

APPENDIX C

NOISE AND VIBRATION ANALYSIS

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MEMORANDUM

DATE: December 11, 2019

To: Christopher Koontz, AICP, Planning Bureau Manager

FROM: J.T. Stephens, Senior Noise Specialist

SUBJECT: Noise and Vibration Impact Analysis: Modified Belmont Pool Revitalization Project

INTRODUCTION AND PROJECT DESCRIPTION

This Noise and Vibration Impact Analysis has been prepared to evaluate the potential impacts associated with the proposed Modified Belmont Pool Revitalization Project (Modified Project) in the City of Long Beach (City), Orange County, California. More specifically, the potential impacts would be compared to those determined in the Certified 2016 Environmental Impact Report (EIR) (LSA 2016) for the Belmont Pool Project (Approved Project). This analysis would also ensure that previously determined mitigation measures would be capable of reducing potential impacts to less than significant. The analysis is intended to satisfy the City's requirement for a project-specific noise impact analysis and examines the impacts of the proposed noise-sensitive uses on the project site together with the project design features and standard conditions. Future noise level impacts are based on modeled traffic volumes (*Belmont Plaza Pool Revised Traffic Analysis*, LSA 2019) to properly account for the impacts associated with the surrounding traffic.

CEQA Baseline

At the time the Notice of Preparation (NOP) was issued, the Project site contained both the Belmont Pool facilities and the outdoor temporary pool (opened in December 2013 to provide swimming facilities while the permanent facility was under construction). Although the site contained the former Belmont Pool building at the time of the NOP, the facility was subsequently demolished in February 2015 to alleviate an imminent public safety threat due to the seismically unsafe condition of the building.

The temporary outdoor pool is currently used by clubs, local high schools, and the general public, and creates noise associated with spectators, whistles and recreational activities. Therefore, the activities associated with the temporary outdoor pool represent an accurate portrayal of the existing noise conditions for the site. In addition, the temporary outdoor pool is part of the baseline condition because it was opened prior to the release of the NOP issued by the City for the proposed Project.

Location and Description

The Modified Project site is located on a site in Belmont Shore Beach Park that formerly contained the Belmont Plaza Olympic Pool, which was operated by the City Department of Parks, Recreation

and Marine. Figure 1, below, shows the project location, and Figure 2 illustrates the modified site plan.

METHODOLOGY

The evaluation of noise impacts associated with the Modified Project includes the following:

- Determination of the short-term construction noise impacts on on-site and off-site noise-sensitive uses with industry-recognized noise emission levels for construction equipment;
- Determination of the long-term operational noise impacts, including vehicular traffic and aircraft activities, on on-site and off-site noise-sensitive uses; and
- Determination of the required mitigation measures to reduce short-term and long-term noise impacts from all sources.

CHARACTERISTICS OF SOUND

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations, or cycles per second, of a wave resulting in the tone's range from high to low. Loudness is the strength of a sound that describes a noisy or quiet environment and is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity refers to how hard the sound wave strikes an object, which in turn produces the sound's effect. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses.

Measurement of Sound

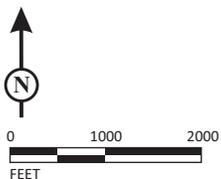
Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units (e.g., inches or pounds), decibels are measured on a logarithmic scale representing points on a sharply rising curve.

For example, 10 decibels (dB) is 10 times more intense than 1 dB, 20 dB is 100 times more intense than 1 dB, and 30 dB is 1,000 times more intense than 1 dB. Thirty decibels (30 dB) represent 1,000 times as much acoustic energy as 1 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).



FIGURE 1

LSA



SOURCE: USGS 7.5' Quad - Long Beach, California
 I:\CLB1904.06\G\Project Location.cdr (11/26/2019)

Modified Belmont Pool Revitalization Project
 Project Location

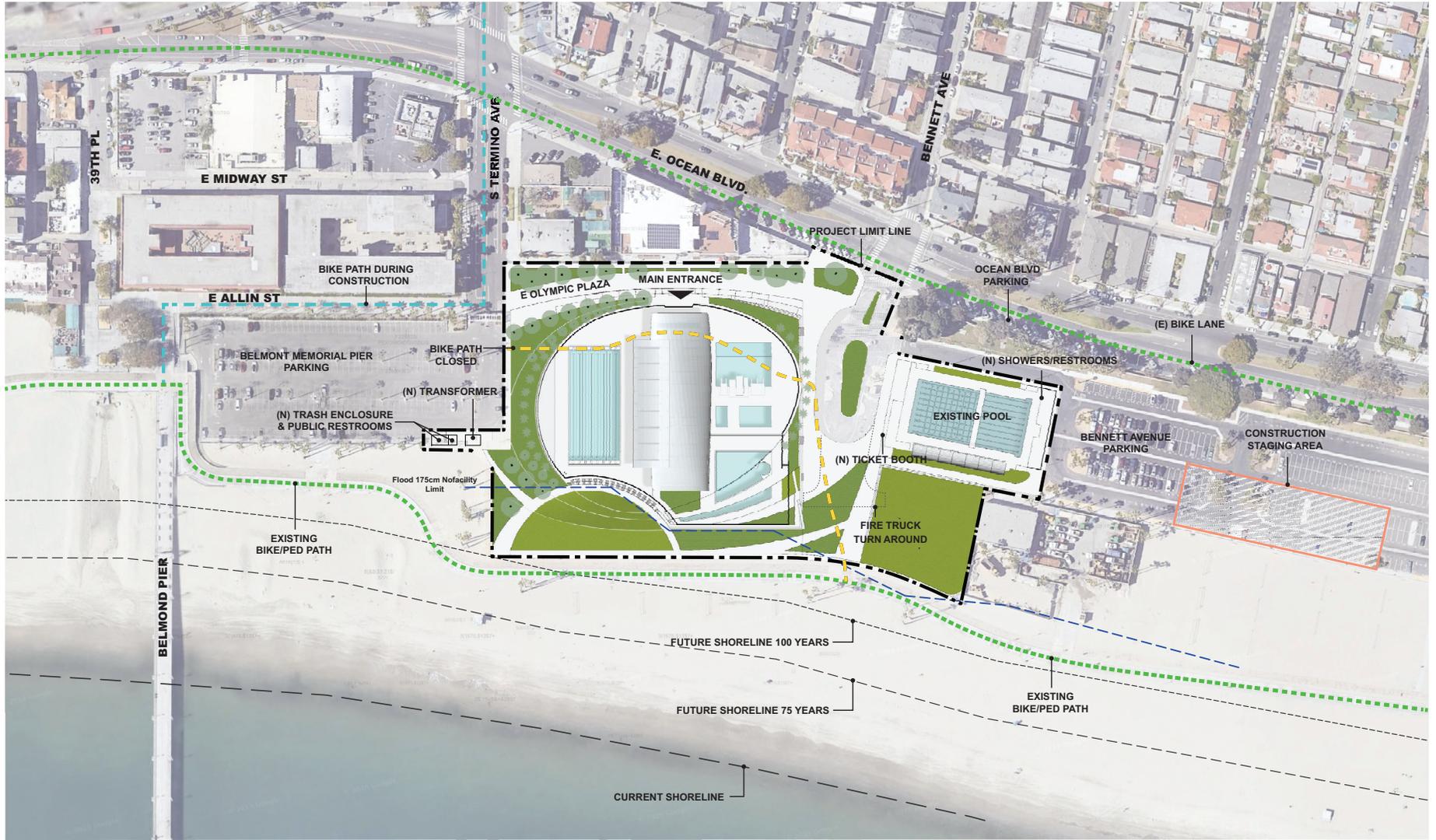
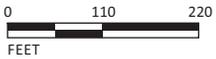


FIGURE 2

LSA



SOURCE: Hastings+Chivetta

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single-point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source (e.g., highway traffic or railroad operations) the sound decreases 3 dB for each doubling of distance in a hard site environment. Similarly, line sources with intervening absorptive vegetation or line sources which are located at a great distance to the receptor would decrease 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on A-weighted decibels (dBA). CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours), and a 10 dBA weighting factor applied to noises occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The City uses the CNEL noise scale for long-term noise impact assessment.

Other noise rating scales of importance when assessing the annoyance factor include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max} , which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale or noise standards in terms of percentile noise levels in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level (i.e., half the time the noise level exceeds this level, and half the time it is less than this level). The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first is audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise levels of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels (3.0 dB or greater) are considered potentially significant.

Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160–165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying less developed areas.

