4.5 NOISE AND VIBRATION

This section addresses the impact of the noise and vibration that would be generated by the proposed project on nearby noise-sensitive land uses, as well as the effect of current and future noise and vibration levels on the proposed project.

4.5.1 Setting

a. Overview of Sound Measurement. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. Two commonly used noise metrics – the Day-Night average level (Ldn) and the Community Noise Equivalent Level (CNEL) - recognize this fact by weighting hourly Leqs over a 24-hour period. The Ldn is a 24-hour average noise level that adds 10 dBA to actual nighttime (10 p.m. to 7 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the Ldn, except it also adds a 5 dBA penalty for noise occurring during the evening (7 PM to 10 p.m.).

b. Vibration. Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the United States. Policies and standards related to ground-borne vibration are provided in Section 8.80.200 of the Long Beach Municipal Code (LBMC), where operating or permitting the operation of any device that creates vibration above the vibration perception threshold of an individual at or beyond the property boundary of the source, if on private property, or at 150 feet from the source if on a public space or public right-of-way, is a code violation. Section 8.80.200(g) is described in more detail below under *Regulatory Setting*.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (Federal Transit Administration, 2006). A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Consequently, the FTA recommends an 80 VdB threshold for infrequent events at residences and buildings where people normally sleep (e.g., the future on-site residences and the residences and hotels in the vicinity). In terms of ground-borne vibration impacts on structures, the FTA states that ground-borne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

c. Sensitive Receptors. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Residences, hospitals, schools, guest lodging, and libraries are most sensitive to noise intrusion and therefore have more stringent noise exposure targets than manufacturing or agricultural uses that are not subject to effects such as sleep disturbance. Noise sensitive land uses near the project area include residences, a library, and a school. The nearest existing residential receptors are located 100 feet north of the project site boundary on Third Street. The First Congregational Church of Long Beach, located at 241 Cedar Avenue, is also a sensitive receptor and is located 85 feet west of the proposed construction area near the 3rd and Pacific Block.

d. Regulatory Setting. Chapter 8.80 of the LBMC provides regulations regarding noise levels in the City. Section 8.80.160 sets exterior noise level limits for districts identified in the municipal code. The project site is located in District 2. The following exterior noise level standards would therefore apply to the project site:

- *Daytime (7:00 a.m. – 10:00 p.m.): 60 dBA*
- *Nighttime (10:00 p.m. – 7:00 a.m.) 55 dBA*

Receptors to the northwest of the project site, west of Queens Way, are located in District 1 and the following exterior noise level standards are applicable to those receptors:

- *Daytime (7:00 a.m. – 10:00 p.m.): 50 dBA*
- *Nighttime (10:00p.m. – 7:00 a.m.) 45 dBA*

Section 8.80.150 states that the noise standards provided in Section 8.80.160 shall be applied as follows:

> *No person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured from any other property, either incorporated or unincorporated, to exceed:*
>
> *1) The noise standard for that land use district as specified in Table A in Section 8.80.160 for a cumulative period of more than thirty (30) minutes in any hour; or*
>
> *2) The noise standard plus five (5) decibels for a cumulative period of more than fifteen (15) minutes in any hour; or*
>
> *3) The noise standard plus ten (10) decibels for a cumulative period of more than five (5) minutes in any hour; or*
>
> *4) The noise standard plus fifteen (15) decibels for a cumulative period of more than one (1) minute in any hour; or*
>
> *5) The noise standard plus twenty (20) decibels or the maximum measured ambient, for any period of time.*

Section 8.80.170 of the LBMC sets interior noise levels for specific types of development, as shown in Table 4.5-1.

Table 4.5-1
City of Long Beach Interior Noise Level Standards

Land Use	Time Interval	Allowable Noise Level (dBA)
Residential	10:00 p.m. – 7:00 a.m.	35
	7:00 a.m. – 10:00 p.m.	45
School	7:00 a.m. – 10:00 p.m. (While school is in session)	45
Hospital, designated quiet zones, and noise sensitive zones	Anytime	40

Source: Long Beach Municipal Code Sec. 8.80.170

Section 8.80.202 of the Long Beach Municipal Code sets restrictions on construction activities as follows:

- *No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity*

between the hours of 7:00 p.m. and 7:00 a.m. the following day on weekdays or federal holidays, except for emergency work authorized by the Building Official.

- *No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of 7:00 p.m. on Friday and 9:00 a.m. on Saturday and after 6:00 p.m. on Saturday, except for emergency work authorized by the Building Official.*
- *No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.*

The Long Beach Municipal Code 8.80.200(n) requires that air conditioning equipment generate noise levels of no more than 55 dBA at any point on a neighboring property line. This standard would apply to all air conditioning and refrigerating equipment.

The Long Beach General Plan Noise Element provides outdoor and indoor noise standards for different types of land uses, as summarized in Table 4.5-2.

Table 4.5-2
City of Long Beach General Plan Noise Level Standards

Land Use	Outdoor			Indoor (Ldn)
	Peak	L10	L50	
Residential (7:00 a.m.–10:00 p.m.)	70	55	45	45
Residential (10:00 p.m.–7:00 a.m.)	60	45	35	35
Commercial (any time)	75	65	55	-
Industrial (any time)	85	70	60	-

Source: Long Beach General Plan Noise Element.

The Long Beach General Plan Noise Element also contains the following goal related to transportation noise.

Goal 2: Discouraging within transportation noise zones the development of noise sensitive uses that cannot be sufficiently insulated against externally generated noise at a reasonable cost.

The Long Beach General Plan Noise Element contains the following goals related to population and housing.

Goal 3 To reduce the level of noise generated by the population into the environment of the City.

Goal 6 To require better sound deadening design on new housing units where acoustical problems could develop.

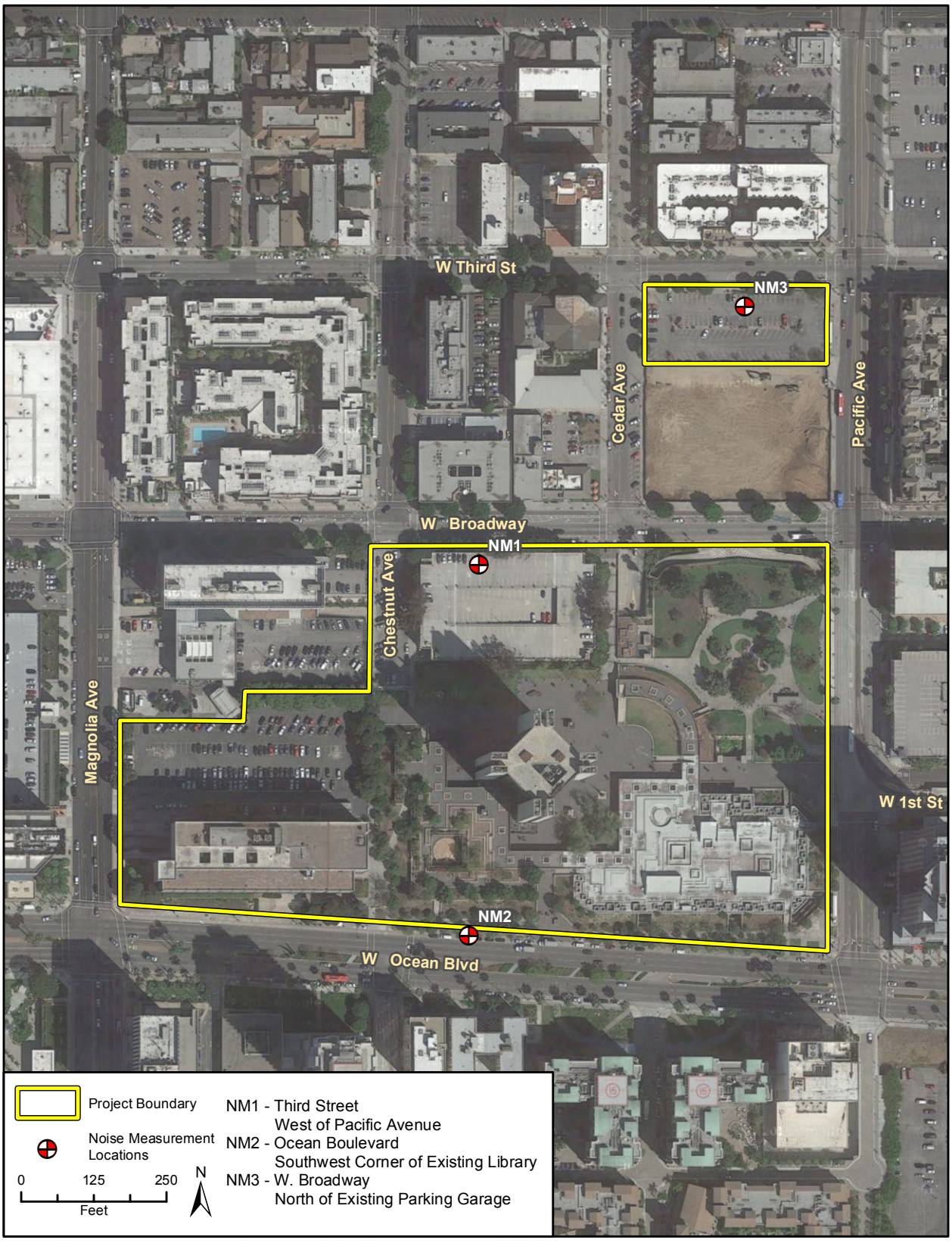
Goal 7 To reduce the level of incoming and outgoing noise into and from residential dwellings within the City.

The California Department of Health Services establishes noise criteria for various land uses. Noise exposure for a residential land use is "normally acceptable" when the CNEL at exterior residential locations is equal or below 60 dBA, "conditionally acceptable" when the CNEL is between 60 and 70 dBA, "normally unacceptable" when the CNEL is between 70 and 75 dBA, and "clearly unacceptable" when the CNEL is greater than 75 dBA.

Section 8.80.200(g) of the Long Beach Municipal Code regulates vibration as follows:

Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one hundred fifty feet (150') (forty-six (46) meters) from the source if on a public space or public right-of-way. For the purposes of this subsection, "vibration perception threshold" means the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such directed means as, but not limited to, sensation by touch or visual observation of moving objects. The perception threshold shall be presumed to be .001 g's in the frequency range 0—30 hertz and .003 g's in the frequency range between thirty and one hundred hertz.

e. Existing Noise Sources. The most common source of noise in the project site vicinity is traffic on surrounding roads. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create sustained noise levels. Ambient noise levels would be expected to be highest during the daytime and rush hour unless congestion slows speeds substantially. Existing noise sources within the project site consist of commercial and government buildings, as well as the existing library and park. To determine ambient noise levels at nearby sensitive receptors, three 15-minute noise measurements were taken between 7:00 a.m. and 9:00 a.m. (peak hour) on May 20, 2015 using an ANSI Type II integrating sound level meter (refer to Appendix D for noise measurement data). Table 4.5-3 lists the ambient noise levels measured at these locations. See Figure 4.5-1 for the locations of noise measurements and Figure 4.5-2 for the locations of existing and proposed sensitive receptors within the project area.



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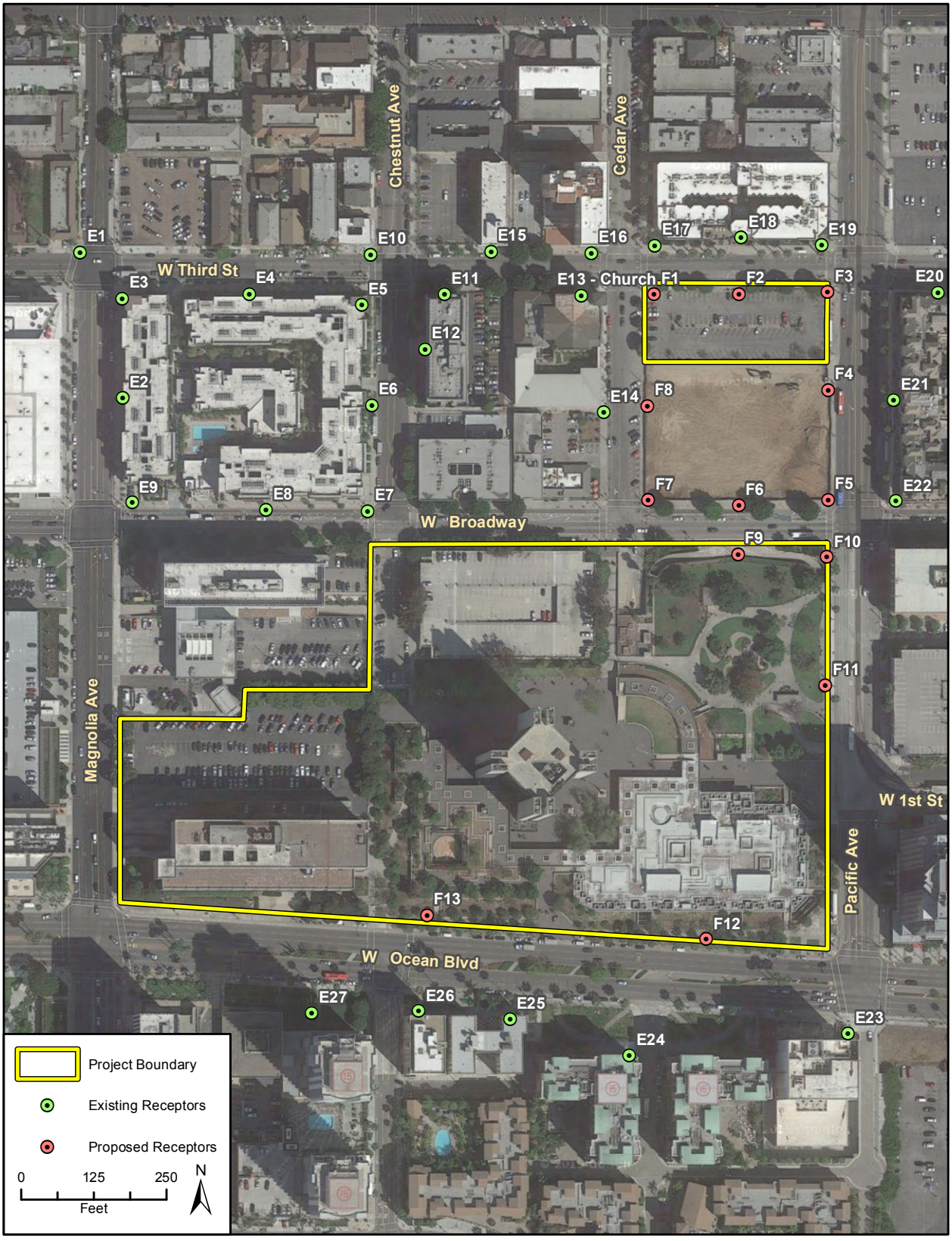
Noise Measurement Locations Figure 4.5-1



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Modeled Existing and Future Receptor Locations Figure 4.5-2

Table 4.5-3
Noise Measurements

Measurement Number	Measurement Location	Distance to Nearest Sensitive Receptor	Distance from Centerline of Roadway	Sample Time	Leq (dBA)
1	Third Street west of Pacific Avenue	80 ft (to apartments on Third St.)	40 ft	7:25 a.m.– 7:40 a.m.	64.9
2	Ocean Boulevard on the southwest corner of the existing library	100 ft (to existing library)	50 ft	8:00 a.m. – 8:15 a.m.	70.8
3	W. Broadway, north of the existing parking garage	230 ft (to apartments on W. Broadway)	35 ft	8:30 a.m. – 8:45 a.m.	68.5

All measurements were taken using ANSI Type II Integrating sound level meter.
Refer to Figure 4.5-1 for noise measurement locations.
Refer to the Appendix D for noise monitoring data sheets

Long Beach Municipal Airport is located approximately four miles northeast of the project site, and the project site is outside its Airport Influence Area (Los Angeles County Airport Land Use Commission, 2003).

LLG prepared the *Transportation Impact Analysis* for the project and analyzed local roadway segments and intersections in the surrounding roadway network and provided average daily trip (ADT) rates and peak hour trips (see Appendix E). Using the trip data, existing traffic-generated noise levels along these segments were estimated using the U.S. Department of Transportation, Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 (FHWA, 2004). Table 4.5-4 shows the estimated noise levels at existing sensitive receptors near the project site. Each of the sensitive receptor locations listed is the edge or corner of an existing residential building, with the exception of "Cedar – Church btwn Third and Broadway," which is the First Congregational Church of Broadway.

Table 4.5-4
Existing Traffic-Generated Noise

Receptor Location	Modeled Noise Level Leq (dBA)
Broadway btwn Chestnut and Magnolia	69.3
Broadway NE Corner of Broadway and Magnolia	71.9
Broadway NW Corner of Chestnut and Broadway	69.2
Cedar - Church btwn Third and Broadway	65.8
Chestnut btwn Third and Broadway	65.3
Chestnut E of Chestnut btwn Third and Broadway	64.1
Magnolia btwn Third and Broadway	70.0
Ocean btwn Cedar and Chestnut	71.8
Ocean btwn Chestnut and Magnolia	70.3
Ocean NE Corner of Ocean and Chestnut	71.9
Ocean NW Corner of Ocean and Cedar	69.2
Ocean NW Corner of Ocean and Pacific	71.8
Pacific E of Pacific btwn Third and Broadway	68.4
Pacific NE Corner of Pacific and Broadway	71.1
Third btwn Cedar and Chestnut	69.3
Third btwn Magnolia and Chestnut	67.5
Third E of Pacific	68.0
Third NE Corner of Pacific and Cedar	67.9
Third NE Corner of Third and Magnolia	69.1
Third North of Third West of Pacific	69.5
Third NW Corner of Third and Cedar	70.2
Third NW Corner of Third and Chestnut	70.5
Third NW Corner of Third and Magnolia	70.9
Third NW Corner of Third and Pacific	70.9
Third SE of Chestnut and Pacific Intersection	67.4
Third SW Corner of Third and Cedar	69.4
Third SW Corner of Third and Chestnut	68.3

Refer to Appendix D for these estimates. Calculated using the FHWA Traffic Noise Model.

Modeled noise levels range from 64.1 dBA to 71.9 dBA for existing sensitive receptors. The highest modeled noise level was identified at Ocean on the northeast corner of Ocean and Chestnut and at Broadway on the northeast corner of Broadway and Magnolia. Modeled noise

exceeds the measured noise levels at the same locations because the model includes the greatest amount of traffic observed during PM peak hours, whereas the measurements were taken during AM peak hour and traffic was slightly lower. Nonetheless, the noise levels at the measurement locations indicate that the model is an appropriate tool for determining existing and future noise levels for this area.

4.5.2 Previous Environmental Review

The Long Beach Downtown Plan EIR examined the noise setting of the region and the potential impacts associated with development of the entire Downtown Plan area. The EIR determined that construction noise impacts associated with the Downtown Plan would be significant but mitigable because Downtown Plan implementation would expose businesses and residences throughout the Downtown Plan Area to temporary elevated levels of noise throughout years of construction. The project would be subject to the mitigation measures identified in the EIR, specifically Noise-1(a), which required noise reduction techniques such as equipment mufflers, "quiet" construction equipment models, prohibition of idling, and routing of construction-related traffic, as well as Noise-1(b), which requires the construction of temporary noise barriers and a project-specific noise analysis to determine further necessary noise reduction techniques.

The Downtown Plan EIR determined that noise associated with traffic generated by the Downtown Plan would be less than significant as it affects existing sensitive receptors, but that traffic noise and land use compatibility impacts would be significant but mitigable for proposed receptors. Operation of the proposed project would generate traffic and would locate sensitive receptors, including residences and a library, in areas that could be exposed to levels of noise that exceed applicable standards. The project would be subject to the mitigation measures identified in the EIR, specifically Noise-5, which requires a site-specific noise study for projects in areas where new residential development would be exposed to noise levels exceeding 65 dBA.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not adopted. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to noise and vibration would be significant and unavoidable despite implementation of mitigation involving the erection of temporary sound barriers, installation of mufflers, use of electric equipment, and the establishment of a noise disturbance coordinator. If demolition occurs by implosion, the Downtown Plan EIR recommended mitigation requiring the development and approval of a Noise Control Plan and a Vibration Control Plan to protect human health and adjacent buildings.

The Downtown Plan EIR determined that construction of the Downtown Plan would include vibration sources, including pile driving that would result in a significant and unavoidable impact. The project would be subject to EIR Measure Noise-2(a), which requires a site-specific vibration study for all construction projects in order to determine the area of impact and identify appropriate mitigation measures.

4.5.3 Impact Analysis

a. Methodology and Thresholds of Significance.

Methodology. The analysis of noise impacts considers the effects of both temporary construction-related noise and long-term noise associated with operation of the proposed project. Construction noise estimates are based upon noise levels reported by the Federal Transit Administration (FTA), Office of Planning and Environment (FTA, May 2006), and the distance to nearby sensitive receptors. Reference noise levels from that document were then used to estimate noise levels at nearby sensitive receptors based on a standard noise attenuation rate of 6 dBA per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receptor locations. Therefore, the noise levels presented herein represent a conservative, reasonable worst-case estimate of actual construction noise.

To determine ambient noise levels at nearby sensitive receptors, Rincon Consultants, Inc. took three 15-minute noise measurements between 7:00 a.m. and 9:00 a.m. (peak hour) on May 20, 2015, using an ANSI Type II integrating sound level meter (see Figure 4.5-1 above for noise measurement locations relative to the project site; see Appendix D for noise measurement data). These locations were selected to represent ambient noise levels experienced by sensitive receptors near the project site, as well as noise levels generated by land uses similar to the project. At each location, consideration was given to site-specific characteristics, and the sound level meter was placed away from walls and topographic features which might skew noise measurements. The noise measurements recorded the equivalent noise level (Leq) at each location.

Rincon calculated noise levels associated with existing and future traffic along local roadways using the U.S. Department of Transportation, Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 (FHWA, 2004) (noise modeling data sheets can be viewed in Appendix D) and the *Transportation Impact Analysis* (see Appendix E and Section 4.6, *Transportation and Traffic*). Roadway noise level estimates do not account for all intervening barriers, such as trees or walls, which may shield individual receptors from the noise source. Therefore, the levels presented represent a conservative estimate of the noise levels that would be experienced at individual receptor locations.

The future exterior noise levels associated with traffic for the proposed residences and library were also calculated using the FHWA Traffic Noise Model Version 2.5 (FHWA, 2004). The interior noise level is the difference between the projected exterior noise level at the structure's façade and the noise reduction provided by the structure itself. Typical residential construction in California provides approximately 15 dBA of noise reduction from exterior noise sources with windows partially open, and approximately 20 to 25 dBA of noise reduction with windows kept closed (DOT, 2009). For this analysis, interior noise level was determined by subtracting the estimated noise reduction achieved by the building shell from the estimated exterior noise level of the project site.

Significance Thresholds. Pursuant to Appendix G of the *State CEQA Guidelines*, potentially significant impacts would occur if the project would result in any of the following conditions:

- *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;*
- *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;*
- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *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, exposure of people residing or working in the project area to excessive noise levels; and/or*
- *For a project within the vicinity of a private airstrip, exposure of people residing or working in the project area to excessive noise levels.*

As discussed in the Initial Study (Appendix A), the project site is not located in the vicinity of a private airstrip nor is it located within two miles of an airport or within an airport land use plan. Impacts related to airport noise would therefore be less than significant and are not discussed further in this section. The SEIR analyzes potential temporary and permanent impacts from construction and operation of the proposed project, including potential vibration impacts.

Existing off-site development would primarily be affected by potential increased noise associated with increased traffic volumes attributable to the project at various roadway segments. Impacts to existing development are considered significant if project-generated traffic results in exposure of sensitive receptors to an unacceptable increase in noise levels. The level of significance changes with increasing noise exposure, such that smaller changes in ambient noise levels result in significant impacts at higher existing noise levels. Table 4.5-5 shows the relevant significance thresholds for increases in traffic related noise levels caused either by the project alone or by cumulative development.

Impacts related to operational on-site activities and traffic noise would also be significant if project-related activities cause occupied sensitive receptors to experience noise levels exceeding the standards shown in Table 4.5-5.

Table 4.5-5
Significant Change in Ambient Noise Levels

Existing Ambient Noise Level, CNEL/Ldn	Significant Increase
< 60 dBA	+ 5 dBA or greater
> 60 dBA	+ 3 dBA or greater

Source: Long Beach Downtown Community Plan – Noise Impact Analysis (Appendix F of the Long Beach Downtown Plan EIR)

Impacts related to construction would be significant if project-related activities cause occupied sensitive receptors to experience noise levels exceeding the following federal noise standards shown in Table 4.5-6 or if it would occur during hours when construction activity is prohibited under the Long Beach Municipal Code (see *Regulatory Setting*).

Table 4.5-6
Construction Noise Level Limits

Land Use	8-hour Noise Limit (dBA Leq)
Residential	80
Commercial	85
Industrial	90

Source: Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment. May 2006.

b. Project Impacts and Mitigation Measures.

CEQA Checklist Threshold	*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.*
CEQA Checklist Threshold	*A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*
Quantitative Threshold	*See Table 4.5-6*

Impact N-1 **Construction-related activities associated with the proposed project would generate noise that could exceed City of Long Beach standards at existing receptors. Residential uses proposed by the project may also be exposed to noise levels that exceed City standards. The Downtown Plan EIR determined that construction associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would not be feasible to reduce the impact to a less than significant level. This is a Class I, *significant and unavoidable* impact.**

Construction would not cause permanent impacts since it would be temporary and daily construction activities would be limited by the City's Noise Ordinance (Section 8.80.202) to less noise sensitive daytime hours. Construction noise impacts primarily result when construction activities occur during times of day when people are most sensitive to noise (early morning,

evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time.

As discussed in the Downtown Plan EIR, adoption of the Downtown Plan could subject nearby residents to excessive noise levels. The Downtown Plan EIR includes Mitigation Measure Noise-1(a), which requires that: construction equipment be equipped with mufflers; "quiet" models of stationary equipment be used; stationary noise-generating equipment be located as far as possible from receptors; engines do not idle for longer than five minutes; as well as other requirements to reduce noise impacts from construction. The Downtown Plan EIR also includes Mitigation Measure Noise-1(b), which requires construction of temporary noise barriers around construction sites within 300 feet of operational businesses, residences, and other-noise sensitive land uses. Noise-1(b) also requires that if a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket must be erected along building façades facing construction sites.

Temporary noise impacts associated with construction of the proposed project may adversely affect adjacent sensitive receptors. The grading/excavation phase of project construction tends to create the highest construction noise levels because of the operation of heavy equipment. As shown in Table 4.5-7, the maximum noise level associated with heavy equipment at construction sites can range from about 74 to 88 dBA at 50 feet from the source, depending upon the types of equipment in operation at any given time and phase of construction (FTA, 2006). During grading operations, equipment is dispersed in various portions of the site in both time and space. Due to site and equipment limitations, only a limited amount of equipment can operate near a given location at a particular time.

Construction noise levels would diminish at approximately 6 dBA per doubling of distance. Table 4.5-7 shows typical maximum construction noise levels at various distances from construction activity. The nearest existing sensitive receptor is the First Congregational Church of Long Beach, which is approximately 85 feet from the nearest proposed construction areas; however, construction would not occur on Sunday mornings when the church would be in use and, therefore, would not impact this receptor. The nearest sensitive receptor that would be in use during construction activities is a residential building located 100 feet from the project site. The maximum noise level at that location would be about 82 dBA. The residential component of the project is concentrated on the 3rd and Pacific Block, which is located approximately 300 feet north of the where construction on the remainder of the project site would occur, and on Center Block, operation of which would occur after all other components are constructed. Therefore, the proposed library would be the only onsite sensitive receptor that would be located adjacent to project construction. The library could be approximately 50 feet from construction activity and could experience a maximum noise level of approximately 88 dBA during construction of both the Center Block and the Lincoln Park and New Library Block.

Table 4.5-7
Typical Construction Equipment Noise Levels

Equipment	Noise Level at 50 feet from Source	Noise Level at 100 feet from Source	Noise Level at 300 feet from Source
Augur Drill Rig	84	78	69
Backhoe	78	72	63
Compactor (ground)	83	77	68
Dozer	82	76	67
Dump Truck	76	70	61
Excavator	81	75	66
Flat Bed Truck	74	68	59
Front End Loader	79	72	63
Generator	81	75	66
Grader	83	77	68
Jackhammer	88	82	73
Pickup Truck	75	69	60
Pneumatic Tools	85	79	70
Roller	80	74	65
Scraper	84	78	69
Warning Horn	83	77	68
Welder/Torch	74	68	59

Source: FTA, 2006.

A temporary noise barrier, as required by Mitigation Measure Noise-1(b) would attenuate construction noise at locations for which the barrier breaks the line of sight between the source and the receptor by up to 10 dBA (FHWA, 2001). However, given the height of the surrounding buildings, which includes residential buildings of over ten stories, a temporary noise barrier would not break the line-of-sight between the construction activities and upper-floor receptors. In order for a barrier to successfully reduce noise at a receptor, it must disrupt the line-of-sight and directly shield the receptor. It would not be feasible to construct a noise barrier tall enough to shield high-rise buildings. Therefore, while Mitigation Measure Noise-1(b) would reduce noise levels to a less than significant level for receptors located on the first floor and would be implemented as a requirement of the Downtown Plan EIR, it would not be sufficient to reduce noise levels to less than 80 dBA Leq for eight hours for noise-sensitive uses located on higher floors. Therefore, impacts would significant and unavoidable at existing and proposed residential units.

Temporary noise from construction would exceed the ambient noise levels near the project site, which are between 65 and 71 dBA. Therefore, City noise standards would be exceeded, despite

implementation of mitigation measures Noise-1(a) and Noise-1(b). This would be a significant and unavoidable impact.

Furthermore, as described in the Long Beach Courthouse Demolition Project Draft EIR, demolition of the former Long Beach Courthouse would result in impacts related to noise that would be significant and unavoidable despite implementation of mitigation involving the erection of temporary sound barriers, installation of mufflers, use of electric equipment, and the establishment of a noise disturbance coordinator. If demolition occurs by implosion, the Downtown Plan EIR recommended mitigation requiring the development and approval of a Noise Control Plan to protect human health and adjacent buildings. Nonetheless, mitigation required by the Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR would not reduce impacts related to construction to a less than significant level. Due to the height of the surrounding residential and commercial buildings, and the potential for demolition to occur by implosion, mitigation would not be feasible for all receptors. Impacts would be significant and unavoidable.

Mitigation Measures. Along with the mitigation required by the Downtown Plan EIR, the following mitigation would be required to reduce impacts from the demolition of the former Courthouse to the extent feasible.

Noise-1 **Noise Control Plan.** If demolition occurs by implosion, the City shall approve a Noise Control Plan that protects public health and includes:

- A site-specific map that delineates the hearing damage radius;
- Safety measures to ensure that community members would not be within this radius during the implosion;
- Control measures designed by an implosion expert to reduce noise at the source of the implosion; and
- A statement that all demolition-related damage shall be repaired.

Significance After Mitigation. The Downtown Plan EIR determined that construction associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would not be feasible to reduce impacts to a less than significant level. The Long Beach Courthouse Demolition Project Draft EIR determined that construction associated with the demolition of the Courthouse would result in a significant and unavoidable noise impact; the proposed project would contribute to that impact. Therefore, impacts associated with construction noise would be significant and unavoidable.

CEQA Checklist Threshold	*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.*
CEQA Checklist Threshold	*A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*
CEQA Checklist Threshold	*A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*
Quantitative Threshold	*See Table 4.5-1 and Table 4.5-2*

Impact N-2 Operational activities associated with the proposed project would generate noise that could exceed City of Long Beach standards at existing receptors. Residential uses proposed by the project may also be exposed to noise levels that exceed City standards. The Downtown Plan EIR determined that operation associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would be required. This is a Class II, *significant but mitigable* impact.

As discussed in the Downtown Plan EIR, point source noise levels associated with commercial uses have the potential to expose nearby existing and future noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance and that would permanently or temporarily exceed existing ambient noise levels. Downtown Plan EIR Mitigation Measure Noise-6 requires a site-specific noise study prior to issuance of building permits in areas where new residential development would be located adjacent to commercial uses to determine the area of impact and to present appropriate mitigation measures. The mitigation measures required as a result of the noise study may include:

- *Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses.*
- *Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible.*
- *Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.*

The buildings proposed on the 3rd and Pacific Block, as well as the Center Block, would locate residential uses adjacent to commercial uses. Noise sources associated with commercial land uses include mechanical equipment operation, public address systems, parking lot noise (e.g., opening and closing of vehicle doors, people talking, car alarms), delivery activities (e.g., use of

forklifts, hydraulic lifts), trash compactors, and air compressors. Noise from such equipment can reach intermittent levels of approximately 90 dBA, 50 feet from the source (City of Long Beach, 2011). These elevated noise levels, which have the potential to be generated by commercial uses within mixed use land use designations, would expose nearby noise sensitive land uses (e.g., residential units both existing and proposed) to excessive noise levels that violate the City Noise Ordinance and permanently increase noise levels above ambient levels.

The Third and Pacific Block includes commercial uses on the first floor of the proposed buildings. The nearest sensitive receptor to the Block is the First Congregational Church of Long Beach, which is located 85 feet west. However, the church would be occupied on Sunday mornings, at which time the commercial uses would not generate high levels of noise. The residential building located 100 feet north across Third Street is the nearest sensitive receptor that would be occupied. While the proposed commercial uses are not expected to generate high levels of noise, the highest noise generator would be the loading and unloading areas for trucks. Loading/unloading areas could be located 100 feet from the nearest residences. Thus, point source noise levels associated with commercial land uses could potentially expose nearby existing noise sensitive receptors to excessive noise levels that violate the City Noise Ordinance and mitigation would be required to reduce these impacts.

The Third and Pacific Block would include residential uses above the commercial uses described above. The proposed residential uses could also be exposed to intermittent levels of up to 90 dBA, 50 feet from the source as a result of the commercial activities; therefore, mitigation would be required to reduce these impacts for proposed receptors as well.

Relocation of the park would place it in closer proximity to the residential uses that are south of Ocean Boulevard (approximately 150 feet away). While there may be periodic events in the park that generate noise, the park would not generally generate noise that would impact sensitive users. This impact would be less than significant.

Mitigation Measures. The following mitigation measures would be required to reduce operational noise impacts to existing and proposed receptors to a less than significant level.

Noise-2(a) **Loading Areas.** The applicant shall submit site plans to the Department of Development Services showing that all loading and unloading areas would be oriented away from existing sensitive receptors and/or shielded by the proposed buildings such that the line-of-sight would be broken.

Noise-2(b) **Sound-Rated Windows and Glass Doors Near Commercial Uses.** The applicant shall install sound-rated windows and sliding glass doors on all residential units that are within 50 feet of commercial uses. Windows shall be at least STC 35 to ensure that commercial activities do not result in interior noise levels exceeding 35 dBA when the windows are closed.

Significance After Mitigation. The Downtown Plan EIR determined that operation associated with buildout of the Downtown Plan would result in a potentially significant impact unless mitigation is incorporated. The proposed project would contribute to this impact and mitigation would be required to reduce impacts to a less than significant level.

CEQA Checklist Threshold	*Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.*
Quantitative Threshold	*80 VdB for residences and buildings where people normally sleep. 100 VdB for damage to fragile buildings (LBMC 8.80.200(g); Federal Transit Administration, May 2006).*

Impact N-3 Construction-activities associated with the proposed project could generate ground-borne vibration. The Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction-generated vibration would be significant and unavoidable. The proposed project would contribute to this impact and construction-related vibration would therefore be a Class I, *significant and unavoidable* impact.

As discussed in the Downtown Plan EIR, adoption of the Downtown Plan could subject nearby residents to excessive levels of vibration. The Downtown Plan EIR includes Mitigation Measure Noise-2(a), which requires that the City review all construction projects for potential vibration-generating activities from demolition, excavation, pile–driving, and construction within 100 feet of existing structures and require site-specific vibration studies to be conducted by a qualified structure engineer in order to determine the area of impact and identify appropriate mitigation measures. Mitigation Measure Noise-2(b) requires that construction near schools that generates vibration exceeding the "vibration perception threshold" be scheduled at a time when school is not in session. Because the nearest school, Edison Elementary School is 2,250 feet northwest of the project site, Noise-2(b) would not be required for the proposed project.

The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to vibration would be significant and unavoidable despite implementation of mitigation measures if demolition occurs by implosion. The Downtown Plan EIR recommended mitigation requiring the development and approval of a Vibration Control Plan to protect human health and adjacent buildings if demolition occurs by implosion.

Project construction activities would result in vibration that may be felt on properties in the immediate vicinity of the project site, as commonly occurs with construction projects. Table 4.5-8 identifies various vibration velocity levels for different types of construction equipment. Pile-driving would not be required for the proposed project. Project construction would likely involve the use of bulldozers and jackhammers on the project site for all building elements. Additionally, loaded trucks carrying construction materials would operate on the project site and some surrounding streets during construction.

Table 4.5-8
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB					
	10 Feet	40 Feet	75 Feet	100 Feet	200 Feet	300 Feet
Large Bulldozer	97	79	73	69	60	55
Loaded Trucks	93	77	71	68	59	54
Jackhammer	87	71	65	61	52	47
Small Bulldozer	66	49	43	40	31	26

Source: FTA, 2006.

None of the proposed project components would require use of a large bulldozer within 40 feet of an existing or proposed structure that would include residential uses. Therefore, vibration levels would not exceed the vibration threshold established by the FTA of 80 VdB for residences and buildings where people normally sleep. No new impact would occur and impacts would be less than significant.

As described above, impacts related to vibration would be significant and unavoidable despite implementation of mitigation measures if demolition of the former Courthouse occurs by implosion. Implosion is not included in the vibration estimates shown in Table 4.5-8 above. The proposed project includes the demolition of the former Courthouse, as well as other existing structures. Therefore, impacts would be significant and unavoidable.

Mitigation Measures. Along with the mitigation required by the Downtown Plan EIR, the following mitigation would be required to reduce impacts from the demolition of the former Courthouse to the extent feasible.

Noise-3 **Vibration Control Plan.** If demolition occurs by implosion, the City shall approve a Vibration Control Plan that protects public health and adjacent buildings, and includes:

- A site-specific estimate of the potential zones of vibration perceptibility and building damage;
- A pre-construction survey to assess the foundations and facades of buildings within the damage zone;
- A post-construction survey to assess damage, if any, caused by implosion; and
- A statement that all demolition-related damage shall be repaired.

Significance After Mitigation. The proposed project would contribute to the significant and unavoidable impact as described in the Long Beach Courthouse Demolition Project Draft EIR. Therefore, project impacts would be significant and unavoidable.

CEQA Checklist Threshold	*Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.*
Quantitative Threshold	*80 VdB for residences and buildings where people normally sleep. 100 VdB for damage to fragile buildings (LBMC 8.80.200(g); Federal Transit Administration, May 2006).*

Impact N-4 Operational activities associated with the proposed project could generate ground-borne vibration. The Downtown Plan EIR determined that impacts related to operational vibration would be less than significant. The proposed project would not result in additional impacts beyond those determined in the Downtown Plan EIR and operational vibration would therefore be a Class III, *less than significant* impact.

The Downtown Plan EIR determined that heavy trucks used for delivery and distribution of materials to and from commercial sites generally operate at low speeds while on the commercial site; and the operational characteristics of mechanical equipment and distribution methods used for general commercial land uses would not result in excessive ground-borne vibration levels.

The types of tenants that would occupy commercial spaces and the number of trucks that would visit these facilities on any given day were not known at the time the Downtown Plan was analyzed in the Downtown Plan EIR. However, it was anticipated that the types of commercial uses proposed for the Downtown Plan Area would not involve large-scale trucking operations. Linscott, Law, and Greenspan, Engineers estimates that the project would accommodate approximately 83 trucks per day. These truck trips would be distributed throughout the project area to the multiple proposed commercial uses. Therefore, operational noise associated with heavy trucks would not generate a substantial level of ground-borne vibration at any sensitive receptors and no new impacts would result from the proposed project.

Mitigation Measures. No mitigation would be required.

Significance After Mitigation. Impacts would be less than significant without mitigation. The Downtown Plan EIR determined that operational vibration impacts would be less than significant. Impacts would be less than significant (Class III).

CEQA Checklist Threshold	*A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*
Quantitative threshold	*See Table 4.5-5 above.*

Impact N-5 Traffic generated by the proposed project is not anticipated to result in noise level increases along roadways in the project vicinity. Traffic-related increases in noise would not exceed the City's threshold at sensitive receptors along roadway segments. The Downtown Plan EIR also determined that traffic-generated noise increases resulting from the Downtown Plan would be less than significant. This is a Class III, *less than significant* impact.

The Downtown Plan EIR determined that traffic-generated noise increases resulting from the Downtown Plan would be less than significant. The traffic noise level increases directly attributable to the project were estimated to be no greater than 1 dBA, which would not be perceptible and would be less than the 3-dBA significance criterion.

Development of the proposed project would increase the number of vehicle trips to and from the site, which would increase traffic noise on surrounding roadways within the vicinity of the project site. The *Transportation Impact Analysis* prepared for the proposed project (Shane Green, personal communication, June 2015; see Appendix E) determined the existing and future traffic levels on Third Street, Broadway, Ocean Boulevard, Magnolia Avenue, Chestnut Avenue, Cedar Avenue, Pacific Avenue, and First Street, as well as the traffic levels expected as a result of the proposed project. These traffic levels were used to determine existing and potential future sound levels at existing sensitive receptors along these roadways, including residences and the First Congregational Church of Long Beach, located at 241 Cedar Avenue.

These estimates are based on noise modeling using the FHWA Traffic Noise Model. The fleet mix for vehicle trips along the roadways was estimated at between 86 to 95% passenger vehicles, 2.5% light- and medium-duty trucks, 2.5% heavy-duty trucks, and between 0 to 9% buses. This estimate is considered reasonable for these roadways based on the urban/ downtown nature of the area, as well as the actual bus schedule. The sensitive receptors closest to the roadways were selected to determine the highest noise levels that would occur at receptors located along these roadways. Receptors that were not modeled would experience the similar or lower increases in noise than those receptors that were modeled based on their proximity to the roadways. Table 4.5-9 shows estimates of exterior noise level increases that would result from project-related traffic increases on local roadways within the immediate vicinity of the project site and Figure 4.5-2 shows the locations of the modeled receptors.

