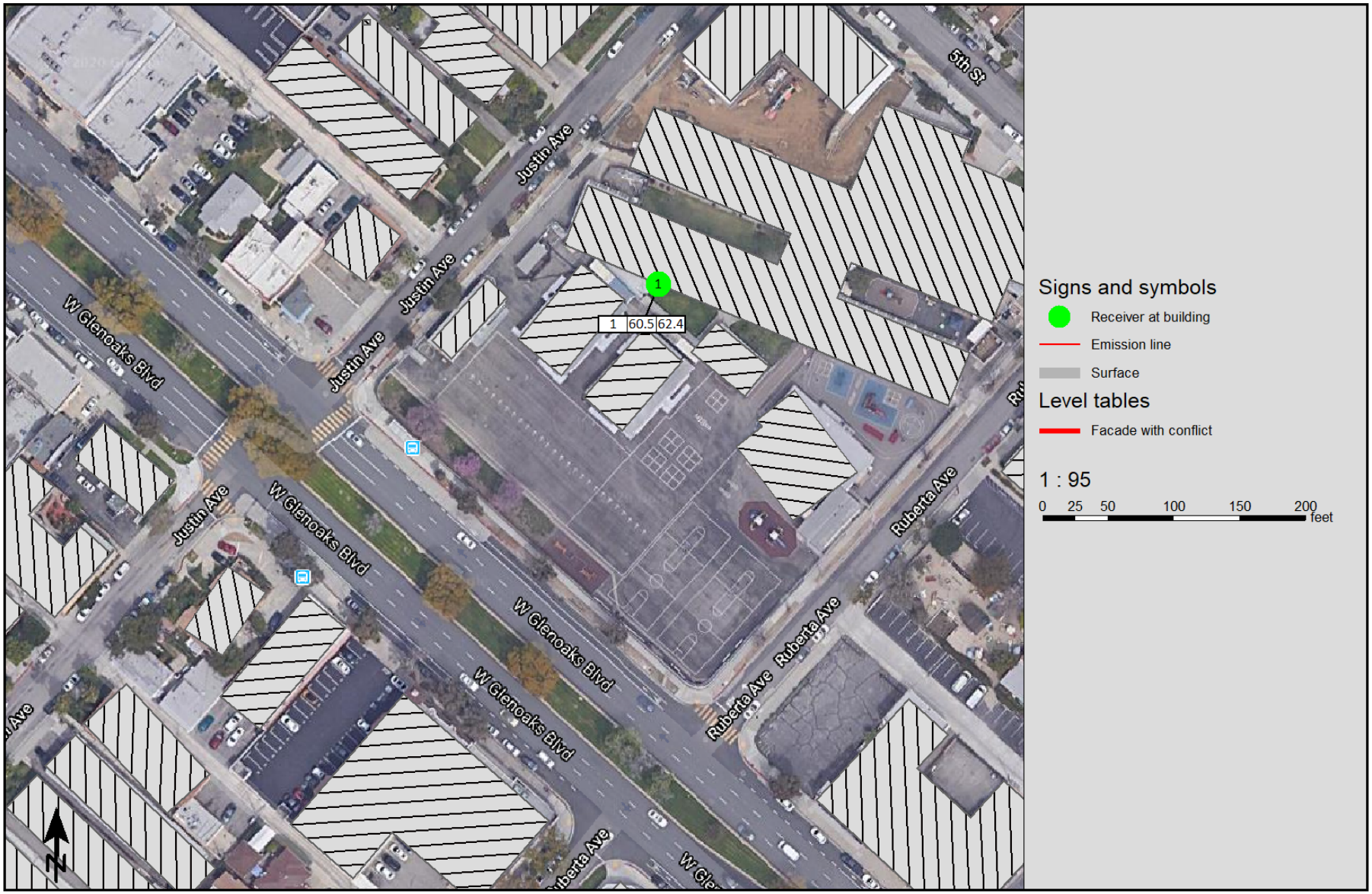
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Thomas Jefferson Elementary	11381398.4	3781760.33	South we	GF	169.93	-	-	60.5	62.4	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Level Lden
			dB(A)	
Thomas Jefferson Elementary	GF	60.5 62.4		
1		-	-	-
Glenoaks Boulevard		-	60.3	62.2
Justin Avenue		-	46.9	48.8

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Thomas Jefferson	GF	Day	30.(	39.(	43.:	45.:	46.(	46.(	47.:	48.4	47.(	47.:	49.:	50.:	50.:	50.!	49.'	48.(	47.'	46.:	46.!	44.(	40.(	35.:	28.'	18.4
			Lden	32.!	40.!	45.:	47.'	47.!	48.4	49.'	50.:	49.!	49.'	51.'	52.'	52.:	52.4	50.!	50.4	49.(	48.(	48.(	45.!	41.!	37.:	30.(	20.3


5th St
Justin Ave
Justin Ave
Justin Ave
Justin Ave
W Glenoaks Blvd
W Glenoaks Blvd
W Glenoaks Blvd
W Glenoaks Blvd
Ruberta Ave
Ruberta Ave
Ruberta Ave
1
1 60.5 62.4
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 95
0 25 50 100 150 200
feet

KEY E1

BROADWAY BETWEEN CHEVY CHASE AND VERDUGO

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00(	20008	Total	-	1237	765	263	-	Traffic li	-	30.0	Average (of DGAC a	0.0 / 0.
		Automobiles	-	940	580	200	56					
		Medium trucks	-	173	107	36	56					
		Heavy trucks	-	48	30	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	36	23	8	56					
		Auxiliary vehicle	-	35	22	8	56					
0+26	-							-	-	-	-	-
Chevy Chase Drive							Traffic direction: In entry direction					
0+00(	22076	Total	-	1365	844	290	-	Traffic li	-	30.0	Average (of DGAC a	-1.8
		Automobiles	-	1037	640	221	56					
		Medium trucks	-	191	118	40	56					
		Heavy trucks	-	53	33	11	56					
		Buses	-	5	4	1	56					
		Motorcycles	-	40	25	9	56					
		Auxiliary vehicle	-	39	24	9	56					
0+17	-							-	-	-	-	-

Receiver list

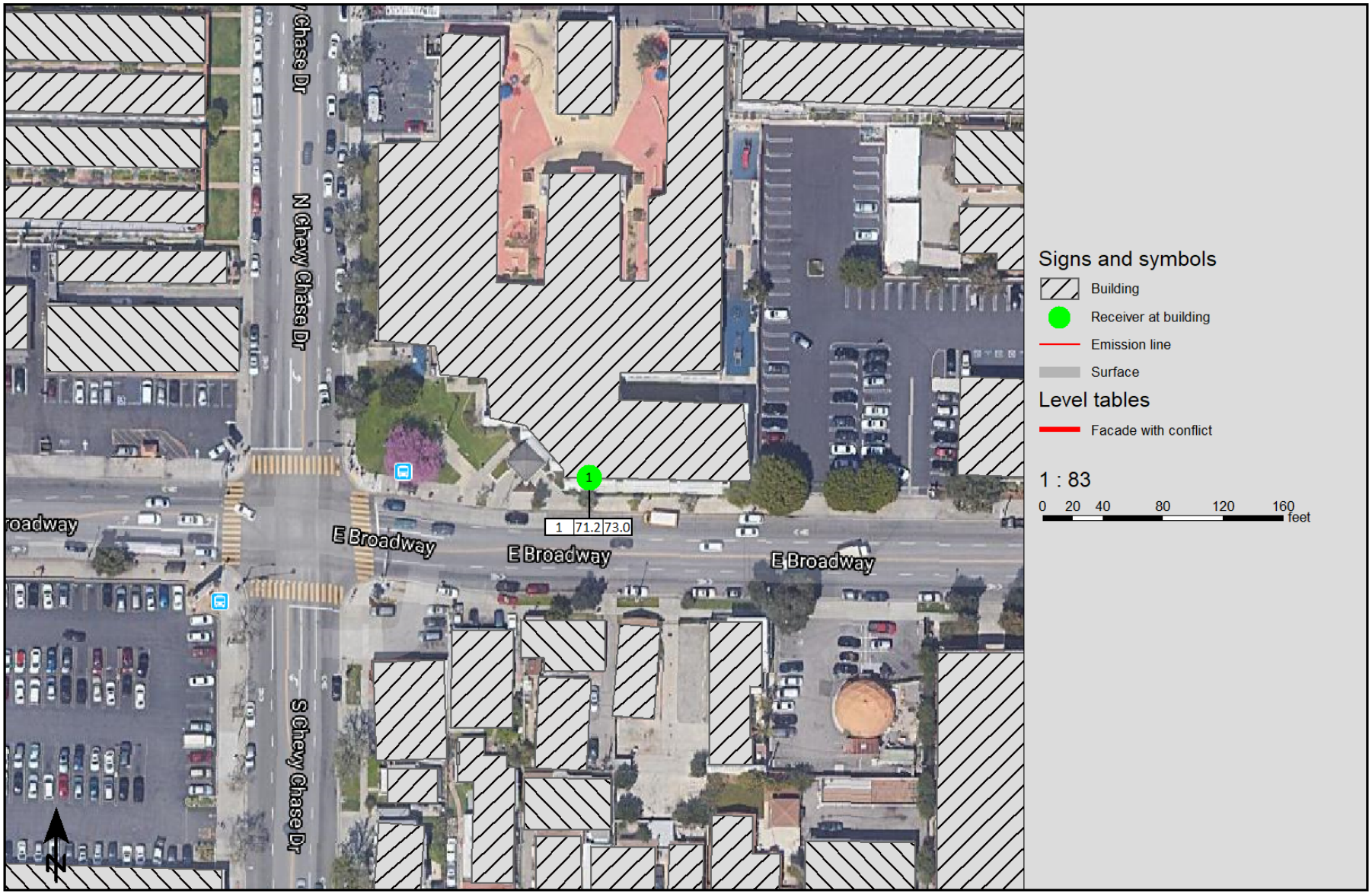
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	John Marshall Elementary	11385774.8 3779074.69	South	GF	180.53	-	-	71.2	73.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
John Marshall Elementary	GF	71.2	73.0		
Broadway		-		70.9	72.7
Chevy Chase Drive		-		59.7	61.6

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	John Marshall Eler	GF	Day	39.9	47.0	51.0	54.0	55.2	56.2	57.7	60.9	59.0	58.0	61.0	61.0	60.2	60.4	59.0	58.7	58.0	57.8	57.0	54.7	52.9	48.7	46.3	41.3
			Lden	41.4	48.9	53.9	55.9	57.7	58.7	59.9	62.2	61.4	60.4	62.8	63.9	62.0	62.2	60.9	59.9	59.9	59.7	58.8	55.9	54.4	50.0	48.2	43.


N Chevy Chase Dr
S Chevy Chase Dr
E Broadway
E Broadway
E Broadway
1
1 71.2 73.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND AND EAGLE ROCK

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	4444	Total	-	275	170	58	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	209	129	44	56					
		Medium trucks	-	39	24	8	56					
		Heavy trucks	-	11	7	2	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	8	5	2	56					
		Auxiliary vehicle	-	8	5	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	37968	Total	-	2348	1452	498	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -3
		Automobiles	-	1783	1103	378	56					
		Medium trucks	-	329	203	70	56					
		Heavy trucks	-	92	57	20	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	69	43	14	56					
		Auxiliary vehicle	-	67	41	14	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.0	62.9	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.7	63.6	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	61.0	62.9		
1		-		-	-
Colorado Boulevard		-		55.5	57.4
Eagle Rock Boulevard		-		59.5	61.4
Rockland Avenue 5116	GF	61.7	63.6		
1		-		-	-
Colorado Boulevard		-		61.2	63.1
Eagle Rock Boulevard		-		51.9	53.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	31.8	39.4	44.1	46.4	47.4	48.0	48.2	48.1	48.3	48.4	50.0	50.4	49.9	50.1	49.2	48.3	47.1	47.0	46.8	44.8	41.8	37.0	31.1	24.5
			Lden	33.1	41.3	45.9	48.3	49.3	49.8	50.0	50.1	50.2	50.2	51.9	52.3	51.8	52.1	51.0	50.1	49.1	48.9	48.0	46.0	43.0	39.4	33.9	26.4
2	Rockland Avenue	GF	Day	34.2	40.9	44.2	45.3	45.9	45.3	46.4	49.9	50.4	49.9	51.2	51.8	50.3	51.0	50.1	49.3	48.1	49.4	48.9	45.4	43.9	38.0	32.9	24.4
			Lden	36.1	42.8	46.1	47.2	47.4	47.2	48.2	51.3	52.3	51.4	53.1	53.1	52.2	52.9	51.9	51.1	50.1	51.2	50.8	47.3	45.3	40.4	34.4	26.3

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Casper Ave
Merton Ave
2
1 61.7 63.6
1
1 61.0 62.9
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY F2

COLORADO BOULEVARD FROM TOWNSEND TO FLORISTAN

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	40500	Total	-	2504	1549	532	-	Traffic li	-	30.0	Average (of DGAC a	0.4 / 3.
		Automobiles	-	1898	1176	404	56					
		Medium trucks	-	350	217	74	56					
		Heavy trucks	-	98	60	21	56					
		Buses	-	10	5	2	56					
		Motorcycles	-	74	46	15	56					
		Auxiliary vehicle	-	74	45	15	56					
0+41(	-							-	-	-	-	-
Townsend Avenue							Traffic direction: In entry direction					
0+00(	1812	Total	-	112	69	24	-	Stop sig	-	100.0	Average (of DGAC a	-2.2
		Automobiles	-	85	52	18	46					
		Medium trucks	-	16	10	3	46					
		Heavy trucks	-	4	3	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	3	2	1	46					
		Auxiliary vehicle	-	3	2	1	46					
0+17(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Dahlia Heights Elementary Sc	11389451.0	3778232.14	North	GF	206.73	-	-	67.4	69.3	-	-
2	Waldran Avenue 1597	11389232.4	3778202.50	West	GF	202.83	-	-	67.2	69.0	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Dahlia Heights Elementary School	GF	67.4	69.3		
Colorado Boulevard		-		67.4	69.3
Townsend Avenue		-		30.6	32.5
Waldran Avenue 1597	GF	67.2	69.0		
Colorado Boulevard		-		59.2	61.0
Townsend Avenue		-		66.4	68.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Dahlia Heights Ele	GF	Day	37.5	44.8	49.5	52.1	53.8	55.1	56.1	57.4	56.1	55.1	55.4	55.6	55.8	56.0	54.8	54.0	54.0	52.9	53.3	51.1	48.0	44.9	40.8	34.1
			Lden	39.4	46.1	51.3	54.0	55.6	56.9	58.0	59.3	57.9	56.9	57.3	57.5	57.7	57.9	56.6	56.5	55.8	54.7	55.1	52.9	50.4	46.7	42.7	36.
2	Waldran Avenue 1	GF	Day	35.0	43.0	48.4	50.9	52.2	53.0	54.4	57.0	55.0	54.3	56.5	57.0	56.0	56.0	55.1	54.0	53.9	52.9	52.0	49.0	46.8	44.9	42.4	37.4
			Lden	37.4	45.5	50.3	52.8	54.0	54.9	56.2	58.9	57.4	56.1	58.3	58.8	57.9	58.4	57.5	56.5	55.5	54.8	53.8	51.4	48.1	46.8	44.3	39.3

Townsend Ave
Townsend Ave
Dahlia Dr
Dahlia Dr
1 67.4 69.3
1
Floristan Ave
Floristan Ave
1 67.2 69.0
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 114
0 30 60 120 180 240
feet

KEY H1
COLORADO BOULEVARD FROM LOS ROBLES TO OAKLAND

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	21252	Total	-	1314	813	279	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1028	617	212	56					
		Medium trucks	-	189	114	39	56					
		Heavy trucks	-	53	32	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	38	24	8	56					
		Auxiliary vehicle	-	-	23	8	56					
0+46	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	26600	Total	-	1645	1017	349	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1287	772	265	56					
		Medium trucks	-	237	142	49	56					
		Heavy trucks	-	66	40	13	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	48	30	10	56					
		Auxiliary vehicle	-	-	29	10	56					
0+29	-							-	-	-	-	-

Receiver list

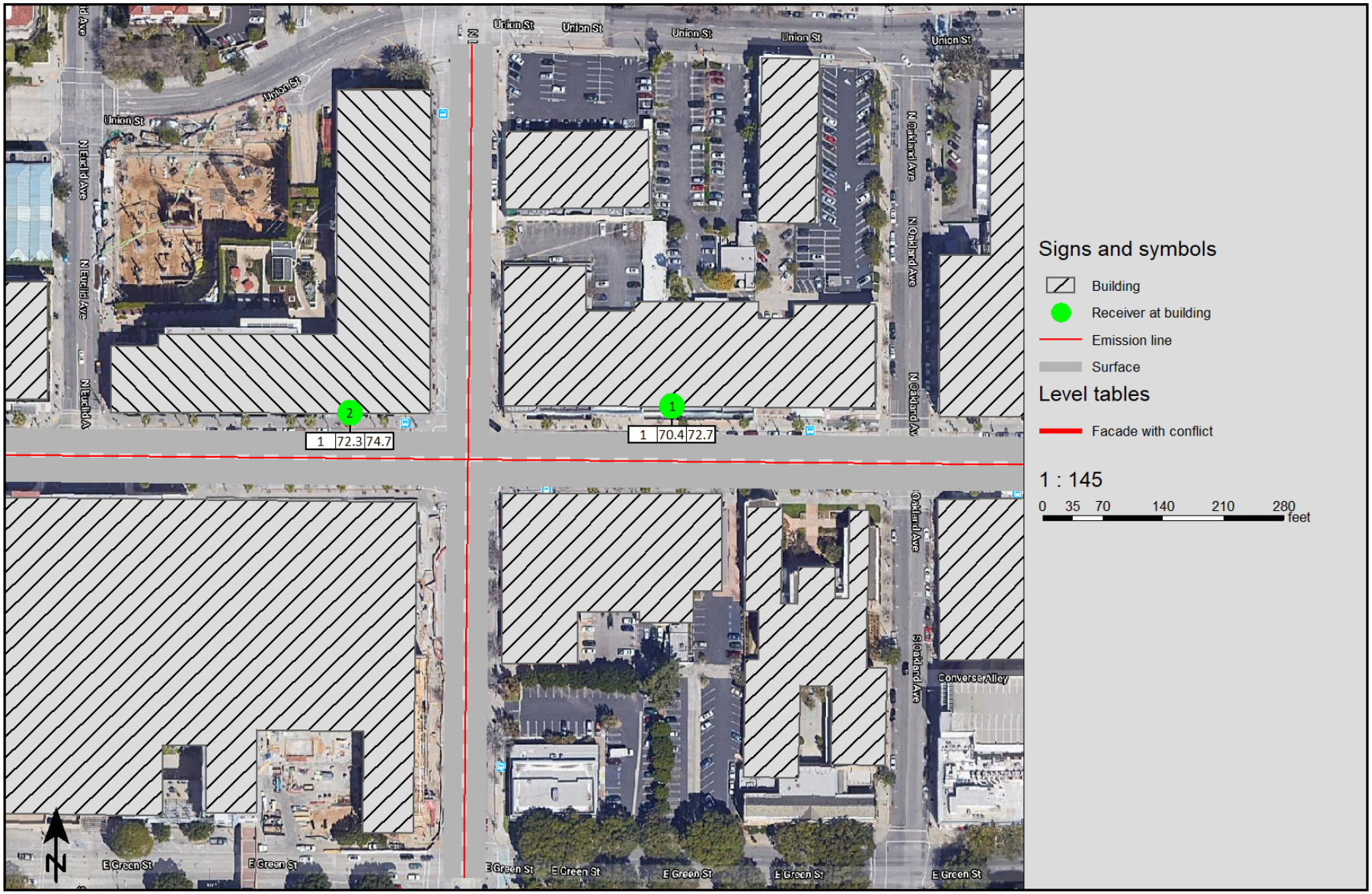
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	70.4	72.7	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	72.3	74.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	70.4	72.7		
Colorado Boulevard		-		70.1	72.5
Los Robles Avenue		-		57.9	60.4
Western Asset Plaza 385	GF	72.3	74.7		
Colorado Boulevard		-		71.8	74.2
Los Robles Avenue		-		62.5	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's M	GF	Day	38.2	45.5	49.9	52.2	53.2	54.2	55.2	57.2	58.2	57.9	59.4	61.2	60.5	60.6	59.8	58.9	57.9	56.2	54.8	51.9	48.6	44.9	41.9	38.8
			Lden	40.2	47.2	52.2	54.8	56.2	57.2	58.2	60.8	60.8	60.2	61.8	63.2	62.8	62.9	62.2	61.2	60.2	58.2	57.4	54.6	51.4	47.8	44.6	41.2
2	Western Asset Pla	GF	Day	40.6	47.4	51.9	54.2	55.6	56.8	58.2	60.4	60.6	60.6	62.2	63.2	62.6	62.2	61.2	60.2	59.2	57.2	56.9	53.6	51.2	49.6	46.9	41.2
			Lden	42.6	49.6	54.2	56.2	58.2	59.2	60.2	63.2	62.6	62.2	64.9	65.9	64.4	64.2	63.2	62.9	61.6	60.2	59.2	56.4	54.2	51.8	49.2	44.2


