

3.9

NOISE

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3.9.1 Introduction

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This section addresses potential noise impacts that could result from the proposed Project. In summary, the construction activities at the proposed Pier A rail yard near the Berth 200-202 Marinas under the proposed Project would generate construction noise levels that would cause temporary and periodic noise levels substantially above existing ambient noise levels in nearby marinas where people live. Even with implementation of recommended mitigation measures, construction equipment noise levels would substantially exceed existing ambient noise levels, causing a significant impact under CEQA during daytime hours. Significant and unavoidable short-term noise impacts would also occur during daytime hours along “C” Street during construction of the Harry Bridges Buffer Area. Once completed, operation of improvements at Berths 136-147 implemented by the proposed Project, vehicular traffic on Harry Bridges Boulevard, and operations at the Pier A rail yard, would not cause a substantial increase in noise in the residential areas of San Pedro, Wilmington, and the live-aboards in the marinas near the rail yard. Prior to 2004, the proposed Harry Bridges Boulevard landscaped area was to be a 25-acre container storage/backlands area for the Berths 136-147 Container Terminal Redevelopment Plan. Based on community opposition and the growing recognition of the land use conflict of having a heavy industry use immediately adjacent to residential areas, the proposed Project was eventually modified to widen Harry Bridges Boulevard in substantially its existing location and develop the land to the north as an open space landscaped area. This project element benefits the community noise environment in the Wilmington neighborhood to the north of the proposed Project.

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3.9.2 Environmental Setting

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3.9.2.1 Noise Fundamentals

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Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound can be caused by its

1 *pitch* or its *loudness*. *Pitch* is the height or depth of a tone or sound, depending on
 2 the relative rapidity (frequency) of the vibrations by which it is produced. Higher
 3 pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is
 4 the amplitude of sound waves combined with the reception characteristics of the ear.
 5 Amplitude may be compared with the height of an ocean wave. Technical acoustical
 6 terms commonly used in this section are defined in Table 3.9-1.

7 **Table 3.9-1. Definitions of Acoustical Terms**

<i>Term</i>	<i>Definition</i>
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals in air). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sounds are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high 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.
Equivalent Noise Level (L_{eq})	The average A-weighted noise level during the measurement period. The hourly L_{eq} used for this report is denoted as dBA $L_{eq[h]}$.
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels to sound levels in the evening from 7:00 PM to 10:00 PM and after addition of 10 decibels to sound levels in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level (L_{dn})	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 PM and 7:00 AM.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, time of occurrence, and tonal or informational content as well as the prevailing ambient noise level.

8 **3.9.2.1.1 Decibels and Frequency**

9 In addition to the concepts of pitch and loudness, there are several noise measurement
 10 scales which are used to describe noise. The *decibel (dB)* is a unit of measurement,
 11 which indicates the relative amplitude of a sound. Zero on the decibel scale is based on
 12 the lowest sound pressure that a healthy, unimpaired human ear can detect. Sound levels

in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a 10-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its level. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a wide range of amplitudes. Since decibels are logarithmic units, sound pressure levels are not added arithmetically. When two sounds of equal sound pressure level are added, the result is a sound pressure level that is 3 dB higher. For example, if the sound level were 70 dB when 100 cars pass by, then it would be 73 dB when 200 cars pass the observer. Doubling the amount of energy would result in a 3 dB increase to the sound level.

Frequency relates to the number of pressure oscillations per second, or *Hertz (Hz)*. The range of sound frequencies that can be heard by healthy human ears is from about 20 Hz at the low frequency end to 20,000 Hz (20 kilohertz [kHz]) at the high frequency end.

There are several methods for characterizing sound. The most common is the *A-weighted sound level* or *dBA*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Studies have shown that the *A-weighted* level is closely correlated with annoyance to traffic noise. Other frequency weighting networks, such as *C weighting* or *dBC*, have been devised to describe noise levels for specific types of noise (e.g., explosives). Table 3.9-2 shows typical *A-weighted* noise levels that occur in human environments.

Table 3.9-2. Typical Noise Levels in the Environment

<i>Common Outdoor Noise Source</i>	<i>Noise Level (dBA)</i>	<i>Common Indoor Noise Source</i>
Jet fly-over at 300 meters	120 dBA	Rock concert
Pile driver at 30 meters	110 dBA	Night club with live music
Large truck passes by at 15 meters	100 dBA	Noisy restaurant
Gas lawn mower at 30 meters	90 dBA	Garbage disposal at 1 meter
Commercial/Urban area daytime	80 dBA	Vacuum cleaner at 3 meters
Suburban expressway at 90 meters	70 dBA	Normal speech at 1 meter
Suburban daytime	60 dBA	Active office environment
Urban area nighttime	50 dBA	Quiet office environment
Suburban nighttime	40 dBA	Library
Quiet rural areas	30 dBA	Quiet bedroom at night
Wilderness area	20 dBA	Quiet recording studio
Threshold of human hearing	10 dBA	Threshold of human hearing
	0 dBA	

3.9.2.1.2 Noise Descriptors

Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations is utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq} . A common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration. The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within approximately plus or minus 1 dBA. Two metrics describe the 24-hour average, L_{dn} and CNEL. Both include penalties for noise during the nighttime, and CNEL also penalizes noise during the evening. CNEL and L_{dn} are normally within 1 dBA of each other and are used interchangeably in this section.

3.9.2.1.3 Human Response to Noise

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, the healthy human ear can detect changes of about 2 dBA; however, it is widely accepted that changes of 3 dBA in the normal environment are considered just noticeable to most people. A change of 5 dBA is readily perceptible and a change of 10 dBA is perceived as being twice as loud.

Noise and Health

A number of studies have linked increases in noise with health effects, including hearing impairment, sleep disturbance, cardiovascular effects, psychophysiological effects, and potential impacts to fetal development (Babisch 2005). Potential health effects appear to be caused by both short and long term exposure to very loud noises and long term exposure to lower levels of sound. Acute sounds of $L_{AF} > 120\text{dB}$ can cause mechanical damage to hair cells of the cochlea (the auditory portion of the inner ear) and hearing impairment (Babisch 2005). As discussed in Section 3.9.2.1.1, $L_{AF} > 120\text{dB}$ is equivalent to a rock concert or a plane flying overhead at 300 meters. The World Health Organization and the USEPA consider $L_{Aeq} = 70\text{dB(A)}$ to be a safe daily average noise level for the ear. However, even this “ear-safe” level may cause disturbance to sleep and concentration and may be linked to chronic health impacts such as hypertension and heart disease (Babisch, 2006). A number of studies have looked at the potential health effects from the sound of chronic lower noise levels, such as traffic, especially as these noise levels affect children. In a study of school children in Germany, blood pressure was found to be 10mmHg higher in a group of students exposed to road traffic noise from high traffic transit routes (Babisch, 2006). A study by Kwanda (2004) showed that in pregnant women, exposure to airplane noise was found to be associated with decreased fetal body weight.

3.9.2.1.4 Sound Propagation

When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends on the following important factors:

Geometric spreading. Sound from a single source (i.e., a “point” source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. Highway noise is not a single stationary point source of sound. The movement of vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a “line” source) rather than from a point. This results in cylindrical spreading rather than the spherical spreading resulting from a point source. The change in sound level from a line source is 3 dBA per doubling of distance.

Ground absorption. Usually the noise path between the source and the observer is very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation because of geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is done for simplification only; for distances of less than 60 meters (300 feet), prediction results based on this scheme are sufficiently accurate. For acoustically “hard” sites (i.e., sites with a reflective surface, such as a parking lot or a smooth body of water, between the source and the receiver), no excess ground attenuation is assumed. For acoustically absorptive or “soft” sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dBA per doubling of distance is normally assumed. When added to the geometric spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dBA per doubling of distance for a line source and 7.5 dBA per doubling of distance for a point source.

Atmospheric effects. Research by Caltrans and others has shown that atmospheric conditions can have a major effect on noise levels. Wind has been shown to be the single most important meteorological factor within approximately 150 meters (500 feet), whereas vertical air temperature gradients are more important over longer distances. Other factors, such as air temperature, humidity, and turbulence, also have major effects. Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lower noise levels. Increased sound levels can also occur because of temperature inversion conditions (i.e., increasing temperature with elevation).

Shielding by natural or human-made features. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. A higher barrier may provide as much as 20 dB of noise reduction.

3.9.2.2 Existing Noise Environment

The proposed Project is located in the Wilmington and San Pedro Districts of the City of Los Angeles north and west of the Port of Los Angeles. Noise levels in the area result from vehicular traffic on the local street network and the freeways, railroad train movements along the various railroad lines in the area, industrial noise sources, and activities at the Port of Los Angeles. The noise environment at any particular location depends upon proximity to the various noise sources. Noise sensitive receivers are also located along the rail corridors in the environs of the Port of Los Angeles. The impact of increased railroad train noise was calculated. Noise sensitive receivers in the proposed Project vicinity include single- and multi-family residences located along the north side of “C” Street between Neptune and Mar Vista avenues, residences southwest of Pacific Avenue on a hill overlooking Berth 100, and the top of Knoll Hill (Figure 3.9-1) where there is one residence and a temporary dog park, for which the Port has received a request to convert to temporary little league baseball fields. Persons living in marinas at Berths 200-202 are near the site proposed for the relocation of the Pier A rail yard.

Noise measurements are used to establish noise levels at sensitive receivers in the areas surrounding the proposed Project. In addition, noise surveys of existing industrial activities similar in nature to those proposed as part of the proposed Project are used to quantify project-generated noise. All measured noise levels reported in this section were obtained utilizing Larson-David Laboratories Model 700 and 812 integrating sound level meters equipped with precision microphones and wind screens and were field calibrated with an acoustical calibrator. Measurements were made by qualified personnel experienced in the selection of representative measurement sites, the accurate measurement of environmental sources, and proper field survey methods.

3.9.2.2.1 Wilmington

A noise monitoring survey was conducted in April 2002 to quantify existing ambient noise levels at representative locations along “C” Street (Figure 3.9-1). Noise levels in and around the “C” Street neighborhood result from vehicular traffic on the street network. Physical conditions in the area were the same in April 2002 as in December 2003. Vehicular traffic volumes on major roadways, including the I-110, Harry Bridges Boulevard, and “C” Street, increased slightly from 2002 to 2003 (Transportation/Circulation 3.10.2.2). The incremental increase in vehicular traffic between 2002 and 2003 would mean that noise levels in April 2002 would, if any, be slightly lower than at the baseline time period established at December 2003 providing a conservative baseline for determining a change in noise levels which could result from the proposed Project.

Noise levels were monitored during the daytime, evening, and nighttime in consecutive hourly intervals at three locations, LT-1, LT-3, and LT-4. A reference noise measurement was also conducted at Location LT-2 adjacent to Harry Bridges Boulevard. Locations LT-1, LT-3, and LT-4 were selected to characterize the noise environment at residences located along “C” Street that were nearest to the proposed Project area. Based on observations in the field, it was determined that the noise environment varies along “C” Street primarily based on the lessening effect of the

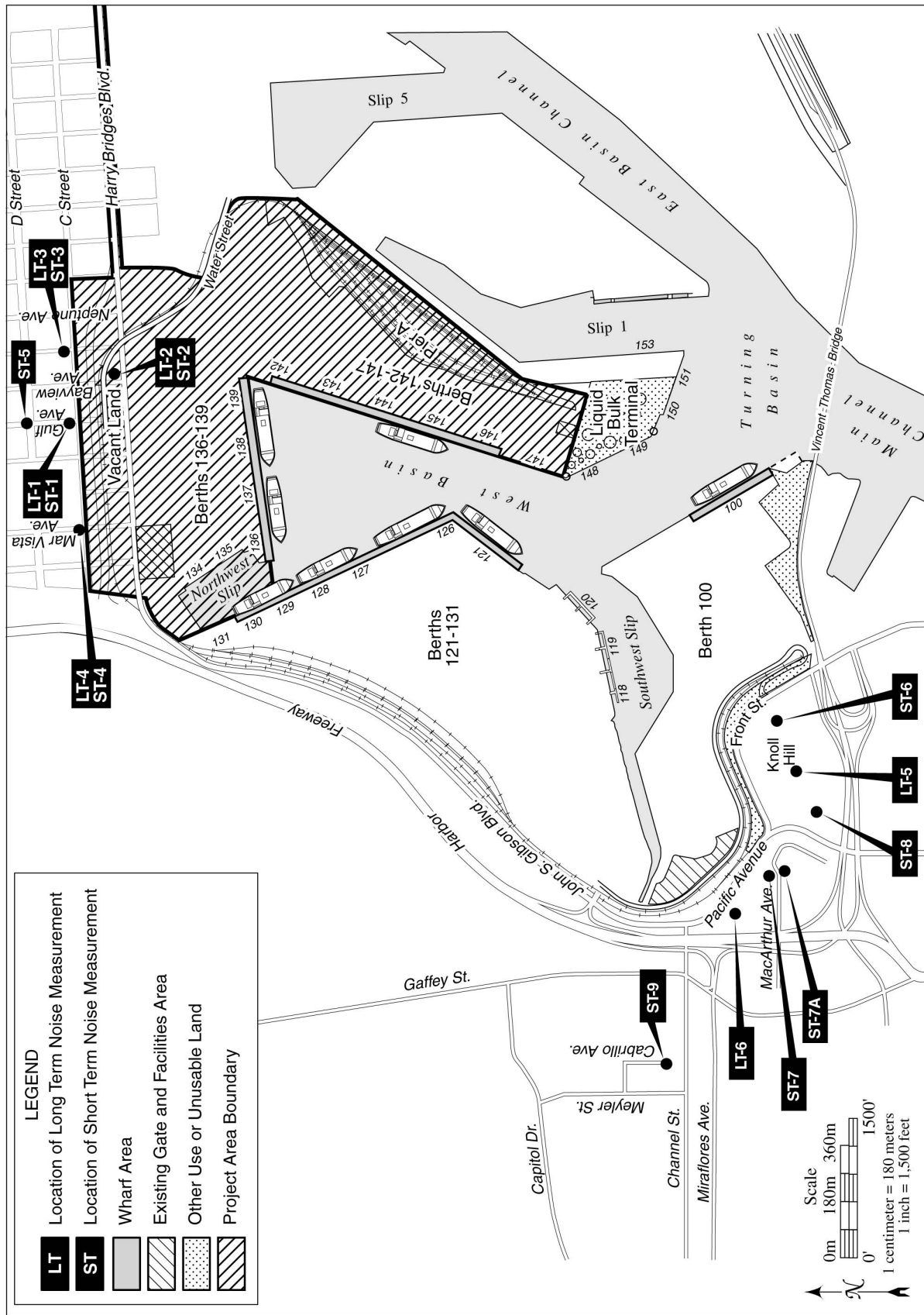


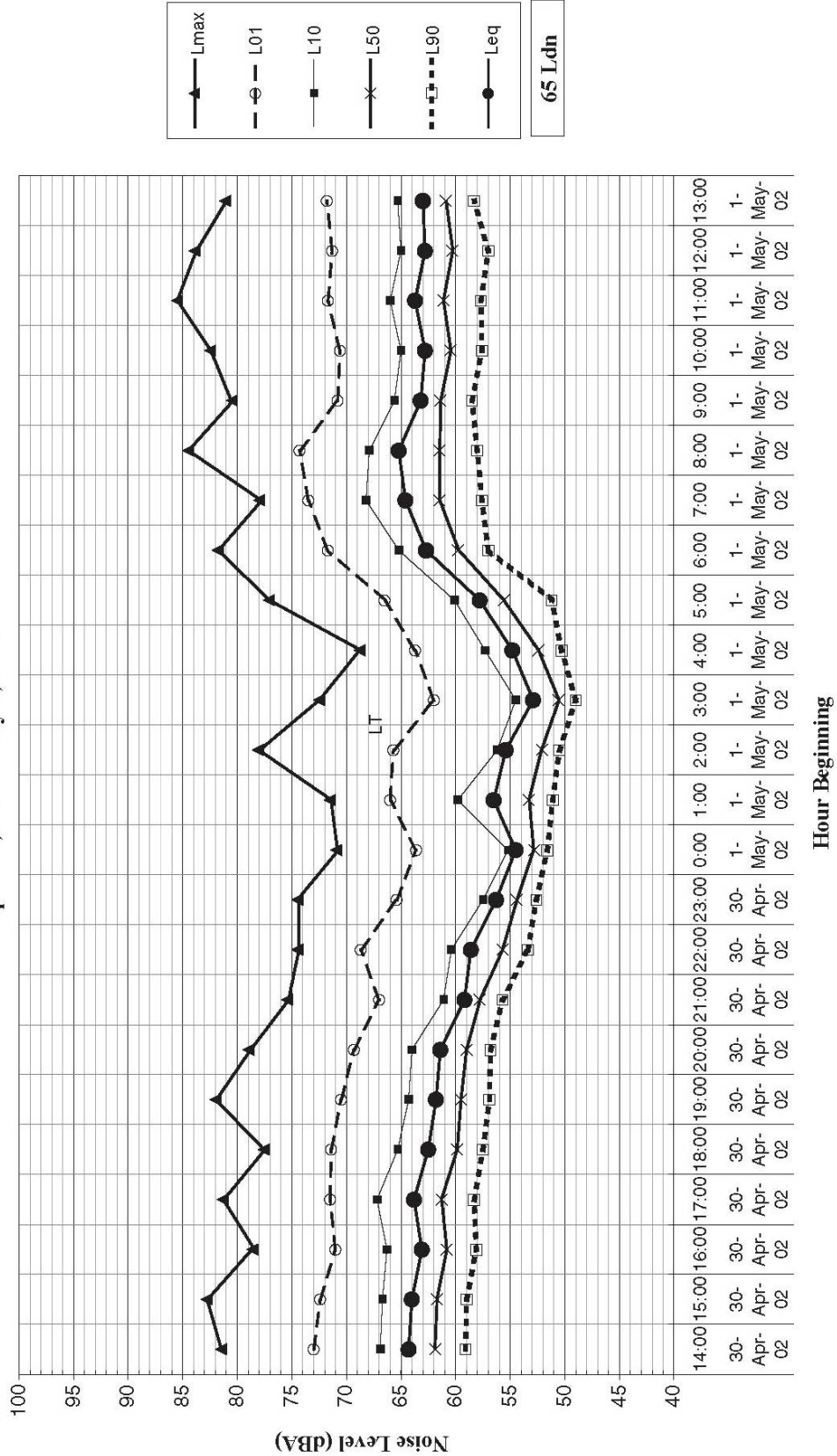
Figure 3.9-1. Noise Measurement Locations

1 noise from the I-110 freeway as one moves east along “C” Street. A measurement was
2 made also adjacent to Harry Bridges Boulevard. The purpose for this measurement
3 was to assist in the analysis of potential noise impacts from improvements to Harry
4 Bridges Boulevard that are included in the proposed Project. This was, therefore, a
5 source reference measurement as opposed to a measurement of existing ambient noise
6 levels at a sensitive receiver. These measurements are also discussed in this section of
7 the report. The results of the noise measurements are shown in Figures 3.9-2 through
8 3.9-5. The figures provide the range of noise levels measured during each hour
9 depicted by the statistical descriptors L_{90} , L_{50} , L_{10} and L_{01} , as well as the maximum
10 noise level and the energy average or equivalent sound level, $L_{eq[h]}$. The measured L_{dn} ,
11 the 24-hour day/night average noise level, is also shown on each figure. The existing
12 L_{dn} along “C” Street in the central and eastern portion of the study area is 65 to 66 L_{dn} .
13 At the western end of the study area near the I-110 freeway, the measured L_{dn} was 71
14 dBA. Noise from a nearby remaining commercial/light industrial land use also
15 contributed to measured noise levels at this location. The existing noise level at the
16 measurement location 57 feet from the centerline of Harry Bridges Boulevard was 77
17 dBA L_{dn} and the peak hour average noise level was 77 to 78 dBA $L_{eq(h)}$.

18 Short-term, 15-minute duration noise measurements were made at each long-term
19 measurement location and at one additional location at the corner of Gulf Avenue and
20 “D” Street one block north of the primary study area (see Table 3.9-3). Instantaneous
21 noise levels from identifiable sources were observed during the attended
22 measurements. At Site ST-1 below the long-term meter at LT-1, neighborhood noise
23 from stereos and voices reached 55 dBA. Harry Bridges Boulevard traffic was audible,
24 but the dominant source of noise was local traffic on “C” Street. Trucks on Harry
25 Bridges Boulevard generated maximum noise levels up to 65 dBA. Local traffic on
26 “C” Street generated typical maximum noise levels in the range of 72 to 77 dBA. At
27 Site ST-2 along Harry Bridges Boulevard, heavy truck traffic was the dominant source
28 of noise. The truck traffic generated typical maximum noise levels of 83 to 87 dBA as
29 trucks passed by the measurement site. A train also passed by at a speed of
30 approximately 5 mph. The train generated a steady noise level of 69 to 70 dBA. At
31 Site ST-3, at the corner of the park located at the intersection of “C” Street and
32 Bayview Avenue, Harry Bridges Boulevard traffic was audible with trucks generating
33 maximum noise levels of 58 to 61 dBA. Local traffic on “C” Street generated
34 maximum noise levels of 68 to 70 dBA. Children on skateboards in the parking lot
35 across Bayview from the monitoring site generated noise levels of 60 to 61 dBA.

36 At Site ST-4 below long-term meter LT-4, at the intersection of “C” Street and
37 Hawaiian Avenue, heavier “C” Street traffic and freeway traffic on the I-110
38 dominated the measured noise levels. Vehicular traffic on “C” Street was typically in
39 the range of 65 to 74 dBA. The freeway traffic was steady at about 62 dBA with
40 maximum levels ranging from 63 to 65 dBA when louder trucks passed by on the
41 freeway. Site ST-5 was selected near the intersection of Gulf Avenue and “D” Street
42 to measure ambient noise levels further north in the Wilmington neighborhood. At
43 this location, freeway traffic on I-110 was steady at about 55 dBA. Activities at the
44 Port of Los Angeles were inaudible. Other sources of noise contributing to the
45 measured noise levels included occasional local traffic, birds in the trees, and the
46 sounds of children playing. Local cars on the roadways generated maximum noise
47 levels of 60 to 66 dBA as they passed through the intersection

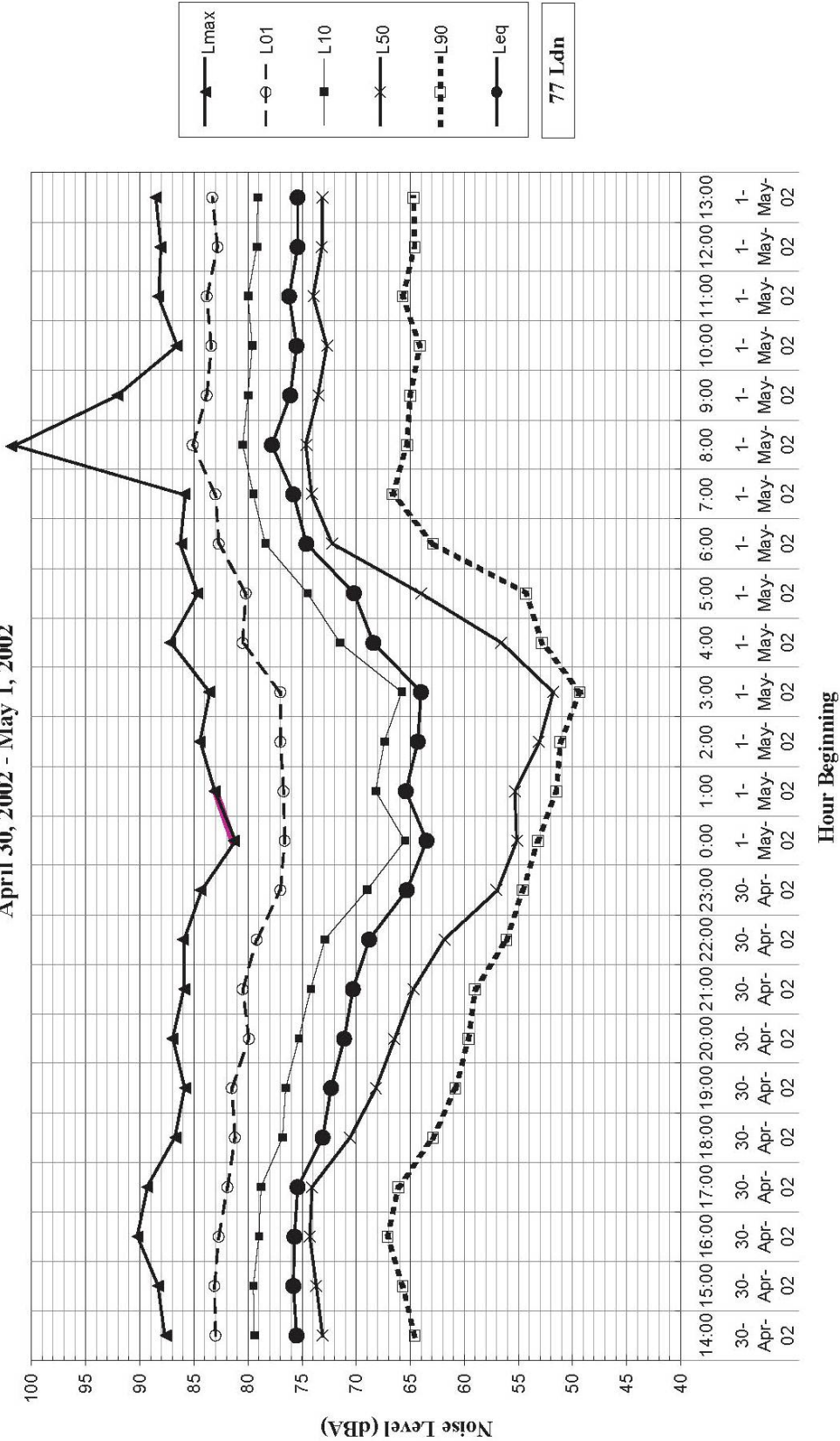
Hourly Noise Levels at LT-1
 ~48 feet to Centerline of C Street at 303 Gulf Street
 April 30, 2002 - May 1, 2002