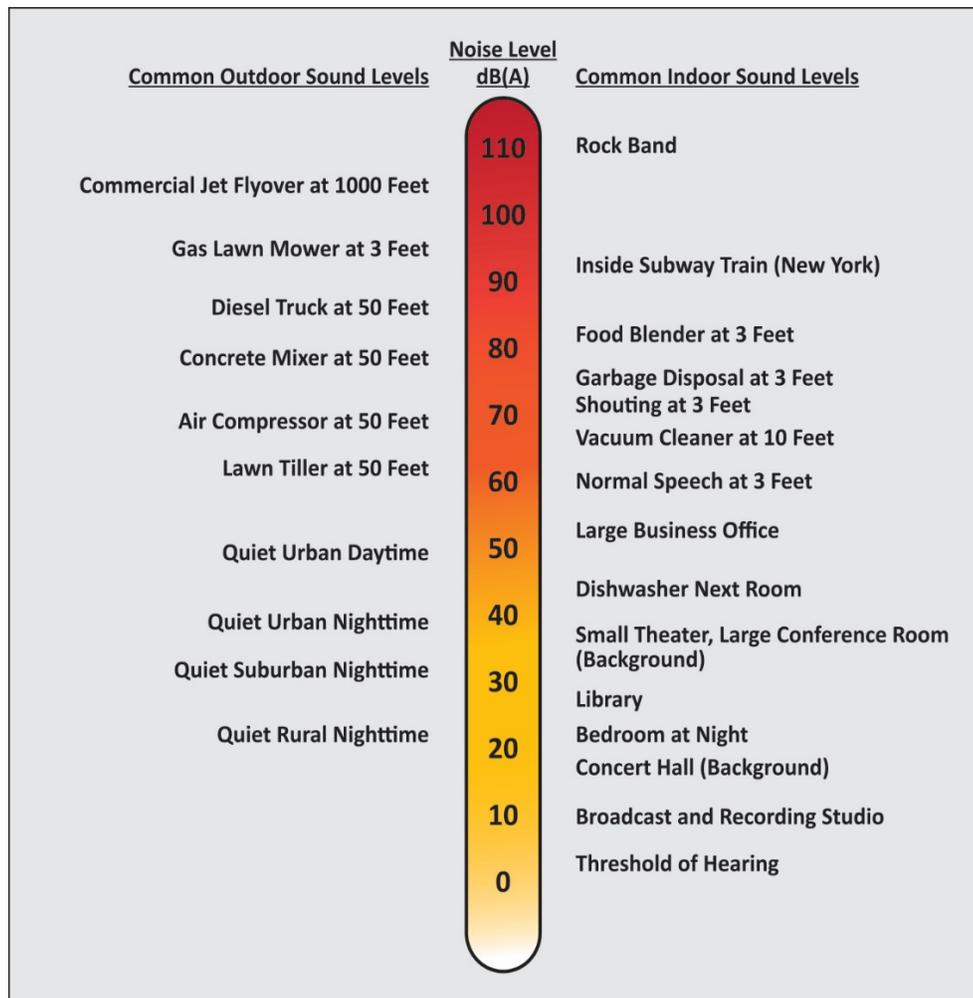
Table A lists definitions of acoustical terms, and Table B shows common sound levels and their sources.

Table A: Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit of level that denotes the ratio between two quantities proportional to power, the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter deemphasizes the very low and very high frequency components of the sound in a manner similar to the frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this assessment are A-weighted, unless reported otherwise.
L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀	The fast A-weighted noise levels equaled or exceeded by a fluctuating sound level for 1 percent, 10 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L _{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L _{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L _{max} , L _{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content, as well as the prevailing ambient noise level.

Source: *Handbook of Acoustical Measurements and Noise Control* (Harris, Cyril M., 1991).

Table B: Common Sound Levels and Noise Sources



Source: Compiled by LSA (2016).

CHARACTERISTICS OF VIBRATION

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible. Typically, there is a more adverse reaction to effects associated with the shaking of a building. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet (ft) from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft (Federal Transit Administration's (FTA) 2018 *Transit Noise and Vibration Impact Assessment Manual*). When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, construction of the project could result in ground-borne vibration that may be perceptible and annoying.

Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for typical construction activities to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile driving to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 2018). Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. Vibration velocity level in decibels is defined as:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the vibration velocity in decibels (VdB), "V" is the RMS velocity amplitude, and " V_{ref} " is the reference velocity amplitude, or 1×10^{-6} inches/second (inch/sec) used in the United States.

Factors that influence ground-borne vibration and noise include the following:

- **Vibration Source:** Vehicle suspension, wheel types and condition, railroad track/roadway surface, railroad track support system, speed, transit structure, and depth of vibration source
- **Vibration Path:** Soil type, rock layers, soil layering, depth to water table, and frost depth
- **Vibration Receiver:** Foundation type, building construction, and acoustical absorption

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground compared to when it is at the ground surface. In addition, soil conditions are known to have a strong influence on the levels of ground-borne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock.

Experience with ground-borne vibration indicates: (1) vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and (2) shallow rock seems to concentrate the vibration energy close to the surface and can result in ground-borne vibration problems at large distances. Factors such as layering of the soil and the depth to the water table can have significant effects on the propagation of ground-borne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

THRESHOLDS OF SIGNIFICANCE

Based on the *Guidelines for the Implementation of the California Environmental Quality Act (CEQA)*, Appendix G, Public Resources Code, Sections 15000–15387, a project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and the goals of the community in which it is located. The following are the thresholds for potential noise impacts.

Traffic Noise

A proposed project would normally have a significant off-site traffic noise impact if both of the following criteria are met:

- Long-term project traffic will cause a noise level increase of 3 dBA or more on a roadway segment adjacent to a noise-sensitive land use. Noise-sensitive land uses include the following: residential (single-family, multifamily, and mobile home); transient lodging (e.g., hotels and motels); nursing homes; hospitals; schools; and parks, playgrounds, and recreation areas.
- The resulting “future with project” noise level exceeds the noise standard for sensitive land uses as identified in the City’s General Plan.

A proposed project would normally have a significant on-site traffic noise impact if future noise levels exceed the exterior noise standard for sensitive land uses as identified in the City’s General Plan.

Stationary Noise

As part of the City of Long Beach Municipal Code, the Noise Ordinance sets limits on the level and duration of time a stationary noise source may impact a residential area. The determination that a project has the potential to exceed the City’s established noise limits is typically based on a noise technical report prepared by a qualified acoustical consultant. The project would normally have a significant noise impact if it would exceed the stationary source noise criteria for the City as specified by the noise standards set forth in the regulatory setting section below.

APPLICABLE NOISE STANDARDS

The following information provides standards to which potential noise impacts will be compared, such that exceedances, where appropriate, will be identified and mitigation will be recommended.

City of Long Beach General Plan

The Noise Element of the General Plan contains noise standards for mobile noise sources. These standards address the impacts of noise from adjacent roadways and airports. The City specifies outdoor and indoor noise limits for residential uses, places of worship, educational facilities, hospitals, hotels/motels, and commercial and other land uses. The noise standard for exterior living areas is 65 dBA CNEL. The indoor noise standard is 45 dBA CNEL, which is consistent with the standard in the California Noise Insulation Standard.

City of Long Beach Municipal Code

The City has adopted a quantitative Noise Control Ordinance, No. C-5371, Long Beach 1977 (Municipal Code, Chapter 8.80). The ordinance establishes maximum permissible hourly noise levels generated from operations for different districts throughout the City. Tables C and D list exterior noise and interior noise limits for various land uses.

Table C: Exterior Noise Limits, L_N (dBA)

Receiving Land Use	Time Period	L_{50}	L_{25}	L_8	L_2	L_{max}
Residential (District One)	Night: 10:00 PM–7:00 AM	45	50	55	60	65
	Day: 7:00 AM–10:00 PM	50	55	60	65	70
Commercial (District Two)	Night: 10:00 PM–7:00 AM	55	60	65	70	75
	Day: 7:00 AM–10:00 PM	60	65	70	75	80
Industrial (District Three)	Anytime ¹	65	70	75	80	85
Industrial (District Four)	Anytime ¹	70	75	80	85	90

Source: City of Long Beach Municipal Code.