Union St
Union St
Union St
Union St
Union St
Union St
N Euclid Ave
N Euclid Ave
N Euclid Ave
N Oakland Ave
N Oakland Ave
N Oakland Ave
2
1 72.3 74.7
1
1 70.4 72.7
E Green St
E Green St
E Green St
E Green St
E Green St
E Green St
E Green St
S Oakland Ave
Converse Alley
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 35 70 140 210 280
feet

KEY H1
COLORADO BOULEVARD FROM CHESTER TO HOLLISTON

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	24148	Total	-	1493	924	317	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1134	701	176	56					
		Medium trucks	-	209	130	33	56					
		Heavy trucks	-	58	37	87	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	44	27	7	56					
		Auxiliary vehicle	-	42	26	7	56					
0+48(	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00(	25440	Total	-	1573	973	334	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1195	738	186	56					
		Medium trucks	-	220	137	35	56					
		Heavy trucks	-	61	38	92	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	46	29	7	56					
		Auxiliary vehicle	-	45	27	7	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	71.0	75.2	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	68.2	72.5	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	71.0	75.2		
Colorado Boulevard		-		70.0	74.2
Hill Avenue		-		64.1	68.4
Holliston United Methodist Church	GF	68.2	72.5		
Colorado Boulevard		-		68.1	72.5
Hill Avenue		-		44.8	49.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	40.(	47.4	51.(	54.'	55.(	55.9	57.:	60.(	58.4	58.(	60.4	61.9	59.'	60.9	58.(	58.7	58.'	57.:	57.(	55.:	52.9	50.(	46.:	40.:
			Lden	43.(	50.(	55.'	58.'	59.:	60.9	62.4	65.9	63.'	62.4	64.9	65.(	63.:	64.:	63.(	62.(	62.:	61.'	61.9	60.(	57.'	54.:	51.(	44.'
2	Holliston United M	GF	Day	38.9	46.:	51.(	53.(	54.9	55.4	55.4	55.9	55.'	54.9	56.(	57.'	56.:	56.9	55.4	56.:	56.:	55.9	54.:	53.:	51.(	47.'	42.:	36.'
			Lden	41.:	49.9	54.9	57.(	59.:	59.9	59.(	60.'	59.'	59.:	61.4	61.'	60.:	61.(	59.'	60.'	60.:	60.'	59.:	58.'	55.(	52.9	47.(	41.:

2042 PROJECT
TRAFFIC NOISE MODELING

CATEGORY 2 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM LANKERSHIM AND BLAKESLEE

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.4	49.2	54.3	56.8	58.2	59.3	59.9	60.3	58.2	57.3	58.3	58.0	58.8	58.0	57.4	57.8	57.0	56.4	56.8	54.7	52.0	48.0	43.0	35.0
			Lden	43.2	51.0	55.9	58.0	60.3	61.0	61.4	62.0	60.3	59.0	60.0	60.9	60.3	60.3	60.9	59.3	59.9	58.8	58.2	58.3	56.0	53.9	49.9	44.8	37.4
2	Gallery at NoHo C	GF	Day	35.9	43.2	48.3	50.8	52.2	53.0	53.3	53.3	51.3	50.8	51.9	52.3	53.0	53.3	52.3	51.9	50.0	50.4	51.3	47.9	46.0	42.8	37.2	31.1
			Lden	37.2	45.3	50.0	52.3	54.3	54.9	55.3	55.9	53.0	52.0	53.8	54.2	54.9	54.9	54.0	53.8	52.4	52.2	53.0	49.3	47.9	44.4	39.0	32.9
3	Gray Studios	GF	Day	39.4	47.0	51.8	54.4	55.8	56.6	57.3	58.3	58.2	58.3	59.2	59.2	59.3	60.3	59.0	57.8	57.0	55.0	54.2	51.8	50.8	49.8	45.8	38.4
			Lden	41.2	48.9	53.0	56.2	57.0	58.9	59.0	60.0	60.2	60.0	61.3	61.2	61.0	62.0	60.9	59.3	58.9	57.9	56.3	53.3	52.3	51.4	47.0	40.1

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.6	72.4		
Chandler Ave b/t Fair and Vineland		-		59.7	61.6
Fair Ave N of Chandller		-		35.1	36.9
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.3	71.2
Gallery at NoHo Commons	GF	64.5	66.4		
Chandler Ave b/t Fair and Vineland		-		63.9	65.8
Fair Ave N of Chandller		-		53.2	55.0
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.0	51.8
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.3
Fair Ave N of Chandller		-		31.0	32.8
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.8	56.6

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1 3781696.23	-	GF	191.40	-	-	70.6	72.4	-	-
2	Gallery at NoHo Commons	11373425.6 3781689.51	South	GF	194.08	-	-	64.5	66.4	-	-
3	Gray Studios	11373713.1 3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	34352	Total	-	2124	1314	451	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1612	996	342	56					
		Medium trucks	-	297	184	64	56					
		Heavy trucks	-	83	51	17	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	62	39	13	56					
		Auxiliary vehicle	-	61	38	13	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13180	Total	-	815	504	173	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -
		Automobiles	-	619	382	131	56					
		Medium trucks	-	114	71	24	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	23	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	6084	Total	-	376	233	80	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	285	177	61	48					
		Medium trucks	-	53	33	11	48					
		Heavy trucks	-	15	9	3	48					
		Buses	-	2	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	11	7	2	48					
0+06(	-							-	-	-	-	-

Metro BRT NoHo to Pasadena
Chandler Blvd
Chandler Blvd
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Weddington St
Weddington St
Weddington St
Blakeslee Ave
McCormick St
McCormick St
McCormick St
Vineland Ave
Granger Ave
1 64.5 66.4
70.6 72.4
1 70.2 72.0
1
2
3
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet

KEY C

OLIVE AVENUE FROM MYERS TO KEYSTONE

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Ave b/t Buena Vista and Keystone							Traffic direction: In entry direction					
0+00(	33912	Total	-	2097	1297	445	-	Traffic li	-	30.0	Average (of DGAC a	-0.1
		Automobiles	-	1592	984	338	56					
		Medium trucks	-	294	181	63	56					
		Heavy trucks	-	82	51	18	56					
		Buses	-	8	5	1	56					
		Motorcycles	-	61	38	13	56					
		Auxiliary vehicle	-	60	37	13	56					
0+25	-							-	-	-	-	-
Keystone Avenue							Traffic direction: In entry direction					
0+00(	2536	Total	-	157	97	33	-	Traffic li	-	30.0	Average (of DGAC a	-0.8 / 0
		Automobiles	-	119	74	25	46					
		Medium trucks	-	22	14	5	46					
		Heavy trucks	-	6	4	1	46					
		Buses	-	1	0	0	46					
		Motorcycles	-	5	3	1	46					
		Auxiliary vehicle	-	4	3	1	46					
0+42	-							-	-	-	-	-

Receiver list

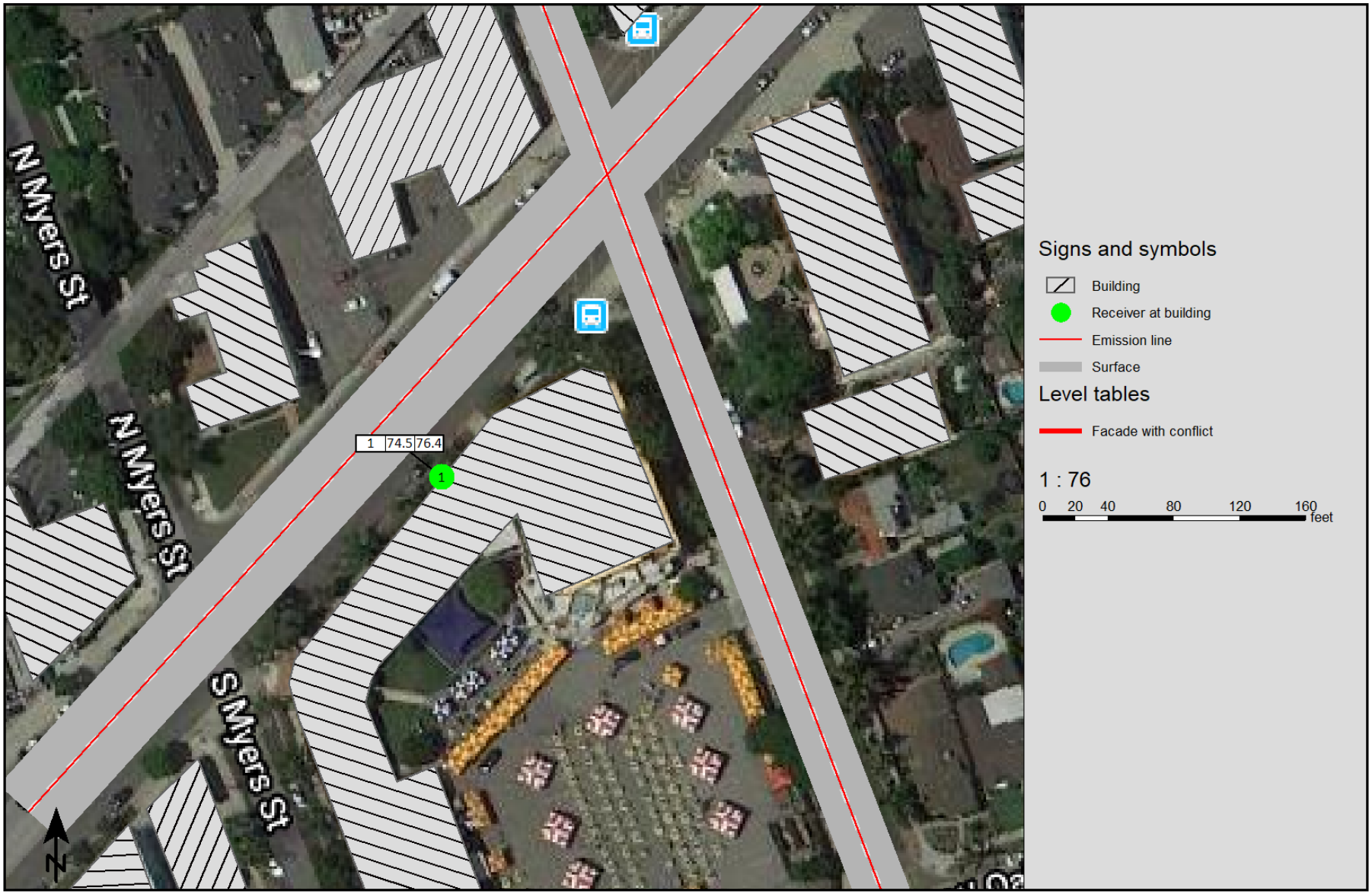
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	St. Finbar School	11377724.5	3781109.46	North we	GF	167.06	-	-	74.5	76.4	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
St. Finbar School	GF	74.5	76.4		
Keystone Avenue		-		48.0	49.9
Olive Ave b/t Buena Vista and Keystone		-		74.5	76.4

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	St. Finbar School	GF	Day	42.5	50.2	55.0	57.0	58.5	59.7	60.5	62.5	63.2	62.0	63.0	64.7	64.2	64.5	63.5	62.7	61.0	60.4	59.2	56.2	53.0	52.7	49.8	45.
			Lden	44.3	52.7	56.5	59.4	60.8	61.0	62.4	64.8	65.7	63.9	64.9	66.0	66.0	66.4	65.4	64.0	63.8	62.2	61.7	58.0	55.8	54.0	51.7	46.


N Myers St
N Myers St
S Myers St
1 74.5 76.4
1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 76
0 20 40 80 120 160
feet

KEY C
OLIVE AVENUE FROM CALIFORNIA TO ALAMEDA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	38.4	46.(	50.(	53.4	54.(	55.(	56.(	57.2	56.!	55.4	56.4	57.!	57.2	57.3	56.(	55.7	55.2	54.4	53.7	51.(	48.(	44.3	40.7	35.2
			Lden	40.2	47.(	52.7	55.3	56.7	57.4	57.(	59.7	58.2	57.3	58.3	59.4	59.7	59.2	57.(	57.(	57.(	56.2	55.(	53.!	50.4	46.2	41.(	37.1

Contribution levels of the receivers

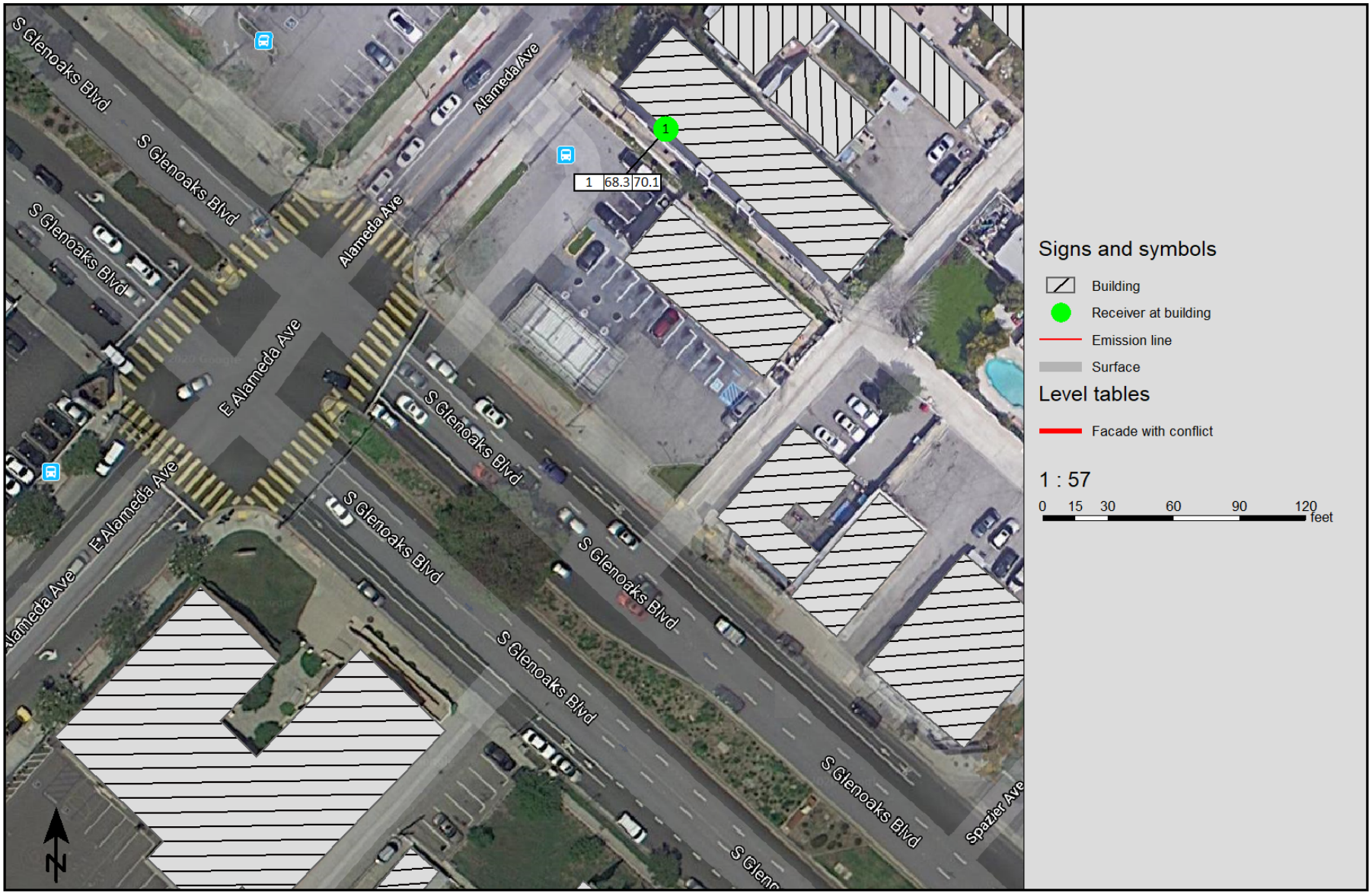
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Alameda Avenue 1112	GF	68.3	70.1		
Alameda Avenue		-		65.5	67.3
Glenoaks Boulevard		-		65.0	66.9

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	68.3	70.1	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00(	35140	Total	-	2173	1344	461	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1649	1020	350	56					
		Medium trucks	-	304	189	64	56					
		Heavy trucks	-	85	52	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	64	39	13	56					
		Auxiliary vehicle	-	62	38	13	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	11808	Total	-	730	452	155	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	554	343	118	56					
		Medium trucks	-	102	63	22	56					
		Heavy trucks	-	29	18	6	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	22	13	4	56					
		Auxiliary vehicle	-	21	13	4	56					
0+23	-							-	-	-	-	-


S Glenoaks Blvd
Alameda Ave
1
1 68.3 70.1
E Alameda Ave
Spazier Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE FROM BUENA VISTA TO BRIGHTON

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Buena Vista Stree	GF	Day	40.9	48.0	53.3	55.8	57.1	57.8	58.0	59.0	59.1	58.4	59.0	60.0	60.0	59.0	58.9	58.0	57.3	56.9	57.1	55.9	52.8	49.4	46.2	39.
			Lden	42.8	50.4	55.1	57.0	58.9	59.6	59.8	60.8	60.9	60.2	61.8	62.4	61.8	61.8	60.3	59.9	59.1	58.8	59.0	57.7	54.6	51.2	48.0	41.