Source: Illingworth & Rodkin 2002

Figure 3.9-2. Hourly Noise Levels at LT-1

Hourly Noise Levels at LT-2
 ~ 57 feet to Centerline of Harry Bridges Boulevard
 April 30, 2002 - May 1, 2002



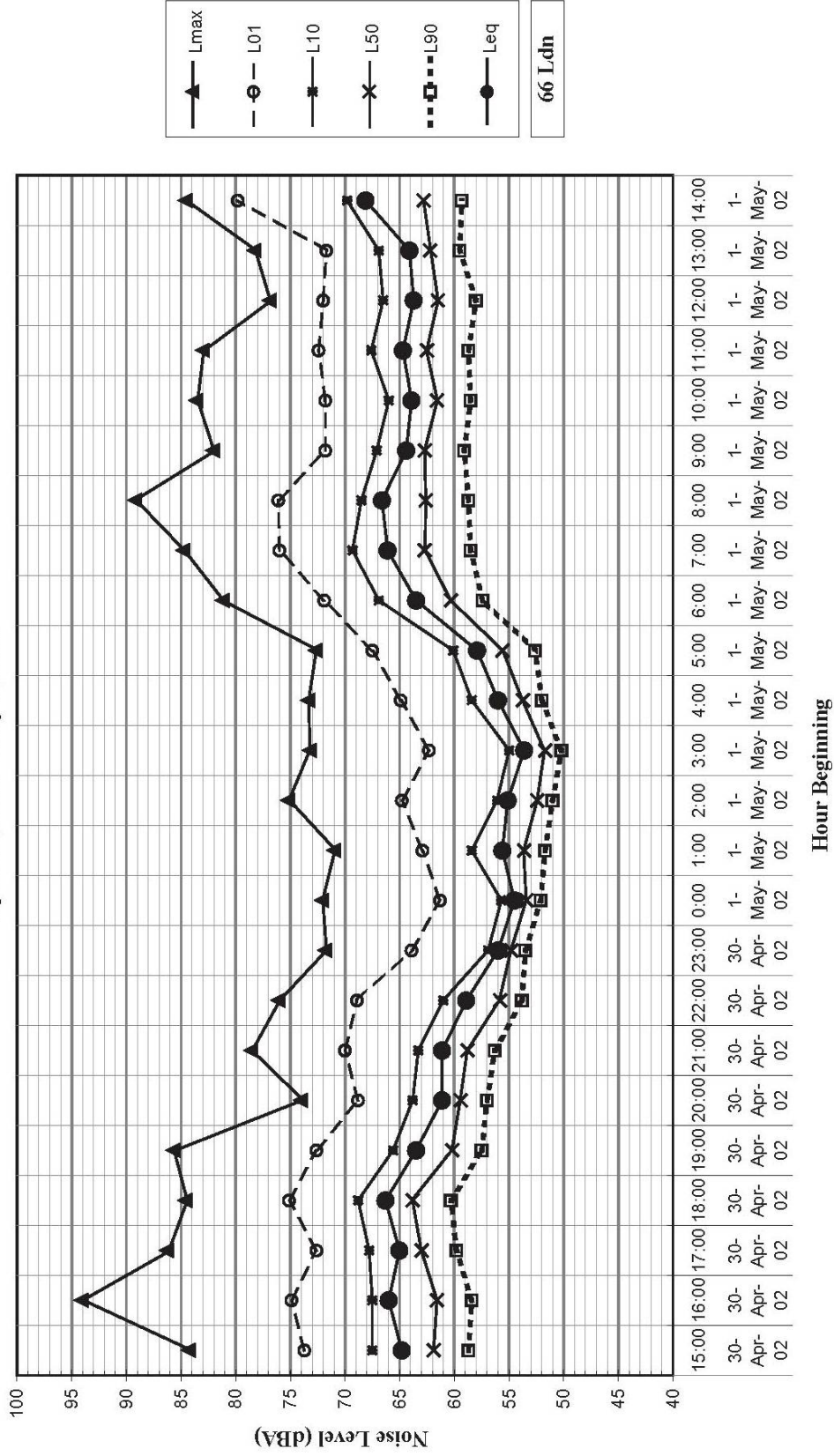
Source: Illingworth & Rodkin 2002

Figure 3.9-3. Hourly Noise Levels at LT-2

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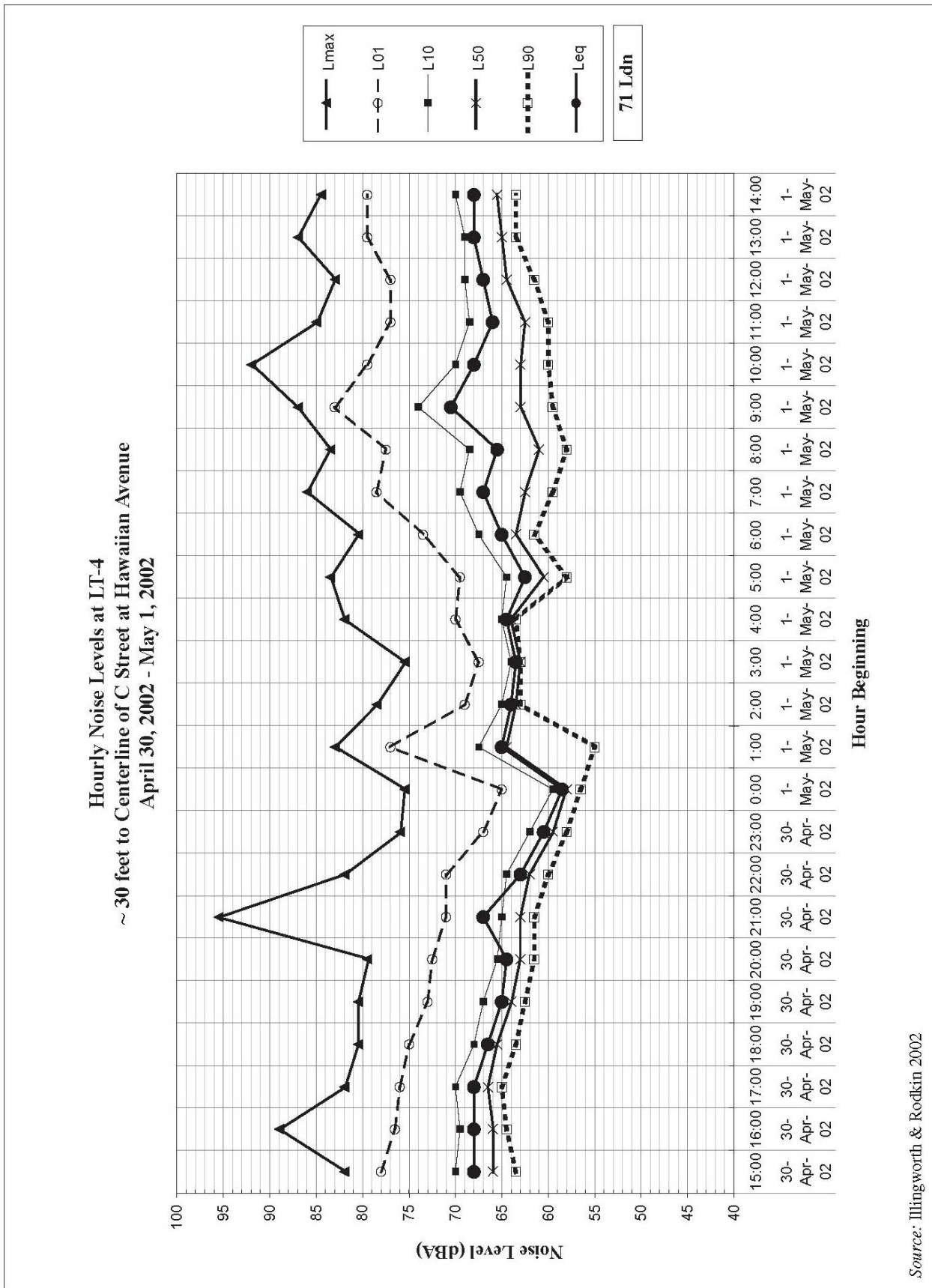
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Hourly Noise Levels at LT-3
 ~48 feet to Centerline of C Street at Bayview Avenue
 April 30, 2002 - May 1, 2002



Source: Illingworth & Rodkin 2002

Figure 3.9-4. Hourly Noise Levels at LT-3



Source: Illingworth & Rodkin 2002

Figure 3.9-5. Hourly Noise Levels at LT-4

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Table 3.9-3. Short-Term Noise Measurement Data (dBA)

Site	Location	Date	Time	L_{max}	L_{min}	$L_{(1)}$	$L_{(10)}$	$L_{(50)}$	$L_{(90)}$	L_{eq}
ST-1	Below LT-1 ~ 48 feet to Centerline of "C" Street at 303 Gulf Street	4/30/2002	15:50	77	54	72	65	58	56	62
ST-2	Below LT-2 ~ 57 feet to Centerline of Harry Bridges Boulevard	4/30/2002	15:30	87	58	83	79	73	65	75
ST-3	Below LT-3 ~ 48 feet to Centerline of "C" Street at Bayview Avenue	4/30/2002	16:10	70	55	69	63	58	56	60
ST-4	Below LT-4 ~ 30 feet to Centerline of "C" Street at Hawaiian Avenue	4/30/2002	16:30	74	60	72	67	63	62	65
ST-5	Northwest Corner of Gulf Avenue and "D" Street	4/30/2002	16:50	66	54	65	60	57	55	58
ST-6	East end Knoll Hill at end of Viewland	10/29/02	12:06	68	59	67	64	62	60	62
		10/29/02	15:45	74	61	67	66	64	62	64
		10/30/02	9:30	69	59	68	66	64	63	64
ST-7	Elberon, Summerland, MacArthur intersection, Top of slope	10/29/02	16:20	75	61	73	69	66	64	67
		10/30/02	9:55	73	62	71	69	66	64	67
ST-7A	Elberon, Summerland, MacArthur intersection, 100' back from top of slope	10/30/02	10:10	67	54	65	60	58	56	58
ST-8	Harbor Occupational Center near Metals Building	10/29/02	16:40	64	54	62	60	57	56	58
ST-9	End of Cabrillo Ave @ #1130	10/30/02	10:45	62	53	61	59	57	55	57

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3.9.2.2.2 San Pedro

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The noise monitoring survey was conducted in October 2002 to quantify existing ambient noise levels at representative sensitive receiver locations near the West Basin in San Pedro. Noise levels were monitored during the daytime, evening, and nighttime in consecutive hourly intervals at two locations, LT-5 and LT-6. The results of the measurements are shown in Figures 3.9-6 and 3.9-7. The figures provide the range of noise levels measured during each hour depicted by the statistical descriptors L_{90} , L_{50} , L_{10} , and L_{01} , as well as the maximum noise level and the energy average or equivalent sound level $L_{eq[h]}$. The measured L_{dn} , the 24-hour day/night average noise level, is also shown in each figure. The existing L_{dn} on top of Knoll Hill was 65 dBA L_{dn} at Site LT-5. Hourly noise levels were typically between 55 and 60 dBA $L_{eq[h]}$. Noise levels were steady over the entire 24-hour period, with the exception of occasional local noises

Top of Knoll Hill - Center Street at Viewland Place
 October 29, 2002 - October 30, 2002

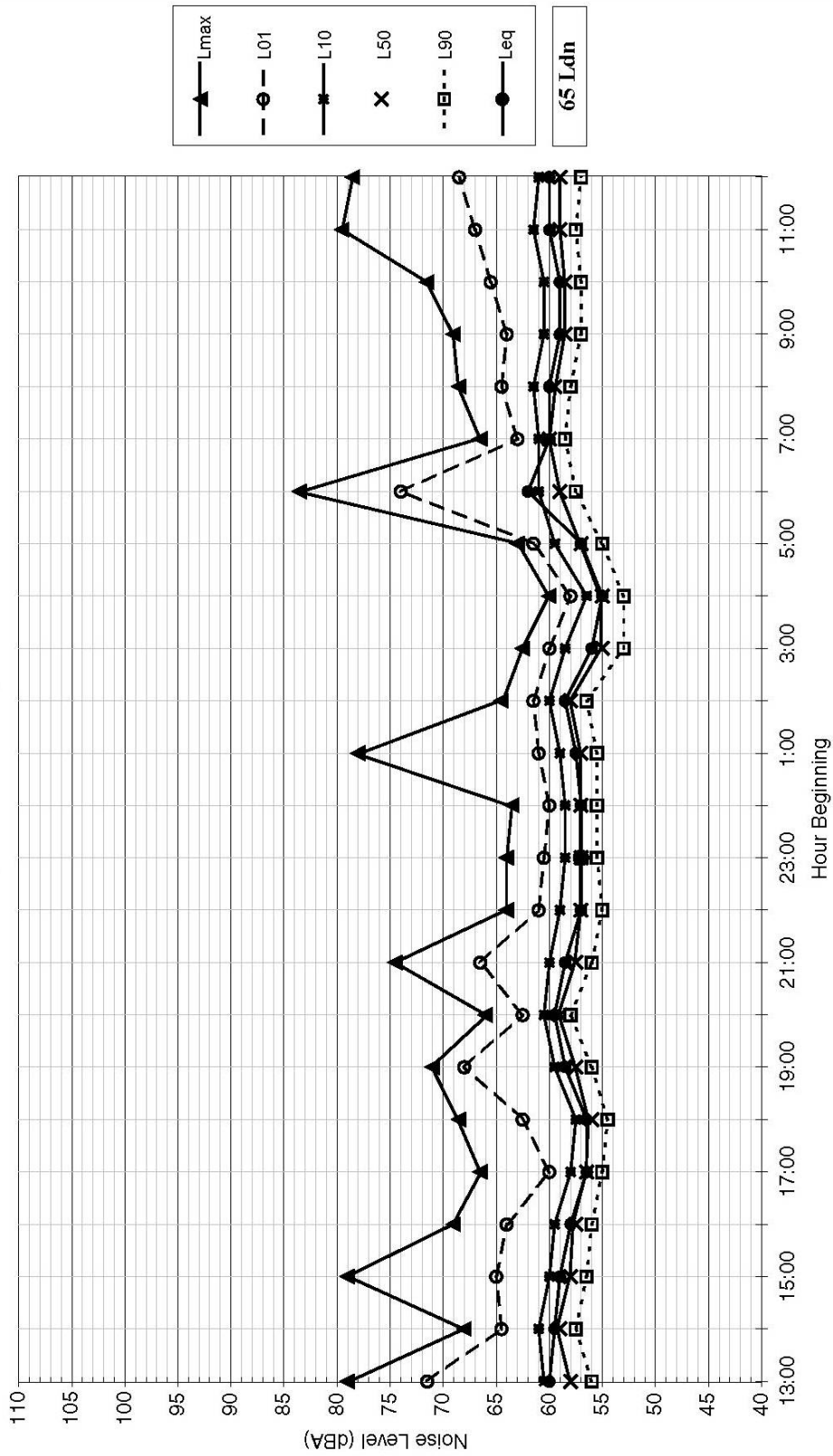


Figure 3.9-6. Hourly Noise Levels at LT-5

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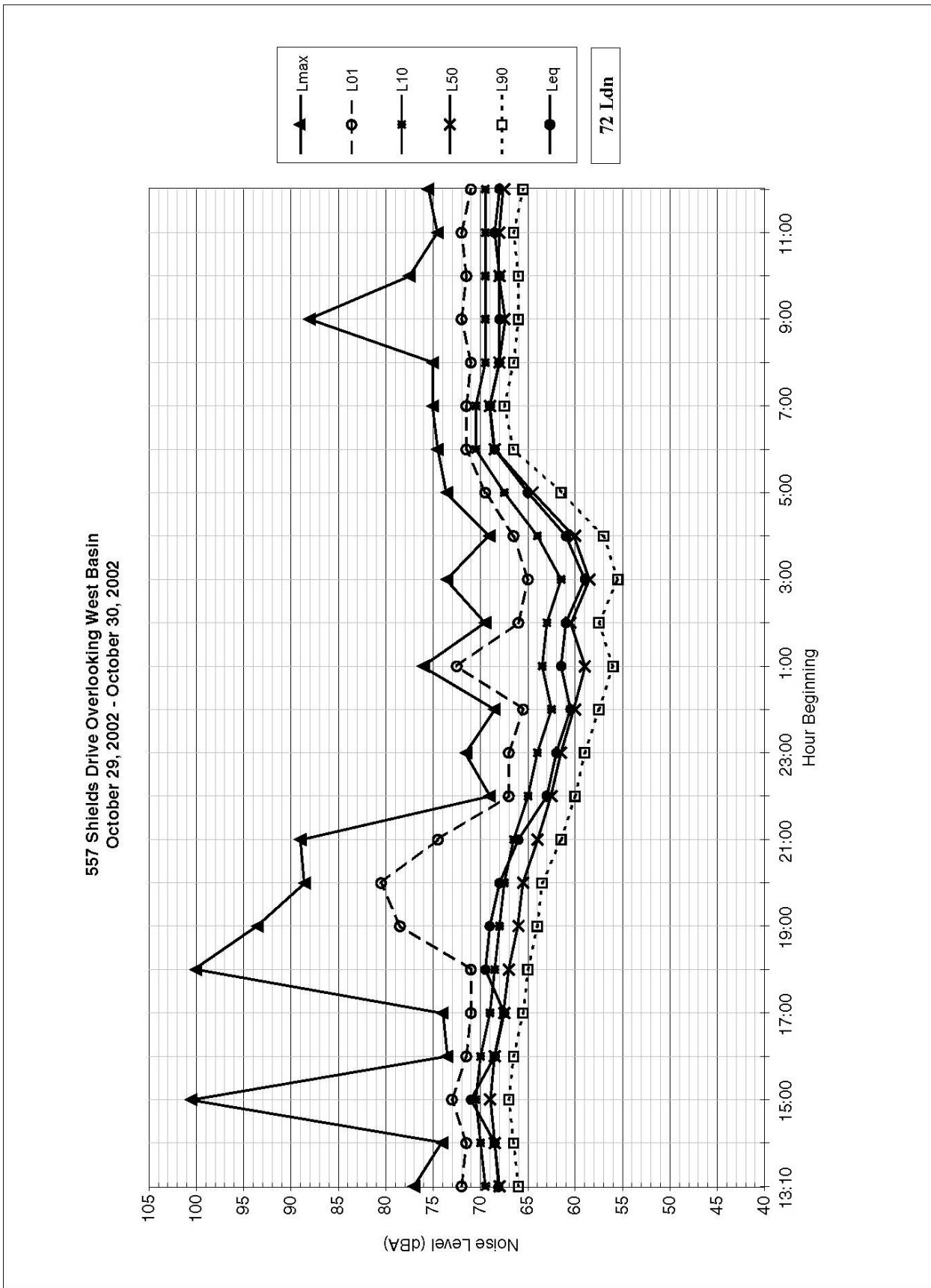


Figure 3.9-7. Hourly Noise Levels at LT-6

1 resulting from vehicular traffic or dogs in the dog park. Measurement location LT-6 was
2 on Shields Drive on the top of the slope overlooking Pacific Avenue and most of the
3 West Basin. Major sources of noise at this monitoring site included vehicular traffic on
4 Pacific Avenue, vehicular traffic on the I-110 Freeway, and truck traffic circulating inside
5 the Port property paralleling Pacific Avenue. Railroad trains on the railroad tracks within
6 the Port also were audible, but did not contribute in a major way to measured noise
7 levels. High maximum noise levels during several hours are believed to have resulted
8 from local traffic near the microphone. At this measurement location on Shields Drive,
9 the measured level was 72 dBA L_{dn} .

10 Short-term, 15-minute duration noise measurements were made at additional
11 representative locations. Site ST-6 was at the east end of the top of Knoll Hill
12 overlooking Berth 100 and the intersection of Front Street and a truck access to the
13 West Basin. Truck traffic on these roadways was the dominant source of noise,
14 generating typical maximum levels of 62 to 64 dBA. A helicopter flying overhead
15 during the mid-day measurement generated a maximum noise level of 68 dBA and a
16 truck horn during the late afternoon measurement generated a maximum noise level of
17 74 dBA. The higher noise levels during the late afternoon measurement resulted from
18 heavier truck traffic. Construction activities at Berth 100 were virtually complete. The
19 backland areas were nearly all paved and there were no activities at the wharf.
20 Construction noise did not make a measurable or noticeable contribution to the October
21 2002 noise measurement survey. Data are presented in Table 3.9-3.

22 Site ST-7 was located near the intersection of Elberon, Summerland, and MacArthur in
23 the residential area west of Knoll Hill. The noise environment at this location was very
24 similar to the noise environment at location LT-6. The measurement site was selected
25 at the top of the slope with an unobstructed view of traffic on Pacific Avenue, Front
26 Street, and the Port as well as the Freeway and more distant sources of noise in the
27 area. For comparative purposes, a supplementary measurement was made 100 feet
28 from the top of the slope along Elberon across from 409 Elberon. At this location (ST-
29 7A) noise from truck traffic directly below was shielded by the top of the slope. This
30 resulted in approximately a 9-dBA reduction in the measured noise level and
31 demonstrates the effectiveness of topographical shielding.

32 The Harbor Occupational Center, located on Pacific Avenue south of Knoll Hill, was
33 identified in the original West Basin Transportation Improvement Program EIR
34 (LAHD 1997a) as a noise sensitive receiver, because a previous project considered the
35 removal of Knoll Hill, potentially exposing this site to increased noise from new and
36 existing transportation sources. One short-term measurement was made at this location
37 (ST-8). Vehicular traffic on Route 47 (Vincent Thomas Bridge) was again the
38 dominant noise source. The noise environment was not very different than it was
39 previously. This receiver location is not considered further in this evaluation because
40 the proposed Project would not affect the noise environment at this site.

41 Another site that could potentially be affected by the proposed Project is located on
42 upper Cabrillo Avenue west of the I-110 Freeway. This neighborhood is elevated
43 above the freeway and has views of the freeway and the West Basin. Measurement
44 location ST-9 was selected to characterize noise levels in this neighborhood. The site
45 for this measurement was at the south end of the street near 1130 Cabrillo Avenue.
46 Vehicular traffic on the I-110 Freeway dominated the noise environment during the

1 measurements. Port activities were indistinguishable from other traffic noise. The
2 noise environment at this location was very steady, characteristic of distant freeway
3 noise with noise levels typically ranging from about 54 to 60 dBA, with occasional
4 slight excursions above and below this range.

5 **3.9.2.2.3 Berth 200-202 Marinas**

6 The noise monitoring survey was conducted in November 2005 to quantify existing
7 ambient noise levels at representative sensitive receiver locations near the site
8 proposed for the relocation of the Pier A rail yard. Physical conditions in the area,
9 sources of ambient noise, and levels of activity are not believed to have changed
10 substantially since December 2003. Ambient noise measurements conducted in
11 November 2005 are believed to be conservative baseline conditions for the purposes
12 of this assessment because as provided below, the noise levels are very low, free of
13 major fluctuations, and dominated by near field noises nearby. There have also been
14 no known significant new facility construction/operations in the area that would
15 cause an increase in the noise measurements between these two time periods. In fact,
16 in 2004, Auto Warehousing ceased their operations at Berth 200A and DAS saw a
17 reduction in their auto handling at Berths 195-199 in that same year which, if audible
18 at this marina site, would result in a noisier baseline. Noise levels were monitored
19 during the daytime, evening, and nighttime in consecutive hourly intervals at one
20 location, LT-7, as shown on Figure 3.9-8, in the Island Yacht 2 Marina located at
21 Berth 200X. The results of the measurement are shown in Figure 3.9-9. The figure
22 provides the range of noise levels measured during each hour depicted by the
23 statistical descriptors, L_{90} , L_{50} , L_{10} , and L_{01} , as well as the maximum noise level and
24 the energy average or equivalent sound level, $L_{eq[h]}$. The measured L_{dn} , the 24-hour
25 day/night average noise level was 61 dBA. Average noise levels were typically
26 between 50 to 60 dBA $L_{eq(h)}$ during the daytime and 50 to 55 dBA $L_{eq(h)}$ during the
27 nighttime. Maximum instantaneous noise levels typically ranged from about 60 to 70
28 dBA during the daytime and the nighttime with occasional excursions between 70
29 and 80 dBA. Based on field observations, the L_{max} levels resulted from neighborhood
30 vehicles passing close the measurement equipment.

31 Short-term noise measurements were made at additional representative locations in the
32 marinas that could potentially be affected by noise from the relocation of the rail yard.
33 Site ST-9 was in the Leeward Marina located near the intersection of Henry Ford and
34 Anaheim Boulevard. Average noise levels during the measurement typically ranged
35 from about 55 to 58 dBA $L_{eq(h)}$. This resulted from distant traffic on Henry Ford
36 Avenue. Aircraft generated a maximum noise level of 59 dBA. The noise
37 environment was generally free of major fluctuations. There is a railroad train crossing
38 at Henry Road Avenue located about 450 feet from the Leeward Marina. While no
39 trains were noted during the site visit, train horns at this distance would be clearly
40 audible in this setting. Site ST-10 was located at the California Yacht Marina, Berth
41 202. Noise levels at this location were also very steady, with average levels ranging
42 typically between 50 to 53 dBA. Sources of noise included distant traffic and wind in
43 some palm trees at about 50 dBA, a helicopter at a level of 57 dBA, birds at maximum
44 levels of about 53 dBA, and a noon whistle at an industrial facility generated 51 dBA.

3.9.3 Applicable Regulations

The *Los Angeles CEQA Thresholds Guide* (City of Los Angeles 2006) includes the following checklist questions regarding environmental noise impacts:

- a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above the existing without the project?
- e) For a project located within an airport land use plan, or where such a plan has not been adopted within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Significance criteria are established to questions a, c, and d for potential impacts resulting from construction activities and from potential impacts resulting from operation during each of the two stages of construction and operation proposed for this project. Questions b, e, and f are not applicable to this assessment. Background information is presented in the following paragraphs regarding applicable or related regulations adopted by the City of Los Angeles or other agencies.