¹ For use at boundaries rather than for noise control within industrial districts.

dBA = A-weighted decibels

L_{max} = maximum sound level

L_N = percentile noise exceedance level

L_{50} = noise level representing the median noise level; half the time, the noise level exceeds this level, and half the time, it is less than this level

L_{25} = the noise level exceeded 25 percent of the time during a stated period

L_8 = the noise level exceeded 8 percent of the time during a stated period

L_2 = the noise level exceeded 2 percent of the time during a stated period

Table D: Maximum Interior Sound Levels, L_N (dBA)

Receiving Land Use	Time Interval	L_8	L_2	L_{max}
Residential	10:00 PM–7:00 AM	35	40	45
	7:00 AM–10:00 PM	45	50	55
School	7:00 AM–10:00 PM (while school is in session)	45	50	55
Hospital and other Noise-Sensitive Zones	Anytime	40	45	50

Source: City of Long Beach Municipal Code.

dBA = A-weighted decibels

L_{max} = maximum sound level

L_N = percentile noise exceedance level

L_8 = the noise level exceeded 8 percent of the time during a stated period

L_2 = the noise level exceeded 2 percent of the time during a stated period

The City’s Noise Control Ordinance (Section 8.80.202) governs the time of day that construction work can be performed. The Noise Ordinance prohibits construction, drilling, repair, remodeling, alteration, or demolition work between the hours of 7:00 p.m. and 7:00 a.m. on weekdays or federal holidays (considered a weekday) if the noise would create a disturbance across a residential or commercial property line or violate the quantitative provisions of the ordinance, except for emergency work authorized by the building official. The Noise Ordinance also prohibits construction, drilling, repair, remodeling, alteration, or demolition work between the hours of 7:00 p.m. on Friday and 9:00 a.m. on Saturday and after 6:00 p.m. on Saturday, except for emergency work authorized by the building official. No construction, drilling, repair, remodeling, alteration, or demolition work shall occur at any time on Sundays, except for emergency work authorized by the building official.

APPLICABLE VIBRATION STANDARDS

The following information provides standards to which potential vibration impacts will be compared, such that exceedances, where appropriate, will be identified and mitigation will be recommended.

City of Long Beach Municipal Code

Section 8.80.200G of the City's Municipal Code provides the following direction regarding vibration impacts:

“Operating or permitting the operation of any device that creates 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 one hundred fifty feet (150’) (forty-six (46) meters) from the source if on a public space or public right-of-way. For the purposes of this subsection, “vibration perception threshold” means the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such directed means as, but not limited to, sensation by touch or visual observation of moving objects.”

OVERVIEW OF THE EXISTING NOISE ENVIRONMENT

The sensitive land uses within the vicinity of the Modified Project site include the Belmont Shores Children's Center, which is located approximately 25 ft from the northern project boundary, and residences to the north, east, and west of the project site across East Ocean Boulevard and Termino Avenue. The primary existing noise sources in the project area are transportation facilities. In addition, operational noise from the temporary outdoor pool and periodic aircraft operations are audible from the project site.

Vehicular Traffic Noise

In addition to the existing noise level measurements, the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to identify traffic-related noise impacts from the roadway segments in the project vicinity. Existing traffic volumes in the *Belmont Plaza Pool Revised Traffic Analysis* (LSA 2019) prepared for the proposed project were used to assess the existing traffic noise impacts. A typical vehicle mix for Southern California was used.

The primary existing noise sources in the project area are from vehicle traffic on project area roadways. Other existing noise sources in the project area include activity associated with the temporary outdoor pool, which is used by clubs, local high schools, and the general public. Noise from motor vehicles is generated by engine vibrations, the interaction between the tires and the road, and the exhaust systems. Traffic on Ocean Boulevard, Termino Avenue, and Bennett Avenue contributes to the area ambient noise levels. Tables E and F provide the traffic noise levels along the roadways adjacent to the project site under the existing conditions. These noise levels are representative of the worse-case scenario, which assumes no shielding exists between the traffic and the locations from which the noise contours are drawn. The specific assumptions used in developing these noise levels and model printouts are provided in Attachment A.

Table E: Existing Weekday Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ocean Boulevard west of Redondo Avenue	25,710	58	117	248	68.2
Ocean Boulevard between Redondo Avenue and Loma Avenue	26,310	59	119	252	68.3
Ocean Boulevard between Loma Avenue and Mira Mar Avenue	24,065	56	112	237	67.9
Ocean Boulevard between Mira Mar Avenue and Termino Avenue	6,050	< 50	< 50	97	61.9
Ocean Boulevard between Termino Avenue and Bennett Avenue	9,090	< 50	62	126	63.7
Ocean Boulevard between Bennett Avenue and Granada Avenue	8,035	< 50	58	116	63.2
Ocean Boulevard east of Granada Avenue	6,920	< 50	< 50	106	62.5
Livingston Avenue between Mira Mar Avenue and Termino Avenue	18,380	< 50	95	199	66.8
Livingston Avenue between Termino Avenue and 2nd Street	19,365	< 50	98	206	67.0
Livingston Avenue east of 2nd Street	3,170	< 50	< 50	66	59.1
2nd Street south of Livingston Avenue	19,330	< 50	< 50	97	63.6
Termino Avenue south of Ocean Boulevard	2,790	< 50	< 50	< 50	57.6
Termino Avenue between Ocean Boulevard and Livingston Avenue	3,200	< 50	< 50	< 50	58.2
Termino Avenue north of Livingston Avenue	800	< 50	< 50	< 50	52.2
Bennett Avenue south of Ocean Boulevard	1,540	< 50	< 50	< 50	52.6
Bennett Avenue north of Ocean Boulevard	820	< 50	< 50	< 50	49.9
Granada Avenue south of Ocean Boulevard	520	< 50	< 50	< 50	47.9
Granada Avenue north of Ocean Boulevard	1,360	< 50	< 50	< 50	52.1

Source: Compiled by LSA (November 2019).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = foot/feet

Table F: Existing Weekend Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ocean Boulevard west of Redondo Avenue	15,910	< 50	87	181	66.1
Ocean Boulevard between Redondo Avenue and Loma Avenue	16,625	< 50	89	186	66.3
Ocean Boulevard between Loma Avenue and Mira Mar Avenue	16,720	< 50	89	187	66.3
Ocean Boulevard between Mira Mar Avenue and Termino Avenue	6,050	< 50	< 50	97	61.9
Ocean Boulevard between Termino Avenue and Bennett Avenue	8,430	< 50	60	120	63.4
Ocean Boulevard between Bennett Avenue and Granada Avenue	6,840	< 50	< 50	105	62.5
Ocean Boulevard east of Granada Avenue	5,970	< 50	< 50	96	61.9
Livingston Avenue between Mira Mar Avenue and Termino Avenue	11,545	< 50	71	147	64.7
Livingston Avenue between Termino Avenue and 2nd Street	12,170	< 50	74	152	65.0
Livingston Avenue east of 2nd Street	2,900	< 50	< 50	62	58.7
2nd Street south of Livingston Avenue	15,260	< 50	< 50	83	62.6
Termino Avenue south of Ocean Boulevard	2,740	< 50	< 50	< 50	57.5
Termino Avenue between Ocean Boulevard and Livingston Avenue	3,970	< 50	< 50	60	59.1
Termino Avenue north of Livingston Avenue	960	< 50	< 50	< 50	52.9
Bennett Avenue south of Ocean Boulevard	1,700	< 50	< 50	< 50	53.0
Bennett Avenue north of Ocean Boulevard	800	< 50	< 50	< 50	49.8
Granada Avenue south of Ocean Boulevard	1,520	< 50	< 50	< 50	52.5
Granada Avenue north of Ocean Boulevard	1,800	< 50	< 50	< 50	53.3

Source: Compiled by LSA (November 2019).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = foot/feet

Aircraft Noise

Based on the Long Beach Airport Noise Contours map included in the *Long Beach Airport Terminal Area Improvement Project EIR* (City of Long Beach 2005), the project site is located approximately 3 miles south of the Long Beach Airport 65 dBA CNEL contour.

PROJECT IMPACT ANALYSIS

The project would result in short-term construction noise and vibration impacts and long-term mobile source noise and vibration impacts as described below.

Short-Term Construction-Related Impacts

Project construction would result in short-term noise and vibration impacts on these adjacent land uses. Maximum construction impacts would be short-term, generally intermittent depending on the construction phase, and variable depending on the receiver distance from the active construction zone. The duration of impacts generally would be from one day to several days depending on the phase of construction. The levels and types of impacts that would occur during construction are described below.

Construction Noise Impacts Two types of short-term noise impacts would occur during project construction, including: (1) equipment delivery and construction worker commutes; and (2) project construction operations.