Table 4.5-9
Pre-Project and Post-Project Traffic Noise

Receptor Location	Projected Noise Level (dBA CNEL)		Change In Noise Level (dBA CNEL)	Significance Threshold (dBA)[4]	Significant Impact?
	Existing[1]	Existing Plus Project[3]			
Broadway btwn Chestnut and Magnolia	69.3	69.9	0.6	3	No
Broadway NE Corner of Broadway and Magnolia	71.9	72.4	0.5	3	No
Broadway NW Corner of Chestnut and Broadway	69.2	70.4	1.2	3	No
Cedar - Church btwn Third and Broadway	65.8	70.1	4.3	3	No[5]
Chestnut btwn Third and Broadway	65.3	67.2	1.9	3	No
Chestnut E of Chestnut btwn Third and Broadway	64.1	66.6	2.5	3	No
Magnolia btwn Third and Broadway	70	70.7	0.1	3	No
Ocean btwn Cedar and Chestnut	71.8	71.9	0.1	3	No
Ocean btwn Chestnut and Magnolia	70.3	70.3	0	3	No
Ocean NE Corner of Ocean and Chestnut	71.9	72	0.1	3	No
Ocean NW Corner of Ocean and Cedar	69.2	69.3	0.1	3	No
Ocean NW Corner of Ocean and Pacific	71.8	71.8	0	3	No
Pacific E of Pacific btwn Third and Broadway	68.4	69.0	0.6	3	No
Pacific NE Corner of Pacific and Broadway	71.1	71.5	0.4	3	No
Third btwn Cedar and Chestnut	69.3	70.1	0.8	3	No
Third btwn Magnolia and Chestnut	67.5	68.3	0.8	3	No
Third E of Pacific	68	68.5	0.5	3	No
Third NE Corner of Pacific and Cedar	67.9	69.4	1.5	3	No
Third NE Corner of Third and Magnolia	69.1	69.8	0.7	3	No
Third North of Third West of Pacific	69.5	70.4	0.9	3	No
Third NW Corner of Third and Cedar	70.2	71.2	1	3	No

Table 4.5-9
Pre-Project and Post-Project Traffic Noise

Receptor Location	Projected Noise Level (dBA CNEL)		Change In Noise Level (dBA CNEL)	Significance Threshold (dBA)[4]	Significant Impact?
	Existing[1]	Existing Plus Project[3]			
Third NW Corner of Third and Chestnut	70.5	71.5	1	3	No
Third NW Corner of Third and Magnolia	70.9	71.6	0.7	3	No
Third NW Corner of Third and Pacific	70.9	71.6	0.7	3	No
Third SE of Chestnut and Pacific Intersection	67.4	68.3	0.9	3	No
Third SW Corner of Third and Cedar	69.4	70.4	1	3	No
Third SW Corner of Third and Chestnut	68.3	69.4	1.1	3	No

1. Existing noise is based on measured noise, except where measurements were not taken, in which case noise estimates based on U.S. Department of Transportation, Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5 were used.

2. Existing noise reflects modeled estimates based on traffic from roadways as determined in the Traffic Impact Analysis. Refer to Appendix E for the traffic analysis and Appendix D for the estimates from the FHWA Traffic Noise Model Version 2.5.

3. Existing Plus Project noise reflects estimates generated using FHWA Traffic Noise Model Version 2.5.

4. As shown in Table 4.5-5, an increase of 5 dBA would be considered significant when existing ambient noise is less than 60 dBA and an increase of 3 dBA would be considered significant when existing ambient noise is greater than 60 dBA.

5. The noise level at the First Congregational Church of Long Beach could increase by as much as 4.3 dBA during peak-hour traffic. However, the church would not be occupied during peak-hour traffic on weekday mornings or evenings.

Existing plus project traffic volumes would increase exterior noise levels by less than 3 dBA for all existing residences, which are represented by the locations listed in Table 4.5-9. Additional receptors are located along the roadways included in Table 4.5-9 and throughout the buildings, which extend further back from the roadways, and would also not experience exterior noise level increases greater than 3 dBA. Therefore, impacts from project-related traffic noise increases would be less than significant.

Future noise levels were also calculated using the FHWA Traffic Noise Model. In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed project, the status of other known development projects (cumulative projects) in the area was researched, as described in Section 4.6, *Transportation and Traffic*. Eleven cumulative projects within a two-mile radius of the project site are located in the City of Long Beach. These cumulative projects have either been built, but are not yet fully occupied, or are being processed for approval and have been included as part of the cumulative background setting. Noise levels were estimated for a scenario including only these cumulative projects and a scenario including the cumulative projects and the proposed Civic Center Project. The change in noise level that would occur as a result of the proposed project is again compared to the 3 dBA threshold described in Table 4.5-5. Exterior noise levels are shown in Table 4.5-10.

Table 4.5-10
Cumulative Traffic Noise Impacts

Roadway	Projected Noise Level (dBA CNEL)			Change In Noise Level (Future Plus Project - Existing) (dBA CNEL)	Project Contribution to Change in Noise Level (Future Plus Project - Future) (dBA CNEL)	Significance Threshold (dBA)[4]	Significant?
	Existing[1]	Future	Future Plus Project[3]				
Broadway btwn Chestnut and Magnolia	69.3	69.9	71	1.7	1.1	3	No
Broadway NE Corner of Broadway and Magnolia	71.9	72.4	73.4	1.5	1	3	No
Broadway NW Corner of Chestnut and Broadway	69.2	69.5	70.8	1.6	1.3	3	No
Cedar - Church btwn Third and Broadway	65.8	66.1	70.1	4.3	4	3	No[5]
Chestnut btwn Third and Broadway	65.3	65.5	66.7	1.4	1.2	3	No
Chestnut E of Chestnut btwn Third and Broadway	64.1	64.3	65.9	1.8	1.6	3	No
Magnolia btwn Third and Broadway	70	70.4	70.9	0.9	0.5	3	No
Ocean btwn Cedar and Chestnut	71.8	72.2	72.2	0.4	0	3	No
Ocean btwn Chestnut and Magnolia	70.3	70.9	70.8	0.5	-0.1	3	No
Ocean NE Corner of Ocean and Chestnut	71.9	72.3	72.3	0.4	0	3	No

Table 4.5-10
Cumulative Traffic Noise Impacts

Roadway	Projected Noise Level (dBA CNEL)			Change In Noise Level (Future	Project Contribution to	Significance Threshold	Significant?
Ocean NW Corner of Ocean and Cedar	69.2	69.6	69.6	0.4	0	3	No
Ocean NW Corner of Ocean and Pacific	71.8	71.6	72.5	0.7	0.9	3	No
Pacific E of Pacific btwn Third and Broadway	68.4	69.0	69.3	0.9	0.3	3	No
Pacific NE Corner of Pacific and Broadway	71.1	71.6	71.9	0.8	0.3	3	No
Third btwn Cedar and Chestnut	69.3	69.6	70.5	1.2	0.9	3	No
Third btwn Magnolia and Chestnut	67.5	67.7	68.6	1.1	0.9	3	No
Third E of Pacific	68.0	68.3	68.8	0.8	0.5	3	No
Third NE Corner of Pacific and Cedar	67.9	68.3	69.7	1.8	1.4	3	No
Third NE Corner of Third and Magnolia	69.1	69.5	70.1	1	0.6	3	No
Third North of Third West of Pacific	69.5	70.0	70.8	1.3	0.8	3	No
Third NW Corner of Third and Cedar	70.2	70.5	71.6	1.4	1.1	3	No
Third NW Corner of Third and Chestnut	70.5	70.8	71.7	1.2	0.9	3	No

Table 4.5-10
Cumulative Traffic Noise Impacts

Roadway	Projected Noise Level (dBA CNEL)			Change In Noise Level (Future	Project Contribution to	Significance Threshold	Significant?
Third NW Corner of Third and Magnolia	70.9	71.2	71.9	1	0.7	3	No
Third NW Corner of Third and Pacific	70.9	71.4	72.0	1.1	0.6	3	No
Third SE of Chestnut and Pacific Intersection	67.4	67.6	68.5	1.1	0.9	3	No
Third SW Corner of Third and Cedar	69.4	69.7	70.7	1.3	1.0	3	No
Third SW Corner of Third and Chestnut	68.3	68.5	69.4	1.1	0.9	3	No

1. Existing noise is based on noise estimates from Federal Highway Administration's (FHWA) Traffic Noise Model Version 2.5.

2. Existing noise reflects modeled estimates based on traffic from roadways as determined in the Traffic Impact Analysis. Refer to Appendix E for the traffic analysis and Appendix D for the estimates from the FHWA Traffic Noise Model Version 2.5.

3. Existing Plus Project noise reflects estimates generated using FHWA Traffic Noise Model Version 2.5.

4. As shown in Table 4.5-5, an increase of 5 dBA would be considered significant when existing ambient noise is less than 60 dBA and an increase of 3 dBA would be considered significant when existing ambient noise is greater than 60 dBA.

5. The noise level at the First Congregational Church of Long Beach could increase by as much as 4.3 dBA during peak-hour traffic. However, the church would not be occupied during peak-hour traffic on weekday mornings or evenings.

Similar to the existing and existing plus project conditions, the project's contribution to the future plus project change in noise levels would only exceed the 3 dBA increase at the First Congregational Church of Long Beach. However, as described above, this increase in noise was determined based on peak hour traffic, which occurs on weekday mornings and evenings. Services are held at the First Congregational Church of Long Beach on weekends; therefore the church would not be occupied during peak-hour traffic. Impacts from project-related traffic noise increases under future conditions would be less than significant.

Mitigation Measures. Because impacts would be less than significant, no mitigation is required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

CEQA Checklist Threshold	*Exposure of persons to or generation of noise levels in exceed of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*
Quantitative threshold	*See Table 4.5-5 above.*

Impact N-6 **Noise levels at proposed sensitive receptors may exceed City thresholds for interior and exterior noise. The Downtown Plan EIR determined that the Downtown Plan would result in a Class II impact, potentially significant unless mitigation is incorporated, as it would allow sensitive receptors to be located in areas exceeding the City's noise standards. The Downtown Plan required site-specific noise analysis and mitigation for individual projects. The proposed project would contribute to this impact and such mitigation would be required. This is a Class II, *significant but mitigable* impact.**

The Downtown Plan EIR determined that because the Downtown Plan would allow the location of sensitive receptors in areas that would exceed the standards identified for the applicable land use by the Noise Element of the Long Beach General Plan, impacts would be significant but mitigable. The project would be subject to the mitigation measure identified in the EIR, specifically Mitigation Measure Noise-5, which requires a site-specific noise study and mitigation in areas where new residential development would be exposed to noise levels exceeding 65 dBA. This noise study requirement has been met in this EIR and is described below.

The *Transportation Impact Analysis* prepared for the proposed project (Shane Green, personal communication, June 2015; see Appendix E) determined the traffic levels expected as a result of the proposed project. Traffic is the largest source of noise in the project area; therefore, these traffic levels were used to determine potential sound levels at proposed receptors, including proposed residences and the proposed library location (Figure 4.5-2 shows the locations of the modeled receptors). The sensitive receptors that would be closest to the roadways were selected to determine the highest noise levels that would occur at receptors located along these roadways. Receptors that were not modeled would experience similar or lower increases in noise level than those receptors that were modeled based on their proximity to the roadways.

Table 4.5-11 shows exterior and interior noise levels that would be experienced at the proposed residences and library. As shown, exterior noise levels would exceed 65 dBA at all proposed receptors adjacent to roadways. As described in Section 4.5.3(a), typical residential construction in California provides approximately 15 dBA of noise reduction from exterior noise sources with windows partially open, and approximately 20 to 25 dBA of noise reduction with windows kept closed (DOT, 2009).

Table 4.5-11
Projected Noise Levels
for Proposed Receptors

Roadway	Projected Noise Level
Future Library NW corner Broadway and Pacific	71.6
Future Library on Broadway btwn Pacific and Cedar	72.4
Future Library on Pacific btwn Broadway and First	68.6
NE corner Broadway and Chestnut	69.4
E of Cedar btwn Broadway and Third	69.9
NE corner Broadway and Cedar	70.5
North of Broadway btwn Pacific and Cedar	68.3
NW corner Pacific and Broadway	72.0
SE Corner Third and Cedar	70.1
SW Corner Third and Pacific	70.4
W of Pacific btwn Third and Broadway	68.7

Where exterior noise levels are below 70 dBA Ldn, interior noise can be mitigated with standard wall and window construction, and the inclusion of mechanical forced-air ventilation to allow occupants the option of maintaining windows closed to control noise, as required by Mitigation Measure Noise-6(a). Where exterior noise levels exceed 70 dBA Ldn, noise-sensitive uses would not normally be able to meet the 45-dBA Ldn interior standard simply through typical construction methods. Thus, noise-sensitive uses, including the proposed library and the residences located adjacent to Broadway, Pacific Avenue, Third Street, and Cedar Avenue, would require additional noise reduction measures described in Mitigation Measure Noise-6(b).

Mitigation Measures. The following mitigation measures would be required to reduce impacts to future receptors to a less than significant level. These mitigation measures include features that were recommended in Mitigation Measure Noise-5 of the Downtown Plan EIR.

Noise-6(a) **Mechanical Ventilation.** The applicant shall provide mechanical ventilation in all residential units proposed along Broadway, Pacific Avenue, Third Street, Cedar Avenue, Chestnut Avenue, and First Street, so that windows can remain closed at the choice

of the occupants to maintain interior noise levels below ~~45~~ 35 dBA Ldn.

Noise-6(b) **Sound-Rated Windows and Sliding Glass Doors.** The applicant shall install sound-rated windows and sliding glass doors on the residential units that face Broadway, Pacific Avenue, Third Street, and Cedar Avenue, as well as the proposed library, such that interior noise levels would not exceed ~~45~~ 35 dBA Ldn when the windows are closed.

Significance After Mitigation. With implementation of mitigation measures Noise-6(a) and Noise-6(b), impacts to interior noise levels for proposed residences and the proposed library would be reduced to less than significant levels.

c. Cumulative Impacts. The Downtown Plan Area, which surrounds the project site, is the geographic extent for cumulative impacts associated with noise. Cumulative development in the City of Long Beach would result in the development of eleven projects also served by the larger roadway network surrounding the project site, as described in Section 4.6, *Traffic and Transportation*. As shown in Table 4.5-10, cumulative impacts along the analyzed surrounding roadway network would contribute to further exceedance of the exterior noise standard over time. Cumulative traffic noise increases from project-generated traffic along the analyzed road segments would range from 0.0 to 4.2 dBA and in some cases the project would result in a decrease in traffic noise compared to future without project traffic, due to the extension of existing roadways.

The operational noise generation of cumulative projects is not known, but because future uses would be similar to the existing uses in the area, cumulative projects would not create cumulative operational noise impacts in combination with the proposed project. All future development would be required to comply with the City's noise and vibration standards, which restrict the level of noise and vibration that can be generated near a property according to its designated use. Cumulative impacts would be less than significant.

4.6 TRANSPORTATION AND TRAFFIC

This section analyzes the potential for the proposed project to cause significant impacts to the existing traffic and transportation facilities in the City of Long Beach. The analysis in this section is based on a Traffic Impact Analysis (TIA) prepared for the project by Linscott, Law & Greenspan, Engineers (LLG), in July 2015. The full TIA is provided in Appendix E.

4.6.1 Setting

a. Existing Street System. The principal local network of streets serving the project site includes Third Street, Broadway, Ocean Boulevard, First Street, Magnolia Avenue, Chestnut Avenue, Cedar Avenue, and Pacific Avenue. The following discussion provides a brief synopsis of these streets. The descriptions are based on an inventory of existing roadway conditions.

Third Street. Third Street is a two-lane, one-way roadway (westbound travel only) oriented in the east-west direction. Parking is generally permitted on both sides of the roadway, except for a segment between Chestnut Avenue and Cedar Avenue. A separated/protected bike lane is also present on Third Street and limits parking on the street. The posted speed limit is 25 miles per hour (mph). A bike The intersection of Third Street and Pacific Avenue is controlled by a traffic signal.

Broadway. Broadway is a two-lane, one-way divided roadway (eastbound travel only) oriented in the east-west direction. West of Magnolia Avenue, parking is restricted on both the north and south side of the roadway. West of Pine Avenue, parking is generally permitted on the north side of the roadway and restricted on the south side. East of Pine Avenue, parking is permitted on both sides of the roadway. A separated/protected bike lane is also present on Broadway and limits parking on the street. The posted speed limit on Broadway is 30 mph. The intersections of Broadway at Magnolia Avenue, Chestnut Avenue, Cedar Avenue, and Pacific Avenue are controlled by traffic signals.

Ocean Boulevard. Ocean Boulevard is primarily a six-lane, divided roadway oriented in the east-west direction. West of Magnolia Avenue, Ocean Boulevard is a seven-lane, divided roadway, with three travel lanes in the eastbound direction and four travel lanes in the westbound direction. Parking is permitted on both sides of the roadway. The posted speed limit on Ocean Boulevard is 30 mph. The intersections of Ocean Boulevard at Magnolia Avenue, Chestnut Avenue, and Pacific Avenue are controlled by traffic signals. The intersection of Ocean Boulevard at Cedar Avenue is controlled by a one-way stop.

First Street. First Street is primarily a two-lane, divided roadway oriented in the east-west direction. Parking is not permitted on both sides of the roadway. The posted speed limit on First Street is 25 mph. The intersection of Pacific Avenue at First Street is controlled by a traffic signal.

Magnolia Avenue. Magnolia Avenue is primarily a four-lane, divided roadway oriented in the north-south direction. South of Ocean Boulevard, Magnolia Avenue is a six-lane, divided roadway. North of Third Street, Magnolia Avenue is a two-lane, divided roadway. Parking is permitted on both sides of the roadway north of Broadway. South of Broadway, parking is

generally not permitted on both sides of the roadway, except for a segment between Broadway and Ocean Avenue where parking is permitted on the west side of the roadway. North of Ocean Boulevard, the posted speed limit is 25 mph; south of Ocean Boulevard, the posted speed limit is 45 mph. The intersections of Magnolia Avenue at Broadway and Ocean Boulevard are controlled by traffic signals.

Chestnut Avenue. Chestnut Avenue is primarily a two-lane, undivided roadway oriented in the north-south direction. Between Third Street and Broadway, Chestnut is a two-lane, divided roadway. Between Broadway and Ocean Boulevard, Chestnut is a three-lane, undivided roadway. Parking is permitted on both sides of the roadway, north of Ocean Boulevard. Parking is not permitted on both sides of the roadway south of Ocean Boulevard. The posted speed limit on Chestnut Avenue is 25 mph. The intersections of Chestnut Avenue at Broadway and Ocean Boulevard are controlled by traffic signals.

Cedar Avenue. Cedar Avenue is a primarily two-lane, undivided roadway oriented in the north-south direction. South of Broadway and north of Ocean Boulevard, Cedar Avenue is a two-lane, divided roadway. Parking is permitted on both sides of the roadway, north of Broadway. Parking is not permitted on both sides of the roadway, south of Broadway. The posted speed limit on Cedar Avenue is 25 mph. The intersection of Cedar Avenue at Broadway is controlled by a traffic signal. The intersection of Cedar Avenue at Ocean Boulevard is controlled by a one-way stop.

Pacific Avenue. Pacific Avenue is primarily a four-lane, divided roadway oriented in the north-south direction. South of Ocean Boulevard, Pacific Avenue is a two-lane, undivided roadway. Parking is not permitted on either side of the roadway within the vicinity of the project site. The posted speed limit on Pacific Avenue is 25 mph. The intersections of Pacific Avenue at Third Street, Broadway, First Street and Ocean Boulevard are controlled by traffic signals.

b. Existing Public Transit. The Los Angeles County Metropolitan Transportation Authority and Long Beach Transit (LBT) provide public transit services in the vicinity of the proposed project. In the vicinity of the project, the Metro Blue Line currently serves Pacific Avenue. The Los Angeles Department of Transportation (LADOT) Commuter Express 142 currently serves Ocean Boulevard. In addition to the Metro routes, LBT Route 151 serves Broadway, Third Street, and Pacific Avenue; Route 121 serves Ocean Boulevard and Pacific Avenue; LBT Route 181, 191 and 192 serve Broadway, Third Street, and Magnolia Avenue; LBT Route 21, 22, 61, and Passport serve Pacific Avenue. LBT bus stops are located throughout Downtown and include the downtown Long Beach Transit Mall on First Street between Pacific Avenue and Long Beach Boulevard, in proximity to the project site. From the westerly edge of the project site, the Long Beach Transit Mall is located directly east of the civic center block across Pacific Avenue. The TIA in Appendix E contains figures that illustrate Long Beach Transit routes and bus stops within the vicinity of the project site.

c. Existing Bicycle Master Plan and Bicycle Facilities. The City of Long Beach promotes bicycling as a means of mobility and a way in which to improve the quality of life within its community. The Bicycle Master Plan recognizes the needs of bicycle users and aims to create a complete and safe bicycle network throughout the City. Existing and proposed City of Long Beach Bicycle Facilities in the vicinity of the project site are shown in the TIA in Appendix E.

d. Existing Intersection Conditions. Existing a.m. and p.m. peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology for signalized intersections.

Intersection Capacity Utilization (ICU) Method of Analysis. In conformance with City of Long Beach and Los Angeles County Congestion Management Program (CMP) requirements, existing weekday peak hour operating conditions for the key signalized study intersections were evaluated using the ICU method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. The ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per Los Angeles County CMP requirements, the ICU calculations use a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and dual left turn capacity of 2,880 vph. A clearance interval is also added to each Level of Service (LOS) calculation. Per City of Long Beach requirements, clearance intervals are based on the number of phases in the intersection and whether the left turning movements are all fully protected or whether some of them are permitted with other left-turn movements being protected. Table 4.6-1 shows the clearance intervals used in the analysis of the key study intersections within the City of Long Beach.

Table 4.6-1
City of Long Beach Clearance Intervals

Number of Signal Phases	Left-turn Phasing Type	Clearance Interval (Percent)
2	Permitted	10%
3	Protected and Permitted	12%
3	Fully Protected	15%
4	Protected and Permitted	14%
4	Fully Protected	18%

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.

The ICU value translates to a LOS estimate, which is a relative measure of the intersection performance. The six qualitative categories of LOS have been defined along with the corresponding ICU value range and are shown in Table 4.6-2. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements.

Table 4.6-2
Level of Service Criteria for Signalized Intersections

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	LOS Description
A	<0.600	**Excellent**. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601–0.700	**Very Good**. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701–0.800	**Good**. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801–0.900	**Fair**. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901–1.000	**Poor**. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	**Failure**. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.

Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections). The 2000 HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the key unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay is measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a LOS estimate, which is a relative measure of the intersection performance. The six qualitative categories of LOS have been defined along with the corresponding HCM control delay value range, as shown in Table 4.6-3.

Table 4.6-3
Level of Service Criteria for Unsignalized Intersections

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.

Level of Service Criteria. According to the City of Long Beach, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours, or the current LOS if the existing LOS is worse than LOS D (i.e. LOS E or F).

Existing Traffic Volumes. The ten key study intersections selected for evaluation in the TIA provide local access to the project study area. They include the following:

1. *Magnolia Avenue at Broadway*
2. *Chestnut Avenue at Broadway*
3. *Cedar Avenue at Broadway*
4. *Pacific Avenue at Broadway*
5. *Magnolia Avenue at Ocean Boulevard*
6. *Chestnut Avenue at Ocean Boulevard*
7. *Cedar Avenue at Ocean Boulevard*
8. *Pacific Avenue at Ocean Boulevard*
9. *Pacific Avenue at Third Street*
10. *Pacific Avenue at First Street*

These ten key study intersections have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will pass through each of these intersections, and their analysis will reveal the expected impact associated with the proposed project.

Existing weekday peak hour traffic volumes for the ten key study intersections evaluated in the TIA were obtained from manual turning movement counts conducted by National Data and Surveying Services (NDS) in March 2015.

Figures 4.6-1a and 4.6-1b illustrate the existing weekday a.m. and p.m. peak hour traffic volumes at the ten key study intersections evaluated in the TIA, respectively. Figures 4.6-2a and 4.6-2b show a.m. and p.m. peak hour traffic volumes associated with the current Civic Center land uses.

Existing Level of Service Results. Table 4.6-4 summarizes the existing peak hour service level calculations for the ten (10) key study intersections based on existing traffic volumes and current street geometrics. Review of Table 4.6-4 indicates that all ten (10) key study intersections currently operate at LOS C or better during the weekday a.m. and p.m. peak hours.

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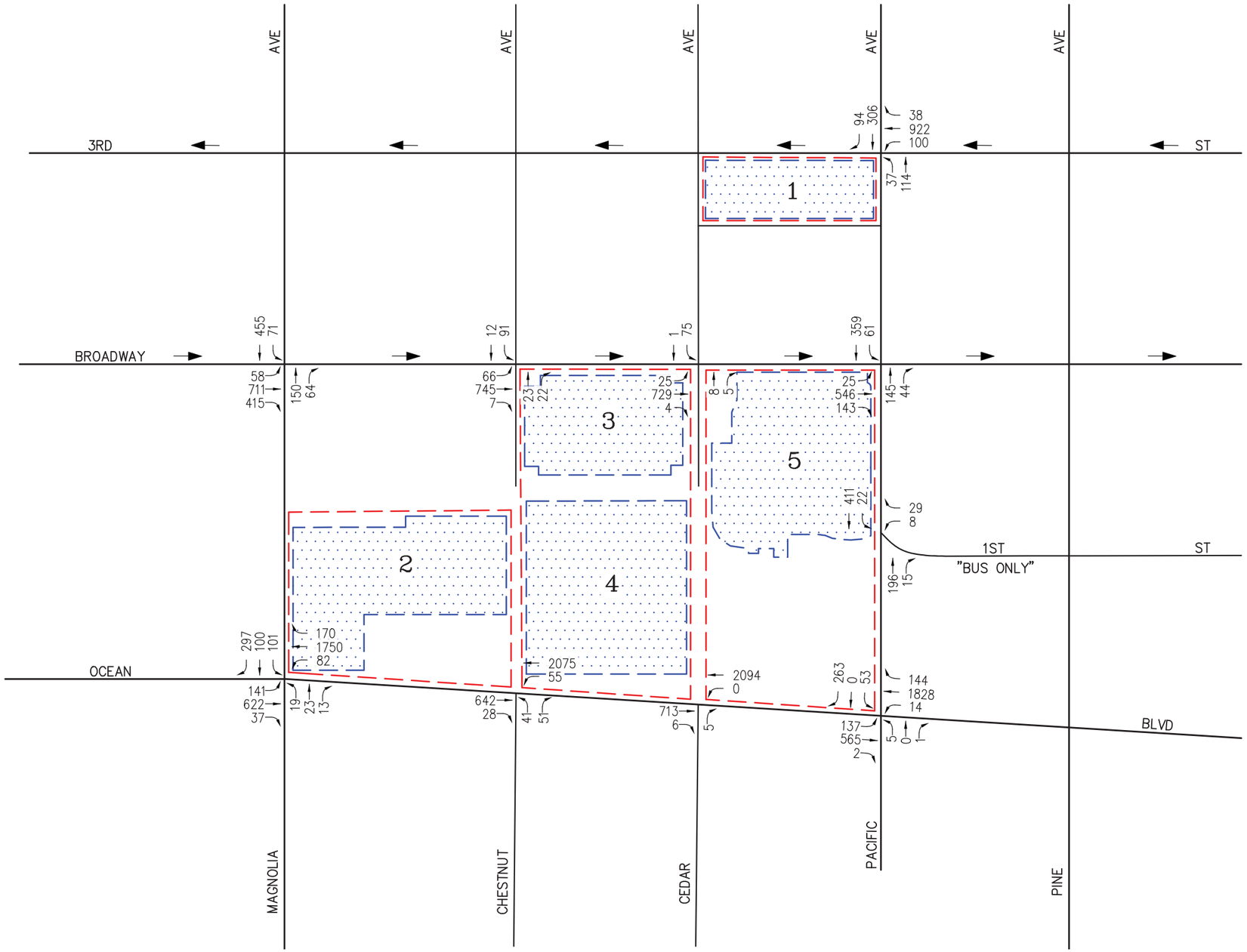
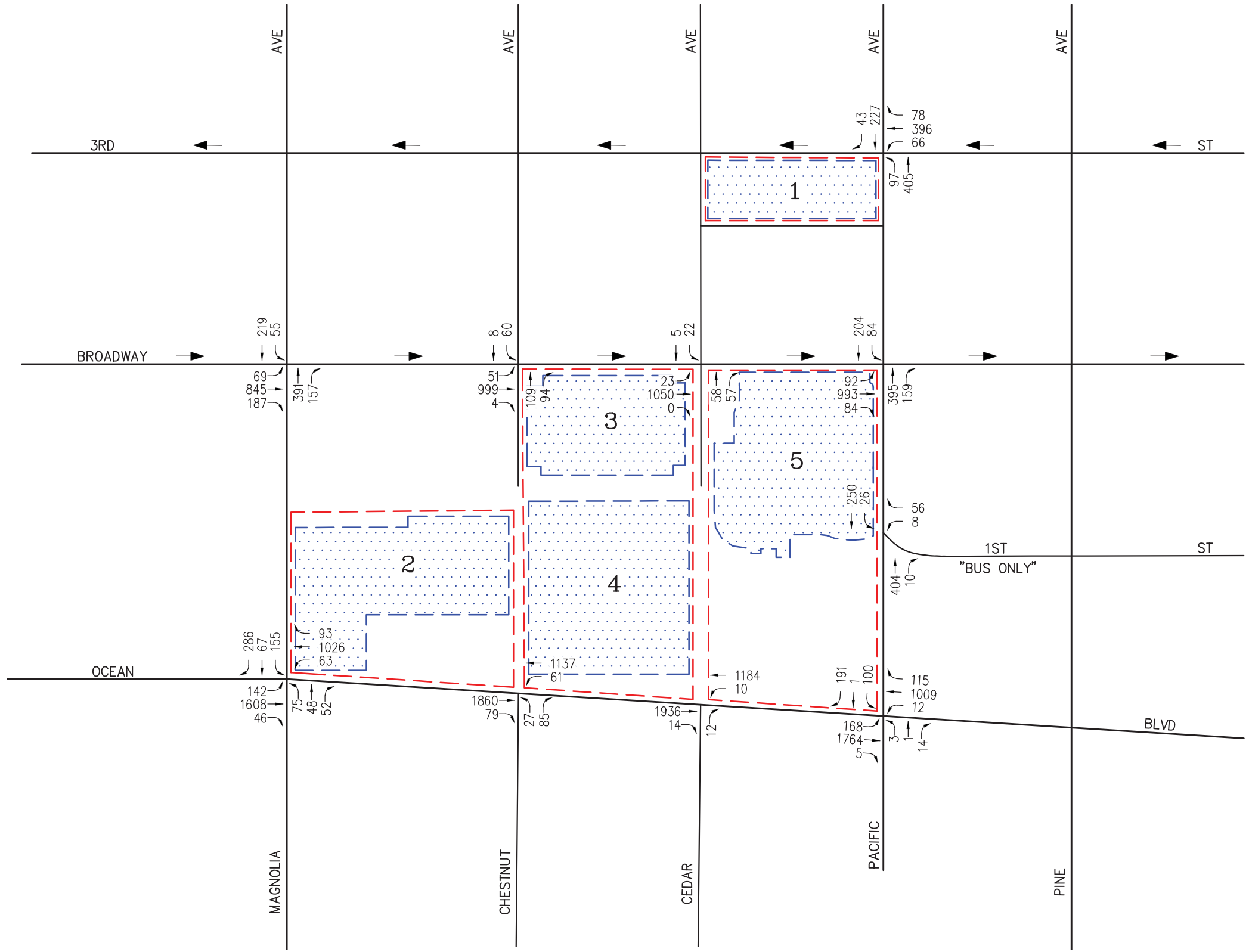


Existing A.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-1a



KEY

= PROJECT AREA
= PARKING LOCATIONS

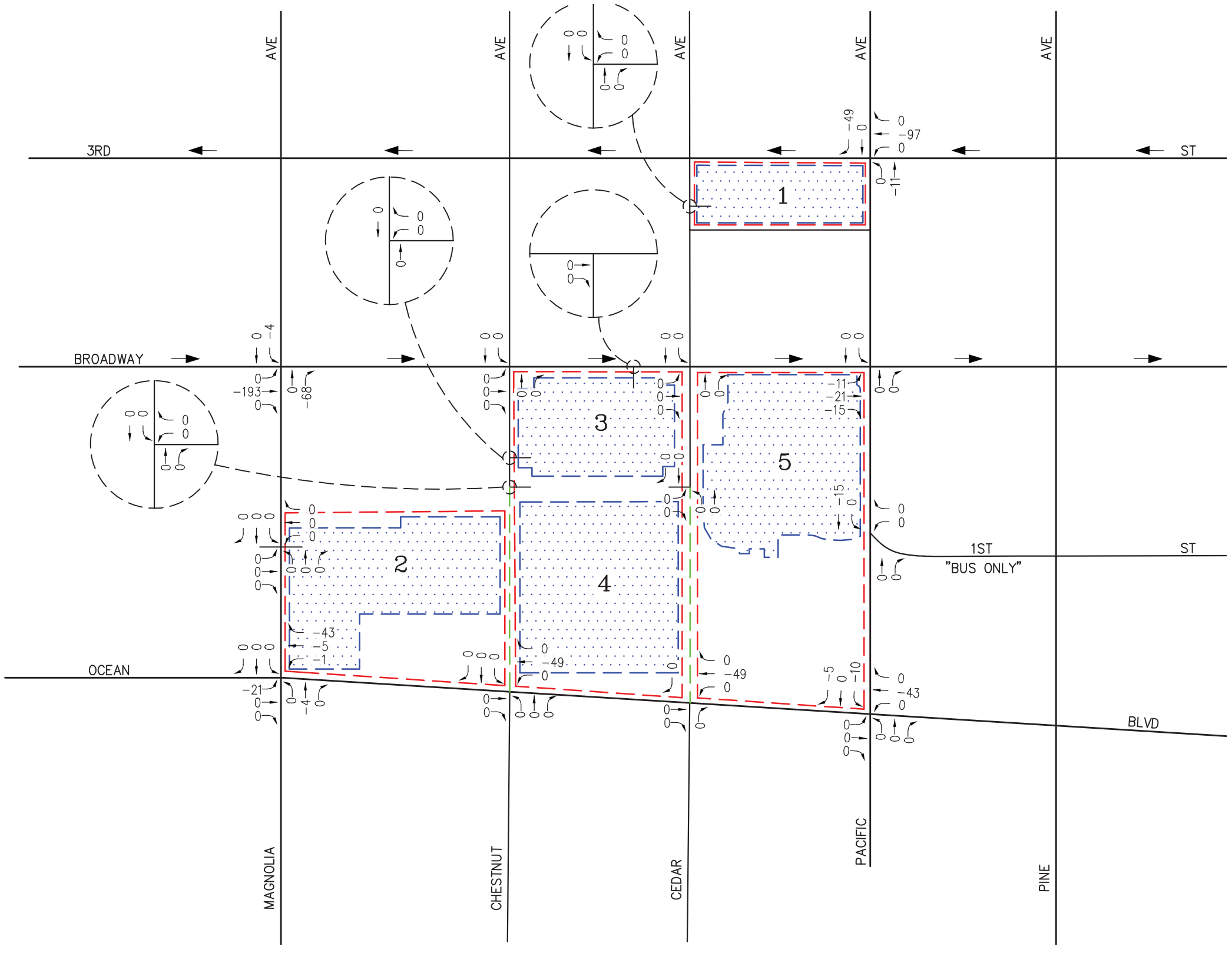
1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

N

Existing P.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

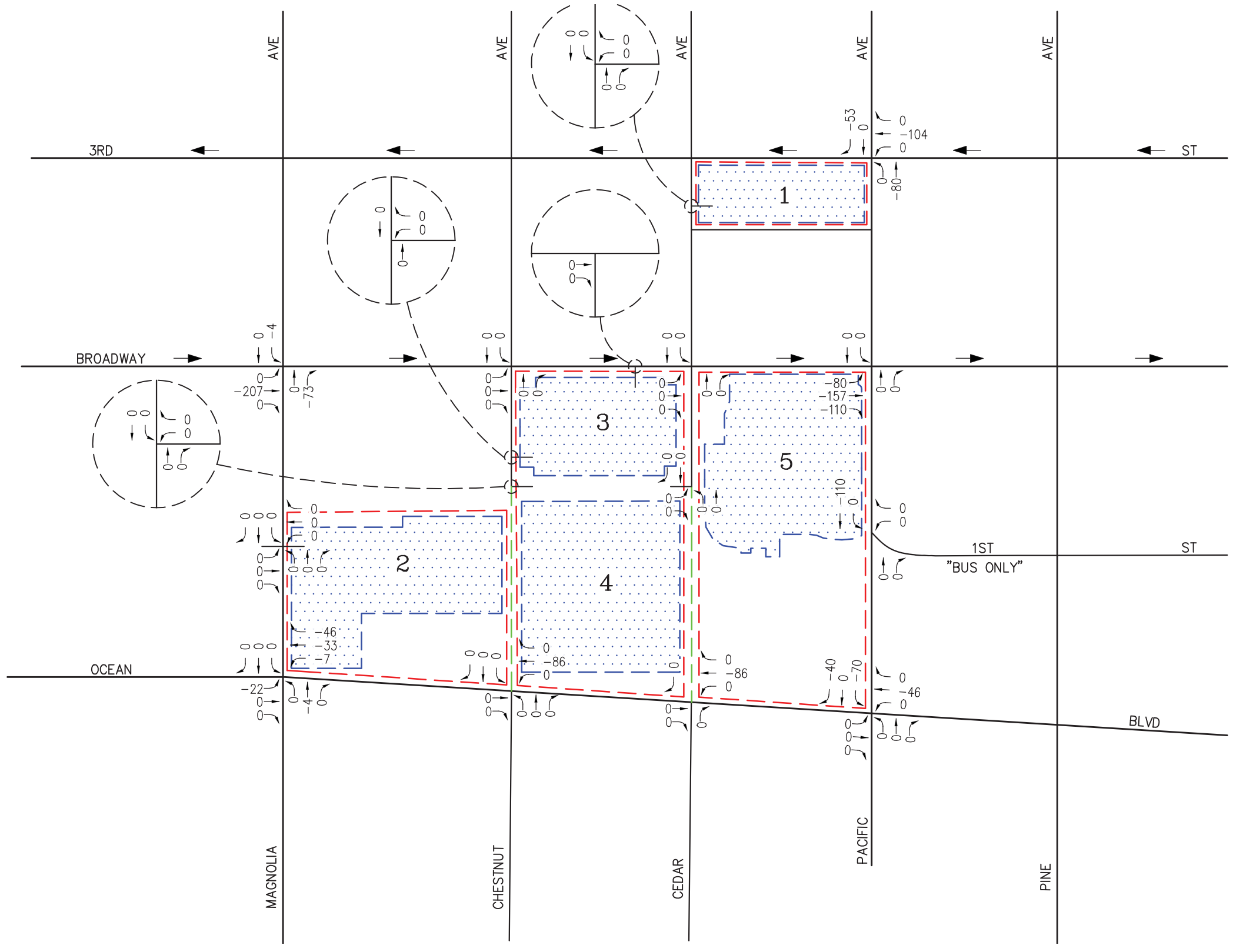
Figure 4.6-1b



A.M. Peak Hour Existing
Civic Center Traffic Volumes

Figure 4.6-2a

Source: Linscott, Law & Greenspan, 2015



P.M. Peak Hour Existing
Civic Center Traffic Volumes

Figure 4.6-2b

Source: Linscott, Law & Greenspan, 2015

Table 4.6-4
Existing Peak Hour Levels of Service

Key Intersection	Control Type	Time Period	ICU/HCM	LOS
1. Magnolia Avenue at Broadway	2-Phase Traffic Signal	a.m. p.m.	0.502 0.570	A A
2. Chestnut Avenue at Broadway	3-Phase Traffic Signal	a.m. p.m.	0.432 0.553	A A
3. Cedar Avenue at Broadway	3-Phase Traffic Signal	a.m. p.m.	0.432 0.531	A A
4. Pacific Avenue at Broadway	3-Phase Traffic Signal	a.m. p.m.	0.478 0.663	A B
5. Magnolia Avenue at Ocean Boulevard	3-Phase Traffic Signal	a.m. p.m.	0.770 0.730	C C
6. Chestnut Avenue at Ocean Boulevard	2-Phase Traffic Signal	a.m. p.m.	0.564 0.595	A A
7. Cedar Avenue at Ocean Boulevard	One-Way Stop	a.m. p.m.	9.7 s/v 17.2 s/v	A C
8. Pacific Avenue at Ocean Boulevard	6-Phase Traffic Signal	a.m. p.m.	0.689 0.559	B A
9. Pacific Avenue at Third Street	3-Phase Traffic Signal	a.m. p.m.	0.569 0.430	A A
10. Pacific Avenue at First Street	3-Phase Traffic Signal	a.m. p.m.	0.302 0.336	A A

Source: Linscott, Law and Greenspan, July 2015; see Appendix E for full TIA report.
Notes:
ICU = Intersection Capacity Utilization
s/v = seconds per vehicle (delay)
LOS = Level of Service, please refer to Table 4.6-2 and Table 4.6-3 for the LOS definitions

e. Regulatory Setting.

Congestion Management Program (CMP). In Los Angeles County, the CMP uses ICU intersection analysis methodology to analyze its operations. In June 1990, the passage of the Proposition 111 gas tax increase required urbanized areas in the State with a population of 50,000 or more to adopt a CMP. Metro is the Congestion Management Agency (CMA) for the County. Metro has been charged with the development, monitoring, and biennial updating of Los Angeles County's CMP. The Los Angeles County CMP is intended to address the impact of local growth on the regional transportation system. The CMP Highway System includes specific roadways, including State highways, and CMP arterial monitoring locations/intersections. The CMP is also the vehicle for proposing transportation projects that are eligible to compete for the State gas tax funds.

City of Long Beach General Plan. It is the stated goal of the City to maintain or improve the current ability to move people and goods to and from activity centers while reinforcing the quality of life in their neighborhoods. This goal is supported by the objectives to: (1) maintain traffic and transportation LOS at LOS D, (2) accommodate reasonable, balanced growth, and (3) maintain or enhance our quality of life. The following specific Mobility of People (MOP) policies are included in the Mobility Element of the General Plan.

MOP Policy 1-1	*To improve the performance and visual appearance of Long Beach's streets, design streets holistically using the "complete streets approach" which considers walking, those with mobility constraints, bicyclists, public transit users, and various other modes of mobility in parallel.*
MOP Policy 1-9	*Increase mode shift of transit, pedestrians, and bicycles.*
MOP Policy 1-18	*Focus development densities for residential and nonresidential uses around the eight Metro Blue Line stations within City boundaries.*
MOP Policy 4-1	*Consider effects on overall mobility and various travel modes when evaluating transportation impacts of new developments or infrastructure projects.*
MOP Policy 15-3	*Consider pickup and delivery activities associated with various land uses when approving new development, implementing projects, and improving highways, streets, and bridges.*

Long Beach Municipal Code. Chapter 21.41, Off-Street Parking and Loading requirements of the Long Beach Municipal Code (LBMC) provides parking requirements for development projects within the City. Since the proposed project involves development of new residential uses within the City, which will require adequate parking, the proposed project is subject to the requirements of Chapter 21.41 of the LBMC.

4.6.2 Previous Environmental Review

The Long Beach Downtown Plan EIR (the "Downtown Plan EIR") examined traffic impacts associated with buildout of the Downtown Plan. The Downtown Plan EIR determined that the Downtown Plan would result in significant impacts at 16 intersections and would result in a significant and unavoidable impact. The Downtown Plan EIR determined that the Downtown Plan would not result in any significant impacts related to design hazards or emergency access. For comparison purposes, the project's trip generation potential was compared to the traffic forecast associated with the development potential of the Civic Center area as evaluated in the Downtown Plan EIR Traffic Impact Analysis, dated February 4, 2010. Up to 800 residential units, 460,000 square feet (sf) of office/commercial floor area, 64,000 sf of retail space and 16,000 sf of restaurant uses were assumed and assessed for the Civic Center area in the Downtown Plan EIR traffic analysis.

The project includes the demolition of the former Long Beach Courthouse. The Long Beach Courthouse Demolition Project was studied in a Draft EIR (SCH# 2014051003) that was circulated in October and November of 2014, but was not certified. The Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to conflicts with applicable plans would be less than significant with implementation of mitigation involving the development of a Construction Management Plan.

4.6.3 Impact Analysis

a. Methodology and Significance Thresholds.