Contribution levels of the receivers

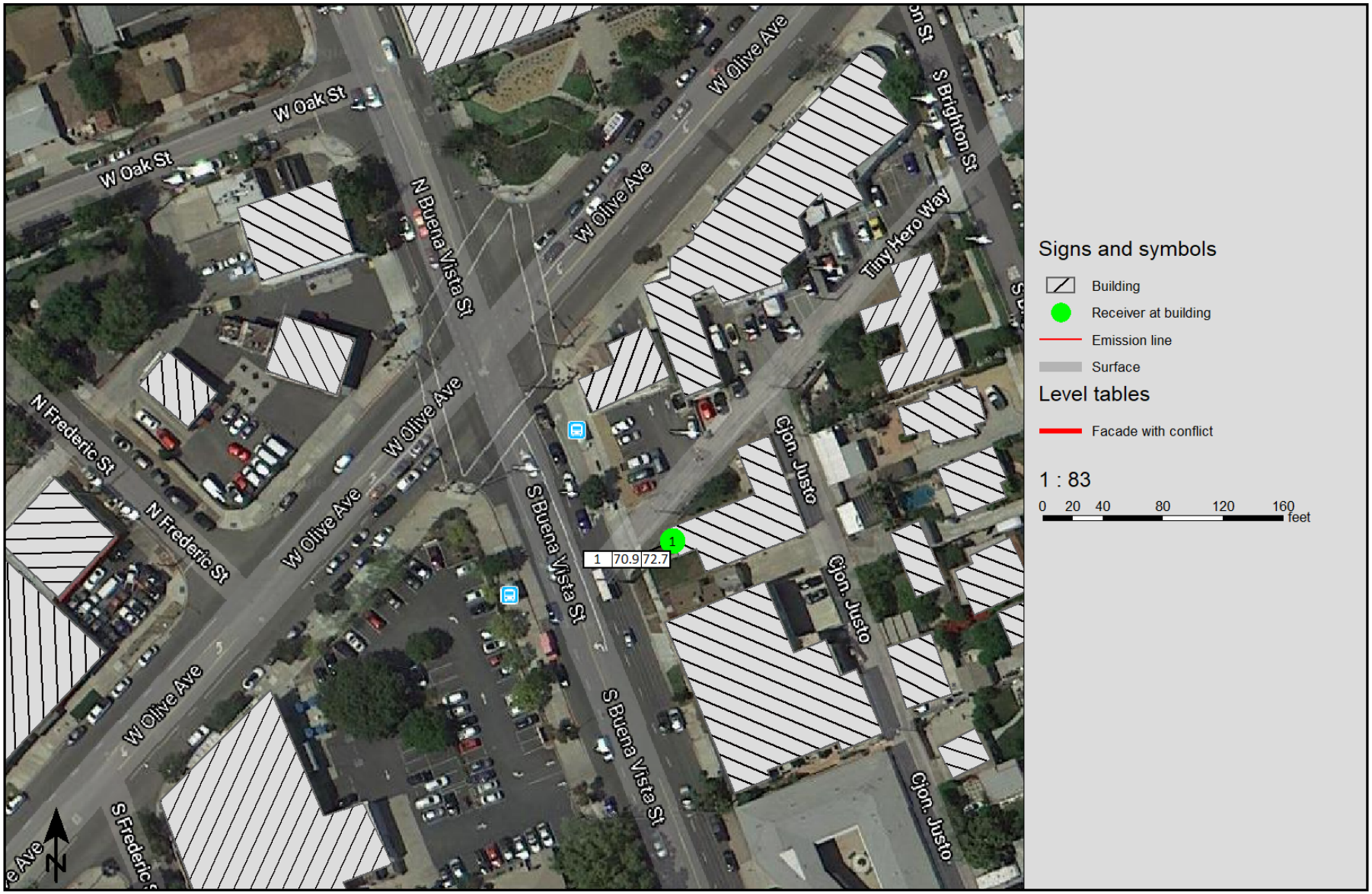
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Buena Vista Street 112	GF	70.9	72.7		
Buena Vista Street		-		70.1	71.9
Olive Avenue		-		63.3	65.2

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Buena Vista Street 112	11377485.83	780785.08	West	GF	163.97	-	-	70.9	72.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue								Traffic direction: In entry direction				
0+00(	30148	Total	-	1864	1153	396	-	Traffic li	-	30.0	Average (of DGAC a	0.7
		Automobiles	-	1415	875	301	56					
		Medium trucks	-	261	162	55	56					
		Heavy trucks	-	72	45	15	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	55	34	12	56					
		Auxiliary vehicle	-	53	33	11	56					
0+25	-							-	-	-	-	-
Buena Vista Street								Traffic direction: In entry direction				
0+00(	33912	Total	-	2097	1297	445	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1592	984	339	56					
		Medium trucks	-	294	182	62	56					
		Heavy trucks	-	81	51	17	56					
		Buses	-	8	5	1	56					
		Motorcycles	-	62	38	14	56					
		Auxiliary vehicle	-	60	37	12	56					
0+21	-							-	-	-	-	-


W Oak St
W Oak St
N Buena Vista St
W Olive Ave
W Olive Ave
S Brighton St
Tiny Hero Way
N Frederic St
N Frederic St
W Olive Ave
W Olive Ave
S Buena Vista St
Cjon. Justo
Cjon. Justo
Cjon. Justo
W Olive Ave
S Buena Vista St
S Frederic
1 70.9 72.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 20 40 80 120 160
feet

KEY C

OLIVE AVENUE FROM SPARKS TO BEACHWOOD

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Sparks Street 114	GF	Day	34.2	41.5	46.3	48.5	49.3	50.4	50.6	52.2	52.0	51.6	52.4	53.2	53.3	53.0	51.8	51.2	50.3	50.2	49.5	47.2	44.3	40.3	37.6	33.1
			Lden	36.3	43.4	47.5	50.4	51.6	52.2	52.3	54.2	54.5	53.5	54.2	55.3	55.6	54.5	53.3	53.3	52.6	52.3	51.4	49.2	46.6	42.6	39.4	35.2

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Sparks Street 114	GF	63.9	65.7		
Olive Avenue		-		55.1	57.0
Sparks Street		-		63.0	64.8
Verdugo Avenue		-		51.2	53.0

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Sparks Street 114	11378176.13781526.97	West	GF	167.01	-	-	63.9	65.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue								Traffic direction: In entry direction				
0+00(	10724	Total	-	663	410	141	-	Traffic li	-	30.0	Average (of DGAC a	-0.2
		Automobiles	-	507	312	107	56					
		Medium trucks	-	93	58	20	56					
		Heavy trucks	-	26	16	6	56					
		Buses	-	2	1	-	56					
		Motorcycles	-	17	12	5	56					
		Auxiliary vehicle	-	17	12	3	56					
0+17	-							-	-	-	-	-
Verdugo Avenue								Traffic direction: In entry direction				
0+00(	5644	Total	-	349	216	74	-	Traffic li	-	30.0	Average (of DGAC a	-0.8
		Automobiles	-	267	164	56	56					
		Medium trucks	-	49	30	10	56					
		Heavy trucks	-	13	9	3	56					
		Buses	-	1	1	-	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+22	-							-	-	-	-	-
Sparks Street								Traffic direction: In entry direction				
0+00(	4820	Total	-	298	185	63	-	Traffic li	-	30.0	Average (of DGAC a	-1.2
		Automobiles	-	228	141	48	46					
		Medium trucks	-	42	26	9	46					
		Heavy trucks	-	12	7	3	46					
		Buses	-	1	1	-	46					
		Motorcycles	-	8	5	2	46					
		Auxiliary vehicle	-	8	5	2	46					
0+19	-							-	-	-	-	-

N Sparks St
W Verdugo Ave
Beachwood Dr
W Verdugo Ave
W Olive Ave
S Sparks St
S Sparks St
W Olive Ave
W Olive Ave
W Olive Ave
1
1 63.9 65.7
S Sparks St
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 69
0 15 30 60 90 120
feet

KEY C

OLIVE AVENUE FROM SAN FERNANDO TO 3RD

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	San Fernando Blvd	GF	Day	35.	43.	48.	50.	52.	53.	53.	55.	54.	54.	55.	55.	55.	55.	54.	54.	53.	52.	52.	49.	46.	43.	40.	36.
			Lden	37.	45.	50.	52.	54.	55.	55.	56.	56.	56.	56.	57.	57.	57.	56.	55.	55.	54.	54.	51.	48.	45.	42.	38.

Contribution levels of the receivers

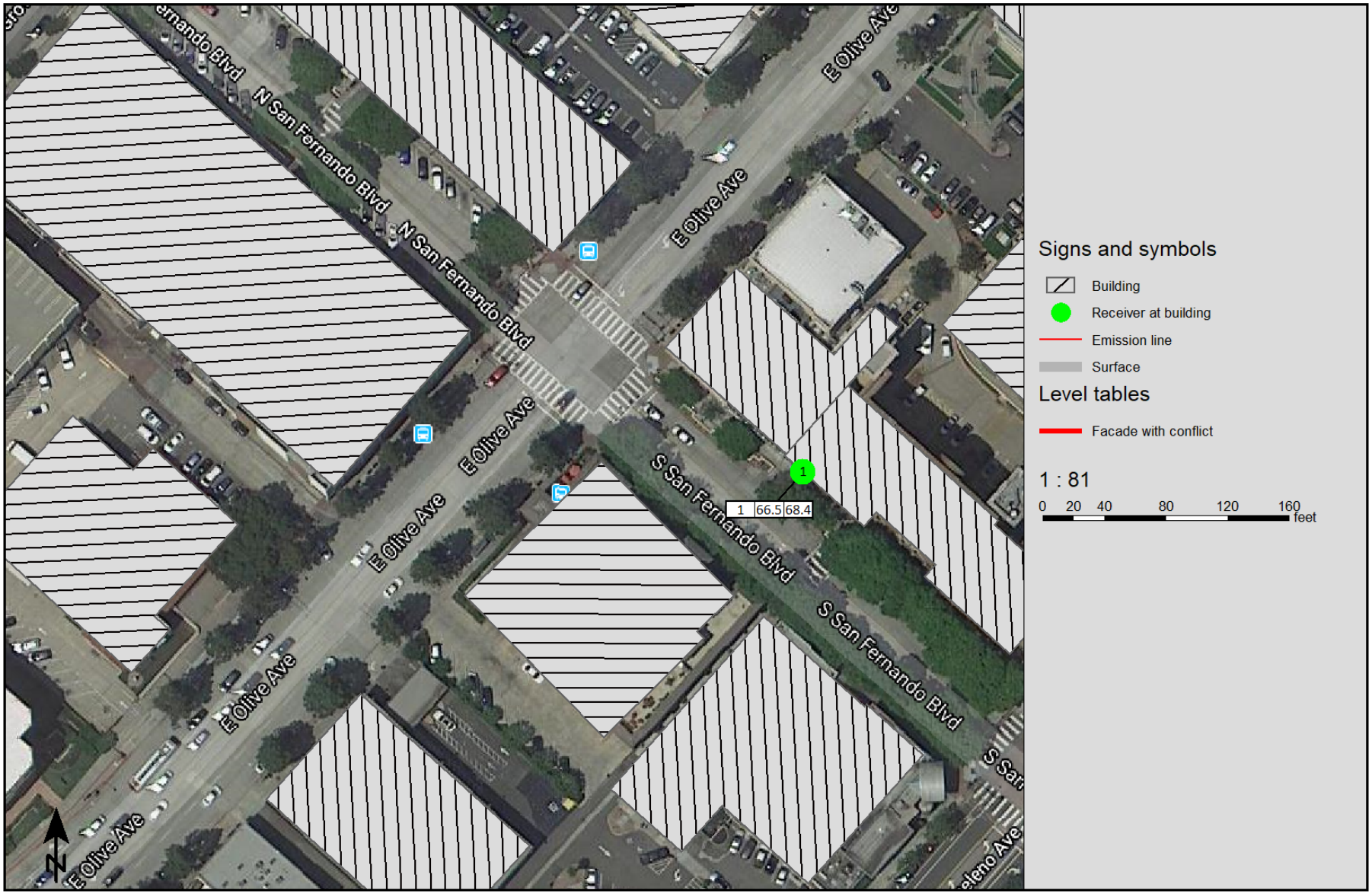
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
San Fernando Blvd. 150	GF	66.5	68.4		
Olive Avenue		-		65.3	67.2
San Fernando Boulevard		-		60.1	62.0

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	San Fernando Blvd. 150	11379442.03782961.24	South we	GF	186.64	-	-	66.5	68.4	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
San Fernando Boulevard							Traffic direction: In entry direction					
0+00(	23252	Total	-	1438	889	305	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1091	675	231	56					
		Medium trucks	-	201	124	42	56					
		Heavy trucks	-	56	35	12	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	43	26	9	56					
		Auxiliary vehicle	-	41	26	9	56					
0+29	-							-	-	-	-	-
Olive Avenue							Traffic direction: In entry direction					
0+00(	6456	Total	-	399	247	85	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	303	188	64	56					
		Medium trucks	-	56	35	12	56					
		Heavy trucks	-	16	10	3	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	12	7	2	56					
		Auxiliary vehicle	-	11	7	2	56					
0+24	-							-	-	-	-	-


N San Fernando Blvd
E Olive Ave
S San Fernando Blvd
1
1 66.5 68.4
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 81
0 20 40 80 120 160
feet

KEY D

GLENOAKS BOULEVARD FROM ALAMEDA TO SPAZIER

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Alameda Avenue							Traffic direction: In entry direction					
0+00(	35140	Total	-	2173	1344	461	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1649	1020	350	56					
		Medium trucks	-	304	189	64	56					
		Heavy trucks	-	85	52	19	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	64	39	13	56					
		Auxiliary vehicle	-	62	38	13	56					
0+23	-							-	-	-	-	-
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	11808	Total	-	730	452	155	-	Traffic li	-	30.0	Average (of DGAC a	2.2
		Automobiles	-	554	343	118	56					
		Medium trucks	-	102	63	22	56					
		Heavy trucks	-	29	18	6	56					
		Buses	-	3	2	1	56					
		Motorcycles	-	22	13	4	56					
		Auxiliary vehicle	-	21	13	4	56					
0+23	-							-	-	-	-	-

Receiver list

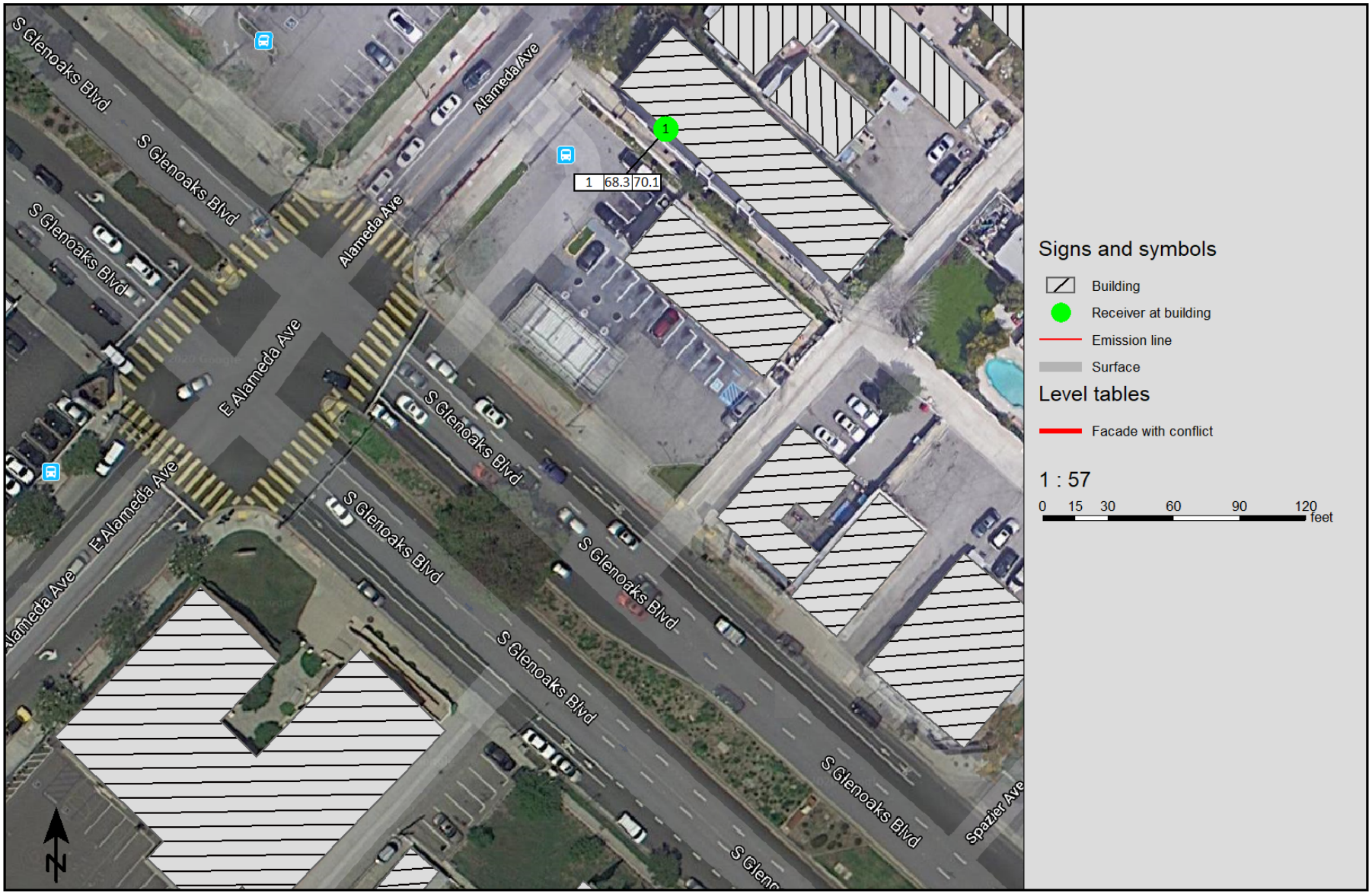
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Alameda Avenue 1112	11380485.1	3782545.83	South we	GF	181.24	-	-	68.3	70.1	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Alameda Avenue 1112	GF	68.3	70.1		
Alameda Avenue		-		65.5	67.3
Glenoaks Boulevard		-		65.0	66.9

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Alameda Avenue 1	GF	Day	38.4	46.(	50.(	53.4	54.(	55.(	56.(	57.2	56.!	55.4	56.4	57.!	57.2	57.3	56.(	55.7	55.2	54.4	53.7	51.(	48.(	44.3	40.7	35.2
			Lden	40.2	47.(	52.7	55.3	56.7	57.4	57.(	59.7	58.2	57.3	58.3	59.4	59.7	59.2	57.(	57.(	57.(	56.2	55.(	53.!	50.4	46.2	41.(	37.1


S Glenoaks Blvd
Alameda Ave
1
1 68.3 70.1
E Alameda Ave
Spazier Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 57
0 15 30 60 90 120
feet

KEY D

GLENOAKS BOULEVARD FROM WILLARD TO GRANDVIEW

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Willard Avenue 10	GF	Day	34.2	42.9	47.4	49.7	51.1	51.8	51.9	52.8	50.0	48.9	49.7	50.9	51.0	51.4	50.1	49.0	49.1	49.1	47.9	45.2	41.0	37.0	31.9	22.1
			Lden	36.1	44.7	49.2	51.0	53.0	53.6	53.7	54.0	52.4	50.4	51.9	52.2	52.8	53.2	51.9	50.9	50.9	50.9	49.2	47.1	43.4	39.4	33.2	24.0

Contribution levels of the receivers

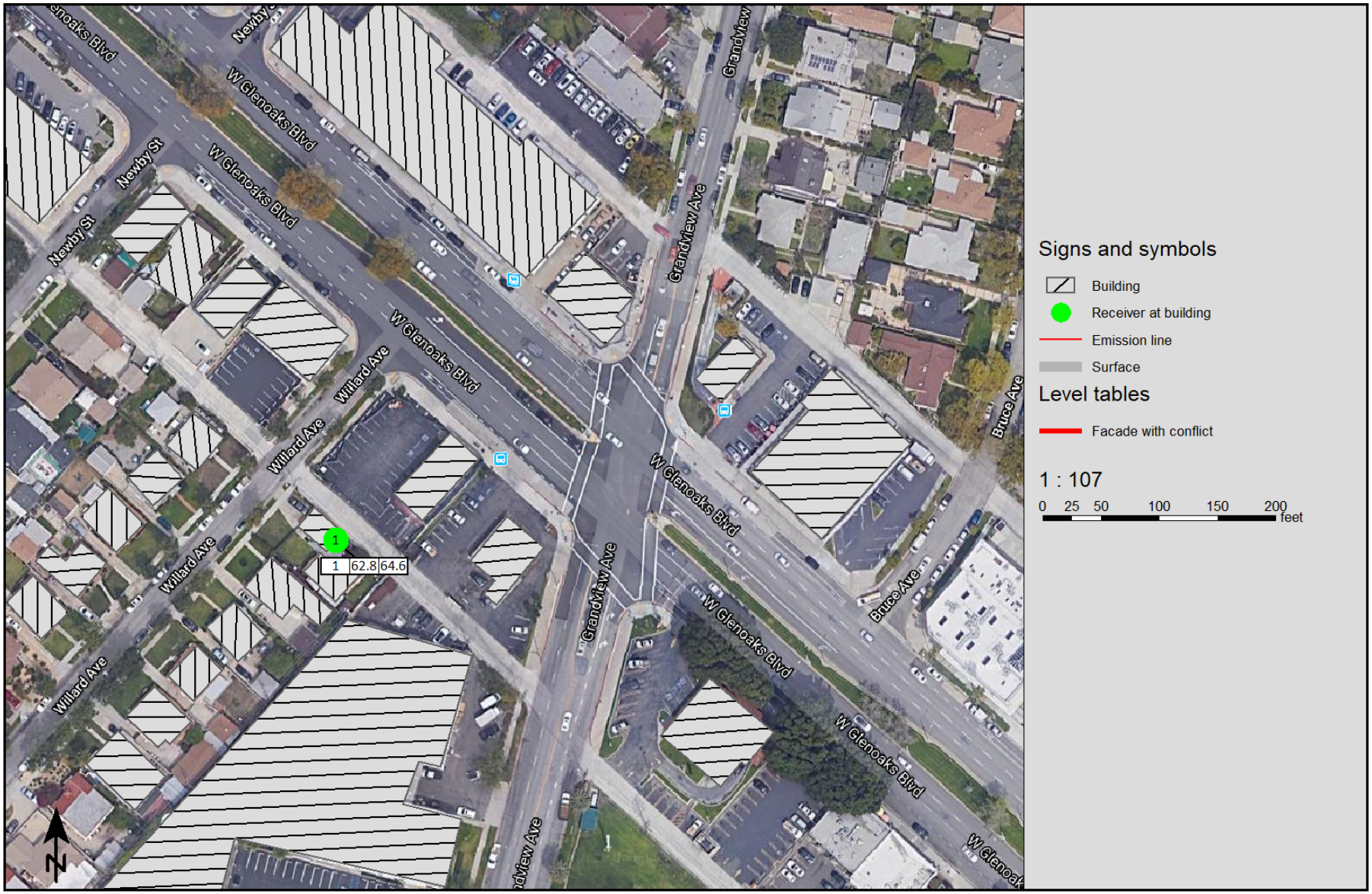
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Willard Avenue 1068	GF	62.8	64.6		
Glenoaks Boulevard		-		61.7	63.6
Grandview Avenue		-		56.3	58.1