The first type of short-term construction noise would result from transport of construction equipment and materials to the project site and construction worker commutes. These transportation activities would incrementally raise noise levels on access roads leading to the site. It is expected that larger trucks used in equipment delivery would generate higher noise impacts than trucks associated with worker commutes. The single-event noise from equipment trucks passing at a distance of 50 ft from a sensitive noise receptor would reach a maximum level of 84 dBA L_{max} . However, the pieces of heavy equipment for grading and construction activities would be moved on site just one time and would remain on site for the duration of each construction phase. This one-time trip, when heavy construction equipment is moved on and off site, would not add to the daily traffic noise in the project vicinity. The total number of daily vehicle trips would be minimal when compared to existing traffic volumes on the affected streets, and the long-term noise level change associated with these trips would not be perceptible. Therefore, equipment transport noise and construction-related worker commute impacts would be short term and would not result in a significant off-site noise impact.

The second type of short-term noise impact is related to noise generated during site preparation, grading, building construction, architectural coating, and paving on the project site. Construction is undertaken in discrete steps, each of which has its own mix of equipment, and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table G lists the maximum noise levels recommended for noise impact assessments for typical construction equipment based on a distance of 50 ft between the equipment and a noise receptor. Typical operating cycles for these types of construction equipment may involve 1 to 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings.

Table G: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L _{max}) at 50 ft ¹
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).

Note: Noise levels reported in this table are rounded to the nearest whole number.

¹ Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston’s Noise Code for the “Big Dig” project.

FHWA = Federal Highway Administration

ft = foot/feet

L_{max} = maximum instantaneous sound level

Construction of the proposed project is expected to require the use of graders, bulldozers, water trucks, and pickup trucks. Noise associated with the use of construction equipment is estimated to be between 75 and 85 dBA L_{max} at a distance of 50 ft from the active construction area for the grading phase. As seen in Table G, the maximum noise level generated by each grader is assumed to be approximately 85 dBA L_{max} at 50 ft from the grader in operation. Each dozer would generate approximately 82 dBA L_{max} at 50 ft. The maximum noise level generated by water trucks/pickup trucks is approximately 75 dBA L_{max} at 50 ft from these vehicles. Each doubling of the sound source with equal strength increases the noise level by 3 dBA. Each piece of construction equipment operates as an individual point source.

In addition to standard construction equipment, the project anticipates the use of hydraulic hammer pile drivers. Noise generated by a hydraulic hammer pile driver was evaluated to be similar to a typical pile driver. Table G shows that a typical pile driver generates noise levels of approximately 95 dBA L_{max} at 50 ft. If pile driving is conducted concurrently with site preparation, the construction site could potentially generate noise levels of 96 dBA L_{max} at a distance of 50 ft.

The following land uses are located within the vicinity of the proposed construction activities:

- **Residential Uses.** The closest residences to the northeast and northwest are located approximately 100 ft and 80 ft from the project construction boundary and may be subjected to short-term noise reaching 90 and 92 dBA L_{max} , respectively, generated by the proposed project construction activities.
- **Belmont Shores Children's Center.** The Belmont Shores Children's Center is located approximately 25 ft from the project construction boundary and may be subject to short-term noise reaching 102 dBA L_{max} or higher generated by construction activities from the project site.

The closest existing sensitive receptors would be subject to short-term noise levels that would be higher than existing ambient noise levels in the project area but would no longer occur once construction of the project is completed. In addition, noise generated from construction activities would be intermittent and temporary. Section 8.80.202 of the City's Municipal Code allows elevated construction-related noise levels as long as the construction activities are limited to the hours specified. These impacts are the same as the impacts identified in the Certified 2016 EIR; thus, no additional impacts would occur.

Adherence to the City's noise regulations and implementation of Mitigation Measures 4.10.2 and 4.10.3 from the Certified 2016 EIR, which require standard conditions for construction and a preconstruction community meeting, would reduce construction noise impacts to sensitive receptors. Therefore, temporary increases in ambient noise levels in the proposed project vicinity associated with project construction would be reduced to less than significant levels.

Construction Vibration Building Damage Potential

Vibration generated by construction equipment can result in varying degrees of ground vibration, depending on the equipment. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings near an active construction area may experience these vibrations, which range from imperceptible, low rumbling sounds to perceptible vibrations to, in extreme cases, noticeable vibration levels. Typically, construction-related vibration does not reach vibration levels that would result in damage to nearby structures.

The Caltrans *Transportation and Construction Vibration Guidance Manual* (September 2013) shows that the vibration damage threshold for continuous/frequent intermittent sources is 0.10 peak-particle velocity (PPV) (inch/sec) for fragile buildings, 0.25 PPV (inch/sec) for historic and some old buildings, 0.3 PPV (inch/sec) for older residential structures, and 0.5 PPV (inch/sec) for new residential structures. The manual shows the vibration annoyance potential criteria to be barely perceptible at 0.01 PPV (inch/sec), distinctly perceptible at 0.04 PPV (inch/sec), and strongly perceptible at 0.10 PPV (inch/sec) for continuous/frequent intermittent sources. These thresholds were used to evaluate the potential for short-term, construction-related, ground-borne vibration impacts during construction of the proposed project.

Bulldozers and trucks used for construction of the proposed project would generate the highest ground-borne vibration levels. Based on information shown in Table H from the Caltrans *Transportation and Construction Vibration Guidance Manual*, a large bulldozer and loaded trucks would generate vibration levels of 0.089 PPV (inch/sec) and 0.076 PPV (inch/sec), respectively, when measured at 25 ft. The closest heavy construction activities to receptors would be located approximately 25 ft from the Belmont Shores Children’s Center and other commercial buildings. The nearest residences to the northeast and northwest are located approximately 100 ft and 80 ft, respectively, from heavy construction activities. The estimated vibration level at the closest residence to the northeast and northwest would be 0.049 inch/sec and 0.097 inch/sec, respectively. The estimated vibration levels at the Belmont Shores Children’s Center and other commercial buildings would be 0.101 inch/sec. These construction vibration levels are below the damage threshold of 0.3 inch/sec for older residential buildings and 0.5 inch/sec for modern industrial commercial buildings. Therefore, the proposed project would result in a less than significant impact, and no mitigation is required. Furthermore, the potential impacts are the same as the impacts related to construction vibration in the Certified 2016 EIR.

Table H: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L _v at 25 ft	
	PPV (inch/sec)	L _v (VdB) ¹
Hoe Ram	0.089	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: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

¹ RMS VdB re 1 μinch/sec.

μin/sec = micro-inches per second

ft = foot/feet

FTA = Federal Transit Administration

inch/sec = inches per second

L_v = velocity in decibels

PPV = peak particle velocity

RMS = root-mean-square

VdB = vibration velocity in decibels

Long-Term Off-Site Traffic Noise Impacts

This noise impact analysis is based on information from the *Belmont Plaza Pool Revised Traffic Analysis* (LSA 2019) that was conducted for the proposed project. Traffic volumes for the existing and future cumulative scenarios, during weekday and weekend conditions, without and with the proposed project are analyzed. The baseline scenarios and with project scenarios are evaluated to determine potential traffic noise impacts on off-site sensitive land uses.

Guidelines included in the FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) handbook were used to evaluate highway traffic-related noise conditions along roadway segments in the project vicinity. The standard vehicle mix for Southern California roadways was used for traffic on these roadway segments. The modeled 24-hour CNEL levels are shown in the following tables:

- Table I: Existing Weekday Traffic Noise Levels Without and With Modified Project
- Table J: Existing Weekend Traffic Noise Levels Without and With Modified Project
- Table K: Future Weekday Traffic Noise Levels Without and With Modified Project
- Table L: Future Weekend Traffic Noise Levels Without and With Modified Project

These noise levels represent the worst-case scenario, which assumes no shielding is provided between the traffic and the locations where the noise contours are drawn. The specific assumptions used in developing these noise levels and model printouts are provided in Attachment A.

Tables I through L show that project-related traffic noise levels would have a traffic noise increase of up to 2.6 dBA, except for Bennett Avenue south of Ocean Boulevard. Although traffic noise levels along Bennett Avenue south of Ocean Boulevard would increase by up to 7.0 dBA, this roadway segment is the entrance to the proposed project, and there are no off-site noise-sensitive land uses adjacent to this segment of the road. The traffic noise increases of up to 2.6 dBA along other roadway segments in the project area are less than the 3 dBA threshold normally perceptible by the human ear in an outdoor environment. The small increase in noise along these roadway segments is due to new existing baseline traffic counts which show some decreased traffic volumes on some study area segments. Because the trips associated with the Modified Project are the same as those presented in the 2016 Certified EIR, the overall Project-related trips represent a larger percentage of overall trips; the 0.2 dBA increase is still far below the 3.0 dBA threshold of perceptible noise and remains less than significant. Therefore, no significant traffic noise impacts would occur on off-site noise-sensitive land uses. No mitigation measures for off-site uses would be required.