Traffic Forecasting Methodology. In order to estimate the traffic impact characteristics of the proposed project, a multi-step process has been utilized. The first step is estimating traffic generation, which includes the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing or expected future travel patterns in the study area. The analysis assumes the future year scenario does not include roadway changes or improvements beyond those proposed by the project.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

Project Traffic Generation. Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the Ninth Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE).

Trip generation rates/equations for ITE Land Use 230: Residential Condominium/Townhouse, ITE Land Use 310: Hotel, ITE Land Use 411: City Park, ITE Land Use 590: Library, ITE Land Use 710: General Office Building, ITE Land Use 820: Shopping Center and ITE Land Use 932: High-Turnover (Sit Down) Restaurant have been applied appropriately to the existing development and proposed project uses.

As shown in Table 4.6-5, the proposed project is forecast to generate 18,582 daily trips, including 1,185 trips (795 inbound, 390 outbound) produced in the a.m. peak hour and 1,668 trips (693 inbound, 975 outbound) produced in the p.m. peak hour on a typical weekday.

For the existing land use, Table 4.6-5 shows that the existing trip generation potential of the current civic center (i.e., City Hall office tower, Main Library and Lincoln Park) totals 7,659 daily trips, with 514 trips (418 inbound, 96 outbound) produced in the a.m. peak hour and 1,116 trips (446 inbound, 670 outbound) produced in the p.m. peak hour.

Comparison of the trips generated by the proposed project to the trip generation potential of existing land uses shows that the implementation of the proposed project would result in an additional 10,923 daily trips, including 671 net a.m. peak hour trips and 552 net p.m. peak hour trips.

Table 4.6-5
Project Trip Generation Forecast

Land Use	Daily	A.M. Peak Hour			P.M. Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
Proposed Project Trip Generation							
Third and Pacific Block							
Residential	1,176	11	56	67	53	25	78
Civic Block							
City Hall and Port Building	5,347	527	72	599	92	447	539
Lincoln Park and New Library Block							
Main Library and Lincoln Park	3,644	90	40	130	277	298	575
Center Block							
Residential	2,821	25	123	148	119	59	178
Hotel	1,552	60	41	101	58	56	114
Retail	3,076	46	28	74	63	69	132
Restaurant	966	36	30	66	31	21	52
Total Proposed Project Trips	**18,582**	**795**	**390**	**1,185**	**693**	**975**	**1,668**
Total Existing Land Use Trips	**7,659**	**418**	**96**	**514**	**446**	**670**	**1,116**
Net Project Trips (Project – Existing)	**10,923**	**377**	**294**	**671**	**247**	**305**	**552**

Source: Linscott, Law and Greenspan July 2015; see Appendix E for full TIA report. Trip calculations include reductions for transit, internal capture, mixed-use, and pass by trips, where applicable.

Project Traffic Distribution and Assignment. Figures 4.6-3a illustrates the general, directional traffic distribution pattern for the existing civic center uses, whereas Figures 4.6-3b through 4.6-3f present the trip distribution patterns for various components of the proposed project. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

- *Location of site access points in relation to the surrounding street system*
- *The site's proximity to major traffic carriers and regional access routes*
- *Physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns*

- *Presence of traffic congestion in the surrounding vicinity*
- *Ingress/egress availability at the project's parking structures, including turn restrictions to and from Ocean Boulevard*

The a.m. and p.m. peak hour traffic volumes associated with the current civic center uses are presented in Figures 4.6-2a and 4.6-2b, respectively. The anticipated a.m. and p.m. peak hour project traffic volumes associated with the proposed project are presented in Figures 4.6-4a and 4.6-4b, respectively. The traffic volume assignments presented in Figures 4.6-2a and 4.6-2b above reflect the traffic distribution characteristics for the existing development and the traffic generation potential presented in Table 4.6-5.

The project's traffic volume forecasts illustrated in Figures 4.6-4a and 4.6-4b reflect the traffic distribution characteristics of the proposed project as shown in Figures 4.6-3b through 4.6-3f below and the project traffic generation potential presented in Table 4.6-5.

Figures 4.6-5a and 4.6-5b present projected a.m. and p.m. peak hour traffic volumes at the ten key study intersections with the addition of the trips generated by the proposed project to existing traffic volumes, respectively.

Future Traffic Conditions.

Ambient Traffic Growth. Cumulative traffic growth estimates were calculated using an ambient growth factor. The ambient traffic growth factor is intended to include unknown and future cumulative projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent per year. Applying this factor to existing Year 2015 traffic volumes results in a five percent increase of growth in existing volumes in horizon year 2020.

The ambient growth factor is generally consistent with the background traffic growth estimates contained in the most current Congestion Management Program for Los Angeles County. In addition, the one percent per year ambient growth factor was approved by City of Long Beach staff.

Cumulative Projects Traffic Characteristics. In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed project, the status of other known development projects (cumulative projects) in the area has been researched. With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. There are twelve cumulative projects within a two-mile radius of the project site that are located in the City of Long Beach. These cumulative projects have either been built, but not yet fully occupied, or are being processed for approval and have been included as part of the cumulative background setting. These cumulative projects are described in Section 3, *Environmental Setting*.

Table 4.6-6 presents the development totals and resultant trip generation for the twelve cumulative projects. As shown in Table 4.6-6, the twelve cumulative projects are expected to generate a combined total of 13,513 daily trips, including 891 a.m. peak hour trips (251 inbound and 640 outbound) and 1,306 p.m. peak hour trips (761 inbound and 545 outbound) on a typical weekday.

Table 4.6-6
Cumulative Projects Traffic Generation Forecast[1]

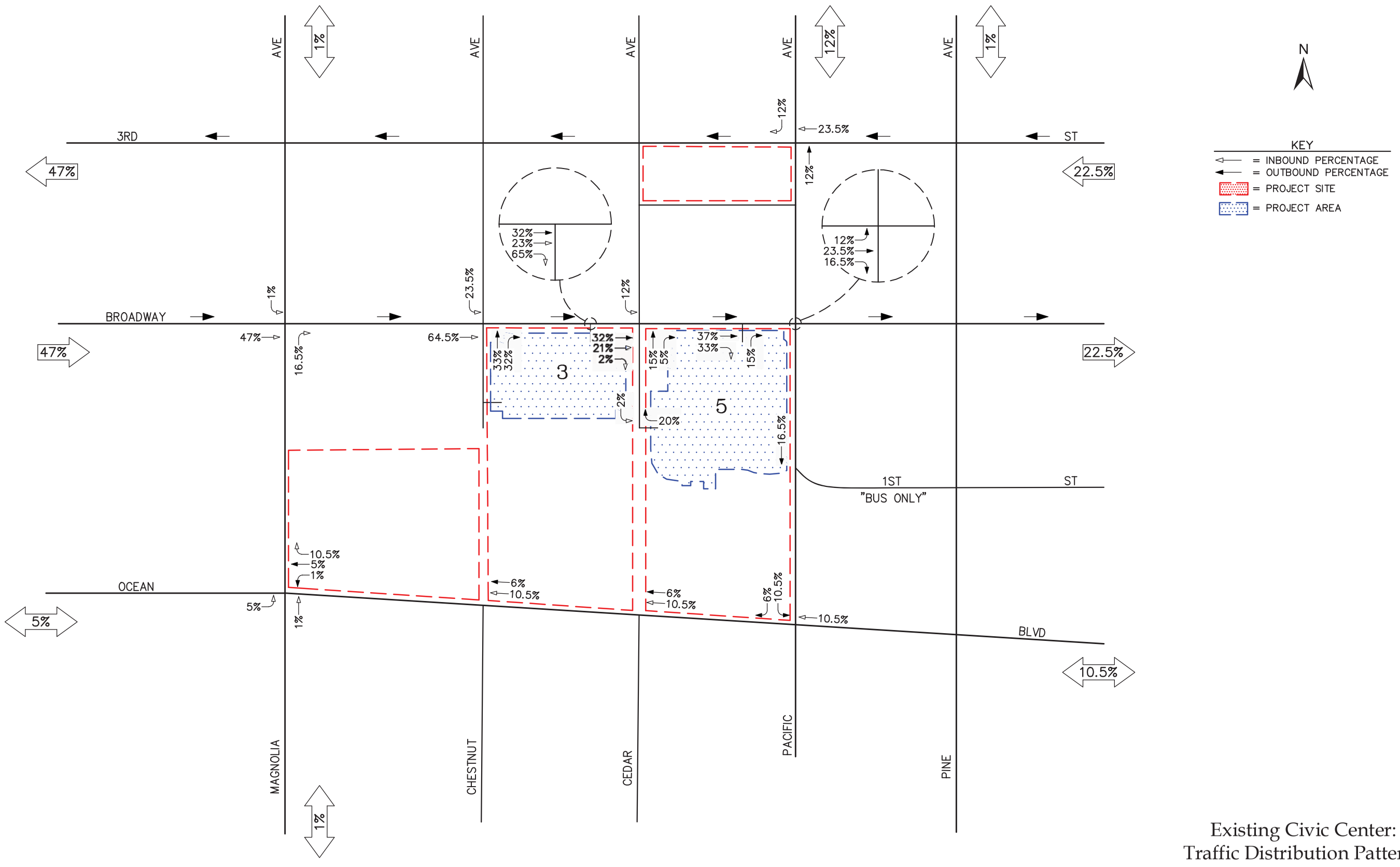
#	Cumulative Project Description	Daily 2-way	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
1	207 East Seaside Way Apartments[2]	751	11	47	58	45	25	70
2	Silversands	652	16	30	46	31	22	53
3	Mixed-Use Project	220	4	10	14	12	9	21
4	City Hall East	1,192	18	65	83	69	41	110
5	Ocean Center Building Reuse	1,247	41	59	100	60	38	98
6	Oceanaire Residential Project[3]	1,436	22	89	111	86	48	134
7	The Pike Outlet Conversion Project	2,266	41	22	63	85	124	209
8	442 West Ocean Boulevard Apratments[4]	632	10	38	48	38	21	59
9	SRG 1st Alamitos Development	922	13	52	65	52	28	80
10	200 W. Ocean Boulevard	801	12	40	52	43	26	69
11	City Ventures Development	232	3	15	18	14	7	21
12	Shoreline Gateway[5]	4,381	60	173	233	226	156	382
Total Cumulative Projects Trip Generation Potential		**14,732**	**251**	**640**	**891**	**761**	**545**	**1,306**

Source: LLG, TIA, July 2015.
[1]Source: Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE).
[2]Source: 207 East Seaside Way Apartments Project Traffic Impact Analysis, prepared by LLG Irvine.
[3]Source: Oceanaire Apartments Traffic Impact Analysis, prepared by Michael Baker International.
[4]Source: 442 West Ocean Boulevard Apartments Project Traffic Impact Analysis, prepared by LLG Irvine.
[5]Trip Generation forecast based on the approach published in the City of Long Beach Shoreline Gateway EIR Traffic Impact Study, June 2006, prepared by MMA. Project Development Totals based on information provided by the City of Long Beach.

The a.m. and p.m. peak hour traffic volumes associated with the twelve cumulative projects are presented in Figures 4.6-6a and 4.6-6b above, respectively.

Year 2020 Traffic Volumes. Figures 4.6-7a and 4.6-7b present future a.m. and p.m. peak hour cumulative traffic volumes at the ten (10) key study intersections for the Year 2020, respectively. The cumulative traffic volumes represent the accumulation of existing traffic, ambient growth traffic and cumulative projects traffic.

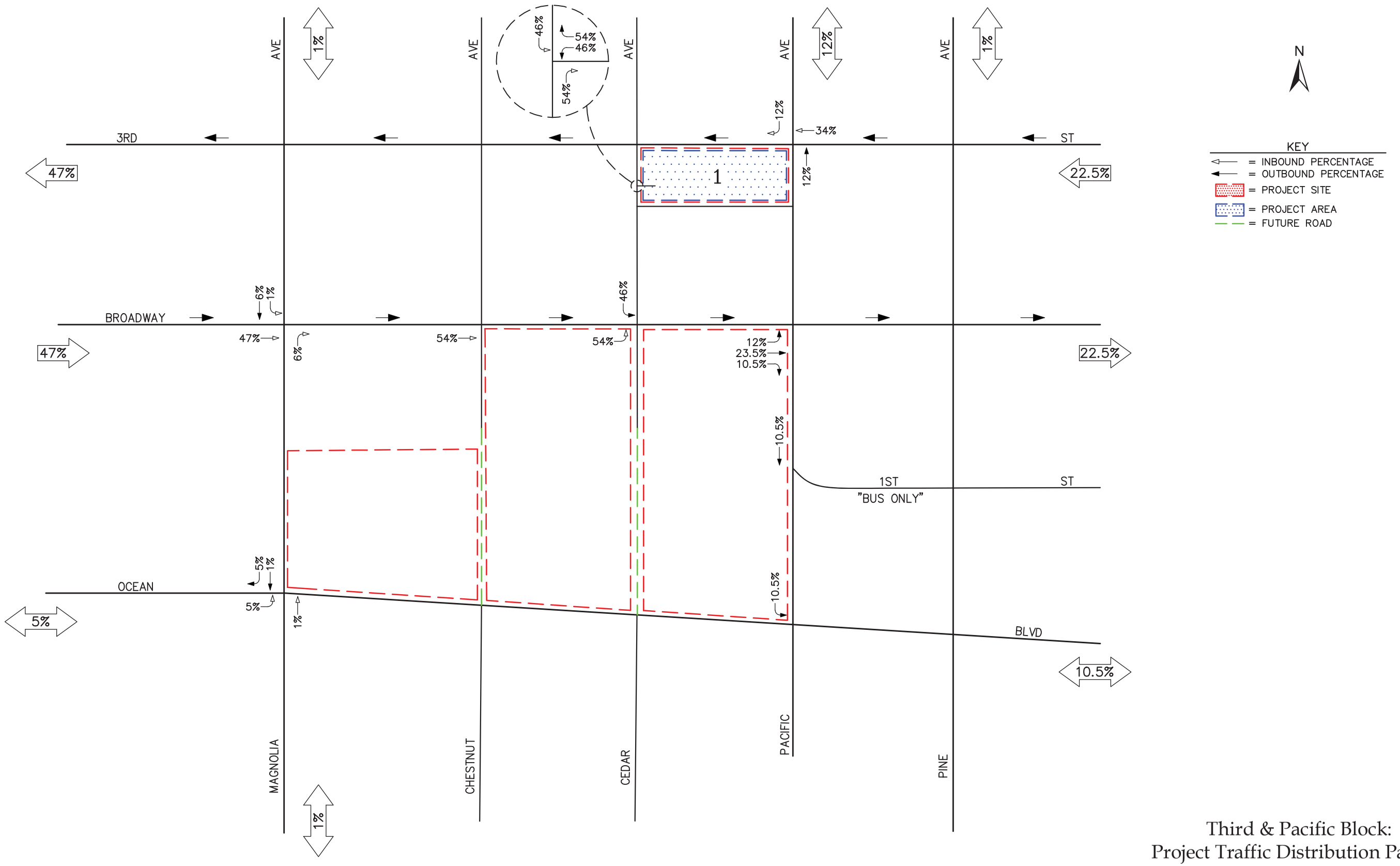
Figures 4.6-8a and 4.6-8b illustrate Year 2020 forecast a.m. and p.m. peak hour traffic volumes with the inclusion of the trips generated by the proposed project.



Existing Civic Center:
Traffic Distribution Patterns

Source: Linscott, Law & Greenspan, 2015

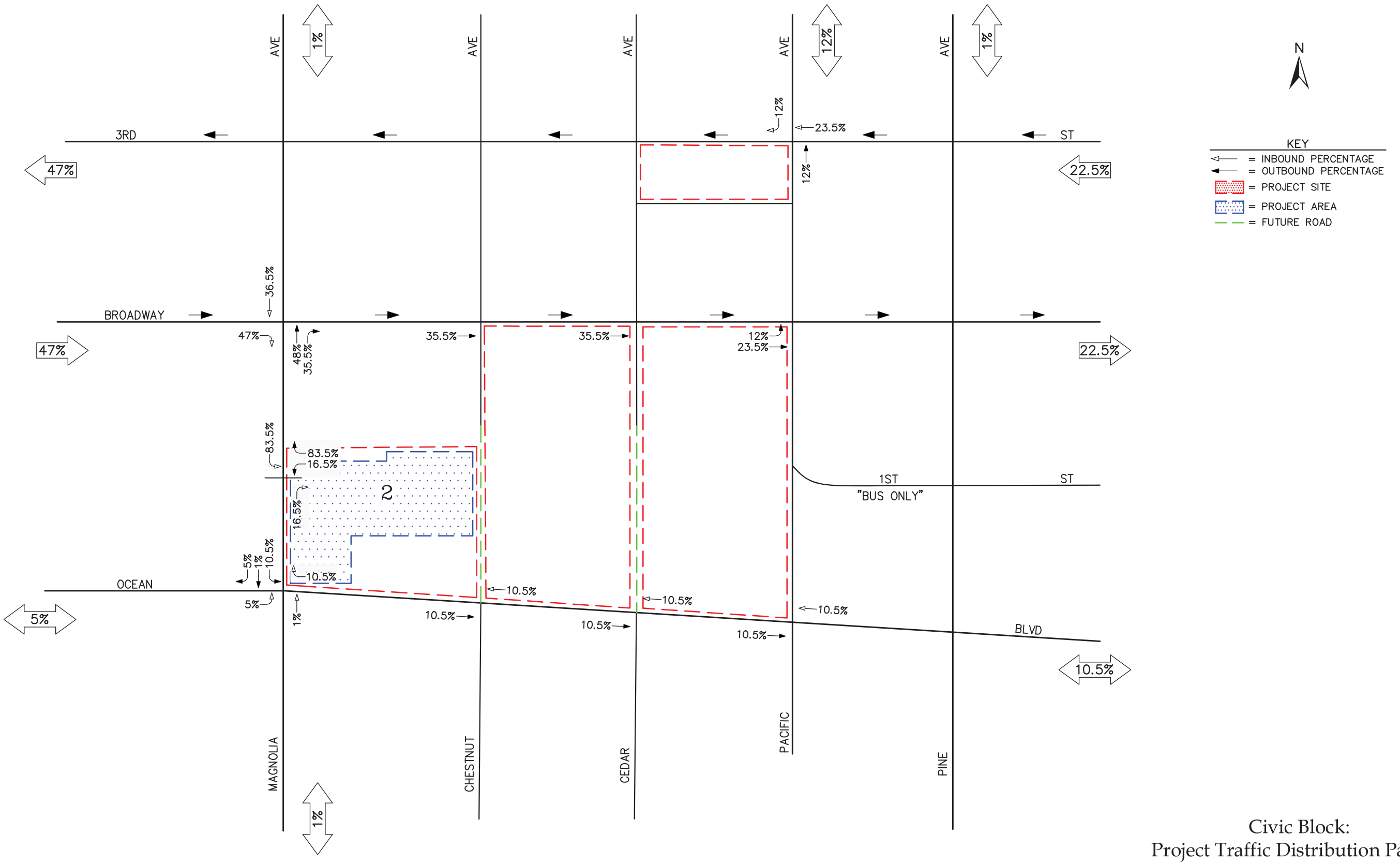
Figure 4.6-3a



Third & Pacific Block:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

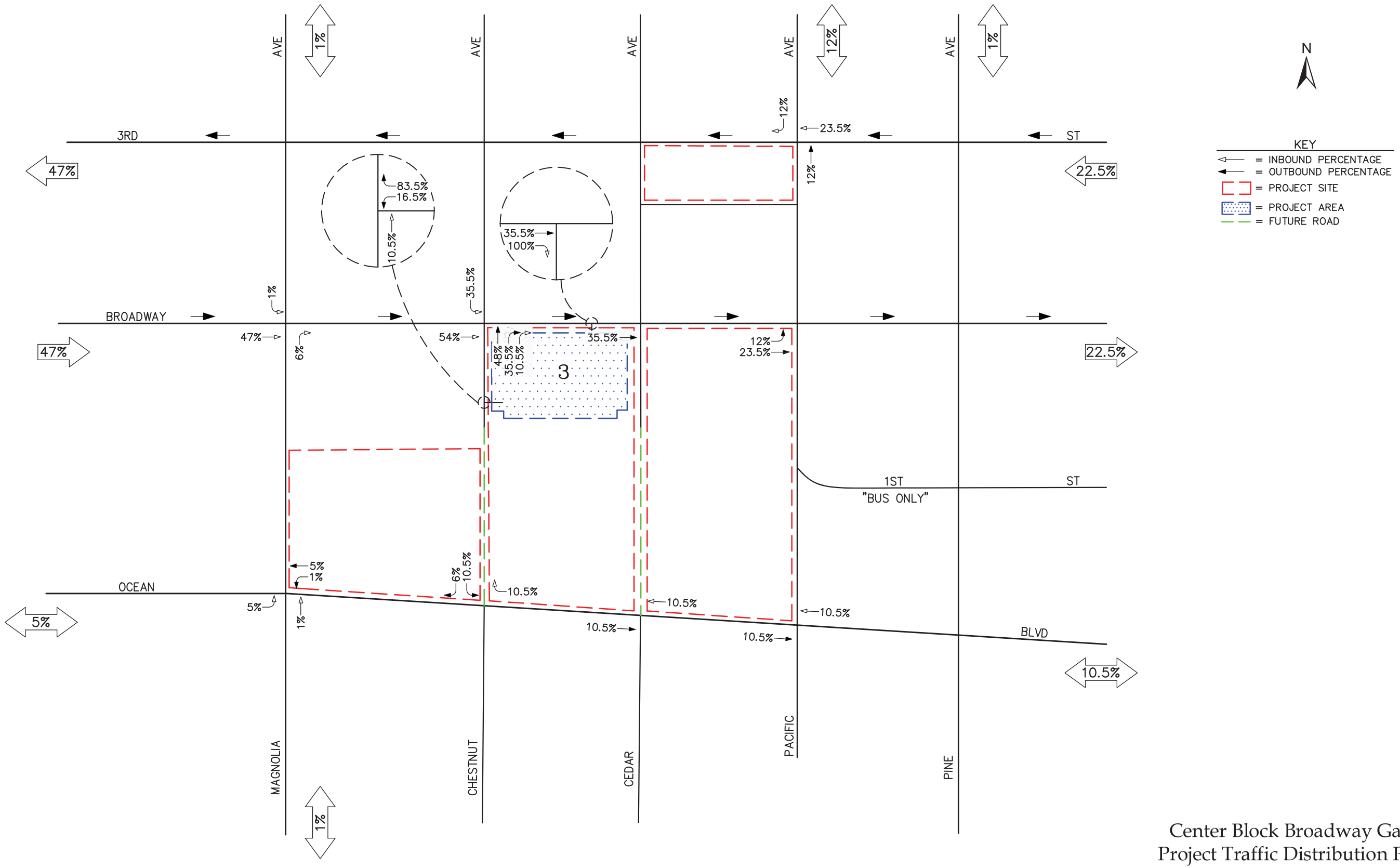
Figure 4.6-3b



Civic Block:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

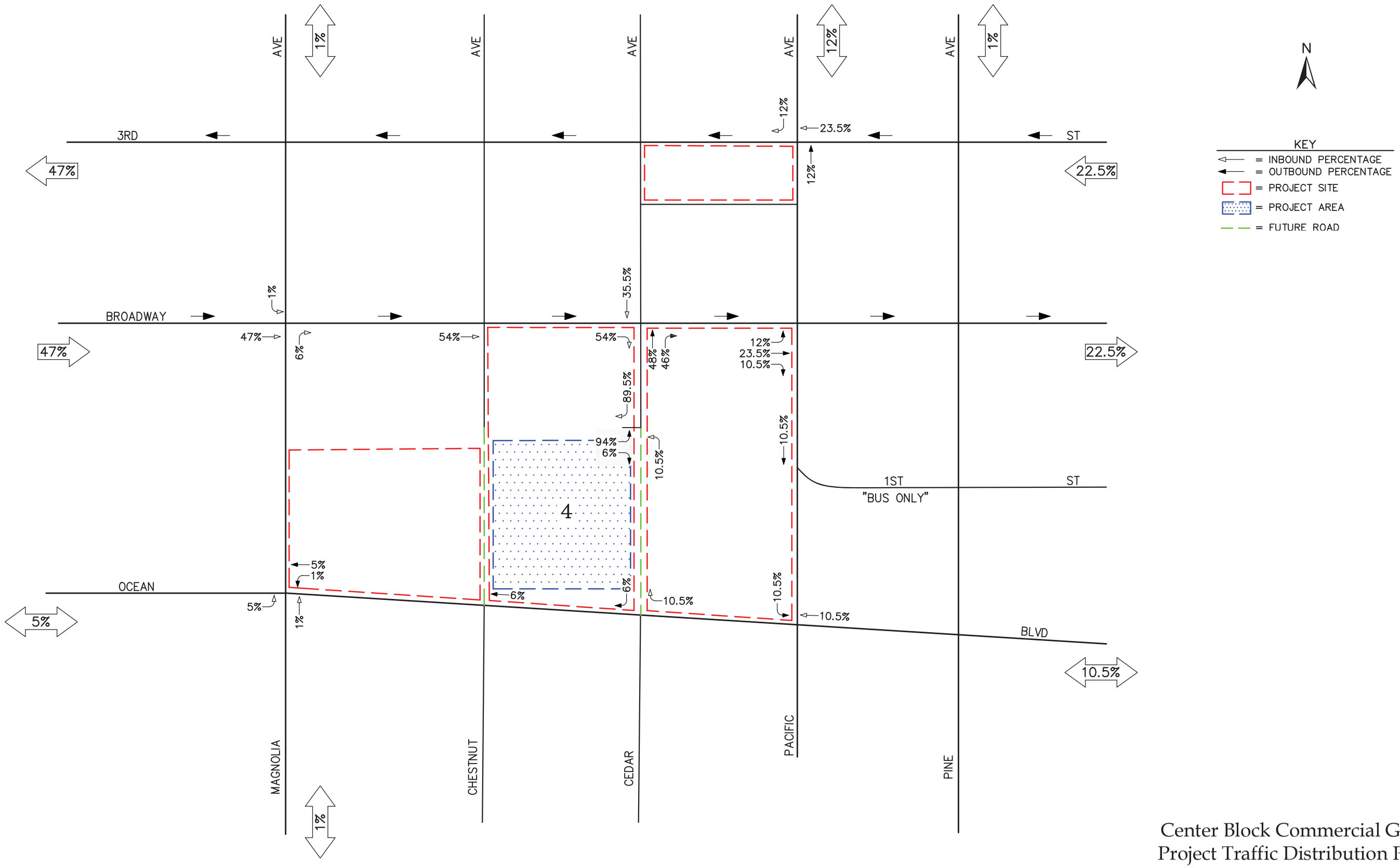
Figure 4.6-3c



Center Block Broadway Garage:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