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Willard Avenue 1068	11381817.33	781184.57	South ea	GF	154.34	-	-	62.8	64.6	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	42036	Total	-	2599	1608	552	-	Traffic li	-	100.0	Average (of DGAC a	-1.1
		Automobiles	-	1974	1221	420	56					
		Medium trucks	-	364	225	77	56					
		Heavy trucks	-	102	63	21	56					
		Buses	-	10	6	2	56					
		Motorcycles	-	76	48	16	56					
		Auxiliary vehicle	-	74	46	16	56					
0+42(	-							-	-	-	-	-
Grandview Avenue							Traffic direction: In entry direction					
0+00(	9700	Total	-	600	371	127	-	Traffic li	-	100.0	Average (of DGAC a	-3.1
		Automobiles	-	456	282	97	56					
		Medium trucks	-	84	52	18	56					
		Heavy trucks	-	23	14	5	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	18	11	4	56					
		Auxiliary vehicle	-	17	11	4	56					
0+28	-							-	-	-	-	-


W Glenoaks Blvd
Newby St
Grandview Ave
Willard Ave
Bruce Ave
1
1 62.8 64.6
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 107
0 25 50 100 150 200
feet

KEY E1

BROADWAY FROM BRAND TO LOUISE

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Eleve Lofts	GF	Day	41.2	49.0	54.0	56.9	58.9	59.7	60.6	62.2	62.4	62.9	63.7	63.6	64.0	64.7	63.7	62.9	62.0	60.9	60.6	57.9	54.7	50.9	46.8	43.2
			Lden	43.0	51.0	56.0	58.8	60.4	61.6	62.9	64.0	64.2	64.4	65.0	65.9	66.0	66.9	65.0	64.4	63.9	62.8	61.9	59.2	56.0	52.8	48.7	45.2

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Eleve Lofts	GF	74.5	76.4		
Artsakh Avenue		-		57.3	59.1
Broadway		-		74.4	76.3

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Eleve Lofts	11384430.53779078.67	North	GF	166.81	-	-	74.5	76.4	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00(	18760	Total	-	1160	718	246	-	Traffic li	-	40.0	Average (of DGAC a	1.0
		Automobiles	-	880	545	186	56					
		Medium trucks	-	162	100	34	56					
		Heavy trucks	-	45	28	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	34	22	7	56					
		Auxiliary vehicle	-	33	20	7	56					
0+29	-							-	-	-	-	-
Artsakh Avenue							Traffic direction: In entry direction					
0+00(	2604	Total	-	161	100	34	-	Traffic li	-	30.0	Average (of DGAC a	-1.5
		Automobiles	-	122	76	26	65					
		Medium trucks	-	23	14	5	65					
		Heavy trucks	-	6	4	1	65					
		Buses	-	1	0	0	65					
		Motorcycles	-	5	3	1	65					
		Auxiliary vehicle	-	5	3	1	65					
0+24(	-							-	-	-	-	-

E Broadway
E Broadway
E Broadway
Artsakh Ave
1 74.5 76.4
1
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 84
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND TO EAGLE ROCK

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	5080	Total	-	314	194	67	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	238	147	51	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	38328	Total	-	2370	1466	503	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -3
		Automobiles	-	1800	1113	382	56					
		Medium trucks	-	332	205	71	56					
		Heavy trucks	-	93	57	20	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	69	43	14	56					
		Auxiliary vehicle	-	67	42	14	56					
0+20	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.4	63.3	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.8	63.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	61.4	63.3		
1		-		-	-
Colorado Boulevard		-		55.6	57.4
Eagle Rock Boulevard		-		60.1	62.0
Rockland Avenue 5116	GF	61.8	63.7		
1		-		-	-
Colorado Boulevard		-		61.3	63.2
Eagle Rock Boulevard		-		52.5	54.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	32.2	39.8	44.4	46.8	47.8	48.4	48.6	49.0	48.7	48.8	50.8	50.9	50.3	51.7	49.6	48.7	48.1	47.5	47.3	45.2	42.3	38.7	32.2	25.
			Lden	34.7	41.6	46.3	48.7	49.7	50.3	50.8	50.9	50.6	50.7	52.4	52.7	52.2	53.6	51.8	50.6	49.9	49.3	49.7	47.2	44.2	40.6	34.7	27.
2	Rockland Avenue	GF	Day	34.3	41.6	44.3	45.8	45.6	45.4	46.8	49.6	50.8	49.6	51.3	51.8	50.4	51.7	50.2	49.4	48.7	49.8	49.6	45.8	43.6	38.7	32.6	24.
			Lden	36.3	42.9	46.3	47.3	47.8	47.3	48.3	51.8	52.4	51.8	53.3	53.8	52.3	53.6	52.6	51.3	50.6	51.3	50.9	47.4	45.4	40.8	34.8	26.

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Casper Ave
Merton Ave
2
1 61.8 63.7
1
1 61.4 63.3
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY H1
COLORADO BOULEVARD FROM EUCLID TO LOS ROBLES

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	21448	Total	-	1326	820	282	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1037	623	214	56					
		Medium trucks	-	191	115	39	56					
		Heavy trucks	-	53	32	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	39	24	8	56					
		Auxiliary vehicle	-	-	23	8	56					
0+46	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	26960	Total	-	1667	1031	354	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1304	783	269	56					
		Medium trucks	-	240	144	50	56					
		Heavy trucks	-	67	40	14	56					
		Buses	-	7	4	2	56					
		Motorcycles	-	49	30	11	56					
		Auxiliary vehicle	-	-	29	11	56					
0+29	-							-	-	-	-	-

Receiver list

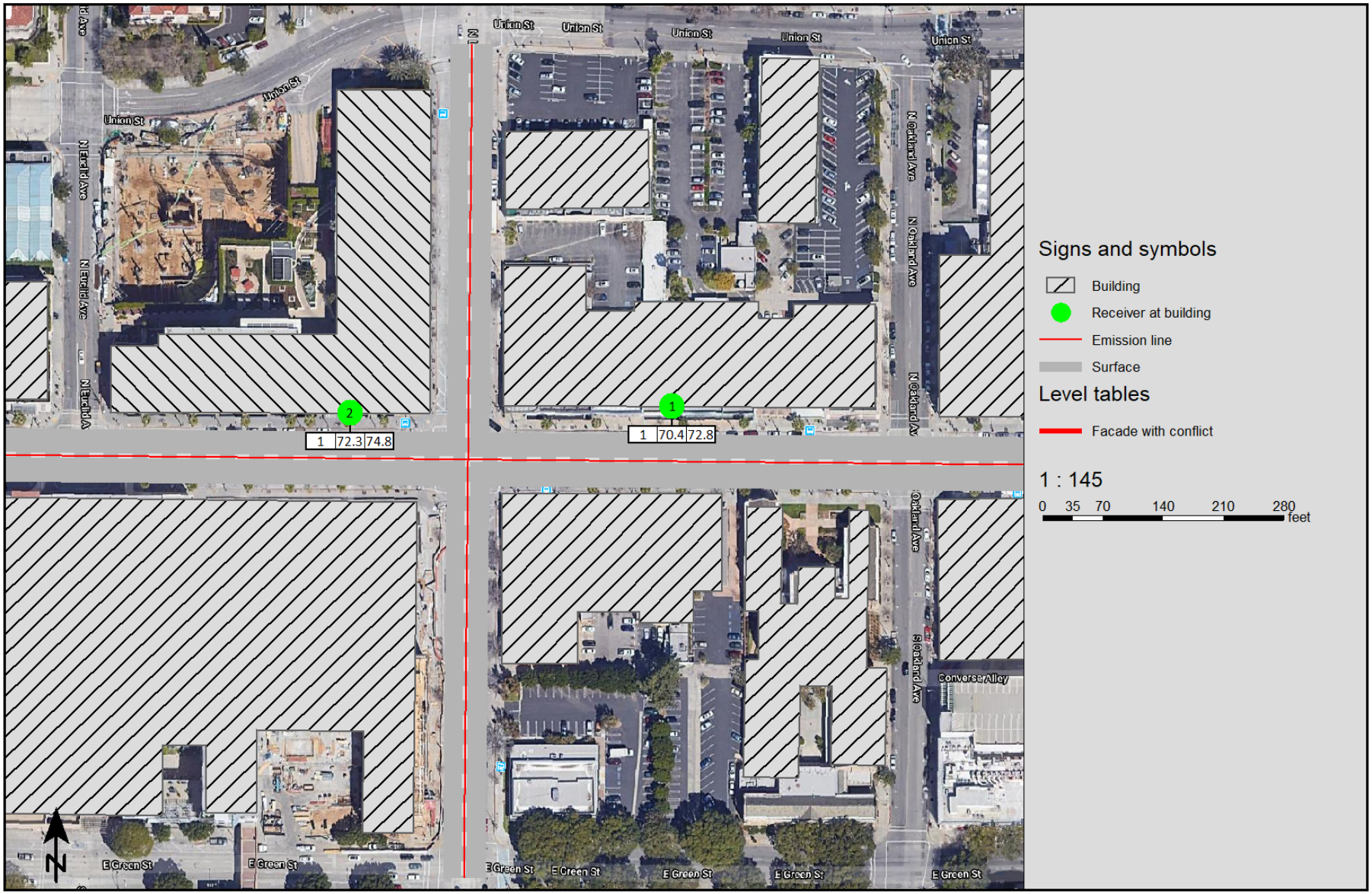
No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	70.4	72.8	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	72.3	74.8	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	70.4	72.8		
Colorado Boulevard		-		70.1	72.5
Los Robles Avenue		-		58.0	60.4
Western Asset Plaza 385	GF	72.3	74.8		
Colorado Boulevard		-		71.8	74.3
Los Robles Avenue		-		62.6	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's M	GF	Day	38.2	45.5	50.0	52.4	53.7	54.8	55.7	57.8	58.2	57.9	59.5	61.2	60.5	60.0	59.8	58.5	58.0	56.2	54.8	51.9	48.0	45.0	41.9	38.9
			Lden	40.4	47.7	52.2	54.8	56.2	57.2	58.2	60.5	60.9	60.2	61.8	63.4	62.8	63.0	62.2	61.2	60.2	58.8	57.4	54.6	51.4	47.9	44.6	41.2
2	Western Asset Pla	GF	Day	40.0	47.4	51.9	54.2	55.7	56.8	58.2	60.4	60.0	60.0	62.2	63.4	62.7	62.4	61.4	60.2	59.2	57.7	56.5	53.0	51.2	49.7	46.5	41.7
			Lden	42.7	49.0	54.2	56.8	58.7	59.2	60.8	63.2	62.7	62.4	64.0	65.5	64.5	64.7	63.7	62.5	61.0	60.2	59.2	56.5	54.2	51.9	49.7	44.2


Union St
N Euclid Ave
N Oakland Ave
E Green St
Converse Alley
1
2
1 72.3 74.8
1 70.4 72.8
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 35 70 140 210 280
feet

KEY H1
COLORADO BOULEVARD FROM HOLLISTON TO HILL

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	40.(	47.4	51.9	54.'	55.'	55.9	57.4	60.'	58.4	58.(	60.9	61.9	59.2	60.9	59.(	58.'	58.'	57.2	57.'	55.2	53.(	50.'	46.4	40.2
			Lden	43.(	50.9	55.'	58.2	59.2	60.9	62.9	65.(	63.'	62.4	64.(	65.(	63.2	64.2	63.'	62.(	62.2	61.'	61.8	60.'	57.'	54.8	51.(	44.'
2	Holliston United M	GF	Day	38.9	46.2	51.(	53.(	54.9	55.9	55.4	55.(	55.'	54.(	56.(	57.8	56.2	56.9	55.9	56.2	56.2	55.9	54.2	53.2	51.(	47.'	42.2	36.'
			Lden	41.2	49.(	54.9	57.9	59.2	59.9	59.9	60.'	59.'	59.2	61.4	61.'	60.2	61.(	59.8	60.'	60.2	60.'	59.2	58.'	55.8	52.9	47.(	41.2

Contribution levels of the receivers

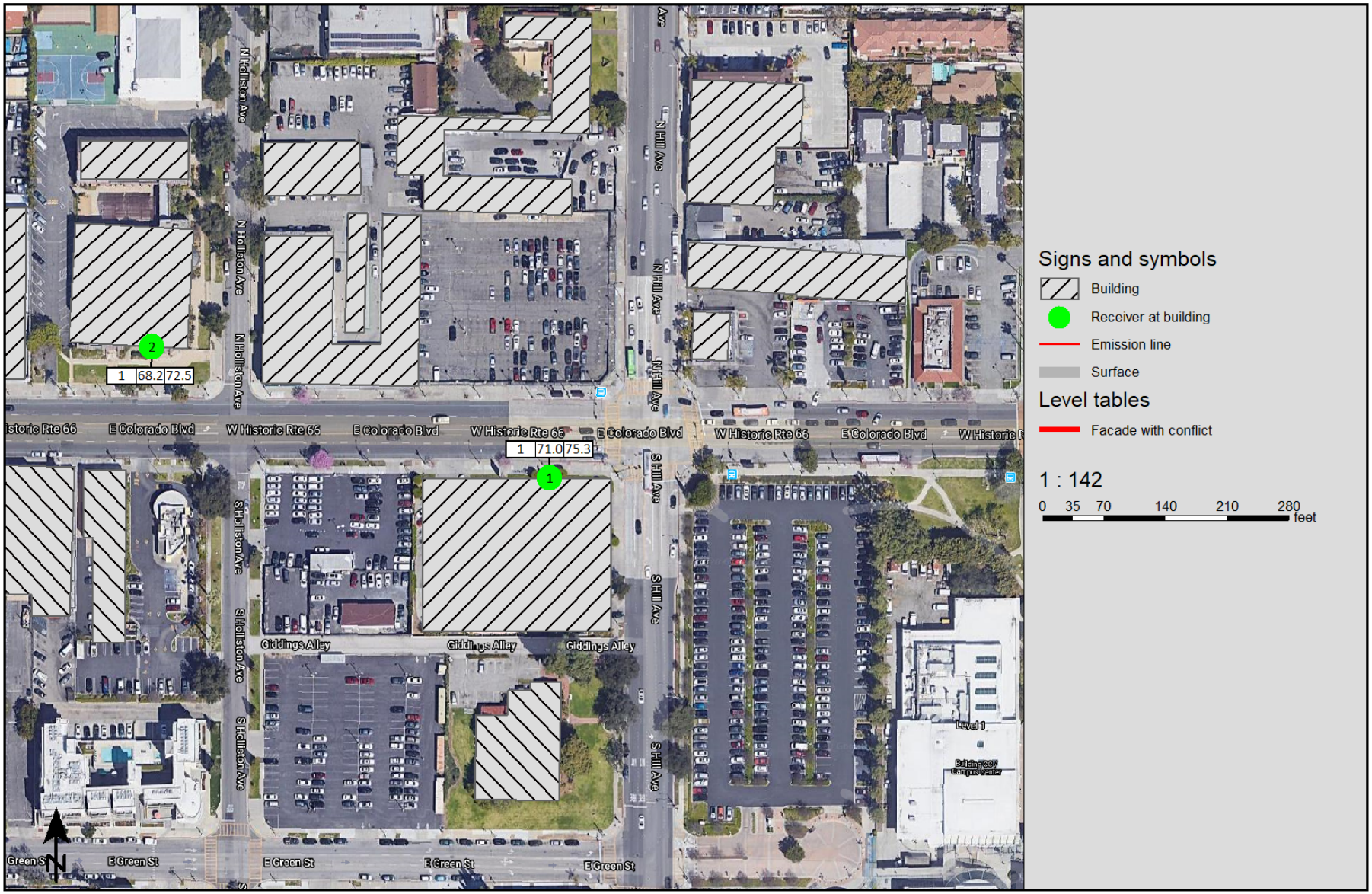
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	71.0	75.3		
Colorado Boulevard		-		70.0	74.3
Hill Avenue		-		64.2	68.5
Holliston United Methodist Church	GF	68.2	72.5		
Colorado Boulevard		-		68.2	72.5
Hill Avenue		-		44.9	49.4

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	71.0	75.3	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	68.2	72.5	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	24276	Total	-	1501	928	319	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1141	704	177	56					
		Medium trucks	-	210	130	33	56					
		Heavy trucks	-	58	37	88	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	44	27	7	56					
		Auxiliary vehicle	-	43	26	7	56					
0+48(	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00(	25944	Total	-	1604	992	341	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1219	753	190	56					
		Medium trucks	-	224	139	35	56					
		Heavy trucks	-	62	39	94	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	47	29	7	56					
		Auxiliary vehicle	-	46	28	7	56					
0+31(	-							-	-	-	-	-


N Hollston Ave
N Hill Ave
E Colorado Blvd
W Historic Rte 66
S Hollston Ave
S Hill Ave
Giddings Alley
E Green St
Level 1
Building Co/ Campus Center
2
1 68.2 72.5
1 1 71.0 75.3
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 142
0 35 70 140 210 280
feet

CATEGORY 3 RECEIVERS

KEY A1

CHANDLER BOULEVARD FROM BLAKESLEE TO VINELANE

KEY A1

VINELAND AVENUE FROM WEDDINGTON TO MAGNOLIA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	East Valley High S	GF	Day	41.4	49.2	54.3	56.8	58.2	59.3	59.9	60.3	58.2	57.3	58.3	58.0	58.8	58.0	57.4	57.8	57.0	56.4	56.8	54.7	52.0	48.0	43.0	35.0
			Lden	43.2	51.0	55.9	58.0	60.3	61.0	61.4	62.0	60.3	59.0	60.0	60.9	60.3	60.3	60.9	59.3	59.9	58.8	58.2	58.3	56.0	53.9	49.9	44.8	37.4
2	Gallery at NoHo C	GF	Day	35.9	43.2	48.3	50.8	52.2	53.0	53.3	53.3	51.3	50.8	51.9	52.3	53.0	53.3	52.3	51.9	50.0	50.4	51.3	47.9	46.0	42.8	37.2	31.1
			Lden	37.2	45.3	50.0	52.3	54.3	54.9	55.3	55.9	53.0	52.0	53.8	54.2	54.9	54.9	54.0	53.8	52.4	52.2	53.0	49.3	47.9	44.4	39.0	32.9
3	Gray Studios	GF	Day	39.4	47.0	51.8	54.4	55.8	56.6	57.3	58.3	58.2	58.3	59.2	59.2	59.3	60.3	59.0	57.8	57.0	55.0	54.2	51.8	50.8	49.8	45.8	38.4
			Lden	41.2	48.9	53.0	56.2	57.0	58.9	59.0	60.0	60.2	60.0	61.3	61.2	61.0	62.0	60.9	59.3	58.9	57.9	56.3	53.3	52.3	51.4	47.0	40.1

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
East Valley High School	GF	70.6	72.4		
Chandler Ave b/t Fair and Vineland		-		59.7	61.6
Fair Ave N of Chandller		-		35.1	36.9
Vineland Ave b/t Chandler and Magnolia		-		62.8	64.6
Vineland Ave N of Chandler		-		69.3	71.2
Gallery at NoHo Commons	GF	64.5	66.4		
Chandler Ave b/t Fair and Vineland		-		63.9	65.8
Fair Ave N of Chandller		-		53.2	55.0
Vineland Ave b/t Chandler and Magnolia		-		47.5	49.3
Vineland Ave N of Chandler		-		50.0	51.8
Gray Studios	GF	70.2	72.0		
Chandler Ave b/t Fair and Vineland		-		42.5	44.3
Fair Ave N of Chandller		-		31.0	32.8
Vineland Ave b/t Chandler and Magnolia		-		70.0	71.9
Vineland Ave N of Chandler		-		54.8	56.6