Also, on-site traffic noise impacts would not occur because the Modified Project is not considered to be noise sensitive, and mitigation measures for on-site uses are not required. The conclusions related to potential traffic noise impacts are generally the same as in the previous certified 2016 EIR, which concluded that project-related traffic noise would result in increases of up to 2.4 dBA, except for Bennett Avenue south of Ocean Boulevard, which would increase by up to 7.2 dBA. As shown in Tables I through L, project-related traffic noise levels would have a traffic noise increase of up to 2.6 dBA, with the levels at the entrance to the pool roadway increasing by up to 7.0 dBA. This is a slightly greater increase in noise levels; however, the increase in noise would remain below the 3.0 dBA level of significance. The increase of 7.0 dBA for the entry driveway is slightly less than the projected increase to 7.2 dBA at this location under the Approved Project. Therefore, vehicle trips associated with the Modified Project would not result in new impacts related to traffic noise, and no new mitigation measures are required.

Long-Term Ground-Borne Noise and Vibration from Vehicular Traffic

Because the rubber tires and suspension systems of buses and other on-road vehicles provide vibration isolation and reduce noise, it is unusual for on-road vehicles to cause ground-borne noise or vibration. When on-road vehicles cause such effects as the rattling of windows, the source is almost always airborne noise. Most problems with on-road vehicle-related noise and vibration can be directly related to a pothole, bump, expansion joint, or other discontinuity in the road surface. Smoothing the bump or filling the pothole will usually solve the problem. As with the Approved Project, the Modified Project would have roads with smooth pavement and would not result in significant ground-borne noise or vibration impacts from vehicular traffic.

Table I: Existing Weekday Traffic Noise Levels Without and With Modified Project

Roadway Segment	Without Project					With Modified Project						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ocean Boulevard west of Redondo Avenue	25,710	58	117	248	68.2	26,590	880	59	120	253	68.4	0.2
Ocean Boulevard between Redondo Avenue and Loma Avenue	26,310	59	119	252	68.3	27,620	1,310	61	123	260	68.5	0.2
Ocean Boulevard between Loma Avenue and Mira Mar Avenue	24,065	56	112	237	67.9	25,305	1,240	58	116	245	68.1	0.2
Ocean Boulevard between Mira Mar Avenue and Termino Avenue	6,050	< 50	< 50	97	61.9	7,245	1,195	< 50	< 50	109	62.7	0.8
Ocean Boulevard between Termino Avenue and Bennett Avenue	9,090	< 50	62	126	63.7	10,330	1,240	< 50	67	136	64.3	0.6
Ocean Boulevard between Bennett Avenue and Granada Avenue	8,035	< 50	58	116	63.2	9,125	1,090	< 50	62	126	63.7	0.5
Ocean Boulevard east of Granada Avenue	6,920	< 50	< 50	106	62.5	7,550	630	< 50	56	112	62.9	0.4
Livingston Avenue between Mira Mar Avenue and Termino Avenue	18,380	< 50	95	199	66.8	18,530	150	< 50	95	200	66.8	0.0
Livingston Avenue between Termino Avenue and 2nd Street	19,365	< 50	98	206	67.0	19,630	265	< 50	99	208	67.0	0.0
Livingston Avenue east of 2nd Street	3,170	< 50	< 50	66	59.1	3,170	0	< 50	< 50	66	59.1	0.0
2nd Street south of Livingston Avenue	19,330	< 50	< 50	97	63.6	19,580	250	< 50	< 50	98	63.6	0.0
Termino Avenue south of Ocean Boulevard	2,790	< 50	< 50	< 50	57.6	3,610	820	< 50	< 50	57	58.7	1.1
Termino Avenue between Ocean Boulevard and Livingston Avenue	3,200	< 50	< 50	< 50	58.2	3,660	460	< 50	< 50	57	58.8	0.6
Termino Avenue north of Livingston Avenue	800	< 50	< 50	< 50	52.2	880	80	< 50	< 50	< 50	52.6	0.4
Bennett Avenue south of Ocean Boulevard	1,540	< 50	< 50	< 50	52.6	4,020	2,480	< 50	< 50	< 50	56.8	4.2
Bennett Avenue north of Ocean Boulevard	820	< 50	< 50	< 50	49.9	820	0	< 50	< 50	< 50	49.9	0.0
Granada Avenue south of Ocean Boulevard	520	< 50	< 50	< 50	47.9	520	0	< 50	< 50	< 50	47.9	0.0
Granada Avenue north of Ocean Boulevard	1,360	< 50	< 50	< 50	52.1	1,670	310	< 50	< 50	< 50	53.0	0.9

Source: Compiled by LSA (November 2019).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic CNEL = Community Noise Equivalent Level dBA = A-weighted decibels ft = foot/feet

Table J: Existing Weekend Traffic Noise Levels Without and With Modified Project

Roadway Segment	Without Project					With Modified Project						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ocean Boulevard west of Redondo Avenue	15,910	< 50	87	181	66.1	18,070	2,160	< 50	94	197	66.7	0.6
Ocean Boulevard between Redondo Avenue and Loma Avenue	16,625	< 50	89	186	66.3	19,955	3,330	< 50	100	210	67.1	0.8
Ocean Boulevard between Loma Avenue and Mira Mar Avenue	16,720	< 50	89	187	66.3	19,720	3,000	< 50	99	208	67.1	0.8
Ocean Boulevard between Mira Mar Avenue and Termino Avenue	6,050	< 50	< 50	97	61.9	9,050	3,000	< 50	62	125	63.7	1.8
Ocean Boulevard between Termino Avenue and Bennett Avenue	8,430	< 50	60	120	63.4	11,810	3,380	< 50	72	149	64.8	1.4
Ocean Boulevard between Bennett Avenue and Granada Avenue	6,840	< 50	< 50	105	62.5	9,800	2,960	< 50	65	132	64.0	1.5
Ocean Boulevard east of Granada Avenue	5,970	< 50	< 50	96	61.9	7,670	1,700	< 50	56	113	63.0	1.1
Livingston Avenue between Mira Mar Avenue and Termino Avenue	11,545	< 50	71	147	64.7	11,655	110	< 50	72	148	64.8	0.1
Livingston Avenue between Termino Avenue and 2nd Street	12,170	< 50	74	152	65.0	12,895	725	< 50	76	158	65.2	0.2
Livingston Avenue east of 2nd Street	2,900	< 50	< 50	62	58.7	2,900	0	< 50	< 50	62	58.7	0.0
2nd Street south of Livingston Avenue	15,260	< 50	< 50	83	62.6	15,950	690	< 50	< 50	85	62.8	0.2
Termino Avenue south of Ocean Boulevard	2,740	< 50	< 50	< 50	57.5	4,980	2,240	< 50	< 50	69	60.1	2.6
Termino Avenue between Ocean Boulevard and Livingston Avenue	3,970	< 50	< 50	60	59.1	5,090	1,120	< 50	< 50	70	60.2	1.1
Termino Avenue north of Livingston Avenue	960	< 50	< 50	< 50	52.9	1,210	250	< 50	< 50	< 50	53.9	1.0
Bennett Avenue south of Ocean Boulevard	1,700	< 50	< 50	< 50	53.0	8,460	6,760	< 50	< 50	56	60.0	7.0
Bennett Avenue north of Ocean Boulevard	800	< 50	< 50	< 50	49.8	800	0	< 50	< 50	< 50	49.8	0.0
Granada Avenue south of Ocean Boulevard	1,520	< 50	< 50	< 50	52.5	1,520	0	< 50	< 50	< 50	52.5	0.0
Granada Avenue north of Ocean Boulevard	1,800	< 50	< 50	< 50	53.3	2,640	840	< 50	< 50	< 50	54.9	1.6

Source: Compiled by LSA (November 2019).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic CNEL = Community Noise Equivalent Level dBA = A-weighted decibels ft = foot/feet