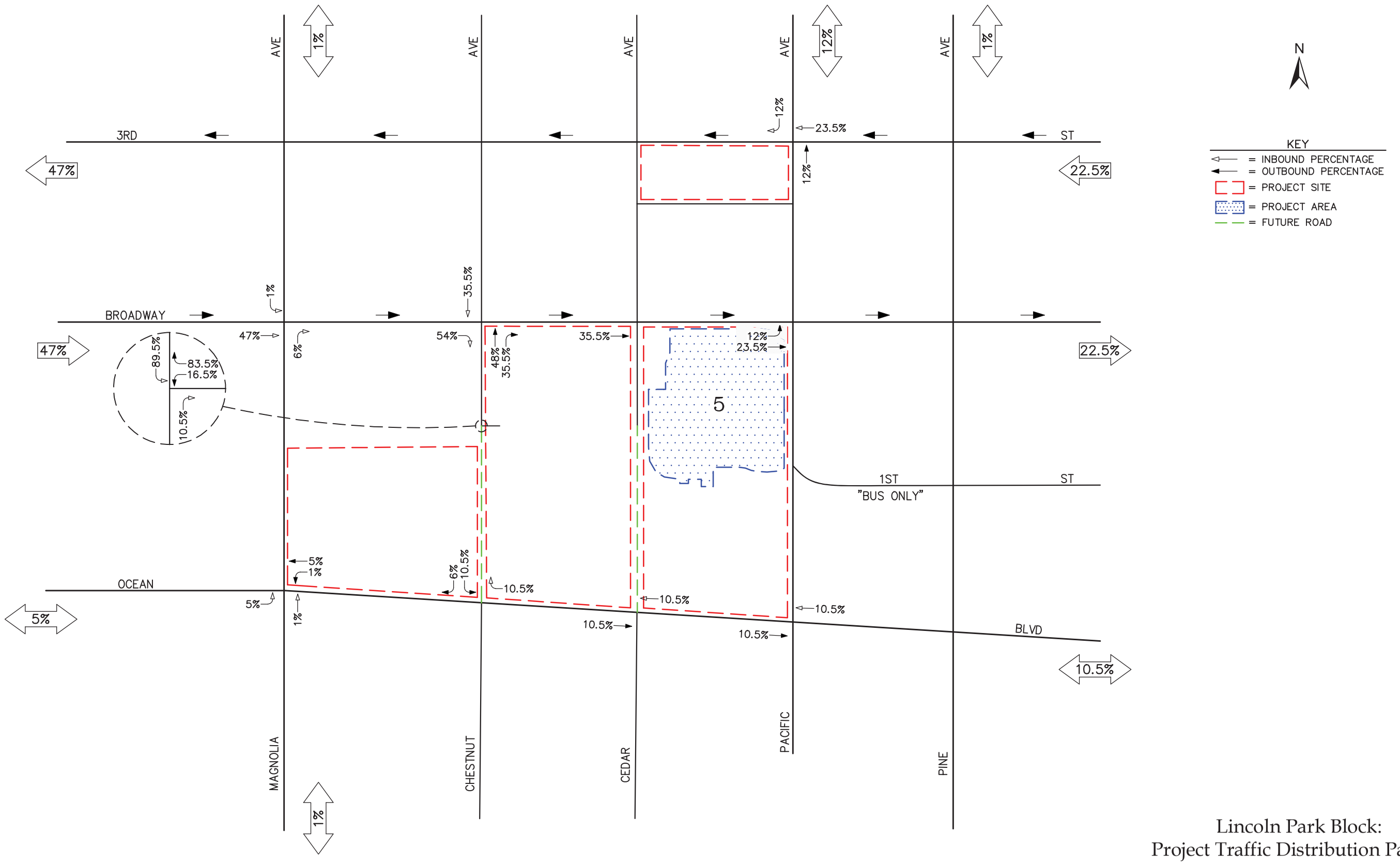
Figure 4.6-3d



Center Block Commercial Garage:
Project Traffic Distribution Pattern

Source: Linscott, Law & Greenspan, 2015

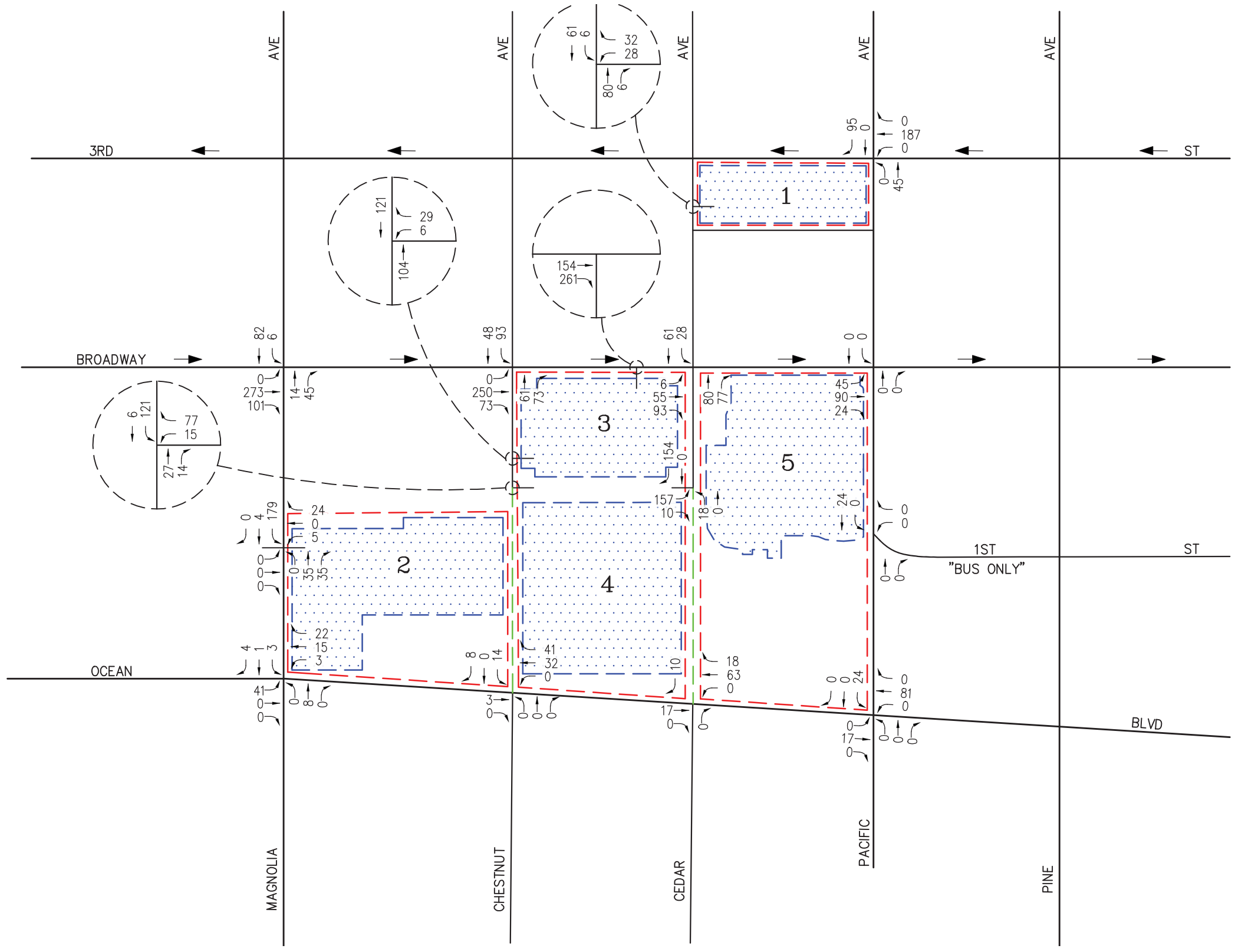
Figure 4.6-3e



Lincoln Park Block:
Project Traffic Distribution Pattern

Figure 4.6-3f

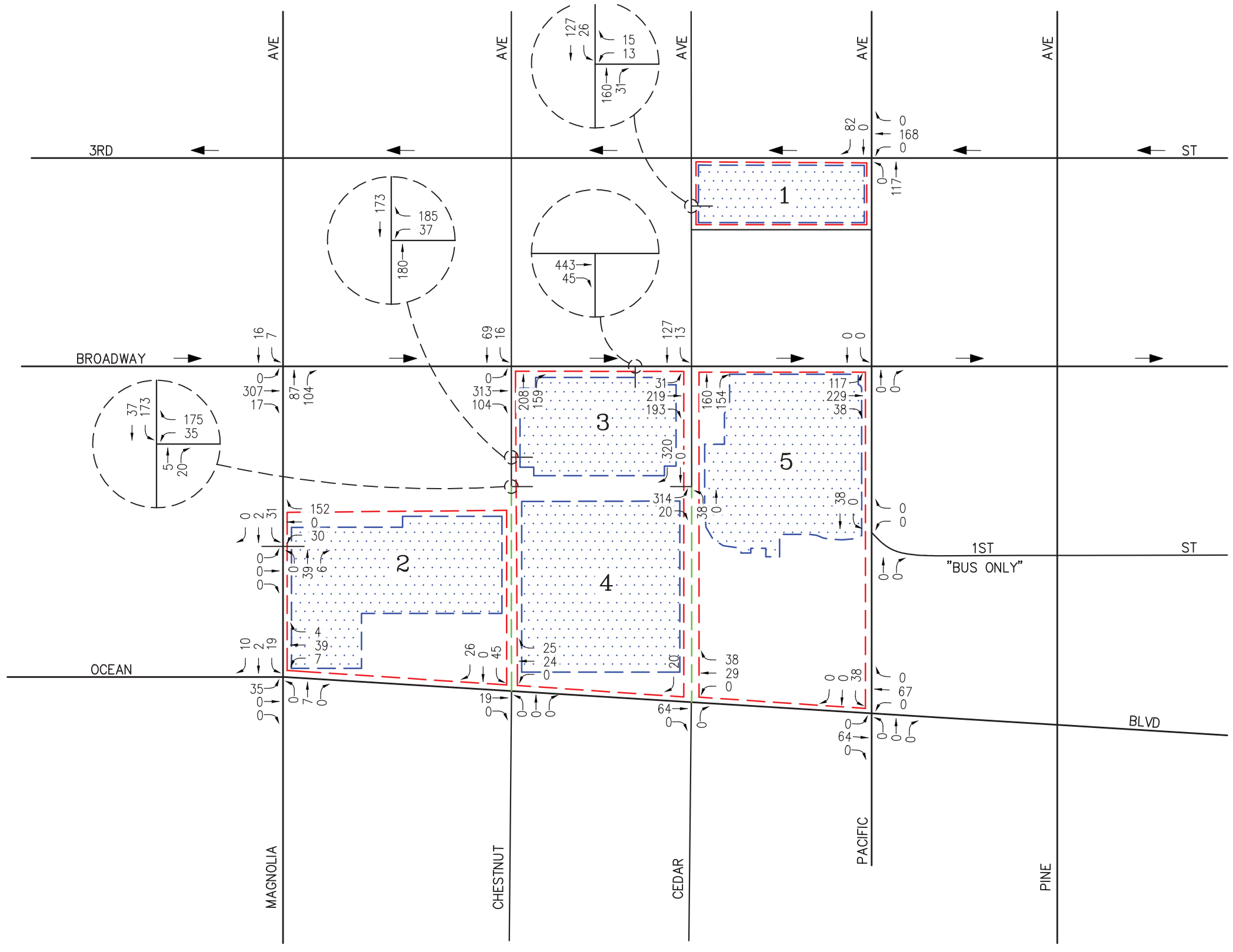
Source: Linscott, Law & Greenspan, 2015



A.M. Peak Hour Project Traffic Volumes

Figure 4.6-4a

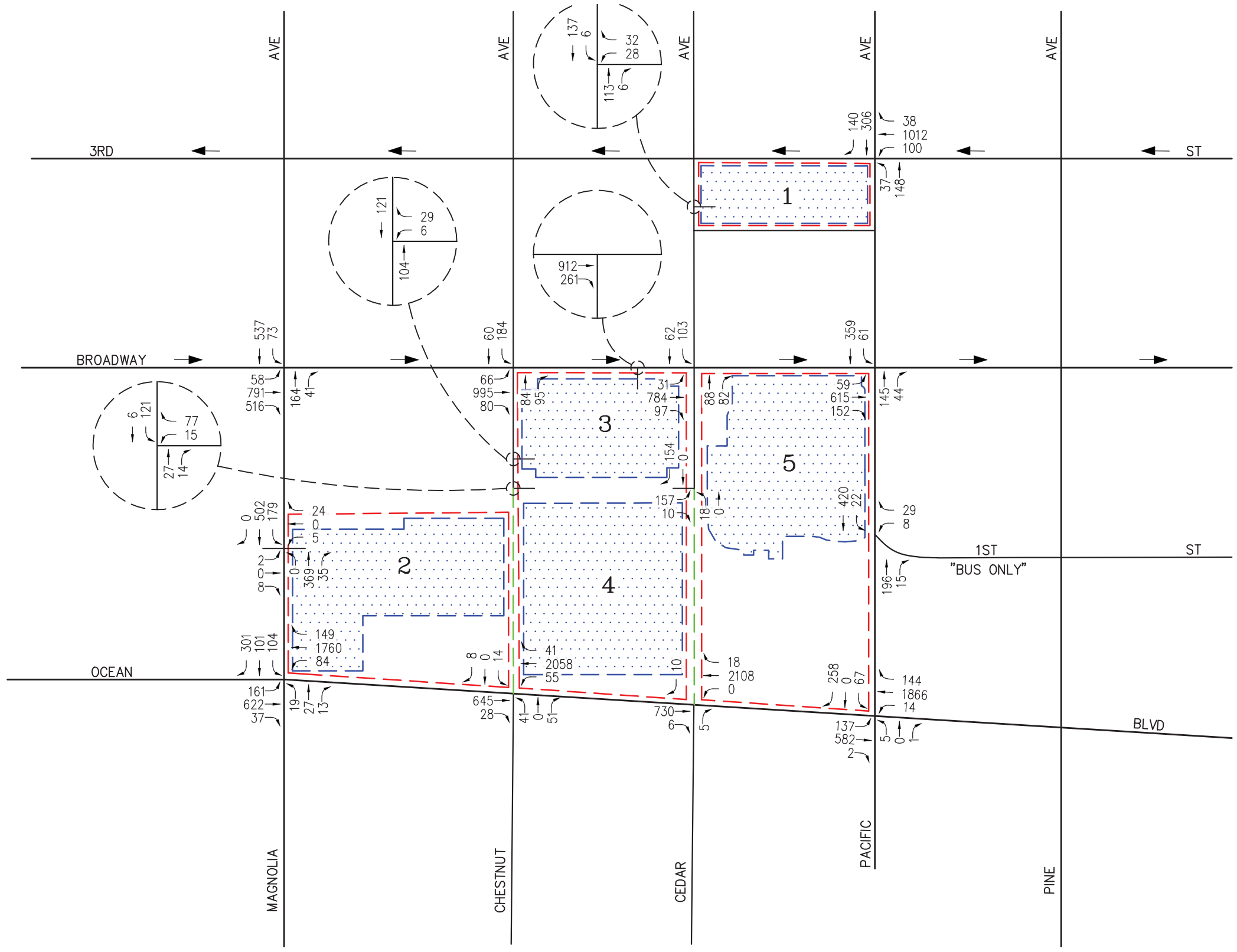
Source: Linscott, Law & Greenspan, 2015



P.M. Peak Hour Project
Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

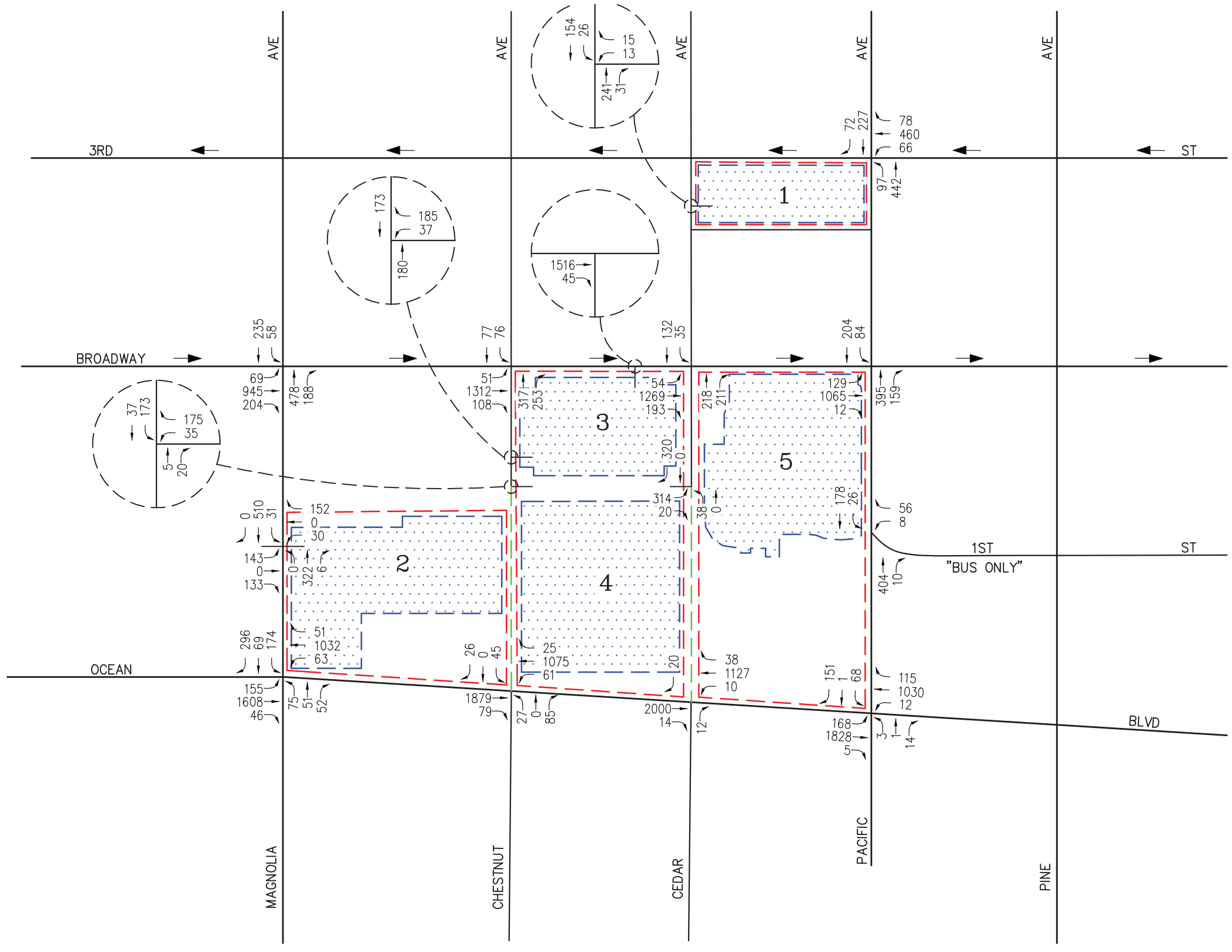
Figure 4.6-4b



Existing Plus Project A.M. Peak Hour Traffic Volumes

Figure 4.6-5a

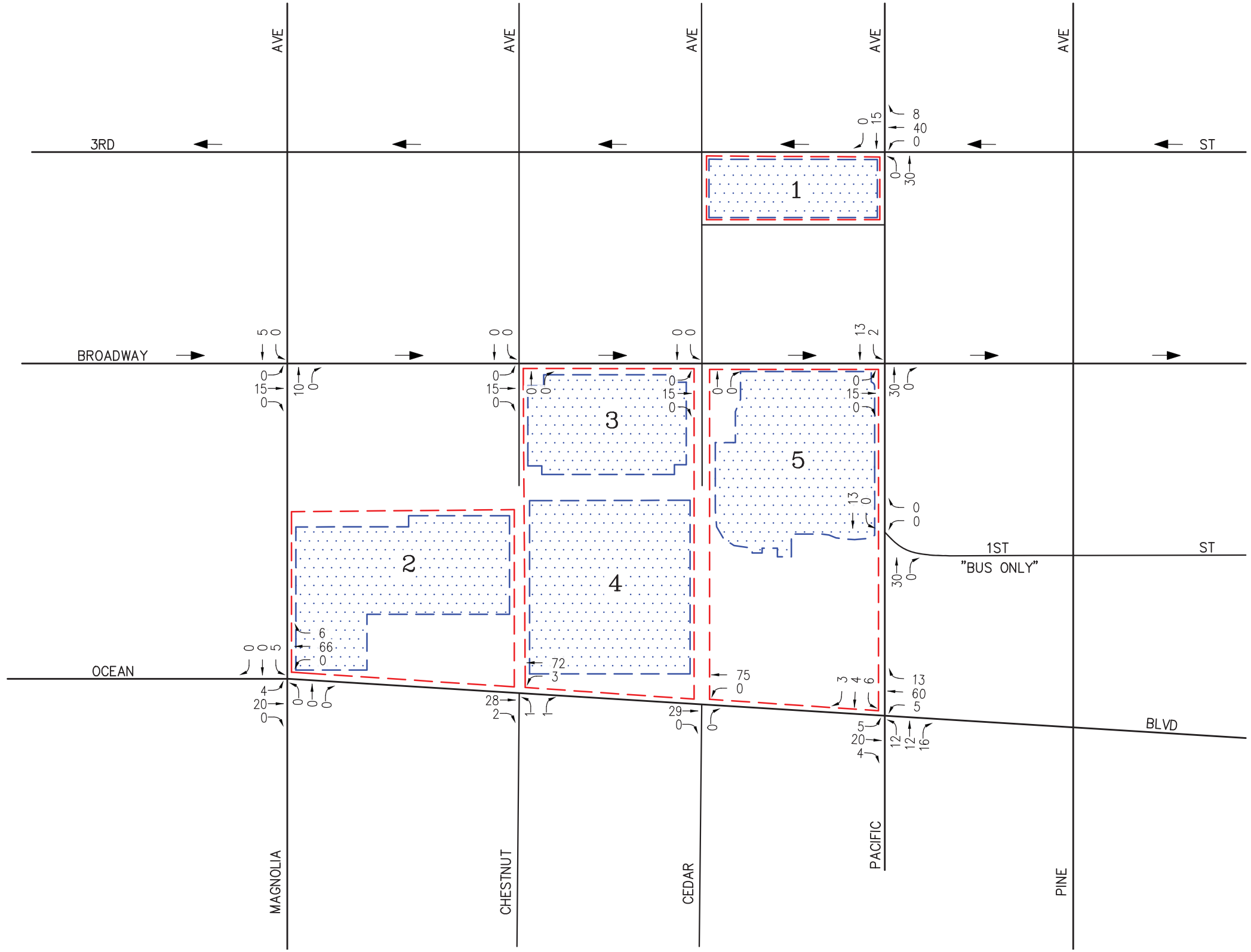
Source: Linscott, Law & Greenspan, 2015



Existing Plus Project P.M. Peak Hour Traffic Volumes

Figure 4.6-5b

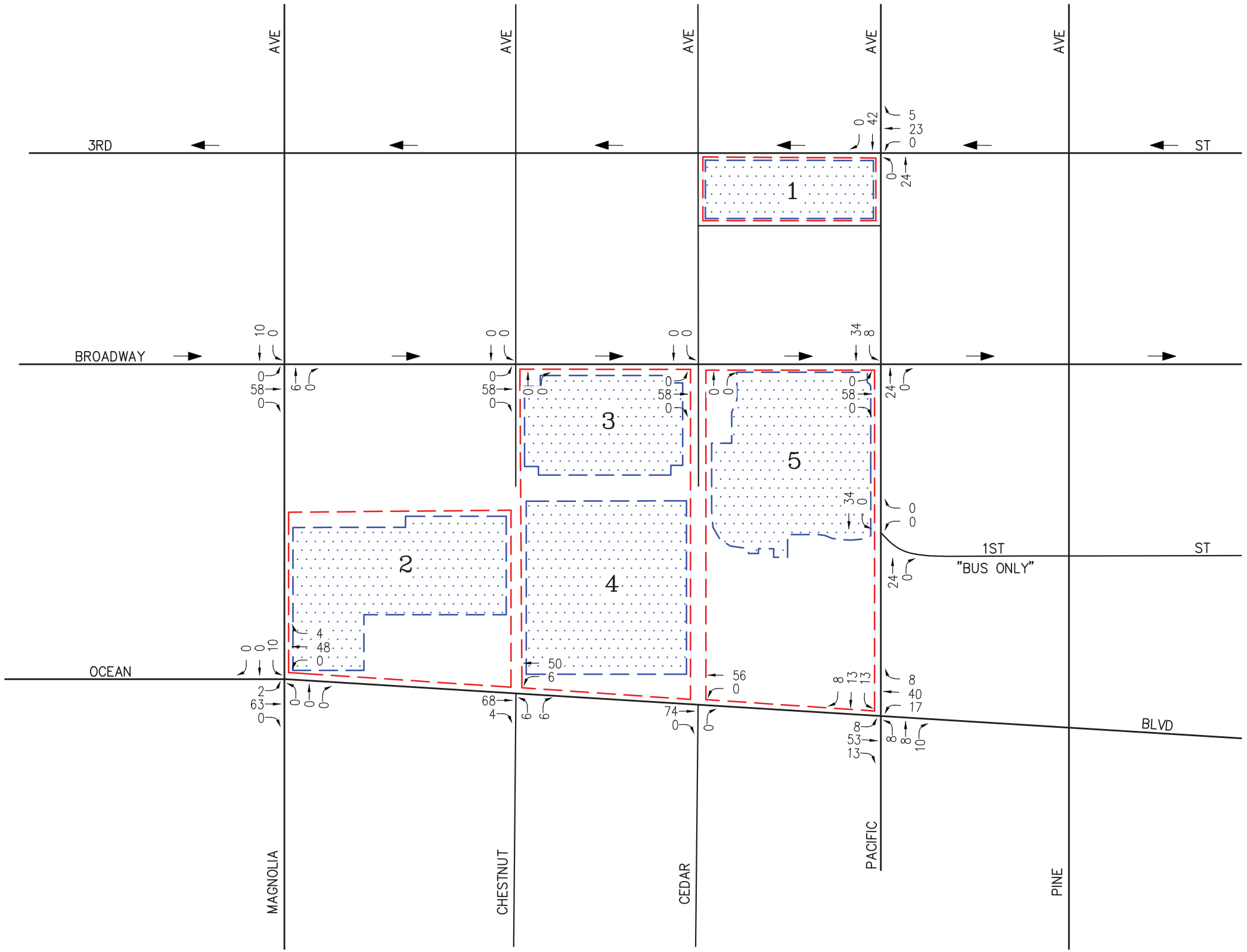
Source: Linscott, Law & Greenspan, 2015



A.M. Peak Hour Cumulative Traffic Volumes

Figure 4.6-6a

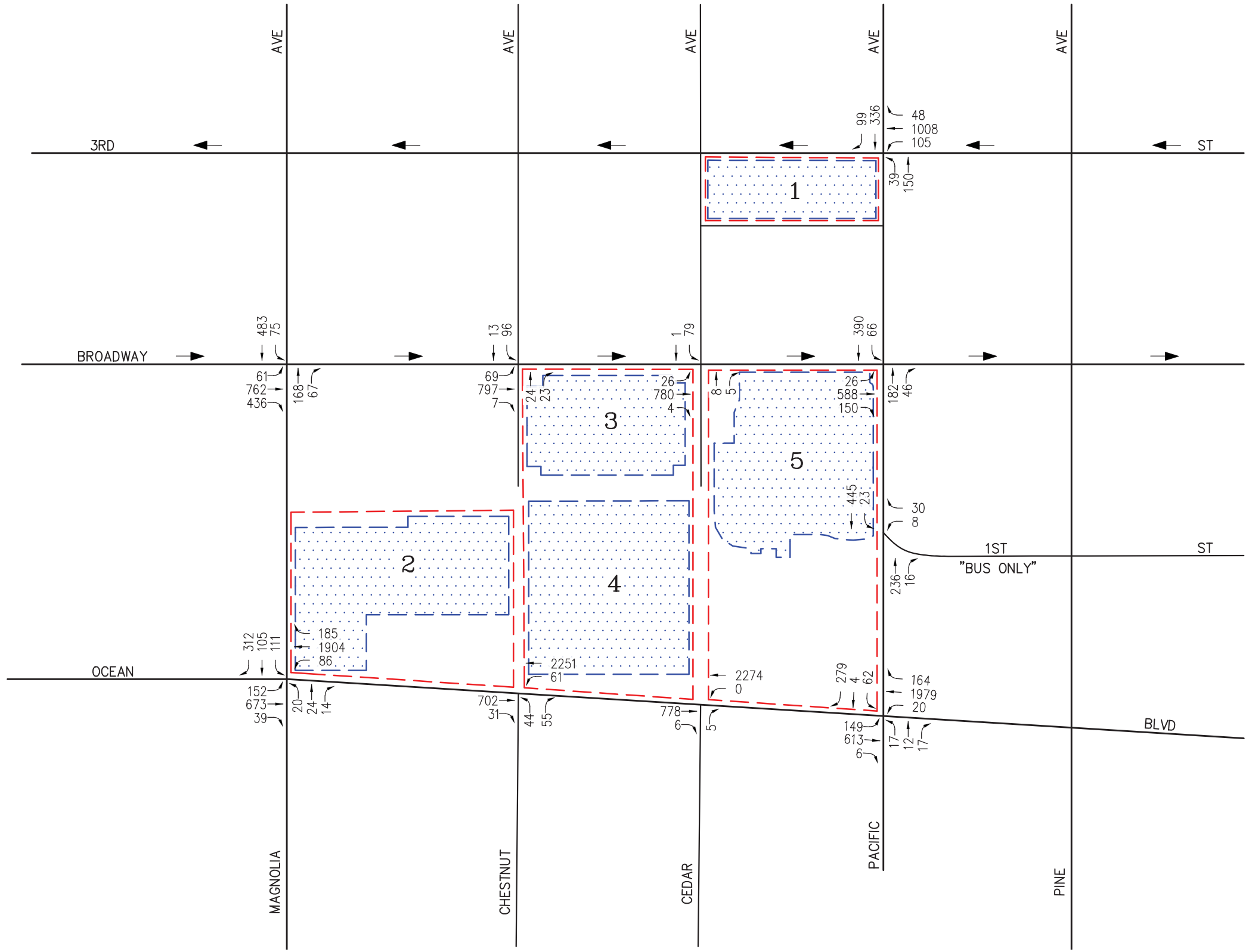
Source: Linscott, Law & Greenspan, 2015



P.M. Peak Hour Cumulative Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

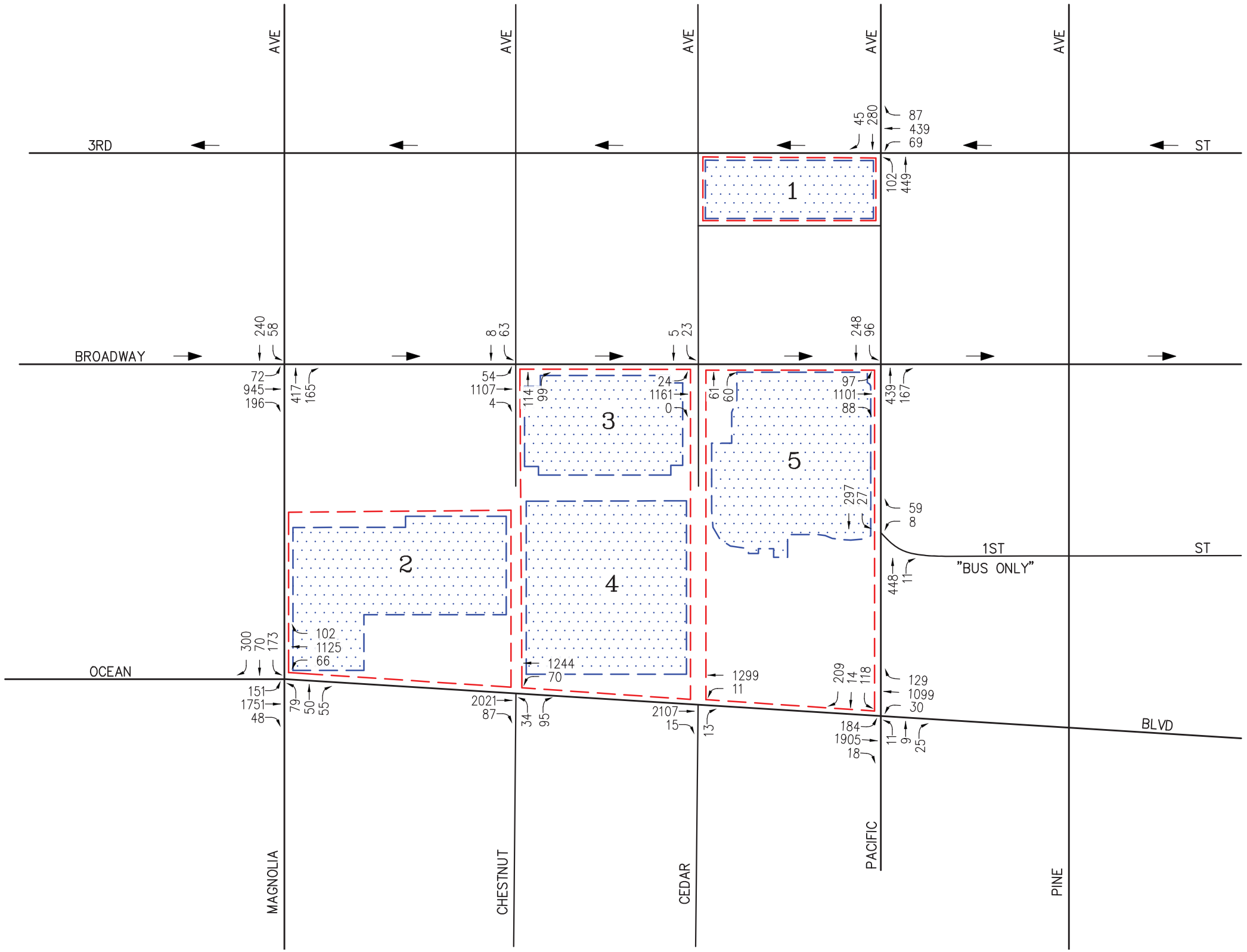
Figure 4.6-6b



Year 2020 Cumulative
A.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

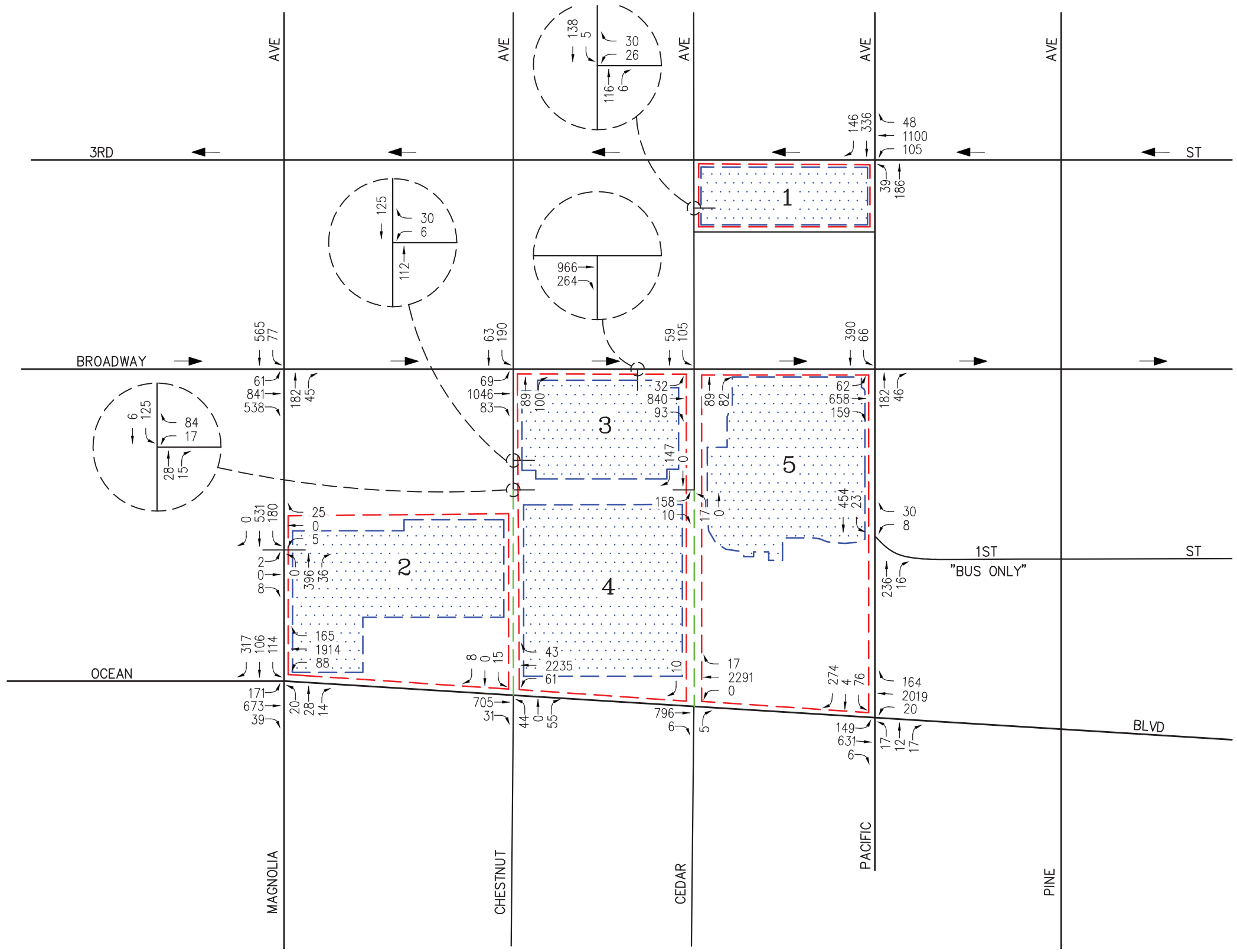
Figure 4.6-7a



Year 2020 Cumulative
P.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-7b



KEY

= PROJECT AREA
= PARKING LOCATIONS
= FUTURE ROAD

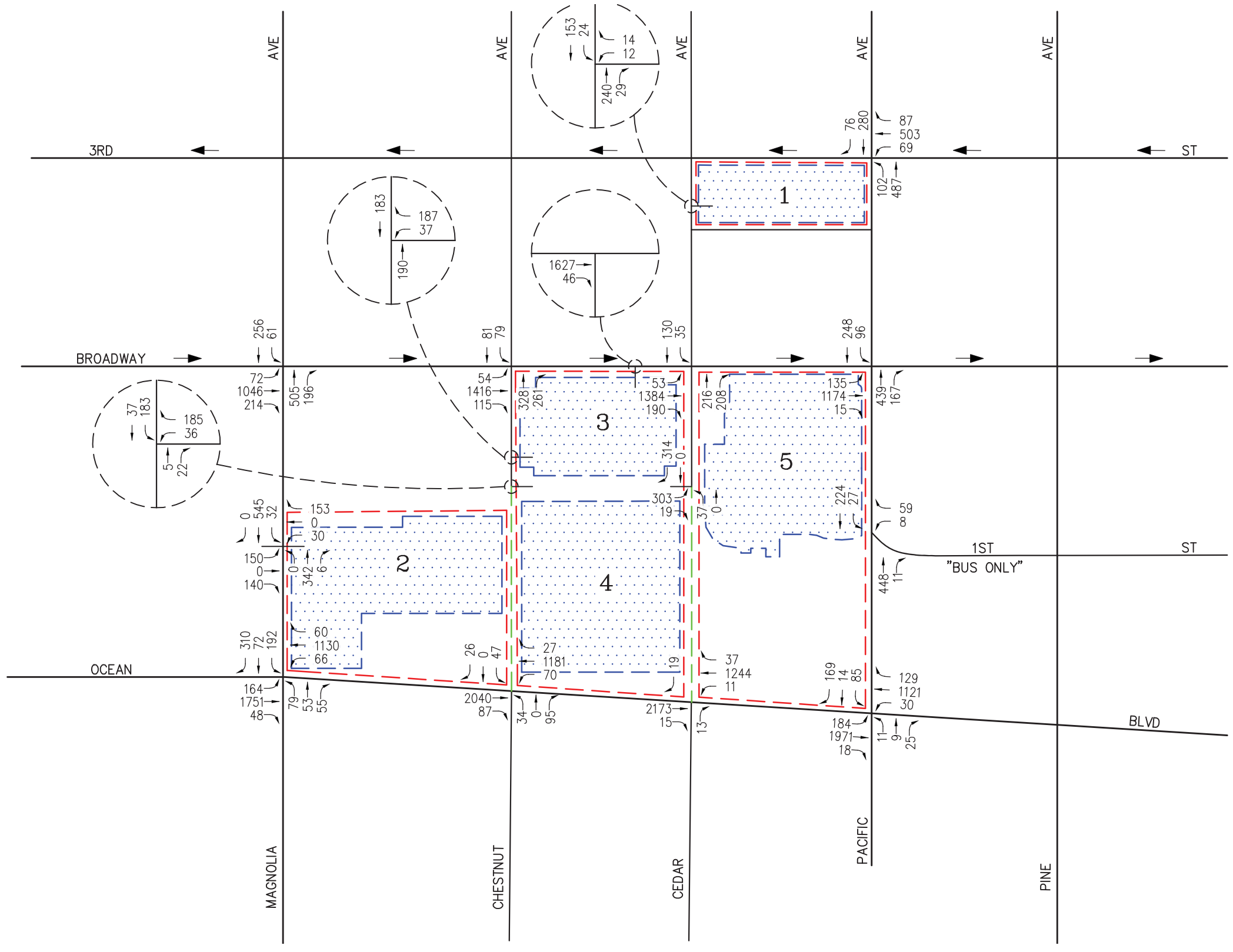
1 = THIRD & PACIFIC BLOCK RESIDENTIAL PARKING
2 = CIVIC CENTER BLOCK PARKING
3 = CENTER BLOCK BROADWAY PARKING GARAGE
4 = CENTER BLOCK COMMERCIAL PARKING GARAGE
5 = LINCOLN PARK BLOCK PARKING GARAGE

N

Year 2020 Cumulative Plus Project
A.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-8a



Year 2020 Cumulative Plus Project
P.M. Peak Hour Traffic Volumes

Source: Linscott, Law & Greenspan, 2015

Figure 4.6-8b

Significance Thresholds. Impacts related to transportation and circulation would be potentially significant if development facilitated by the proposed project would:

- *Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of a circulation system, taking into account all modes of transportation, including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit*
- *Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways*
- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks*
- *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
- *Result in inadequate emergency access*
- *Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities*

The intersections of Alamitos Avenue with Seventh Street and with Ocean Boulevard are the only Downtown Plan Area intersections that are CMP arterial monitoring locations (Los Angeles County Metropolitan Transportation Authority, 2010). Both CMP arterial monitoring locations within the Downtown Plan Area are outside the project study area. The Downtown Plan Final EIR identified unavoidably significant impacts at both locations, but traffic generated by the proposed project is less than what was considered in the Downtown Plan Final EIR. Therefore, the proposed project would not create any new impact related to the Los Angeles County CMP beyond what was identified in the Downtown Plan Final EIR.

According the City of Long Beach, impacts to intersections are considered significant if:

- *An unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained; and*
- *The project increases traffic demand at the study intersection by 2% of capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU > 0.901). At unsignalized intersections, a "significant" adverse traffic impact is defined as a project that: adds 2% or more traffic delay (seconds per vehicle) at an intersection operating LOS E or F.*

The Initial Study for the proposed project (Appendix A) determined that the following issues are less than significant and, therefore, thresholds related to these topics are not discussed further in this SEIR:

- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks*
- *Result in inadequate emergency access*
- *Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities*

Regarding adopted alternative transportation plans, the Downtown Plan EIR determined that the Downtown Plan would have no impact with regard to alternative transportation. The proposed project is within the parameters of the Downtown Plan. Therefore, the Civic Center Project would not result in any new significant impacts to alternative transportation plans or increase the severity of significant impacts to alternative transportation plans beyond those identified in the Downtown Plan EIR.

Traffic Impact Analysis Scenarios. The following scenarios are those for which V/C calculations have been performed using the ICU/HCM methodologies:

1. *Existing Traffic Conditions;*
2. *Existing Plus Project Traffic Conditions;*
3. *Existing Plus Project Traffic Conditions with Improvements, if necessary;*
4. *Year 2020 Cumulative Traffic Conditions;*
5. *Year 2020 Cumulative Plus Project Traffic Conditions; and*
6. *Year 2020 Cumulative Plus Project Traffic Conditions with Improvements, if necessary.*

b. Project Impacts and Mitigation Measures.

Threshold	*Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of a circulation system, taking into account all modes of transportation, including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit;*
Quantitative Threshold	*An unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained*
Quantitative Threshold	*The project increases traffic demand at the study intersection by 2% of capacity (ICU increase ≥ 0.020), causing or worsening LOS E or F (ICU > 0.901). At unsignalized intersections, a "significant" adverse traffic impact is defined as a project that: adds 2% or more traffic delay (seconds per vehicle) at an intersection operating LOS E or F.*

Impact T-1 **Implementation of the proposed project would increase traffic on the surrounding street network. The Downtown Plan EIR determined that buildout of the Downtown Plan would result in Class I, significant and unavoidable traffic impacts. The proposed project would contribute to this impact; however, project-generated traffic would not cause any intersection to exceed City standards under existing plus project traffic conditions. Impacts associated with the proposed project would be Class III, *less than significant*.**

Table 4.6-7 summarizes the peak hour LOS results at the study intersections for existing plus project traffic conditions. Under existing conditions, all ten intersections operate at acceptable LOS C or better during the a.m. and p.m. peak hours. As shown in Table 4.6-7, traffic associated with the proposed project would not significantly impact any of the ten intersections, as all ten intersections would continue to operate at acceptable LOS D or better during the a.m. and p.m. peak hours with the addition of project generated traffic to existing traffic. Therefore, the impacts to local intersections would be less than significant under existing plus project traffic conditions.

Table 4.6-7
Existing Plus Project Conditions for Study Intersections

Key Intersection	Time Period	Existing Traffic Conditions		Existing Plus Project Traffic Conditions			
		ICU/HCM	LOS	ICU/HCM	LOS	Increase	Significant Impact?[1] (<LOS D)
1. Magnolia Avenue at Broadway	a.m.	0.502	A	0.591	A	0.089	No
	p.m.	0.570	A	0.640	B	0.070	No
2. Chestnut Avenue at Broadway	a.m.	0.432	A	0.626	B	0.194	No
	p.m.	0.553	A	0.847	D	0.294	No
3. Cedar Avenue at Broadway	a.m.	0.432	A	0.581	A	0.149	No
	p.m.	0.531	A	0.843	D	0.312	No
4. Pacific Avenue at Broadway	a.m.	0.478	A	0.502	A	0.024	No
	p.m.	0.663	B	0.663	B	0.000	No
5. Magnolia Avenue at Ocean Boulevard	a.m.	0.770	C	0.787	C	0.017	No
	p.m.	0.730	C	0.736	C	0.006	No
6. Chestnut Avenue at Ocean Boulevard	a.m.	0.564	A	0.584	A	0.020	No
	p.m.	0.595	A	0.645	B	0.050	No
7. Cedar Avenue at Ocean Boulevard	a.m.	9.7 s/v	A	14.7 s/v	B	5.0 s/v	No
	p.m.	17.2 s/v	C	18.0 s/v	C	0.8 s/v	No
8. Pacific Avenue at Ocean Boulevard	a.m.	0.689	B	0.694	B	0.005	No
	p.m.	0.559	A	0.562	A	0.003	No
9. Pacific Avenue at Third Street	a.m.	0.569	A	0.598	A	0.029	No
	p.m.	0.430	A	0.457	A	0.027	No
10. Pacific Avenue at First Street	a.m.	0.302	A	0.304	A	0.002	No
	p.m.	0.336	A	0.336	A	0.000	No

Source: LLG, July 2015; see Appendix E for full TIA report.

s/v = seconds per vehicle, LOS = Level of Service

[1] According the City of Long Beach, impacts to intersections are considered significant if an unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained.

Mitigation Measures. Mitigation would not be required.

Significance After Mitigation. Impacts would be less than significant without mitigation. Nonetheless, Downtown Plan EIR Mitigation Measure Traf-1(a) includes implementing transit facilities and programs to encourage public transit usage and development of Transportation Demand Management Policies. Downtown Plan EIR Mitigation Measures AQ-2(a) includes measures to require commercial development to promote a ride-share program for employees, and secure bicycle parking areas, which would apply to the proposed project. These measures would further reduce the project's traffic generation.

Threshold	*Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Impact T-2 The proposed project does not include any hazardous design features. Impacts associated with the proposed project would be Class III, *less than significant*.

Access to the project site could result in hazardous design features, if project driveways operate at LOS that would prevent motorists from entering and exiting the project site safely. The proposed project will provide three new parking garages which also includes a new

subterranean garage below the proposed City Hall and Port Building. Vehicular access for the proposed project includes the following:

- ***Civic Block:*** *Primary access to the Civic Block subterranean parking structure will be provided from Magnolia Avenue (Project Driveway F). Access to the existing Broadway garage will continue to be provided by an ingress-only driveway on Broadway (Project Driveway B) as well as an egress-only driveway along Chestnut (Project Driveway C).*
- ***Center Block:*** *A new subterranean parking structure will be constructed, with primary vehicular access provided by the future extension of Cedar Avenue between Broadway and Ocean Boulevard (Project Driveway E).*
- ***Lincoln Park and New Library Block:*** *Access to the existing Lincoln garage will continue to be provided from the Cedar Avenue and Pacific Avenue access ramps in the interim, but will ultimately be served by the "Lincoln Alley" (Project Driveway D).*
- ***Third and Pacific Block:*** *Access to the site's parking garage will be provided from Cedar Avenue (Project Driveway A).*

Table 4.6-8 summarizes the Year 2020 cumulative plus peak hour level of service results for the six project driveways. The project driveways are forecast to operate at an acceptable LOS C or better during the a.m. and p.m. peak hours in the Year 2020. As such, motorists entering and exiting the project site would be able to do so comfortably, safely, and without undue congestion. Therefore, the proposed project would have a less than significant impact on access to the project site or surrounding properties.

Table 4.6-8
Year 2020 Cumulative Plus Project
Driveway Peak Hour Levels of Service Summary

Driveway	Control Type	Time Period	HCM (s/v)	LOS
A. Cedar Avenue at Project Driveway A	One-Way Stop	a.m. p.m.	9.7 10.8	A B
B. Project Driveway B at Broadway	Uncontrolled Ingress Only	a.m. p.m.	-- --	-- --
C. Chestnut Avenue at Project Driveway C	One-Way Stop	a.m. p.m.	9.0 10.2	A B
D. Chestnut Avenue at Project Driveway D	One-Way Stop	a.m. p.m.	9.2 10.1	A B
E. Cedar Avenue at Project Driveway E	One-Way Stop	a.m. p.m.	9.4 11.0	A B
F. Magnolia Avenue at Project Driveway F	Two-Way Stop	a.m. p.m.	12.0 21.4	B C

Source: LLG, July 2015; see Appendix E for full TIA report.
s/v = seconds per vehicle (delay), LOS = Level of Service

Mitigation Measures. Mitigation would not be required.

Significance After Mitigation. Impacts would be less than significant without mitigation.

b. Cumulative Impacts. Cumulative development within the project area would cause increases in traffic on area roadways. Section 3, Environmental Setting, describes planned and pending projects in the vicinity of the project site. Table 4.6-9 summarizes existing, cumulative, and cumulative plus project intersection capacities. Table 4.6-9 indicates that all ten intersections are forecast to operate at an acceptable LOS D or better during the a.m. and p.m. peak hour with the addition of ambient traffic growth and cumulative development. Therefore, the project's impact to local intersections would be less than significant under Year 2020 cumulative traffic conditions.

Table 4.6-9
Year 2020 Cumulative Plus Project Peak Hour Intersection Capacity Analysis Summary

Key Intersection	Time Period	Existing Conditions		Year 2020 Cumulative (No Project) Conditions		Year 2020 Cumulative Plus Project Conditions		Project Increase	Significant Impact?[1] (< LOSD)
		ICU/ HCM	LOS	ICU/ HCM	LOS	ICU/ HCM	LOS		
1. Magnolia Avenue at Boradway	a.m. p.m.	0.502 0.570	A A	0.523 0.613	A B	0.613 0.684	B B	0.090 0.071	No No
2. Chestnut Avenue at Broadway	a.m. p.m.	0.432 0.553	A A	0.450 0.591	A A	0.644 0.884	B D	0.194 0.293	No No
3. Cedar Avenue at Broadway	a.m. p.m.	0.432 0.531	A A	0.450 0.568	A A	0.600 0.880	A D	0.150 0.312	No No
4. Pacific Avenue at Broadway	a.m. p.m.	0.478 0.663	A B	0.503 0.719	A C	0.527 0.719	A C	0.024 0.000	No No
5. Magnolia Avenue at Ocean Boulevard	a.m. p.m.	0.770 0.730	C C	0.819 0.773	D C	0.836 0.779	D C	0.017 0.006	No No
6. Chestnut Avenue at Ocean Boulevard	a.m. p.m.	0.564 0.595	A A	0.603 0.642	B B	0.623 0.692	B B	0.020 0.050	No No
7. Cedar Avenue at Ocean Boulevard	a.m. p.m.	9.7 s/v 17.2s/v	A C	9.9 s/v 19.4 s/v	A C	15.7 s/v 20.3 s/v	C C	5.8s/v 0.9s/v	No No
8. Pacific Avenue at Ocean Boulevard	a.m. p.m.	0.689 0.559	B A	0.755 0.629	C B	0.761 0.632	C B	0.006 0.003	No No
9. Pacific Avenue at Third Street	a.m. p.m.	0.569 0.430	A A	0.609 0.466	B A	0.638 0.486	B A	0.029 0.020	No No
10. Pacific Avenue at First Street	a.m. p.m.	0.302 0.306	A A	0.313 0.352	A A	0.316 0.352	A A	0.003 0.000	No No

Source: LLG, July 2015; see Appendix E for full TIA report.

s/v = seconds per vehicle, LOS = Level of Service

[1] According the City of Long Beach, impacts to intersections are considered significant if an unacceptable peak hour Level of Service (LOS) (i.e. LOS E or F) at any of the intersections is projected. The City of Long Beach considers LOS D (ICU = 0.801 - 0.900) to be the minimum acceptable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS D (i.e. LOS E or F), should also be maintained.

5 OTHER CEQA-REQUIRED DISCUSSIONS

This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the project.

5.1 GROWTH INDUCEMENT

Section 15126(d) of the *CEQA Guidelines* requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is therefore considered significant if it could result in significant physical effects in one or more environmental issue areas.

5.1.1 Population Growth

The proposed project would add up to 780 residential units in Downtown Long Beach. The current population of Long Beach is 472,779 and the City has approximately 2.82 persons per household (California Department of Finance, 2015). Development of the proposed project would therefore add an estimated 2,200 residents (780 dwelling units x 2.82 people/dwelling unit), thus increasing the City's population to 474,979. The Southern California Association of Government's (SCAG) population growth forecast for Long Beach is 491,000 in 2020 and 534,100 in 2035 (SCAG RTP-SCS, 2012a). According to the City's General Plan Housing Element, realization of future housing development potential (7,270 new dwelling units by 2021) would result in an increase in the City's population of 20,501 persons, for a total population of 490,793 in 2021. Consequently, the population increase generated by the proposed project would not exceed SCAG or City of Long Beach citywide population forecasts.

As discussed in Section 3.0, *Environmental Setting*, planned and pending development within the City would add approximately 1,187 new residential units to the City. Based on the estimate of 2.82 persons per household, cumulative development within the City (including the proposed project) would add 5,547 people (1,187 units x 2.82 people/unit + 2,200 residents for proposed project) bringing the total population to 478,326 (472,779 + 5,547). This would not exceed SCAG's 2020 population projection for Long Beach of 491,000 or the Long Beach General Plan Housing Element's population projection of 490,793 by 2021.

5.1.2 Economic Growth

The project would generate temporary employment opportunities during construction, which would be expected to draw workers from the existing regional work force. Therefore, construction of the project would not be considered growth-inducing from a temporary employment standpoint.

The proposed project involves 240,000 gross square feet (gsf) of office space for the Port Building, 270,000 gsf of office space for City Hall staff and elected officials, a new 92,000 gsf library, 32,000 gsf of retail space, 8,000 gsf of restaurant space, and an estimated 290,400 gsf for a 200-room hotel. Of these uses, the retail space, restaurant space, and hotel would generate new

jobs. The Port Building, City Hall, and library would accommodate existing jobs that would be relocated to the new facilities. Table 5-1 shows the estimated jobs generated by the other proposed uses.

Table 5-1
New Employees Accommodated by Proposed Project

Land Use	Area (sf)	Area (acres)	Employees per Acre	Total Employees
Retail	32,000	0.73	18.86	14
Restaurant[1]	8,000	0.18	25.76	5
Hotel	290,400	6.67	51.91	346
			Total	**365**

Source: Table C-1, Range of Employment Densities (Employees Per Acre) by County (Southern California Association of Governments (SCAG), Employment Density Study Summary Report, October 31, 2001).
[1] Employee rate for "Other Retail/Services" in SCAG Table C-1 was used, as "Restaurant" is not listed.

The proposed project would generate an estimated 2,200 new residents and 365 new jobs in Long Beach. This would contribute to economic growth. The additional population would likely contribute to the local economy as demand for general goods increases, which in turn could result in economic growth for various sectors. Nevertheless, the proposed project would not be expected to induce economic expansion to the extent that significant environmental impacts directly associated with the project's contribution would occur.

The Southern California Association of Government estimated employment (jobs) in the City to be 168,100 in 2008. SCAG's employment growth forecast for Long Beach is 176,000 in 2020 and 184,800 in 2035 (SCAG, 2012a). Therefore, jobs are expected to increase in the City by approximately 7,900 between 2008 and 2020 and approximately 16,700 between 2008 and 2035. Consequently, the employment increase generated by the proposed project would account for approximately 4.6 percent of job growth between 2008 and 2020 and would not exceed SCAG employment forecasts.

5.1.3 Removal of Obstacles to Growth

The project site is located in a fully urbanized area that is well served by existing infrastructure. Existing utilities in Long Beach would be adequate to serve the proposed project. The project would be served by the Sanitation Districts of Los Angeles County (LACSD), with wastewater going to the Joint Water Pollution Control Plan (JWPCP). The JWPCP has the capacity to treat 400 million gallons per day (mgd) and currently processes an average flow of ~~263.4~~263.1 mgd (LACSD, ~~May 14~~September 23, 2015 ~~NOP~~ NOA Response; see ~~Appendix A~~Section 8.0, *Response to Comments*). This existing wastewater infrastructure would be adequate to serve the proposed project and no capacity expansion would be necessary. Potable water is served by the Long Beach Water Department. As discussed in Section XVII, *Utilities and Service Systems,* and IX, *Hydrology and Water Quality,* of the Initial Study, the proposed project is well served by existing infrastructure. The existing infrastructure would be adequate and no capacity expansion would be necessary to serve the project.

The proposed project would include the extension of Chestnut Avenue and Cedar Avenue through the project site. However, these roads would connect existing roads in an urban environment and would not provide for any substantial capacity increasing transportation or circulation improvements. Because the project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.2 IRREVERSIBLE ENVIRONMENTAL EFFECTS

The *CEQA Guidelines* require that EIRs evaluating projects involving amendments to public plans, ordinances, or policies contain a discussion of significant irreversible environmental changes. CEQA also requires decision makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

The proposed project would redevelop an urban area within the City of Long Beach. No previously undeveloped land would be converted for the project. Construction and operation of the project would irreversibly commit construction materials and non-renewable energy resources. The project would involve the use of building materials and energy, some of which are non-renewable resources. Consumption of these resources would occur with any development in the region and are not unique to the project. The increased intensity of residential, office, and commercial development would also irreversibly increase local demand for non-renewable energy resources such as petroleum products and natural gas. However, increasingly efficient building design and automobile engines are expected to offset this demand to some degree. In addition, the proposed project would be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The project is required to exceed Title 24 standards that are in effect at the time of development by 20 percent and to achieve a 25 percent reduction in electricity use through such measures as photovoltaic cells in compliance with Downtown Area Plan EIR Mitigation Measure AQ-2.