3.9.3.1 City of Los Angeles Municipal Code

Section 41.40 of the City of Los Angeles Municipal Code establishes when construction work is prohibited. The Municipal Code section states the following:

- (a) No person shall between the hours of 9:00 pm and 7:00 am of the following day perform any construction or repair work of any kind upon or any excavating for, any building or structure, where any of the foregoing entails the use of any power-driven drill, driven machine, excavator, or any other machine, tool, device, or equipment which makes loud noises to the disturbance of persons occupying sleeping quarters in any dwelling, hotel, or apartment or other place of residence. In addition, the operation, repair or servicing of construction equipment and the jobsite delivering of construction materials in such areas shall be prohibited during the hours herein specified. Any person who knowingly and willfully violates the foregoing provision shall be deemed guilty of a misdemeanor punishable as elsewhere provided in this code.*

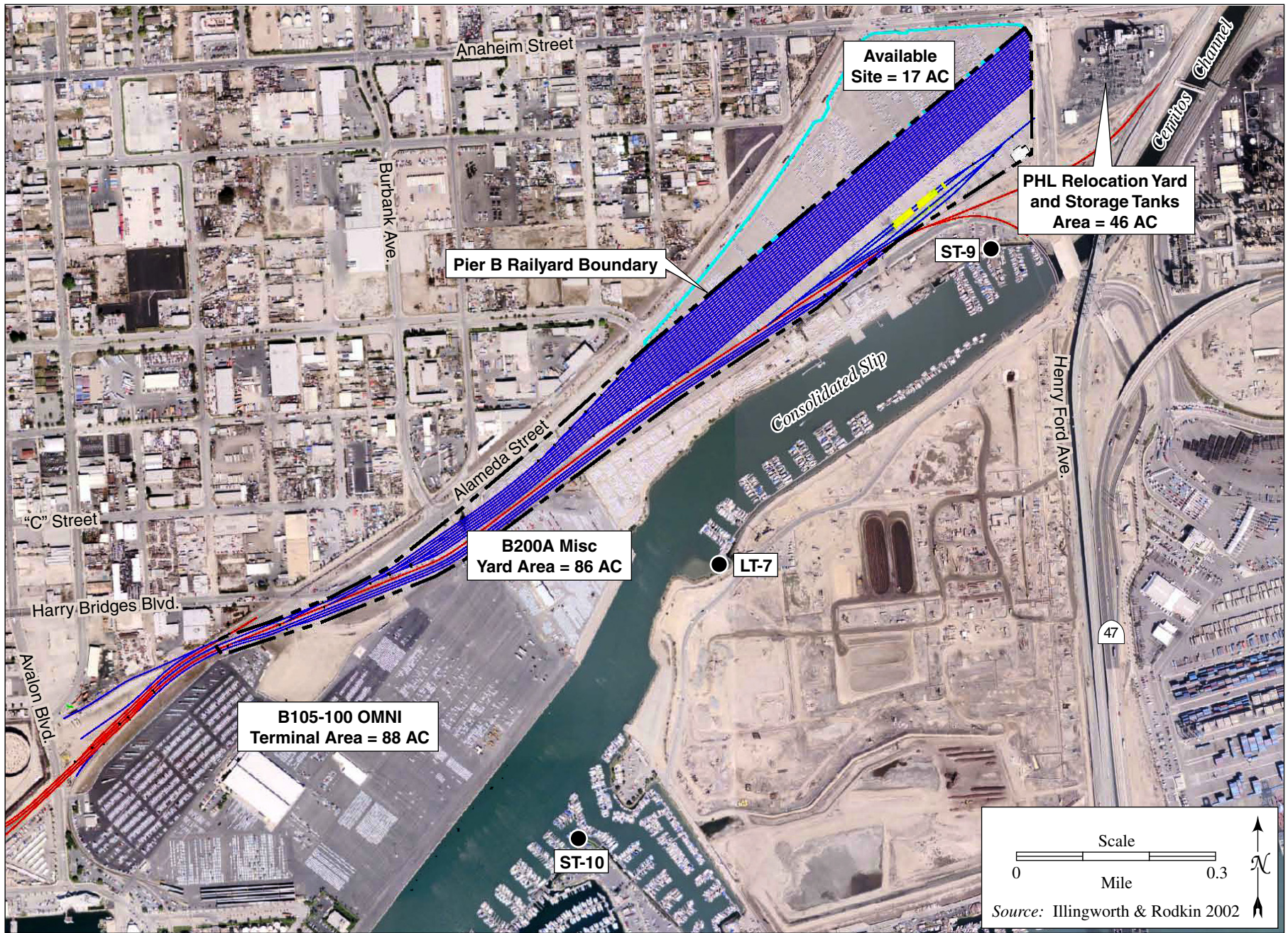
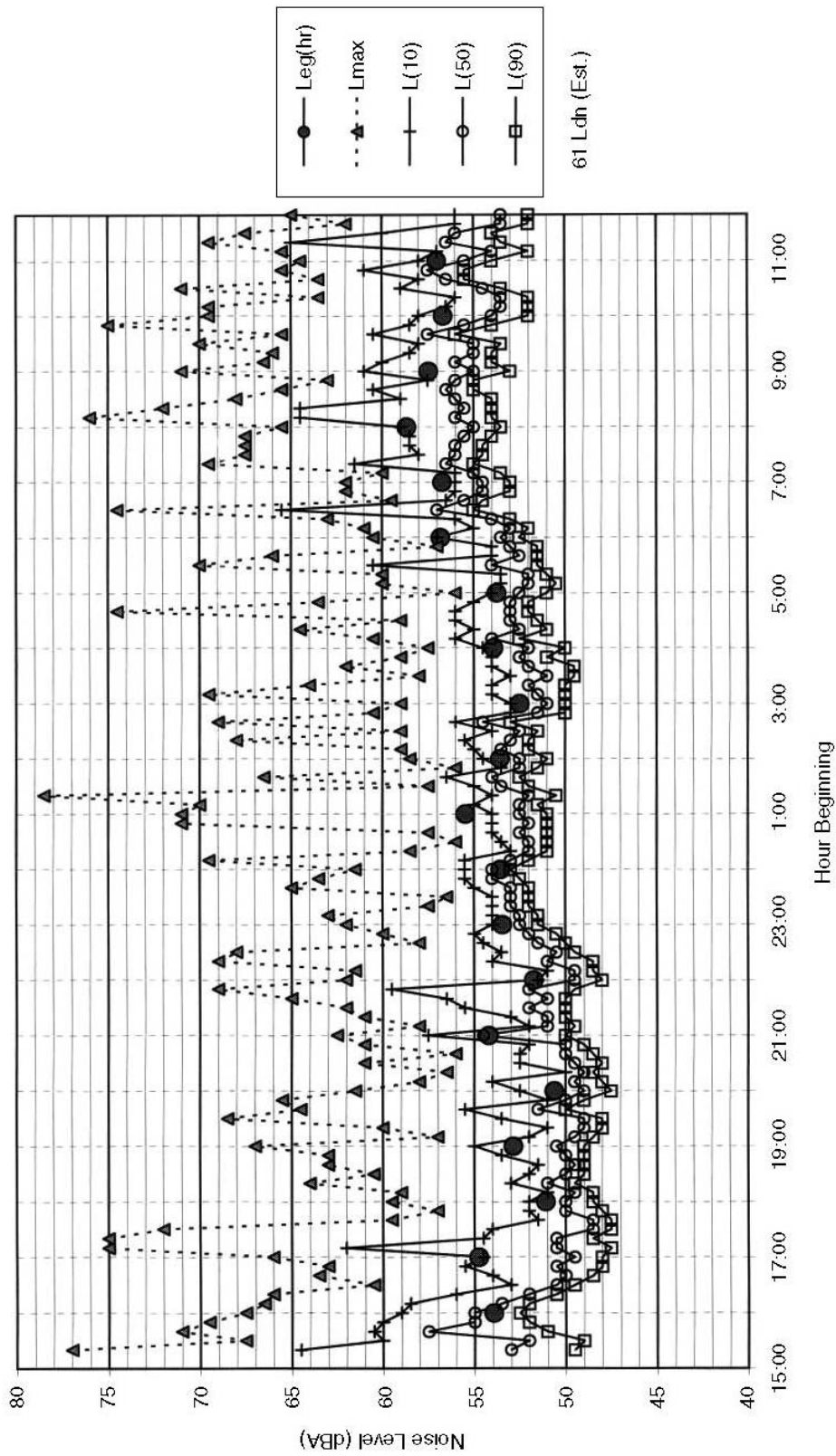


Figure 3.9-8. Noise Measurement Locations

1

2



Source: Illingworth and Rodkin 2005

Figure 3.9-9. Noise Levels at Measurement Location LT-7, Consolidated Slip Marina, November 7-8, 2005

1 The code section then provides certain provisions for exceptions and exemptions.

2 Chapter 11 of the Municipal Code sets forth noise regulations, including regulations
3 applicable to construction noise impacts. Section 112.05 establishes maximum noise
4 levels for powered equipment or powered hand tools. This section states:

5 *Between the hours of 7:00 am and 10:00 pm in any residential zone of the*
6 *City or within 500 feet thereof, no person shall operate or cause to be*
7 *operated any powered equipment or powered hand tool that produces a*
8 *maximum noise level exceeding the following noise limits at a distance of 50*
9 *feet there from (a) 75 dBA for construction, industrial and agricultural*
10 *machinery including crawler tractors, dozers, rotary drills and augers,*
11 *loaders, power shovels, cranes, derricks, motor graders, paving machines,*
12 *off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons,*
13 *pavement breakers, depressors, and pneumatic or other powered equipment;*
14 *(b) 75 dBA for powered equipment of 20 horsepower or less intended for*
15 *infrequent use in residential areas including chain saws, log chippers, and*
16 *powered hand tools; and (c) 65 dBA for powered equipment intended for*
17 *repetitive use in residential areas including lawn mowers, backpack mowers,*
18 *small lawn and garden tools, and riding tractors.*

19 *The noise limits for particular equipment listed above in (a), (b) and (c) shall*
20 *be deemed to be superseded and replaced by noise limits for such equipment*
21 *from and after their establishment by final regulations adopted by the Federal*
22 *Environmental Protection Agency and published in the Federal Register.*

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

29 **3.9.4 Impacts and Mitigation Measures**

30 **3.9.4.1 Methodology**

31 This section summarizes the methodology. Detailed supporting information for the
32 tasks is presented in each section. The methodology to determine the significance of
33 noise impacts resulting from construction and operation of the proposed Project
34 included several tasks. Representative sensitive receiver locations were identified.
35 The noise sensitive receivers were identified through field observations. The
36 monitoring sites were selected to characterize noise exposures in the neighborhoods
37 surrounding the proposed Project. Noise surveys were conducted to establish
38 existing ambient noise levels at sensitive receiver locations in the study area. A noise
39 measurement survey was conducted during construction at Berth 100 to determine
40 typical noise levels resulting from “worst-case” construction at the Port. Noise levels
41 resulting from construction activities were estimated for each major phase of

1 construction in each area using measured data from the noise survey and calculations
2 of construction noise levels based on the numbers and types of pieces of equipment
3 expected at the construction sites. A noise measurement survey was conducted at the
4 existing rail yard on Pier A in November 2005 to determine typical noise levels
5 resulting from railroad operations. Operational noise levels from stationary sources
6 were based upon previous data collected at the Port.

7 The methodology for the assessment of noise impacts from the proposed
8 improvements to Harry Bridges Boulevard included several tasks. In addition to the
9 ambient noise survey described above, additional noise measurements were
10 conducted in 2002 along Harry Bridges Boulevard to establish source noise levels
11 and to calibrate TNM, the FHWA/Caltrans traffic noise model used to predict noise
12 levels from the existing transportation corridor. The effects of widening the roadway
13 and increased traffic were calculated using the TNM V2.5 computer model.

14 **3.9.4.1.1 CEQA Baseline**

15 Section 15125 of the CEQA Guidelines requires EIRs to include a description of the
16 physical environmental conditions in the vicinity of a project that exist at the time of
17 the NOP. These environmental conditions would normally constitute the baseline
18 physical conditions by which the CEQA lead agency determines whether an impact is
19 significant. For purposes of this Draft EIS/EIR, the CEQA Baseline for determining
20 the significance of potential impacts under CEQA is December 2003. CEQA
21 Baseline conditions are described in Table 2-2 of Section 2.4.

22 The CEQA baseline represents the setting at a fixed point in time and differs from the
23 “No Project” Alternative (discussed in Section 2.5.1) in that the No Project Alternative
24 addresses what is likely to happen at the site over time, starting from the existing
25 conditions. The No Project Alternative allows for growth at the Project site that would
26 occur even without improvements constructed at the TraPac Terminal.

27 **3.9.4.1.2 No Federal Action/NEPA Baseline**

28 For purposes of this Draft EIS/EIR, the evaluation of significance under NEPA is
29 defined by comparing the proposed Project or other alternative to the No Federal
30 Action scenario. The No Federal Action/NEPA Baseline condition for determining
31 significance of impacts coincides with the “No Federal Action” condition, which is
32 defined by examining the full range of construction and operational activities the
33 applicant could implement and is likely to implement absent permits from the
34 USACE. Therefore, the No Federal Action/NEPA Baseline would not include any
35 dredging, filling of the Northwest Slip, wharf construction or upgrades, or crane
36 replacement. The No Federal Action/NEPA Baseline would include construction and
37 operation of all upland elements (existing lands) for backlands or other purposes.
38 The upland elements are assumed to include:

- 39 • Adding 57 acres of existing land for backland area and an on-dock rail yard;
- 40 • Constructing a 500-space parking lot for union workers;

- Demolishing the existing administration building and constructing a new LEED certified administration building and other terminal buildings;
- Adding new lighting and replacing existing lighting, fencing, paving, and utilities on the backlands;
- Relocating the Pier A rail yard and constructing the new on-dock rail yard;
- Widening and realigning Harry Bridges Boulevard; and
- Developing the Harry Bridges Buffer Area.

Unlike the CEQA Baseline, which is defined by conditions at a point in time, the No Federal Action/NEPA Baseline is not bound by statute to a “flat” or “no growth” scenario; therefore, the USACE may project increases in operations over the life of a project to properly analyze the No Federal Action/NEPA Baseline condition. Normally, any ultimate permit decision would focus on direct impacts to the aquatic environment, as well as indirect and cumulative impacts in the uplands determined to be within the scope of federal control and responsibility. Significance of the proposed Project or alternative is defined by comparing the proposed Project or alternative to the No Federal Action/NEPA Baseline (i.e., the increment). The No Federal Action/NEPA Baseline conditions are described in Table 2-2 of Section 2.4.

The No Federal Action/NEPA Baseline also differs from the “No Project” Alternative, where the Port would take no further action to construct and develop additional backlands (other than the 176 acres that currently exist). Under this alternative, no construction impacts would occur. However, forecasted increases in cargo throughput would still occur as greater operational efficiencies are made.

3.9.4.2 Thresholds of Significance

The *Los Angeles CEQA Thresholds Guide* (City of Los Angeles 2006) contains the following significance thresholds related to construction noise. Quantification of ambient noise levels (existing and projected at the time of construction) is measured in CNEL.

A project would normally have a significant impact on noise levels from construction during the *daytime* if:

NOI-1 Construction activities lasting more than 1 day would exceed existing ambient exterior noise levels by 10 dBA or more at a noise sensitive use; or if construction activities lasting more than 10 days in a 3-month period would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

A project would normally have a significant impact on noise levels from construction during the *nighttime* if:

NOI-2 Construction activities would exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 pm and 7:00 am Monday

1 through Friday, before 8:00 am or after 6:00 pm on Saturday, or at any time
2 on Sunday.

3 The *Los Angeles CEQA Thresholds Guide* (City of Los Angeles 2006) contains the
4 following significance thresholds for operational noise impacts due to stationary
5 sources, vehicular traffic, or increased railroad operations.

6 **NOI-3** A project would normally have a significant impact on noise levels from
7 project operations if the project causes the ambient noise level measured at
8 the property line of affected uses to increase by 3 dBA in CNEL to or within
9 the ‘normally unacceptable’ or ‘clearly unacceptable category,’ or any 5
10 dBA or greater noise increase.

11 Sensitive receivers in the Port area that are potentially affected by operational noise
12 from the proposed Project include residential land uses (single- and multi-family
13 housing, boats used as residences) and neighborhood parks. At these land uses, a
14 significant impact would occur if the proposed Project causes CNEL noise levels to
15 increase by (1) 5 dBA or greater where the existing CNEL is less than 70 dBA; or (2)
16 3 dBA or greater where the existing CNEL exceeds 70 dBA.

17 **3.9.4.3 Impacts and Mitigation**

18 The potential for noise from construction and operation of each project alternative to
19 affect the noise environment at sensitive receiver locations in the surrounding
20 Wilmington and San Pedro districts of the City of Los Angeles is assessed in this section.

21 **3.9.4.3.1 Proposed Project**

22 **3.9.4.3.1.1 Construction Impacts**

23 Table 3.9-5 shows the noise level ranges of typical construction equipment. During
24 any construction project, the overall average noise levels vary with the level of
25 construction activity and the types of equipment that are on site and operating at a
26 particular time. Hourly average noise levels have been estimated based on the
27 numbers and types of equipment that are expected to be on site to complete the
28 various construction projects. These sources included landside equipment such as
29 loaders, dozers, and trucks, and waterside equipment such as hoists, generators, and
30 tugs. Tables 3.9-6, 3.9-7 and 3.9-8 show the computed hourly average noise levels at
31 a reference distance of 100 feet for each of the major construction phases. These
32 levels represent the noise levels that would occur during the noisiest phase of
33 construction, for example, wharf construction with pile driving occurring. The
34 following standard controls would be implemented during proposed Project
35 construction and are assumed in the noise assessment:

- 36 1. **Construction Hours.** Limit construction to the hours of 7:00 am to 9:00 pm
37 on weekdays, between 8:00 am and 6:00 pm on Saturdays, and prohibit
38 construction equipment noise anytime on Sundays and holidays as prescribed in
39 the City of Los Angeles Noise Ordinance.

1

Table 3.9-5. Construction Equipment Noise Level Range

	A-Weighted Noise Level (dB) at 50 Feet						
	60	70	80	90	100	110	
<i>Earth Moving:</i>							
Compactors (Rollers)			██████████	██████████			
Front Loaders			██████████	██████████	██████████		
Backhoes			██████████	██████████	██████████		
Bulldozers			██████████	██████████	██████████		
Scrapers, Graders			██████████	██████████	██████████		
Pavers				██████████	██████████		
Trucks			██████████	██████████	██████████		
<i>Materials Handling:</i>							
Concrete Mixers			██████████	██████████	██████████		
Concrete Pumps			██████████	██████████	██████████		
Cranes (Movable)			██████████	██████████	██████████		
Cranes (Derrick)				██████████	██████████		
<i>Stationary:</i>							
Pumps			██████████	██████████	██████████		
Generators			██████████	██████████	██████████		
Compressors			██████████	██████████	██████████		
<i>Impact Equipment:</i>							
Pneumatic Wrenches				██████████	██████████		
Jackhammers & Rock Drill			██████████	██████████	██████████		
Pile Drivers (Peak)				██████████	██████████	██████████	
<i>Others:</i>							
Vibrators			██████████	██████████	██████████		
Saws			██████████	██████████	██████████		
<i>Source:</i> Harris (1979)							

2

2. **Construction Days.** Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).

3

4

5

3. **Construction Equipment.** Properly muffle and maintain all construction equipment powered by internal combustion engines.

6

7

4. **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.

8

9

5. **Equipment Location.** Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses.

10

11

1
2
3**Table 3.9-6. Construction Source Noise Levels at Berths 136-147 during Phase I (Completed by 2015)**

<i>Location</i>	<i>Construction Activity</i>	<i>L_{eq-hour} (dBA) at 100 Feet</i>
Berths 136-147	Backland Development (Harry Bridges Boulevard)	88
	Backland Development (Pier A yard)	88
	Building Demo (Pier A yard)	89
Berths 145-147	Wharf Demo	92
	Wharf Construction with Pile Driving	95
	Rip Rap Placement Dredging	84
	ICTF	88
		89

Table 3.9-7. Construction Source Noise Levels at Harry Bridges Boulevard Improvements and Buffer Area during Phase I (Completed by 2015)

<i>Construction Activity</i>	<i>L_{eq-hour} (dBA) at 100 Feet</i>
Harry Bridges Boulevard Improvements -Foundation	82
Harry Bridges Boulevard Improvements -Paving	82
Harry Bridges Boulevard Buffer Area	88

Table 3.9-8. Construction Source Noise Levels during Phase II (2015-2025)

<i>Location</i>	<i>Construction Activity</i>	<i>L_{eq-hour} (dBA) at 100 Feet</i>
Berths 136-147	Northwest Slip Fill	
	Rip Rap Placement	84
	Dredging	88
	Wharf Construction with Pile Driving	95

- 4 6. **Quiet Equipment Selection.** Select quiet construction equipment whenever
5 possible. Comply where feasible with noise limits established in the City of
6 Los Angeles Noise Ordinance.
- 7 7. **Notification.** Notify residents adjacent to the proposed Project site of the
8 construction schedule in writing.

9 An opportunity arose to obtain noise level data during a major construction project at
10 Berth 100 in July 2002. The noise survey included noise measurements close to
11 specific pieces of equipment and community noise measurements on Knoll Hill and
12 in the west of Knoll Hill neighborhood (Knoll Hill only has one residence.). A

summary of the numerous pieces of construction equipment operating during the noise survey and the measured noise levels are presented in Table 3.9-9. These data represent maximum construction noise levels expected at the Port during any phase of construction because they included pile driving during wharf construction. The wharf construction with pile driving generated an L_{eq} equivalent to about 90 dBA at 100 feet from the center of the pile driving activity. This level is 5 dBA lower than the equivalent level shown in Table 3.9-6, demonstrating that those are conservative estimates accounting for all construction activities during wharf construction when accumulated and set to a reference distance of 100 feet.

Table 3.9-9. Berth 100 Wharf Construction Noise Levels Measured July 15, 2002

<i>Noise Source and Measurement Location</i>	<i>L_{max} (dBA)</i>	<i>L_{eq} (dBA)</i>
1. Caterpillar 973 Track Dozer at 200 feet	76	69
2. Diesel Hammer driving landside concrete piles at 160 feet	96	86
3. Komatsu PC200 Loader ripping dirt and rock at 50 feet	85	74
4. Manitowoc 888 Crane lifting materials at 50 feet	87	78
5. General construction including cranes, air compressors, trucks, loaders, hammering (no pile driving)	74	69
6. General construction including 5 cranes, 3 large loaders, 8-10 small loaders, water truck, numerous concrete trucks, pile driving measured on top of Knoll Hill (Site ST-6). Note: Dominant noise source was container trucks at Front Street entrance to Port; container truck horn	77-84	64
7. Same construction activity ongoing but inaudible at Site ST-7 in west of Knoll Neighborhood at Summerhill, Elberon, MacArthur intersection; traffic noise dominates	79	66

Impact NOI-1: Construction activities during Phase I and Phase II would temporarily and periodically generate noise, and noise levels during Phase I would substantially exceed existing ambient daytime noise levels at sensitive receivers near the new Pier A rail yard and along “C” Street during construction of the Buffer Area.

Construction activities would typically last more than 10 days in any 3-month period for all of the construction activities listed in Tables 3.9-6, 3.9-7, and 3.9-8. Following the thresholds for significance, an impact would be considered significant if noise from these construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

The existing Harry Bridges Boulevard is located approximately 500 feet from the “C” Street neighbors. Sensitive receivers potentially affected by Harry Bridges Boulevard construction noise are located along the north side of “C” Street. The baseline ambient noise levels at these receivers described in Section 3.9.2.2.1 were found to typically range from 63 to 67 dBA $L_{eq(h)}$ during the daytime when construction activities would occur and the CNEL ranges from 71 dBA CNEL near Hawaiian Avenue down to 65-66 dBA further east. The construction noise is calculated to be up to 65 dBA $L_{eq(h)}$ at these residences. Assuming continuous construction at a level of 65 dBA $L_{eq(h)}$ noise level for the daytime period, the construction-generated CNEL noise level would be up to 63 dBA

1 CNEL at the closest residence. Noise from the construction activities would not exceed
2 existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
3 Construction activities associated with the improvements to the roadway would not
4 substantially increase noise levels in the Wilmington neighborhood. Construction
5 activities would not generate noise levels substantially higher than noise levels typically
6 generated by the truck traffic and rail traffic utilizing the existing transportation corridor,
7 and local traffic along “C” Street. Residences in San Pedro located west of Knoll Hill are
8 6,000 feet or more from the nearest possible construction area along Harry Bridges
9 Boulevard. The existing ambient noise levels at these receivers, described in Section
10 3.9.2.2.2 are similar to existing ambient noise levels in the “C” Street neighborhood of
11 the Wilmington District. Noise levels attenuate with increasing distance. Because
12 ambient noise levels are equivalent to those discussed in the previous paragraph and
13 because construction noise levels would be lower than at the nearest most affected
14 receivers in Wilmington, noise from construction activities would not exceed existing
15 ambient noise levels in San Pedro. This is a less-than-significant impact.