Table K: Future Weekday Traffic Noise Levels Without and With Modified Project

Roadway Segment	Without Project					With Modified Project						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ocean Boulevard west of Redondo Avenue	25,960	59	118	249	68.3	26,840	880	60	120	255	68.4	0.1
Ocean Boulevard between Redondo Avenue and Loma Avenue	26,560	59	119	253	68.4	27,870	1,310	61	123	261	68.6	0.2
Ocean Boulevard between Loma Avenue and Mira Mar Avenue	24,315	57	113	239	68.0	25,555	1,240	58	117	247	68.2	0.2
Ocean Boulevard between Mira Mar Avenue and Termino Avenue	6,050	< 50	< 50	97	61.9	7,245	1,195	< 50	< 50	109	62.7	0.8
Ocean Boulevard between Termino Avenue and Bennett Avenue	9,090	< 50	62	126	63.7	10,330	1,240	< 50	67	136	64.3	0.6
Ocean Boulevard between Bennett Avenue and Granada Avenue	8,035	< 50	58	116	63.2	9,125	1,090	< 50	62	126	63.7	0.5
Ocean Boulevard east of Granada Avenue	6,920	< 50	< 50	106	62.5	7,550	630	< 50	56	112	62.9	0.4
Livingston Avenue between Mira Mar Avenue and Termino Avenue	18,630	< 50	95	201	66.8	18,780	150	< 50	96	202	66.8	0.0
Livingston Avenue between Termino Avenue and 2nd Street	19,615	< 50	99	207	67.0	19,880	265	< 50	99	209	67.1	0.1
Livingston Avenue east of 2nd Street	3,170	< 50	< 50	66	59.1	3,170	0	< 50	< 50	66	59.1	0.0
2nd Street south of Livingston Avenue	20,420	< 50	< 50	100	63.8	20,670	250	< 50	< 50	101	63.9	0.1
Termino Avenue south of Ocean Boulevard	2,790	< 50	< 50	< 50	57.6	3,610	820	< 50	< 50	57	58.7	1.1
Termino Avenue between Ocean Boulevard and Livingston Avenue	3,200	< 50	< 50	< 50	58.2	3,660	460	< 50	< 50	57	58.8	0.6
Termino Avenue north of Livingston Avenue	800	< 50	< 50	< 50	52.2	880	80	< 50	< 50	< 50	52.6	0.4
Bennett Avenue south of Ocean Boulevard	1,540	< 50	< 50	< 50	52.6	4,020	2,480	< 50	< 50	< 50	56.8	4.2
Bennett Avenue north of Ocean Boulevard	820	< 50	< 50	< 50	49.9	820	0	< 50	< 50	< 50	49.9	0.0
Granada Avenue south of Ocean Boulevard	520	< 50	< 50	< 50	47.9	520	0	< 50	< 50	< 50	47.9	0.0
Granada Avenue north of Ocean Boulevard	1,360	< 50	< 50	< 50	52.1	1,670	310	< 50	< 50	< 50	53.0	0.9

Source: Compiled by LSA (November 2019).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic CNEL = Community Noise Equivalent Level dBA = A-weighted decibels ft = foot/feet

Table L: Future Weekend Traffic Noise Levels Without and With Modified Project

Roadway Segment	Without Project					With Modified Project						
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Change in ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase over Baseline CNEL (dBA) 50 ft from Centerline of Outermost Lane
Ocean Boulevard west of Redondo Avenue	16,180	< 50	87	183	66.2	18,340	2,160	< 50	95	198	66.7	0.5
Ocean Boulevard between Redondo Avenue and Loma Avenue	16,895	< 50	90	188	66.4	20,225	3,330	< 50	101	212	67.2	0.8
Ocean Boulevard between Loma Avenue and Mira Mar Avenue	16,990	< 50	90	189	66.4	19,990	3,000	< 50	100	210	67.1	0.7
Ocean Boulevard between Mira Mar Avenue and Termino Avenue	6,050	< 50	< 50	97	61.9	9,050	3,000	< 50	62	125	63.7	1.8
Ocean Boulevard between Termino Avenue and Bennett Avenue	8,430	< 50	60	120	63.4	11,810	3,380	< 50	72	149	64.8	1.4
Ocean Boulevard between Bennett Avenue and Granada Avenue	6,840	< 50	< 50	105	62.5	9,800	2,960	< 50	65	132	64.0	1.5
Ocean Boulevard east of Granada Avenue	5,970	< 50	< 50	96	61.9	7,670	1,700	< 50	56	113	63.0	1.1
Livingston Avenue between Mira Mar Avenue and Termino Avenue	11,815	< 50	72	149	64.8	11,925	110	< 50	73	150	64.9	0.1
Livingston Avenue between Termino Avenue and 2nd Street	12,440	< 50	75	154	65.1	13,165	725	< 50	77	160	65.3	0.2
Livingston Avenue east of 2nd Street	2,900	< 50	< 50	62	58.7	2,900	0	< 50	< 50	62	58.7	0.0
2nd Street south of Livingston Avenue	17,030	< 50	< 50	89	63.0	17,720	690	< 50	< 50	91	63.2	0.2
Termino Avenue south of Ocean Boulevard	2,740	< 50	< 50	< 50	57.5	4,980	2,240	< 50	< 50	69	60.1	2.6
Termino Avenue between Ocean Boulevard and Livingston Avenue	3,970	< 50	< 50	60	59.1	5,090	1,120	< 50	< 50	70	60.2	1.1
Termino Avenue north of Livingston Avenue	960	< 50	< 50	< 50	52.9	1,210	250	< 50	< 50	< 50	53.9	1.0
Bennett Avenue south of Ocean Boulevard	1,700	< 50	< 50	< 50	53.0	8,460	6,760	< 50	< 50	56	60.0	7.0
Bennett Avenue north of Ocean Boulevard	800	< 50	< 50	< 50	49.8	800	0	< 50	< 50	< 50	49.8	0.0
Granada Avenue south of Ocean Boulevard	1,520	< 50	< 50	< 50	52.5	1,520	0	< 50	< 50	< 50	52.5	0.0
Granada Avenue north of Ocean Boulevard	1,800	< 50	< 50	< 50	53.3	2,640	840	< 50	< 50	< 50	54.9	1.6

Source: Compiled by LSA (November 2019).

Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.

ADT = average daily traffic CNEL = Community Noise Equivalent Level dBA = A-weighted decibels ft = foot/feet

Long-Term Off-Site Stationary Noise Impacts

This section provides an assessment of the potential operational noise impacts of the Modified Project. While the existing temporary pool was previously not a part of Approved Project, it will be converted to a permanent pool as part of the Modified project. Therefore, the current activities at the pool would be the same as future activities, which would not change the noise environment. Furthermore, the largest design change for the Modified Project is changing the pools on the west side of the site to outdoor pools instead of indoor pools. While this may increase noise levels of the western side of the project site, the source of noise associated with outside activities is based on the same reference noise levels used in the 2016 Certified EIR to estimate crowd noise at maximum capacity. The Approved Project proposed to have 3,000 outdoor seats, along with 1,250 indoor seats, whereas the Modified Project proposes to have 1,865 outdoor seats.. Since the number of outdoor seats is reduced, nearly cut in half, noise levels will likely decrease. However, to remain conservative, noise levels are projected to remain the same as presented below and found within the certified 2016 EIR.

The certified 2016 EIR provided an assessment of the operational impacts associated with daily operations of the Approved Project including crowd and spectator noise as well as the public address system. Reference noise levels were utilized to calculate the potential impacts associated with the Approved Project operations. A reference noise level from a public address sound system was obtained from a noise level measurement conducted by RECON Environmental, Inc., at a high school championship football game (RECON 2003). Each loudspeaker was estimated to generate an hourly equivalent (L_{eq}) noise level of 71.3 dBA at a distance of 50 ft. Crowd noise was measured to be 65 dBA L_{eq} at 75 ft. It is anticipated that reference noise level measurements obtained from RECON at the high school championship football game would be similar to typical daily events or special events associated with the project.

The analysis for the Approved Project concluded that the combined noise levels from the crowd and speaker noise would result in an exterior noise level of 55.3 dBA L_{eq} (1-hour) at the playground associated with the Belmont Shores Children's Center, 55.3 dBA L_{eq} (1-hour) at the outdoor living areas of the residences to the northeast (across from Ocean Boulevard), and 55.1 dBA L_{eq} (1-hour) at the outdoor living areas of the residences to the northwest (across from Termino Avenue). The combined noise levels at the Belmont Shores Children's Center and the two residential locations would potentially exceed the City's daytime exterior L_{50} and L_{25} standard of 50 and 55 dBA. Implementation of Mitigation Measure 4.10.1, as included in the certified 2016 EIR, which requires measures to reduce noise levels from the speakers, would reduce the combined noise level to less than the City's exterior noise standards, and the impact would be less than significant after mitigation.