The project would require a commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section XIV, *Public Services,* and Section XVII, *Utilities and Service Systems* of the Initial Study, impacts to these service systems would be less than significant.

Primary impacts related to consumption of non-renewable and slowly renewable resources would be less than significant because the proposed project would not use unusual amounts of energy or construction materials, as development would be primarily comprised of residential uses, office space, and retail space. Consumption of these resources would occur with any development in the region and are not unique to the proposed project. Additional vehicle trips associated with the proposed project would incrementally increase local traffic and regional air pollutant and greenhouse gas emissions as discussed in Sections 4.2, *Air Quality,* Section 4.4, *Greenhouse Gas Emissions,* and Section 4.6, *Transportation and Traffic*. Impacts resulting from

traffic generated by future development would be less than significant or would be less than significant with mitigation incorporated.

The project would contribute to significant and unavoidable impacts previously identified in the Downtown Plan EIR. The Downtown Plan EIR determined that operational emissions associated with buildout of the Downtown Plan would result in a significant and unavoidable impact. Operation of the project would generate reactive organic gas (ROG) emissions that would exceed South Coast Air Quality Management District (SCAQMD) operational significance thresholds and contribute to this impact. In addition, the Downtown Plan EIR determined that implementation of the Downtown Plan could result in exposure of receptors to short- and long-term emissions of toxic air contaminants (TACs) from onsite and offsite stationary and mobile sources; this impact was determined by the Downtown Plan EIR to be significant and unavoidable. The project would place residential uses within the Downtown Plan Area, contributing to this significant and unavoidable impact. Furthermore, the Downtown Plan EIR determined that implementation of the Downtown Plan would result in significant and unavoidable cumulative air quality impacts. As development of the project site was anticipated in the Downtown Plan EIR, the project would contribute to the Downtown Plan's cumulative air quality impacts and would be significant and unavoidable.

The project would result in a significant and unavoidable impact to cultural resources. Construction of the project would involve the demolition of the Old Courthouse and the Long Beach City Hall-Library Complex, which have been identified as historical resources for the purposes of CEQA. Demolition of these buildings would contribute to the significant and unavoidable impact identified in the Downtown Plan EIR.

Lastly, construction activities associated with the project would generate noise that could exceed City of Long Beach standards at existing receptors; this impact would be significant and unavoidable. In addition, construction activities could subject nearby residents to excessive levels of ground-borne vibration. The Downtown Plan EIR and Long Beach Courthouse Demolition Project Draft EIR determined that impacts related to construction-generated vibration would be significant and unavoidable. The project would contribute to the significant and unavoidable impact identified by the Downtown Plan EIR.

5.3 ENERGY EFFECTS

The *CEQA Guidelines* Appendix F requires that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful or unnecessary consumption of energy.

The proposed project would involve the use of energy during the construction and operational phases of the project. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, machinery, and generators for lighting. In addition, temporary grid power may also be provided to any temporary construction trailers or electric construction equipment. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In addition, the increase in vehicle trips associated with the project would increase fuel consumption within the City.

Electricity service for the proposed project would be provided by Southern California Edison (SCE). SCE's power mix consists of approximately 20 percent renewable energy sources (wind, geothermal, solar, small hydro, and biomass) (SCE website, 2015). Gas service would be provided by the Long Beach Gas and Oil Department.

California used 296,628 gigawatt-hours (GWh) of electricity in 2013 (CEC, 2014a) and 2,313 billion cubic feet of natural gas in 2012 (CEC, 2012). Californians presently consume over 18 billion gallons of motor vehicle fuels per year (CEC, 2014b).

The proposed project's estimated motor vehicle fuel use is detailed in Table 5-2.

Table 5-2
Estimated Project-Related Annual Motor Vehicle Fuel Consumption

Vehicle Type	Percent of Vehicle Trips[1]	Annual Vehicle Miles Traveled[2]	Average Fuel Economy (miles/gallon)[3]	Total Annual Fuel Consumption (gallons)
Existing				
Passenger Cars	51.45%	7,337,324	27.5	266,812
Light/Medium Trucks	44.45%	6,339,048	23.5	269,747
Heavy Trucks/Other	3.67%	523,381	7.7	67,972
Motorcycles	0.43%	61,381	50	1,228
Total	**100%**	**14,261,076**	**--**	**605,759**
With Project				
Passenger Cars	50.46%	16,660,171	27.5	605,824
Light/Medium Trucks	44.89%	14,821,146	23.5	630,687
Heavy Trucks/Other	4.22%	1,393,300	7.7	180,948
Motorcycles	0.43%	141,971	50	2,839
Total	**100%**	**33,016,588**	**--**	**1,420,298**
Net Change				
Passenger Cars		9,322,847	27.5	339,012
Light/Medium Trucks		8,482,098	23.5	360,940
Heavy Trucks/Other		869,919	7.7	112,976
Motorcycles		80,590	50	1,611
Total Net Change		**18,755,512**	**--**	**814,539**

[1] Percent of vehicle trips found in Table 4.3 "Trip Type Information" in CalEEMod output (see Appendix B)
[2] Mitigated annual VMT found in Table 4.2 "Trip Summary Information" in CalEEMod output (see Appendix B)
[3] Average fuel economy provided by the United States Department of Transportation, Bureau of Transportation Statistics (2010).

Total estimated energy usage, including motor vehicle fuel, calculated using CalEEMod and shown in CalEEMod output files in Appendix B, is summarized and compared to state-wide usage in Table 5-3. Final energy use is shown as a net increase over the energy use from the existing use of the project site. The proposed project would make a minimal contribution to state-wide energy consumption in these categories.

Table 5-3
Estimated Project-Related Energy Usage
Compared to State-Wide Energy Usage

Form of Energy	Units	Annual Project-Related Energy Use	Annual State-Wide Energy Use	Project % of State-Wide Energy Use
Existing				
Electricity	megawatts per hour	6,830[1]	296,628,000[2]	0.0002%
Natural Gas	billion BTU	5.69[1]	2,313,000[3]	0.000002%
Motor Vehicle Fuels	gallons	605,759[4]	18,019,000,000[5]	0.00003%
Proposed Project				
Electricity	megawatts per hour	10,637	296,628,000	0.00004%
Natural Gas	billion BTU	23.88	2,313,000	0.00001%
Motor Vehicle Fuels	gallons	1,420,298	18,019,000,000	0.00008%
Net Change				
Electricity	megawatts per hour	3,807	296,628,000	0.00001%
Natural Gas	billion BTU	18.19	2,313,000	0.000008%
Motor Vehicle Fuel	gallons	814,539	18,019,000,000	0.00005%

[1] CalEEMod output provided in the Air Quality Analysis (see Appendix C for calculation results); Table 5.2
[2] California Energy Commission, California Energy Almanac,2013 Total Electricity System Power, data as of September 2014. Available: http://energyalmanac.ca.gov/electricity/total_system_power.html
[3] California Energy Commission, California Energy Almanac, Overview of Natural Gas in California – Natural Gas Supply. Available: http://energyalmanac.ca.gov/naturalgas/overview.html
[4] See Table 5-2
[5] California Energy Commission, 2014 Integrated Energy Policy Report, Available: http://www.energy.ca.gov/2014publications/CEC-100-2014-001/CEC-100-2014-001-CMF.pdf.

The proposed project would also be subject to the energy conservation requirements of the California Energy Code (Title 24, Part 6, of the California Code of Regulations, *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California. The Code applies to the building envelope, space-conditioning systems, and water-heating and lighting systems of buildings and appliances. The Code provides guidance on construction techniques to maximize energy conservation. Minimum efficiency standards are given for a variety of building elements, including appliances; water and space heating and cooling equipment; and insulation for doors, pipes, walls and ceilings. The Code emphasizes saving energy at peak periods and seasons, and improving the quality of installation of energy efficiency measures. The California Green Building Standards Code sets targets for: energy efficiency; water consumption; dual plumbing systems for potable and recyclable water; diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including ecofriendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels.

The project is required to exceed Title 24 standards that are in effect at the time of development by 20 percent and to achieve a 25 percent reduction in electricity use through such measures as photovoltaic cells in compliance with Downtown Area Plan EIR Mitigation Measure AQ-2. Exceedance of Title 24 energy conservation requirements would ensure that energy is not used in an inefficient, wasteful, or unnecessary manner.

5.4 PUBLIC HEALTH HAZARDS

An SEIR scoping meeting was held on April 30, 2015 to solicit further public comment on the scope and content of the SEIR. One commenter expressed concern that the project's proposed demolition could result in vermin from the existing buildings invading adjacent properties. Demolition could potentially disturb vermin in existing buildings, which, if substantial, could pose a public health hazard. The commenter suggested mitigation requiring existing buildings to be fumigated prior to demolition.

Mitigation Measures. The following mitigation measure would reduce potential public health impacts from vermin due to proposed demolition to a less than significant level.

Other-1 **Fumigation.** Prior to issuance of demolition permits, the project applicant shall fumigate all buildings.

Significance After Mitigation. Implementation of Mitigation Measure Other-1 would reduce impacts to a less than significant level.

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6 ALTERNATIVES

As required by Section 15126.6 of the *CEQA Guidelines*, this SEIR examines a range of reasonable alternatives to the proposed project that would attain most of its basic objectives (stated in Section 2.5 of this SEIR) but would avoid or substantially lessen any of its significant effects.

The key objectives of the project are to:

- *Replace seismically deficient City Hall and Main Library in an expeditious manner.*
- *Reduce public safety hazards by eliminating the risk of fire, structural collapse, personal injury to trespassers, vandalism and crime, by demolishing the structurally unsound, abandoned, and deteriorated former Long Beach Courthouse building.*
- *Meet the long term goal of the Harbor Department to bring its headquarters downtown.*
- *Redevelop the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza, which asserts the value and importance of the public realm, and which functions as the City's center for governance, civic engagement and cultural and educational exchange.*
- *Consider opportunities to redevelop Old Courthouse site with public uses as part of the Civic Center mega-block redevelopment.*
- *Improve connections between the new Civic Center and greater Downtown through the reestablishment of the small block grid of the historic downtown street fabric and encouragement of a more pedestrian friendly environment.*
- *Redevelop the Main Library within Lincoln Park and ensure that future library space needs will be considered in the context of the changing role of the modern city library, and revolutionary change in media and technology that will influence the library of the future.*
- *Revitalize Lincoln Park into a destination park with amenities appropriate for visitors, residents and Downtown workers.*
- *Cap the City's ongoing maintenance costs, increase energy efficiency, and consolidate offsite City leases, when feasible.*
- *Consider private development elements and/or disposition of surplus property for private development, such as new housing, office, hotel and retail. If housing is proposed, 10 percent of all housing units must be affordable to moderate income persons.*
- *Design buildings to interface with the streets and draw pedestrians into the civic spaces. Proposed solutions must address the vision, guiding principles and design guidelines of the Downtown Plan 2012 (see Planned Development District Ordinance PD-30).*
- *Connect the Civic Center to surrounding business and residential uses. Be highly accessible to pedestrians and bicycles and include convenient automobile access. All private uses should complement the civic functions.*
- *Activate the perimeter streetscape, access points and all public components. Provide appropriate lighting and wayfinding signage for pedestrians, bicycles and automobiles.*

The guiding principles for downtown Long Beach from the Downtown Plan are as follows:

- *We promote the development of a distinctive downtown skyline, providing a vibrant, compact city core attracting cosmopolitan and creative people.*
- *Our lively Downtown acts as the heart of the city, connecting with the neighborhoods and coastline.*

- *We encourage an infrastructure to accommodate a future that is less dependent on fossil fuels and more focused on walking, bicycling, and public transportation.*
- *We invite and support new industries to invest in our future so that we can continue to diversify our economy and promote job growth while strengthening our existing backbone of convention, tourism, and port business.*
- *We endorse bold architecture, planning, and construction that utilize green building technology and incorporate sustainable energy.*
- *We demand quality in building practices in order to ultimately create historical masterpieces.*
- *We value our buildings of historic merit and seek to preserve or restore them through adaptive reuse.*

Included in this analysis are four alternatives, including the CEQA-required "no project" alternative, that involve changes to the project to help reduce its environmental impacts as identified in this SEIR. This section also identifies the Environmentally Superior Alternative.

The following alternatives are evaluated in this SEIR:

- *Alternative 1: No Project*
- *Alternative 2: Downtown Plan Buildout of Civic Center Area*
- *Alternative 3: Adaptive Reuse Alternative*
- *Alternative 4: Reduced Density*

The potential environmental impacts of each alternative are analyzed in Sections 6.1 through 6.4.

Table 6-1 provides a summary comparison of the development characteristics of the proposed project and each of the alternatives considered. A more detailed description of the alternatives is included in the impact analysis for each alternative.

Table 6-1
Comparison of Project Alternatives' Buildout Characteristics

Characteristic	Alternatives				
	Proposed Project	**No Project Alternative**	**Downtown Plan Buildout of Civic Center Area[1]**	**Adaptive Reuse Alternative**	**Reduced Density[4]**
Number of Residential Units	780 DU	None	800 DU	780 DU	741 DU
Number of Hotel Rooms	200 rooms	None	None	200 rooms	190 rooms
Office Square Footage	510,000 GSF	283,000 GSF	460,000 GSF	510,000GSF[2]	484,500 GSF
Commercial Square Footage: Retail: Restaurant:	 32,000 GSF 8,000 GSF	None	 64,000 GSF 16,000 GSF	 32,000 GSF 8,000 GSF	 30,400 GSF 7,600 GSF
Lincoln Park and Main Library *Total Park Area:* *Open Space (ac):* *Library (ac/GSF):*	 4.8 ac 3.17 ac 1.63 ac / 92,000 GSF[3]	 4.8 ac 2.6 ac 2.2 ac / 138,000 GSF[3]	 4.8 ac 2.6 ac 2.2 ac / 138,000 GSF[3]	 4.8 ac 3.17 ac 1.63 ac / 92,000 GSF[3]	 4.8 ac 3.17 ac 1.63 ac / 87,400 GSF[3]
Vacant Square Footage (former Long Beach Courthouse)	None	277,000 GSF	None	None	None
Grading Import: Export:	 68,200 cy 380,000 cy	None	 11,200 cy 350,000 cy	 68,200 cy 200,000 cy	 68,200 cy 380,000 cy
Construction Schedule	74 months	None	69 months[6]	74 months	71 months[5]

DU = dwelling units; ac = acres; GSF: gross square footage; cy = cubic yards
[1] Source: Iteris, Long Beach Downtown Community Plan EIR Traffic Impact Analysis, 2010. Assumes that the existing Lincoln Park and the Library would be retained.
[2] Although the entire Courthouse would be used as City Hall, only approximately 180,000 GSF of the Courthouse would be useable as office space (RRM Design Group, 2014; see Appendix H of the Long Beach Courthouse Demolition Project Draft EIR). Therefore, it is assumed that the Port Building would be approximately 330,000 GSF and would accommodate City Hall and Port Building uses to accommodate all uses proposed by the project.
[3] GSF for Library uses.
[4] Assumes five percent reduction in residential, commercial, and office/Library uses.
[5] Estimated by reducing the proposed project's building construction schedule by five percent. The Reduced Density Alternative would include the same demolition, grading, and paving schedule.
[6] Eliminated Phase 3, which includes Main Library demolition and park construction.

All of these alternatives are described and analyzed below. Following the analysis of these four alternatives is a discussion of alternatives that were considered for analysis, but rejected as infeasible. These include several alternatives suggested by the State Historic Preservation Officer of the Office of Historic Preservation, as part of the SEIR scoping process. In addition, this section includes a discussion of the "environmentally superior alternative" among the alternatives studied.

6.1 NO PROJECT ALTERNATIVE

This alternative assumes that the proposed project is not constructed on the site. It assumes that the site would continue in its current condition and that the existing City Hall, Main Library, Lincoln Park, vacant former Long Beach Courthouse, and associated parking structures and parking lots would remain. However, implementation of the no project alternative at this time

would not preclude development of the site at some point in the future. The No Project Alternative is required by CEQA and also suggested by the Office of Historic Preservation during the SEIR scoping process.

6.1.1 Impact Analysis

No change in environmental conditions would occur under this alternative because no development would occur and site conditions would not change. This alternative would avoid the proposed project's significant and unavoidable impacts related to operational air pollutant emissions; exposing sensitive receptors to toxic air contaminants from Port of Long Beach and offsite stationary sources; demolishing historic resources; construction noise and vibration; and cumulative air quality impacts. In addition, this alternative would avoid significant, but mitigable impacts related to construction air pollutant emissions, operational noise, and exposing sensitive receptors to excessive noise. No significant impacts would occur under this alternative and none of the mitigation measures recommended for the proposed project would apply.

This alternative would not include demolition or rehabilitation of the former Long Beach Courthouse. Consequently, the critical functional and physical deficiencies identified for the former Courthouse by the statewide Task Force on Court Facilities in 1997 and the Administrative Office of the Courts in 2001 would remain. These deficiencies are described in detail in Section 2.0, *Project Description*, but include Americans with Disabilities Act (ADA) accessibility issues and seismic deficiencies. Despite a limited retrofit at an estimated cost of $13.9 million by the County of Los Angeles, the Courthouse is expected to remain standing long enough to evacuate, but would not be capable of being re-occupied following a medium-sized earthquake. Under this alternative, the structurally unsound, abandoned, and deteriorated former Courthouse would remain a public safety hazard, vulnerable to risk of fire, structural collapse, personal injury to trespassers, and vandalism and crime.

Overall, this alternative's impacts would be less than those of the proposed project. However, the selection of the no project alternative would not preclude the future redevelopment of the Civic Center area. Furthermore, this alternative would not fulfill any of the project objectives, nor would it meet the Downtown Plan guiding principles for the Downtown Plan Area.

6.2 DOWNTOWN PLAN BUILDOUT OF CIVIC CENTER AREA ALTERNATIVE

The Downtown Plan EIR assumed development of up to 800 residential units, 460,000 gross square feet (GSF) of office/commercial floor area, 64,000 GSF of retail space and 16,000 GSF of restaurant uses for the Civic Center area in the Downtown Plan traffic analysis. This alternative assumes the existing Main Library and Lincoln Park would be retained and Lincoln Parking Garage would not be renovated. In addition, this alternative does not include the construction of a hotel. As the existing Library and Lincoln Park would be retained, grading would be reduced in comparison to the proposed project to 11,200 cy of import and 350,000 cy of export and the construction schedule would likely be reduced to 69 months. Similar to the proposed project, this alternative would include demolition of the former Courthouse and City Hall.

6.2.1 Aesthetics

Similar to the proposed project, the Downtown Plan Buildout of the Civic Center Area Alternative would introduce new high-rise structures and full-block complexes at locations within the Downtown Plan Area. The alternative would increase the number of residential units and the commercial area constructed on the project site, but would generally be similar in regards to the visual character of the proposed development. As this alternative would not include the hotel component, it would likely not increase the height of the two Center Block mixed-use buildings proposed by the project despite the additional residential and commercial area this alternative would accommodate and the site constraints caused by retaining the existing Main Library. The aesthetic impact to scenic vistas, scenic resources, and the site's visual character associated with this development would be similar to that of the proposed project and would be less than significant. Implementation of this alternative would result in a roughly similar significant, but mitigable aesthetic impact from construction when compared to the proposed project, as it would occur over the same period of time and in the same general locations as the proposed project. Therefore, Mitigation Measure AES-1 (Construction Screening) would be required to screen construction sites from public viewpoints. Shadows or shading could be generated by this alternative that would affect shadow-sensitive land uses; however, because this alternative does not include the hotel component, this alternative would not create new significant shading impacts to shadow-sensitive land uses. Overall, impacts from this alternative would be similar to those of the proposed project.

6.2.2 Air Quality

The Downtown Plan Buildout of Civic Center Area Alternative would not include a 200-room hotel component, but would increase the number of residential units and the commercial area constructed on the project site; therefore, this alternative would likely have similar operational emissions as the proposed project. As this alternative would retain the existing Main Library and Lincoln Park, soil import and export would be reduced by approximately seven percent in comparison to the proposed project. Therefore, this alternative would have slightly lower overall construction emissions than the proposed project.

Similar to the proposed project, this alternative would include demolition of existing buildings and would require implementation of Mitigation Measure AQ-2 (Air Quality Safety Plan). As this alternative would have similar operational emissions compared to the proposed project, it would also require implementation of Mitigation Measure AQ-3 (Low-VOC Paint). Nonetheless, similar to the proposed project, this alternative's operational and cumulative air quality impacts would remain significant and unavoidable. In addition, this alternative would place sensitive receptors in the Downtown Plan Area like the proposed project; therefore, impacts related to toxic air contaminants from Port of Long Beach and offsite stationary sources would remain significant and unavoidable.

6.2.3 Cultural Resources

Like the proposed project, the Downtown Plan Buildout of Civic Center Area Alternative would include the demolition of the former Courthouse and City Hall, but would retain the existing Main Library; therefore, this alternative's impact would be less than that of the proposed project, but would still be significant. As with the proposed project, Mitigation Measures CR-

1(a) (Historic Artifact Collection Program) and CR-1(b) (Building Documentation) would apply to this alternative, but would not reduce the impact to below a level of significance. This alternative's cultural resource impact would be less than that of the proposed project because it would retain the Main Library, but would be significant and unavoidable, as determined in the Downtown Plan EIR.

6.2.4 Greenhouse Gas Emissions/Climate Change

The Downtown Plan Buildout of Civic Center Area Alternative would not include a 200-room hotel component, but would increase the number of residential units and the commercial area constructed on the project site; therefore, this alternative would have similar operational greenhouse gas (GHG) emissions as the proposed project. Similar to the proposed project, this alternative's GHG emissions and climate change impacts would be less than significant. Similar to the proposed project, this alternative would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals.

6.2.5 Noise and Vibration

The Downtown Plan Buildout of Civic Center Area Alternative would increase the number of residential units proposed by 20 units and the commercial area constructed on the project site by 40,000 GSF. Construction would likely occur over a shorter period of time (69 months) when compared to the proposed project. Nonetheless, due to the project site's proximity to sensitive receptors Mitigation Measure Noise-1 (Noise Control Plan) would be required. As with the proposed project, this alternative would have significant and unavoidable noise and vibration impacts due to the demolition of the former Long Beach Courthouse and City Hall. However, noise and vibration impacts would be slightly reduced because this alternative would not include demolition of the Main Library. Operational impacts associated with location of commercial uses in proximity to existing and planned residential uses would be similar to those of the proposed project and Mitigation Measures Noise-2(a) (Loading Areas) and Noise-2(b) (Sound-Rated Windows and Sliding Glass Doors Near Commercial Uses) would apply to this alternative.

As described in detail in Section 6.2.6, this alternative would generate an estimated 3,181 more daily trips, 39 more a.m. peak hour trips, and 288 more p.m. peak hour trips when compared to the proposed project. This represents an approximately 23 percent increase in daily traffic compared to the proposed project.

The proposed project's traffic noise impacts would not exceed the 3 dBA significance threshold at any receptor location. However, the 23 percent increase in traffic due to this alternative may result in an exceedance of the relevant thresholds at certain locations. The receptor located at Chestnut Avenue between Third Street and Broadway would experience a noise increase of 2.5 dBA as a result of the proposed project and this alternative would likely result in an exceedance of the 3 dBA significance threshold at this location.

The Downtown Plan Buildout of Civic Center Area Alternative's impacts related to construction-generated noise and vibration would be less than those of the proposed project,

however impacts related to traffic-generated noise would be greater. Overall, construction noise and vibration impacts would continue to be significant and unavoidable.

6.2.6 Transportation and Traffic

Table 6-2 shows the trip generation potential for the mix of uses assumed for buildout of the Civic Center. Buildout of the Downtown Plan Civic Center Area would generate an estimated 14,104 daily trips, with 710 trips (337 inbound, 373 outbound) produced in the a.m. peak hour, and 840 trips (439 inbound, 401 outbound) produced in the p.m. peak hour. A comparison of the trips generated by the proposed project to the trips generated by the mix of uses assumed in the Downtown Plan for the Civic Center area shows that that this alternative would result in 3,181 more daily trips, 39 more a.m. peak hour trips, and 288 more p.m. peak hour trips.

Table 6-2
Trip Generation Forecast – Downtown Plan Civic Center Area

ITE Reference	Average Daily Trips	A.M. Peak Hour			P.M. Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
LU Zone 8: Residential Condos	1,769	16	81	97	78	37	115
LU Zone 9:Residential Condos, Office, Shopping Center, Restaurant	15,229	607	332	939	411	606	1,017
Total Downtown Plan Civic Center Area Trips	**16,998**	**623**	**413**	**1,036**	**489**	**643**	**1,132**
Existing City Hall Trips[a]	**2,894**	**286**	**40**	**326**	**50**	**242**	**292**
Net Downtown Plan Civic Center Area Alternative Trips (Alternative – Existing)	**14,104**	**337**	**373**	**710**	**439**	**401**	**840**

Source: Linscott, Law and Greenspan June 2015; see Appendix E for full TIA report.
[a] The Downtown Plan Buildout of the Civic Center Area Alternative would include demolition of City Hall.

The Downtown Plan EIR determined that traffic generated by buildout of the Downtown Plan would result in significant and unavoidable impacts to traffic and transportation. This alternative would contribute to this impact and impacts would be greater than those of the proposed project.

6.3 ADAPTIVE REUSE ALTERNATIVE

This alternative considers the potential impacts of rehabilitating the former Long Beach Courthouse to be adaptively reused primarily as City Hall and/or municipal offices. This alternative responds to requests from the California Office of Historic Preservation and others during the SEIR scoping process to consider an alternative that would preserve existing onsite historic resources. This alternative also considers the demolition of the City Hall-Library Complex to occur by means other than implosion.

The Adaptive Reuse Alternative assumes the former Courthouse building would be rehabilitated for a government office use in conformance with the Secretary of the Interior Standards for the Treatment of Historic Properties. Rehabilitation of the building would be

conducted in accordance with the California Historic Building Code, which allows for more flexible application of building regulations when impacting a historic resource. It is assumed that all identified character-defining features of the Courthouse building interior would be repaired and maintained in-situ to the highest degree feasible and in accordance with the Secretary's Rehabilitation Standards and Guidelines. Nonetheless, the majority of these spaces would be altered to accommodate government office uses.

RRM Design Group conducted a conceptual feasibility study assessment to re-purpose the former Courthouse building for a government office use. That study is included in Appendix H of the Long Beach Courthouse Demolition Project Draft EIR. In summary, the assessment concludes that the building would require substantial upgrades to the building's structural, mechanical, plumbing, fire protection, lighting and electrical systems. All levels of the building's interior would require substantial modernization to comply with the California's building codes, energy efficiency regulations and disabled access for a government office use. Virtually all of the exterior glass panels and metal building skin would need to be replaced with dual glazed high efficiency glass to meet current energy regulations. Similarly, to meet disabled access regulations several upgrades to the building entries, lobby, circulation, parking, and restrooms would require substantial renovation. While the gross building area is approximately 277,000 square feet, the net useable area for office conversion would be much less. The estimated usable office area would be in the 60 to 70 percent range or approximately 180,000 square feet; therefore, it is assumed that the Port Building would be approximately 330,000 GSF (rather than 240,000 GSF proposed by the project) and would accommodate City Hall and Port Building uses. Therefore, this alternative would reduce new office square footage construction by approximately 35 percent, when compared to the proposed project.

The conceptual feasibility study determined that substantial investment would be required to modernize the existing building systems and to renovate interior finish materials. Renovation projects are labor intense for activities such as selective demolition and preservation of character defining features. The cost premium for a public sector renovation project may add upwards of 25 to 30 percent beyond the cost of new construction to account for prevailing wage requirements, which are not applicable to private sector projects. Renovation budget contingencies would also be much higher than new construction due to the likelihood of finding unknown deficiencies such as hazardous material abatement. Major cost factors include significant renovation of all major building systems. Seismic strengthening of the existing building structural systems is needed to remain habitable after a seismic event. According to the conceptual feasibility study, a renovation project of this size and complexity would cost far more than demolishing and replacing the existing building with entirely new construction; the study estimated that the cost for the rehabilitation of the former Courthouse and conversion to municipal office use would range from $124,650,000 to $138,500,000.

6.3.1 Aesthetics

The Adaptive Reuse Alternative would involve the same amount of residential and commercial space as the proposed project. This alternative would result in the reconstruction of the former Long Beach Courthouse to be used as 180,000 GSF of useable office space. This alternative would increase the size of the Port Building to 330,000 GSF to accommodate the office space needs of City Hall and the Harbor Department; therefore, the Port Building would be four stories taller than the proposed project and would be approximately 15 stories tall.

Adaptive reuse of the former Courthouse may contribute less to the visual character of the area than the proposed project, which would introduce new structures that are more visually consistent with the surrounding area and that would be visually compatible with one another. Overall, this alternative would result in a change in visual character similar to that of the proposed project and the aesthetic impact to scenic vistas, scenic resources, and the site's visual character associated with this development would also be less than significant. Implementation of this alternative would result in a roughly similar significant, but mitigable impact from construction when compared to the proposed project, as construction would occur over the same period of time and in the same general locations as under the proposed project. Therefore, Mitigation Measure AES-1 (Construction Screening) would be required to screen construction sites from public viewpoints. Construction impacts associated with the demolition of the former Long Beach Courthouse would not occur, but other construction impacts would occur throughout the project site. Although the Port Building would be four stories taller than the proposed project, shadows or shading generated by this alternative would not create new shadow impacts to shadow-sensitive land uses. Overall, impacts from this alternative would be similar to those of the proposed project.

6.3.2 Air Quality

The Adaptive Reuse Alternative would involve the same amount of residential and commercial space as the proposed project. This alternative would result in the reconstruction of the former Long Beach Courthouse to be used as 180,000 GSF of office space. This alternative would build 330,000 GSF of new office space to accommodate City Hall and the Harbor Department's office space needs. Therefore, this alternative would reduce new office square footage construction by approximately 35 percent, when compared to the proposed project.

Construction would occur over the same length of time as compared to the proposed project and in the same locations. This alternative would result in the same operational emissions compared to the proposed project due to the same amount of overall residential, commercial, and office uses. This alternative would have lower overall construction emissions because demolition of the former Long Beach Courthouse would not occur and the square footage of new office construction would be reduced by approximately 35 percent. Similar to the proposed project, construction-related air quality impacts would be less than significant with implementation of Mitigation Measure AQ-2 (Air Quality Safety Plan), which would mitigate impacts related to the demolition of the City Hall-Library Complex. Because this alternative would include the same overall residential, commercial, and office uses as the proposed project, implementation of Mitigation Measure AQ-3 (Low-VOC Paint) would also be required and the impact of operational air pollutant emissions would remain significant and unavoidable, similar to the proposed project. This alternative's air quality impacts would be similar to that of the proposed project; operational and cumulative air quality impacts would remain significant and unavoidable. Similar to the proposed project, this alternative would place sensitive receptors in the Downtown Plan Area; therefore, impacts related to toxic air contaminants from Port of Long Beach and offsite stationary sources would also remain significant and unavoidable.

6.3.3 Cultural Resources

The former Long Beach Courthouse building was found individually eligible for the California Register of Historic Resources and also eligible for City of Long Beach Landmark Designation.

This alternative would preserve this building and eliminate the significant and unavoidable impact resulting from demolition of the building. The adaptive reuse of the building, however, would require substantial alteration of interior and exterior features. The adaptive reuse would maintain the structure of the building, but its appearance and historic value may be diminished. Similar to the proposed project, the Adaptive Reuse Alternative would include demolition of the City Hall-Library Complex; therefore, similar to the proposed project, this alternative would have a significant impact to this resource and Mitigation Measures CR-1(a) (Historic Artifact Collection Program) and CR-1(b) (Building Documentation) would apply. This alternative's cultural resource impact would be less than that of the proposed project with respect to the former Long Beach Courthouse and equal to that of the proposed project with respect to the City Hall-Library Complex. Therefore, although the impact would be lower than that of the proposed project, the impact associated with demolition of the City Hall-Library Complex would remain significant and unavoidable.

6.3.4 Greenhouse Gas Emissions/Climate Change

The Adaptive Reuse Alternative would include the same amount of office, residential, and commercial uses on the project site; therefore, operational GHG emissions would be the same as the proposed project. This alternative would have ~~slightly~~ lower construction GHG emissions than the proposed project due to the adaptive reuse of the former Long Beach Courthouse, rather than the demolition of the building. This alternative's climate change impacts would be ~~slightly~~ less than those of the proposed project and, as with the proposed project, would ~~remain~~ be less than significant. Similar to the proposed project, this alternative would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals.

6.3.5 Noise and Vibration

Construction would occur over the same length of time as compared to the proposed project and in the same locations. However, the significant and unavoidable impacts associated with noise and vibration generated by the demolition of the former Long Beach Courthouse would not occur under this alternative, nor would the significant and unavoidable impacts associated with noise and vibration generated by the potential demolition by implosion of the City Hall-Library Complex. The significant and unavoidable impact associated with noise generated by other construction activities, such as from the use of jackhammers, generators, and compactors, would, however, occur. Operational impacts associated with location of commercial uses in proximity to existing and planned residential uses would be similar to those of the proposed project and mitigation measures Noise-2(a) (Loading Areas) and Noise-2(b) (Sound-Rated Windows and Glass Doors Near Commercial Uses) would apply to this alternative.

As described in detail in Section 6.3.6, this alternative would have similar traffic volumes as the proposed project because it would not change the office, commercial, and residential square footages of the proposed project. Therefore, similar to the proposed project, traffic noise impacts would be less than significant.

6.3.6 Transportation and Traffic

This alternative would have generally the same traffic volumes as the proposed project because it would not change the office, commercial, and residential square footages of the proposed project. Access to the project site would be similar to the proposed project, and would not include any hazardous design features. Similar to the proposed project, impacts to traffic would be less than significant.

6.4 REDUCED DENSITY

This alternative involves reducing the amount of residential, commercial, and office/library uses proposed for the project site by five percent. Therefore, this alternative assumes the construction of 741 dwelling units, a 190 room hotel, 484,500 GSF of office uses, 30,400 GSF of retail uses, 7,600 GSF of restaurant uses, and 87,400 GSF of library uses. It is assumed that the footprint of proposed land uses would remain the same; therefore, this alternative would utilize 3.17 acres of Lincoln Park as open space and would have the same overall grading as the proposed project. The construction schedule would be shorter than the proposed project and would occur over approximately 71 months.

The intent of this alternative is to reduce any potentially significant impacts associated with the project that would result from its intensity, such as the potentially significant but mitigable impacts mentioned above. This alternative also has the potential to reduce other, less than significant impacts of the proposed project such as aesthetics, GHGs, traffic and roadway noise. This alternative would meet the objectives of the project, but to a lesser degree than the project, because it would not involve the same amount of housing or office/library and commercial space creation as the proposed project.

6.4.1 Aesthetics

The Reduced Density Alternative would lead to a reduced amount of residential, office, and commercial space being built on the project site as compared to the proposed project. While this alternative would result in a change in visual character similar to that the proposed project since commercial, office, and residential uses would be developed throughout the area, buildings would be slightly smaller with slightly less visual impact. The aesthetic impact to scenic vistas, scenic resources, and the site's visual character associated with this development would be reduced when compared to the proposed project. Implementation of this alternative would result in a roughly similar, but slightly reduced significant but mitigable impact associated with construction when compared to the proposed project since it would occur in the same general locations as the proposed project over a shorter period of time. Mitigation Measure AES-1 (Construction Screening) would be required to screen construction sites from public viewpoints. Shadows or shading generated by this alternative would be slightly reduced compared to the proposed project because building heights would be lower. Similar to the proposed project, this alternative would have less than significant shadow impacts. Overall, impacts from this alternative would be slightly less than those of the proposed project and would be significant, but mitigable.

6.4.2 Air Quality

The Reduced Density Alternative involves a five percent reduction in overall development intensity as compared to the proposed project. This alternative would have slightly lower overall construction emissions than the proposed project due to the reduced number of units and square footage to be built, but grading emissions would not change substantially because this alternative would require the same grading as the proposed project. Because this alternative would include demolition of existing buildings, it would require implementation of Mitigation Measure AQ-2 (Air Quality Safety Plan). Table 6-3 shows that with implementation of Mitigation Measure AQ-3 (Low-VOC Paint), this alternative would result in operational emissions of reactive organic gases (ROG) that are less than SCAQMD's significance threshold. The proposed project had significant, but mitigable construction-related air quality impacts and significant and unavoidable operational air quality impacts. This alternative's operational and construction-related air quality impacts would be less than those of the proposed project and both impacts would be less than significant with mitigation. Similar to the proposed project, however, this alternative would place sensitive receptors in the Downtown Plan Area; therefore, impacts related to toxic air contaminants from Port of Long Beach and offsite stationary sources would remain significant and unavoidable.

Table 6-3
Long-Term Operational Emissions (lbs/day) with Mitigation Measure AQ-3

Emission Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Reduced Density Alternative Emissions						
Area	**54.8**	0.7	61.2	<0.1	0.3	0.3
Energy	**0.7**	7.1	4.8	<0.1	0.6	0.6
Mobile	**50.5**	130.6	560.5	1.8	127	35.5
Total Project Emissions	**105.9**	**138.4**	**626.9**	**1.8**	**128.0**	**36.4**
Existing Emissions						
Area	18.2	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	0.2	1.5	1.3	<0.1	0.1	0.1
Mobile	35.0	78.5	323.7	0.6	55.3	15.7
Total Existing Emissions	**53.4**	**80.1**	**325.1**	**0.6**	**55.4**	**15.8**
Net Emissions (Project – Existing)	***52.5***	***58.3***	***301.8***	***1.2***	***72.6***	***20.6***
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: See Appendix B for CalEEMod calculations. Assumed compliance with SCAQMD's Healthy Hearths Initiative Rule 445 and Architectural Coating Rule 1113,and Downtown Plan EIR Mitigation Measure AQ-2 and GHG-2(b).
Note: Totals may not add up due to rounding.

6.4.3 Cultural Resources

Like the proposed project, the Reduced Density Alternative would include the demolition of the former Courthouse and City Hall-Library Complex; therefore, this alternative's cultural resource impact would be similar to that of the proposed project and would be significant. Mitigation Measures CR-1(a) (Historic Artifact Collection Program) and CR-1(b) (Building Documentation) would apply to this alternative and would reduce impacts to the degree feasible. Nevertheless, as with the proposed project, the impact would remain significant and unavoidable due to the demolition of historic resources.

6.4.4 Greenhouse Gas Emissions/Climate Change

Because of the five percent reduction in the total development under the Reduced Density Alternative, this alternative would lead to a roughly five percent reduction in operational GHG emissions compared to the proposed project. A minor reduction in overall construction-related GHG emissions would also occur, although grading GHG emissions would not be substantially reduced because this alternative would require the same grading as the proposed project.

Similar to the proposed project, this alternative would be consistent with the Climate Action Team GHG reduction strategies, the SCAG Sustainable Communities Strategy, and Long Beach Sustainable City Action Plan Goals. The Reduced Density Alternative's GHG Emissions/Climate Change impacts would be less than the already less than significant impacts of the proposed project.

6.4.5 Noise and Vibration

The Reduced Density Alternative would reduce the amount of residential, office, and commercial space by five percent compared to the proposed project. Construction would occur over approximately 71 months, a three month reduction compared to the proposed project, thereby reducing the duration of the significant and unavoidable noise and vibration impacts generated near existing sensitive receptors. This alternative would have the same significant and unavoidable impacts related to noise and vibration due to the demolition of the former Long Beach Courthouse and City Hall-Library Complex and Mitigation Measure Noise-1 (Noise Control Plan) would be required. Operational impacts associated with the location of commercial uses in proximity to existing and planned residential uses would be similar to the proposed project and mitigation measures Noise-2(a) (Loading Areas) and Noise-2(b) (Sound-Rated Windows and Glass Doors Near Commercial Uses) would apply to this alternative. Similar to the proposed project, the operational noise impacts of this alternative would be less than significant.

As described in detail in Section 6.4.6, this alternative would result in a five percent reduction in traffic generation when compared to the proposed project. The impacts of project-related traffic noise would be less than significant and this alternative would result in less traffic-generated noise. Therefore, this alternative's impacts related to noise and vibration would be less than significant.

6.4.6 Transportation and Traffic

The Reduced Density Alternative would reduce project-generated traffic by five percent. The impacts of project-related traffic would be less than significant; therefore, because the Reduced Density Alternative would generate five percent fewer new trips, its impact would also be less than significant. Access to the project site would be similar to the proposed project, and would not include any hazardous design features; therefore, transportation impacts related to hazardous design features would also be less than significant.

6.5 ALTERNATIVES CONSIDERED BUT REJECTED

During the preparation of this SEIR, consideration was given to three alternatives that were suggested by the Office of Historic Preservation, as part of the SEIR scoping process, but were ultimately rejected. The three alternatives that were considered but rejected are an Alternate Site Alternative, an Infill Alternative, and an Alternative-Use Alternative. An Alternate Site Alternative and Infill Alternative would have located the entire proposed project or project components on one or more different sites within the Downtown Plan Area and an Alternative-Use Alternative would have placed different uses within the existing buildings on the project site. A fourth alternative, the Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative, was considered, but rejected. This alternative would have adaptively

reused the Courthouse as office space (similar to that described in the Adaptive Reuse Alternative above) and rehabilitated the seismic deficiencies within the City Hall-Library Complex.

The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, residential development, and commercial mixed use development. In total, the proposed project includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. Existing buildings that would be demolished include the former Long Beach Courthouse and the City Hall-Library Complex. Moving the project to another site, as would occur in the Alternate Site and Infill Alternatives, would not meet many of the key project objectives since it would not replace seismically deficient structures, reduce public safety hazards, or improve and revitalize the Civic Center Area. In addition, it would not be feasible to place different uses in existing buildings on the project site, as would occur in the Alternate-Use Alternative, since additional buildings would need to be constructed to house displaced civic uses. Displaced civic uses then would not be located within the Civic Center Area, as identified in the adopted Downtown Plan.

The Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was also considered, but rejected. This alternative would have adaptively reused the Courthouse as office space (similar to that described in Section 6.3, *Adaptive Reuse Alternative*) and rehabilitated the seismic deficiencies within the City Hall-Library Complex. Unlike the Adaptive Reuse Alternative described in Section 6.3, *Adaptive Reuse Alternative*, this alternative would have placed the Port Building within the former Courthouse and retained the City Hall and Library uses within the existing buildings. This alternative was rejected because, as discussed in Section 2.0, *Project Description*, there are critical functional and physical deficiencies identified for the former Courthouse by the statewide Task Force on Court Facilities in 1997 and the Administrative Office of the Courts in 2001 that would make rehabilitation of the former Courthouse, infeasible. RRM Design Group prepared an Adaptive Reuse Study for the former Long Beach Courthouse in September 2014 that determined adaptive reuse of the former Courthouse would require substantial upgrades to the building's structural, mechanical, plumbing, fire protection, lighting and electrical systems. All levels of the building's interior would require substantial modernization to comply with the California's building codes, energy efficiency regulations and disabled access for a government office use. The Study estimated that costs for rehabilitation of the former Courthouse and conversion to municipal office use would range from $124,650,000 to $138,500,000. City Hall has seismic deficiencies that would increase rehabilitation costs associated with the Courthouse. Moreover, the project site is largely built out; retaining the former Courthouse and the City Hall-Library Complex would restrict space available to achieve project objectives, such as redeveloping the site into a vibrant mix of public and private space with a grand Civic Plaza; improving connections with greater Downtown; reestablishing the small block grid of the historic downtown street fabric; private development of housing, office, hotel, and retail; and increasing affordable housing.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The environmental analysis contained in the SEIR determined that the proposed project would result in several significant and unavoidable and potentially significant but mitigable

environmental impacts. Each of the alternatives considered would reduce or avoid one or more of the proposed project's significant and unavoidable or significant but mitigable impacts, as discussed below.