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	East Valley High School	11373666.1 3781696.23	-	GF	191.40	-	-	70.6	72.4	-	-
2	Gallery at NoHo Commons	11373425.6 3781689.51	South	GF	194.08	-	-	64.5	66.4	-	-
3	Gray Studios	11373713.1 3781442.43	West	GF	190.24	-	-	70.2	72.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Vineland Ave b/t Chandler and Magnolia							Traffic direction: In entry direction					
0+00(	28096	Total	-	1737	1075	369	-	Traffic li	-	30.0	Average (of DGAC a	-0.3
		Automobiles	-	1318	815	280	56					
		Medium trucks	-	243	151	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	7	4	1	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	31	11	56					
0+35	-							-	-	-	-	-
Vineland Ave N of Chandler							Traffic direction: In entry direction					
0+00(	34352	Total	-	2124	1314	451	-	Traffic li	-	30.0	Average (of DGAC a	0.6
		Automobiles	-	1612	996	342	56					
		Medium trucks	-	297	184	64	56					
		Heavy trucks	-	83	51	17	56					
		Buses	-	9	5	1	56					
		Motorcycles	-	62	39	13	56					
		Auxiliary vehicle	-	61	38	13	56					
0+10(	-							-	-	-	-	-
Chandler Ave b/t Fair and Vineland							Traffic direction: In entry direction					
0+00(	13180	Total	-	815	504	173	-	Traffic li	-	30.0	Average (of DGAC a	-0.6 / -
		Automobiles	-	619	382	131	56					
		Medium trucks	-	114	71	24	56					
		Heavy trucks	-	32	20	7	56					
		Buses	-	3	2	0	56					
		Motorcycles	-	24	15	5	56					
		Auxiliary vehicle	-	23	15	5	56					
0+36	-							-	-	-	-	-
Fair Ave N of Chandller							Traffic direction: In entry direction					
0+00(	6084	Total	-	376	233	80	-	Traffic li	-	60.0	Average (of DGAC a	0.0 / 1.
		Automobiles	-	285	177	61	48					
		Medium trucks	-	53	33	11	48					
		Heavy trucks	-	15	9	3	48					
		Buses	-	2	1	0	48					
		Motorcycles	-	11	7	2	48					
		Auxiliary vehicle	-	11	7	2	48					
0+06(	-							-	-	-	-	-

Metro BRT NoHo to Pasadena
Chandler Blvd
Chandler Blvd
Blakeslee Ave
Vineland Ave
Vineland Ave
Vineland Ave
Weddington St
Weddington St
Weddington St
Blakeslee Ave
McCormick St
McCormick St
McCormick St
Vineland Ave
Granger Ave
1 64.5 66.4
70.6 72.4
1 70.2 72.0
1
2
3
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 183
0 45 90 180 270 360
feet

KEY D

GLENOAKS BOULEVARD FROM OLIVE TO ANGELENO

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Burbank Central L	GF	Day	39.9	47.0	51.3	54.2	55.4	55.9	56.9	58.3	58.4	56.9	58.0	59.9	58.3	58.9	58.2	57.4	57.2	56.9	55.3	53.2	49.8	46.2	42.8	38.2
			Lden	41.4	48.9	53.0	56.3	57.2	57.8	58.2	60.9	60.2	58.8	60.4	61.3	60.9	60.3	60.0	59.2	59.3	58.2	57.9	55.0	51.0	48.3	44.0	40.1

Contribution levels of the receivers

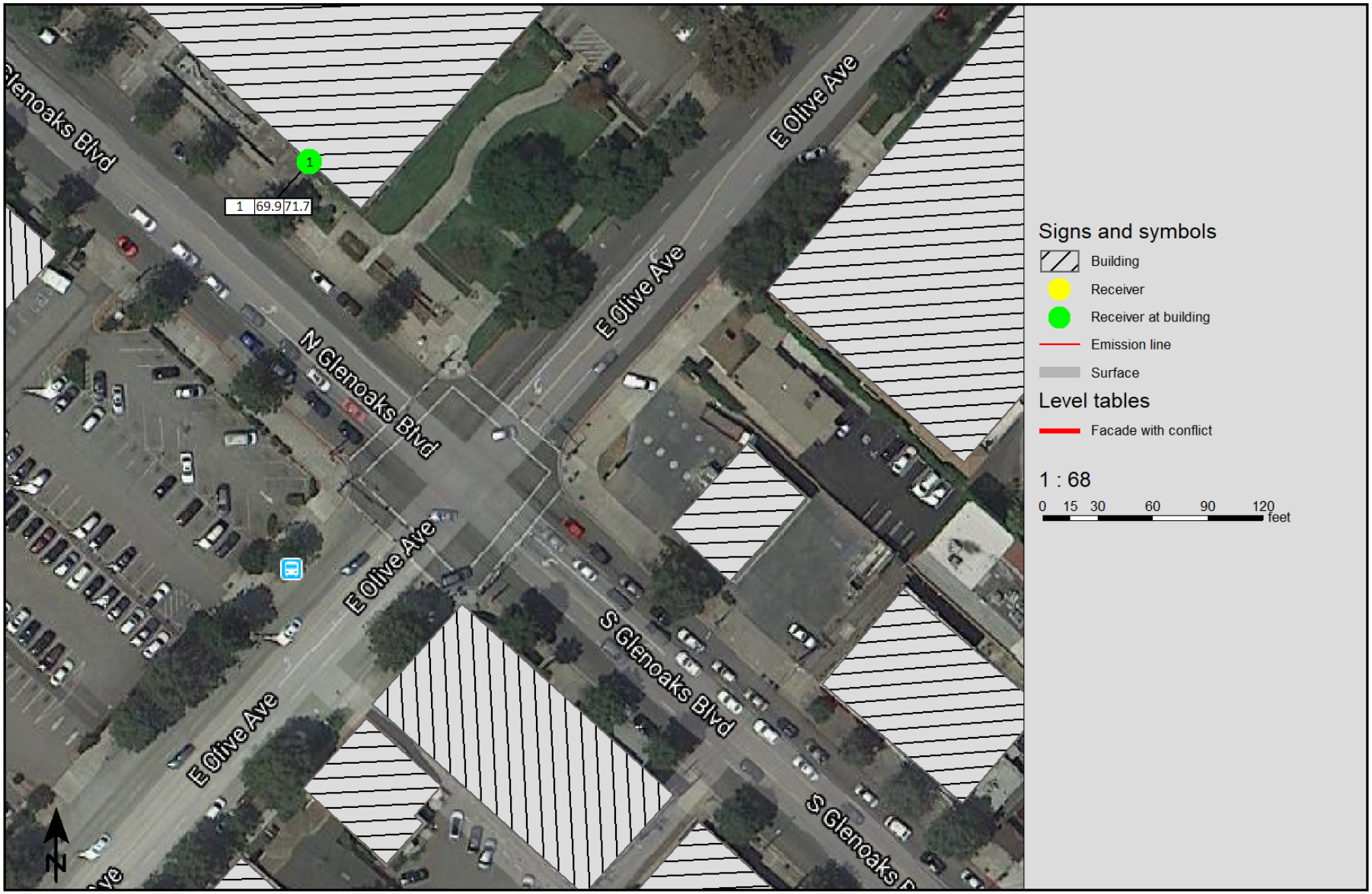
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Burbank Central LIbrary	GF	69.9	71.7		
North Glenoaks Boulevard		-		68.5	70.3
Olive Avenue		-		64.2	66.0

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Burbank Central LIbrary	11379602.4	13783293.5	South we	GF	202.86	-	-	69.9	71.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Olive Avenue							Traffic direction: In entry direction					
0+00(	40208	Total	-	2486	1538	528	-	Traffic li	-	30.0	Average (of DGAC a	3.7
		Automobiles	-	1889	1168	401	46					
		Medium trucks	-	349	215	74	46					
		Heavy trucks	-	98	60	20	46					
		Buses	-	8	6	2	46					
		Motorcycles	-	73	45	16	46					
		Auxiliary vehicle	-	71	44	15	46					
0+25(	-							-	-	-	-	-
North Glenoaks Boulevard							Traffic direction: In entry direction					
0+00(	14648	Total	-	906	560	192	-	Traffic li	-	30.0	Average (of DGAC a	-1.9
		Automobiles	-	688	425	146	46					
		Medium trucks	-	127	78	27	46					
		Heavy trucks	-	36	22	7	46					
		Buses	-	3	2	1	46					
		Motorcycles	-	27	16	6	46					
		Auxiliary vehicle	-	26	16	5	46					
0+22(	-							-	-	-	-	-


Glenoaks Blvd
E Olive Ave
1
1 69.9 71.7
N Glenoaks Blvd
E Olive Ave
E Olive Ave
S Glenoaks Blvd
E Olive Ave
S Glenoaks
N
Signs and symbols
Building
Receiver
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 68
0 15 30 60 90 120
feet

KEY D
GLENOAKS BOUELVARD FROM JUSTIN TO RUBERTA

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Thomas Jefferson	GF	Day	30.5	38.9	43.2	45.0	45.8	46.4	47.0	48.2	47.5	47.0	49.0	50.0	50.0	50.4	48.9	48.4	47.5	46.0	46.0	43.9	39.8	35.2	28.0	18.3
			Lden	32.5	40.0	45.0	46.9	47.7	48.3	49.0	50.0	49.3	48.9	50.9	52.0	52.0	52.2	50.8	50.3	49.4	47.9	48.5	45.8	41.7	37.0	29.9	20.3

Contribution levels of the receivers

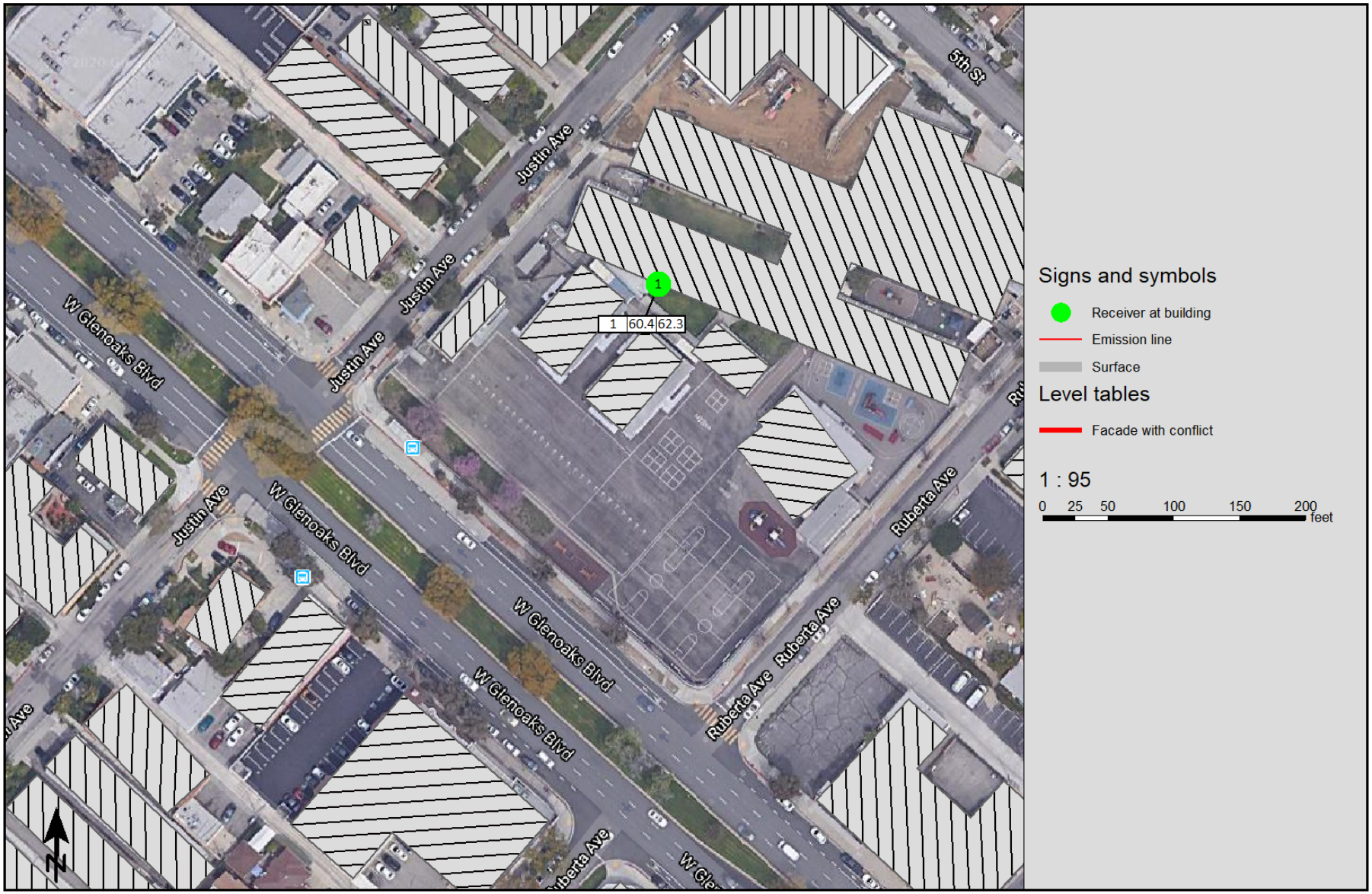
Source name		Traffic lane	Level Day	Level Lden
			dB(A)	
Thomas Jefferson Elementary	GF	60.4 62.3		
1		-	-	-
Glenoaks Boulevard		-	60.2	62.0
Justin Avenue		-	47.4	49.2

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Thomas Jefferson Elementary	11381398.4	3781760.33	South we	GF	169.93	-	-	60.4	62.3	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 1
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Glenoaks Boulevard							Traffic direction: In entry direction					
0+00	38980	Total	-	2410	1491	512	-	Traffic li	30.0	100.0	Average (of DGAC a	-1.4
		Automobiles	-	1830	1132	388	56					
		Medium trucks	-	338	209	72	56					
		Heavy trucks	-	94	58	20	56					
		Buses	-	9	5	2	56					
		Motorcycles	-	71	44	15	56					
		Auxiliary vehicle	-	69	42	15	56					
0+43	-							-	-	-	-	-
Justin Avenue							Traffic direction: In entry direction					
0+00	1600	Total	-	99	61	21	-	Traffic li	30.0	100.0	Average (of DGAC a	3.3
		Automobiles	-	75	46	16	46					
		Medium trucks	-	14	9	3	46					
		Heavy trucks	-	4	2	1	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	3	2	1	46					
		Auxiliary vehicle	-	3	2	1	46					
0+30	-							-	-	-	-	-


5th St
Justin Ave
Justin Ave
Justin Ave
Justin Ave
W Glenoaks Blvd
W Glenoaks Blvd
W Glenoaks Blvd
W Glenoaks Blvd
Ruberta Ave
Ruberta Ave
Ruberta Ave
1
1 60.4 62.3
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 95
0 25 50 100 150 200
feet

KEY E1

BROADWAY BETWEEN CHEVY CHASE AND VERDUGO

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	John Marshall Eler	GF	Day	39.4	47.(	51.(	54.(	55.2	56.2	57.7	60.4	59.4	58.4	60.9	61.(	60.2	60.4	59.(	58.(	58.(	57.4	56.9	54.7	52.4	48.7	46.3	41.2
			Lden	41.3	48.(	53.4	55.(	57.7	58.7	59.4	62.2	61.4	60.4	62.(	63.4	62.(	62.2	60.9	59.4	59.4	59.7	58.(	55.9	54.2	50.(	48.7	43.

Contribution levels of the receivers

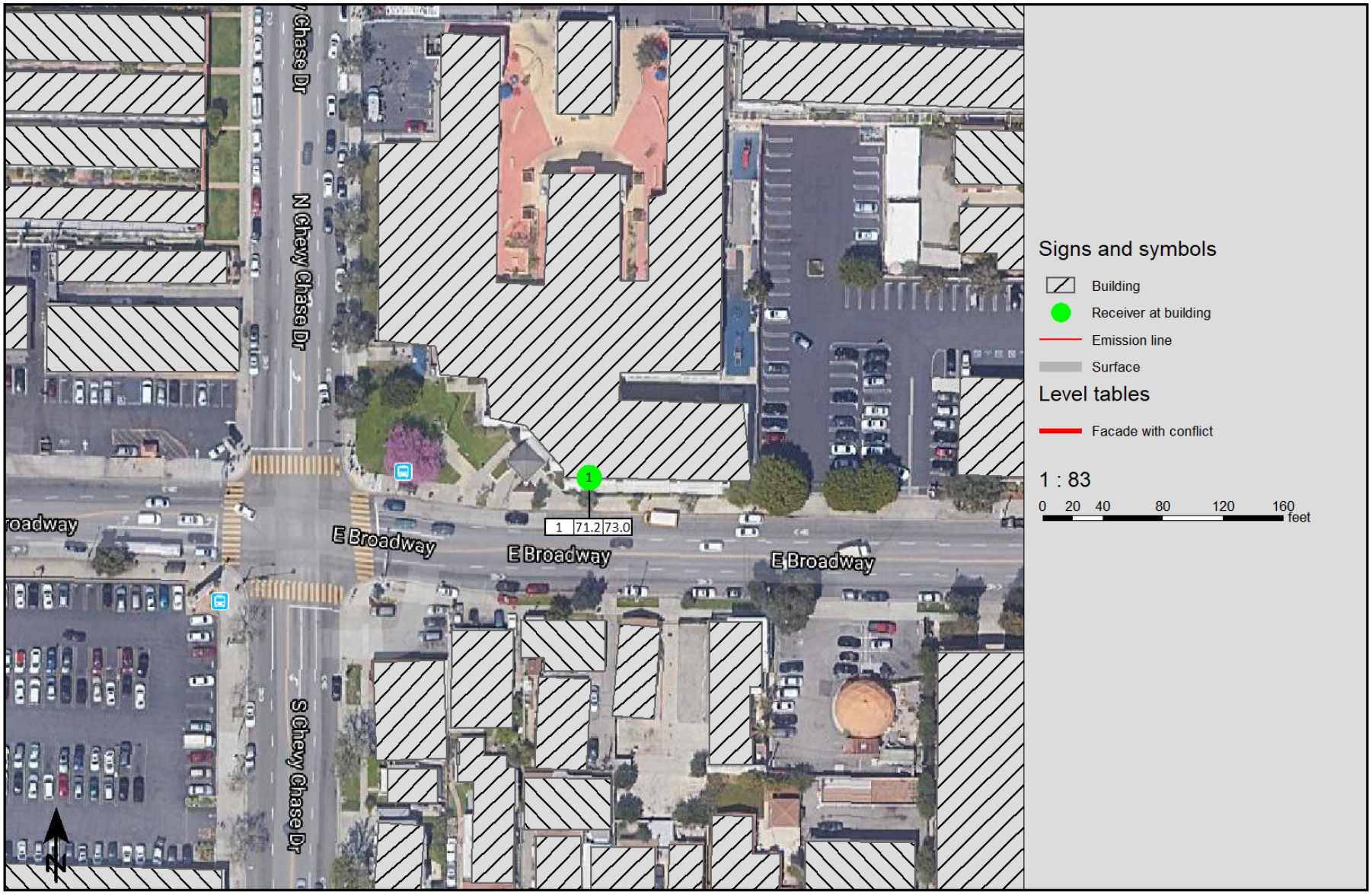
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
John Marshall Elementary	GF	71.2	73.0		
Broadway		-		70.8	72.7
Chevy Chase Drive		-		59.8	61.7

Receiver list

No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	John Marshall Elementary	11385774.8 3779074.69	South	GF	180.53	-	-	71.2	73.0	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Broadway							Traffic direction: In entry direction					
0+00(	19860	Total	-	1228	759	261	-	Traffic li	-	30.0	Average (of DGAC a	0.0 / 0.
		Automobiles	-	933	575	198	56					
		Medium trucks	-	172	106	36	56					
		Heavy trucks	-	48	29	10	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	36	23	8	56					
		Auxiliary vehicle	-	35	22	8	56					
0+26	-							-	-	-	-	-
Chevy Chase Drive							Traffic direction: In entry direction					
0+00(	22532	Total	-	1393	862	296	-	Traffic li	-	30.0	Average (of DGAC a	-1.8
		Automobiles	-	1058	654	225	56					
		Medium trucks	-	195	121	41	56					
		Heavy trucks	-	54	33	11	56					
		Buses	-	5	4	1	56					
		Motorcycles	-	41	26	9	56					
		Auxiliary vehicle	-	40	25	9	56					
0+17	-							-	-	-	-	-


N Chevy Chase Dr
S Chevy Chase Dr
E Broadway
E Broadway
E Broadway
1
1 71.2 73.0
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 83
0 20 40 80 120 160
feet

KEY F2

COLORADO BOULEVARD FROM ROCKLAND AND EAGLE ROCK

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Center for the Arts	GF	Day	32.2	39.8	44.4	46.8	47.8	48.4	48.6	49.0	48.7	48.8	50.8	50.9	50.3	51.7	49.6	48.7	48.1	47.5	47.3	45.2	42.3	38.7	32.2	25.
			Lden	34.7	41.6	46.3	48.7	49.7	50.3	50.8	50.9	50.6	50.7	52.4	52.7	52.2	53.6	51.8	50.6	49.9	49.3	49.7	47.2	44.2	40.6	34.7	27.
2	Rockland Avenue	GF	Day	34.3	41.6	44.3	45.8	45.6	45.4	46.8	49.6	50.8	49.6	51.3	51.8	50.4	51.7	50.2	49.4	48.7	49.8	49.6	45.8	43.6	38.7	32.6	24.
			Lden	36.3	42.9	46.3	47.3	47.8	47.3	48.3	51.8	52.4	51.8	53.3	53.8	52.3	53.6	52.6	51.3	50.6	51.3	50.9	47.4	45.4	40.8	34.8	26.