Additionally, the interior noise assessment for the Approved Project, which incorporated a 15 dBA exterior-to-inter noise reduction from the building façade, identified that the combined interior noise level with windows and doors closed would be 31.3 dBA L_{eq} (1-hour) in the classroom associated with the Belmont Shores Children's Center, 31.3 dBA L_{eq} (1-hour) at the residences to the northeast (across from Ocean Boulevard), and 31.1 dBA L_{eq} (1-hour) at the residences to the northwest (across from Termino Avenue). The combined interior noise level with windows and doors open would be 43.3 dBA L_{eq} (1 hour) in the classroom associated with the Belmont Shores

Children's Center, 43.3 dBA L_{eq} (1 hour) at the residences to the northeast (across from Ocean Boulevard), and 43.1 dBA L_{eq} (1 hour) at the residences to the northwest (across from Termino Avenue). The combined noise levels at the Belmont Shores Children's Center and the two residential locations would not exceed the City's daytime interior standard. Since the Approved Project was not expected to be used after 10:00 p.m., the certified 2016 EIR determined that no nighttime operational noise would occur, and no violation of the City's nighttime noise standards would occur.

While the Modified Project has a larger footprint than the Approved Project, specifically associated with the improvements at the existing temporary pool which would remain under the Modified Project, the improvements in the expanded footprint would not add any new noise sources in the project area. Furthermore, the Modified Project would significantly reduce the number of temporary bleachers as well as add a 10 ft high glass wall around the aquatic center containing the new pools and associated ancillary uses, which would reduce operational noise levels. The Modified Project would also not conduct operations past 10:00 p.m.; therefore, consistent with the findings in the certified 2016 EIR, the Modified Project would not violate the City's nighttime noise standards. With the implementation of Mitigation Measure 4.10.1 from the certified 2016 EIR, the Modified Project would result in a less than significant impact, and the potential impacts would likely be less than those identified for the Approved Project.

SUMMARY OF RECOMMENDATIONS

Based on the analysis above, the Modified Project would have similar or lesser impacts related to noise and vibration as compared to that of the Approved Project analyzed in the certified 2016 EIR. With implementation of the mitigation measures in the certified 2016 EIR, and listed below, the Modified Project would result in less than significant impacts related to construction-related noise and vibration as well as operational noise impacts to surrounding sensitive uses.

The following mitigation measures, as presented in the certified 2016 EIR, are incorporated to offset the potentially significant operational and construction-related noise impacts of the Modified Project.

- Mitigation Measure 4.10.1** Prior to issuance of the occupancy permit, the City of Long Beach's (City) Director of Development Services, or designee, shall verify that a sound engineer has designed the permanent and temporary sound systems such that the City's exterior noise standards (daytime exterior noise level of 50 dBA L_{50}) are not exceeded at the surrounding sensitive land uses. Measures capable of reducing the noise levels include, but are not limited to, the following:
- Reducing the source levels;
 - Reducing the speaker elevations;
 - Directing the speakers away from adjacent noise-sensitive land uses; and
 - Using highly directional speakers.

Mitigation Measure 4.10.2

Prior to issuance of demolition or grading permits, the City of Long Beach's Director of Development Services, or designee, shall verify that construction and grading plans include the following conditions to reduce potential construction noise impacts on nearby sensitive receptors:

- During all site excavation and grading, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards;
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site;
- The construction contractor shall locate equipment staging to create the greatest distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction;
- The construction contractor shall ensure that engine idling from construction equipment (i.e., bulldozers and haul trucks) is limited to a maximum of 5 minutes at any given time;
- The construction contractor shall ensure that all construction activities are scheduled to avoid operating several pieces of heavy equipment simultaneously; and
- Construction, drilling, repair, remodeling, alteration, or demolition work shall be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, and 9:00 a.m. to 6:00 p.m. on Saturday. In accordance with City standards, no construction activities are permitted outside of these hours.

Mitigation Measure 4.10.3

Prior to issuance of a grading permit, the City of Long Beach Tidelands Capital Improvement Division shall hold a community preconstruction meeting in concert with the construction contractor to provide information to the public regarding the construction schedule. The construction schedule information shall include the duration of each construction activity and the specific location, days, frequency, and duration of the pile driving that will occur during each phase of the project construction. Public notification of this meeting shall be undertaken in the same manner as the Notice of Availability mailings for this Supplemental Environmental Impact Report.

In addition, during construction, the following best business practices are recommended:

- Ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved.

- Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturer's standards.
- Construction staging areas shall be located away from off-site sensitive uses during the later phases of project development.
- The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site whenever feasible.
- The construction contractor shall use on-site electrical sources to power equipment rather than diesel generators whenever feasible.

Additional measures that could be considered, but are not required to reduce potential construction noise impacts include scheduling louder construction activities that occur close to schools to conduct after class hours and/or conducting construction near schools during summer months when school is out of session.

REFERENCES

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ATTACHMENT A

FHWA TRAFFIC NOISE MODEL PRINTOUTS

TABLE Existing NP (PM)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25710 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
58.3	117.0	247.9	532.0

TABLE Existing NP (PM)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26310 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.31

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
59.1	118.8	251.7	540.2

TABLE Existing NP (PM)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 24065 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.92

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
56.3	112.2	237.3	509.1

TABLE Existing NP (PM)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6050 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	97.1	204.1

TABLE Existing NP (PM)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9090 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.70

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	62.1	125.7	266.8

TABLE Existing NP (PM)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8035 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	58.0	116.1	246.0

TABLE Existing NP (PM)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6920 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	105.7	222.9

TABLE Existing NP (PM)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18380 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	94.7	198.7	425.6

TABLE Existing NP (PM)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19365 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.98

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	97.8	205.7	440.7

TABLE Existing NP (PM)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Livingston Avenue East of 2nd Street
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3170 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	65.7	133.9

TABLE Existing NP (PM)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: 2nd Street South of Livingston Avenue
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19330 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.59

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	96.7	208.0

TABLE Existing NP (PM)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2790 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.58

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	99.0

TABLE Existing NP (PM)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	108.2

TABLE Existing NP (PM)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (PM)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1540 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (PM)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 820 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (PM)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 47.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (PM)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing NP (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1360 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (PM)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26590 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.36

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
59.4	119.6	253.4	544.0

TABLE Existing P (PM)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27620 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.52

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
60.7	122.5	259.9	557.9

TABLE Existing P (PM)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25305 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.14

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
57.8	115.8	245.3	526.4

TABLE Existing P (PM)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7245 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	108.8	229.8

TABLE Existing P (PM)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10330 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	66.8	136.5	290.4

TABLE Existing P (PM)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9125 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	62.2	126.0	267.5

TABLE Existing P (PM)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7550 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	56.0	111.6	236.1

TABLE Existing P (PM)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18530 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.79

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	95.2	199.8	427.9

TABLE Existing P (PM)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19630 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	98.7	207.5	444.7

TABLE Existing P (PM)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Livingston Avenue East of 2nd Street
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3170 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	65.7	133.9

TABLE Existing P (PM)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: 2nd Street South of Livingston Avenue
NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19580 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.64

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	97.6	209.8

TABLE Existing P (PM)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3610 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	56.6	117.0

TABLE Existing P (PM)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3660 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	57.1	118.0

TABLE Existing P (PM)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 880 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (PM)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4020 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.77

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	73.3

TABLE Existing P (PM)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 820 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (PM)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 47.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (PM)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Existing - Weekday - Existing P (PM)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1670 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (Sat)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15910 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.13

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	86.6	180.8	386.7

TABLE Existing NP (Sat)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16625 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.32

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	89.0	186.1	398.2

TABLE Existing NP (Sat)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16720 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.34

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	89.3	186.8	399.7

TABLE Existing NP (Sat)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6050 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	97.1	204.1

TABLE Existing NP (Sat)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8430 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.37

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	59.5	119.8	253.9

TABLE Existing NP (Sat)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6840 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.46

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	104.9	221.2

TABLE Existing NP (Sat)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5970 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	96.3	202.3

TABLE Existing NP (Sat)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11545 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	71.3	146.7	312.6

TABLE Existing NP (Sat)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12170 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	73.6	151.8	323.7

TABLE Existing NP (Sat)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Livingston Avenue East of 2nd Street
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	62.4	126.4

TABLE Existing NP (Sat)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: 2nd Street South of Livingston Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15260 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	82.7	177.7

TABLE Existing NP (Sat)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2740 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	97.8

TABLE Existing NP (Sat)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3970 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	59.9	124.4

TABLE Existing NP (Sat)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 960 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (Sat)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1700 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (Sat)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (Sat)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.54

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing NP (Sat)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (Sat)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18070 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.68

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	93.7	196.5	420.9

TABLE Existing P (Sat)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19955 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	99.7	209.8	449.5

TABLE Existing P (Sat)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19720 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	98.9	208.2	446.0

TABLE Existing P (Sat)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9050 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.68

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	61.9	125.3	266.1

TABLE Existing P (Sat)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11810 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	72.3	148.9	317.3

TABLE Existing P (Sat)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9800 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	64.8	131.9	280.5