16 The proposed Project would include construction of a buffer area between Harry
17 Bridges Boulevard and “C” Street. Construction equipment required for this project
18 element would include but not be limited to dozers, loaders, backhoes, trucks,
19 graders, compactors and trenchers. Construction activities would be occurring as
20 close as within approximately 50-75 feet of residences along “C” Street. Typically,
21 construction activities would be occurring within distances of between 50 and 200
22 feet of these residences. Maximum noise levels would intermittently reach 80-90
23 dBA and average noise levels would reach 88 dBA L_{eq} , the levels shown in the tables
24 above at the reference distances. On a worst case day, when construction in the
25 buffer area is immediately adjacent to a residence, the CNEL could be up to 86 dBA
26 CNEL. It should be noted that pile driving, which is included for information
27 purposes, is the noisiest individual source of construction noise and would not occur
28 as part of buffer construction. Construction noise levels would exceed ambient noise
29 levels discussed in the preceding paragraph by 5 dBA or more. This would occur
30 intermittently and would depend upon the staging of the work as the buffer
31 construction proceeds. Construction activities in the buffer area will be located at an
32 even greater distance from the residences in San Pedro than the Harry Bridges
33 Boulevard construction activities, so as discussed in the previous paragraph, these
34 construction activities would not exceed ambient noise levels in other sensitive
35 neighborhoods and would cause a less-than-significant impact there.

36 The next nearest construction area to the Wilmington neighborhoods would be located in
37 the Northwest Slip. Northwest Slip construction activities are proposed to take place
38 during Phase II between the years 2015 and 2025. Riprap placement and dredging would
39 occur at a distance of approximately 1,500 feet from the closest Wilmington
40 neighborhoods along “C” Street. Maximum hourly average noise level would
41 intermittently reach 54-59 dBA $L_{eq(h)}$. The calculated construction-generated CNEL from
42 these construction activities would be 52-57 dBA CNEL. Noise from the construction
43 activities occurring at the closest point to the neighbors in the Northwest Slip would not
44 exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
45 Pile driving would occur during wharf construction in the Northwest Slip. Wharf
46 construction with pile driving is the noisiest construction activity that would occur. Pile
47 driving would occur at a distance of approximately 2,100 feet from the nearest noise
48 sensitive residence along “C” Street. Hourly average noise levels from pile driving and

1 wharf construction, based on calculated noise levels and actual measured noise levels
2 during wharf construction including pile driving, are estimated to range from 90-95 dBA
3 $L_{eq(h)}$ at a distance of 100 feet. Hourly average noise levels are calculated to range from
4 58-62 dBA $L_{eq(h)}$ at the nearest residences, located along "C" Street in the Wilmington
5 District. Assuming continuous pile driving during the daytime hours, as previously
6 discussed for other construction activities, the CNEL is calculated to range from 56-60
7 dBA CNEL. Noise from wharf construction would not exceed existing ambient exterior
8 noise levels by 5 dBA or more at a noise sensitive use. This is a less-than-significant
9 impact. Other construction activities that would be necessary to implement the proposed
10 Project include backland development at Berths 136-147, wharf demolition and wharf
11 construction at Berths 145-147, rip rap placement and dredging at Berths 145-147, and
12 construction of the intermodal container transfer facility. A review of the data in Table
13 3.9-6 shows that source construction noise levels are similar to and fall within the range
14 of construction noise levels assessed in the previous paragraphs. These construction
15 activities would all occur at locations at distances equivalent to or greater than the
16 distances between the construction activities discussed in the previous paragraphs.
17 Predicted construction noise levels would, therefore, be less than the construction noise
18 levels assessed and found to be less than significant for worst case construction activities
19 discussed in previous paragraphs. Construction activities for the balance of all work
20 necessary to implement the proposed Project would, therefore, cause a less-than-
21 significant impact at noise sensitive receiver locations.

22 The Pier A rail yard would be moved to a new location northeast of the TraPac
23 Terminal near the Berth 200-202 Marinas. The new rail yard would be constructed
24 within 5 months after a 1-month mobilization period. It would take 3 months for
25 utilities (drainage system, electricity, water, gas, sewer, and lighting) to be provided to
26 the site. It would take 5 months to prepare the site and lay tracks. Sources of
27 construction noise that are unique to railroad yard construction include a rail saw, spike
28 driver, tie cutter, tie handler, and tie inserter. Otherwise, general construction
29 equipment would be the same. Typical A-weighted noise levels resulting from this
30 additional equipment typically ranges from about 77 to 90 dBA, measured at a distance
31 of 50 feet (USDOT 1995). The (total) source noise level would be 89 dBA $L_{eq(h)}$ at 100
32 feet from the construction activity. Sensitive receivers near the rail yard include live-
33 aboards located in marinas across the channel from the new rail yard site. Residents in
34 the Wilmington and San Pedro neighborhoods are located more than 3,000 feet from
35 this construction area and would not be affected by construction noise because the
36 noise would be inaudible at this distance. Construction activities would be located
37 within approximately 500 to 800 feet of the nearest noise sensitive marina areas.
38 Hourly average noise levels could reach 70dBA $L_{eq(h)}$ during busy construction periods.
39 The CNEL could reach 68 dBA CNEL. Existing baseline noise levels in the marinas
40 range from about 50 to 60 dBA $L_{eq(h)}$ during the daytime and the baseline CNEL is 61
41 dBA CNEL. During construction at the new Pier A rail yard, construction activities
42 lasting more than 10 days in a 3-month period would exceed existing ambient exterior
43 noise levels by 5 dBA or more. This is a significant impact.

44 ***Potential Health Impacts***

45 As discussed in the section above, construction associated with the marine terminal
46 improvements, the Pier A rail yard relocation, the Harry Bridges Blvd. modifications

1 and Harry Bridges Buffer Area all generate noise level at residences below the $L_{AF} >$
2 120dB acute noise levels discussed in Section 2.9.3.1.3. However, such levels may
3 contribute to health effects caused by lower noise levels over longer time frames.

4 **CEQA Impact Determination**

5 Construction noise levels for the Harry Bridges Boulevard widening and at Berths
6 136-147 would not cause a substantial increase in noise levels at sensitive receivers.
7 This would be a less than significant impact. The construction activities at the Harry
8 Bridges Buffer Area would cause temporary and periodic noise levels substantially
9 above existing ambient noise levels in the Wilmington neighborhood north of “C”
10 Street, resulting in a significant impact. The construction activities at the proposed
11 Pier A rail yard near the Berth 200-202 Marinas would generate construction noise
12 levels that would cause temporary and periodic noise levels substantially above
13 existing ambient noise levels in nearby marinas where people live, resulting in a
14 significant impact. These significant impacts would be short-term.

15 *Mitigation Measures*

16 **NOI-1:** The following mitigation measures would reduce impact of noise from
17 construction activities:

- 18 a) **Construction Hours.** Limit construction to the hours of 7:00 AM to 9:00 PM on
19 weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit
20 construction equipment noise anytime on Sundays and holidays as prescribed in
21 the City of Los Angeles Noise Ordinance.
- 22 b) **Construction Days.** Do not conduct noise-generating construction activities on
23 weekends or holidays unless critical to a particular activity (e.g., concrete work).
- 24 c) **Temporary Noise Barriers.** When construction is occurring within 500 feet of
25 a residence or park, temporary noise barriers (solid fences or curtains) shall be
26 located between noise-generating construction activities and sensitive receptors.
- 27 d) **Construction Equipment.** Properly muffle and maintain all construction
28 equipment powered by internal combustion engines.
- 29 e) **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines
30 near noise sensitive areas.
- 31 f) **Equipment Location.** Locate all stationary noise-generating construction
32 equipment, such as air compressors and portable power generators, as far as
33 practical from existing noise sensitive land uses.
- 34 g) **Quiet Equipment Selection.** Select quiet construction equipment whenever
35 possible. Comply where feasible with noise limits established in the City of Los
36 Angeles Noise Ordinance.
- 37 h) **Notification.** Notify residents adjacent to the proposed Project site of the
38 construction schedule in writing.

Residual Impacts

Considering the distances between the construction noise sources and receivers, the standard controls, and temporary noise barriers may not be sufficient to reduce the projected increase in the ambient noise level to the point where it would no longer cause a substantial increase. With implementation of these measures, construction equipment noise levels generated at the buffer area and rail yard sites could substantially exceed existing ambient noise levels. Thus, impacts to “C” Street residents resulting from buffer construction, as well as impacts to marina residents from construction of the Pier A rail yard, will remain significant even after mitigation.

NEPA Impact Determination

As discussed above, in-water construction work (e.g., pile driving) would occur at a distance of more than 1,500 feet from sensitive receivers so levels would be reduced to below ambient levels. There would be no adverse short-term effects under NEPA from in-water work. The new Pier A rail yard and the Harry Bridges Buffer Area are considered part of the No Federal Action/NEPA Baseline conditions and, therefore, noise related to construction of these components is not relevant to the NEPA impact determination.

Mitigation Measures

No mitigation is required.

Residual Impacts

With no mitigation required, there would be no residual impacts.

Impact NOI-2: Construction activities would not exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or at any time on Sunday.

No construction activities are planned to occur between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or at any time on Sunday.

CEQA Impact Determination

There would be no construction-related noise impacts during prohibited hours as described above; consequently, no impacts under CEQA would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

With no mitigation required, there would be no residual impacts.

NEPA Impact Determination

There would be no in-water construction-related noise impacts during prohibited hours as described above; consequently, no impacts under NEPA would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

With no mitigation required, there would be no residual impacts.

3.9.4.3.1.2 Operational Impacts

Impact NOI-3: Operations would generate noise, but noise levels would not substantially exceed existing ambient noise levels at sensitive receivers.

On-Site Operations

Operation activities that would generate noise would include truck and rail movements in the newly developed backland areas and container terminal operations at the new wharves. Truck movements and truck container loading were monitored April 30, 2002 along the backland areas of Berths 136-139 during the noise monitoring survey in the Wilmington District. Noise levels generated in these areas are more than 10 dBA lower than, and not distinguishable from, noise levels generated by truck traffic circulating on the Port's perimeter roadways. The new wharf would be located more than 2,000 feet from the Wilmington residential neighbors located north of "C" Street and farther from residences west of I-110 and Knoll Hill. Noise from truck operations at the terminals would cause no increase in noise at sensitive receivers. This is a less-than-significant impact. Noise levels resulting from container terminal operations were monitored at the Port of Los Angeles in June 1990 (I&R 1990). These data represent noise levels of typical operations at a container terminal from typical/standard equipment including but not limited to: container ships, assist tugs, electric container cranes, yard hostlers, toppicks, side picks, and heavy duty vehicles. These pieces of equipment are the same equipment pieces operating at the Berth 136-147 container terminal. Two ships were being unloaded simultaneously at the Evergreen Lines Terminal. Four large gantry cranes were operating simultaneously. Several straddle loaders were observed to be loading and unloading trucks. Many trucks were circulating at the terminal. Noise levels were monitored at a point directly across the main channel from the container terminal at a distance of about 1,100 feet from the container terminal. The cranes generated maximum noise levels of 56 to 57 dBA. The sounds of containers clanking reached a maximum noise level of 63 dBA. Truck horns were the most identifiable noise sources, with maximum levels reaching 70 dBA. The average noise level generated by the operations was 59 dBA L_{eq} . Accounting for the difference in distance where these measurements were conducted, and the distance of 2,000 feet over ground between the Wilmington residential neighbors and the proposed terminal activities, the average noise level from this level of activity is calculated to be about 50-53dBA L_{eq} . Noise generated

1 by container terminal loading operations would be below existing ambient noise levels
2 day or night at these nearest residential neighbors. Intermittent noises would be
3 indistinguishable from road traffic on the Port's perimeter roadways, local street traffic
4 noise, and existing sources of intermittent noise within the Port. Assuming 24-hour per
5 day continuous operations, the Port-related activities would cause, by themselves, a
6 CNEL in the range of 57-60 dBA CNEL. As discussed in previous paragraphs and in
7 Section 3.9.2.2.1, baseline noise levels range from 65 dBA CNEL to 71 dBA CNEL at
8 the most affected sensitive receiver locations. Port-related activities already occur at
9 Berths 136-147. Projected noise levels under maximum activities that would include
10 ship loading, would generate noise levels below existing ambient noise levels resulting
11 primarily from vehicular on the roadway networks. Such activities would cause no
12 significant increase in CNEL levels at these locations.

13 The proposed Project includes a 30-acre buffer area between Harry Bridges
14 Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant, Port-
15 owned property (see Figure 2-3). The creation of this buffer area would ensure that
16 no development that would potentially increase noise levels in the buffer area would
17 occur, protecting the noise environment of the most affected residents.

18 The operation of the new Pier A rail yard near the Berth 200-202 Marinas would
19 generate noise. A noise monitoring survey was conducted at the existing Pier A rail
20 yard in November 2005 to quantify noise levels from railroad operations. The noise
21 survey included noise measurements made during a one-hour period when the rail
22 yard was actively working between 10:00 AM and 11:00 AM on November 8, 2005.
23 The noise measurements were conducted at the Port of Los Angeles Materials and
24 Environmental Testing Lab located across Pier A Street from the active area in the
25 Pier A rail yard. The measurements were made at a distance of about 200 feet from
26 where the engines were operating. The activity consisted of a train engine coupling
27 to, and uncoupling from, groups of railroad cars, shuttling the cars back and forth on
28 different tracks, and recoupling the cars to other strings of railroad cars. Noise
29 sources included the engine, the train horn, the crunching sounds associated with the
30 slack action of the strings of cars starting and stopping, and the sounds of the impacts
31 of cars being coupled together. During the hour of attended noise measurements,
32 maximum noise levels resulting from these activities typically ranged from about 65
33 dBA to 75 dBA at a distance of about 200 to 300 feet from the source. The highest
34 noise level measured was 97 dBA, resulting from a train horn. Occasionally, the
35 sound of cars crunching together when coupling ranged from 78 to 80 dBA. The
36 average noise level for the hour of busy activity was 68 dBA $L_{eq(h)}$.

37 The Harbor Belt Line Railroad was contacted to determine typical daily operations
38 (personal communication, Fox 2005). The busiest level of activity occurs between
39 6:00 AM and 3:00 PM when incoming trains are sorted. Between 3:00 PM and 6:00
40 PM is the lowest activity period. Between 6:00 PM and 6:00 AM, the activity level
41 is substantially less than during the busier daytime period when crews deliver cars to
42 other areas of the port.

43 The proposed rail yard would operate as it presently does at the existing rail yard.
44 The primary activity would occur near the western end of the new rail yard. This
45 would place the activity area furthest from sensitive receivers, approximately 800
46 feet from the nearest residence in a yacht marina. Maximum noise levels at this

1 distance would be reduced at least 12 dBA below the maximum noise levels
2 described above due to increased distance. Maximum and average noise levels
3 would typically fall between the range of 53 to 63 dBA and could occasionally reach
4 68 dBA. The average noise level for the hour of busy activity is calculated to be
5 about 56 dBA $L_{eq(h)}$. To calculate the CNEL, one must assume a level of activity and
6 associated noise level during each of the three time periods discussed above (6:00
7 AM to 3:00 PM, 3:00 PM to 6:00 PM, and 6:00 PM to 6:00 AM). Based on
8 measurements and observations previously described for the Harbor Belt Line
9 Railroad, it is assumed that during the busiest activity period, the hourly average
10 noise level would be 56 dBA L_{eq} . A noise level of 50 dBA L_{eq} would occur for the
11 3:00 PM to 6:00 PM period and the 6:00 PM to 6:00 AM period. After adjusting the
12 hourly average noise levels by adding 5 dBA to the evening period (7:00 PM to 10:00
13 PM) and 10 dBA to the average noise levels during the nighttime (10:00 PM to 7:00
14 AM), based on the definition of CNEL, the calculated noise level is 58 dBA CNEL.
15 The baseline ambient noise level in the marinas, based on measurements as discussed
16 in Section 3.9.2.2.3, is 61 dBA CNEL. When the noise level from operations at the
17 relocated Pier A rail yard is added to the ambient noise level, the noise level is
18 calculated to increase to, at most, 63 dBA CNEL. This would be a 2 dBA increase in
19 the CNEL. This is a less-than-significant impact.

20 ***Railway Corridor Noise***

21 The implementation of the proposed Project would result in an increase in the
22 number of rail movements into and out of the Port of Los Angeles along the Alameda
23 Transportation Corridor. Proposed Project throughput comparisons presented in
24 Table 2-1 of the project description include the number of annual rail trips generated
25 from Berths 136-147 under the CEQA Baseline (2003) Condition, the No Federal
26 Action/NEPA Baseline conditions and the proposed Project in the years 2015 and
27 2038. To determine the maximum possible increase in noise along the rail corridors
28 resulting from the proposed Project, a comparison was made between the CEQA
29 2003 Baseline of 731 annual rail trips and the year 2038 with the proposed Project of
30 1,434 annual rail trips. This is an increase of about two rail trips per day. There
31 would be about four more events per day when a train horn is sounded at the Henry
32 Ford Avenue grade crossing north of the consolidated slip causing audible noise at
33 the Leeward Marine. There are currently approximately 68 peak rail trips per day in
34 and out of the San Pedro Bay Ports excluding light engine switching operations
35 (Parsons 2006). The incremental increase in noise levels along the railroad corridors
36 serving the Port of Los Angeles is calculated to be 0.2 dBA CNEL. This is a less-
37 than-significant impact.

38 Train horns are a part of the acoustical environment in the environs of the Port of Los
39 Angeles. There is an existing at-grade crossing at Henry Ford Avenue north of the
40 Consolidated Slip and this was discussed in the noise setting section. This project
41 will not change the level of noise from a train horn, it will result in an increase in the
42 number of times the horns are sounded because there would be about four more
43 intermodal train movements per day through this crossing. The significance
44 threshold is based on increased noise above the baseline level in terms of the CNEL
45 noise metric, and this is a function of the level, duration, and time of day the noise
46 occurs; as well as the existing noise level. There are currently about 8 train

1 movements per day through this crossing distributed throughout the day and night.
2 The project would add 4 movements distributed throughout the day and night. The
3 increase in the train generated CNEL is calculated to be 1.8 dBA CNEL. An increase
4 of at least 3 dBA in the CNEL is considered to be a substantial increase causing a
5 significant impact. Also, because vehicular traffic on Henry Ford Avenue and other
6 railroad trains traveling adjacent to Henry Ford Avenue are more significant sources
7 of noise at the Leeward Marina, the increase in the overall CNEL would be less than
8 1.8 dBA CNEL. So, while there will be an increase in the number of audible train
9 horns, this is a less than significant environmental impact.

10 ***Harry Bridges Boulevard Widening***

11 Harry Bridges Boulevard is proposed to be widened, but will remain four lanes. Over
12 the past several years, various roadway alignments have been considered for Harry
13 Bridges Boulevard. The proposed Project includes a 30-acre buffer area between Harry
14 Bridges Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant,
15 port-owned property (see Figure 2-3). The creation of this buffer area would ensure
16 that no development that would potentially increase noise levels within the buffer area
17 would occur, including the realignment of the Harry Bridges Boulevard transportation
18 corridor closer to the residences located along "C" Street. By designating this as a
19 buffer area, port-related activities that would potentially increase noise level in the area
20 would not be developed.

21 The incremental increase in noise at the most affected sensitive receivers along "C"
22 Street was determined by modeling the traffic noise generated by Harry Bridges
23 Boulevard using TNM Version 2.5. Example model runs are included in the Noise
24 Appendix. Existing and future traffic data included in the Transportation/Circulation
25 Appendix was used in the traffic noise modeling. In the baseline model, the existing
26 four-lane section of Harry Bridges Boulevard was assumed. In the future models, a
27 wider cross section was assumed, with widening occurring to the north bringing some
28 of the traffic closer to the "C" Street neighbors. First, a direct comparison was made
29 between the existing four lane section and the future widened section assuming the
30 same traffic volume. The redistribution of traffic adjacent to the existing travel lanes
31 would cause an increase of 0.8 dBA at reference modeling locations adjacent to the
32 roadway where noise from Harry Bridges Boulevard dominates the noise environment
33 and by 0.3 dBA or less at the "C" street residences. Proposed Project-generated traffic
34 for the years 2015 and 2038 was then added to the baseline traffic to determine the
35 incremental increase in noise generated by Harry Bridges Boulevard traffic. The
36 calculated increase in noise levels along Harry Bridges Boulevard was 1 dBA $L_{eq(h)}$. It
37 is assumed that the hourly distribution of noise levels throughout the day and night
38 would remain the same as it is today. The calculated increase in CNEL noise levels is,
39 therefore, also calculated to be 1 dBA CNEL for both the years 2015 and 2038. At the
40 Wilmington neighbors along "C" Street, the noise environment is affected by vehicular
41 traffic on the I-110 freeway, local traffic on "C" Street, and, to a lesser extent, vehicular
42 traffic along Harry Bridges Boulevard and activities at the Port. Because the noise
43 from Harry Bridges Boulevard is a minor contributor to noise levels at the most
44 affected receivers, the increase in the overall CNEL at these receivers would range
45 from 0 dBA CNEL to 1 dBA CNEL. There would be no change in the character of the
46 noise environment because the roadway traffic would not be moved noticeably closer

1 to the community. Based on the noise monitoring and modeling completed for the
2 proposed Project there is no evidence to indicate that any noise abatement would be
3 required for the proposed Project. Furthermore, because of the distances involved
4 between the residences and the existing Harry Bridges Boulevard alignment, and
5 parameters which affect performance of noise barriers, it is likely that a noise barrier
6 would be of only minimal benefit in reducing noise from Harry Bridges Boulevard.
7 Landscaped mounds are being considered within the Harry Bridges Boulevard
8 Landscaped Area. The design for these landscaped mounds is not yet complete, and so
9 no excess attenuation for the landscaped mounds has been included in the noise model.
10 Landscaped mounds, depending upon their final design, could provide a further
11 reduction in Harry Bridges Boulevard noise in the Wilmington neighborhood to the
12 north.

13 The Transportation/Circulation Appendix includes turning movement volumes for 17
14 intersections located along roadways in the study area. Turning movement volumes for
15 all 17 study intersections were reviewed to determine if any other roadway segments
16 could experience a measurable increase in traffic noise as a result of project-generated
17 traffic. It was determined by inspection that traffic added by the proposed Project
18 would be insignificant and would cause a 0 dBA increase to the CNEL on all other
19 roadway segments studied except along Harry Bridges Boulevard adjacent to the
20 proposed Project study area.

21 ***Potential Health Impacts***

22 In terms of operation, operational noise levels would not cause the CNEL to be increased
23 by 3dBA CNEL, nor exceed 5dBA over the current CNEL at sensitive locations. For
24 example, truck and rail movements associated with container terminal operations would
25 generate noise average noise levels at about 50-53dBA L_{eg} at the closest Wilmington
26 residential neighborhoods. As discussed in Section above, baseline noise levels range
27 from 65dBA CNEL to 71 dBA CNEL at the most affected sensitive receiver locations.
28 Operational noise levels at residences are below the $L_{AF} > 120$ dB acute noise levels
29 discussed in Section 2.9.2.1.3 and will not contribute to hearing impairment. However,
30 both existing noise levels and operational noise levels may contribute to chronic health
31 impacts associated with lower noise levels. The proposed Project however, would not
32 contribute to these potential health impacts above baseline levels.

33 **CEQA Impact Determination**

34 Because operational noise levels would not cause the CNEL to be increased by 3
35 dBA CNEL or more to the “normally unacceptable” or “clearly unacceptable”
36 category, nor exceed 5 dBA over the current CNEL at sensitive locations, operational
37 noise impacts will be less than significant under CEQA.

38 ***Mitigation Measures***

39 No mitigation is required.

Residual Impacts

Impacts will be less than significant, so there will be no residual impacts.

NEPA Impact Determination

Because operational noise levels would not increase substantially above the current CNEL or the No Federal Action/NEPA Baseline at sensitive receptor locations, there would be less than significant impacts would under NEPA.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts will be less than significant; there will be no residual impacts

3.9.4.3.2 Alternatives

3.9.4.3.2.1 Alternative 1 - No Project Alternative

The No Project Alternative (Alternative 1) evaluates what would reasonably be expected to occur on the site in the absence of issuance of a federal permit or a discretionary land use decision by the Port of Los Angeles. This alternative would not allow implementation of the proposed Project or other physical improvements at Berths 136-147 beyond what already exists there. Because this alternative does not include the new rail yard, there would be more truck trips generated from this site in the future than under the proposed Project.

3.9.4.3.2.1.1 Construction Impacts

Impact NOI-1: Construction activities at Berths 136-147 that could be implemented under the No Project Alternative would not generate noise levels that would exceed existing ambient noise levels at sensitive receivers.

This alternative would not allow implementation of the proposed Project or other physical improvements at Berths 136-147 beyond what already exists there. There would, therefore, not be construction activities that could potentially cause an increase in noise levels at nearby sensitive receiver locations.

CEQA Impact Determination

Due to the fact that the No Project Alternative does not include any construction there would be no impacts under CEQA.

1 *Mitigation Measures*

2 No mitigation is required.

3 *Residual Impacts*

4 With no mitigation required, there would be no residual impacts under CEQA.

5 **NEPA Impact Determination**

6 Under this alternative, no development would occur within the in-water proposed
7 Project area (i.e., no dredging, filling of the Northwest Slip or new wharf
8 construction). Therefore, potential impacts are not applicable under NEPA since there
9 would be no federal action under this alternative.

10 *Mitigation Measures*

11 Due to No Federal Action, mitigation is not applicable. No mitigation measures are
12 necessary under NEPA.

13 *Residual Impacts*

14 With no mitigation required, there would be no residual impacts under NEPA.

15 **Impact NOI-2: Construction activities would not exceed the ambient**
16 **noise level by 5 dBA at a noise sensitive use between the hours of 9:00**
17 **PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00**
18 **PM on Saturday, or at any time on Sunday.**

19 No construction activities are planned to occur between the hours of 9:00 PM and
20 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or
21 at any time on Sunday.

22 **CEQA Impact Determination**

23 There would be no construction-related noise impacts during prohibited hours as
24 described above; consequently, no impacts under CEQA would occur.

25 *Mitigation Measures*

26 No mitigation is required.

27 *Residual Impacts*

28 With no mitigation required, there would be no residual impacts.

NEPA Impact Determination

Under this alternative, no development would occur within the in-water proposed Project area (i.e., no dredging, filling of the Northwest Slip or new wharf construction). Therefore, potential impacts are not applicable under NEPA since there would be no federal action under this alternative.