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Center for the Arts Eagle Rock	GF	61.4	63.3		
1		-		-	-
Colorado Boulevard		-		55.6	57.4
Eagle Rock Boulevard		-		60.1	62.0
Rockland Avenue 5116	GF	61.8	63.7		
1		-		-	-
Colorado Boulevard		-		61.3	63.2
Eagle Rock Boulevard		-		52.5	54.3

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Center for the Arts Eagle Roc	11387985.2	3778298.07	South	GF	179.23	-	-	61.4	63.3	-	-
2	Rockland Avenue 5116	11388001.1	3778319.17	South	GF	180.90	-	-	61.8	63.7	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
1							Traffic direction: Both directions					
0+00	-							-	-	-	-	-1.7 / 2
0+00	-							-	-	-	-	-
0+00	-							-	-	-	-	0.0
Eagle Rock Boulevard							Traffic direction: In entry direction					
0+00	5080	Total	-	314	194	67	-	Traffic li	-	30.0	Average (of DGAC a	-1.0 / 1
		Automobiles	-	238	147	51	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	6	2	56					
0+30	-							-	-	-	-	-
Colorado Boulevard							Traffic direction: In entry direction					
0+00	38328	Total	-	2370	1466	503	-	Traffic li	-	30.0	Average (of DGAC a	-5.8 / -3
		Automobiles	-	1800	1113	382	56					
		Medium trucks	-	332	205	71	56					
		Heavy trucks	-	93	57	20	56					
		Buses	-	9	6	2	56					
		Motorcycles	-	69	43	14	56					
		Auxiliary vehicle	-	67	42	14	56					
0+20	-							-	-	-	-	-

Rockland Ave
Rockland Ave
Eagle Rock Blvd
Colorado Blvd
Colorado Blvd
Colorado Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Eagle Rock Blvd
Casper Ave
Merton Ave
2
1 61.8 63.7
1
1 61.4 63.3
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 101
0 25 50 100 150 200
feet

KEY F2

COLORADO BOULEVARD FROM TOWNSEND TO FLORISTAN

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Dahlia Heights Ele	GF	Day	37.4	44.1	49.4	52.0	53.0	55.0	56.0	57.2	55.9	55.0	55.2	55.9	55.1	55.9	54.0	54.9	53.9	52.8	53.1	50.9	48.4	44.8	40.1	34.
			Lden	39.2	46.9	51.2	53.9	55.9	56.8	57.8	59.1	57.8	56.8	57.2	57.2	57.9	57.8	56.9	56.2	55.1	54.0	55.0	52.8	50.2	46.0	42.9	35.
2	Waldran Avenue 1	GF	Day	32.4	40.0	44.1	47.2	48.9	49.2	50.0	52.1	50.0	49.4	51.1	51.1	50.8	51.2	50.4	49.2	48.9	47.8	46.9	44.1	41.9	39.4	36.2	30.
			Lden	34.2	41.9	46.0	49.1	50.4	51.1	51.9	54.0	52.9	51.2	53.1	53.0	52.1	53.2	52.4	51.1	50.4	49.1	48.9	46.0	43.8	41.2	38.1	32.

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Dahlia Heights Elementary School	GF	67.3	69.1		
Colorado Boulevard		-		67.3	69.1
Townsend Avenue		-		23.6	25.6
Waldran Avenue 1597	GF	62.2	64.2		
Colorado Boulevard		-		59.1	60.9
Townsend Avenue		-		59.4	61.4

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Dahlia Heights Elementary Sc	11389451.0	3778232.14	North	GF	206.73	-	-	67.3	69.1	-	-
2	Waldran Avenue 1597	11389232.4	3778202.50	West	GF	202.83	-	-	62.2	64.2	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	39352	Total	-	2433	1505	517	-	Traffic li	-	30.0	Average (of DGAC a	0.4 / 3.
		Automobiles	-	1845	1143	393	56					
		Medium trucks	-	340	211	72	56					
		Heavy trucks	-	95	58	20	56					
		Buses	-	10	5	2	56					
		Motorcycles	-	72	44	15	56					
		Auxiliary vehicle	-	72	43	15	56					
0+41(	-							-	-	-	-	-
Townsend Avenue							Traffic direction: In entry direction					
0+00(	360	Total	-	22	14	5	-	Stop sig	-	100.0	Average (of DGAC a	-2.2
		Automobiles	-	17	11	4	46					
		Medium trucks	-	3	2	1	46					
		Heavy trucks	-	1	1	0	46					
		Buses	-	0	0	0	46					
		Motorcycles	-	1	0	0	46					
		Auxiliary vehicle	-	1	0	0	46					
0+17(	-							-	-	-	-	-

Townsend Ave
Townsend Ave
Dahlia Dr
Dahlia Dr
1 67.3 69.1
1
Floristan Ave
Floristan Ave
1 62.2 64.2
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Waldran Ave
Floristan Ave
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 114
0 30 60 120 180 240
feet

KEY H1
COLORADO BOULEVARD FROM LOS ROBLES TO OAKLAND

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	So Cal Children's M	GF	Day	38.2	45.5	50.0	52.4	53.7	54.8	55.7	57.8	58.2	57.9	59.5	61.2	60.5	60.0	59.8	58.5	58.0	56.2	54.8	51.9	48.0	45.0	41.9	38.9
			Lden	40.4	47.7	52.2	54.8	56.2	57.2	58.2	60.5	60.9	60.2	61.8	63.4	62.8	63.0	62.2	61.2	60.2	58.8	57.4	54.6	51.4	47.9	44.6	41.2
2	Western Asset Pla	GF	Day	40.0	47.4	51.9	54.2	55.7	56.8	58.2	60.4	60.0	60.0	62.2	63.4	62.7	62.4	61.4	60.2	59.2	57.7	56.5	53.0	51.2	49.7	46.5	41.7
			Lden	42.7	49.0	54.2	56.8	58.7	59.2	60.8	63.2	62.7	62.4	64.0	65.5	64.5	64.7	63.7	62.5	61.0	60.2	59.2	56.5	54.2	51.9	49.7	44.2

Contribution levels of the receivers

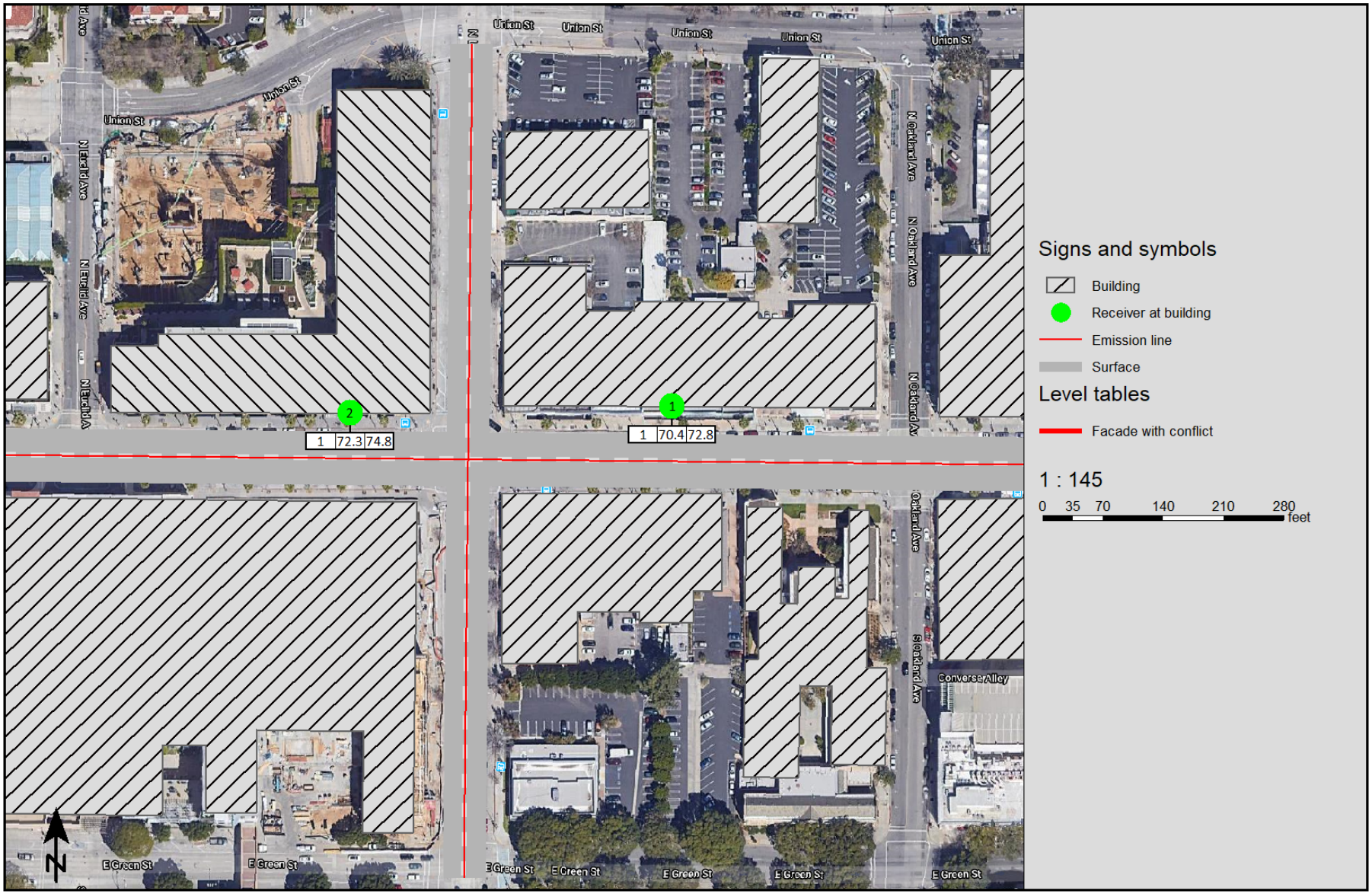
Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
So Cal Children's Museum	GF	70.4	72.8		
Colorado Boulevard		-		70.1	72.5
Los Robles Avenue		-		58.0	60.4
Western Asset Plaza 385	GF	72.3	74.8		
Colorado Boulevard		-		71.8	74.3
Los Robles Avenue		-		62.6	65.0

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	So Cal Children's Museum	11394838.9	3778935.46	South	GF	261.40	-	-	70.4	72.8	-	-
2	Western Asset Plaza 385	11394725.1	3778933.08	South	GF	262.25	-	-	72.3	74.8	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	21448	Total	-	1326	820	282	-	Traffic li	-	30.0	Average (of DGAC a	-1.0
		Automobiles	-	1037	623	214	56					
		Medium trucks	-	191	115	39	56					
		Heavy trucks	-	53	32	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	39	24	8	56					
		Auxiliary vehicle	-	-	23	8	56					
0+46	-							-	-	-	-	-
Los Robles Avenue							Traffic direction: In entry direction					
0+00(	26960	Total	-	1667	1031	354	-	Traffic li	-	30.0	Average (of DGAC a	-1.1
		Automobiles	-	1304	783	269	56					
		Medium trucks	-	240	144	50	56					
		Heavy trucks	-	67	40	14	56					
		Buses	-	7	4	2	56					
		Motorcycles	-	49	30	11	56					
		Auxiliary vehicle	-	-	29	11	56					
0+29	-							-	-	-	-	-


Union St
N Euclid Ave
N Oakland Ave
E Green St
Converse Alley
1
2
1 72.3 74.8
1 70.4 72.8
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 145
0 35 70 140 210 280
feet

KEY H1
COLORADO BOULEVARD FROM CHESTER TO HOLLISTON

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hill and Colorado H	GF	Day	40.(	47.4	51.(	54.'	55.(	55.9	57.:	60.(	58.4	58.(	60.4	61.9	59.'	60.9	58.(	58.7	58.'	57.:	57.(	55.:	52.9	50.(	46.:	40.:
			Lden	43.(	50.(	55.'	58.'	59.:	60.9	62.4	65.9	63.'	62.4	64.9	65.(	63.:	64.:	63.(	62.(	62.:	61.'	61.9	60.(	57.'	54.:	51.(	44.'
2	Holliston United M	GF	Day	38.9	46.:	51.(	53.(	54.9	55.4	55.4	55.9	55.'	54.9	56.(	57.'	56.:	56.9	55.4	56.:	56.:	55.9	54.:	53.:	51.(	47.'	42.:	36.'
			Lden	41.:	49.9	54.9	57.(	59.:	59.9	59.(	60.'	59.'	59.:	61.4	61.'	60.:	61.(	59.'	60.'	60.:	60.'	59.:	58.'	55.(	52.9	47.(	41.:

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hill and Colorado Hotel	GF	71.0	75.2		
Colorado Boulevard		-		70.0	74.2
Hill Avenue		-		64.1	68.4
Holliston United Methodist Church	GF	68.2	72.5		
Colorado Boulevard		-		68.1	72.5
Hill Avenue		-		44.8	49.3

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hill and Colorado Hotel	11396583.7	3778893.27	North	GF	245.22	-	-	71.0	75.2	-	-
2	Holliston United Methodist Ch	11396446.0	3778938.67	South	GF	248.35	-	-	68.2	72.5	-	-

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Colorado Boulevard							Traffic direction: In entry direction					
0+00(	24148	Total	-	1493	924	317	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1134	701	176	56					
		Medium trucks	-	209	130	33	56					
		Heavy trucks	-	58	37	87	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	44	27	7	56					
		Auxiliary vehicle	-	42	26	7	56					
0+48(	-							-	-	-	-	-
Hill Avenue							Traffic direction: In entry direction					
0+00(	25440	Total	-	1573	973	334	-	Traffic li	-	30.0	Average (of DGAC a	0.0
		Automobiles	-	1195	738	186	56					
		Medium trucks	-	220	137	35	56					
		Heavy trucks	-	61	38	92	56					
		Buses	-	6	4	7	56					
		Motorcycles	-	46	29	7	56					
		Auxiliary vehicle	-	45	27	7	56					
0+31(	-							-	-	-	-	-

ROUTE OPTIONS ANALYSIS

BRT NORTH HOLLYWOOD TO PASADENA

NOISE ANALYSIS OF ROUTE OPTIONS

This analysis evaluates the noise impacts of route options to the Proposed Project. The route options will have noise impacts similar to the Project, with slight variations due to the number of stations, location of the route segments, and location of the stations. Differences in the route alignments and station locations for the route options are described below.

Route 2

One route option, starting from North Hollywood, would use Lankershim Boulevard instead of using Vineland Avenue. There would be a station at Lankershim Boulevard and Hesby Avenue, which would be a side-running segment of the project, as opposed to the center-running segment along Vineland Avenue for the Proposed Project. This portion of the Lankershim corridor is mostly commercial retail and office uses, but more residential uses are being built that would be considered sensitive receptors.

At the intersection of Lankershim and Weddington, there are sensitive uses that would be impacted by noise from traffic over time. However, as shown below, noise levels along Lankershim Boulevard near Weddington would increase by less than one dBA L_{eq} at Category 3 receptors near the street.

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{eq})	Predicted Project Noise (dBA L_{eq})	FTA Moderate Impact Threshold (dBA L_{eq})	FTA Severe Impact Threshold (dBA L_{eq})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{eq})	Predicted Increase (dBA L_{eq})	CEQA Impact Threshold (dBA L_{eq})	CEQA Impact Before Mitigation
A2 (Route Option)	Lankershim Blvd. from Chandler Ave. to Weddington Ave.	Los Angeles	71.9	63	70	**75**	--	**72.5**	**1**	**3**	--

After traveling on the SR-134 from North Hollywood to the curb-running segment along Olive Avenue in the City of Burbank, one route option would skip a station at the Olive Avenue/Verdugo Avenue intersection and at the Glenoaks Boulevard/Grandview Avenue intersection. Instead, this option would stop at a side-running station at Central Avenue and Lexington Drive in Glendale. Here, this route option would deviate from the Proposed Project by continuing south along Central Avenue, with a station at the intersection of Central Avenue and American Way.

Then, Route Option 2 would head east along Colorado Street, making station stops at the Colorado Street/Brand Avenue, Colorado Street/Glendale Avenue, and Colorado Street/Verdugo Road intersections. The route would continue east along Colorado Street in Glendale until the station at the Eagle Rock Plaza, located within the boundaries of the City of Los Angeles.

Key	Segment	Jurisdiction	Existing Noise Level (dBA L_{dn})	Predicted Project Noise (dBA L_{dn})	FTA Moderate Impact Threshold (dBA L_{dn})	FTA Severe Impact Threshold (dBA L_{dn})	FTA Level Impact Before Mitigation	Predicted Future Noise Level (dBA L_{dn})	Predicted Increase (dBA L_{dn})	CEQA Impact Threshold (dBA L_{dn})	CEQA Impact Before Mitigation
E2 (Route Option)	Colorado St. from Central Ave. to Brand Blvd.	Glendale	69	58	63	67	--	70	1	5	--

This Route Option would take Colorado Boulevard through Eagle Rock, as under the Proposed Project. However, this route option would have side-running bus lanes through this segment as opposed to center-running lanes under the Proposed Project. Therefore, the two stations (Colorado Boulevard/Eagle Rock Boulevard and Colorado Boulevard/Townsend Avenue intersections) would be constructed adjacent to the curb under Route Option 2 in contrast to stations constructed in the median under the Proposed Project.

Under Route Option 2, the route would then use SR-134 and the Colorado Boulevard interchange to enter the City of Pasadena. On Colorado Boulevard in Pasadena, this route would have a station at three intersections; Colorado Boulevard/Arroyo Parkway, Colorado Boulevard/Lake Avenue, and Colorado Boulevard/Hill Avenue. With the exception of a different location for the Colorado Boulevard/Arroyo Parkway station, which would be used only for the Colorado Boulevard interchange routing in Route Option 2, the stations for this route option would be the same as under the Proposed Project. Like under the Proposed Project, stations would be along the curb, due to the mixed-flow alignment along Colorado Boulevard.

Route 3

Another route option would start from North Hollywood and use Lankershim Boulevard instead of Vineland Avenue, as under the Proposed Project. A station would be located and Lankershim Boulevard and Hesby Avenue, which would be side-running along this portion of Lankershim Boulevard.

Like under the Proposed Project, Route Option 3 would use SR-134 from North Hollywood to the curb-running segment along Olive Avenue in the City of Burbank. However, along this route option, there would not be a station at the Olive Avenue/Verdugo Avenue intersection. Route Option 3 would continue along Glenoaks Boulevard traveling between the City of Burbank and Glendale, which would be curb-running and median-running as under the Proposed Project. However, Route Option 3 would not include the optional station at Glenoaks Boulevard/Grandview Avenue intersection as under the Proposed Project.

Route Option 3 would then deviate from the Proposed Project route by locating a station at SR-134 at Brand Boulevard in Glendale. Route Option 3 would take SR-134 through Glendale and Eagle Rock, exiting at Figueroa Street in Eagle Rock to stop at a station located at Colorado Boulevard and Figueroa Street. The route option then east along Colorado Boulevard before reentering SR-134 and taking the Fair Oaks Avenue interchange into the City of Pasadena.

After exiting the Fair Oaks Avenue interchange, Route Option 3 would stop at the Raymond Avenue/Holly Street station as under the Proposed Project route. However, Route Option 3 would head south to Green Street and head east, stopping at station located at the intersections of Green Street/Los Robles Avenue and Green Street/Lake Avenue. Route Option 3 would then turn north on Hill Avenue, making a station stop at Hill Avenue/Colorado Boulevard. Continuing north, Route Option 3 would head west at Union Street, stopping at 2 more stations located at the intersections of Union Street/Lake Avenue and Union Street/Los Robles Avenue.

Impacts for this route option would be similar to the Proposed Project for both construction noise and operational noise.