The No Project Alternative would avoid or reduce the proposed project's potential impacts in all environmental impact areas and would have no environmental impact. Consequently, the No Project Alternative is considered environmentally superior. However, this alternative would not meet any of the project objectives (stated in Section 2.0, *Project Description*) because it would not carry out the proposed project, nor would it meet the Downtown Plan guiding principles for the Downtown Plan Area.

Section 15126.6(e)(2) of the *CEQA Guidelines* requires that, if the environmentally superior alternative is the No Project Alternative, the SEIR must also identify an environmentally superior alternative among the other alternatives. Of the remaining three alternatives, the Reduced Density Alternative, which would reduce the proposed project's potential impacts in aesthetics, air quality, GHG emissions, noise and vibration, and traffic and transportation, is the environmentally superior alternative. The only environmental impact areas for which impacts would not be reduced is cultural resources, for which the Reduced Density Alternative would have impacts similar to those of the proposed project. This alternative would meet the basic objectives of the project because it would allow for replacement of seismically deficient buildings, reduce public safety hazards, locate the Harbor Department headquarters in the Downtown Plan Area, redevelop the Civic Center mega-block, redevelop the former Courthouse, improve connections between the new Civic Center and greater Downtown, redevelop the Main Library, revitalize Lincoln Park, cap the City's ongoing maintenance costs, increase energy efficiency, provide affordable housing, connect to surrounding businesses and residential uses, and activate the perimeter streetscape. However, because the Reduced Density Alternative would involve a reduction in the total amount of residential, office, and commercial uses developed, it would meet the project objectives to a proportionally lesser degree than the proposed project.

The Adaptive Reuse Alternative would reduce, but would not eliminate impacts to cultural resources and would also incrementally lessen impacts to GHG emissions, and noise and vibration. The Adaptive Reuse Alternative would not ~~fail to~~ meet the project's objective of redeveloping the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza. As discussed in Section 6.3, *Adaptive Reuse Alternative*, it would also require substantial renovation at an estimated cost ranging from $124,650,000 to $138,500,000

Table 6-4 indicates whether each alternative's environmental impact is greater than, less than, or similar to the proposed project.

Table 6-4
Comparison of Environmental Impacts of Alternatives

Issue	No Project	Downtown Plan Buildout of Civic Center Area	Adaptive Reuse	Reduced Density
Aesthetics	-	=	=	-
Air Quality	-	=	=	-
Cultural Resources	-	-	-	=
GHG Emissions/ Climate Change	-	=	-	-
Noise and Vibration	-	- / +	- / +	-
Transportation and Traffic	-	+	=	-
Overall	**-**	**=**	**-**	**-**

+Impacts greater than those of the proposed project
- Impacts less than those of the proposed project
= Impacts similar impact to the proposed project
- / + Impacts both greater and less than the proposed project

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7 REFERENCES AND REPORT PREPARERS

7.1 REFERENCES

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7.1.2 Persons Contacted

Amy Bodek. Long Beach Development Services, Executive Office. April-July 2015.
Craig Chalfant. Long Beach Development Services, Planning Bureau. April-July 2015.
Shane Green. Linscott, Law & Greenspan, Engineers (LLG). June 26, 2015.
Stephanie Kemp. City of Long Beach, Human Resources. July 2015.

7.2 REPORT PREPARERS

This EIR was prepared by the City of Long Beach, with the assistance of Rincon Consultants, Inc. Consultant staff involved in the preparation of the EIR are listed below.

Rincon Consultants, Inc.
Shannon Carmack, Architectural Historian
Aubrey Mescher, Senior Environmental Planner
Joe Power, AICP, Principal in Charge
Sarah Richman, Associate Environmental Planner
Lindsey Sarquilla, Associate Environmental Planner
Wade Sherman, Graphics Technician
Katherine Warner, GIS Technician

Traffic Impact Analysis- Linscott, Law & Greenspan, Engineers
Richard E. Barretto, Principal
Shane Green, Transportation Engineer III

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8 RESPONSES TO COMMENTS ON THE DRAFT SEIR

8.1 INTRODUCTION

In accordance with Section 15088 of the California Environmental Quality Act (CEQA) *Guidelines*, the City of Long Beach, as the lead agency, has reviewed the comments received on the Draft Supplemental Environmental Impact Report (Draft SEIR) for the Civic Center Project and has prepared written responses to the written comments received. The Draft SEIR was circulated for a 45-day public review period that began August 4, 2015 and concluded on September 17, 2015. A study session to receive public comment on the Draft SEIR was conducted on August 20, 2015.

Each verbal and written comment that the City received is included in this section. Responses to comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the Draft SEIR addresses pertinent environmental issues. The comment letters included herein were submitted by public agencies and private citizens or groups.

Any changes made to the text of the Draft SEIR correcting information, data or intent, other than minor typographical corrections or minor working changes, are noted in the Final SEIR text as changes from the Draft SEIR.

The focus of the responses to comments is the disposition of environmental issues that are raised in the comments, as specified by Section 15088(c) of the *CEQA Guidelines*. Detailed responses to comments on the merits of the proposed project are not provided. However, comments that are not directed to an environmental issue have been forwarded to City decision-makers for review and consideration.

Where a comment results in a change to the Draft SEIR text, a notation is made in the response indicating that the text is revised. Changes in text are signified by strikeouts (~~strikeouts~~) where text is removed and by bold font (**bold font**) where text is added. If text is added where the font is already bold, additions are noted using underlined bold font (**underlined bold font**).

8.2 RESPONSES TO PUBLIC TESTIMONY

On August 20, 2015, City Staff conducted a study session during the Planning Commission Public Hearing regarding the Draft SEIR for the Civic Center Project. The hearing provided an opportunity for members of the public to receive a summary presentation of the project as well as the major findings of the Draft SEIR. The primary purpose of the public comment portion of the hearing was to receive input from interested parties regarding the adequacy of the Draft SEIR. Seven individuals spoke at the hearing. Table 8-1 summarizes verbal comments made by the seven speakers in the order received. No approvals or formal actions were taken by the Planning Commission at this hearing.

Table 8-1
August 20, 2015, Study Session and Verbal Comment Summary

Num.	Speaker/Affiliation	Comments
1	Gary Shelton, Long Beach Area Coalition for the Homeless	a. Stated appreciation for mitigation measure to address vermin from demolition. b. Asked about the existing mature trees on the project site and how the project would address removing them.
2	Margaret Smith, Vice President, Long Beach Library Foundation	a. Requested adequate funding for the new library.
3	Laura Myers, Private Citizen	a. Requested adequate funding for the new library.
4	Bob Ladd, Private Citizen	a. Stated that residential uses would be disruptive to the Civic Center. Suggested that the new Library should front Ocean Boulevard and that commercial uses should be at edges of the project site and not near the center.
5	Alice, Friends of Lincoln Park	a. Suggested that information on social services should be available within the new Lincoln Park.
6	Mark Christoffels, Planning Commissioner	a. Expressed concern with potential wind tunnel creation due to the design of the project. b. Asked if project design has addressed glare. c. Stated that programmed spaces should be illuminated. d. Asked why the project does not include any water features.
7	Jane Templin, Planning Commissioner	a. Asked to see details regarding the project's compliance with Title 24 and Leadership in Energy & Environmental Design (LEED) gold certification.

Responses to verbal comments are provided below.

1. Gary Shelton, Long Beach Area Coalition for the Homeless

a. The commenter asked about the existing mature trees on the project site and how the project would address removing. As discussed in Section IV, *Biological Resources*, of the Initial Study (see Appendix A of the Draft SEIR), the proposed project would involve the reconstruction of Lincoln Park, which would require the removal of vegetation, including mature trees. All vegetation within the Park is ornamental landscaping that does not include native biological resources or habitats. Therefore, the Civic Center Project would not result in any significant impacts to biological resources or increase the severity of significant impacts to biological resources beyond those identified in the Downtown Plan EIR. In accordance with the City's Tree Maintenance Policy, all trees within the public right-of-way would be replaced with an approved 15-gallon tree. In addition, the project proponent looked into the feasibility of relocating some of the mature trees on the project site, but found that it would be infeasible because the existing parking garage cannot bear the weight of the trucks necessary to for tree relocation.

2. Margaret Smith, Vice President, Long Beach Library Foundation

a. This comment has been forwarded to City decision makers for their consideration.

3. Laura Myers, Private Citizen

a. This comment has been forwarded to City decision makers for their consideration.

4. Bob Ladd, Private Citizen

a. This comment is about the project and not the SEIR. This comment has been forwarded to City decision makers for their consideration.

5. Alice, Friends of Lincoln Park

a. This comment has been forwarded to City decision makers for their consideration.

6. Mark Christoffels, Planning Commissioner

a. Expressed concern with potential wind tunnels due to the design of the project. The project is consistent with the Downtown Plan, which envisions buildings of up to 150 feet in height. This type of development may increase overall wind tunnel effects, but such effects would not constitute a significant environmental effect under CEQA.
b. Asked if project design has addressed glare. The Initial Study that was prepared for the proposed project (see Appendix A of the Draft EIR) included an initial evaluation of aesthetic impacts, and determined that the project would not result in a significant impact associated with the introduction of a new source of substantial light or glare; therefore, this issue is not further addressed in the SEIR.
c. Stated that programmed spaces should be illuminated. The project would comply with City lighting requirements.
d. Asked why the project does not include any water features. This comment is about the project rather than the SEIR. Water features have not been proposed, but presumably could be if desired.

7. Jane Templin, Planning Commissioner

a. Asked to see details regarding the project's compliance with Title 24 and LEED gold certification. The proposed project would be required to exceed Title 24 standards that are in effect at the time of development by 20 percent (Downtown Area Plan EIR Mitigation Measure AQ-2). The project would be equipped with equipment (e.g. HVAC systems), lighting fixtures, and lighting that exceed Title 24 requirements.

8.3 WRITTEN COMMENTS AND RESPONSES ON THE DRAFT SEIR

Each written comment regarding the Draft SEIR that the City received is included in this section (refer to Table 8-2). Responses to these comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the Draft SEIR addresses pertinent environmental issues. The comment letters included herein were submitted by public agencies, local interest groups, and private citizens. Each comment letter has been numbered sequentially and each separate issue raised by the commenter, if more than one, has also been assigned a number. Each comment letter is reproduced in its entirety with

the issues of concern lettered in the right margin. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 2.1, for example, indicates that the response is for the first comment raised in Letter 2).

Table 8-2
Written Comments on the Draft SEIR

Letter	Commenter	Affiliation	Date Received
State Public Agencies			
1	Julianne Polanco, State Historic Preservation Officer	California Office of Historic Preservation	September 14, 2015
2	Dianne Watson, IGR/CEQA Branch Chief	California Department of Transportation (Caltrans), District 7	September 17, 2015
3	Scott Morgan, Director	State Clearinghouse	September 28, 2015
Regional Public Agencies			
4	Kevin T. Johnson, Acting Chief, Forestry Division	County of Los Angeles Fire Department	September 1, 2015
5	Jillian Wong, Ph.D., Program Supervisor, Planning, Rule Development & Area Sources	South Coast Air Quality Management District	September 16, 2015
6	Adriana Raza, Customer Service Specialist, Facilities Planning Department	County Sanitation Districts of Los Angeles County	September 23, 2015
Local Interest Groups			
7	Cheryl Perry, President	Long Beach Heritage	September 10, 2015
8	Adrian Scott Fine, Director of Advocacy	Los Angeles Conservancy	September 17, 2015
Private Citizen			
9	Jim Coke	Private Citizen	September 7, 2015

Letter 1

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
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www.ohp.parks.ca.gov

September 14, 2015

Craig Chalfant
Planning Bureau, Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802
Sent via email September 14, 2015

Dear Mr. Chalfant,

RE: **DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT**

Thank you for including the California Office of Historic Preservation (OHP) in the environmental review process for the proposed Long Beach Civic Center Project. Pursuant to the National Historic Preservation Act and the California Public Resources Code, the State Historic Preservation Officer (SHPO) and the OHP have broad responsibility for the implementation of federal and state historic preservation programs in California. We have a long history of working with the City of Long Beach (Lead Agency) through our Certified Local Government program. Our comments are offered with the intent of protecting historic and cultural resources, while allowing the City of Long Beach to meet its program needs. The following comments are based on the information included in the Draft Supplemental Environmental Impact Report (SEIR) for the Civic Center Project.

The proposed project is located in downtown Long Beach, and includes demolition and replacement of the existing Courthouse, City Hall, Public Library, and Lincoln Park. The proposed project also includes construction of a new Port of Long Beach administration facility. In addition to these civic buildings, the proposed project includes construction of three residential/commercial buildings, one at the corner of 3rd Street and Pacific Boulevard, and two on the site of the existing City Hall. The two existing parking structures currently occupying the site would remain. In previous comments provided to the Lead Agency on May 13, 2015, the OHP suggested several mitigation measures that might be considered if impacts to historic resources could not be avoided through project alternatives. The OHP also suggested the Draft SEIR include an updated study of the project area to determine if the Civic Center merits local, state, or national register listing as a historic district. 1

Mitigation Measures

The Draft SEIR § 4.3-14 suggests that the mitigation measures offered by the OHP lack a nexus to the impacts of the proposed project and therefore would not constitute mitigation under CEQA. The CEQA Guidelines § 15126.4 acknowledge the

constitutional requirements that mitigation measures must have an "essential nexus" to a legitimate government interest, and that those mitigation measures imposed as ad hoc exactions must bear a "rough proportionality" to the project's significant impacts. (14 Cal. Code Regs., § 15126.4(a)(4)(A), (B), citing Nollan v. California Coastal Com'n (1987) 483 U.S. 825, 837; Dolan v. City of Tigard (1994) 512 U.S. 374, 391; Ehrlich v. City of Culver City (1996) 12 Cal.4th 854, 866-877.) In order for the Lead Agency to determine if there is an essential nexus between the mitigation measures suggested by the OHP and the impacts of the proposed project, the Lead Agency should consider whether the mitigation measures are rationally connected to a valid governmental purpose. Creative mitigation, including funding of historic preservation planning documents has a clear "nexus" to projects with significant impacts to historical resources; historic preservation more broadly has been found to serve a legitimate public benefit and be a valid exercise of municipal police powers. We ask that the Lead Agency reconsider the essential nexus test and consider adopting the suggested off site mitigation measures as a required condition of project approval, including dedicating funding for future local historic preservation efforts that have a tangible public benefit component.

1, cont'd

Evaluation and Identification

The SEIR includes a survey of the project area (Appendix C) and identifies three historical resources eligible for listing on the CRHR as landmarks (Courthouse, City Hall, and Library). The three resources identified in the cultural resources survey appear to be unified geographically, historically, and architecturally. The three landmarks taken together may meet the definition of a historic district provided in Public Resources Code (PRC) Title 14, Chapter 11.5, Section 4852 (a)(5). It is somewhat unclear why this grouping of landmarks is not being treated as a historic district in light of their historic context and similar architectural style. Additionally, the landscape of the Civic Center is not discussed or evaluated as being a potential contributing resource to a potential district. The historic district criteria and determination of ineligibility should be further clarified in the Final SEIR.

2

The Cultural Section (4.3) of the SEIR and the historical resources survey report (Appendix C) both determine the Courthouse, Library, and City Hall are eligible for listing in the CRHR under Criteria # 3 for their architectural merit, but the evaluation is largely silent on CRHR Criteria # 1. Based on the historic context statement included in Appendix C, the Civic Center appears to be associated with events that have made a significant contribution to the broad patterns of Long Beach history. As described by the *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (incorporated by reference into the CRHR, § 4852), when evaluating the integrity of resources eligible under this criteria, design and workmanship may be less important than the other aspects of historic integrity (location, setting, materials, feeling, and association). In the Final SEIR please discuss Criteria # 1 within the historic context of the Long Beach Civic Center and clarify why the buildings and park are ineligible under this criterion.

3

We thank the Lead Agency for seriously considering our previous suggestion to include an adaptive reuse alternative in the Draft SEIR. To reduce impacts to cultural resources, we encourage the Lead Agency to adopt the reuse scheme developed for the Courthouse building. Given the significant impacts to historical resources, we again encourage the Lead Agency to adopt mitigation measures that go beyond commonly considered measures such as HABS documentation and salvaging historic artifacts, and to adopt mitigation measures that have a public benefit component. 4

If you have questions, please contact Sean de Courcy of the Local Government and Environmental Compliance Unit, at (916) 445-7042 or at Sean.deCourcy@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Letter 1

COMMENTER: Julianne Polanco, State Historic Preservation Officer, California Office of Historic Preservation

DATE: September 14, 2015

RESPONSE:

Response 1.1

The commenter asks that the Lead Agency reconsider the essential nexus test and consider adopting the off site mitigation measures suggested by the Office of Historic Preservation (OHP) in the May 13, 2015 comment letter it submitted during the scoping period. Recommended mitigation included dedicating funding for future local historic preservation efforts that have a "tangible public benefit component."

Mitigation Measures CR-1(a), Historic Artifact Collection Program, and CR-1(b), Building Documentation, described on pages 4.3-13 through 4.3-14 provide both a tangible public benefit and directly mitigate the impacts of the proposed project. The measures suggested by OHP in its May 13, 2015 comment letter include: (1) additional historic surveys in parts of the City that have previously not been surveyed; (2) development of design guidelines for future re-use of public buildings; and (3) creation of a Historic Preservation Mitigation Fund. These suggestions would have a tangible public benefit, but do not mitigate the impacts of the proposed project. For example, as OHP suggests, the creation of a Historic Preservation Mitigation Fund may have a governmental purpose, but the measure does not address the identified impact related to demolition of the Old Courthouse and the Long Beach City Hall-Library Complex. Nonetheless, this comment has been forwarded to City decision makers, who may consider including one or more of the commenter's suggestions as conditions of project approval.

Response 1.2

The commenter requests that the historic district criteria and determination of ineligibility be further clarified in the Final SEIR.

The project site and the adjacent Public Safety Building were assessed for potential eligibility in the California Register of Historic Resources (CRHR) or at the local level as a historic district. Five resources were identified within the study area and were considered as a potential contributors to a Civic Center historic district; these include: (1) the City Hall-Library Complex, (2) the Old Courthouse, (3) Public Safety Building, (4) Lincoln Park and the (5) Broadway Parking Garage. The City Hall-Library Complex and associated landscaping (the landscape elements designed by Peter Walker, which include the "berm" around the Main Library, the tiled plaza and the rooftop garden elements, but do not include Lincoln Park) were designed and constructed as a singular entity and evaluated as one historic resource for this study. Each of the buildings and structures within the Civic Center are functionally related and were designed for municipal purposes. However, three of the extant resources - the Public Safety Building, Lincoln Park and the Broadway Parking Garage -were found ineligible for listing in the CRHR or as local landmarks. With a majority of the resources identified as not eligible for

the CRHR or local designation, it was determined that a historic district is not present due to the lack of contributing resources.

The landscape elements found within the City Hall-Library Complex are discussed in detail in the Cultural Resources Study (Appendix C of the Draft SEIR) and are noted as contributing elements to the project site's significance. These include the brick surfaced Centennial Plaza, and terraced roof gardens with seating areas, stairs and walkways that connect each of the buildings. None of these elements extend beyond the footprint of the City Hall-Library Complex property and were not incorporated into the site plan for the Old Courthouse, Public Safety Building or Lincoln Park. In addition, there is an overall lack of cohesion throughout the site. Therefore, there is no overall landscape theme or specific elements to consider for historic designation or as a contributing element to a historic district.

Response 1.3

The commenter requests that the SEIR include a discussion of the eligibility of the cultural resources within the context of CRHR Criterion 1.

The City Hall-Library Complex and the Old Courthouse are also considered eligible for listing in the CRHR under Criterion 1 for their contribution to the civic development of the City of Long Beach.

Pages 4.3-8 and 4.3-9 of the Draft SEIR have been revised to include the following information:

> **The Old Long Beach Courthouse also appears eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Competed in 1960 the Old Courthouse was one of the first projects of the long-awaited Civic Center Master Plan.** The Old Long Beach Courthouse **also** appears eligible for listing in the CRHR as an individual resource under Criterion 3 within the context of the architectural evolution of Long Beach, as one of a limited number of ~~fine~~ examples of the Corporate International Style of architecture remaining in the City. The building embodies the distinctive characteristics of the Corporate International Style, and is a representative example of the style designed by local architects, Francis Heusel and Kenneth S. Wing. Despite having undergone a 60,000 square foot alteration in 1971, the building's exterior appearance still reflects its period of construction and retains a high degree of integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors, and windows and vertical surfaces on the same plane. ~~Competed in 1960 the Old Courthouse was one of the first projects of the Civic Center Master Plan.~~

And

> Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The City

> Hall-Library Complex appears individually eligible for listing in the CRHR **under Criterion 1 for its association with the civic development of Long Beach. Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project. The complex also appears eligible for individual listing** ~~as an individual resource~~ under Criterion 3 as a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects. The complex is one of a limited number of ~~fine~~ examples of the Late Modern Style of architecture remaining in the city. Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Ed Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr., each considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. ~~Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.~~

Page 1of the Cultural Resources Study (see Appendix C of the Draft SEIR) has been revised to include the following information:

> The Old Courthouse was previously evaluated and found individually eligible for historic significance on two occasions: in 2006, it was found eligible for local listing as a City of Long Beach Historic Landmark, and in 2008, the property was found eligible for listing in the California Register of Historical Resources (CRHR) **under Criterion 3, as an example of Corporate International style architecture. Rincon concurs with this finding and ~~.~~notes it is also eligible for listing in the CRHR under Criteria 1, for its association with the civic development of Long Beach, it** ~~It~~ is therefore considered a historical resource for the purposes of the California Environmental Quality Act (CEQA).

And

> Rincon found that the City Hall-Library Complex appears individually eligible for listing in the CRHR as an individual resource under Criterion **1, for its association with the civic development of Long Beach and under** ~~on~~ **Criteria** 3 as a representative example of the Late Modern-style with unique landscape design elements and as the work of a group of local master architects.

Page 53 of the Cultural Resources Study (see Appendix C of the Draft SEIR) has been revised to include the following information:

> Completed in 1977 by Allied Architects, the Long Beach City Hall-Library Complex is an intact example of Late Modern architecture that retains integrity of design, materials, feeling, workmanship, association and location. The complex appears eligible for individual listing in the CRHR **under Criterion 1 for its association with the civic development of Long Beach. Designed in**

fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project. The complex also appears eligible for individual listing under Criterion 3 within the context of the architectural evolution of Long Beach. Although the City Hall-Library Complex is less than 50 years in age (constructed in 1977) the complex is one of a limited number of ~~fine~~ examples of the Late Modern Style of architecture remaining in the city. Designed by a consortium of local architects that consisted of Hugh and Donald Gibbs, Frank Homolka, Killingsworth, Brady and Associates, and Kenneth S. Wing Jr. and Sr., **e**~~E~~ach considered local masters in their own right, the complex is unique for its collaborative design amongst local architects and represents the collective work of a group of masters. The Library rooftop design contributions of master landscape architect Peter Walker also contribute to the significance and eligibility of the complex. ~~Designed in fulfillment of the goals of centralization outlined in the 1950s Civic Center Master Plan, the City Hall-Library Complex represents the final completed element of the project.~~

Although completion of the Civic Center took over two decades to complete and deviates from the original 1950s design layout, the buildings within the Civic Center represent a distinct grouping of civic and governmental properties ~~united historically by plan and physical development~~.

Page 54 of the Cultural Resources Study (see Appendix C of the Draft SEIR) have been revised to include the following information:

The Old Long Beach Courthouse also appears eligible for listing in the CRHR under Criterion 1 for its association with the civic development of Long Beach. Competed in 1960 the Old Courthouse was one of the first projects of the long-awaited Civic Center Master Plan. The Old Long Beach Courthouse **also** appears eligible for listing in the CRHR as an individual resource under Criterion 3 within the context of the architectural evolution of Long Beach, as one of a limited number of ~~fine~~ examples of the Corporate International Style of architecture remaining in the City. The building embodies the distinctive characteristics of the Corporate International Style, and is a representative example of the style designed by local architects, Francis Heusel and Kenneth S. Wing. Despite having undergone a 60,000 square foot alteration in 1971, the building's exterior appearance still reflects its period of construction and retains a high degree of integrity of location, feeling, association, setting, design, materials and workmanship. The building has retained most of its character-defining features: curtain wall construction and glass windows inset in recliner grids, recessed first floor and use of squared columns, terrazzo floors, and windows and vertical surfaces on the same plane. ~~Competed in 1960 the Old Courthouse was one of the first projects of the Civic Center Master Plan.~~

Response 1.4

The commenter encourages the City to adopt the Adaptive Reuse Alternative to reduce cultural resource impacts. The commenter also encourages the City to adopt its suggested mitigation measures.

The Draft SEIR included a partial preservation alternative, the Adaptive Reuse Alternative, discussed in Section 6.3. This alternative would preserve the former Courthouse building, but demolish the City Hall-Library complex. The Draft SEIR found that the Adaptive Reuse Alternative would reduce impacts to cultural resources, as well as greenhouse gas emissions/climate change.

As discussed in Section 6.5, *Alternatives Considered But Rejected*, an alternative that would adaptively reuse the Courthouse as office space (similar to that described in the Adaptive Reuse Alternative) and rehabilitate the seismic deficiencies within the City Hall-Library Complex in the Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was considered. However, as discussed on pages 6-14 and 6-15 of the Draft SEIR, this alternative was rejected because of the functional and physical deficiencies of the buildings and because most of the project objectives would not be feasibly attainable.

It is acknowledged that an alternative that preserves and rehabilitates existing structures would reduce impacts to historic resources and is physically feasible. However, such an alternative would conflict with objectives for the currently proposed project as well as those of the adopted Downtown Plan and would be prohibitively expensive, ranging from more than $124,650,000 to $138,500,000 for conversion of the former Courthouse alone. Therefore, a full preservation alternative is not a feasible alternative under CEQA.

This comment has been forwarded to City decision makers for their consideration.

Letter 2

DEPARTMENT OF TRANSPORTATION
DISTRICT 7-OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
www.dot.ca.gov

Serious Drought.
Serious drought.
Help save water!

September 17, 2015

Mr. Craig Chalfant
City of Long Beach
Development Services
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Re: **Civic Center Project**
Draft Environmental Impact Report
IGR No: 150807/EA, SCH#2015041054
Vic: LA / 710 /6.058-6.273

Dear Mr. Chalfant

The California Department of Transportation (Caltrans) has reviewed Traffic Impact Analysis (TIA) included in the Draft Environmental Impact Report (DEIR) for the proposed Civic Center Project. The proposed project includes a new 11-story City Hall, a main library, a Port Building for Harbor Department administration, the relocating of the Main Library, the redevelopment of Lincoln Park, a 580 residential building, a 200-room hotel, and a commercial mixed use development consisting of an 8,000 square foot restaurant and 32,000 square feet of retail space. The project also involves the demolition of the existing City Hall and library buildings.

As the State agency with jurisdiction over State highway transportation facilities, Caltrans is concerned with potential increase in traffic volumes directed to them as it might exacerbate existing congestion. Regional access to the Long Beach Civic Center area is provided via I-710 and State Route 1. 1

After the existing buildings are demolished, there will be a deductions of vehicle trips, therefore the proposed project is estimated to generate a net of 10,923 average daily trips of which 671 would occur during the AM peak hour and 552 during the PM peak hour (Table 5-1). A vehicle trip deduction of 26% is also taken to account for transit usage. The 26% transit reduction seems high, please explain how the figure was arrived at. Survey data from similar uses in the vicinity project site would be justifiable information. Caltrans recommends that the City monitor transit usage within its different neighborhoods in order to justify the transit usage assumptions.

We note that 47% of the net vehicle trips are distributed to I-710, however the TIA does not evaluate potential impacts to it. The magnitude of the proposed development meets the CEQA criteria of regional significant and as such it should have evaluated potential impacts to the regional highway system including I-710 nearest intersections and interchanges. We also requested analysis of state highway facilities in our comments to the Notice of Preparation of a Draft EIR. I-710 currently operates over capacity during peak hours in Long Beach and additional traffic from anticipated growth with the Long Beach Downtown plan could potentially exacerbate existing conditions. 2

We acknowledge the Long Beach Downtown Plan EIR includes implementation of transit facilities and programs to encourage public transit usage and development of Transportation Demand Management Policies. Please include more specific information as to how the proposed Civic Center project will encourage transit usage and other alternate modes of transportation. Proximity to public transit may not be enough incentive to cause the desired mode switch. Caltrans also promotes utilization of alternate modes of transportation including public transit, bicycle, and walking. To the extent that more of the population shifts to transit for some of their inter-regional trips, traffic impacts to state facilities can be satisfactorily mitigated 3

In the spirit of mutual cooperation, Caltrans staff is available to work with the project's traffic engineers to perform traffic analysis of state highway facilities to identify potential impacts and mitigation measures, if any are necessary.

If you have any questions regarding these comments, please feel free to contact Elmer Alvarez, Project Coordinator at (213) 897-6696 or electronically at elmer.alvarez@dot.ca.gov.

Sincerely,

Elmer Alvarez for:

DIANNA WATSON
IGR/CEQA Branch Chief
Caltrans District 7

cc: Scott Morgan, State Clearinghouse

Letter 2

COMMENTER: Dianna Watson, IGR/CEQA Branch Chief, California Department of Transportation (Caltrans)

DATE: September 17, 2015

RESPONSE:

Response 2.1

The commenter requests justification for the 26 percent vehicle trip deduction for transit use assumed in the Draft SEIR. The commenter suggests that survey data from similar uses in the vicinity of the project site would be justifiable information and recommends that the City monitor transit use to justify the transit use assumptions.

The SEIR traffic analysis applies the same 26 percent vehicle trip reduction for transit use that was applied to trip generation in the Downtown Plan EIR. Justification for the transit service, pass-by, and other mode trip generation adjustment are included on pages 40 to 41 of the *Long Beach Downtown Community Plan EIR Traffic Impact Analysis* (prepared by Iteris and included in Appendix F of the Downtown Plan EIR). The 26 percent reduction is from an analysis of mode share (percent of trips via auto versus transit) based on review of actual vehicle trips into and out of Downtown Long Beach, plus data from the 2000 U.S. Census Journey to Work data. In addition, it should be noted that the reduction was only applied to home-to-work trips, which are the most common type of trips to occur on transit. This is a conservative assumption, since some of the commercial trips would also occur on transit, but are not included; thus, they are all assumed to occur via passenger auto and further analysis in the SEIR is not warranted.

Response 2.2

The commenter states that the Draft EIR should have evaluated the project's traffic impacts on the I-710 intersections and interchanges. The commenter states that the I-710 currently operates over capacity during peak hours in Long Beach and additional traffic from the proposed project could exacerbate existing conditions.

The Downtown Plan EIR found that implementation of the Downtown Plan would result in significant and unavoidable impacts to traffic and transportation, including to the I-710. Downtown Plan EIR Mitigation Measure Traf-1(a) requires enhancement to freeway access to the I-710 from the Downtown area and Mitigation Measure Traf-1(b) required a series of traffic signal improvements. As discussed in the traffic impact analysis prepared for the proposed project (see Appendix E of the Draft SEIR) and shown in Table 6-2, Trip Generation Forecast – Downtown Plan Civic Center Area, of Section 6.0, *Alternatives*, of the Draft SEIR, buildout of the Civic Center Area as analyzed in the Downtown Plan EIR would generate more trips than the proposed project. Therefore, the project would not result in any new transportation impacts, or increase the severity of significant impacts to the I-710 beyond those identified in the Downtown Plan EIR. Thus, further analysis in the SEIR is not warranted.

Response 2.3

The commenter requests specific information about how the proposed project would encourage transit use and other alternate modes of transportation.

Downtown Plan EIR Mitigation Measure AQ-2 requires the project to include a number of measures that would encourage alternate modes of transportation and a reduction in single-occupancy vehicle use. Specifically, the mitigation measure requires the project to include a secure bicycle parking area within the project site for employees and customers, requires commercial development operators to operate, maintain, and promote a ride-share program for employees, and requires all new commercial developments to include or provide access to convenient shower and locker facilities to employees to encourage bicycle, walking, and jogging options for commuting. Specific project design elements may include additional incentives for commuters and residences to use alternative modes of transportation beyond the immediate convenience of being located near transit services. The project is also expected to result in additional bus stops planned throughout the new Civic Center complex. The project would include two bicycle parking areas and locker rooms in the new underground parking garage to serve City Hall and the Port Building, and the project would also include installation of numerous electric vehicle charging stations for City and Port employees.

Letter 3

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

September 18, 2015

Craig Chalfant
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Subject: Civic Center Project
SCH#: 2015041054

Dear Craig Chalfant:

The State Clearinghouse submitted the above named Supplemental EIR to selected state agencies for review. The review period closed on September 17, 2015, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

City of Long Beach
RECEIVED
SEP 28 2015
Planning Bureau

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH#	**2015041054**
Project Title	Civic Center Project
Lead Agency	Long Beach, City of

Type	**SIR** Supplemental EIR
Description	The project includes a new City Hall, a new Port Building for Harbor Department administration, a new and relocated Main Library, a redeveloped Lincoln Park, a residential development, and a commercial mixed use development. The project also includes the demolition of the former Long Beach Courthouse building. In total, the proposal includes six new buildings, three new parking garages, related infrastructure and landscaping, and two new public street extensions of Chestnut Avenue and Cedar Avenue through the project site. The Lincoln Park garage and Broadway garage would be preserve and would be used by city staff and public parking as it is today. Existing buildings that would be demolished include the former Long Beach Courthouse, Long Beach City Hall, and Long Beach Main Library.

Lead Agency Contact

Name	Craig Chalfant		
Agency	City of Long Beach		
Phone	562 570 6368	*Fax*	
email			
Address	333 W. Ocean Boulevard, 5th Floor		
City	Long Beach	*State* CA	*Zip* 90802

Project Location

County	Los Angeles		
City	Long Beach		
Region			
Lat / Long	33° 46' 5.59" N / 118° 11' 45.61" W		
Cross Streets	Ocean Blvd, Pacific Ave, Broadway, and Magnolia Ave. Pacific Ave, Third St and Cedar		
Parcel No.	728002-5902, -5900, -2914		
Township	*Range*	*Section*	*Base*

Proximity to:

Highways	I-710, SR-1
Airports	No
Railways	Port of Los Angeles
Waterways	Los Angeles River
Schools	
Land Use	Mixed Use (LUD 7) / Downtown Plan (PD-30)

Project Issues	Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Landuse; Cumulative Effects
Reviewing Agencies	Resources Agency; Department of Boating and Waterways; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Resources, Recycling and Recovery; California Highway Patrol; Caltrans, District 7; Air Resources Board; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; Public Utilities Commission; Other Agency(ies)

Date Received	08/04/2015	*Start of Review*	08/04/2015	*End of Review*	09/17/2015

Note: Blanks in data fields result from insufficient information provided by lead agency.

Letter 3

COMMENTER: Scott Morgan, Director, State Clearinghouse

DATE: September 28, 2015

RESPONSE:

The commenter acknowledges that the Draft EIR complied with the State Clearinghouse review requirements and that no state agencies submitted comments to the State Clearinghouse.

This comment is noted.

Letter 4

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

City of Long Beach
RECEIVED
SEP 09 2015
Planning Bureau

September 1, 2015

Craig Chalfant, Planner
City of Long Beach
Development Services Department
333 West Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Chalfant:

NOTICE OF AVAILABILITY OF A DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, "CIVIC CENTER PROJECT", INCLUDES A NEW CITY HALL, A NEW PORT BUILDING FOR HARBOR DEPARTMENT ADMINISTRATION, AND A COMMERICIAL MIXED DEVELOPMENT, LONG BEACH (FFER 201500152)

The Notice of Availability of a Draft Supplement Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION: 1

1. The subject property is entirely within the City of Long Beach, which is not a part of the emergency response of the Los Angeles County Fire Department (also known as the Consolidated Fire Protection District of Los Angeles County). Therefore, this project does not appear to have any impact on the emergency responsibilities of this Department.

LAND DEVELOPMENT UNIT:

1. This project is located entirely in the City of Long Beach. Therefore, the City of Long Beach Fire Department has jurisdiction concerning this project and will be

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

AGOURA HILLS	CALABASAS	DIAMOND BAR	HIDDEN HILLS	LA MIRADA	MALIBU	POMONA	SIGNAL HILL
ARTESIA	CARSON	DUARTE	HUNTINGTON PARK	LA PUENTE	MAYWOOD	RANCHO PALOS VERDES	SOUTH EL MONTE
AZUSA	CERRITOS	EL MONTE	INDUSTRY	LAKEWOOD	NORWALK	ROLLING HILLS	SOUTH GATE
BALDWIN PARK	CLAREMONT	GARDENA	INGLEWOOD	LANCASTER	PALMDALE	ROLLING HILLS ESTATES	TEMPLE CITY
BELL	COMMERCE	GLENDORA	IRWINDALE	LAWNDALE	PALOS VERDES ESTATES	ROSEMEAD	WALNUT
BELL GARDENS	COVINA	HAWAIIAN GARDENS	LA CANADA FLINTRIDGE	LOMITA	PARAMOUNT	SAN DIMAS	WEST HOLLYWOOI
BELLFLOWER	CUDAHY	HAWTHORNE	LA HABRA	LYNWOOD	PICO RIVERA	SANTA CLARITA	WESTLAKE VILLAG
BRADBURY							WHITTIER

setting conditions. This project is located in close proximity to the jurisdictional area of the Los Angeles County Fire Department. However, this project is unlikely to have an impact that necessitates a comment concerning general requirements from the Land Development Unit of the Los Angeles County Fire Department.

1, cont'd

2. Should any questions arise regarding subdivision, water systems, or access, please contact the County of Los Angeles Fire Department's Land Development Unit's Inspector Nancy Rodeheffer at (323) 890-4243.

3. The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance.

2

2. The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

HEALTH HAZARDOUS MATERIALS DIVISION:

1. The Health Hazardous Materials Division (HHMD) of the Los Angeles County Fire Department previously provided our comments regarding this project in May 2015. HHMD has no additional comments at this time. In addition, HHMD has no jurisdiction over environmental matters in the City of Long Beach, which has its own local Certified Unified Program Agency (CUPA).

4

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

KEVIN T. JOHNSON, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

KTJ:ad

Letter 4

COMMENTER: Kevin T. Johnson, Acting Chief, Forestry Division, County of Los Angeles Fire Department

DATE: September 1, 2015

RESPONSE:

Response 4.1

The commenter states that the project site is outside of the Los Angeles County Fire Department jurisdiction and thus would not have any impact on the emergency or general responsibilities of the Department. This comment is noted.

Response 4.2

The commenter states that the County of Los Angeles Fire Department's Forestry Division has no comments on the project. This comment is noted.

Response 4.3

The commenter states that the Health Hazardous Materials Division of the County of Los Angeles Fire Department has no jurisdiction over environmental matters in the City of Long Beach, which has its own local Certified Unified Program Agency (CUPA), and has no comments on the project. This comment is noted.

Letter 5

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL AND USPS: September 16, 2015

Craig.chalfant@longbeach.gov
Craig Chalfant, Planner
Planning Bureau, Development Services Department
City of Long Beach
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Draft Environmental Impact Report (Draft EIR) for the Civic Center Project (SCH# 2015041054)

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the lead agency and should be incorporated into the Final CEQA document. The lead agency plans to demolish three buildings and construct six new governmental and mixed use buildings. Demolition would either be carried out by traditional techniques or by implosion. Based on a review of the Draft EIR, the SCAQMD staff has several concerns regarding the potential air quality impacts of the Long Beach Civic Center Project.

In the Air Quality Section, the lead agency quantified the project's construction and operation air quality impacts and compared those impacts with the SCAQMD's recommended regional and localized daily significance thresholds. Based on its analyses, the lead agency has determined that operational air quality impacts will exceed the recommended regional daily threshold for ROG emissions. Even with mitigation measures, the project related impacts to regional air quality would remain significant and unavoidable. The SCAQMD staff recommends additional mitigation measures that could be used to further reduce ROG emissions. Please see the attachment for more information. 1

The SCAQMD staff is available to work with the lead agency to address these concerns and any other air quality questions that may arise. Please contact Jack Cheng, Air Quality Specialist at (909) 396-2448, if you have any questions regarding these comments. We look forward to reviewing and providing comments for the Final CEQA document associated with this project.

Sincerely,

Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor
Planning, Rule Development & Area Sources

JW:JC
LAC150805-02
Control Number
Attachment

Attachment

Air Quality Analysis

1. The lead agency failed to properly quantify PM emissions from implosion. CalEEMod estimates emissions from traditional demolition methods and does not quantify fugitive PM emissions from implosion. SCAQMD staff recommends the lead agency revise the air quality analysis to include the emissions from implosion demolition. 2

   Mitigation Measure AQ-2 and the Air Quality Safety Plan do not identify how the lead agency will comply with SCAQMD Rule 401 – Visible Emissions and Rule 403 – Fugitive Dust. Specifically, Mitigation Measure AQ-2 does not utilize any form of dust suppression and fugitive dust control measures outlined in SCAQMD Rule 403. Furthermore, demolition by implosion is not exempt from any of the requirements of SCAQMD Rule 401 and 403. Please provide additional detailed information on the mitigation measures for both traditional and implosion demolition in the Final EIR. 3

2. The lead agency states that construction-related daily emissions would not exceed any regional SCAQMD thresholds from criteria pollutants during any individual construction phases. However, the air quality impacts from construction are underestimated because the air quality analysis does not account for overlapping construction phases. For example, Phase One: Architectural Coating overlaps with Phase Three: Demolition, Grading, and Construction. SCAQMD staff recommends revising the air quality analysis to account for overlapping construction phases and comparing the peak impacts to SCAQMD's CEQA significance thresholds for construction. 4

3. The SCAQMD staff recommends that overlapping construction and operational air quality impacts starting in 2020 through project build out 2022 be estimated, compared with the recommended SCAQMD long-term operational thresholds of significance, and then included in the Final EIR. Based on SCAQMD staff review, Phase Four: Grading air quality impacts will overlap with the operational emissions generated from occupancy during Phase One and Two. Individually, construction and operational NOx impacts for these separate activities (Phase Four: Grading and Phases 1 & 2 Operations) were shown as less than significant. However, when the overlap phases are combined, the peak impact would exceed the SCAQMD's CEQA significance thresholds for operation. 5

Additional Mitigation Measures

During project operations, the lead agency has determined that project operation emissions are significant for ROGs. Therefore, SCAQMD staff recommends additional mitigation measures to further reduce ROG emissions.

- Provide electric vehicle (EV) Charging Stations

  It is important to make this electrical infrastructure available when the project is built so that it is ready when this technology becomes commercially available. The cost of installing electrical charging equipment onsite is significantly cheaper if completed when the project is built compared to retrofitting an existing building. Similar to the City of Los Angeles requirements for all new projects, the SCAQMD staff recommends that the Lead Agency require at least 5% of all vehicle parking spaces include EV charging stations.[1] At a minimum, electrical panels should appropriately sized to allow for future expanded use. 1, cont'd

- Provide outlets for electric and propane barbecues in residential areas.