Mitigation Measures

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

Residual Impacts

With no mitigation required, there would be no residual impacts under NEPA.

3.9.4.3.2.1.2 Operational Impacts

Impact NOI-3: Operations would generate noise, but noise levels would not substantially exceed existing ambient noise levels at sensitive receivers.

On-Site Operations

Operations at Berths 136-147 would be implemented through existing facilities. There would be an increase in TEUs in the year 2003 to the years 2025 through 2038 for this alternative. There would also be an increase in the duration of time that container operations are occurring at Berths 136-147 to accommodate the increase in TEUs. Port operations at Berths 136-147, while intermittently audible, do not make a measurable contribution to daily average noise levels in the surrounding residential neighborhoods. The noise environment in these neighborhoods would continue to result primarily from vehicular traffic on the roadway network. This is a less-than-significant impact.

Harry Bridges Boulevard Operations

There would be an increase in traffic on Harry Bridges Boulevard. Under the No Project Alternative, Harry Bridges Boulevard would not be widened. Traffic data included in the Transportation/Circulation Appendix was used to calculate the incremental increase in noise that could result from increased traffic under the No Project Alternative. Because the roadway would not be widened, and the hour-by-hour distribution of traffic noise along Harry Bridges Boulevard would be anticipated to be the same as it is under the baseline, and the percentage distribution of vehicle types is assumed to be the same as under the baseline, the increase was calculated solely based on the increase in traffic volume. Incremental increases attributable to Harry Bridges Boulevard traffic were 1 dBA L_{eq} and 1 dBA CNEL. The cumulative increases calculated in the years 2015 and 2038 are 2–3 dBA L_{eq} and 23 dBA CNEL including the contribution from the incremental increases in traffic generated at Berths 136-147 and cumulative development included within the transportation analysis. The total increase above the baseline ambient noise levels at the nearest

1 Wilmington district residences would be 0-1 dBA CNEL. An increase in noise of 0-1
2 dBA CNEL is not a substantial increase according to the Los Angeles CEQA
3 thresholds. Therefore, impacts would be less than significant.

4 The Transportation/Circulation Appendix includes turning movement volumes for 17
5 intersections located along roadways in the study area. Turning movement volumes for
6 all 17 study intersections were reviewed to determine if any other roadway segments
7 could experience a measurable increase in traffic noise as a result of traffic generated
8 by this alternative. It was determined by inspection that traffic added by this alternative
9 would be insignificant and would cause a dBA increase to the CNEL on all other
10 roadway segments studied except along Harry Bridges Boulevard adjacent to the
11 proposed Project study area.

12 ***Railway Corridor Noise***

13 There would be no increases in train movements under the No Project Alternative
14 attributable to the Berth 136-147 terminal because the rail yard would not be
15 constructed; there would be no container train access to the facility. Therefore, noise
16 from rail activity under the No Project Alternative would be less than for the
17 proposed Project.

18 **CEQA Impact Determination**

19 Because operational noise levels would not result in the CNEL being increased by 3
20 dBA CNEL or more nor increased to within the “normally unacceptable” or “clearly
21 unacceptable” category, nor exceed 5 dBA over the current CNEL at sensitive
22 locations, less than significant noise impacts would occur under CEQA.

23 ***Mitigation Measures***

24 No mitigation is required.

25 ***Residual Impacts***

26 With no mitigation required, residual impacts would be less than significant.

27 **NEPA Impact Determination**

28 Under this alternative, no development would occur within the in-water proposed
29 Project area (i.e., no dredging, filling of the Northwest Slip or wharf construction).
30 Therefore, potential impacts are not applicable under NEPA since there would be no
31 federal action under this alternative.

32 ***Mitigation Measures***

33 Due to No Federal Action, mitigation is not applicable. No mitigation measures are
34 necessary under NEPA.

Residual Impacts

With no mitigation required, there would be no residual impacts under NEPA.

3.9.4.3.2.2 Alternative 2 – Reduced Project: Proposed Project Without the 10-Acre Fill

The Reduced Project Alternative (Alternative 2) is the same as the proposed Project except the 10-acre Northwest Slip would not be filled for additional backland storage area with a 400-foot wharf built adjacent to it. The throughput for the years 2025 through 2038 would be the same as for the proposed Project. Construction-related noise impacts would be similar to the proposed Project (**Impact NOI-1 and NOI-2**) during Phase 1. There would be no significant construction activities between 2015 and 2038. The general description of construction-related noise presented in the proposed Project is applicable to this alternative for Phase 1. Construction source noise levels during Phase II presented in Table 3.9-8 are not applicable to this alternative.

3.9.4.3.2.2.1 Construction Impacts

Impact NOI-1: Construction activities would temporarily and periodically generate noise, and noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers near the new Pier A rail yard and along “C” Street during construction of the Buffer Area.

Construction activities would typically last more than 10 days in any 3-month period for all of the construction activities listed in Tables 3.9-6 and 3.9-7. Following the thresholds for significance, an impact would be considered significant if noise from these construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

The existing Harry Bridges Boulevard is located approximately 500 feet from the “C” Street neighbors. Sensitive receivers potentially affected by Harry Bridges Boulevard construction noise are located along the north side of “C” Street. The baseline ambient noise levels at these receivers described in Section 3.9.2.2.1 were found to typically range from 63 to 67 dBA $L_{eq(h)}$ during the daytime when construction activities would occur and the CNEL ranges from 71 dBA CNEL near Hawaiian Avenue down to 65-66 dBA further east. The construction noise is calculated to be up to 65 dBA $L_{eq(h)}$ at these residences. Assuming continuous construction at a level of 65 dBA $L_{eq(h)}$ noise level for the daytime period, the construction-generated CNEL noise level would be up to 63 dBA CNEL at the closest residence. Noise from the construction activities would not exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use. Construction activities associated with the improvements to the roadway would not substantially increase noise levels in the Wilmington neighborhood. Construction activities would not generate noise levels substantially higher than noise levels typically generated by the truck traffic and rail traffic utilizing the existing transportation corridor, and local traffic along “C” Street. Residences in San Pedro located west of Knoll Hill are 6,000 feet or more from the nearest possible construction area along Harry Bridges Boulevard. The existing ambient noise levels at these receivers, described in Section 3.9.2.2.2 are similar to existing ambient noise levels in the “C” Street neighborhood

1 of the Wilmington District. Noise levels attenuate with increasing distance. Because
2 ambient noise levels are equivalent to those discussed in the previous paragraph and
3 because construction noise levels would be lower than at the nearest most affected
4 receivers in Wilmington, noise from construction activities would not exceed existing
5 ambient noise levels in San Pedro. This is a less-than-significant impact.

6 Alternative 2 would include construction of a buffer area between Harry Bridges
7 Boulevard and “C” Street. Construction equipment required for this project element
8 would include but not be limited to dozers, loaders, backhoes, trucks, graders,
9 compactors and trenchers. Construction activities would be occurring as close as
10 within approximately 50-75 feet of residences along “C” Street. Typically,
11 construction activities would be occurring within distances of between 50 and 200 feet
12 of these residences. Maximum noise levels would intermittently reach 80-90 dBA and
13 average noise levels would reach 88 dBA L_{eq} , the levels shown in the tables above at
14 the reference distances. On a worst case day, when construction in the buffer area is
15 immediately adjacent to a residence, the CNEL could be up to 86 dBA CNEL. It
16 should be noted that pile driving, which is included for information purposes, is the
17 noisiest individual source of construction noise and would not occur as part of buffer
18 construction. Construction noise levels would exceed ambient noise levels discussed in
19 the preceding paragraph by 5 dBA or more. This would occur intermittently and would
20 depend upon the staging of the work as the buffer construction proceeds. This is a
21 significant impact. Construction activities in the buffer area will be located at an even
22 greater distance from the residences in San Pedro than the Harry Bridges Boulevard
23 construction activities, so as discussed in the previous paragraph, these construction
24 activities would not exceed ambient noise levels in other sensitive neighborhoods and
25 would cause a less-than-significant impact there.

26 The next nearest construction area to the Wilmington neighborhood would be located
27 at a distance of more than 2,000 feet from the Wilmington neighborhood. Other
28 construction activities that would be necessary to implement the Reduced Project
29 Alternative include backland development at Berths 136-147, wharf demolition and
30 wharf construction at Berths 145-147, rip rap placement and dredging at Berths 145-
31 147, and construction of the intermodal container transfer facility. With the
32 exception of wharf construction with pile driving, the data in Table 3.9-6 shows that
33 source construction noise levels are similar to and fall within the range of
34 construction noise levels assessed in the previous paragraphs. Pile driving and wharf
35 construction would occur at a distance of approximately 5,000 feet from the nearest
36 sensitive receivers. Hourly average noise levels from pile driving and wharf
37 construction, based on calculated noise levels and actual measured noise levels
38 during wharf construction including pile driving, are estimated to range from 90-95
39 dBA $L_{eq(h)}$ at a distance of 100 feet. Hourly average noise levels are calculated to
40 range from 48-52 dBA $L_{eq(h)}$ at the nearest residences located along “C” Street in the
41 Wilmington District and in the San Pedro area near Knoll Hill. Assuming continuous
42 pile driving during the daytime hours, as previously discussed for other construction
43 activities, the CNEL is calculated to range from 46-50 dBA CNEL. Noise from
44 wharf construction with pile driving would not exceed existing ambient exterior noise
45 levels by 5 dBA or more at a noise sensitive use. These construction activities would
46 all occur at locations at distances equivalent to or greater than the distances between
47 the construction activities discussed in the previous paragraphs. Predicted
48 construction noise levels would, therefore, be less than the construction noise levels

1 assessed and found to be less than significant for worst case construction activities
2 discussed in previous paragraphs. This is a less-than-significant impact.

3 The Pier A rail yard would be moved to a new location northeast of the TraPac
4 Terminal near the Berth 200-202 Marinas. The new rail yard would be constructed
5 within 5 months after a 1-month mobilization period. It would take 3 months for
6 utilities (drainage system, electricity, water, gas, sewer, and lighting) to be provided
7 to the site. It would take 5 months to prepare the site and lay tracks. Sources of
8 construction noise that are unique to railroad yard construction include a rail saw,
9 spike driver, tie cutter, tie handler, and tie inserter. Otherwise, general construction
10 equipment would be the same. Typical A-weighted noise levels resulting from this
11 additional equipment typically ranges from about 77 to 90 dBA, measured at a
12 distance of 50 feet (USDOT 1995). The (total) source noise level would be 89 dBA
13 $L_{eq(h)}$ at 100 feet from the construction activity. Sensitive receivers near the rail yard
14 include live-aboards located in marinas across the channel from the new rail yard
15 site. Residents in the Wilmington and San Pedro neighborhoods are located more
16 than 3,000 feet from this construction area and would not be affected by construction
17 noise because the noise would be inaudible at this distance. Construction activities
18 would be located within approximately 500 to 800 feet of the nearest noise sensitive
19 marina areas. Hourly average noise levels could reach 70-dBA L_{eq} during busy
20 construction periods. Existing ambient noise levels in the marinas range from about
21 50 to 60 dBA. During construction at the new Pier A rail yard, construction activities
22 lasting more than 10 days in a 3-month period would exceed existing ambient
23 exterior noise levels by 5 dBA or more. This is a significant impact.

24 **CEQA Impact Determination**

25 Construction noise levels for the Harry Bridges Boulevard widening and at Berths
26 136-147 would not cause a substantial increase in noise levels at sensitive receivers.
27 This would be a less than significant impact. The construction activities at the Harry
28 Bridges Buffer Area would cause temporary and periodic noise levels substantially
29 above existing ambient noise levels in the Wilmington neighborhood north of "C"
30 Street. The construction activities at the proposed Pier A rail yard near the Berth
31 200-202 Marinas would generate construction noise levels that would cause
32 temporary and periodic noise levels substantially above existing ambient noise levels
33 in nearby marinas where people live. Therefore, significant short-term impacts
34 would occur under CEQA.

35 ***Mitigation Measures***

36 **NOI-1:** The following mitigation measures would reduce impact of noise from
37 construction activities:

- 38 a) **Construction Hours.** Limit construction to the hours of 7:00 AM to 9:00 PM on
39 weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit
40 construction equipment noise anytime on Sundays and holidays as prescribed in
41 the City of Los Angeles Noise Ordinance.
- 42 b) **Construction Days.** Do not conduct noise-generating construction activities on
43 weekends or holidays unless critical to a particular activity (e.g., concrete work).

- 1 c) **Temporary Noise Barriers.** When construction is occurring within 500 feet of
2 a residence or park, temporary noise barriers (solid fences or curtains) shall be
3 located between noise-generating construction activities and sensitive receptors.
- 4 d) **Construction Equipment.** Properly muffle and maintain all construction
5 equipment powered by internal combustion engines.
- 6 e) **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines
7 near noise sensitive areas.
- 8 f) **Equipment Location.** Locate all stationary noise-generating construction
9 equipment, such as air compressors and portable power generators, as far as
10 practical from existing noise sensitive land uses.
- 11 g) **Quiet Equipment Selection.** Select quiet construction equipment whenever
12 possible. Comply where feasible with noise limits established in the City of Los
13 Angeles Noise Ordinance.
- 14 h) **Notification.** Notify residents adjacent to the proposed Project site of the
15 construction schedule in writing.

16 *Residual Impacts*

17 Considering the distances between the construction noise sources and receivers, the
18 standard controls and temporary noise barriers may not be sufficient to reduce the
19 projected increase in the ambient noise level to the point where it would no longer
20 cause a substantial increase. With implementation of these measures, construction
21 equipment noise levels generated at the buffer area and rail yard sites could
22 substantially exceed existing ambient noise levels. This impact remains significant
23 after mitigation.

24 **NEPA Impact Determination**

25 As discussed above, in-water construction work (e.g., pile driving) would occur at a
26 distance of more than 2,000 feet from sensitive receivers so levels would be reduced
27 to below ambient levels. There would be no adverse short-term effects under NEPA
28 from in-water work. The new Pier A rail yard and the Harry Bridges Buffer Area are
29 considered part of the No Federal Action/NEPA Baseline conditions and, therefore,
30 noise related to construction of these components is not relevant to the NEPA impact
31 determination.

32 *Mitigation Measures*

33 Due to No Federal Action, mitigation is not applicable. No mitigation is required.

34 *Residual Impacts*

35 With no mitigation required, the residual impacts would be the same as described
36 above.

37 **Impact NOI-2: Construction activities would not exceed the ambient**
38 **noise level by 5 dBA at a noise sensitive use between the hours of 9:00**

1 **PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00**
2 **PM on Saturday, or at any time on Sunday.**

3 No construction activities are planned to occur between the hours of 9:00 PM and
4 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or
5 at any time on Sunday.

6 **CEQA Impact Determination**

7 There would be no construction-related noise impacts during prohibited hours as
8 described above; consequently, no impacts under CEQA would occur.

9 *Mitigation Measures*

10 No mitigation is required.

11 *Residual Impacts*

12 With no mitigation required, there would be no residual impacts.

13 **NEPA Impact Determination**

14 There would be no in-water construction-related noise impacts during prohibited
15 hours as described above; consequently, no impacts under NEPA would occur.

16 *Mitigation Measures*

17 No mitigation is required.

18 *Residual Impacts*

19 With no mitigation required, there would be no residual impacts.

20 **3.9.4.3.2.2. Operational Impacts**

21 **Impact NOI-3: Operations would generate noise, but noise levels would**
22 **not substantially exceed existing ambient noise levels at sensitive**
23 **receivers.**

24 ***On-Site Operations***

25 Operation activities that would generate noise would include truck and rail
26 movements in the newly developed backland areas and container terminal operations
27 at the new wharves. Truck movements and truck container loading were monitored
28 April 30, 2002 along the backland areas of Berths 136-139 during the noise
29 monitoring survey in the Wilmington District. Noise levels generated in these areas
30 are more than 10 dBA lower than, and not distinguishable from, noise levels
31 generated by truck traffic circulating on the Port's perimeter roadways. The new
32 wharf would be located more than 2,000 feet from the Wilmington residential

1 neighbors located north of "C" Street and farther from residences west of I-110 and
2 Knoll Hill. Noise from truck operations at the terminals would cause no increase in
3 noise at sensitive receivers. This is a less-than-significant impact.

4 Noise levels resulting from container terminal operations were monitored at the Port
5 of Los Angeles in June 1990 (I&R 1990). These data represent noise levels of
6 typical operations at a container terminal from typical/standard equipment including
7 but not limited to: container ships, assist tugs, electric container cranes, yard hostlers,
8 toppicks, side picks, heavy duty vehicles. These pieces of equipment are the same
9 equipment pieces operating at the Berth 136-147 container terminal. Two ships were
10 being unloaded simultaneously at the Evergreen Lines Terminal. Four large gantry
11 cranes were operating simultaneously. Several straddle loaders were observed to be
12 loading and unloading trucks. Many trucks were circulating at the terminal. Noise
13 levels were monitored at a point directly across the main channel from the container
14 terminal at a distance of about 1,100 feet from the container terminal. The cranes
15 generated maximum noise levels of 56 to 57 dBA. The sounds of containers clanking
16 reached a maximum noise level of 63 dBA. Truck horns were the most identifiable
17 noise sources, with maximum levels reaching 70 dBA. The average noise level
18 generated by the operations was 59 dBA L_{eq} . Accounting for the difference in
19 distance where these measurements were conducted, and the distance of 2,000 feet
20 over ground between the Wilmington residential neighbors and the proposed terminal
21 activities, the average noise level from this level of activity is calculated to be about
22 50-53dBA L_{eq} . Noise generated by container terminal loading operations would be
23 below existing ambient noise levels day or night at these nearest residential
24 neighbors. Intermittent noises would be indistinguishable from road traffic on the
25 Port's perimeter roadways, local street traffic noise, and existing sources of
26 intermittent noise within the Port. Assuming 24-hour per day continuous operations,
27 the Port-related activities would cause, by themselves, a CNEL in the range of 57-60
28 dBA CNEL. As discussed in previous paragraphs and in Section 3.9.2.2.1, baseline
29 noise levels range from 65 dBA CNEL to 71 dBA CNEL at the most affected
30 sensitive receiver locations. Port-related activities already occur at Berths 136-147.
31 Projected noise levels under maximum activities that would include ship loading,
32 would generate noise levels below existing ambient noise levels resulting primarily
33 from vehicular on the roadway networks. Such activities would cause no significant
34 increase in CNEL levels at these locations.

35 The proposed Project includes a 30-acre buffer area between Harry Bridges
36 Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant, Port-
37 owned property (see Figure 2-3). The creation of this buffer area would ensure that
38 no development that would potentially increase noise levels in the buffer area would
39 occur, protecting the noise environment of the most affected residents.

40 The operation of the new Pier A rail yard near the Berth 200-202 Marinas would
41 generate noise. A noise monitoring survey was conducted at the existing Pier A rail
42 yard in November 2005 to quantify noise levels from railroad operations. The noise
43 survey included noise measurements made during a one-hour period when the rail
44 yard was actively working between 10:00 AM and 11:00 AM on November 8, 2005.
45 The noise measurements were conducted at the Port of Los Angeles Materials and
46 Environmental Testing Lab located across Pier A Street from the active area in the
47 Pier A rail yard. The measurements were made at a distance of about 200 feet from

1 where the engines were operating. The activity consisted of a train engine coupling
2 to, and uncoupling from, groups of railroad cars, shuttling the cars back and forth on
3 different tracks, and re-coupling the cars to other strings of railroad cars. Noise
4 sources included the engine, the train horn, the crunching sounds associated with the
5 slack action of the strings of cars starting and stopping, and the sounds of the impacts
6 of cars being coupled together. During the hour of attended noise measurements,
7 maximum noise levels resulting from these activities typically ranged from about 65
8 dBA to 75 dBA at a distance of about 200 to 300 feet from the source. The highest
9 noise level measured was 97 dBA, resulting from a train horn. Occasionally, the
10 sound of cars crunching together when coupling ranged from 78 to 80 dBA. The
11 average noise level for the hour of busy activity was 68 dBA $L_{eq(h)}$.

12 The Harbor Belt Line Railroad was contacted to determine typical daily operations
13 (personal communication, Fox 2005). The busiest level of activity occurs between
14 6:00 AM and 3:00 PM when incoming trains are sorted. Between 3:00 PM and 6:00
15 PM is the lowest activity period. Between 6:00 PM and 6:00 AM, the activity level
16 is substantially less than during the busier daytime period when crews deliver cars to
17 other areas of the port.

18 The proposed rail yard would operate as it presently does at the existing rail yard.
19 The primary activity would occur near the western end of the new rail yard. This
20 would place the activity area furthest from sensitive receivers, approximately 800
21 feet from the nearest residence in a yacht marina. Maximum noise levels at this
22 distance would be reduced at least 12 dBA below the maximum noise levels
23 described above due to increased distance. Maximum and average noise levels
24 would typically fall between the range of 53 to 63 dBA and could occasionally reach
25 68 dBA. The average noise level for the hour of busy activity is calculated to be
26 about 56 dBA $L_{eq(h)}$. To calculate the CNEL, one must assume a level of activity and
27 associated noise level during each of the three time periods discussed above (6:00
28 AM to 3:00 PM, 3:00 PM to 6:00 PM, and 6:00 PM to 6:00 AM). Based on
29 measurements and observations previously described for the Harbor Belt Line
30 Railroad, it is assumed that during the busiest activity period, the hourly average
31 noise level would be 56 dBA L_{eq} . A noise level of 50 dBA L_{eq} would occur for the
32 3:00 PM to 6:00 PM period and the 6:00 PM to 6:00 AM period. After adjusting the
33 hourly average noise levels by adding 5 dBA to the evening period (7:00 PM to 10:00
34 PM) and 10 dBA to the average noise levels during the nighttime (10:00 PM to 7:00
35 AM), based on the definition of CNEL, the calculated noise level is 58 dBA CNEL.
36 The baseline ambient noise level in the marinas, based on measurements as discussed
37 in Section 3.9.2.2.3, is 61 dBA CNEL. When the noise level from operations at the
38 relocated Pier A rail yard is added to the ambient noise level, the noise level is
39 calculated to increase to, at most, 63 dBA CNEL. This would be a 2 dBA increase in
40 the CNEL. This is a less-than-significant impact.

41 ***Railway Corridor Noise***

42 The implementation of the project would result in an increase in the number of rail
43 movements into and out of the Port of Los Angeles along the Alameda
44 Transportation Corridor. Project throughput comparisons presented in Table 2-4 of
45 the project description include the number of annual rail trips generated from Berths

1 136-147 under the CEQA Baseline (2003) Condition, the No Federal Action/NEPA
2 Baseline conditions and the proposed Project in the years 2015 and 2038. To
3 determine the maximum possible increase in noise along the rail corridors resulting
4 from the Reduced Project (Alternative 2), a comparison was made between the
5 CEQA 2003 Baseline of 731 annual rail trips and the year 2038 with Alternative 2 of
6 1,434 annual rail trips. This is an increase of about two rail trips per day. There
7 would be about four more events per day when a train horn is sounded at the Henry
8 Ford Avenue grade crossing north of the consolidated slip causing audible noise at
9 the Leeward Marine. There are currently approximately 68 peak rail trips per day in
10 and out of the San Pedro Bay Ports excluding light engine switching operations
11 (Parsons 2006). The incremental increase in noise levels along the railroad corridors
12 serving the Port of Los Angeles is calculated to be 0.2 dBA CNEL. This is a less-
13 than-significant impact.

14 Train horns are a part of the acoustical environment in the environs of the Port of Los
15 Angeles. There is an existing at-grade crossing at Henry Ford Avenue north of the
16 Consolidated Slip and this was discussed in the noise setting section. This project
17 will not change the level of noise from a train horn, it will result in an increase in the
18 number of times the horns are sounded because there would be about four more
19 intermodal train movements per day through this crossing. The significance
20 threshold is based on increased noise above the baseline level in terms of the CNEL
21 noise metric, and this is a function of the level, duration, and time of day the noise
22 occurs; as well as the existing noise level. There are currently about 8 train
23 movements per day through this crossing distributed throughout the day and night.
24 The project would add 4 movements distributed throughout the day and night. The
25 increase in the train generated CNEL is calculated to be 1.8 dBA CNEL. An increase
26 of at least 3 dBA in the CNEL is considered to be a substantial increase causing a
27 significant impact. Also, because vehicular traffic on Henry Ford Avenue and other
28 railroad trains traveling adjacent to Henry Ford Avenue are more significant sources
29 of noise at the Leeward Marina, the increase in the overall CNEL would be less than
30 1.8 dBA CNEL. So, while there will be an increase in the number of audible train
31 horns, this is a less than significant environmental impact

32 ***Harry Bridges Boulevard Widening***

33 Harry Bridges Boulevard is proposed to be widened and remain four lanes. Over the
34 past several years, various roadway alignments have been considered for Harry Bridges
35 Boulevard. The proposed Project includes a 30-acre buffer area between Harry Bridges
36 Boulevard and “C” Street from Figueroa Street to Laguna Avenue, on vacant, port-
37 owned property (see Figure 2-3). The creation of this buffer area would ensure that no
38 development that would potentially increase noise levels within the buffer area would
39 occur, including the realignment of the Harry Bridges Boulevard transportation
40 corridor closer to the residences located along “C” Street. By designating this as a
41 buffer area, port-related activities that would potentially increase noise level in the area
42 would not be developed.