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	19436	Total	-	1212	749	237	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	919	569	180	56					
		Medium trucks	-	170	105	33	56					
		Heavy trucks	-	47	29	9	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	36	22	7	56					
		Auxiliary vehicle	-	35	21	7	56					
0+36	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	5060	Total	-	313	194	66	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	237	147	50	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	5	2	56					
0+31(	-							-	-	-	-	-

Receiver list

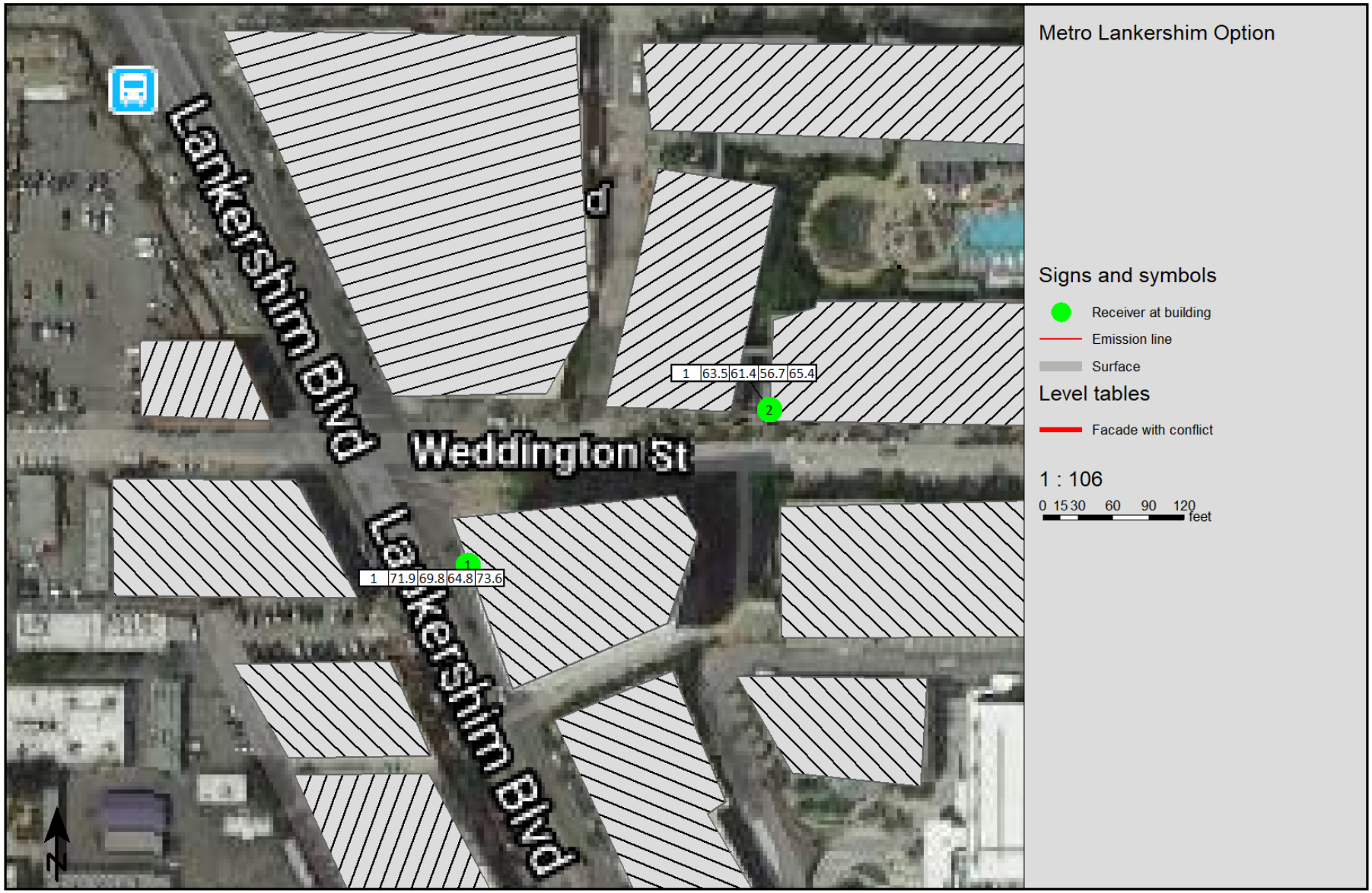
No.	Receiver name	Coordinates X	Y	Buildir side	Floor	Height abv.gr m	Limit Day	Evenir	Night	Lden	Level Day	Evenir	Night	Lden	Conflict Day	Evenir	Night	Lden
		in meter					dB(A)				dB(A)				dB			
1	Kaiser Permanente	11373213	781499	West	GF	193.07	-	-	-	-	71.9	69.8	64.8	73.6	-	-	-	-
2	Lofts at Noho	11373293	781539	West	GF	192.95	-	-	-	-	63.5	61.4	56.7	65.4	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		71.9	69.8	64.8	73.6
Lankershim Boulevard		-	71.8	69.6	64.7	73.4
Weddington Street		-	57.7	55.5	50.9	59.5
Lofts at Noho	GF		63.5	61.4	56.7	65.4
Lankershim Boulevard		-	53.2	51.0	46.1	54.8
Weddington Street		-	63.1	61.0	56.4	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	39.9	47.7	51.9	54.4	55.8	56.9	58.0	60.0	60.9	59.9	61.2	63.0	61.7	61.9	60.2	58.2	56.9	56.0	56.9	56.2	54.0	50.9	47.7	40.7
			Even	37.4	45.0	49.7	52.2	53.7	54.7	55.9	58.9	58.7	57.8	59.2	60.9	59.0	59.4	58.7	56.2	54.8	53.9	54.4	54.7	51.8	48.4	45.0	38.0
			Night	32.9	40.0	44.8	47.2	48.7	49.8	50.9	53.9	53.8	52.8	54.2	55.9	54.0	54.4	53.2	51.2	49.9	48.9	49.4	49.2	46.9	43.4	40.0	33.0
			Lden	41.2	48.8	53.9	56.7	57.8	58.0	59.7	62.2	62.0	61.0	63.0	64.7	63.4	63.2	61.9	60.0	58.0	57.7	58.2	57.9	55.0	52.2	49.4	42.4
2	Lofts at Noho	GF	Day	32.7	39.9	44.7	46.9	47.8	49.7	50.0	52.9	51.4	51.4	53.9	53.9	52.4	53.7	51.7	50.7	49.9	48.7	48.2	47.2	46.2	42.0	37.2	34.9
			Even	30.0	37.4	42.0	44.4	45.7	47.0	48.9	50.8	49.2	49.2	51.4	51.8	50.2	51.0	49.0	48.0	47.4	46.0	46.7	45.2	44.2	40.4	35.7	32.4
			Night	25.2	32.7	37.2	39.7	41.0	42.2	43.8	46.7	44.0	44.0	46.7	47.7	45.7	46.2	44.9	43.9	42.7	41.2	41.4	40.9	39.9	35.8	30.9	27.7
			Lden	33.9	41.2	45.9	48.2	49.0	50.9	52.4	54.7	53.2	53.2	55.2	55.7	54.2	54.9	53.2	52.9	51.4	50.0	50.0	49.7	48.7	44.4	39.7	36.5


Lankershim Blvd
Weddington St
Lankershim Blvd
1 63.5 61.4 56.7 65.4
2
1 71.9 69.8 64.8 73.6
1
N
Metro Lankershim Option
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY A2

LANKERSHIM BOULEVARD FROM CHANDLER TO WEDDINGTON

2019 BASE YEAR

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	19436	Total	-	1212	749	237	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	919	569	180	56					
		Medium trucks	-	170	105	33	56					
		Heavy trucks	-	47	29	9	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	36	22	7	56					
		Auxiliary vehicle	-	35	21	7	56					
0+36	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	5060	Total	-	313	194	66	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	237	147	50	56					
		Medium trucks	-	44	27	9	56					
		Heavy trucks	-	12	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	9	6	2	56					
		Auxiliary vehicle	-	9	5	2	56					
0+31(	-							-	-	-	-	-

Receiver list

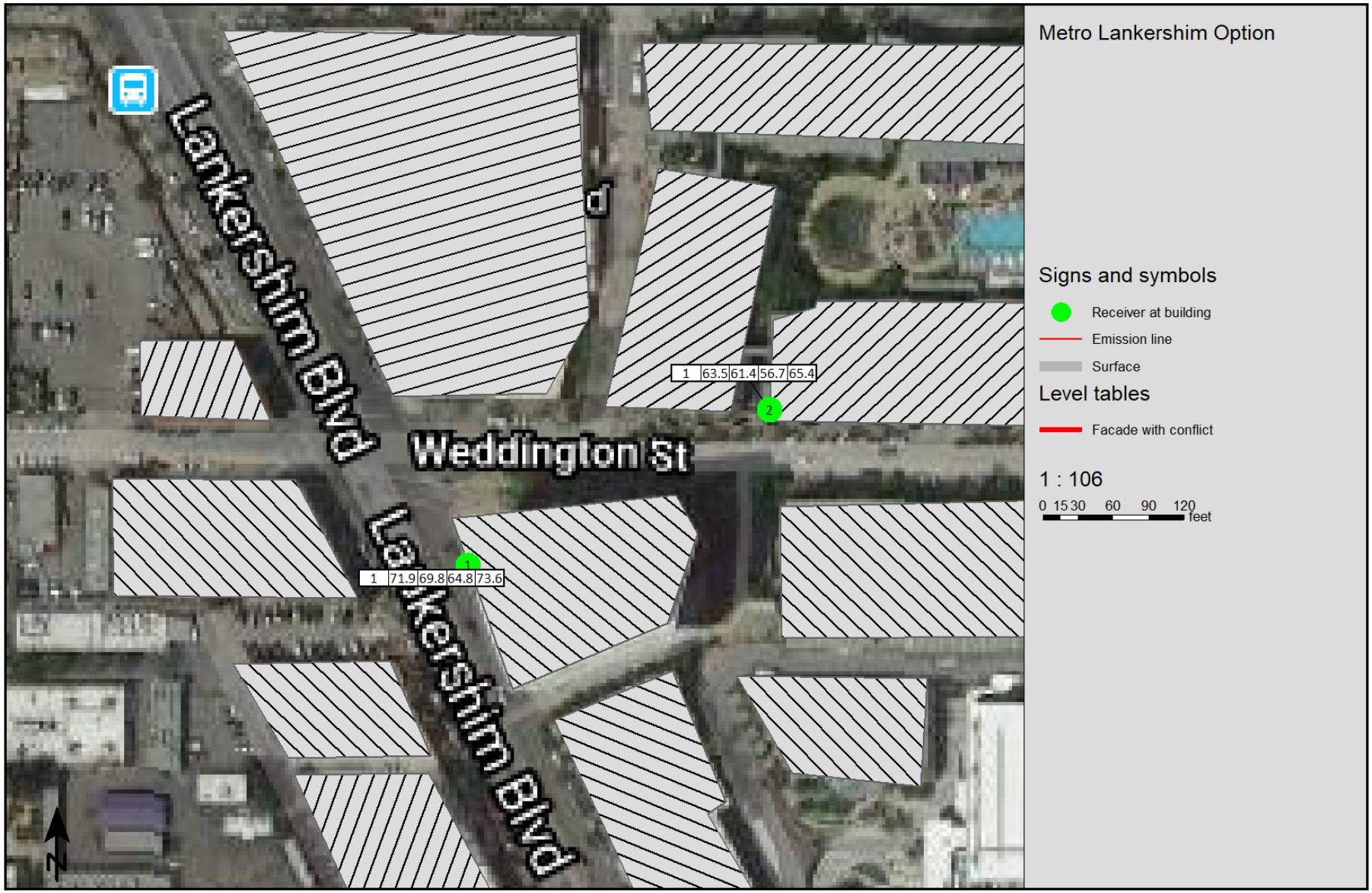
No.	Receiver name	Coordinates X	Y	Buildir side	Floor	Height abv.gr m	Limit Day	Evenir	Night	Lden	Level Day	Evenir	Night	Lden	Conflict Day	Evenir	Night	Lden
		in meter					dB(A)				dB(A)				dB			
1	Kaiser Permanente	11373213	781499	West	GF	193.07	-	-	-	-	71.9	69.8	64.8	73.6	-	-	-	-
2	Lofts at Noho	11373293	781539	West	GF	192.95	-	-	-	-	63.5	61.4	56.7	65.4	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		71.9	69.8	64.8	73.6
Lankershim Boulevard		-	71.8	69.6	64.7	73.4
Weddington Street		-	57.7	55.5	50.9	59.5
Lofts at Noho	GF		63.5	61.4	56.7	65.4
Lankershim Boulevard		-	53.2	51.0	46.1	54.8
Weddington Street		-	63.1	61.0	56.4	65.0

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	39.9	47.7	51.9	54.4	55.8	56.9	58.0	60.0	60.9	59.9	61.2	63.0	61.7	61.9	60.2	58.2	56.9	56.0	56.9	56.2	54.0	50.9	47.7	40.7
			Even	37.4	45.0	49.7	52.2	53.7	54.7	55.9	58.9	58.7	57.8	59.2	60.9	59.0	59.4	58.7	56.2	54.8	53.9	54.4	54.7	51.8	48.4	45.0	38.0
			Night	32.9	40.0	44.8	47.2	48.7	49.8	50.9	53.9	53.8	52.8	54.2	55.9	54.0	54.4	53.2	51.2	49.9	48.9	49.4	49.2	46.9	43.4	40.0	33.0
			Lden	41.2	48.8	53.9	56.7	57.8	58.0	59.7	62.2	62.0	61.0	63.0	64.7	63.4	63.2	61.9	60.0	58.0	57.7	58.2	57.9	55.0	52.2	49.4	42.4
2	Lofts at Noho	GF	Day	32.7	39.9	44.7	46.9	47.8	49.7	50.0	52.9	51.4	51.4	53.9	53.9	52.4	53.7	51.7	50.7	49.9	48.7	48.2	47.2	46.2	42.0	37.2	34.9
			Even	30.0	37.4	42.0	44.4	45.7	47.0	48.9	50.8	49.2	49.2	51.4	51.8	50.2	51.0	49.0	48.0	47.4	46.0	46.7	45.2	44.2	40.4	35.7	32.4
			Night	25.2	32.7	37.2	39.7	41.0	42.2	43.8	46.7	44.0	44.0	46.7	47.7	45.7	46.2	44.9	43.9	42.7	41.2	41.4	40.9	39.9	35.8	30.9	27.7
			Lden	33.9	41.2	45.9	48.2	49.0	50.9	52.4	54.7	53.2	53.2	55.2	55.7	54.2	54.9	53.2	52.9	51.4	50.0	50.0	49.7	48.7	44.4	39.7	36.5


Lankershim Blvd
Weddington St
Lankershim Blvd
1 63.5 61.4 56.7 65.4
2
1 71.9 69.8 64.8 73.6
1
N
Metro Lankershim Option
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY A2

LANKERSHIM BOULEVARD FROM CHANDLER TO WEDDINGTON

2024 NO PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	21948	Total	-	1357	840	288	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	1029	638	219	56					
		Medium trucks	-	190	118	40	56					
		Heavy trucks	-	53	33	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	40	25	9	56					
		Auxiliary vehicle	-	39	24	9	56					
0+36	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	5672	Total	-	351	217	74	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	266	165	56	56					
		Medium trucks	-	49	30	10	56					
		Heavy trucks	-	14	8	3	56					
		Buses	-	1	1	0	56					
		Motorcycles	-	10	6	2	56					
		Auxiliary vehicle	-	10	6	2	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Buildir side	Floor	Height abv.gr m	Limit Day dB(A)	Limit Evenir dB(A)	Limit Night dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Evenir dB(A)	Level Night dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Evenir dB	Conflict Night dB	Conflict Lden dB
1	Kaiser Permanente	11373213	781499	West	GF	193.07	-	-	-	-	72.4	70.3	65.7	74.3	-	-	-	-
2	Lofts at Noho	11373293	781539	West	GF	192.95	-	-	-	-	64.0	61.9	57.3	65.9	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		72.4	70.3	65.7	74.3
Lankershim Boulevard		-	72.2	70.1	65.5	74.1
Weddington Street		-	58.2	56.0	51.4	60.0
Lofts at Noho	GF		64.0	61.9	57.3	65.9
Lankershim Boulevard		-	53.6	51.5	46.9	55.5
Weddington Street		-	63.6	61.5	56.9	65.5

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	40.(	47.(	52.:	54.!	56.:	57.4	58.!	61.'	61.4	60.4	61.8	63.!	62.:	62.(	60.'	58.!	57.4	56.!	57.(	56.'	54.4	51.(	48.:	41.:
			Even	37.!	45.!	50.:	52.!	54.:	55.:	56.4	59.(	59.:	58.:	59.'	61.4	60.'	59.!	58.(	56.'	55.:	54.4	54.!	54.(	52.:	48.!	46.'	39.
			Night	33.:	40.!	45.(	48.:	49.(	50.(	51.!	54.4	54.(	53.'	55.'	56.'	55.!	55.:	54.(	52.'	50.'	49.'	50.:	50.(	47.'	44.:	41.4	34.!
			Lden	41.!	49.!	54.:	56.!	58.:	59.:	60.4	63.(	63.:	62.:	63.'	65.:	64.'	63.!	62.(	60.'	59.:	58.:	58.!	58.(	56.:	52.!	50.(	43.
2	Lofts at Noho	GF	Day	32.(	40.(	44.(	47.(	48.:	49.(	51.'	53.4	51.!	51.!	54.(	54.4	52.!	53.(	52.:	51.:	50.(	48.(	48.'	47.!	46.!	43.'	37.!	35.(
			Even	30.!	37.!	42.!	44.!	46.:	47.4	48.!	51.:	49.!	49.'	51.!	52.:	50.!	51.4	50.'	49.'	47.!	46.!	46.(	45.'	44.'	40.!	35.(	32.!
			Night	25.!	33.:	37.!	40.:	41.(	42.!	44.:	46.(	45.'	45.'	47.:	47.(	46.:	46.!	45.4	44.4	43.:	41.!	41.!	41.(	40.(	36.:	31.(	28.:
			Lden	34.4	41.!	46.4	48.!	50.:	51.4	52.!	55.:	53.'	53.'	55.!	56.:	54.!	55.4	54.(	53.(	51.!	50.!	50.!	49.(	48.(	44.!	39.(	36.!

Lankershim Blvd
Weddington St
Lankershim Blvd
1 64.0 61.9 57.3 65.9
2
1 72.4 70.3 65.7 74.3
1
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY E2
LANKERSHIM BOULEVARD FROM CHANDLER TO WEDDINGTON
2024 PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Lankershim Boulevard							Traffic direction: In entry direction					
0+00(	22384	Total	-	1384	856	294	-	Traffic li	-	30.0	Average (of DGAC a	-0.6
		Automobiles	-	1049	650	223	56					
		Medium trucks	-	194	120	41	56					
		Heavy trucks	-	54	33	11	56					
		Buses	-	6	3	1	56					
		Motorcycles	-	41	25	9	56					
		Auxiliary vehicle	-	40	24	9	56					
0+36	-							-	-	-	-	-
Weddington Street							Traffic direction: In entry direction					
0+00(	6016	Total	-	372	230	79	-	Traffic li	-	30.0	Average (of DGAC a	-0.5
		Automobiles	-	282	175	60	56					
		Medium trucks	-	52	32	11	56					
		Heavy trucks	-	14	9	3	56					
		Buses	-	2	1	0	56					
		Motorcycles	-	11	7	2	56					
		Auxiliary vehicle	-	11	6	2	56					
0+31(	-							-	-	-	-	-

Receiver list

No.	Receiver name	Coordinates X in meter	Coordinates Y in meter	Buildir side	Floor	Height abv.gr m	Limit Day dB(A)	Limit Evenir dB(A)	Limit Night dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Evenir dB(A)	Level Night dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Evenir dB	Conflict Night dB	Conflict Lden dB
1	Kaiser Permanente	11373213	781499	West	GF	193.07	-	-	-	-	72.5	70.4	65.8	74.3	-	-	-	-
2	Lofts at Noho	11373293	781539	West	GF	192.95	-	-	-	-	64.3	62.2	57.5	66.1	-	-	-	-

Contribution levels of the receivers

Source name		Traffic lane	Level Day	Evening	Night	Lden
			dB(A)			
Kaiser Permanente	GF		72.5	70.4	65.8	74.3
Lankershim Boulevard		-	72.3	70.2	65.6	74.2
Weddington Street		-	58.4	56.3	51.7	60.3
Lofts at Noho	GF		64.3	62.2	57.5	66.1
Lankershim Boulevard		-	53.7	51.6	47.0	55.6
Weddington Street		-	63.9	61.8	57.1	65.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Kaiser Permanente	GF	Day	40.	47.	52.	55.	56.	57.	58.	61.	61.	60.	61.	63.	62.	62.	60.	58.	57.	56.	57.	56.	54.	51.	48.	41.
			Even	38.	45.	50.	52.	54.	55.	56.	59.	59.	58.	59.	61.	60.	60.	58.	56.	55.	54.	55.	54.	52.	49.	46.	39.
			Night	33.	41.	45.	48.	49.	50.	51.	54.	54.	53.	55.	56.	55.	55.	54.	52.	50.	49.	50.	50.	47.	44.	41.	34.
			Lden	42.	49.	54.	56.	58.	59.	60.	63.	63.	62.	63.	65.	64.	64.	62.	60.	59.	58.	58.	58.	56.	52.	50.	43.
2	Lofts at Noho	GF	Day	32.	40.	44.	47.	48.	49.	51.	53.	52.	52.	54.	54.	53.	53.	52.	51.	50.	48.	48.	48.	47.	43.	38.	35.
			Even	30.	38.	42.	45.	46.	47.	49.	51.	50.	50.	52.	52.	51.	51.	50.	49.	48.	46.	46.	45.	44.	41.	35.	33.
			Night	26.	33.	38.	40.	41.	43.	44.	46.	45.	45.	47.	47.	46.	47.	45.	44.	43.	42.	42.	41.	40.	36.	31.	28.
			Lden	34.	42.	46.	49.	50.	51.	53.	55.	54.	53.	56.	56.	55.	55.	54.	53.	52.	50.	50.	49.	48.	45.	39.	37.