[1] http://ladbs.org/LADBSWeb/LADBS_Forms/Publications/LAGreenBuildingCodeOrdinance.pdf

Letter 5

COMMENTER: Jillian Wong, Ph.D., Program Supervisor, Planning, Rule Development & Area Sources, South Coast Air Quality Management District (SCAQMD)

DATE: September 16, 2015

RESPONSE:

Response 5.1

The commenter recommends additional mitigation measures to further reduce reactive organic gas (ROG) emissions. Recommendations include providing electric vehicle charging stations at five percent of all vehicle parking spaces or ensuring electrical panels are appropriately sized to allow for future expanded use of electric vehicle charging, and providing outlets for electric and propane barbecues in residential areas.

The proposed project would meet LEED Gold standards, which requires approximately three percent of all spaces to have Electric Vehicle Charging Stations. Pages 4.2-20 and 4.2-21 of the Draft SEIR have been revised to include the following:

AQ-3(a) **Low-VOC Paint.** The project applicant shall require all development operator(s) to use low-VOC paint on all interior and exterior surfaces. Paint should not exceed 50 g/L for all interior surfaces and exterior surfaces.

AQ-3(b) **Barbecue Outlets. Provide electric and propane barbecue outlets in all residential outdoor areas.**

Significance After Mitigation. As shown in Table 4.2-9, implementation of Mitigation Measure AQ-3**(a)** would reduce ROG emissions to the maximum extent feasible. **Mitigation Measure AQ-3(b) would further reduce ROG emissions, however, it is not possible to quantify reductions with CalEEMod.** ~~However, p~~**P**roject-related long-term impacts to regional air quality would remain significant and unavoidable.

Response 5.2

The commenter states that the Draft SEIR fails to properly quantify particulate matter (PM) emissions from implosion because CalEEMod estimates emissions only from traditional demolition methods.

Impact AQ-2 on Page 4.2-15 of the Draft SEIR states that project emissions would not exceed SCAQMD regional thresholds, but acknowledges that if demolition occurs by implosion, the project would result in significant impacts related to localized PM emissions without implementation of Mitigation Measure AQ-2. If demolition occurs by implosion, Mitigation Measure AQ-2 requires the development of an Air Quality Safety Plan to be approved by the SCAQMD. The plan would include the following measures:

- *A radius around the project site in which the public is prevented from being outdoors;*
- *Advanced notification of potential particulate matter and asbestos exposure to all land uses within 1,000 feet of the project site;*
- *Notice that windows should be closed at all buildings within the safety radius during the implosion until the City has provided notice that particulate matter and asbestos concentrations have reached background concentrations;*
- *Air quality monitoring during the day of the implosion to confirm when particulate matter and asbestos concentrations have reached background concentrations.*

Page 4.2-10 of the Draft SEIR has been revised to include the following clarification:

> **[…]**However, the air quality models identified in the CEQA Air Quality Handbook are outdated; therefore, CalEEMod Version 2013.2.2 was used to estimate regional air pollutant emissions associated with project construction and operation. **Modeling assumed demolition would occur by traditional methods, as it is not possible to model demolition by implosion in CalEEMod.**

Response 5.3

The commenter states that Mitigation Measure AQ-2, which requires the development of an Air Quality Safety Plan, does not identify how the Lead Agency will comply with SCAQMD Rule 401 – Visible Emissions and Rule 403 – Fugitive Dust and requests that detailed information be included in the mitigation measures for both traditional and implosion demolition. The commenter also states that demolition by implosion is not exempt from any of the requirements of SCAQMD Rule 401 and 403.

The Draft SEIR details that the project would be required to comply with SCAQMD Rule 403 and lists the measures to reduce fugitive dust that are required to be implemented at all construction sites located within the South Coast Air Basin on page 4.2-15 of Section 4.2, *Air Quality*. The following sentence on page 4.2-16 has been revised to clarify that Rule 403 applies to all phases of construction:

> Therefore, the following conditions, which are required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for ~~the site preparation and grading~~ **all** phases of construction.

In addition, Page 4.2-6 of the Draft SEIR has been revised to include the following information:

> ***SCAQMD Rules and Regulations.*** **All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the Plan may include the following:**
>
> > **Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than 3 minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.**

> **Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.**
>
> **Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in a table incorporated in the Rule.**

Response 5.4

The commenter states that regional air quality impacts from construction are underestimated because the air quality analysis does not account for overlapping construction phases. The commenter gives as an example, Phase One: Architectural Coating overlapping with Phase Three: Demolition, Grading, and Construction. The commenter recommends revising the air quality analysis to account for overlapping phases and comparing the peak impacts to SCAQMD regional thresholds for construction.

The air quality analysis, which is reproduced in Appendix B of the Draft SEIR, does account for overlapping phases. Page 4.2-10 of the Draft SEIR has been revised to include the following clarification:

> […] Phase 1 **would span January 2016 to November 2019 and** includes demolition of the former Courthouse, grading, construction of City Hall, the Port Building, the new Library, Civic Block parking garage and associated architectural coating and paving. Phase 1 also includes the grading and construction of the residential building and parking garage within the Third and Pacific Block. Phase 2 **would span April 2017 to December 2017 and** includes architectural coating and paving for the residential building within the Third and Pacific Block. Phase 3 **would span July 2019 to March 2020 and** includes demolition of the existing Main Library, and grading and construction of Lincoln Park. Phase 4 **would span January 2020 to July 2022 and** includes demolition of the existing City Hall and grading and construction of the Center Block components, including associated architectural coating and paving.

As described on page 18 of SCAQMD's CalEEMod User's Guide, Appendix A, Calculation Details for CalEEMod, "Since construction phases may or may not overlap in time, the maximum daily construction emissions will not necessarily be the sum of all possible daily emissions. CalEEMod therefore calculates the maximum daily emissions for each construction phase. The program will then add together the maximum daily emissions for each construction phase that overlaps in time. Finally the program will report the highest of these combined overlapping phases as a daily maximum." The maximum daily emissions reported in Table 4.2-6, Estimated Construction Maximum Daily Air Pollutant Emissions (lbs/day), on page 4.2-17 of the Draft SEIR account for the overlapping phases of construction described in the revision above and are "peak" emissions associated with construction of the project. As shown in Table 4.2-6, the project's maximum emissions are below SCAQMD's regional thresholds.

Response 5.5

The commenter recommends overlapping construction and operational air quality emissions starting in 2020 through project buildout in 2022 and comparing the combined emissions with recommended SCAQMD long-term operational thresholds of significance. The commenter states that overlapping construction and operational emissions would exceed SCAQMD's operational threshold.

SCAQMD's construction and operational thresholds are detailed on page 4.2-11 of the Draft SEIR. The construction emissions threshold applies to construction-related activities, such as architectural coating (i.e., interior and exterior painting), grading, and building construction; whereas, the operational emissions threshold applies to operational emissions associated with waste generation, vehicle trips, and water use of the proposed project's long term use. Construction emissions are temporary in nature and would not contribution to long-term operational emissions. Use of the approach suggested by the commenter could apply to any project, but the City has never received a similar request on any other project, nor has such an approach been used in the past. To maintain consistency with past City practice and SCAQMD recommendations, the approach used in the Draft SEIR (analyzing temporary construction emissions and long-term operational emissions separately and comparing emissions to the applicable thresholds) has not been revised.

Letter 6

WATER RECLAMATION
SOLID WASTE MANAGEMENT

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON HYDE
Chief Engineer and General Manager

September 16, 2015

Ref File No.: 3408681

Mr. Craig Chalfant, Planner
Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Chalfant:

Civic Center Project

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Supplemental Environmental Impact Report for the subject project on August 5, 2015. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments:

1. Previous comments submitted by the Districts in correspondence dated May 14, 2015 (copy enclosed) still apply to the subject project with the following updated information.

2. The Joint Water Pollution Control Plant currently processes an average flow of 263.1 million gallons per day.

3. All other information concerning Districts' facilities and sewerage service contained in the document is current.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Enclosure

cc: M. Sullivan
J. Ganz

DOC: #3448741.D03

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

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GRACE ROBINSON HYDE
Chief Engineer and General Manager

May 14, 2015

Ref File No.: 3290765

Mr. Craig Chalfant, Planner
Development Services Department
City of Long Beach
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Chalfant:

Civic Center Project

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on April 17, 2015. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' De Forest Avenue Trunk Sewer, located in Broadway at the Long Beach Freeway. This 36–inch diameter trunk sewer has a design capacity of 39.4 million gallons per day (mgd) and conveyed a peak flow of 5.6 mgd when last measured in 2012.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant located in the City of Carson, which has a design capacity of 400 mgd and currently processes an average flow of 263.4 mgd.

3. The expected increase in average wastewater flow from the proposed project consisting of a 270,000-square-foot city hall building, a 240,000-square-foot port building, a 92,000-square-foot library, 40,000 square feet of retail structure, a total of 780 apartment units, and a 200-room hotel, is 113,690 gallons per day, after all structures on the project site are demolished. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System for increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is

issued. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, click on Will Serve Program, and search for the appropriate link. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

5. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Hyde

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: M. Sullivan
J. Ganz

DOC: #3316480.D03

Letter 6

COMMENTER: Adriana Raza, Customer Service Specialist, Facilities Planning Department, County Sanitation Districts of Los Angeles County

DATE: September 23, 2015

RESPONSE:

The commenter refers to its letter submitted during the scoping period. The commenter states that all information contained in the Draft SEIR concerning the County Sanitation Districts of Los Angeles County's facilities and services is current, except that the Joint Water Pollution Control Plant currently processes an average flow of 263.1 million gallons per day.

The average flow of the Joint Water Pollution Control Plant has been updated from 263.4 million gallons per day, which was based on the Districts' May 14, 2015 comment letter, to 263.1 million gallons per day throughout the Draft SEIR.

Letter 7

LONG BEACH HERITAGE

September 10, 2015

LONG BEACH HERITAGE RESPONSE TO THE CIVIC CENTER PROJECT SEIR, SECTION 4.3

The mid-twentieth century Civic Center is a significant element in the built environment of our city and its demolition should be mitigated by a substantial contribution to future historic preservation in Long Beach. Merely documenting the destroyed buildings in photographs and saving a few artifacts for tourists to view does not make up for the loss of such notable structures by important local architects. The former Los Angeles County Courthouse of 1958-60 on Ocean Boulevard, designed by Francis Heusel and Kenneth Wing, is deemed eligible for local and state landmark status, according to CEQA guidelines. It is a prime and intact example of Mid-Century Modern curtain wall architecture. Although the City Hall and Main Library buildings are only 38 years old, they are the product of the Allied Architects, who included the internationally esteemed Edward Killingsworth; Wing & Wing; Gibbs & Gibbs; and Frank Homolka. The structures embody the Late Modern style current in America in the 1970s, with their striking combination of concrete and tinted glass, as well as the use of a rooftop garden on the Library, an innovative concept at the time. This unique complex is eligible for listing in the State Register of Historic Resources as well. Many years of planning went into the final concept for our Civic Center buildings and landscaping. 1

Long Beach Heritage agrees with the State Historic Preservation Office that mitigation for the loss of the Civic Center should include depositing a substantial sum of money into the Long Beach Navy Memorial Heritage Association trust fund to be used for future preservation grants in the city. This fund originated with mitigation money for the destruction of the architecturally noteworthy Roosevelt Navy Base designed by Adrian Wilson and Paul Revere Williams. Demolition of our Civic Center, which is considered aesthetically significant by architects and preservationists, should be assuaged by a meaningful contribution from the developer to preservation efforts in Long Beach. 2

Cheryl Perry

Cheryl Perry

President, Long Beach Heritage

Letter 7

COMMENTER: Cheryl Perry, President, Long Beach Heritage

DATE: September 10, 2015

RESPONSE:

Response 7.1

The commenter states that building documentation and preserving "a few articles for tourists to view" does not make up for the loss of the former Los Angeles County Courthouse, City Hall, or Main Library. The commenter states that the complex is eligible for listing in the State Register of Historic Resources.

The Draft SEIR acknowledges that the former Los Angeles County Courthouse and City Hall-Library Complex both appear eligible for listing in the CRHR (see page 4.3-8 of Section 4.3, *Cultural Resources*). The Draft SEIR also acknowledges that Mitigation Measures CR-1(a), Historic Artifact Collection Program, and CR-1(b), Building Documentation, would reduce significant impacts to cultural resources to the degree feasible, but not to below a level of significance. Therefore, the Draft SEIR found that impacts to cultural resources would contribute to the Downtown Plan EIR finding that impacts to cultural resources would be significant and unavoidable.

Response 7.2

The commenter states agreement with the OHP that cultural resource mitigation should include funding for historic preservation and suggests depositing a "substantial sum of money" into the Long Beach Navy Memorial Heritage Association trust fund to be used for future preservation grants in the City. The commenter notes that this fund originated with mitigation money for the destruction of the architecturally noteworthy Roosevelt Navy Base.

OHP's recommendation that the City establish a historic preservation mitigation fund does not directly address the identified impact related to demolition of the Old Courthouse and the Long Beach City Hall-Library Complex. Nonetheless, this comment has been forwarded to City decision makers, who may consider including the suggestion as conditions of project approval.

Letter 8

LOS ANGELES CONSERVANCY

523 West Sixth Street, Suite 826
Los Angeles, CA 90014

213 623 2489 OFFICE
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laconservancy.org

Submitted electronically
September 17, 2015

Craig Chalfant, Planner
Long Beach Development Services
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802
Email: craig.chalfant@longbeach.gov

Re: Draft Supplemental Environmental Impact Report, Long Beach Civic Center Project

Dear Mr. Chalfant,

On behalf of the Los Angeles Conservancy, thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Report (SEIR).

The Conservancy has previously raised concerns over the environmental review process for the proposed demolition of the Long Beach Courthouse, and we appreciate the completion of a Draft SEIR that examines the Long Beach Civic Center as a whole. Nonetheless, the current analysis for the proposed Civic Center Project contains significant flaws with respect to cultural resources in several key areas and fails to adequately evaluate a range of meaningful preservation alternatives. **Most concerning is that no single preservation alternative is offered (only partial-preservation alternatives) within the Draft SEIR that assesses the reuse and continued eligibility of all of the affected cultural resources, despite being required by CEQA. This is in violation of CEQA and further demonstrates that the City is not seriously looking at preservation solutions and options in a good faith manner.**

1

We strongly believe that there are viable opportunities to retain and adaptively reuse the historic Courthouse, City Hall, and Main Library buildings as part of the proposed redevelopment of the site, and we urge the City to further analyze and select a true preservation alternative as the environmentally superior alternative.

I. Historic significance of the Long Beach Civic Center.

The proposed project seeks to demolish the Long Beach Courthouse, City Hall, and Main Library, three known historic resources that are eligible for listing in the California Register of Historical Resources and as Long Beach Historic Landmarks.

2

The Courthouse was determined eligible for the California Register in 2008 as part of the the City of Long Beach's citywide survey of historic resources. The assessment identified the building as an excellent example of the Corporate International Style that retains most of its character-defining features. Completed in 1960, the steel-framed building was designed by master architect Kenneth S. Wing in conjunction with Francis J. Heusel. The rectangular-plan courthouse has curtain walls set with panels of glass and blue porcelain enamel corresponding to each floor and floor plate, while the west and east elevations have a contrasting treatment with precast aggregate concrete panels. Other distinguishing features of the building's design include the recessed first floor set behind the columns of the structural framing, the transparant quality of the glass-enclosed staircase of the building's southwest section, and terrazzo paving and raised concrete planters.

Completed in 1977, City Hall and the Main Library represented the realization of the 1950s Civic Center Master Plan, which envisioned a modern centralized hub for civic engagement and municipal services. The complex was designed by Allied Architects, which included Hugh and Donald Gibbs; Homolka & Associates; Killingsworth, Brady & Associates; Kenneth S. Wing and Associates; and Peter Walker as landscape architect. As built, City Hall and the Main Library are excellent examples of the Late Modern Style with integrated landscaping and reveal the collective efforts of this consortium of local master architects. The two buildings are connected by an open plaza, constructed primarily of brick and concrete with a designed modern landscape and amphitheater. 2, cont'd

The fifteen-story glass, concrete, and aluminum City Hall building is the centerpiece of the Civic Center, designed to accommodate all City departments within the central tower. Distinctive features include monumental precast concrete corner piers, sleek glass curtain walls, and the plaza-facing glass door entrance. The council chambers are located on the plaza level and visible through a glass viewing area, which Docomomo Southern California has recognized as "a forward-thinking nod to transparency in local government."

The two-story, rectangular-plan Main Library building was designed to be an integral part of the surrounding Lincoln Park and features a flat roof with planters and grass berms above reinforced concrete walls. In juxtaposition to the solid concrete massing, large clerestory windows allow natural light to filter into the public spaces.

II. Cultural Resources evaluation in Draft SEIR contains significant flaws.

The Conservancy believes that the Cultural Resources evaluation prepared for the Draft SEIR is flawed in several key areas and is inadequate for purposes of conducting a thorough environmental review. While the study acknowledges the eligibility of the Courthouse, City Hall, and the Main Library for listing on the California Register of Historical Resources and as City of Long Beach Historic Landmarks, we disagree with the methodology applied in the evaluation of a potential Civic Center historic district. 3

First, the Draft SEIR erroneously treats City Hall and the Main Library as a single historic resource as opposed to two separate resources. Though they are inextricably linked as part of the fulfillment of the 1950s Civic Center Master Plan under the direction of Allied Architects, they are distinct buildings in 4

design and execution. As such, they should have been evaluated separately for individual eligibility, as well as for eligibility as contributors to the potential historic district.

4, cont'd

Second, the Conservancy disputes the proposed boundaries for and assessment of the potential Civic Center historic district and believes that the project site does indeed contain an eligible historic district. The Cultural Resources Study in the Draft SEIR states: "[w]hile the buildings and structures within the Civic Center are all functionally related and were each designed for municipal purposes, the alterations to the Public Safety Building and Lincoln Park and construction of the Broadway Parking Garage have reduced the integrity of the site and weakened its cohesive overall identity, making it ineligible for consideration as a CRHR or locally eligible historic district."[1] We recognize that the 1960 Public Safety Building, though one of the first buildings to be constructed as part of the postwar redevelopment of the Civic Center, has been altered significantly over the years and no longer retains integrity. Similarly, Lincoln Park has been modified from its 1964 redesign and does not appear to be an eligible historic resource either. We question, however, the decision to evaluate the 1980s Broadway Parking Garage within the boundaries of the potential district, since it does not represent the realization of the Civic Center Master Plan and was constructed outside of the potential period of significance.

5

Despite alterations to the Public Safety Building and Lincoln Park, Conservancy strongly believes that the Civic Center superblock, its associated buildings (including the Courthouse, City Hall, and Main Library), and its designed plaza and landscapes do compose an eligible and intact historic district. The period of significance for the potential district is 1960 to 1977. Together, the contributing buildings and integrated landscapes express the vision of the 1950s Civic Center Master Plan, namely the creation of a modern, transparent, and consolidated governmental complex within the core of the city.

The Civic Center Project seeks to demolish the Courthouse, City Hall, and Main Library as well as the historic and cultural landscape in order to fulfill a proposed plan to redevelop the entire Civic Center site. This action would lead to the complete and significant loss of three individually eligible historic resources, which would be compounded by the loss of an eligibile historic district. To this end, the Draft SEIR should have also evaluated the overall impacts to cultural resources that would occur as a result of the proposed project, from the standpoint of indivually-eligble resources and as a historic district

6

III. Overly Narrow Project Objectives Improperly Limit the Full Consideration of Preservation Alternatives

Paradoxically, the project seeks to demolish the historic Courthouse and Civic Center in order to redevelop the site. As recognized by the DEIR, a significant adverse impact -- the loss of the Courthouse and Civic Center -- is the result of any attempt to meet these objectives. We strongly feel that the City cannot legitimately justify demolishing the Courthouse and Civic Center and obliterating significant and unique historic resources without the full consideration of viable preservation alternatives. As narrowly defined within the SEIR, it is virtually impossible to achieve a preservation outcome. We recognize that preserving and reusing the Courthouse and Civic Center may not be the City's preference, but the project

7

[1] City of Long Beach, *Civic Center Project Draft Supplemental Impact Report, Appendix C* (2).

objectives cannot simply be assumed to be superior to the value of the historic resources that is being compromised.

The underlying purpose of the project is summarized in the following objective: "Redevelop the Civic Center mega-block into a vibrant mix of public and private space, including a grand Civic Plaza, which asserts the value and importance of the public realm, and which functions as the City's center for governance, civic engagement and cultural and educational exchange." Rehabilitating and reusing the historic resources within the potential Civic Center Historic District would reinforce the area's civic and cultural identity, reinvigorate it for contemporary uses, and promote long-term sustainability.

As currently outlined, many of the proposed project objectives in the Draft SEIR are too narrowly defined and reveal the City's pre-commitment to demolition as opposed to rehabilitation and potential reuse, which could similarly address public safety concerns. These include the first two objectives:

- Replace seismically deficient City Hall and Main Library in an expeditious manner; and
- Reduce public safety hazards by eliminating the risk of fire, structural collapse, personal injury to trespassers, vandalism and crime, by demolishing the structurally unsound, abandoned, and deteriorated former Long Beach Courthouse building.

It is well recognized that an overly narrow definition of project objectives undermines the purpose of CEQA by foreclosing consideration of less harmful alternatives.[2] With regard to the proposed project, two of the five objectives are so narrowly defined and subjective as to essentially eliminate any possibility of their being met by a preservation alternative. The Conservancy therefore requests that the DEIR contain a broader definition of project objectives, allowing for the full consideration of preservation alternatives.

7, cont'd

IV. The Final SEIR should evaluate and select a bona fide preservation alternative as the environmentally superior alternative.

The Conservancy is deeply concerned over the absence of a range of meaningful preservation alternatives in the Draft SEIR. In our comments on the Draft EIR for the now-withdrawn Long Beach Courthouse Demolition Project, we urged the City to mandate the study of bona fide alternatives for retaining and reusing the Courthouse as part of a thoughtful planning process for the Civic Center at large. With the Draft SEIR, the City has once more failed to demonstrate the infeasibility of incorporating the Courthouse, City Hall, and Main Library into the new plan for revitalizing the Civic Center.

8

a. Deficiencies in current study of project alternatives, as no preservation alternative is offered that maintains eligibility of all of the affected cultural resources

[2] See City of Santee v. County of San Diego (1989) 214 Cal.App.3d 1438 (holding that when project objectives are defined too narrowly an EIR's treatment of analysis may also be inadequate).

In addition to the required No Project/No Build Alternative, the Draft SEIR analyzes three alternatives, of which two would slightly reduce impacts to cultural resources. Alternative 2/Downtown Plan Buildout of Civic Center Area Alternative would retain the Main Library and Lincoln Park, but demolish the Courthouse and City Hall. Though few details are provided, this alternative's impact on historic resources would remain significant. Alternative 3/Adaptive Reuse Alternative would rehabilitate the Courthouse according to the *Secretary of the Interior's Standards for Rehabilitation* and reuse the building for governmental offices. While the Courthouse would retain its eligibility for the California Register under this alternative, City Hall and the Main Library would still be demolished, resulting in significant impacts.

8, cont'd

Alternative 3 references an Adaptive Reuse Study (Study) prepared by RRM Design Group in 2014, which was also included in the Draft EIR for the Long Beach Courthouse Demolition Project. The Study is intended to "understand on a conceptual level the impacts of re-furbishing existing building configuration to be used primarily as City Hall and/or municpal offices." As we pointed out in our comment letter on the proposed Courthouse Demolition Project, this analysis is minimal in scope and provides few actual details on the existing conditions of the various building systems. The Study includes inaccurate information in key areas, stating that "the original heating, cooling, and ventilation systems are well beyond the normal service life expectancy." Furthermore, it fails to acknowledge that, in 1996, the County of Los Angeles undertook a major $1.8 million energy efficiency upgrade of the building that focused on HVAC and lighting.[3]

The analysis in Alternative 3 of the proposed Civic Center Project does not address these deficiencies or offer any additional evidence to support claims that adaptive reuse would be infeasible. In assessing the impacts of Alternative 3 on Cultural Resources, the Draft SEIR states: "The adaptive reuse of the building, however, would require substantial alteration of interior and exterior features. The adaptive reuse would maintain the structure of the building, but its appearance and historic value may be diminished." While the project would adhere to the *Standards for Rehabilitation*, the City does not offer any insights into how the Courthouse's integrity could be compromised, and its discussion of this Alternative underscores the predisposition towards demolition.

A key policy under the California Environmental Quality Act (CEQA) is the lead agency's duty to "take all action necessary to provide the people of this state with historic environmental qualities and preserve for future generations examples of major periods of California history."[4] To this end, CEQA requires public

[3] Energy Star Labeled Building Profile: http://www.energystar.gov/index.cfm?fuseaction=labeled_buildings.showProfile&profile_id=1313: This 6-story, 215,880 sq. ft., air-conditioned facility (302,896 GSF including parking lot and garage) received two new chillers; two sets of chilled water and condenser water pumps, each with premium efficiency pump motors, 24 variable frequency drives and compatible premium efficiency motors for air handling units; an airside economizer cycle; and a new analog/digital energy management system with centralized and local HVAC access control of the entire facility. The building's lighting system was also retrofitted with T8/electronic ballasts (from T12/magnetic ballast fluorescent); compact fluorescent lamps (from incandescent), high pressure sodium lamps (from mercury vapor); and LED exit signs.

[4] Public Resource Code, Sec. 21001 (b), (c).

agencies to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects."[5]

Courts often refer to the EIR as "the heart" of CEQA because it provides decision makers with an in-depth review of projects with potentially significant environmental impacts and analyzes a range of alternatives that reduce those impacts.[6] Based on objective analyses found in the EIR, agencies "shall mitigate or avoid the significant effects on the environment whenever it is feasible to do so."[7] The lead agency cannot merely adopt a statement of overriding considerations and approve a project with significant impacts; it must first adopt feasible alternatives and mitigation measures.[8]

8, cont'd

While the Adaptive Reuse Study ultimately concludes that "a renovation project of this size and complexity would cost far more than demolishing and replacing the existing building with entirely new construction," **the fact that an environmentally superior alternative may be more costly or fails to meet all project objectives does not necessarily render it infeasible under CEQA.**

b. Meaningful adaptive reuse alternatives will meet most of the project objectives.

The Draft SEIR contends that the environmentally superior alternative is Alternative 1/Reduced Density Alternative, which does not include any preservation components that would reduce significant impacts to cultural resources. This determination is in error and inherently flawed and reveals the broader and problematic deficiencies with the City's analysis and this SEIR The Final SEIR should, in good faith, examine a range of additional preservation alternatives that retain and adaptively reuse the Courthouse, City Hall, and Main Library buildings as part of a comprehensive approach to the Civic Center. **Further, the SEIR needs to offer at least one preservation alternative that maintains the eligibility of the affected cultural resources, including the Courthouse and overall Civic Center complex (which includes the historic City Hall, Library and associated designed landscape). This alternative is not provided at all which does not adhere to CEQA provisions. Only partial-preservation alternatives are offered in the Draft SEIR. As stated, the City simply rejected considering and studying this option.[9]**

9

The Draft SEIR states that a Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was considered, but ultimately rejected. Though the 2014 Adaptive Reuse Study of the Courthouse is cited as evidence of this alternative's infeasibility, no studies appear to have been conducted on City Hall and the Main Library. Without sufficient evidence, including detailed cost analyses and a thorough assessment of existing building conditions, we question how the City arrived at its determination that rehabilitation and reuse are infeasible.

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[5] *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41; also see PRC Secs. 21002, 21002.1.
[6] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795; *Laurel Heights Improvement Association v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123.
[7] Public Resource Code, Sec. 21002.1.
[8] Public Resource Code, Sec. 21081; *Friends of Sierra Madre v. City of Sierra Madre* (2001) 25 Cal.4th 165, 185.
[9] Civic Center Project SEIR, 6-14

Furthermore, we strongly believe that greater consideration and analysis should have been given to the three alternatives suggested by the Office of Historic Preservation, including the proposed Infill Alternative. The Draft SEIR fails to demonstrate, for example, the infeasibility of integrating sensitive infill development into the underutilized portions of the site. Adaptively reusing the Courthouse, City Hall, and Main Library buildings – in tandem with compatible infill construction – would meet most the central project objectives, including revitalizing the Civic Center area, enhancing connectivity between Downtown and the Civic Center, and facilitating a vibrant mix of public and private space. There are other civic center developments that have successfully been reused and upgraded to meet current government and alternative use requirements, including those involving similar Modernist structures that also required seismic and life safety solutions, not unlike those present for Long Beach. One example is the Civic Center in Richmond, California.[10] We encourage the City to look to this example and others before foreclosing options for a viable preservation alternative.

While we recognize that the proposed Civic Center project reflects many of the guiding principles of the 2012 Downtown Plan, retaining and rehabilitating these known historic resources is also consistent with the City's outlined vision, which states: "[w]e value our buildings of historic merit and seek to preserve or restore them through adaptive reuse."[11] Though the Downtown Plan EIR found that the implementation of the Downtown Plan would have a "significant and unavoidable impact resulting from the potential redevelopment of properties that are eligible [historic resources]," the City must also demonstrate a good-faith effort to examine and pursue the environmentally superior alternative that mitigates and/or avoids significant impacts.

9, cont'd

Studies have consistently shown that, when comparing buildings of equal size and function, adaptive reuse nearly always offers greater environmental savings over demolition and new construction.[12] New energy efficient buildings can take up to eighty years to overcome the climate change impacts that result from their construction, whereas building reuse and retrofits can substantially reduce greenhouse gas emissions. Though the Draft SEIR notes that Alternative 3/Adaptive Reuse Alternative would "incrementally lessen impacts to GHG emissions," it fails to explore the full environmental benefits of preservation.

10

Conclusion

Thank you for the opportunity to comment on the Draft SEIR for the Long Beach Civic Center Project. We welcome the opportunity to continue working with the City on efforts to identify opportunities for rehabilitation and adaptive reuse within the potential Civic Center Historic District. Please do not hesitate to contact me at (213) 430-4203 or afine@laconservancy.org should you have any questions or concerns.

About the Los Angeles Conservancy:

[10] Richmond, California Civic Center, http://aiasf.org/programs/competition/design-awards/2010/richmond-civic-center/

[11] City of Long Beach, *Civic Center Project Draft Supplemental Impact Report* (2-28).

[12] Preservation Green Lab, National Trust for Historic Preservation, *The Greenest Building: Quantifying the Environmental Value of Building Reuse*, January 2012.

The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with more than 6,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural and cultural heritage of Los Angeles County through advocacy and education. For over twenty-five years, the Conservancy and its volunteer Modern Committee have worked to raise awareness about Los Angeles' unique collection of mid-20th century modernist structures.

10, cont'd

Sincerely,

Adrian Scott Fine
Director of Advocacy

cc: Long Beach Heritage
California Office of Historic Preservation
Docomomo-Southern California

Letter 8

COMMENTER: Adrian Scott Fine, Director of Advocacy, Los Angeles Conservancy

DATE: September 17, 2015

RESPONSE:

Response 8.1

The commenter states that the Draft SEIR is in violation of CEQA because it fails to include an alternative that preserves all cultural resources on the project site. The commenter opines that there are viable opportunities to retain and adaptively reuse the historic Courthouse, City Hall, and Main Library buildings.

CEQA Guidelines Section 15126.6 (a) states that an EIR shall describe a range of reasonable alternatives to the project, however an EIR does not need to consider every conceivable alternative to the project. The same *CEQA Guidelines* section goes on to state that the alternatives should feasibly attain most of the objectives for a project, but avoid or substantially lessen any of the significant effects of the project.

The Draft SEIR includes a partial preservation alternative, the Adaptive Reuse Alternative, discussed in Section 6.3. This alternative would preserve the former Courthouse building, but demolish the City Hall-Library complex. The Draft SEIR found that the Adaptive Reuse Alternative would reduce impacts to cultural resources, as well as greenhouse gas emissions/climate change.

As discussed in Section 6.5, *Alternatives Considered But Rejected*, an alternative that would adaptively reuse the Courthouse as office space (similar to that described in the Adaptive Reuse Alternative) and rehabilitate the seismic deficiencies within the City Hall-Library Complex in the Courthouse Adaptive Reuse and City Hall-Library Complex Rehabilitation Alternative was considered. However, as discussed on pages 6-14 and 6-15 of the Draft SEIR, this alternative was rejected because of the functional and physical deficiencies of the buildings and because most of the project objectives would not be feasibly attainable.

Response 8.2

The commenter states that the project would involve the demolition of three buildings eligible for listing in the California Register of Historic Resources.

The commenter is correct. If City decision makers approve the project, they would have to adopt a Statement of Overriding Considerations setting forth the reasons that they believe the project's benefits outweigh this significant environmental impact.

Response 8.3

The commenter states that the Cultural Resources Study included as Appendix C of the Draft SEIR is flawed and disagrees with the finding that the Civic Center is not a historic district.

Refer to Response 1.2 for a response to this comment.

Response 8.4

The commenter states that City Hall and Main Library should not have been evaluated as one resource.

Consideration was given to how each of the resources within the project area should be evaluated and documented as part of the study. The City Hall-Library Complex spaces share a physical connection: a narrow wing of single-story offices extends off the west elevation of the Main Library and connects to the City Hall between the western and southern piers of the tower. The rooftop landscaping elements continue these connections throughout the space. Therefore the City Hall-Library Complex buildings and the associated landscape elements were considered a single resource. Treating the two buildings separately rather than as the "City Hall-Library Complex" would not change the SEIR conclusions given that the impact associated with demolition of the complex has been identified as unavoidably significant.

Response 8.5

The commenter disputes the boundary used for assessing the Civic Center historic district and opines that the Broadway Parking Garage should not have been included in the assessment.

The Broadway Parking Garage was included in the historic assessment of the project because it is located within the physical property of the Civic Center space. Although the parking garage was constructed in the 1980s and does not meet the typical 50-year threshold for historic significance (as only the former Courthouse meets the 50-year threshold), it was evaluated because of its function as part of the Civic Center and its location within the Civic Center. Further, placement of the Broadway Parking Garage within the Civic Center is integral to evaluating the important components of the property, its spaces and overall cohesion. Even if the Broadway Parking Garage were excluded from the assessment, a historic district would still not be present due to the lack of contributing resources.

Response 8.6

The commenter re-states an opinion that the Civic Center superblock comprise an eligible and intact historic district.

Refer to Response 1.2, Response 8.4 , and Response 8.5 for a response to this comment.

Response 8.7

The commenter states that the project objectives are overly narrow making it virtually impossible to achieve a preservation outcome.

The project objectives are commensurate with the guiding principles of the adopted Long Beach Downtown Plan, described on Page 2-10 of the Draft SEIR, and include "promoting the development of a distinctive downtown skyline", "providing a vibrant, compact city core", and "demand[ing] quality in building practices in order to ultimately create historical masterpieces". In addition, Section 6.0, *Alternatives,* of the Draft SEIR analyzed three alternatives that would reduce impacts to cultural resources, the No Project Alternative, the Adaptive Reuse Alternative, and the Downtown Plan Buildout of Civic Center Area Alternative.

It is acknowledged that an alternative that preserves and rehabilitates existing structures would reduce impacts to historic resources and is physically feasible. However, such an alternative would conflict with objectives for the currently proposed project as well as those of the adopted Downtown Plan and would be prohibitively expensive, ranging from more than $124,650,000 to $138,500,000 for conversion of the former Courthouse alone, which would still suffer from functional and physical deficiencies. Therefore, a full preservation alternative is not a feasible alternative under CEQA.

Response 8.8

The commenter re-states an opinion that the Draft SEIR is in violation of CEQA because it fails to include an alternative that preserves all cultural resources on the project site. The commenter also states that an environmentally superior alternative may be more costly or fail to meet project objectives, but this does not render it "infeasible under CEQA."

Refer to Response 8.1 and Response 8.7, for a response to this comment.

Response 8.9

The commenter states that adaptive reuse would meet most of the project objectives. The commenter also believes that the OHP suggested alternatives that were considered, but rejected should have been more fully considered.

The last paragraph of Section 6.5, *Alternatives Considered But Rejected*, on pages 6-14 and 6-15 of the Draft SEIR, describes the objectives that a full adaptive reuse alternative would fail to meet project objectives because retaining the former Courthouse and the City Hall-Library Complex would restrict space available to achieve project objectives; these include:

- Redeveloping the site into a vibrant mix of public and private space with a grand Civic Plaza
- Improving connections with greater Downtown
- Reestablishing the small block grid of the historic downtown street fabric;
- Private development of housing, office, hotel, and retail; and
- Increasing affordable housing.

The other suggested alternatives included an Alternate Site Alternative, an Infill Alternative, and an Alternative-Use Alternative. These are discussed on page 6-14 of the Draft EIR. An Alternate Site Alternative and Infill Alternative would have located the entire proposed project or project components on one or more different sites within the Downtown Plan Area and an Alternative-Use Alternative would have placed different uses within the existing buildings on the project site. As discussed in the Draft SEIR, moving the project to another site, as would occur in the Alternate Site and Infill Alternatives, would not meet many of the key project objectives since it would not replace seismically deficient structures, reduce public safety hazards, or improve and revitalize the Civic Center Area. In addition, it would not be feasible to place different uses in existing buildings on the project site, as would occur in the Alternate-Use Alternative, since additional buildings would need to be constructed to house displaced civic uses. Displaced civic uses then would not be located within the Civic Center Area, as identified in the adopted Downtown Plan.

Response 8.10

The commenter states that the Adaptive Reuse Alternative fails to fully account for the greenhouse gas emission reduction benefits of preservation, stating that new energy efficient buildings can "take up to eighty years to overcome the climate change impacts that result from construction."

The proposed project's impact related to greenhouse gas emissions was found to be less than significant and the Draft SEIR acknowledges that the impact of the Adaptive Reuse Alternative would be lower than that of the proposed project. In response to this comment, page 6-10 of the Draft SEIR has been revised:

> This alternative would have ~~slightly~~ lower construction GHG emissions than the proposed project due to the adaptive reuse of the former Long Beach Courthouse, rather than demolition of the building. This alternative's climate change impacts would be ~~slightly~~ less than those of the proposed project and**, as with the proposed project,** would **be** ~~remain~~ less than significant.

Letter 9

-----Original Message-----
From: JIM COKE [mailto:jimcoke@usa.net]
Sent: Monday, September 07, 2015 4:32 PM
To: Craig Chalfant
Subject: civic center solar array on roof of new library will be in the shade during winter

Hello Craig,

April Economides suggested reaching out to you regarding the civic center design flaw mentioned in the subject line above.
I pointed this out at a meeting about 18 months ago at Los Altos library with city and developer people. Plan looked the same from latest pictures I saw at the meeting at MADE last month.

Deadline for input in Sept 17? Cambodian community leaders meeting Sept 19? Is this information correct?

thank you,
Jim

Letter 9

COMMENTER: Jim Coke, Private Citizen

DATE: September 7, 2015

RESPONSE:

The commenter states that the proposed solar array on the new library would be shaded during the winter.

Figures 4.1-7a through 4.1-7d in Section 4.1, *Aesthetics*, of the Draft SEIR show the results of a shadow study prepared for the proposed project. As shown on Figure 4.1-7a, the library roof would be shaded by surrounding existing buildings during the early morning hours at the height of winter. Figure 4.1-7b shows that the library would be unshaded during the late morning at the height of winter. Figures 4.1-7c and 4.1-7d indicate that the library roof would be shaded by the proposed mixed-use tower and surrounding existing buildings during the early afternoon at the height of winter. Figures 4.1-7a through 4.1-7d show that the library would be unshaded by existing or proposed buildings throughout the day during the height of summer.

While the solar array efficiency may be reduced during those limited winter solstice hours each year, the overall system would still produce sufficient solar energy to reduce the project's nonrenewable energy demands and associated greenhouse gas emissions. Downtown Plan EIR Mitigation Measure AQ-2 states that "The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day." The proposed project's design and solar array would be in compliance with this mitigation measure, as winter solstice is not indicative of an "average sunny day."

MITIGATION MONITORING AND REPORTING PROGRAM

CEQA requires adoption of a monitoring and reporting program (MMRP) for the mitigation measures necessary to mitigate or avoid significant effects on the environment. The MMRP is designed to ensure compliance with adopted mitigation measures during project implementation.

This MMRP includes applicable mitigation measures from both the Downtown Plan Final Program Environmental Impact Report (PEIR) and the Civic Center Project Supplemental Environmental Impact Report (SEIR). For each measure, specifications are made herein that identify the action required and the monitoring that must occur. In addition, the party for verifying compliance with individual mitigation measures is identified.

In some cases, applicable measures from the Downtown Plan PEIR were fully or partially implemented as part of the Civic Center Project SEIR. In such cases, the MMRP indicates that no further action is required or revises the monitoring requirements outlined in the PEIR to reflect the specific circumstance for the Civic Center Project. When monitoring requirements from the PEIR and the SEIR differ, the requirements of the SEIR supersede those of the PEIR.