TABLE Existing P (Sat)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7670 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	56.5	112.8	238.5

TABLE Existing P (Sat)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11655 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.77

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	71.7	147.6	314.6

TABLE Existing P (Sat)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12895 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	76.2	157.6	336.4

TABLE Existing P (Sat)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Livingston Avenue East of 2nd Street
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	62.4	126.4

TABLE Existing P (Sat)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: 2nd Street South of Livingston Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 15950 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	85.1	183.0

TABLE Existing P (Sat)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4980 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	68.9	144.3

TABLE Existing P (Sat)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5090 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	69.8	146.4

TABLE Existing P (Sat)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1210 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	58.6

TABLE Existing P (Sat)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8460 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	56.0	120.0

TABLE Existing P (Sat)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (Sat)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.54

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing P (Sat)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Existing - Existing P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2640 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	55.5

TABLE Existing+Cumulative NP (WD)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25960 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
58.7	117.7	249.5	535.4

TABLE Existing+Cumulative NP (WD)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26560 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.35

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
59.4	119.5	253.3	543.6

TABLE Existing+Cumulative NP (WD)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 24315 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.97

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
56.6	112.9	238.9	512.6

TABLE Existing+Cumulative NP (WD)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6050 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	97.1	204.1

TABLE Existing+Cumulative NP (WD)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9090 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.70

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	62.1	125.7	266.8

TABLE Existing+Cumulative NP (WD)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8035 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.16

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	58.0	116.1	246.0

TABLE Existing+Cumulative NP (WD)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6920 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.51

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	105.7	222.9

TABLE Existing+Cumulative NP (WD)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18630 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.81

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	95.5	200.5	429.5

TABLE Existing+Cumulative NP (WD)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19615 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	98.6	207.4	444.4

TABLE Existing+Cumulative NP (WD)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue East of 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3170 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	65.7	133.9

TABLE Existing+Cumulative NP (WD)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: 2nd Street South of Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20420 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	100.3	215.8

TABLE Existing+Cumulative NP (WD)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2790 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.58

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	99.0

TABLE Existing+Cumulative NP (WD)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3200 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	108.2

TABLE Existing+Cumulative NP (WD)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 800 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.15

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (WD)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1540 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.60

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (WD)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 820 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (WD)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 47.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (WD)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1360 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (WD)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 26840 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.40

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
59.7	120.3	255.0	547.4

TABLE Existing+Cumulative+P (WD)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 27870 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
61.0	123.2	261.4	561.3

TABLE Existing+Cumulative+P (WD)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 25555 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 68.18

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
58.1	116.6	246.9	529.8

TABLE Existing+Cumulative+P (WD)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7245 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	108.8	229.8

TABLE Existing+Cumulative+P (WD)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 10330 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	66.8	136.5	290.4

TABLE Existing+Cumulative+P (WD)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9125 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.71

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	62.2	126.0	267.5

TABLE Existing+Cumulative+P (WD)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7550 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	56.0	111.6	236.1

TABLE Existing+Cumulative+P (WD)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18780 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.85

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	96.0	201.6	431.8

TABLE Existing+Cumulative+P (WD)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19880 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	99.4	209.3	448.4

TABLE Existing+Cumulative+P (WD)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue East of 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3170 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	65.7	133.9

TABLE Existing+Cumulative+P (WD)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: 2nd Street South of Livingston Avenue
NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20670 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.88

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	101.1	217.5

TABLE Existing+Cumulative+P (WD)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3610 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.69

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	56.6	117.0

TABLE Existing+Cumulative+P (WD)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3660 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.75

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	57.1	118.0

TABLE Existing+Cumulative+P (WD)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 880 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.56

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (WD)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4020 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 56.77

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	73.3

TABLE Existing+Cumulative+P (WD)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 820 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.86

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (WD)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 47.89

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (WD)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (WD)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1670 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (Sat)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue
NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16180 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.20

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	87.5	182.8	391.1

TABLE Existing+Cumulative NP (Sat)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP
(Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16895 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.39

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	89.9	188.1	402.5

TABLE Existing+Cumulative NP (Sat)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 16990 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.41

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	90.2	188.7	404.0

TABLE Existing+Cumulative NP (Sat)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6050 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.93

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	97.1	204.1

TABLE Existing+Cumulative NP (Sat)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8430 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.37

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	59.5	119.8	253.9

TABLE Existing+Cumulative NP (Sat)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 6840 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.46

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	104.9	221.2

TABLE Existing+Cumulative NP (Sat)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue
NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5970 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 61.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	96.3	202.3

TABLE Existing+Cumulative NP (Sat)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11815 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	72.3	148.9	317.4

TABLE Existing+Cumulative NP (Sat)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP
(Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 12440 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.06

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	74.6	154.0	328.5

TABLE Existing+Cumulative NP (Sat)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Livingston Avenue East of 2nd Street
NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	62.4	126.4

TABLE Existing+Cumulative NP (Sat)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: 2nd Street South of Livingston Avenue
NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17030 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.04

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	88.9	191.2

TABLE Existing+Cumulative NP (Sat)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2740 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 57.50

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	97.8

TABLE Existing+Cumulative NP (Sat)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 3970 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 59.11

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	59.9	124.4

TABLE Existing+Cumulative NP (Sat)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 960 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (Sat)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1700 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.03

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (Sat)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (Sat)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.54

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative NP (Sat)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019
ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard
NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative NP (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.28

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (Sat)-01
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard West of Redondo Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 18340 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 66.74

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	94.6	198.5	425.0

TABLE Existing+Cumulative+P (Sat)-02
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Redondo Avenue and Loma Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 20225 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.17

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	100.5	211.6	453.6

TABLE Existing+Cumulative+P (Sat)-03
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Loma Avenue and Mira-Mar Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 19990 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.12

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	99.8	210.0	450.1

TABLE Existing+Cumulative+P (Sat)-04
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9050 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.68

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	61.9	125.3	266.1

TABLE Existing+Cumulative+P (Sat)-05
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Termino Avenue and Bennett Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11810 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	72.3	148.9	317.3

TABLE Existing+Cumulative+P (Sat)-06
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard Between Bennett Avenue and Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 9800 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.02

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	64.8	131.9	280.5

TABLE Existing+Cumulative+P (Sat)-07
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Ocean Boulevard East of Granada Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 7670 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 62.96

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	56.5	112.8	238.5

TABLE Existing+Cumulative+P (Sat)-08
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Mira-Mar Avenue and Termino Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 11925 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.87

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	72.7	149.8	319.4

TABLE Existing+Cumulative+P (Sat)-09
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue Between Termino Avenue and 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 13165 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.30

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	77.2	159.8	341.0

TABLE Existing+Cumulative+P (Sat)-10
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Livingston Avenue East of 2nd Street

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2900 SPEED (MPH): 40 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 58.73

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	62.4	126.4

TABLE Existing+Cumulative+P (Sat)-11
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: 2nd Street South of Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 17720 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.21

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	91.3	196.3

TABLE Existing+Cumulative+P (Sat)-12
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 4980 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.09

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	68.9	144.3

TABLE Existing+Cumulative+P (Sat)-13
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue Between Ocean Boulevard and Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 5090 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	69.8	146.4

TABLE Existing+Cumulative+P (Sat)-14
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Termino Avenue North of Livingston Avenue

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1210 SPEED (MPH): 35 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 18 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 53.95

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	58.6

TABLE Existing+Cumulative+P (Sat)-15
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 8460 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 60.00

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	56.0	120.0

TABLE Existing+Cumulative+P (Sat)-16
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Bennett Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 800 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 49.76

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (Sat)-17
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue South of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 1520 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
	---	-----	-----
AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 52.54

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
-----	-----	-----	-----
0.0	0.0	0.0	0.0

TABLE Existing+Cumulative+P (Sat)-18
FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 11/08/2019

ROADWAY SEGMENT: Granada Avenue North of Ocean Boulevard

NOTES: Belmont Pool Revitalization - Future - Existing+Cumulative+P (Sat)

* * ASSUMPTIONS * *

AVERAGE DAILY TRAFFIC: 2640 SPEED (MPH): 25 GRADE: .5

	TRAFFIC DISTRIBUTION PERCENTAGES		
	DAY	EVENING	NIGHT
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AUTOS	75.51	12.57	9.34
M-TRUCKS	1.56	0.09	0.19
H-TRUCKS	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 6 SITE CHARACTERISTICS: SOFT

* * CALCULATED NOISE LEVELS * *

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 54.94

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL			
70 CNEL	65 CNEL	60 CNEL	55 CNEL
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0.0	0.0	0.0	55.5