43 The incremental increase in noise at the most affected sensitive receivers along “C”
44 Street was determined by modeling the traffic noise generated by Harry Bridges
45 Boulevard using TNM Version 2.5. Example model runs are included in the Noise

1 Appendix. Existing and future traffic data included in the Transportation/Circulation
2 Appendix was used in the traffic noise modeling. In the baseline model, the existing
3 four-lane section of Harry Bridges Boulevard was assumed. In the future models, a
4 wider cross section was assumed, with widening occurring to the north bringing some
5 of the traffic closer to the "C" Street neighbors. First, a direct comparison was made
6 between the existing four lane section and the future widened section assuming the
7 same traffic volume. The redistribution of traffic adjacent to the existing travel lanes
8 would cause an increase of 0.8 dBA at reference modeling locations adjacent to the
9 roadway where noise from Harry Bridges Boulevard dominates the noise environment
10 and by 0.3 dBA or less at the "C" street residences. Traffic that would be added by
11 Alternative 2 for the years 2015 and 2038 was then added to the baseline traffic to
12 determine the incremental increase in noise generated by Harry Bridges Boulevard
13 traffic. The calculated increase in noise levels along Harry Bridges Boulevard was 1
14 dBA $L_{eq(h)}$. It is assumed that the hourly distribution of noise levels throughout the day
15 and night would remain the same as it is today. The calculated increase in CNEL noise
16 levels is, therefore, also calculated to be 1 dBA CNEL for both the years 2015 and
17 2038. At the Wilmington neighbors along "C" Street, the noise environment is affected
18 by vehicular traffic on the I-110 freeway, local traffic on "C" Street, and, to a lesser
19 extent, vehicular traffic along Harry Bridges Boulevard and activities at the Port.
20 Because the noise from Harry Bridges Boulevard is a minor contributor to noise levels
21 at the most affected receivers, the increase in the overall CNEL at these receivers
22 would range from 0 dBA CNEL to 1 dBA CNEL. There would be no change in the
23 character of the noise environment because the roadway traffic would not be moved
24 noticeably closer to the community. Based on the noise monitoring and modeling
25 completed for the proposed Project, there is no evidence to indicate that any noise
26 abatement would be required for the proposed Project. Furthermore, because of the
27 distances involved between the residences and the existing Harry Bridges Boulevard
28 alignment, and parameters which affect performance of noise barriers, it is likely that a
29 noise barrier would be of only minimal benefit in reducing noise from Harry Bridges
30 Boulevard. Landscaped mounds are being considered within the Harry Bridges
31 Boulevard Landscaped Area. The design for these landscaped mounds is not yet
32 complete, and so no excess attenuation for the landscaped mounds has been included in
33 the noise model. Landscaped mounds, depending upon their final design, could
34 provide a further reduction in Harry Bridges Boulevard noise in the Wilmington
35 neighborhood to the north.

36 The Transportation/Circulation Appendix includes turning movement volumes for 17
37 intersections located along roadways in the study area. Turning movement volumes for
38 all 17 study intersections were reviewed to determine if any other roadway segments
39 could experience a measurable increase in traffic noise as a result of traffic generated
40 by this alternative. It was determined by inspection that traffic added by this alternative
41 would be insignificant and would cause a dBA increase to the CNEL on all other
42 roadway segments studied except along Harry Bridges Boulevard adjacent to the
43 project study area.

44 **CEQA Impact Determination**

45 Because operational noise levels would not result in the CNEL to be increased by 3 dBA
46 CNEL or more to or within the "normally unacceptable" or "clearly unacceptable"

1 category nor exceed 5 dBA over the current CNEL at sensitive locations, less than
2 significant noise impacts would occur under CEQA.

3 *Mitigation Measures*

4 No mitigation is required.

5 *Residual Impacts*

6 With no mitigation required, there would be less than significant residual impacts.

7 **NEPA Impact Determination**

8 Because operational noise levels would not substantially increase above the current
9 CNEL at sensitive receptor locations, there would be less-than-significant impacts
10 under NEPA.

11 *Mitigation Measures*

12 No mitigation is required.

13 *Residual Impacts*

14 With no mitigation required, there would be less than significant residual impacts.

15 **3.9.4.3.2.3 Alternative 3 – Reduced Wharf**

16 The Reduced Wharf Alternative (Alternative 3) is similar to the proposed Project
17 except the 10-acre Northwest Slip would not be filled for additional backland storage
18 area, the 400-foot wharf would not be built adjacent to it, and the new 705-foot wharf
19 along Berths 145-147 would not be constructed. Construction-related noise impacts
20 along Harry Bridges Boulevard and the Wilmington neighborhood would be similar
21 to Alternative 2 (Reduced Project) because there would be less in-water construction
22 activities. The throughput for the year 2025 through 2038 would be less than for the
23 proposed Project.

24 **3.9.4.3.2.3.1 Construction Impacts**

25 **Impact NOI-1: Construction activities would temporarily and**
26 **periodically generate noise, and noise levels would substantially**
27 **exceed existing ambient daytime noise levels at sensitive receivers near**
28 **the new Pier A rail yard and along “C” Street during construction of the**
29 **Buffer Area.**

30 Construction activities would typically last more than 10 days in any 3-month period
31 for all of the construction activities listed in Tables 3.9-6 and 3.9-7. Following the
32 thresholds for significance, an impact would be considered significant if noise from
33 these construction activities would exceed existing ambient exterior noise levels by 5
34 dBA or more at a noise sensitive use.

1 The existing Harry Bridges Boulevard is located approximately 500 feet from the
2 "C" Street neighbors. Sensitive receivers potentially affected by Harry Bridges
3 Boulevard construction noise are located along the north side of "C" Street. The
4 baseline ambient noise levels at these receivers described in Section 3.9.2.2.1 were
5 found to typically range from 63 to 67 dBA $L_{eq(h)}$ during the daytime when
6 construction activities would occur and the CNEL ranges from 71 dBA CNEL near
7 Hawaiian Avenue down to 65-66 dBA further east. The construction noise is
8 calculated to be up to 65 dBA $L_{eq(h)}$ at these residences. Assuming continuous
9 construction at a level of 65 dBA $L_{eq(h)}$ noise level for the daytime period, the
10 construction-generated CNEL noise level would be up to 63 dBA CNEL at the
11 closest residence. Noise from the construction activities would not exceed existing
12 ambient exterior noise levels by 5 dBA or more at a noise sensitive use. Construction
13 activities associated with the improvements to the roadway would not substantially
14 increase noise levels in the Wilmington neighborhood. Construction activities would
15 not generate noise levels substantially higher than noise levels typically generated by
16 the truck traffic and rail traffic utilizing the existing transportation corridor, and local
17 traffic along "C" Street. Residences in San Pedro located west of Knoll Hill are
18 6,000 feet or more from the nearest possible construction area along Harry Bridges
19 Boulevard. The existing ambient noise levels at these receivers, described in Section
20 3.9.2.2.2 are similar to existing ambient noise levels in the "C" Street neighborhood
21 of the Wilmington District. Noise levels attenuate with increasing distance. Because
22 ambient noise levels are equivalent to those discussed in the previous paragraph and
23 because construction noise levels would be lower than at the nearest most affected
24 receivers in Wilmington, noise from construction activities would not exceed existing
25 ambient noise levels in San Pedro. This is a less-than-significant impact.

26 The Reduced Wharf Alternative (Alternative 3) would include construction of a
27 buffer area between Harry Bridges Boulevard and "C" Street. Construction
28 equipment required for this project element would include but not be limited to
29 dozers, loaders, backhoes, trucks, graders, compactors and trenchers. Construction
30 activities would be occurring as close as within approximately 50-75 feet of
31 residences along "C" Street. Typically, construction activities would be occurring
32 within distances of between 50 and 200 feet of these residences. Maximum noise
33 levels would intermittently reach 80-90 dBA and average noise levels would reach 88
34 dBA L_{eq} , the levels shown in the tables above at the reference distances. On a worst
35 case day, when construction in the buffer area is immediately adjacent to a residence,
36 the CNEL could be up to 86 dBA CNEL. It should be noted that pile driving, which
37 is included for information purposes, is the noisiest individual source of construction
38 noise and would not occur as part of buffer construction. Construction noise levels
39 would exceed ambient noise levels discussed in the preceding paragraph by 5 dBA or
40 more. This would occur intermittently and would depend upon the staging of the
41 work as the buffer construction proceeds. This is a significant impact. Construction
42 activities in the buffer area will be located at an even greater distance from the
43 residences in San Pedro than the Harry Bridges Boulevard construction activities, so
44 as discussed in the previous paragraph, these construction activities would not exceed
45 ambient noise levels in other sensitive neighborhoods and would cause a less-than-
46 significant impact there.

47 The next nearest construction area to the Wilmington neighborhood would be located
48 at a distance of more than 2,000 feet from the Wilmington neighborhood. Other

1 construction activities that would be necessary to implement the Reduced Wharf
2 Alternative include backland development at Berths 136-147, wharf reconstruction at
3 Berths 145-147, rip rap placement and dredging at Berths 145-147, and construction
4 of the intermodal container transfer facility. The data in Table 3.9-6 shows that
5 source construction noise levels are similar to and fall within the range of
6 construction noise levels assessed in the previous paragraphs. These construction
7 activities would all occur at locations at distances equivalent to or greater than the
8 distances between the construction activities discussed in the previous paragraphs.
9 Predicted construction noise levels would, therefore, be less than the construction
10 noise levels assessed and found to be less than significant for worst case construction
11 activities discussed in previous paragraphs. This is a less-than-significant impact.

12 The Pier A rail yard would be moved to a new location northeast of the TraPac
13 Terminal near the Berth 200-202 Marinas. The new rail yard would be constructed
14 within 5 months after a 1-month mobilization period. It would take 3 months for
15 utilities (drainage system, electricity, water, gas, sewer, and lighting) to be provided
16 to the site. It would take 5 months to prepare the site and lay tracks. Sources of
17 construction noise that are unique to railroad yard construction include a rail saw,
18 spike driver, tie cutter, tie handler, and tie inserter. Otherwise, general construction
19 equipment would be the same. Typical A-weighted noise levels resulting from this
20 additional equipment typically ranges from about 77 to 90 dBA, measured at a
21 distance of 50 feet (USDOT 1995). The (total) source noise level would be 89 dBA
22 $L_{eq(h)}$ at 100 feet from the construction activity. Sensitive receivers near the rail yard
23 include live-aboards located in marinas across the channel from the new rail yard
24 site. Residents in the Wilmington and San Pedro neighborhoods are located more
25 than 3,000 feet from this construction area and would not be affected by construction
26 noise because the noise would be inaudible at this distance. Construction activities
27 would be located within approximately 500 to 800 feet of the nearest noise sensitive
28 marina areas. Hourly average noise levels could reach 70-dBA L_{eq} during busy
29 construction periods. Existing ambient noise levels in the marinas range from about
30 50 to 60 dBA. During construction at the new Pier A rail yard, construction activities
31 lasting more than 10 days in a 3-month period would exceed existing ambient
32 exterior noise levels by 5 dBA or more. This is a significant impact.

33 **CEQA Impact Determination**

34 Construction noise levels for the Harry Bridges Boulevard widening and at Berths
35 136-147 would not cause a substantial increase in noise levels at sensitive receivers.
36 This would be a less than significant impact. The construction activities at the Harry
37 Bridges Buffer Area would cause temporary and periodic noise levels substantially
38 above existing ambient noise levels in the Wilmington neighborhood north of "C"
39 Street. The construction activities at the proposed Pier A rail yard near the Berth
40 200-202 Marinas would generate construction noise levels that would cause
41 temporary and periodic noise levels substantially above existing ambient noise levels
42 in nearby marinas where people live. Therefore, significant short-term impacts
43 would occur under CEQA.

Mitigation Measures

NOI-1: The following mitigation measures would reduce impact of noise from construction activities:

- a) **Construction Hours.** Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance.
- b) **Construction Days.** Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).
- c) **Temporary Noise Barriers.** When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors.
- d) **Construction Equipment.** Properly muffle and maintain all construction equipment powered by internal combustion engines.
- e) **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.
- f) **Equipment Location.** Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses.
- g) **Quiet Equipment Selection.** Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.
- h) **Notification.** Notify residents adjacent to the proposed Project site of the construction schedule in writing.

Residual Impacts

Considering the distances between the construction noise sources and receivers, the standard controls and temporary noise barriers may not be sufficient to reduce the projected increase in the ambient noise level to the point where it would no longer cause a substantial increase. With implementation of these measures, construction equipment noise levels generated at the buffer area and rail yard sites could substantially exceed existing ambient noise levels. This impact remains significant after mitigation.

NEPA Impact Determination

As discussed above, in-water construction work (e.g., pile driving) would occur at a distance of more than 1,500 feet from sensitive receivers so levels would be reduced to below ambient levels. There would be no adverse short-term effects under NEPA from in-water work. The new Pier A rail yard and the Harry Bridges Buffer Area are considered part of the No Federal Action/NEPA Baseline conditions and, therefore, noise related to construction of these components is not relevant to the NEPA impact determination.

1 *Mitigation Measures*

2 Due to No Federal Action, mitigation is not applicable. No mitigation is required.

3 *Residual Impacts*

4 With no mitigation required, there would be no residual impacts

5 **Impact NOI-2: Construction activities would not exceed the ambient**
6 **noise level by 5 dBA at a noise sensitive use between the hours of 9:00**
7 **PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00**
8 **PM on Saturday, or at any time on Sunday.**

9 No construction activities are planned to occur between the hours of 9:00 PM and
10 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or
11 at any time on Sunday.

12 **CEQA Impact Determination**

13 There would be no construction-related noise impacts during prohibited hours as
14 described above; consequently, no impacts under CEQA would occur.

15 *Mitigation Measures*

16 No mitigation is required.

17 *Residual Impacts*

18 With no mitigation required, there would be no residual impacts.

19 **NEPA Impact Determination**

20 There would be no in-water construction-related noise impacts during prohibited
21 hours as described above; consequently, no impacts under NEPA would occur.

22 *Mitigation Measures*

23 Due to No Federal Action, mitigation is not applicable. No mitigation is required.

24 *Residual Impacts*

25 With no mitigation required, there would be no residual impacts.

26 **3.9.4.3.2.3.2 Operational Impacts**

27 **Impact NOI-3: Operations would generate noise, but noise levels would**
28 **not substantially exceed existing ambient noise levels at sensitive**
29 **receivers.**

On-Site Operations

Operation activities that would generate noise would include truck and rail movements in the newly developed backland areas and container terminal operations. Truck movements and truck container loading were monitored April 30, 2002 along the backland areas of Berths 136-139 during the noise monitoring survey in the Wilmington District. Noise levels generated in these areas are more than 10 dBA lower than, and not distinguishable from, noise levels generated by truck traffic circulating on the Port's perimeter roadways. Terminals would be located more than 2,000 feet from the Wilmington residential neighbors located north of "C" Street and farther from residences west of I-110 and Knoll Hill. Noise from truck operations at the terminals would cause no increase in noise at sensitive receivers. This is a less-than-significant impact.

Noise levels resulting from container terminal operations were monitored at the Port of Los Angeles in June 1990 (I&R 1990). These data represent noise levels of typical operations at a container terminal from typical/standard equipment including but not limited to: container ships, assist tugs, electric container cranes, yard hostlers, toppicks, side picks, and heavy duty vehicles. These pieces of equipment are the same equipment pieces operating at the Berth 136-147 container terminal. Two ships were being unloaded simultaneously at the Evergreen Lines Terminal. Four large gantry cranes were operating simultaneously. Several straddle loaders were observed to be loading and unloading trucks. Many trucks were circulating at the terminal. Noise levels were monitored at a point directly across the main channel from the container terminal at a distance of about 1,100 feet from the container terminal. The cranes generated maximum noise levels of 56 to 57 dBA. The sounds of containers clanking reached a maximum noise level of 63 dBA. Truck horns were the most identifiable noise sources, with maximum levels reaching 70 dBA. The average noise level generated by the operations was 59 dBA L_{eq} . Accounting for the difference in distance where these measurements were conducted, and the distance of 2,000 feet over ground between the Wilmington residential neighbors and the proposed terminal activities, the average noise level from this level of activity is calculated to be about 50-53dBA L_{eq} . Noise generated by container terminal loading operations would be below existing ambient noise levels day or night at these nearest residential neighbors. Intermittent noises would be indistinguishable from road traffic on the Port's perimeter roadways, local street traffic noise, and existing sources of intermittent noise within the Port. Assuming 24-hour per day continuous operations, Port-related activities would cause, by themselves, a CNEL in the range of 57-60 dBA CNEL. As discussed in previous paragraphs and in Section 3.9.2.2.1, baseline noise levels range from 65 dBA CNEL to 71 dBA CNEL at the most affected sensitive receiver locations. Port-related activities already occur at Berths 136-147. Projected noise levels under maximum activities that would include ship loading, would generate noise levels below existing ambient noise levels resulting primarily from vehicular on the roadway networks. Such activities would cause no significant increase in CNEL levels at these locations.

The Reduced Wharf Alternative includes a 30-acre buffer area between Harry Bridges Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant, Port-owned property (see Figure 2-3). The creation of this buffer area would

1 ensure that no development that would potentially increase noise levels in the buffer
2 area would occur, protecting the noise environment of the most affected residents.

3 The operation of the new Pier A rail yard near the Berth 200-202 Marinas would
4 generate noise. A noise monitoring survey was conducted at the existing Pier A rail
5 yard in November 2005 to quantify noise levels from railroad operations. The noise
6 survey included noise measurements made during a one-hour period when the rail
7 yard was actively working between 10:00 AM and 11:00 AM on November 8, 2005.
8 The noise measurements were conducted at the Port of Los Angeles Materials and
9 Environmental Testing Lab located across Pier A Street from the active area in the
10 Pier A rail yard. The measurements were made at a distance of about 200 feet from
11 where the engines were operating. The activity consisted of a train engine coupling
12 to and uncoupling from groups of railroad cars, shuttling the cars back and forth on
13 different tracks, and recoupling the cars to other strings of railroad cars. Noise
14 sources included the engine, the train horn, the crunching sounds associated with the
15 slack action of the strings of cars starting and stopping, and the sounds of the impacts
16 of cars being coupled together. During the hour of attended noise measurements,
17 maximum noise levels resulting from these activities typically ranged from about 65
18 dBA to 75 dBA at a distance of about 200 to 300 feet from the source. The highest
19 noise level measured was 97 dBA, resulting from a train horn. Occasionally, the
20 sound of cars crunching together when coupling ranged from 78 to 80 dBA. The
21 average noise level for the hour of busy activity was 68 dBA $L_{eq(h)}$.

22 The Harbor Belt Line Railroad was contacted to determine typical daily operations
23 (personal communication, Fox 2005). The busiest level of activity occurs between
24 6:00 AM and 3:00 PM when incoming trains are sorted. Between 3:00 PM and 6:00
25 PM is the lowest activity period. Between 6:00 PM and 6:00 AM, the activity level
26 is substantially less than during the busier daytime period when crews deliver cars to
27 other areas of the port.

28 The proposed rail yard would operate as it presently does at the existing rail yard.
29 The primary activity would occur near the western end of the new rail yard. This
30 would place the activity area furthest from sensitive receivers, approximately 800
31 feet from the nearest residence in a yacht marina. Maximum noise levels at this
32 distance would be reduced at least 12 dBA below the maximum noise levels
33 described above due to increased distance. Maximum and average noise levels
34 would typically fall between the range of 53 to 63 dBA and could occasionally reach
35 68 dBA. The average noise level for the hour of busy activity is calculated to be
36 about 56 dBA $L_{eq(h)}$. To calculate the CNEL, one must assume a level of activity and
37 associated noise level during each of the three time periods discussed above (6:00
38 AM to 3:00 PM, 3:00 PM to 6:00 PM, and 6:00 PM to 6:00 AM). Based on
39 measurements and observations previously described for the Harbor Belt Line
40 Railroad, it is assumed that during the busiest activity period, the hourly average
41 noise level would be 56 dBA L_{eq} . A noise level of 50 dBA L_{eq} would occur for the
42 3:00 PM to 6:00 PM period and the 6:00 PM to 6:00 AM period. After adjusting the
43 hourly average noise levels by adding 5 dBA to the evening period (7:00 PM to 10:00
44 PM) and 10 dBA to the average noise levels during the nighttime (10:00 PM to 7:00
45 AM), based on the definition of CNEL, the calculated noise level is 58 dBA CNEL.
46 The baseline ambient noise level in the marinas, based on measurements as discussed
47 in Section 3.9.2.2.3, is 61 dBA CNEL. When the noise level from operations at the

1 Norelocated Pier A rail yard is added to the ambient noise level, the noise level is
2 calculated to increase to, at most, 63 dBA CNEL. This would be a 2 dBA increase in
3 the CNEL. This is a less-than-significant impact.

4 ***Railway Corridor Noise***

5 The implementation of the Reduced Wharf Alternative would result in an increase in
6 the number of rail movements into and out of the Port of Los Angeles along the
7 Alameda Transportation Corridor Project throughput comparisons presented in Table
8 2-4 of the project description include the number of annual rail trips generated from
9 Berths 136-147 under the CEQA Baseline (2003) Condition, the No Federal Action/
10 NEPA Baseline conditions and the proposed Project in the years 2015 and 2038. To
11 determine the maximum possible increase in noise along the rail corridors resulting
12 from the Reduced Wharf (Alternative 3), a comparison was made between the CEQA
13 2003 Baseline of 731 annual rail trips and the year 2038 with Alternative 3 of 1,391
14 annual rail trips. This is an increase of about two rail trips per day. There would be
15 about four more events per day when a train horn is sounded at the Henry Ford
16 Avenue grade crossing north of the consolidated slip causing audible noise at the
17 Leeward Marine. There are currently approximately 68 peak rail trips per day in and
18 out of the San Pedro Bay Ports excluding light engine switching operations (Parsons
19 2006). The incremental increase in noise levels along the railroad corridors serving
20 the Port of Los Angeles is calculated to be 0.2 dBA CNEL. This is a less-than-
21 significant impact.

22 Train horns are a part of the acoustical environment in the environs of the Port of Los
23 Angeles. There is an existing at-grade crossing at Henry Ford Avenue north of the
24 Consolidated Slip and this was discussed in the noise setting section. This project
25 will not change the level of noise from a train horn, it will result in an increase in the
26 number of times the horns are sounded because there would be about four more
27 intermodal train movements per day through this crossing. The significance
28 threshold is based on increased noise above the baseline level in terms of the CNEL
29 noise metric, and this is a function of the level, duration, and time of day the noise
30 occurs; as well as the existing noise level. There are currently about 8 train
31 movements per day through this crossing distributed throughout the day and night.
32 The project would add 4 movements distributed throughout the day and night. The
33 increase in the train generated CNEL is calculated to be 1.8 dBA CNEL. An increase
34 of at least 3 dBA in the CNEL is considered to be a substantial increase causing a
35 significant impact. Also, because vehicular traffic on Henry Ford Avenue and other
36 railroad trains traveling adjacent to Henry Ford Avenue are more significant sources
37 of noise at the Leeward Marina, the increase in the overall CNEL would be less than
38 1.8 dBA CNEL. So, while there will be an increase in the number of audible train
39 horns, this is a less than significant environmental impact

40 ***Harry Bridges Boulevard Widening***

41 Harry Bridges Boulevard is proposed to be widened but would remain four lanes. Over
42 the past several years, various roadway alignments have been considered for Harry
43 Bridges Boulevard. The proposed Project includes a 30-acre buffer area between Harry
44 Bridges Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant,

1 port-owned property (see Figure 2-3). The creation of this buffer area would ensure
2 that no development that would potentially increase noise levels within the buffer area
3 would occur, including the realignment of the Harry Bridges Boulevard transportation
4 corridor closer to the residences located along “C” Street. By designating this as a
5 buffer area, Port-related activities that would potentially increase noise level in the area
6 would not be developed.

7 The incremental increase in noise at the most affected sensitive receivers along “C”
8 Street was determined by modeling the traffic noise generated by Harry Bridges
9 Boulevard using TNM Version 2.5. Example model runs are included in the Noise
10 Appendix. Existing and future traffic data included in the Transportation/Circulation
11 Appendix was used in the traffic noise modeling. In the baseline model, the existing
12 four-lane section of Harry Bridges Boulevard was assumed. In the future models, a
13 wider cross section was assumed, with widening occurring to the north bringing some
14 of the traffic closer to the “C” Street neighbors. First, a direct comparison was made
15 between the existing four lane section and the future widened section assuming the
16 same traffic volume. The redistribution of traffic adjacent to the existing travel lanes
17 would cause an increase of 0.8 dBA at reference modeling locations adjacent to the
18 roadway where noise from Harry Bridges Boulevard dominates the noise environment
19 and by 0.3 dBA or less at the “C” Street residences. Traffic that would be added by
20 Alternative 3 for the years 2015 and 2038 was then added to the baseline traffic to
21 determine the incremental increase in noise generated by Harry Bridges Boulevard
22 traffic. The calculated increase in noise levels along Harry Bridges Boulevard was 1
23 dBA $L_{eq(h)}$. It is assumed that the hourly distribution of noise levels throughout the day
24 and night would remain the same as it is today. The calculated increase in CNEL noise
25 levels is, therefore, also calculated to be 1 dBA CNEL for both the years 2015 and
26 2038. At the Wilmington neighbors along “C” Street, the noise environment is affected
27 by vehicular traffic on the I-110 freeway, local traffic on “C” Street, and, to a lesser
28 extent, vehicular traffic along Harry Bridges Boulevard and activities at the Port.
29 Because the noise from Harry Bridges Boulevard is a minor contributor to noise levels
30 at the most affected receivers, the increase in the overall CNEL at these receivers
31 would range from 0 dBA CNEL to 1 dBA CNEL. There would be no change in the
32 character of the noise environment because the roadway traffic would not be moved
33 noticeably closer to the community. Based on the noise monitoring and modeling
34 completed for the proposed Project, there is no evidence to indicate that any noise
35 abatement would be required for the proposed Project. Furthermore, because of the
36 distances involved between the residences and the existing Harry Bridges Boulevard
37 alignment, and parameters which affect performance of noise barriers, it is likely that a
38 noise barrier would be of only minimal benefit in reducing noise from Harry Bridges
39 Boulevard. Landscaped mounds are being considered within the Harry Bridges
40 Boulevard Landscaped Area. The design for these landscaped mounds is not yet
41 complete, and so no excess attenuation for the landscaped mounds has been included in
42 the noise model. Landscaped mounds, depending upon their final design, could
43 provide a further reduction in Harry Bridges Boulevard noise in the Wilmington
44 neighborhood to the north.