Lankershim Blvd
Weddington St
Lankershim Blvd
1 64.3 62.2 57.5 66.1
2
1 72.5 70.4 65.8 74.3
1
N
Signs and symbols
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 106
0 15 30 60 90 120
feet

KEY E2
COLORADO STREET FROM CENTRAL TO BRAND
2019 BASE YEAR

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Brand Boulevard							Traffic direction: In entry direction					
0+00(	18756	Total	-	1162	719	242	-	Traffic li	-	30.0	Average (of DGAC a	-1.1 / 1
		Automobiles	-	883	546	184	56					
		Medium trucks	-	163	101	34	56					
		Heavy trucks	-	45	28	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	34	21	7	56					
		Auxiliary vehicle	-	33	20	7	56					
0+24	-							-	-	-	-	-
Colorado Street							Traffic direction: In entry direction					
0+00(	28256	Total	-	1747	1081	371	-	Traffic li	-	30.0	Average (of DGAC a	1.0
		Automobiles	-	1328	821	282	56					
		Medium trucks	-	245	152	52	56					
		Heavy trucks	-	68	42	14	56					
		Buses	-	6	5	2	56					
		Motorcycles	-	51	32	11	56					
		Auxiliary vehicle	-	50	30	11	56					
0+32(	-							-	-	-	-	-

Receiver list

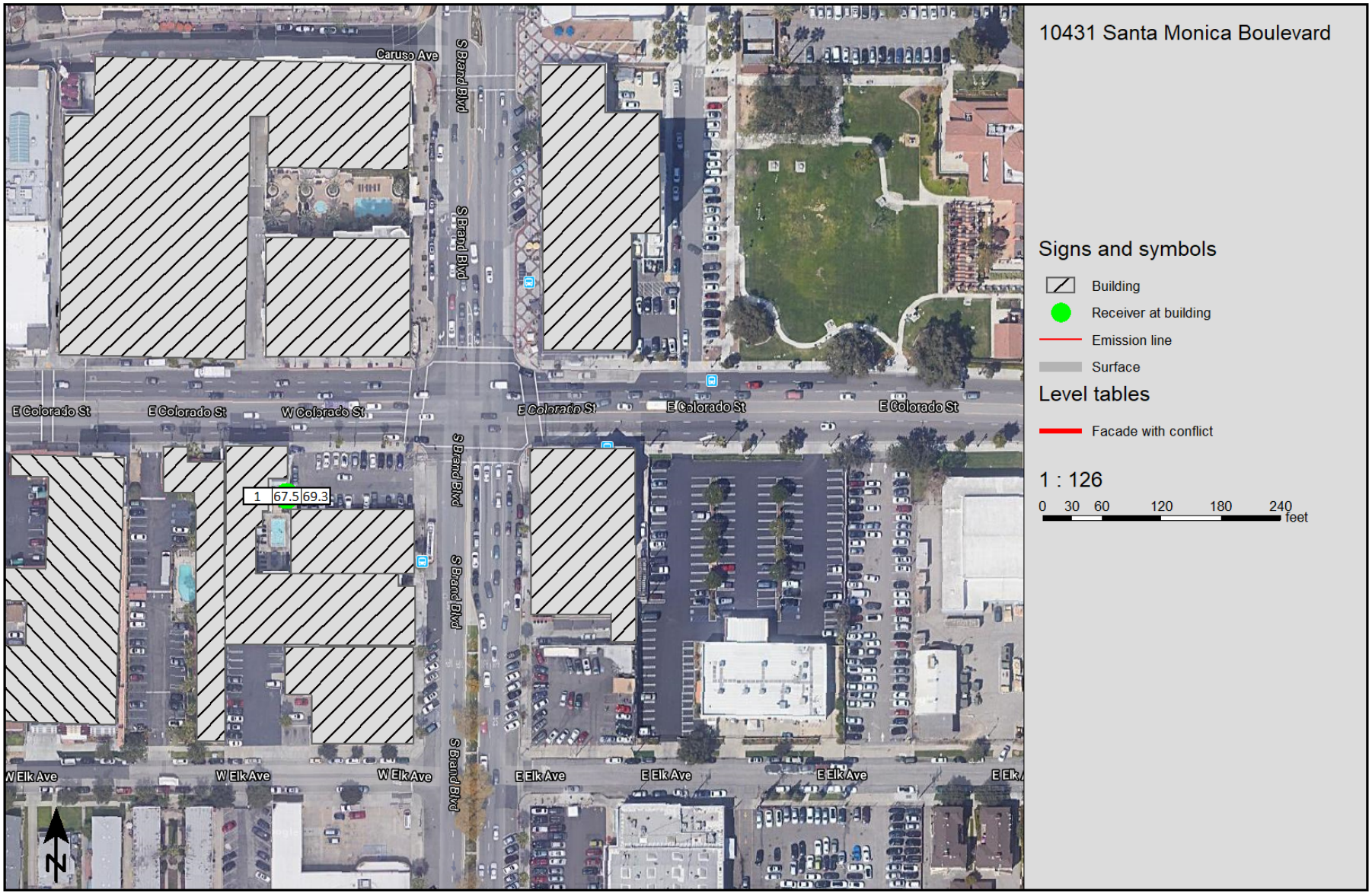
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hampton Inn & Suites	11384235.83778650.76	South	GF	160.48	-	-	67.5	69.3	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hampton Inn & Suites	GF	67.5	69.3		
Brand Boulevard		-		60.7	62.5
Colorado Street		-		66.5	68.3

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hampton Inn & Su	GF	Day	36.9	44.0	49.9	52.2	53.3	54.3	55.2	56.2	55.9	55.2	56.0	56.3	56.2	57.3	55.0	54.3	53.3	52.0	52.3	49.3	48.0	46.3	42.3	33.3
			Lden	38.8	46.9	51.2	54.0	55.9	56.9	57.3	58.3	57.2	57.3	58.9	58.9	58.3	58.9	57.0	56.9	55.9	54.0	53.9	51.9	50.4	48.9	43.9	35.0


10431 Santa Monica Boulevard
Caruso Ave
S Brand Blvd
E Colorado St
W Colorado St
W Elk Ave
E Elk Ave
1 67.5 69.3
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 126
0 30 60 120 180 240
feet
N

KEY E2
COLORADO STREET FROM CENTRAL TO BRAND
2024 NO PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Brand Boulevard							Traffic direction: In entry direction					
0+00(	18756	Total	-	1162	719	242	-	Traffic li	-	30.0	Average (of DGAC a	-1.1 / 1
		Automobiles	-	883	546	184	56					
		Medium trucks	-	163	101	34	56					
		Heavy trucks	-	45	28	9	56					
		Buses	-	4	3	1	56					
		Motorcycles	-	34	21	7	56					
		Auxiliary vehicle	-	33	20	7	56					
0+24	-							-	-	-	-	-
Colorado Street							Traffic direction: In entry direction					
0+00(	30988	Total	-	1916	1185	407	-	Traffic li	-	30.0	Average (of DGAC a	1.0
		Automobiles	-	1456	900	309	56					
		Medium trucks	-	269	166	57	56					
		Heavy trucks	-	74	46	15	56					
		Buses	-	7	5	2	56					
		Motorcycles	-	56	35	12	56					
		Auxiliary vehicle	-	54	33	12	56					
0+32(	-							-	-	-	-	-

Receiver list

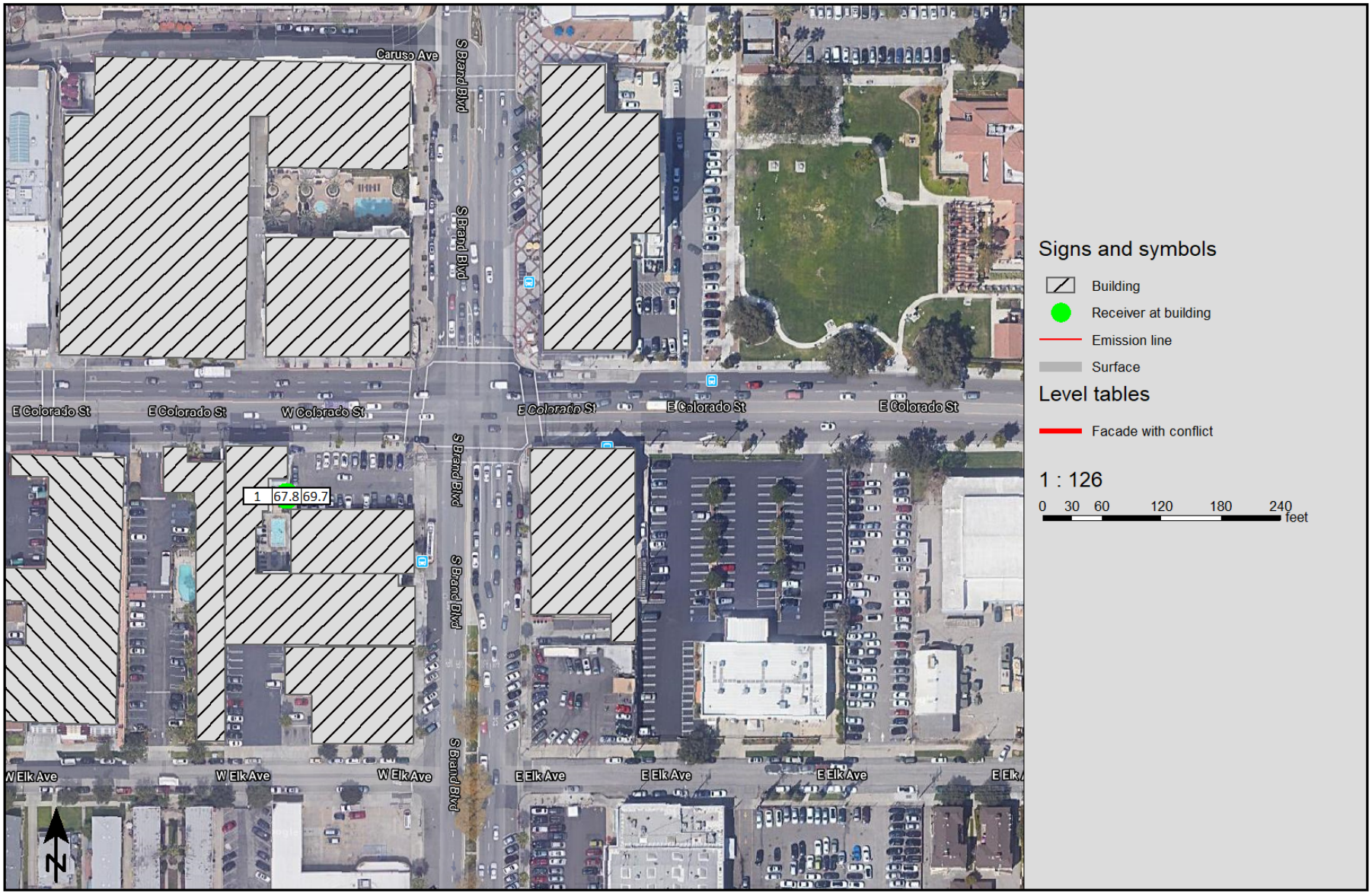
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hampton Inn & Suites	11384235.83778650.76	South	GF	160.48	-	-	67.8	69.7	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hampton Inn & Suites	GF	67.8	69.7		
Brand Boulevard		-		60.7	62.5
Colorado Street		-		66.9	68.7

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hampton Inn & Su	GF	Day	37.3	44.9	49.8	52.9	54.8	55.8	55.8	56.8	55.9	55.8	57.0	57.0	56.8	57.4	56.7	55.8	54.8	53.7	52.4	50.0	48.9	47.7	42.9	34.
			Lden	39.7	46.8	51.0	54.4	55.9	56.8	57.4	58.4	57.7	57.4	58.8	58.9	58.4	59.2	57.9	56.8	55.9	54.9	54.2	51.8	50.8	48.9	44.3	35.


Caruso Ave
S Brand Blvd
E Colorado St
W Colorado St
W Elk Ave
E Elk Ave
1 67.8 69.7
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 126
0 30 60 120 180 240
feet

KEY E2
COLORADO STREET FROM CENTRAL TO BRAND
2024 PROJECT

Noise emissions of road traffic

Statio km	ADT Veh/24	Vehicles type	Vehicle name	Traffic values day Veh/h	evening Veh/h	night Veh/h	Speed km/h	Control device	Cons Spee km/h	Affec veh. %	Road surface	Gradie Min / M %
Brand Boulevard							Traffic direction: In entry direction					
0+00(	21304	Total	-	1317	815	280	-	Traffic li	-	30.0	Average (of DGAC a	-1.1 / 1
		Automobiles	-	1001	619	213	56					
		Medium trucks	-	185	114	39	56					
		Heavy trucks	-	51	32	10	56					
		Buses	-	5	3	1	56					
		Motorcycles	-	39	24	8	56					
		Auxiliary vehicle	-	37	23	8	56					
0+24	-							-	-	-	-	-
Colorado Street							Traffic direction: In entry direction					
0+00(	31816	Total	-	1967	1217	418	-	Traffic li	-	30.0	Average (of DGAC a	1.0
		Automobiles	-	1495	924	318	56					
		Medium trucks	-	276	171	59	56					
		Heavy trucks	-	76	47	16	56					
		Buses	-	7	5	2	56					
		Motorcycles	-	58	36	12	56					
		Auxiliary vehicle	-	56	34	12	56					
0+32(	-							-	-	-	-	-

Receiver list

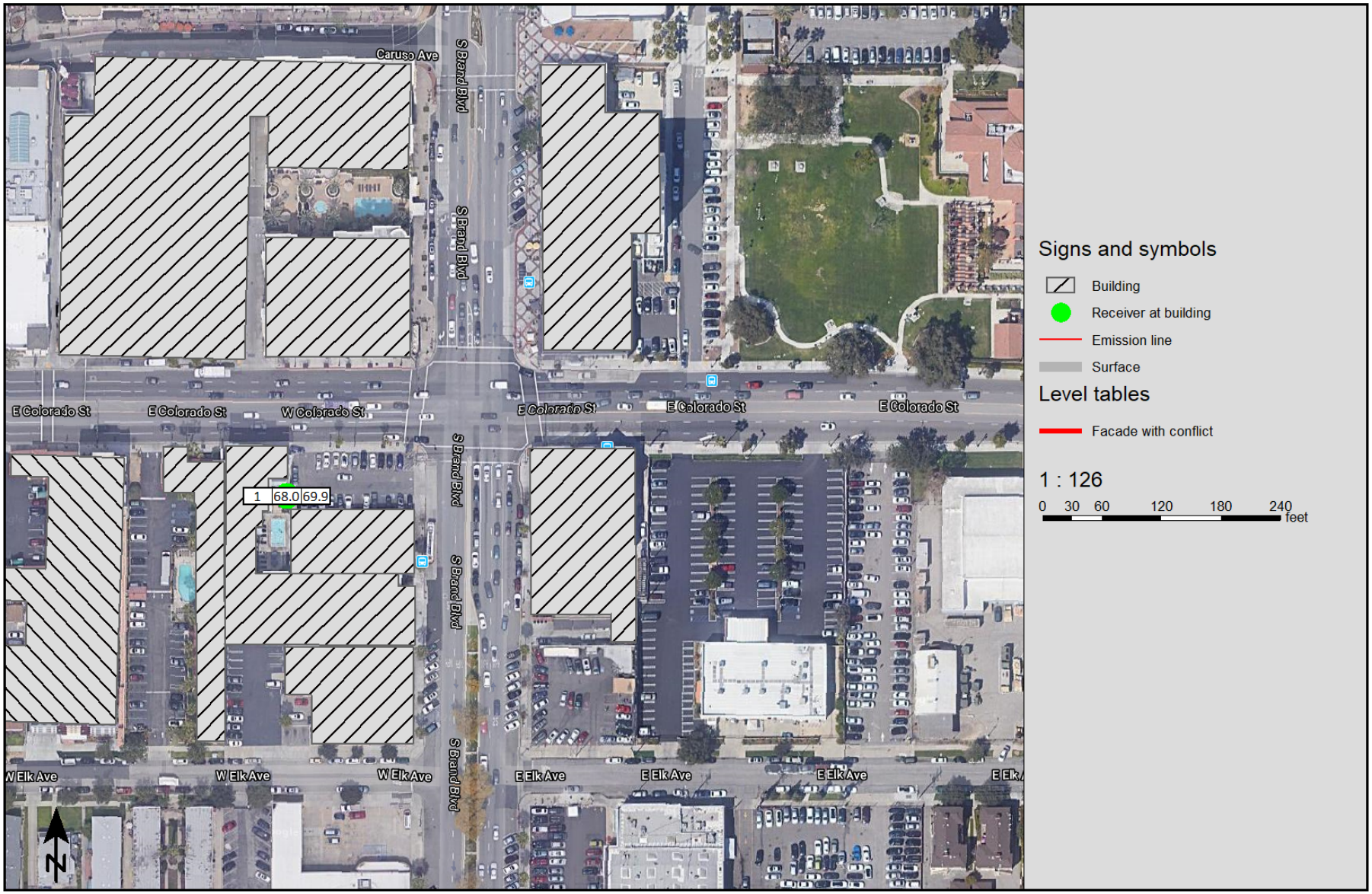
No.	Receiver name	Coordinates X Y in meter	Building side	Floor	Height abv.grd. m	Limit Day dB(A)	Limit Lden dB(A)	Level Day dB(A)	Level Lden dB(A)	Conflict Day dB	Conflict Lden dB
1	Hampton Inn & Suites	11384235.83778650.76	South	GF	160.48	-	-	68.0	69.9	-	-

Contribution levels of the receivers

Source name		Traffic lane		Level Day	Level Lden
				dB(A)	
Hampton Inn & Suites	GF	68.0	69.9		
Brand Boulevard		-		61.3	63.1
Colorado Street		-		67.0	68.8

Spectra of the receivers

No	Name	Floor	Time	50 H	63 H	80 H	100	125	160	200	250	315	400	500	630	800	1 kH	1 kH	2 kH	2 kH	3 kH	4 kH	5 kH	6 kH	8 kH	10 k
1	Hampton Inn & Su	GF	Day	37.5	45.3	50.0	52.3	54.2	55.2	55.6	56.8	56.0	55.8	57.2	57.2	56.8	57.0	56.3	55.2	54.2	53.3	52.0	50.2	49.3	47.2	42.0	34.1
			Lden	39.5	47.0	51.5	54.0	56.0	57.3	57.3	58.0	57.5	57.0	59.0	59.3	58.3	59.4	58.3	57.0	56.3	55.2	54.5	52.0	50.5	49.0	44.5	36.1


Caruso Ave
S Brand Blvd
E Colorado St
W Colorado St
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1 68.0 69.9
N
Signs and symbols
Building
Receiver at building
Emission line
Surface
Level tables
Facade with conflict
1 : 126
0 30 60 120 180 240
feet