45 The Transportation/Circulation Appendix includes turning movement volumes for 17
46 intersections located along roadways in the study area. Turning movement volumes for
47 all 17 study intersections were reviewed to determine if any other roadway segments
48 could experience a measurable increase in traffic noise as a result of traffic generated

1 by this alternative. It was determined by inspection that traffic added by this alternative
2 would be insignificant and would cause a dBA increase to the CNEL on all other
3 roadway segments studied except along Harry Bridges Boulevard adjacent to the
4 project study area.

5 **CEQA Impact Determination**

6 Because operational noise levels would not result in the CNEL to be increased by 3
7 dBA CNEL or more to or within the “normally unacceptable” or “clearly
8 unacceptable” category nor exceed 5 dBA over the current CNEL at sensitive
9 locations, less than significant noise impacts would occur under CEQA.

10 *Mitigation Measures*

11 No mitigation is required.

12 *Residual Impacts*

13 With no mitigation required, there would be less than significant residual impacts.

14 **NEPA Impact Determination**

15 Because operational noise levels would not substantially increase above the current
16 CNEL at sensitive receptor locations, there would be less-than-significant impacts
17 under NEPA.

18 *Mitigation Measures*

19 No mitigation is required.

20 *Residual Impacts*

21 With no mitigation required, there would be less than significant residual impacts.

22 **3.9.4.3.2.4 Alternative 4 – Omni Terminal**

23 The Omni Terminal Alternative (Alternative 4) would convert the existing site into an
24 operating Omni cargo handling terminal similar to the facility currently operating at
25 Berths 174-181. Development of additional backlands would result in 202 acres
26 available for container storage and terminal operations. There would, however, be no
27 construction/operation of an on-dock ICTF rail yard (Pier A rail yard would not be
28 relocated), and there would be no dredging, filling, or wharf construction/improvements.
29 From the standpoint of potential noise impacts, the primary difference between the Omni
30 Terminal alternative and the proposed Project is the elimination of the relocation of the
31 Pier A rail yard. There would, therefore, be no construction noise impacts upon live-
32 boards and other users of the Berth 200-202 Marinas that would result from the
33 relocation of the rail yard.

3.9.4.3.2.4.1 Construction Impacts

Impact NOI-1: Construction activities during Phase I and Phase II would temporarily and periodically generate noise, and noise levels during Phase I would substantially exceed existing ambient daytime noise levels at sensitive receivers along “C” Street during construction of the Buffer Area.

Construction activities would typically last more than 10 days in any 3-month period for all of the construction activities listed in Tables 3.9-6 and 3.9-7. Following the thresholds for significance, an impact would be considered significant if noise from these construction activities would exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.

The existing Harry Bridges Boulevard is located approximately 500 feet from the “C” Street neighbors. Sensitive receivers potentially affected by Harry Bridges Boulevard construction noise are located along the north side of “C” Street. The baseline ambient noise levels at these receivers described in Section 3.9.2.2.1 were found to typically range from 63 to 67 dBA $L_{eq(h)}$ during the daytime when construction activities would occur and the CNEL ranges from 71 dBA CNEL near Hawaiian Avenue down to 65-66 dBA further east. The construction noise is calculated to be up to 65 dBA $L_{eq(h)}$ at these residences. Assuming continuous construction at a level of 65 dBA $L_{eq(h)}$ noise level for the daytime period, the construction-generated CNEL noise level would be up to 63 dBA CNEL at the closest residence. Noise from the construction activities would not exceed existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use. Construction activities associated with the improvements to the roadway would not substantially increase noise levels in the Wilmington neighborhood. Construction activities would not generate noise levels substantially higher than noise levels typically generated by the truck traffic and rail traffic utilizing the existing transportation corridor, and local traffic along “C” Street. Residences in San Pedro located west of Knoll Hill are 6,000 feet or more from the nearest possible construction area along Harry Bridges Boulevard. The existing ambient noise levels at these receivers, described in Section 3.9.2.2.2 are similar to existing ambient noise levels in the “C” Street neighborhood of the Wilmington District. Noise levels attenuate with increasing distance. Because ambient noise levels are equivalent to those discussed in the previous paragraph and because construction noise levels would be lower than at the nearest most affected receivers in Wilmington, noise from construction activities would not exceed existing ambient noise levels in San Pedro. This is a less-than-significant impact.

The Omni Alternative (Alternative 4) would include construction of a buffer area between Harry Bridges Boulevard and “C” Street. Construction equipment required for this project element would include but not be limited to dozers, loaders, backhoes, trucks, graders, compactors and trenchers. Construction activities would be occurring as close as within approximately 50-75 feet of residences along “C” Street. Typically, construction activities would be occurring within distances of between 50 and 200 feet of these residences. Maximum noise levels would intermittently reach 80-90 dBA and average noise levels would reach 88 dBA L_{eq} , the levels shown in the tables above at the reference distances. On a worst case day, when construction in the buffer area is

1 immediately adjacent to a residence, the CNEL could be up to 86 dBA CNEL. It
 2 should be noted that pile driving, which is included for information purposes, is the
 3 noisiest individual source of construction noise and would not occur as part of buffer
 4 construction. Construction noise levels would exceed ambient noise levels discussed in
 5 the preceding paragraph by 5 dBA or more. This would occur intermittently and would
 6 depend upon the staging of the work as the buffer construction proceeds. This is a
 7 significant impact. Construction activities in the buffer area will be located at an even
 8 greater distance from the residences in San Pedro than the Harry Bridges Boulevard
 9 construction activities, so as discussed in the previous paragraph, these construction
 10 activities would not exceed ambient noise levels in other sensitive neighborhoods and
 11 would cause a less-than-significant impact there.

12 The next nearest construction area to the Wilmington neighborhood would be located
 13 at a distance of more than 2,000 feet from the Wilmington neighborhood. Other
 14 construction activities that would be necessary to implement the Omni Alternative
 15 include backland development at Berths 136-147. The data in Table 3.9-6 shows that
 16 source construction noise levels are similar to and fall within the range of
 17 construction noise levels assessed in the previous paragraphs. These construction
 18 activities would all occur at locations at distances equivalent to or greater than the
 19 distances between the construction activities discussed in the previous paragraphs.
 20 Predicted construction noise levels would, therefore, be less than the construction
 21 noise levels assessed and found to be less than significant for worst case construction
 22 activities discussed in previous paragraphs. This is a less-than-significant impact.

23 **CEQA Impact Determination**

24 Construction noise levels near Harry Bridges Boulevard and at Berths 136-147 would
 25 not cause a substantial increase in noise levels at sensitive receivers. This would be a
 26 less than significant impact. The construction activities at the Harry Bridges Buffer
 27 Area would cause temporary and periodic noise levels substantially above existing
 28 ambient noise levels in the Wilmington neighborhood north of "C" Street. Therefore,
 29 significant short-term impacts would occur under CEQA.

30 ***Mitigation Measures***

31 **NOI-1:** The following mitigation measures would reduce impact of noise from
 32 construction activities:

- 33 a) **Construction Hours.** Limit construction to the hours of 7:00 am to 9:00 pm on
 34 weekdays, between 8:00 am and 6:00 pm on Saturdays, and prohibit
 35 construction equipment noise anytime on Sundays and holidays as prescribed in
 36 the City of Los Angeles Noise Ordinance.
- 37 b) **Construction Days.** Do not conduct noise-generating construction activities on
 38 weekends or holidays unless critical to a particular activity (e.g., concrete work).
- 39 c) **Temporary Noise Barriers.** When construction is occurring within 500 feet of
 40 a residence or park, temporary noise barriers (solid fences or curtains) shall be
 41 located between noise-generating construction activities and sensitive receptors.

- 1 d) **Construction Equipment.** Properly muffle and maintain all construction
2 equipment powered by internal combustion engines.
- 3 e) **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines
4 near noise sensitive areas.
- 5 f) **Equipment Location.** Locate all stationary noise-generating construction
6 equipment, such as air compressors and portable power generators, as far as
7 practical from existing noise sensitive land uses.
- 8 g) **Quiet Equipment Selection.** Select quiet construction equipment whenever
9 possible. Comply where feasible with noise limits established in the City of Los
10 Angeles Noise Ordinance.
- 11 h) **Notification.** Notify residents adjacent to the proposed Project site of the
12 construction schedule in writing.

13 *Residual Impacts*

14 Considering the distances between the construction noise sources and receivers, the
15 standard controls and temporary noise barriers may not be sufficient to reduce the
16 projected increase in the ambient noise level to the point where it would no longer
17 cause a substantial increase. With implementation of these measures, construction
18 equipment noise levels generated at the Buffer Area could substantially exceed
19 existing ambient noise levels. This impact remains significant after mitigation.

20 **NEPA Impact Determination**

21 Under this alternative, no development would occur within the in-water project area
22 (i.e., no dredging, filling of the Northwest Slip or wharf construction). Therefore,
23 potential impacts are not applicable under NEPA since there would be no federal
24 action under this alternative.

25 *Mitigation Measures*

26 Due to No Federal Action, mitigation is not applicable. No mitigation measures are
27 necessary under NEPA.

28 *Residual Impacts*

29 With no mitigation required, there would be no residual impacts under NEPA.

30 **Impact NOI-2: Construction activities would not exceed the ambient**
31 **noise level by 5 dBA at a noise sensitive use between the hours of 9:00**
32 **PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00**
33 **PM on Saturday, or at any time on Sunday.**

34 No construction activities are planned to occur between the hours of 9:00 PM and
35 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or
36 at any time on Sunday.

CEQA Impact Determination

There would be no construction-related noise impacts during prohibited hours as described above; consequently, no impacts under CEQA would occur.

Mitigation Measures

No mitigation is required.

Residual Impacts

With no mitigation required, there would be no residual impacts.

NEPA Impact Determination

Under this alternative, no development would occur within the in-water project area (i.e., no dredging, filling of the Northwest Slip or wharf construction). Therefore, potential impacts are not applicable under NEPA since there would be no federal action under this alternative.

Mitigation Measures

Due to No Federal Action, mitigation is not applicable. No mitigation measures are necessary under NEPA.

Residual Impacts

With no mitigation required, there would be no residual impacts under NEPA.

3.9.4.3.2.4.2 Operational Impacts

Impact NOI-3: On-site operations would generate noise, but noise levels would not substantially exceed existing ambient noise levels at sensitive receivers.

On-Site Operations

Operation activities that would generate noise would include truck and rail movements in the newly developed backland areas and container terminal operations. Truck movements and truck container loading were monitored April 30, 2002 along the backland areas of Berths 136-139 during the noise monitoring survey in the Wilmington District. Noise levels generated in these areas are more than 10 dBA lower than, and not distinguishable from, noise levels generated by truck traffic circulating on the Port's perimeter roadways. Terminals would be located more than 2,000 feet from the Wilmington residential neighbors located north of "C" Street and farther from residences west of I-110 and Knoll Hill. Noise from truck operations at the terminals would cause no increase in noise at sensitive receivers. This is a less-than-significant impact.

1 Noise levels resulting from container terminal operations were monitored at the Port
2 of Los Angeles in June 1990 (I&R 1990). These data represent noise levels of
3 typical operations at a container terminal from typical/standard equipment including
4 but not limited to: container ships, assist tugs, electric container cranes, yard hostlers,
5 toppicks, side picks, heavy duty vehicles. These pieces of equipment are the same
6 equipment pieces operating at the Berth 136-147 container terminal. Two ships were
7 being unloaded simultaneously at the Evergreen Lines Terminal. Four large gantry
8 cranes were operating simultaneously. Several straddle loaders were observed to be
9 loading and unloading trucks. Many trucks were circulating at the terminal. Noise
10 levels were monitored at a point directly across the main channel from the container
11 terminal at a distance of about 1,100 feet from the container terminal. The cranes
12 generated maximum noise levels of 56 to 57 dBA. The sounds of containers clanking
13 reached a maximum noise level of 63 dBA. Truck horns were the most identifiable
14 noise sources, with maximum levels reaching 70 dBA. The average noise level
15 generated by the operations was 59 dBA L_{eq} . Accounting for the difference in
16 distance where these measurements were conducted, and the distance of 2,000 feet
17 over ground between the Wilmington residential neighbors and the proposed terminal
18 activities, the average noise level from this level of activity is calculated to be about
19 50-53dBA L_{eq} . Noise generated by container terminal loading operations would be
20 below existing ambient noise levels day or night at these nearest residential
21 neighbors. Intermittent noises would be indistinguishable from road traffic on the
22 Port's perimeter roadways, local street traffic noise, and existing sources of
23 intermittent noise within the Port. Assuming 24-hour per day continuous operations,
24 Port-related activities would cause, by themselves, a CNEL in the range of 57-60
25 dBA CNEL. As discussed in previous paragraphs and in Section 3.9.2.2.1, baseline
26 noise levels range from 65 dBA CNEL to 71 dBA CNEL at the most affected
27 sensitive receiver locations. Port-related activities already occur at Berths 136-147.
28 Projected noise levels under maximum activities that would include ship loading,
29 would generate noise levels below existing ambient noise levels resulting primarily
30 from vehicular on the roadway networks. Such activities would cause no significant
31 increase in CNEL levels at these locations.

32 The Omni Alternative includes a 30-acre buffer area between Harry Bridges
33 Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant, Port-
34 owned property (see Figure 2-3). The creation of this buffer area would ensure that
35 no development that would potentially increase noise levels in the buffer area would
36 occur, protecting the noise environment of the most affected residents.

37 ***Railway Corridor Noise***

38 The Omni Terminal Alternative would not include an ICTF rail yard. Table 2-4 in
39 the project description shows annual rail trips of 409 and 463 in the years 2015 and
40 2038, respectively. This would be a reduction from the 731 annual rail trips at the
41 CEQA 2003 Baseline. There would, therefore, be no increase in railroad train noise
42 along the railway corridors.

Harry Bridges Boulevard Widening

Harry Bridges Boulevard is proposed to be widened but would remain four lanes. Over the past several years, various roadway alignments have been considered for Harry Bridges Boulevard. The proposed Project includes a 30-acre buffer area between Harry Bridges Boulevard and “C” Street from Figueroa Street to Laguna Avenue, on vacant, port-owned property (see Figure 2-3). The creation of this buffer area would ensure that no development that would potentially increase noise levels within the buffer area would occur, including the realignment of the Harry Bridges Boulevard transportation corridor closer to the residences located along “C” Street. By designating this as a buffer area, port-related activities that would potentially increase noise level in the area would not be developed.

The incremental increase in noise at the most affected sensitive receivers along “C” Street was determined by modeling the traffic noise generated by Harry Bridges Boulevard using TNM Version 2.5. Example model runs are included in the Noise Appendix. Existing and future traffic data included in the Transportation/Circulation Appendix was used in the traffic noise modeling. In the baseline model, the existing four-lane section of Harry Bridges Boulevard was assumed. In the future models, a wider cross section was assumed, with widening occurring to the north bringing some of the traffic closer to the “C” Street neighbors. First, a direct comparison was made between the existing four lane section and the future widened section assuming the same traffic volume. The redistribution of traffic adjacent to the existing travel lanes would cause an increase of 0.8 dBA at reference modeling locations adjacent to the roadway where noise from Harry Bridges Boulevard dominates the noise environment and by 0.3 dBA or less at the “C” Street residences. Traffic that would be added by the Omni Alternative for the years 2015 and 2038 was then added to the baseline traffic to determine the incremental increase in noise generated by Harry Bridges Boulevard traffic. The calculated increase in noise levels along Harry Bridges Boulevard was 0 dBA $L_{eq(h)}$. It is assumed that the hourly distribution of noise levels throughout the day and night would remain the same as it is today. The calculated increase in CNEL noise levels is, therefore, also calculated to be 0 dBA CNEL for both the years 2015 and 2038. At the Wilmington neighbors along “C” Street, the noise environment is affected by vehicular traffic on the I-110 freeway, local traffic on “C” Street, and, to a lesser extent, vehicular traffic along Harry Bridges Boulevard and activities at the Port. The increase in the overall CNEL at these receivers would be 0 dBA CNEL. There would be no change in the character of the noise environment because the roadway traffic would not be moved noticeably closer to the community. Based on the noise monitoring and modeling completed for the Project, there is no evidence to indicate that any noise abatement would be required for the proposed Project. Furthermore, because of the distances involved between the residences and the existing Harry Bridges Boulevard alignment, and parameters which affect performance of noise barriers, it is likely that a noise barrier would be of only minimal benefit in reducing noise from Harry Bridges Boulevard. Landscaped mounds are being considered within the Harry Bridges Boulevard Landscaped Area. The design for these landscaped mounds is not yet complete, and so no excess attenuation for the landscaped mounds has been included in the noise model. Landscaped mounds, depending upon their final design, could provide a further reduction in Harry Bridges Boulevard noise in the Wilmington neighborhood to the north.

1 The Transportation/Circulation Appendix includes turning movement volumes for 17
2 intersections located along roadways in the study area. Turning movement volumes for
3 all 17 study intersections were reviewed to determine if any other roadway segments
4 could experience a measurable increase in traffic noise as a result of traffic generated by
5 this alternative. It was determined by inspection that traffic added by this alternative
6 would be insignificant and would cause a dBA increase to the CNEL on all other
7 roadway segments studied except along Harry Bridges Boulevard adjacent to the project
8 study area.

9 **CEQA Impact Determination**

10 Because operational noise levels would not result in the CNEL to be increased to or
11 within the “normally unacceptable” or “clearly unacceptable” category nor exceed 5
12 dBA over the current CNEL at sensitive locations, less than significant noise impacts
13 would occur under CEQA.

14 *Mitigation Measures*

15 No mitigation is required.

16 *Residual Impacts*

17 With no mitigation required, the residual impacts would be less than significant.

18 **NEPA Impact Determination**

19 Under this alternative, no development would occur within the in-water project area
20 (i.e., no dredging, filling of the Northwest Slip or wharf construction). Therefore,
21 potential impacts are not applicable under NEPA since there would be no federal
22 action under this alternative.

23 *Mitigation Measures*

24 Due to No Federal Action, mitigation is not applicable. No mitigation measures are
25 necessary under NEPA.

26 *Residual Impacts*

27 With no mitigation required, there would be no residential impacts under NEPA.

28 **3.9.4.3.2.5 Alternative 5 – Landside Terminal Improvements**

29 Under the Landside Terminal Improvements Alternative (Alternative 5), no new
30 developments in Harbor waters would occur (e.g., dredging, filling, and wharf
31 reconstruction/upgrades). Backland infrastructure improvements, however would take
32 place, including the new on-dock rail yard Harry Bridges Boulevard widening and buffer
33 area as well as the rail yard relocation. Terminal acreage would increase from 176 acres
34 in 2003 to 190 acres in 2015 and remain at that level through 2038. The increased
35 acreage for backland infrastructure would be located entirely within Port boundaries and

1 would be well within industrial areas at the Port. The extent of on-land ground
2 disturbances would be somewhat less than the proposed Project. All mitigation measures
3 of the proposed Project, except for mitigations relating to dredging and new cranes,
4 would apply. Because no federal action would occur, NEPA would not apply and no
5 impacts would occur.

6 **3.9.4.3.2.5.1 Construction Impacts**

7 **Impact NOI-1: Construction activities would temporarily and periodically** 8 **generate noise, and noise levels would substantially exceed existing** 9 **ambient daytime noise levels at sensitive receivers near the new Pier A rail** 10 **yard and along “C” Street during construction of the Buffer Area.**

11 Construction activities would typically last more than 10 days in any 3-month period
12 for all of the construction activities listed in Tables 3.9-6 and 3.9-7. Following the
13 thresholds for significance, an impact would be considered significant if noise from
14 these construction activities would exceed existing ambient exterior noise levels by 5
15 dBA or more at a noise sensitive use.

16 The existing Harry Bridges Boulevard is located approximately 500 feet from the “C”
17 Street neighbors. Sensitive receivers potentially affected by Harry Bridges Boulevard
18 construction noise are located along the north side of “C” Street. The baseline ambient
19 noise levels at these receivers described in Section 3.9.2.2.1 were found to typically range
20 from 63 to 67 dBA $L_{eq(h)}$ during the daytime when construction activities would occur
21 and the CNEL ranges from 71 dBA CNEL near Hawaiian Avenue down to 65-66 dBA
22 further east. The construction noise is calculated to be up to 65 dBA $L_{eq(h)}$ at these
23 residences. Assuming continuous construction at a level of 65 dBA $L_{eq(h)}$ noise level for
24 the daytime period, the construction-generated CNEL noise level would be up to 63 dBA
25 CNEL at the closest residence. Noise from the construction activities would not exceed
26 existing ambient exterior noise levels by 5 dBA or more at a noise sensitive use.
27 Construction activities associated with the improvements to the roadway would not
28 substantially increase noise levels in the Wilmington neighborhood. Construction
29 activities would not generate noise levels substantially higher than noise levels typically
30 generated by the truck traffic and rail traffic utilizing the existing transportation corridor,
31 and local traffic along “C” Street. Residences in San Pedro located west of Knoll Hill are
32 6,000 feet or more from the nearest possible construction area along Harry Bridges
33 Boulevard. The existing ambient noise levels at these receivers, described in Section
34 3.9.2.2.2 are similar to existing ambient noise levels in the “C” Street neighborhood of
35 the Wilmington District. Noise levels attenuate with increasing distance. Because
36 ambient noise levels are equivalent to those discussed in the previous paragraph and
37 because construction noise levels would be lower than at the nearest most affected
38 receivers in Wilmington, noise from construction activities would not exceed existing
39 ambient noise levels in San Pedro. This is a less-than-significant impact.

40 The Landside Development Alternative (Alternative 5) would include construction of
41 a landscaped buffer area between Harry Bridges Boulevard and “C” Street.
42 Construction equipment required for this project element would include but not be
43 limited to dozers, loaders, backhoes, trucks, graders, compactors and trenchers.

1 Construction activities would be occurring as close as within approximately 50-75
2 feet of residences along “C” Street. Typically, construction activities would be
3 occurring within distances of between 50 and 200 feet of these residences.
4 Maximum noise levels would intermittently reach 80-90 dBA and average noise
5 levels would reach 88 dBA L_{eq} , the levels shown in the tables above at the reference
6 distances. On a worst case day, when construction in the buffer area is immediately
7 adjacent to a residence, the CNEL could be up to 86 dBA CNEL. It should be noted
8 that pile driving, which is included for information purposes, is the noisiest
9 individual source of construction noise and would not occur as part of buffer
10 construction. Construction noise levels would exceed ambient noise levels discussed
11 in the preceding paragraph by 5 dBA or more. This would occur intermittently and
12 would depend upon the staging of the work as the buffer construction proceeds. This
13 is a significant impact. Construction activities in the buffer area will be located at an
14 even greater distance from the residences in San Pedro than the Harry Bridges
15 Boulevard construction activities, so as discussed in the previous paragraph, these
16 construction activities would not exceed ambient noise levels in other sensitive
17 neighborhoods and would cause a less-than-significant impact there.

18 The next nearest construction area to the Wilmington neighborhood would be located
19 at a distance of more than 2,000 feet from the Wilmington neighborhood. Other
20 construction activities that would be necessary to implement the Landside Terminal
21 Improvements Alternative include backland development at Berths 136-147, wharf
22 reconstruction at Berths 145-147, rip rap placement and dredging at Berths 145-147,
23 and construction of the intermodal container transfer facility. The data in Table 3.9-6
24 shows that source construction noise levels are similar to and fall within the range of
25 construction noise levels assessed in the previous paragraphs. These construction
26 activities would all occur at locations at distances equivalent to or greater than the
27 distances between the construction activities discussed in the previous paragraphs.
28 Predicted construction noise levels would, therefore, be less than the construction
29 noise levels assessed and found to be less than significant for worst case construction
30 activities discussed in previous paragraphs. This is a less-than-significant impact.

31 The Pier A rail yard would be moved to a new location northeast of the TraPac
32 Terminal near the Berth 200-202 Marinas. The new rail yard would be constructed
33 within 5 months after a 1-month mobilization period. It would take 3 months for
34 utilities (drainage system, electricity, water, gas, sewer, and lighting) to be provided
35 to the site. It would take 5 months to prepare the site and lay tracks. Sources of
36 construction noise that are unique to railroad yard construction include a rail saw,
37 spike driver, tie cutter, tie handler, and tie inserter. Otherwise, general construction
38 equipment would be the same. Typical A-weighted noise levels resulting from this
39 additional equipment typically ranges from about 77 to 90 dBA, measured at a
40 distance of 50 feet (USDOT 1995). The (total) source noise level would be 89 dBA
41 $L_{eq(h)}$ at 100 feet from the construction activity. Sensitive receivers near the rail yard
42 include live-aboards located in marinas across the channel from the new rail yard
43 site. Residents in the Wilmington and San Pedro neighborhoods are located more
44 than 3,000 feet from this construction area and would not be affected by construction
45 noise because the noise would be inaudible at this distance. Construction activities
46 would be located within approximately 500 to 800 feet of the nearest noise sensitive
47 marina areas. Hourly average noise levels could reach 70-dBA L_{eq} during busy
48 construction periods. Existing ambient noise levels in the marinas range from about

1 50 to 60 dBA. During construction at the new Pier A rail yard, construction activities
2 lasting more than 10 days in a 3-month period would exceed existing ambient
3 exterior noise levels by 5 dBA or more. This is a significant impact.

4 **CEQA Impact Determination**

5 Construction noise levels for the Harry Bridges Boulevard widening and at Berths
6 136-147 would not cause a substantial increase in noise levels at sensitive receivers.
7 This would be a less than significant impact. The construction activities at the Harry
8 Bridges Buffer Area would cause temporary and periodic noise levels substantially
9 above existing ambient noise levels in the Wilmington neighborhood north of “C”
10 Street. The construction activities at the proposed Pier A rail yard near the Berth
11 200-202 Marinas would generate construction noise levels that would cause
12 temporary and periodic noise levels substantially above existing ambient noise levels
13 in nearby marinas where people live. Therefore, significant short-term impacts
14 would occur under CEQA.

15 *Mitigation Measures*

16 **NOI-1:** The following mitigation measures would reduce impact of noise from
17 construction activities:

- 18 a) **Construction Hours.** Limit construction to the hours of 7:00 AM to 9:00 PM on
19 weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit
20 construction equipment noise anytime on Sundays and holidays as prescribed in
21 the City of Los Angeles Noise Ordinance.
- 22 b) **Construction Days.** Do not conduct noise-generating construction activities on
23 weekends or holidays unless critical to a particular activity (e.g., concrete work).
- 24 c) **Temporary Noise Barriers.** When construction is occurring within 500 feet of
25 a residence or park, temporary noise barriers (solid fences or curtains) shall be
26 located between noise-generating construction activities and sensitive receptors.
- 27 d) **Construction Equipment.** Properly muffle and maintain all construction
28 equipment powered by internal combustion engines.
- 29 e) **Idling Prohibitions.** Prohibit unnecessary idling of internal combustion engines
30 near noise sensitive areas.
- 31 f) **Equipment Location.** Locate all stationary noise-generating construction
32 equipment, such as air compressors and portable power generators, as far as
33 practical from existing noise sensitive land uses.
- 34 g) **Quiet Equipment Selection.** Select quiet construction equipment whenever
35 possible. Comply where feasible with noise limits established in the City of Los
36 Angeles Noise Ordinance.

37 *Residual Impacts*

38 Considering the distances between the construction noise sources and receivers, the
39 standard controls and temporary noise barriers may not be sufficient to reduce the
40 projected increase in the ambient noise level to the point where it would no longer cause

1 a substantial increase. With implementation of these measures, construction equipment
2 noise levels generated at the buffer area and rail yard sites could substantially exceed
3 existing ambient noise levels. This impact remains significant after mitigation.

4 **NEPA Impact Determination**

5 Under this alternative, no development would occur within the in-water project area
6 (i.e., no dredging, filling of the Northwest Slip or wharf construction). Therefore,
7 potential impacts are not applicable under NEPA since there would be no federal
8 action under this alternative.

9 *Mitigation Measures*

10 Due to No Federal Action, mitigation is not applicable. No mitigation is required.

11 *Residual Impacts*

12 With no mitigation required, there would be no residual impacts under NEPA.

13 **Impact NOI-2: Construction activities would not exceed the ambient**
14 **noise level by 5 dBA at a noise sensitive use between the hours of 9:00**
15 **PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00**
16 **PM on Saturday, or at any time on Sunday.**

17 No construction activities are planned to occur between the hours of 9:00 PM and
18 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or
19 at any time on Sunday.

20 **CEQA Impact Determination**

21 There would be no construction-related noise impacts during prohibited hours as
22 described above; consequently, no impacts under CEQA would occur.

23 *Mitigation Measures*

24 No mitigation is required.

25 *Residual Impacts*

26 With no mitigation required, there would be no residual impacts.

27 **NEPA Impact Determination**

28 Under this alternative, no development would occur within the in-water project area
29 (i.e., no dredging, filling of the Northwest Slip or wharf construction). Therefore,
30 potential impacts are not applicable under NEPA since there would be no federal
31 action under this alternative.

Mitigation Measures

Due to No Federal Action, mitigation is not applicable. No mitigation is required.

Residual Impacts

With no mitigation required, there would be no residual impacts under NEPA.

3.9.4.3.2.5.2 Operational Impacts

Impact NOI-3: Operations would generate noise, but noise levels would not substantially exceed existing ambient noise levels at sensitive receivers.

On-Site Operations

Operation activities that would generate noise would include truck and rail movements in the newly developed backland areas and container terminal operations. Truck movements and truck container loading were monitored April 30, 2002 along the backland areas of Berths 136-139 during the noise monitoring survey in the Wilmington District. Noise levels generated in these areas are more than 10 dBA lower than, and not distinguishable from, noise levels generated by truck traffic circulating on the Port's perimeter roadways. Terminals would be located more than 2,000 feet from the Wilmington residential neighbors located north of "C" Street and farther from residences west of I-110 and Knoll Hill. Noise from truck operations at the terminals would cause no increase in noise at sensitive receivers. This is a less-than-significant impact. Noise levels resulting from container terminal operations were monitored at the Port of Los Angeles in June 1990 (I&R 1990). These data represent noise levels of typical operations at a container terminal from typical/standard equipment including but not limited to: container ships, assist tugs, electric container cranes, yard hostlers, toppicks, side picks, heavy duty vehicles. These pieces of equipment are the same equipment pieces operating at the Berth 136-147 container terminal. Two ships were being unloaded simultaneously at the Evergreen Lines Terminal. Four large gantry cranes were operating simultaneously. Several straddle loaders were observed to be loading and unloading trucks. Many trucks were circulating at the terminal. Noise levels were monitored at a point directly across the main channel from the container terminal at a distance of about 1,100 feet from the container terminal. The cranes generated maximum noise levels of 56 to 57 dBA. The sounds of containers clanking reached a maximum noise level of 63 dBA. Truck horns were the most identifiable noise sources, with maximum levels reaching 70 dBA. The average noise level generated by the operations was 59 dBA L_{eq} . Accounting for the difference in distance where these measurements were conducted, and the distance of 2,000 feet over ground between the Wilmington residential neighbors and the proposed terminal activities, the average noise level from this level of activity is calculated to be about 50-53dBA L_{eq} . Noise generated by container terminal loading operations would be below existing ambient noise levels day or night at these nearest residential neighbors. Intermittent noises would be indistinguishable from road traffic on the Port's perimeter roadways, local street traffic noise, and existing sources of intermittent noise within the Port. Assuming 24-

1 hour per day continuous operations, Port-related activities would cause, by
2 themselves, a CNEL in the range of 57-60 dBA CNEL. As discussed in previous
3 paragraphs and in Section 3.9.2.2.1, baseline noise levels range from 65 dBA CNEL
4 to 71 dBA CNEL at the most affected sensitive receiver locations. Port-related
5 activities already occur at Berths 136-147. Projected noise levels under maximum
6 activities that would include ship loading, would generate noise levels below existing
7 ambient noise levels resulting primarily from vehicular on the roadway networks.
8 Such activities would cause no significant increase in CNEL levels at these locations.

9 The Landside Terminal Improvements Alternative includes a 30-acre buffer area
10 between Harry Bridges Boulevard and "C" Street from Figueroa Street to Laguna
11 Avenue, on vacant, Port-owned property (see Figure 2-3). The creation of this buffer
12 area would ensure that no development that would potentially increase noise levels in
13 the buffer area would occur, protecting the noise environment of the most affected
14 residents.

15 The operation of the new Pier A rail yard near the Berth 200-202 Marinas would
16 generate noise. A noise monitoring survey was conducted at the existing Pier A rail
17 yard in November 2005 to quantify noise levels from railroad operations. The noise
18 survey included noise measurements made during a one-hour period when the rail
19 yard was actively working between 10:00 AM and 11:00 AM on November 8, 2005.
20 The noise measurements were conducted at the Port of Los Angeles Materials and
21 Environmental Testing Lab located across Pier A Street from the active area in the
22 Pier A rail yard. The measurements were made at a distance of about 200 feet from
23 where the engines were operating. The activity consisted of a train engine coupling
24 to and uncoupling from groups of railroad cars, shuttling the cars back and forth on
25 different tracks, and recoupling the cars to other strings of railroad cars. Noise
26 sources included the engine, the train horn, the crunching sounds associated with the
27 slack action of the strings of cars starting and stopping, and the sounds of the impacts
28 of cars being coupled together. During the hour of attended noise measurements,
29 maximum noise levels resulting from these activities typically ranged from about 65
30 dBA to 75 dBA at a distance of about 200 to 300 feet from the source. The highest
31 noise level measured was 97 dBA, resulting from a train horn. Occasionally, the
32 sound of cars crunching together when coupling ranged from 78 to 80 dBA. The
33 average noise level for the hour of busy activity was 68 dBA $L_{eq(h)}$.

34 The Harbor Belt Line Railroad was contacted to determine typical daily operations
35 (personal communication, Fox 2005). The busiest level of activity occurs between
36 6:00 AM and 3:00 PM when incoming trains are sorted. Between 3:00 PM and 6:00
37 PM is the lowest activity period. Between 6:00 PM and 6:00 AM, the activity level
38 is substantially less than during the busier daytime period when crews deliver cars to
39 other areas of the port.

40 The proposed rail yard would operate as it presently does at the existing rail yard.
41 The primary activity would occur near the western end of the new rail yard. This
42 would place the activity area furthest from sensitive receivers, approximately 800
43 feet from the nearest residence in a yacht marina. Maximum noise levels at this
44 distance would be reduced at least 12 dBA below the maximum noise levels
45 described above due to increased distance. Maximum and average noise levels
46 would typically fall between the range of 53 to 63 dBA and could occasionally reach

1 68 dBA. The average noise level for the hour of busy activity is calculated to be
2 about 56 dBA $L_{eq(h)}$. To calculate the CNEL, one must assume a level of activity and
3 associated noise level during each of the three time periods discussed above (6:00
4 AM to 3:00 PM, 3:00 PM to 6:00 PM, and 6:00 PM to 6:00 AM). Based on
5 measurements and observations previously described for the Harbor Belt Line
6 Railroad, it is assumed that during the busiest activity period, the hourly average
7 noise level would be 56 dBA L_{eq} . A noise level of 50 dBA L_{eq} would occur for the
8 3:00 PM to 6:00 PM period and the 6:00 PM to 6:00 AM period. After adjusting the
9 hourly average noise levels by adding 5 dBA to the evening period (7:00 PM to 10:00
10 PM) and 10 dBA to the average noise levels during the nighttime (10:00 PM to 7:00
11 AM), based on the definition of CNEL, the calculated noise level is 58 dBA CNEL.
12 The baseline ambient noise level in the marinas, based on measurements as discussed
13 in Section 3.9.2.2.3, is 61 dBA CNEL. When the noise level from operations at the
14 relocated Pier A rail yard is added to the ambient noise level, the noise level is
15 calculated to increase to, at most, 63 dBA CNEL. This would be a 2 dBA increase in
16 the CNEL. This is a less-than-significant impact.

17 ***Railway Corridor Noise***

18 The implementation of the project would result in an increase in the number of rail
19 movements into and out of the Port of Los Angeles along the Alameda
20 Transportation Corridor. Project throughput comparisons presented in Table 2-4 of
21 the project description include the number of annual rail trips generated from Berths
22 136-147 under the proposed Project and alternatives in the years 2015 and 2038. To
23 determine the maximum possible increase in noise along the rail corridors resulting
24 from Alternative 5, a comparison was made between the CEQA 2003 Baseline of 731
25 annual rail trips and the year 2038 with Alternative 5 of 1,390 annual rail trips. This
26 is an increase of about two rail trips per day. There would be about four more events
27 per day when a train horn is sounded at the Henry Ford Avenue grade crossing north
28 of the consolidated slip causing audible noise at the Leeward Marine. There are
29 currently approximately 68 peak rail trips per day in and out of the San Pedro Bay
30 Ports excluding light engine switching operations (Parsons 2006). The incremental
31 increase in noise levels along the railroad corridors serving the Port of Los Angeles is
32 calculated to be 0.2 dBA CNEL. This is a less-than-significant impact.

33 Train horns are a part of the acoustical environment in the environs of the Port of Los
34 Angeles. There is an existing at-grade crossing at Henry Ford Avenue north of the
35 Consolidated Slip and this was discussed in the noise setting section. This project
36 will not change the level of noise from a train horn, it will result in an increase in the
37 number of times the horns are sounded because there would be about four more
38 intermodal train movements per day through this crossing. The significance
39 threshold is based on increased noise above the baseline level in terms of the CNEL
40 noise metric, and this is a function of the level, duration, and time of day the noise
41 occurs; as well as the existing noise level. There are currently about 8 train
42 movements per day through this crossing distributed throughout the day and night.
43 The project would add 4 movements distributed throughout the day and night. The
44 increase in the train generated CNEL is calculated to be 1.8 dBA CNEL. An increase
45 of at least 3 dBA in the CNEL is considered to be a substantial increase causing a
46 significant impact. Also, because vehicular traffic on Henry Ford Avenue and other

1 railroad trains traveling adjacent to Henry Ford Avenue are more significant sources
2 of noise at the Leeward Marina, the increase in the overall CNEL would be less than
3 1.8 dBA CNEL. So, while there will be an increase in the number of audible train
4 horns, this is a less than significant environmental impact.

5 ***Harry Bridges Boulevard Widening***

6 Harry Bridges Boulevard is proposed to be widened but would remain four lanes. Over
7 the past several years, various roadway alignments have been considered for Harry
8 Bridges Boulevard. The proposed Project includes a 30-acre buffer area between Harry
9 Bridges Boulevard and "C" Street from Figueroa Street to Laguna Avenue, on vacant,
10 port-owned property (see Figure 2-3). The creation of this buffer area would ensure
11 that no development that would potentially increase noise levels within the buffer area
12 would occur, including the realignment of the Harry Bridges Boulevard transportation
13 corridor closer to the residences located along "C" Street. By designating this as a
14 buffer area, port-related activities that would potentially increase noise level in the area
15 would not be developed.

16 The incremental increase in noise at the most affected sensitive receivers along "C"
17 Street was determined by modeling the traffic noise generated by Harry Bridges
18 Boulevard using TNM Version 2.5. Example model runs are included in the Noise
19 Appendix. Existing and future traffic data included in the Transportation/Circulation
20 Appendix was used in the traffic noise modeling. In the baseline model, the existing
21 four-lane section of Harry Bridges Boulevard was assumed. In the future models, a
22 wider cross section was assumed, with widening occurring to the north bringing some
23 of the traffic closer to the "C" Street neighbors. First, a direct comparison was made
24 between the existing four lane section and the future widened section assuming the
25 same traffic volume. The redistribution of traffic adjacent to the existing travel lanes
26 would cause an increase of 0.8 dBA at reference modeling locations adjacent to the
27 roadway where noise from Harry Bridges Boulevard dominates the noise environment
28 and by 0.3 dBA or less at the "C" Street residences. Traffic that would be added by
29 Alternative 5 for the years 2015 and 2038 was then added to the baseline traffic to
30 determine the incremental increase in noise generated by Harry Bridges Boulevard
31 traffic. The calculated increase in noise levels along Harry Bridges Boulevard was 1
32 dBA $L_{eq(h)}$. It is assumed that the hourly distribution of noise levels throughout the day
33 and night would remain the same as it is today. The calculated increase in CNEL noise
34 levels is, therefore, also calculated to be 1 dBA CNEL for both the years 2015 and
35 2038. At the Wilmington neighbors along "C" Street, the noise environment is affected
36 by vehicular traffic on the I-110 freeway, local traffic on "C" Street, and, to a lesser
37 extent, vehicular traffic along Harry Bridges Boulevard and activities at the Port.
38 Because the noise from Harry Bridges Boulevard is a minor contributor to noise levels
39 at the most affected receivers, the increase in the overall CNEL at these receivers
40 would range from 0 dBA CNEL to 1 dBA CNEL. There would be no change in the
41 character of the noise environment because the roadway traffic would not be moved
42 noticeably closer to the community. Based on the noise monitoring and modeling
43 completed for the proposed Project, there is no evidence to indicate that any noise
44 abatement would be required for the proposed Project. Furthermore, because of the
45 distances involved between the residences and the existing Harry Bridges Boulevard
46 alignment, and parameters which affect performance of noise barriers, it is likely that a

1 noise barrier would be of only minimal benefit in reducing noise from Harry Bridges
2 Boulevard. Landscaped mounds are being considered within the Harry Bridges
3 Boulevard Landscaped Area. The design for these landscaped mounds is not yet
4 complete, and so no excess attenuation for the landscaped mounds has been included in
5 the noise model. Landscaped mounds, depending upon their final design, could
6 provide a further reduction in Harry Bridges Boulevard noise in the Wilmington
7 neighborhood to the north.

8 The Transportation/Circulation Appendix includes turning movement volumes for 17
9 intersections located along roadways in the study area. Turning movement volumes for
10 all 17 study intersections were reviewed to determine if any other roadway segments
11 could experience a measurable increase in traffic noise as a result of traffic generated
12 by this alternative. It was determined by inspection that traffic added by this alternative
13 would be insignificant and would cause a dBA increase to the CNEL on all other
14 roadway segments studied except along Harry Bridges Boulevard adjacent to the
15 project study area.

16 **CEQA Impact Determination**

17 Because operational noise levels would not result in the CNEL to be increased by 3
18 dBA CNEL or more to or within the “normally unacceptable” or “clearly
19 unacceptable” category nor exceed 5 dBA over the current CNEL at sensitive
20 locations, less than significant noise impacts would occur under CEQA.

21 *Mitigation Measures*

22 No mitigation is required.

23 *Residual Impacts*

24 With no mitigation required, there would be less than significant residual impacts.

25 **NEPA Impact Determination**

26 Under this alternative, no development would occur within the in-water project area
27 (i.e., no dredging, filling of the Northwest Slip or wharf construction). Therefore,
28 potential impacts are not applicable under NEPA since there would be no federal
29 action under this alternative.

30 *Mitigation Measures*

31 Due to No Federal Action, mitigation is not applicable. No mitigation is required.

32 *Residual Impacts*

33 With no mitigation required, there would be no residual impacts under NEPA.

1 **3.9.4.3.3 Summary of Impact Determinations**

2 The following Table 3.9-10 summarizes the CEQA and NEPA impact determinations
3 of the proposed Project and its Alternatives related to Noise, as described in the
4 detailed discussion in Sections 3.9.4.3.1 and 3.9.4.3.2. This table is meant to allow
5 easy comparison between the potential impacts of the proposed Project and its
6 Alternatives with respect to this resource. Identified potential impacts may be based
7 on Federal, State, or City of Los Angeles significance criteria, Port criteria, and the
8 scientific judgment of the report preparers.

9 For each type of potential impact, the table describes the impact, notes the CEQA and
10 NEPA impact determinations, describes any applicable mitigation measures, and notes
11 the residual impacts (i.e.: the impact remaining after mitigation). All impacts, whether
12 significant or not, are included in this table. Note that impact descriptions for each of
13 the Alternatives are the same as for the proposed Project, unless otherwise noted.

Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise Associated with the Proposed Project and Alternatives

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise				
Proposed Project	NOI-1: Construction activities occurring during Phase I would temporarily and periodically generate noise, and noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers at the new Pier A rail yard and along “C” Street.	CEQA: Significant impact NEPA: Not Applicable	NOI-1a. When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors. Implement the following standard controls: NOI-1b: Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance. NOI-1c: Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work). NOI-1d: Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines. NOI-1e: Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas. NOI-1f: Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses. NOI-1g: Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance. NOI-1h: Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing. Mitigation not required	CEQA: Significant impact after mitigation NEPA: Not applicable

Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise Associated with the Proposed Project and Alternatives (continued)

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise (continued)				
Proposed Project (continued)	NOI-2: Construction activities would not exceed the ambient noise level by 5 dBA at a noise sensitive use between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or at any time on Sunday.	CEQA: No impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: No impact NEPA: No impact
	NOI-3: On-site operations would generate noise, but noise levels would not substantially exceed existing ambient noise levels at sensitive receivers.	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
Alternative 1	NOI-1: Construction activities at Berths 136-147 that could be implemented under the No Project alternative would not generate noise levels that would exceed existing ambient noise levels at sensitive receivers.	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable
	NOI-2	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable
	NOI-3	CEQA: Less than significant impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Not applicable

Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise Associated with the Proposed Project and Alternatives (continued)

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise (continued)				
Alternative 2	NOI-1: Construction activities during Phase I would temporarily and periodically generate noise, and noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers at the new Pier A rail yard and along “C” Street.	CEQA: Significant impact	<p>NOI-1a: When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors. Implement the following standard controls:</p> <p>NOI-1b: Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance.</p> <p>NOI-1c: Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).</p> <p>NOI-1d: Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines.</p> <p>NOI-1e: Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.</p> <p>NOI-1f: Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses.</p> <p>NOI-1g: Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.</p> <p>NOI-1h: Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing.</p>	CEQA: Significant impact after mitigation
		NEPA: Not applicable	Mitigation not required	NEPA: Not applicable
	NOI-2	CEQA: No impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: No impact NEPA: No impact

Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise Associated with the Proposed Project and Alternatives (continued)

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise (continued)				
Alternative 2 (continued)	NOI-3	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
Alternative 3	NOI-1: Construction activities during Phase I would temporarily and periodically generate noise, and noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers at the new Pier A rail yard and along “C” Street.	CEQA: Significant impact NEPA: Not applicable	NOI-1a: When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors. Implement the following standard controls: NOI-1b: Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance. NOI-1c: Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work). NOI-1d: Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines. NOI-1e: Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas. NOI-1f: Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses. NOI-1g: Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance. NOI-1h: Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing.	CEQA: Significant impact after mitigation
			Mitigation not required	NEPA: Not applicable
	NOI-2	CEQA: No impact NEPA: No impact	Mitigation not required Mitigation not required	CEQA: No impact NEPA: No impact

Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise Associated with the Proposed Project and Alternatives (continued)

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise (continued)				
Alternative 3 (continued)	NOI-3	CEQA: Less than significant impact NEPA: Less than significant impact	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Less than significant impact
Alternative 4	NOI-1: Construction activities during Phase I would temporarily and periodically generate noise, and noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers along “C” Street.	CEQA: Significant impact	<p>NOI-1a: When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors. Implement the following standard controls:</p> <p>NOI-1b: Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance.</p> <p>NOI-1c: Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).</p> <p>NOI-1d: Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines.</p> <p>NOI-1e: Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.</p> <p>NOI-1f: Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses.</p> <p>NOI-1g: Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.</p> <p>NOI-1h: Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing.</p>	CEQA: Significant impact after mitigation
		NEPA: Not applicable	Mitigation not required	NEPA: Not applicable
	NOI-2	CEQA: No impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: No impact NEPA: Not applicable

**Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise
Associated with the Proposed Project and Alternatives (continued)**

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise (continued)				
Alternative 4 (continued)	NOI-3	CEQA: Less than significant impact NEPA: Not applicable	Mitigation not required Mitigation not required	CEQA: Less than significant impact NEPA: Not applicable
Alternative 5	NOI-1: Construction activities would temporarily and periodically generate noise, and noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers at the new Pier A rail yard and along “C” Street during construction of the Buffer Area.	CEQA: Significant impact NEPA: Not applicable	NOI-1a: When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors. Implement the following standard controls: NOI-1b: Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance. NOI-1c: Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work). NOI-1d: Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines. NOI-1e: Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas. NOI-1f: Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses. NOI-1g: Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance. NOI-1h: Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing. Mitigation not required	CEQA: Significant impact after mitigation NEPA: Not applicable

Table 3.9-10: Summary Matrix of Potential Impacts and Mitigation Measures for Noise Associated with the Proposed Project and Alternatives (continued)

<i>Alternative</i>	<i>Environmental Impacts*</i>	<i>Impact Determination</i>	<i>Mitigation Measures</i>	<i>Impacts after Mitigation</i>
3.9 Noise (continued)				
Alternative 5 (continued)	NOI-2	CEQA: No impact	Mitigation not required	CEQA: No impact
		NEPA: Not applicable	Mitigation not required	NEPA: Not applicable
	NOI-3	CEQA: Less than significant impact	Mitigation not required	CEQA: Less than significant impact
		NEPA: Not applicable	Mitigation not required	NEPA: Not applicable
* Unless otherwise noted, all impact descriptions for each of the Alternatives are the same as those described for the Proposed Project.				

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3.9.4.4 Mitigation Monitoring

NOI-1: Noise levels would substantially exceed existing ambient daytime noise levels at sensitive receivers at the new Pier A rail yard and along “C” Street.	
Mitigation Measure	<p>NOI-1a: When construction is occurring within 500 feet of a residence or park, temporary noise barriers (solid fences or curtains) shall be located between noise-generating construction activities and sensitive receptors. Implement the following standard controls:</p> <p>NOI-1b: Construction Hours. Limit construction to the hours of 7:00 AM to 9:00 PM on weekdays, between 8:00 AM and 6:00 PM on Saturdays, and prohibit construction equipment noise anytime on Sundays and holidays as prescribed in the City of Los Angeles Noise Ordinance.</p> <p>NOI-1c: Construction Days. Do not conduct noise-generating construction activities on weekends or holidays unless critical to a particular activity (e.g., concrete work).</p> <p>NOI-1d: Construction Equipment. Properly muffle and maintain all construction equipment powered by internal combustion engines.</p> <p>NOI-1e: Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines near noise sensitive areas.</p> <p>NOI-1f: Equipment Location. Locate all stationary noise-generating construction equipment, such as air compressors and portable power generators, as far as practical from existing noise sensitive land uses.</p> <p>NOI-1g: Quiet Equipment Selection. Select quiet construction equipment whenever possible. Comply where feasible with noise limits established in the City of Los Angeles Noise Ordinance.</p> <p>NOI-1h: Notification. Notify residents adjacent to the proposed Project site of the construction schedule in writing.</p>
Timing	During construction of the new Pier A rail yard and the Harry Bridges Buffer Area.
Methodology	The contractor shall determine necessary height and length of barriers based on field conditions. Prior to Notice to proceed Contractor shall submit a Environmental/Noise Compliance Plan to the LAHD Construction Manager for review and approval by LAHD and the Environmental Management Division.
Responsible Parties	LAHD/USACE
Residual Impacts	Significant after mitigation.

3.9.5 Significant Unavoidable Impacts

There would be a significant unavoidable short-term noise impact during the 5-month construction period of the new Pier A rail yard near the Berth 200-202 Marinas. Significant unavoidable short-term noise impacts would also occur along “C” Street as a result of construction of the Harry Bridges Buffer Area.

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