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
AESTHETICS							
DT Mitigation Measure AES-2(a) Lighting Plans and Specifications. Prior to the issuance of building permits for new large development projects, the applicant shall submit lighting plans and specifications for all exterior lighting fixtures and light standards to the Development Services Department for review and approval. The plans shall include a photometric design study demonstrating that all outdoor light fixtures to be installed are designed or located in a manner as to contain the direct rays from the lights onsite and to minimize spillover of light onto surrounding properties or roadways. All parking structure lighting shall be shielded and directed away from residential uses. Rooftop decks and other similar amenities are encouraged in the Plan. Lighting for such features shall be designed so that light is directed so as to provide adequate security and minimal spill-over or nuisance lighting.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			
DT Mitigation Measure AES-2(b) Building Material Specifications. Prior to the issuance of any building permits for development projects, applicants shall submit plans and specifications for all building materials to the Development Services Department for review and approval. The Plan provides measures to ensure that the highest quality materials are used for new development projects. This is an important consideration, since high-quality materials last longer. Quality development provides an impression of permanence and can encourage additional private investment in Downtown Long Beach.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			

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OCM – Onsite Construction Manager
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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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DT Mitigation Measure AES-2(c) Light Fixture Shielding. Prior to the issuance of building permits for development projects within the Downtown Plan Project area, applicants shall demonstrate to the Development Services Department that all night lighting installed on private property within the project site shall be shielded, directed away from residential and other light-sensitive uses, and confined to the project site. Rooftop lighting, including rooftop decks, security lighting, or aviation warning lights, shall be in accordance with Airport/Federal Aviation Administration (FAA) requirements. Additionally, all lighting shall comply with all applicable Airport Land Use Plan (ALUP) Safety Policies and FAA regulations.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			
DT Mitigation Measure AES-2(d) Window Tinting. Prior to the issuance of any building permits, the applicant shall submit plans and specifications showing that building windows are manufactured or tinted to minimize glare from interior lighting and to minimize heat gain in accordance with energy conservation measures.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			
DT Mitigation Measure AES-3 Shadow Impacts. Prior to the issuance of building permits for any structure exceeding 75 feet in height or any structure that is adjacent to a light sensitive use and exceeds 45 feet in height, the applicant shall submit a shading study that includes calculations of the extent of shadowing arches for winter and equinox conditions. If feasible, projects shall be designed to avoid shading of light sensitive uses in excess of the significance thresholds outlined in this EIR. If avoidance of shadows exceeding significance thresholds is determined to be infeasible, the shadow impact will be disclosed as part of a project environmental impact report (EIR).	Implemented in Civic Center Project SEIR; no further action required	Prior to issuance of building permits	Once per individual project component	LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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SEIR Mitigation Measure AES-2 Construction Screening. Temporary fencing comprising of chainlink or wood with screening material attached shall be used around the perimeter of the active construction site to buffer views of construction activities, as well as the staging of vehicles, equipment, and materials. In addition, the contractor shall affix or paint a plainly visible sign on publically accessible portions of the temporary fencing, with the following language: "POST NO BILLS." Such language shall appear at intervals of no less than 25 feet along the length of the publically accessible portions of the barrier. The contractor shall ensure through daily visual inspections that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that such temporary barriers and walkways are maintained in a visually attractive manner, including the prompt removal of graffiti, throughout the construction period.	Verification that temporary fencing is installed around the perimeter of the construction site and that signs are posted on fencing	During construction	Periodically throughout construction	OCM			
AIR QUALITY							
DT Mitigation Measure AQ-1(a) To reduce short-term construction emissions, the City shall require that all construction projects that would require use of heavy-duty (50 horsepower [hp] or more) off-road vehicles to be used during construction shall require their contractors to implement the Enhanced Exhaust Control Practices (listed below) or whatever mitigation measures are recommended by SCAQMD at the time individual portions of the site undergo construction. Enhanced Exhaust Control Practices • The project applicant shall provide a plan for approval by the City, demonstrating that the heavy-duty (50 hp or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_X reduction, 20 percent VOC reduction, and 45 percent particulate reduction compared to the 2011 ARB fleet average, as contained in the URBEMIS	Field verification of compliance for individual project components	During construction	Periodically throughout construction of individual project components	OCM			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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output sheets in Appendix C. Acceptable options for reducing emissions may include use of late-model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. SCAQMD, which is the resource agency for air quality in the Project area, can be used in an advisory role to demonstrate fleet-wide reductions. SCAQMD's mitigation measures for off-road engines can be used to identify an equipment fleet that achieves this reduction (SCAQMD 2007b). • The project applicant shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 hp, that would be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the hp rating, engine production year, and projected hours of use for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of heavy-duty off-road equipment, the project representative shall provide the City with the anticipated construction timeline including start date and name and phone number of the project manager and onsite foreman. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed and the dates of each survey. SCAQMD staff and/or other officials may conduct periodic site inspections to determine compliance. • If, at the time of construction, SCAQMD, CARB, or the EPA has adopted a regulation or new guidance applicable to construction emissions, compliance with							

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the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination must be supported by a project-level analysis and be approved by the City. •							
DT Mitigation Measure AQ-1(b) Prior to construction of each development phase of onsite land uses that are proposed within 1,500 feet of sensitive receptors, each project applicant shall perform a project-level CEQA analysis that includes a detailed LST analysis of construction-generated emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ to assess the impact at nearby sensitive receptors. The LST analysis shall be performed in accordance with applicable SCAQMD guidance that is in place at the time the analysis is performed. The project-level analysis shall incorporate detailed parameters of the construction equipment and activities, including the year during which construction would be performed, as well as the proximity of potentially affected receptors, including receptors proposed by the project that exist at the time the construction activity would occur.	Implemented in Civic Center Project SEIR; no further action required						
DT Mitigation Measure AQ-2 Mitigation to reduce mobile source emissions due to implementation of the Plan addresses reducing the number of motor vehicle trips and reducing the emissions of individual vehicles under the control of the project applicant(s). The following measures shall be implemented by project applicant(s) unless it can be demonstrated to the City that the measures would not be feasible. • The project applicant(s) for all project phases shall require the commercial development operator(s) to operate, maintain, and promote a ride-share program for employees of the various businesses. • The project applicant(s) for all project phases shall include one or more secure bicycle parking areas within the property and encourage bicycle riding for both employees and customers.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	OCM, LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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• The proposed structures shall be designed to meet current Title 24 + 20 percent energy efficiency standards and shall include photovoltaic cells on the rooftops to achieve an additional 25 percent reduction in electricity use on an average sunny day. • The City shall ensure that all new commercial developments include or have access to convenient shower and locker facilities for employees to encourage bicycle, walking, and jogging as options for commuting. • The project applicant(s) for all project phases shall require that all equipment operated by the businesses within the facility be electric or use non-diesel engines. • All truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two-dock door. Diesel trucks shall be prohibited from idling more than 5 minutes and must be required to connect to the 110/208-volt power to run any auxiliary equipment. Signs outlining the idling restrictions shall be provided. If, at the time of construction, SCAQMD, CARB, or EPA has adopted a regulation or new guidance applicable to mobile- and area-source emissions, compliance with the regulation or new guidance may completely or partially replace this mitigation if it is equal to or more effective than the mitigation contained herein, and if the City so permits. Such a determination shall be supported by a project-level analysis that is approved by the City.							

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
DT Mitigation Measure AQ-4(a) The following measures shall be implemented to reduce exposure of sensitive receptors to operational emissions of TACs: • Proposed commercial land uses that have the potential to emit TACs or host TAC-generating activity (e.g., loading docks) shall be located away from existing and proposed onsite sensitive receptors such that they do not expose sensitive receptors to TAC emissions that exceed an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0. • Where necessary to reduce exposure of sensitive receptors to an incremental increase of 10 in 1 million for the cancer risk and/or a noncarcinogenic Hazard Index of 1.0, proposed commercial and industrial land uses that would host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. • Signs shall be posted in at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by the California Office of Administrative Law in January 2005. • Proposed facilities that would require the long-term use of diesel equipment and heavy-duty trucks shall develop a plan to reduce emissions, which may include such measures as scheduling activities when the residential uses are the least occupied, requiring equipment to be shut off when not in use, and prohibiting heavy trucks from idling. • When determining the exact type of facility that would occupy the proposed commercial space, the City shall take into consideration its toxic-producing potential.	HRA implemented in Civic Center Project SEIR; verification of compliance with requirements related to diesel equipment and signage required during final building plan review	Prior to issuance of building permits	Once per individual project involving loading docks and/or diesel equipment	OCM, LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
• Commercial land uses that accommodate more than 100 trucks per day, or 40 trucks equipped with TRUs, within 1,000 feet of sensitive receptors (e.g., residences or schools) shall perform a site-specific project-level HRA in accordance with SCAQMD guidance for projects generating or attracting vehicular trips, especially heavy-duty diesel-fueled vehicles (SCAQMD 2003b). If the incremental increase in cancer risk determined by the HRA exceeds the threshold of significance recommended by SCAQMD or ARB at the time (if any), then all feasible mitigation measures shall be employed to minimize the impact.							
DT Mitigation Measure AQ-4(b) The City shall verify that the following measures are implemented by new developments to reduce exposure of sensitive receptors to emissions of TACs from POLB and stationary sources in the vicinity of the Downtown Plan Project area: • All proposed residences in the Downtown Plan Project area shall be equipped with filter systems with high Minimum Efficiency Reporting Value (MERV) for removal of small particles (such as 0.3 micron) at all air intake points to the home. All proposed residences shall be constructed with mechanical ventilation systems that would allow occupants to keep windows and doors closed and allow for the introduction of fresh outside air without the requirement of open windows. • The heating, ventilation, and air conditioning (HVAC) systems shall be used to maintain all residential units under positive pressure at all times. • An ongoing education and maintenance plan about the filtration systems associated with HVAC shall be developed and implemented for residences. • To the extent feasible, sensitive receptors shall be located as far away from the POLB as possible.	Review of final building plans to verify that required systems are included	Prior to issuance of building permits	Once per each residential building	OCM, LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
DT Mitigation Measure AQ-5 The following additional guidelines, which are recommended in ARB's *Land Use Handbook: A Community Health Perspective* (ARB 2005) shall be implemented. The guidelines are considered to be advisory and not regulatory: Sensitive receptors, such as residential units and daycare centers, shall not be located in the same building as dry-cleaning operations that use perchloroethylene. Dry-cleaning operations that use perchloroethylene shall not be located within 300 feet of any sensitive receptor. A setback of 500 feet shall be provided for operations with two or more machines.	Review of occupancy clearance required for any proposed dry cleaning operation	Prior to issuance of occupancy permits	Once per individual dry cleaning operation proposal	OCM, LBDS			
DT Mitigation Measure AQ-6 The following mitigation measures shall be implemented to control exposure of sensitive receptors to operational odorous emissions. The City shall ensure that all project applicant(s) implement the following measures: • The City shall consider the odor-producing potential of land uses when reviewing future development proposals and when the exact type of facility that would occupy areas zoned for commercial, industrial, or mixed-use land uses is determined. Facilities that have the potential to emit objectionable odors shall be located as far away as feasible from existing and proposed sensitive receptors. • Before the approval of building permits, odor-control devices shall be identified to mitigate the exposure of receptors to objectionable odors if a potential odor-producing source is to occupy an area zoned for commercial land use. The identified odor-control devices shall be installed before the issuance of certificates of occupancy for the potentially odor-producing use. The odor-producing potential of a source and control devices shall be determined in coordination with SCAQMD and based on the number of complaints associated with existing sources of the same nature. • Truck loading docks and delivery areas shall be located	Review and approval of final building plans and applicant-proposed odor control methods for individual project components	Prior to issuance of building permits	Once per individual project component involving potential odor issues	OCM, LBDS			

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Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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as far away as feasible from existing and proposed sensitive receptors. • Signs shall be posted at all loading docks and truck loading areas to indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions. This measure is consistent with the ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which was approved by California's Office of Administrative Law in January 2005. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) • Proposed commercial and industrial land uses that have the potential to host diesel trucks shall incorporate idle-reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off. (This measure is also required by Mitigation Measure AQ-4 to limit TAC emissions.) In addition, mitigation measures identified under AQ-4(b) to reduce indoor exposure to TACs would also result in a reduction in the intensity of offensive odors from the surrounding odor sources.							
SEIR Mitigation Measure AQ-2 Air Quality Safety Plan. If demolition occurs by implosion, the City shall approve an Air Quality Safety Plan that protects public health. The Plan shall be prepared with and approved by the South Coast Air Quality Management District. Public safety measures include: • A radius around the project site in which the public is prevented from being outdoors. • Advanced notification of potential particulate matter and asbestos exposure to all land uses within 1,000 feet of the project site. • Notice that windows shall be closed at all buildings	Verification that an Air Quality Safety Plan approval by the South Coast Air Quality Management District has been prepared	Prior to issuance of demolition permit	Once per each demolition involving implosion	LBDS			

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within the safety radius during the implosion until the City has provided notice that particulate matter and asbestos concentrations have reached background concentrations. • Air quality monitoring during the day of the implosion to confirm when particulate matter and asbestos concentrations have reached background concentrations.							
SEIR Mitigation Measure AQ-3(a) Low VOC Paint. The project applicant shall require all development operator(s) to use low-VOC paint on all interior and exterior surfaces. Paint should not exceed 50 g/L for all interior surfaces and exterior surfaces.	Review and approval of final building plans to verify use of low-VOC paint	Prior to issuance of building permits	Once per individual project component	OCM, LBDS			
SEIR Mitigation Measure AQ-3(b) Barbecue Outlets. Provide electric and propane barbecue outlets in all residential outdoor areas.	Review and approval of final building plans to verify that electric and propane barbecue outlets are provided in all outdoor areas	Prior to issuance of building permits	Once per individual project component	OCM, LBDS			
CULTURAL RESOURCES							
DT Mitigation Measure CR-1(a) The City shall encourage the designation as local landmarks of 21 properties identified in Table 4.3-3 with the "Desired Outcome" of "Pursue Local Designation." The City will encourage the on-going maintenance and appropriate adaptive reuse of all properties in Table 4.3-2 (existing landmarks), and Table 4.3-3 as historic resources.	Review and approval of final building plans involving potential historic resources	Prior to issuance of demolition permits	Once per individual project component with the potential to adversely affect historic resources	LBDS			
DT Mitigation Measure CR-1(b) The following procedures shall be followed prior to issuance of a demolition permit or a building permit for alteration of any property listed in the Historic Survey Report (ICF Jones & Stokes 2009) by Status Code 3S, 3CS, 5S1, or 5S3; designated as a Historic Landmark (City of Long Beach 2010a); listed in Tables 4.3-2 and 4.3-3 of this PEIR, or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or	Partially implemented in Civic Center Project SEIR; documentation program remains to be prepared to the satisfaction of the City Development Services Department	Prior to issuance of demolition permits	Once per individual project component with the potential to adversely affect historic resources	LBPWD, LBDS			

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Local Landmark (Status Code 6L and 6Z): <u>Notification of Historic Preservation Staff</u> Historic Preservation staff in the City Development Services Department shall be notified upon receipt of any demolition permit or building permit for alteration of any property listed in the Historic Survey Report or other property 45 years of age or older that was not previously determined by the Historic Survey Report to be ineligible for National Register, California Register, or Local Landmark (Status Code 6L and 6Z) <u>Determination of Need for Historic Property Survey</u> In consultation with Historic Preservation staff, the City Development Services Department shall determine whether a formal historic property survey is needed and may require that the owner or applicant provide photographs of the property, including each building façade, with details of windows, siding, eaves, and streetscape views, and copies of the County Assessor and City building records, in order to make this determination. <u>Determination of Eligibility</u> If City Development Services Department staff determines that the property may be eligible for designation, the property shall be referred to the Cultural Heritage Commission, whose determination of eligibility shall be considered as part of the environmental determination for the project in accordance with CEQA. <u>Documentation Program</u> If the Cultural Heritage Commission determines that the property is eligible for historic listing, the City Development Services Department shall, in lieu of preservation, require that prior to demolition or alteration a Documentation Program be prepared to the satisfaction of the City Development Services Department, which shall include the following: A. Photo Documentation							

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Documentation shall include professional quality photographs of the structure prior to demolition with 35 mm black and white photographs, 4" x 6" standard format, taken of all four elevations and with close-ups of select architectural elements, such as but not limited to, roof/wall junctions, window treatments, decorative hardware, any other elements of the building's exterior or interior, or other property features identified by the City Development Services Department to be documented. Photographs shall be of archival quality and easily reproducible. B. Required Drawings Measured drawings of the building's exterior elevations depicting existing conditions or other relevant features shall be produced from recorded, accurate measurements. If portions of the building are not accessible for measurement or cannot be reproduced from historic sources, they should not be drawn, but clearly labeled as not accessible. Drawings shall be produced in ink on translucent material or archivally stable material (blueline drawings are acceptable). Standard drawing sizes are 19" x 24" or 24" x 36" and standard scale is ¼" = 1 foot. C. Archival Storage Xerox copies or CD of the photographs and one set of the measured drawings shall be submitted for archival storage with the City Development Services Department; and one set of original photographs, negatives, and measured drawings shall be submitted for archival storage with such other historical repository identified by the City Development Services Department.							

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DT Mitigation Measure CR-2(a) A qualified project archaeologist or archaeological monitor approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of cultural resources. The archaeological monitor shall be empowered to halt or redirect ground-disturbing activities to allow the find to be evaluated. If the archaeological monitor determines the find to be significant, the project applicant and the City shall be notified and an appropriate treatment plan for the resources shall be prepared. The treatment plan shall include notification of a Native American representative and shall consider whether the resource should be preserved in place or removed to an appropriate repository as identified by the City.	Verification that a qualified monitor has been retained for individual project components involving excavation in native sediments; field verification of monitoring	Verification that a monitor has been retained prior to issuance of demolition permit; field verification during construction	Once for verification that a monitor has been retained; periodically throughout construction for field verification	LBDS, OCM			
DT Mitigation Measure CR-2(b) The project archaeologist shall prepare a final report of the find for review and approval by the City and shall include a description of the resources unearthed, if any, treatment of the resources, and evaluation of the resources with respect to the California Register of Historic Resources and the National Register of Historic Places. The report shall be filed with the California Historic Resources Information System South Central Coastal Information Center. If the resources are found to be significant, a separate report including the results of the recovery and evaluation process shall be prepared.	Review and approval of report (if required)	Prior to re-initiating work (if resources unearthed)	As needed throughout construction	LBDS, OCM			

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DT Mitigation Measure CR-2(c) If human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the corner is to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains. Preservation in place and project design alternatives shall be considered as possible courses of action by the project applicant, the City, and the Most Likely Descendent.	Verification that County Coroner and/or NAHC consultation has occurred (if human remains unearthed)	Prior to re-initiating work (if human remains unearthed)	As needed throughout construction	LBDS, OCM			
DT Mitigation Measure CR-3(a) A qualified paleontologist approved by the City in advance of any ground-disturbing activities shall be present during excavation into native sediments and shall have the authority to halt excavation for inspection and protection of paleontological resources. Monitoring shall consist of visually inspecting fresh exposures of rock for fossil remains and, where appropriate, collection of sediment samples for further analysis. The frequency of inspections shall be based on the rate of excavation and grading activities, the materials being excavated, the depth of excavation, and, if found, the abundance and type of fossils encountered.	Verification that a qualified paleontologist has been retained for individual project components involving excavation of native sediments; field verification of monitoring	Verification that a monitor has been retained prior to issuance of demolition permit; field verification during construction	Once for verification that a monitor has been retained; periodically throughout construction for field verification	LBDS, OCM			

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DT Mitigation Measure CR-3(b) If a potential fossil is found, the paleontologist shall be allowed to temporarily divert or redirect excavation and grading in the area of the exposed fossil to evaluate and, if necessary, salvage the find. All fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Any fossils collected shall be donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County and shall be accompanied by a report on the fossils collected and their significance, and notes, maps, and photographs of the salvage effort.	Verification that any paleontological resources identified during grading and construction of individual project components have been appropriately salvaged	Prior to re-initiating work (if fossils unearthed)	As necessary throughout construction of individual project components	LBDS, OCM			
SEIR Mitigation Measure CR-1(a) Historic Artifact Collection Program. Impacts resulting from the demolition of the City Hall-Library Complex and Courthouse shall be minimized through development of an archival identification and collections program. The purpose of this program will be to identify the existing historic artifacts, documents and other objects that are currently stored at the Main Library, City Hall and Port of Long Beach facilities, as well as key components of the Old Courthouse and City Hall-Library Complex to be demolished, so that these important relics can be utilized in the future by researchers and the public for educational purposes. As part of the program, the City will itemize, catalogue and rehouse the items, and establish appropriate conservation and storage measures for long-term preservation. One possible location for rehousing items would be as a museum in the proposed project's new Library.	Identification of existing historic artifacts, documents, and other objects; itemize, cataloguing and rehousing of items	Prior to issuance of demolition permits	Once	LBDS			

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SEIR Mitigation Measure CR-1(b) Building Documentation. Impacts resulting from the demolition of the City Hall-Library Complex and Old Courthouse shall be minimized through archival documentation of as-built and as-found condition. Prior to issuance of the first occupancy permit for the project, the lead agency shall ensure that documentation of the building is completed in accordance with the general guidelines of Historic American Building Survey (HABS) documentation. The documentation shall include large-format photographic recordation, a historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival-quality documentation shall be offered as donated material to repositories that will make it available for current and future generations. Archival copies of the documentation also would be submitted to the City of Long Beach Development Services Department, the downtown branch of the Long Beach Public Library, and the Historical Society of Long Beach where it would be available to local researchers.	Verification that archival documentation of the City Hall-Library Complex has been completed	Prior to issuance of demolition permits	Once	LBDS			
GEOLOGY AND SEISMICITY							
DT Mitigation Measure Geo-1 New construction or structural remodeling of buildings proposed within the Project area shall be engineered to withstand the expected ground acceleration that may occur at the project site. The calculated design base ground motion for each project site shall take into consideration the soil type, potential for liquefaction, and the most current and applicable seismic attenuation methods that are available. All onsite structures shall comply with applicable provisions of the most recent UBC adopted by the City of Long Beach.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBPWD, OCM			

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DT Mitigation Measure Geo-2 Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine, based on building height, depth, and location, whether a comprehensive geotechnical investigation and geo-engineering study shall be completed to adequately assess the liquefaction potential and compaction design of the soils underlying the proposed bottom grade of the structure. If a geotechnical investigation is required, borings shall be completed to at least 50 feet below the lowest proposed finished grade of the structure or 20 feet below the lowest caisson or footing (whichever is deeper). If these soils are confirmed to be prone to seismically induced liquefaction, appropriate techniques to minimize liquefaction potential shall be prescribed and implemented. All onsite structures shall comply with applicable methods of the UBC and California Building Code. Suitable measures to reduce liquefaction impacts could include specialized design of foundations by a structural engineer, removal or treatment of liquefiable soils to reduce the potential for liquefaction, drainage to lower the groundwater table to below the level of liquefiable soils, in-situ densification of soils, or other alterations to the sub-grade characteristics.	Review and approval of geotechnical investigations for individual project components and verification that appropriate standards have been incorporated into final building plans	Geotechnical investigation and final building plan review prior to issuance of building permits	Once per individual project component	LBPWD, OCM			
DT Mitigation Measure Geo-3 Prior to issuance of a building permit for new structures, the City Department of Development Services shall determine the need for soil samples of final sub-grade areas and excavation sidewalls to be collected and analyzed for their expansion index. For areas where the expansion index is found to be greater than 20, grading and foundation designs shall be engineered to withstand the existing conditions. The expansion testing may be omitted if the grading and foundations are engineered to withstand the presence of highly expansive soils.	Review and approval of final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			

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GREENHOUSE GAS EMISSIONS							
DT Mitigation Measure GHG-1(a) Implement Mitigation Measure AQ-1. Implementation of the mitigation measures described in Section 4.2, Air Quality, of the Downtown Plan PEIR, which would reduce construction emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The construction mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.	Review and approval of final building plans to verify compliance with applicable measures	Prior to issuance of building permits	Once per individual project component	LBDS			
DT Mitigation Measure GHG-1(b) Implement Additional Measures to Control Construction-Generated GHG Emissions. To further reduce construction-generated GHG emissions, the project applicant(s) of all public and private developments shall implement all feasible measures for reducing GHG emissions associated with construction that are recommended by the City and/or SCAQMD at the time individual portions of the site undergo construction. Such measures may reduce GHG exhaust emissions from the use of onsite equipment, worker commute trips, and truck trips carrying materials and equipment to and from the project site, as well as GHG emissions embodied in the materials selected for construction (e.g., concrete). Other measures may pertain to the materials used in construction. Prior to the construction of each development phase, the project applicant(s) shall obtain the most current list of GHG-reduction measures that are recommended by the City and/or SCAQMD and stipulate that these measures be implemented during the appropriate construction phase. The project applicant(s) for any particular development phase may submit to the City a report that substantiates why specific measures are considered infeasible for construction of that particular development phase and/or at that point in time. The report, including the substantiation for not implementing particular GHG-reduction measures, shall be approved by the City.	Verification that construction specifications include City and SCAQMD recommended measures; field verification of compliance	Construction specification review and approval prior to issuance of grading permits; field verification during construction	Once per individual project component for construction specification review/approval;field verification periodically throughout construction	LBDS, OCM			

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The City's recommended measures for reducing construction-related GHG emissions at the time of writing the Downtown Plan PEIR are listed below and the project applicant(s) shall, at a minimum, be required to implement the following: • Improve fuel efficiency from construction equipment: o reduce unnecessary idling (modify work practices, install auxiliary power for driver comfort), o perform equipment maintenance (inspections, detect failures early, corrections), o train equipment operators in proper use of equipment, o use the proper size of equipment for the job, and o use equipment with new technologies (repowered engines, electric drive trains). • Use alternative fuels for electricity generators and welders at construction sites such as propane or solar, or use electrical power. • Use an ARB-approved low-carbon fuel, such as biodiesel or renewable diesel for construction equipment (emissions of NO_X from the use of low carbon fuel must be reviewed and increases mitigated). Additional information about low-carbon fuels is available from ARB's Low Carbon Fuel Standard Program (ARB 2010a). • Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes. • Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones. • Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight). • Use locally sourced or recycled materials for							

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construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk, and curb materials). • Minimize the amount of concrete used for paved surfaces or use a low carbon concrete option. • Produce concrete onsite if determined to be less emissive than transporting ready mix. • Use EPA-certified SmartWay trucks for deliveries and equipment transport. Additional information about the SmartWay Transport Partnership Program is available from ARB's Heavy-Duty Vehicle GHG Measure (ARB 2010b) and EPA (EPA 2010). • Develop a plan to efficiently use water for adequate dust control. This may consist of the use of non-potable water from a local source.							
DT Mitigation Measure GHG-2(a) Implement Mitigation Measure AQ-3. Implementation of the mitigation measures described in Section 4.2, which would reduce operational emissions of criteria air pollutants and precursors, would also act to reduce GHG emissions associated with implementation of the Project. The operational mitigation measures for exhaust emissions are relevant to the global climate change impact because both criteria air pollutant and GHG emissions are frequently associated with combustion byproducts.	Verification that required measures have been incorporated into final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			
DT Mitigation Measure GHG-2(b) Implement Additional Measures to Reduce Operational GHG Emissions. For each increment of new development within the Project area requiring a discretionary approval (e.g., tentative subdivision map, conditional use permit, improvement plan), measures that reduce GHG emissions to the extent feasible and to the extent appropriate with respect to the state's progress at the time toward meeting GHG emissions reductions required by the California Global Warming Solutions Act of 2006 (AB 32) shall be imposed, as follows:	Verification that required measures have been incorporated into final building plans for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			

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• The project applicant shall incorporate feasible GHG reduction measures that, in combination with existing and future regulatory measures developed under AB 32, will reduce GHG emissions associated with the operation of future project development phases and supporting roadway and infrastructure improvements by an amount sufficient to achieve the goal of 6.6 CO_2e/SP/year, if it is feasible to do so. The feasibility of potential GHG reduction measures shall be evaluated by the City at the time each phase of development is proposed to allow for ongoing innovations in GHG reduction technologies and incentives created in the regulatory environment. • For each increment of new development, the project applicant shall obtain a list of potentially feasible GHG reduction measures to be considered in the development design from the City. The City's list of potentially feasible GHG reduction measures shall reflect the current state of the regulatory environment, which will continuously evolve under the mandate of AB 32. The project applicant(s) shall then submit to the City a mitigation report that contains an analysis demonstrating which GHG reduction measures are feasible for the associated reduction in GHG emissions, and the resulting CO_2e/SP/year metric. The report shall also demonstrate why measures not selected are considered infeasible. The mitigation report must be reviewed and approved by the City for the project applicant(s) to receive the City's discretionary approval for the applicable increment of development. In determining what measures should appropriately be imposed by a local government under the circumstances, the following factors shall be considered: o The extent to which rates of GHG emissions generated by motor vehicles traveling to, from, and within the Project site are projected to decrease over time as a result of regulations, policies, and/or plans that have already been adopted or may be adopted							

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in the future by ARB or other public agency pursuant to AB 32, or by EPA; o The extent to which mobile-source GHG emissions, which at the time of writing this PEIR comprise a substantial portion of the state's GHG inventory, can also be reduced through design measures that result in trip reductions and reductions in trip length; o The extent to which GHG emissions emitted by the mix of power generation operated by SCE, the electrical utility that will serve the Project site, are projected to decrease pursuant to the Renewables Portfolio Standard required by SB 1078 and SB 107, as well as any future regulations, policies, and/or plans adopted by the federal and state governments that reduce GHG emissions from power generation; o The extent to which replacement of CCR Title 24 with the California Green Building Standards Code or other similar requirements will result in new buildings being more energy efficient and consequently more GHG efficient; o The extent to which any stationary sources of GHG emissions that would be operated on a proposed land use (e.g., industrial) are already subject to regulations, policies, and/or plans that reduce GHG emissions, particularly any future regulations that will be developed as part of ARB's implementation of AB 32, or other pertinent regulations on stationary sources that have the indirect effect of reducing GHG emissions; o The extent to which the feasibility of existing GHG reduction technologies may change in the future, and to which innovation in GHG reduction technologies will continue, effecting cost-benefit analyses that determine economic feasibility; and o Whether the total costs of proposed mitigation for GHG emissions, together with other mitigation measures required for the proposed development, are so great that a reasonably prudent property							

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owner would not proceed with the project in the face of such costs. • In considering how much, and what kind of, mitigation is necessary in light of these factors, the following list of options shall be considered, though the list is not intended to be exhaustive, as GHG-emission reduction strategies and their respective feasibility are likely to evolve over time. These measures are derived from multiple sources including the Mitigation Measure Summary in Appendix B of the California Air Pollution Control Officer's Association (CAPCOA) white paper, *CEQA & Climate Change* (CAPCOA 2008); CAPCOA's *Model Policies for Greenhouse Gases in General Plans* (CAPCOA 2009); and the California Attorney General's Office publication, The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level (California Attorney General's Office 2010). **Energy Efficiency** o Include clean alternative energy features to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines). o Design buildings to meet CEC Tier II requirements (e.g., exceeding the requirements of Title 24 [as of 2007] by 20 percent). o Site buildings to take advantage of shade and prevailing winds and design landscaping and sun screens to reduce energy use. o Install efficient lighting in all buildings (including residential). Also install lighting control systems, where practical. Use daylight as an integral part of lighting systems in all buildings. o Install light-colored "cool" pavements, and strategically located shade trees along all bicycle and pedestrian routes. **Water Conservation and Efficiency**							

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o With the exception of ornamental shade trees, use water-efficient landscapes with native, drought-resistant species in all public area and commercial landscaping. Use water-efficient turf in parks and other turf-dependent spaces. o Install the infrastructure to use reclaimed water for landscape irrigation and/or washing cars. o Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. o Design buildings and lots to be water efficient. Only install water-efficient fixtures and appliances. o Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff. Prohibit businesses from using pressure washers for cleaning driveways, parking lots, sidewalks, and street surfaces. These restrictions should be included in the Covenants, Conditions, and Restrictions of the community. o Provide education about water conservation and available programs and incentives. o To reduce storm water runoff, which typically bogs down wastewater treatment systems and increases their energy consumption, construct driveways to single-family detached residences and parking lots and driveways of multi-family residential uses, with pervious surfaces. Possible designs include Hollywood drives (two concrete strips with vegetation or aggregate in between) and/or the use of porous concrete, porous asphalt, turf blocks, or pervious pavers. **Solid Waste Measures** o Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). o Provide interior and exterior storage areas for recyclables and green waste at all buildings.							

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o Provide adequate recycling containers in public areas, including parks, school grounds, golf courses, and pedestrian zones in areas of mixed-use development. o Provide education and publicity about reducing waste and available recycling services. **Transportation and Motor Vehicles** o Promote ride-sharing programs and employment centers (e.g., by designating a certain percentage of parking spaces for ride-sharing vehicles, designating adequate passenger loading zones and waiting areas for ride-share vehicles, and providing a website or message board for coordinating ride-sharing). o Provide the necessary facilities and infrastructure in all land use types to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations). o At industrial and commercial land uses, all forklifts, "yard trucks," or vehicles that are predominately used onsite at non-residential land uses shall be electric-powered or powered by biofuels (such as biodiesel [B100]) that are produced from waste products, or shall use other technologies that do not rely on direct fossil fuel consumption.							

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HAZARDS AND HAZARDOUS MATERIALS							
DT Mitigation Measure Haz-1(a) Prior to issuance of a demolition or renovation permit, a lead-based paint and asbestos survey shall be performed by a licensed sampling company. The lead-based paint survey shall be prepared for any structures pre-dating 1982; an asbestos survey shall be performed for asbestos-containing insulation for any structure pre-dating 1986; and an asbestos survey shall be performed for asbestos-containing drywall for all structures for which drywall is to be removed. All testing procedures shall follow California and federal protocol. The lead-based paint and asbestos survey report shall quantify the areas of lead-based paint and asbestos-containing materials pursuant to California and federal standards.	Review and approval of survey findings for individual project components involving demolition of a pre-1986 structure; verification that abatement has been conducted	Prior to issuance of demolition permits	Once per individual project component involving demolition of a pre-1986 structure	LBDS			
DT Mitigation Measure Haz-1(b) Prior to any demolition or renovation, onsite structures that contain asbestos must have the asbestos-containing material removed according to proper abatement procedures recommended by the asbestos consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only asbestos trained and certified abatement personnel shall be allowed to perform asbestos abatement. All asbestos-containing material removed from onsite structures shall be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. Following completion of the asbestos abatement, the asbestos consultant shall provide a report documenting the abatement procedures used, the volume of asbestos-containing material removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party and a copy shall be submitted to the City of Long Beach prior to issuance of a demolition or construction permit.	Review and approval of survey findings for individual project components involving demolition of a pre-1986 structure; verification that abatement has been conducted	Prior to issuance of demolition permits	Once per individual project component involving demolition of a pre-1986 structure	LBDS			

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DT Mitigation Measure Haz-1(c) Prior to the issuance of a permit for the renovation or demolition of any structure, a licensed lead-based paint consultant shall be contracted to evaluate the structure for lead-based paint. If lead-based paint is discovered, it shall be removed according to proper abatement procedures recommended by the consultant. All abatement activities shall be in compliance with California and federal OSHA and SCAQMD requirements. Only lead-based paint trained and certified abatement personnel shall be allowed to perform abatement activities. All lead-based paint removed from these structures shall be hauled and disposed of by a transportation company licensed to transport this type of material. In addition, the material shall be taken to a landfill or receiving facility licensed to accept the waste. Following completion of the lead-based paint abatement, the lead-based paint consultant shall provide a report documenting the abatement procedures used, the volume of lead-based paint removed, where the material was moved to, and transportation and disposal manifests or dump tickets. The abatement report shall be prepared for the property owner or other responsible party, with a copy submitted to the City of Long Beach prior to issuance of a demolition or construction permit.	Review and approval of survey findings for individual project components involving demolition of a pre-1982 structure; verification that abatement has been conducted	Prior to issuance of demolition permit	Once per individual project component involving demolition of a pre-1982 structure	LBDS, OCM			

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DT Mitigation Measure Haz-3(a) All excavation and demolition projects conducted within the Project area shall be required to prepare a contingency plan to identify appropriate measures to be followed if contaminants are found or suspected or if structural features that could be associated with contaminants or hazardous materials are suspected or discovered. The contingency plan shall identify personnel to be notified, emergency contacts, and a sampling protocol to be implemented. The excavation and demolition contractors shall be made aware of the possibility of encountering unknown hazardous materials and shall be provided with appropriate contact and notification information. The contingency plan shall include a provision stating under what circumstances it would be safe to continue with the excavation or demolition, and shall identify the person authorized to make that determination.	Review and approval of Contingency Plan prior to issuance of grading permits for individual project components	Prior to issuance of grading permits	Once per individual project component	LBDS, OCM			
DT Mitigation Measure Haz-3(b) If contaminants are detected, the results of the soil sampling shall be forwarded to the local regulatory agency (Long Beach/Signal Hill Certified Unified Program Agency [CUPA], LARWQCB, or the state DTSC). Prior to any other ground disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received. Groundwater is subject to pre-treatment during de-watering activities to meet National Pollutant Discharge Elimination System (NPDES) Construction Dewatering permit limits. The construction activities shall conform to the NPDES requirements. The RWQCB requires the water to be tested for possible pollutants. The developer shall collect groundwater samples from existing site wells to determine pre-treatment system requirements for extracted groundwater. A water treatment system shall be designed and installed for treatment of extracted groundwater removed during dewatering activities so that such water	Verification that a RWQCB de-water and discharge permit has been obtained for individual project components (if necessary)	Prior to issuance of demolition permits	As necessary for individual project components	LBDS			

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complies with the applicable RWQCB and NPDES permit standards before disposal.							
DT Mitigation Measure Haz-3(c) If concentrations of contaminants warrant site remediation, contaminated materials shall be remediated either prior to construction of structures or concurrent with construction. The contaminated materials shall be remediated under the supervision of an environmental consultant licensed to oversee such remediation. The remediation program shall also be approved by a regulatory oversight agency (Long Beach/Signal Hill CUPA, LARWQCB, or the state DTSC). All proper waste handling and disposal procedures shall be followed. Upon completion of the remediation, the environmental consultant shall prepare a report summarizing the project, the remediation approach implemented, the analytical results after completion of the remediation, and all waste disposal or treatment manifests.	Verification that remediation has occurred for individual project components (if necessary)	Prior to issuance of grading permits	As necessary for individual project components	LBDS			
DT Mitigation Measure Haz-3(d) If during the soil sampling, groundwater contamination is suspected or soil contamination is detected at depths at which groundwater could be encountered during demolition or construction, a groundwater sampling assessment shall be performed. If contaminants are detected in groundwater at levels that exceed maximum contaminant levels for those constituents in drinking water, or if the contaminants exceed health risk standards such as Preliminary Remediation Goals, 1 in 1 million cancer risk, or a health risk index above 1, the results of the groundwater sampling shall be forwarded to the appropriate regulatory agency (Long Beach/Signal Hill CUPA, LARWQCB, or the State DTSC). Prior to any other ground-disturbing activities at the site, the regulatory agency shall have reviewed the data and signed off on the property or such additional investigation or remedial activities that are deemed necessary have been completed and regulatory agency approval has been received.	Verification that site closure has been obtained from the applicable regulatory body for individual project components	Review prior to issuance of demolition permit; field verification during construction	Review; as needed throughout construction for field verification	LBDS			

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HYDROLOGY AND WATER QUALITY							
DT Mitigation Measure Hydro-1 Prior to issuance of a grading permit, the City Department of Development Services shall determine the need for the developer to prepare a SWPPP for the site. If required, the SWPPP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any grading or building permits. The SWPPP shall fully comply with City and LARWQCB requirements and shall contain specific BMPs to be implemented during project construction to reduce erosion and sedimentation to the maximum extent practicable. The following BMPs or equivalent measures to control pollutant runoff shall be included within the project's grading and construction plans, if applicable: <u>Pollutant Escape: Deterrence</u> • Cover all storage areas, including soil piles, fuel and chemical depots. Protect from rain and wind with plastic sheets and temporary roofs. • Implement tracking controls to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily and controls implemented as needed. • Implement street sweeping and vacuuming as needed and as required. <u>Pollutant Containment Areas</u> • Locate all construction-related equipment and related processes that contain or generate pollutants (i.e., fuel, lubricants, solvents, cement dust, and slurry) in isolated areas with proper protection from escape. • Locate construction-related equipment and processes that contain or generate pollutants in secure areas, away from storm drains and gutters. • Place construction-related equipment and processes that contain or generate pollutants in bermed and plastic-lined depressions to contain all materials within	Review and approval of final grading and construction plans for individual project components to verify compliance with applicable SWPPP requirements	Prior to issuance of grading permits	Once per individual project component for which an SWPPP is required	LBDS, OCM			

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that site in the event of accidental release or spill. • Park, fuel, and clean all vehicles and equipment in one designated, contained area. <u>Pollutant Detainment Methods</u> • Protect downstream drainages from escaping pollutants by capturing materials carried in runoff and preventing transport from the site. Examples of detainment methods that retard movement of water and separate sediment and other contaminants are silt fences, hay bales, sand bags, berms, and silt and debris basins. <u>Recycling/Disposal</u> • Develop a protocol for maintaining a clean site. This includes proper recycling of construction-related materials and equipment fluids (i.e., concrete dust, cutting slurry, motor oil, and lubricants). • Provide disposal facilities. Develop a protocol for cleanup and disposal of small construction wastes (i.e., dry concrete). <u>Hazardous Materials Identification and Response</u> • Develop a protocol for identifying risk operations and materials. Include protocol for identifying source and distribution of spilled materials. • Provide a protocol for proper clean-up of equipment and construction materials, and disposal of spilled substances and associated cleanup materials. • Provide an emergency response plan that includes contingencies for assembling response teams and immediately notifying appropriate agencies.							

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DT Mitigation Measure Hydro-2 Prior to issuance of a building permit, the Department of Development Services shall determine the need for the developer to prepare a SUSMP for the site. If required, the SUSMP shall be submitted for review and approval by the Department of Development Services prior to the issuance of any building permits. The City's review shall include a determination of whether installation of pollutant removal technology in existing or proposed storm drains adjacent to the project site should be required. The City's review is required to confirm that the SUSMP is consistent with the City's NPDES Permit No. CAS 004003 or a subsequently issued NPDES permit applicable at the time of project construction. A SUSMP consistent with the City's NPDES permit shall be incorporated into the project design plans prior to issuance of any building permits.	Review and approval of SUSMP for individual project components for which an SUSMP is required	prior to issuance of grading permits	Once per individual project component for which an SUSMP is required	LBDS			
DT Mitigation Measure Hydro-3 Prior to issuance of a building permit, the City Stormwater Management Division shall determine the need for the developer to conduct an analysis of the existing stormwater drainage system and to identify improvements needed to accommodate any projected increased runoff that would result from the proposed Project. The evaluation conducted by the developer shall include a determination of whether Low Impact Development (LID) practices and strategies should be incorporated into the project to reduce post-development peak stormwater runoff discharge rates to not exceed the estimated pre-development discharge rates.	Verification that required review of storm drain systems has been conducted for individual project components and that needed improvements have been incorporated	Prior to issuance of building permits	Once per individual project component	LBDS, LBPWD			
NOISE							
DT Mitigation Measure Noise-1(a) The following measures shall be applied to proposed construction projects that are determined to have potential noise impacts from removal of existing pavement and structures, site grading and excavation, pile driving, building framing, and concrete pours and paving: • All internal combustion-engine-driven equipment shall be equipped with mufflers that are in good operating	Review of construction specifications to verify incorporation of applicable requirements; field verification of compliance	Construction specification review prior to issuance of demolition permits; field verification during construction	Once per individual project component for construction specification review; field verification periodically throughout	LBDS, OCM			

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condition and appropriate for the equipment. • "Quiet" models of air compressors and other stationary construction equipment shall be employed where such technology exists. • Stationary noise-generating equipment shall be located as far as reasonable from sensitive receptors when sensitive receptors adjoin or are within 150 feet of a construction site. • Unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes) shall be prohibited. • Foundation pile holes shall be predrilled, as feasible based on geologic conditions, to minimize the number of impacts required to seat the pile. • Construction-related traffic shall be routed along major roadways and away from noise-sensitive receptors. • Construction activities, including the loading and unloading of materials and truck movements, shall be limited to the hours specified in the City Noise Ordinance (Section 8.80.202). • Businesses, residences, and noise-sensitive land uses within 150 feet of construction sites shall be notified of the construction. The notification shall describe the activities anticipated, provide dates and hours, and provide contact information with a description of the complaint and response procedure. • Each project implemented as part of the Plan shall designate a "construction liaison" that would be responsible for responding to any local complaints about construction noise. The liaison would determine the cause of the noise complaints (e.g., starting too early, bad muffler, etc.) and institute reasonable measures to correct the problem. A telephone number for the liaison shall be conspicuously posted at the construction site. • If a noise complaint(s) is registered, the liaison, or project representative, shall retain a City-approved noise consultant to conduct noise measurements at the			construction of individual project components				

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location that registered the complaint. The noise measurements shall be conducted for a minimum of 1 hour and shall include 1-minute intervals. The consultant shall prepare a letter report summarizing the measurements and potential measures to reduce noise levels to the maximum extent feasible. The letter report shall include all measurement and calculation data used in determining impacts and resolutions. The letter report shall be provided to code enforcement for determining the adequacy and if the recommendations are adequate.							
DT Mitigation Measure Noise-1(b) The City will require the following measures, where applicable based on noise level of source, proximity of receptors, and presence of intervening structures, to be incorporated into contract specifications for construction projects within 150 feet of existing residential uses implemented under the proposed Plan: • Temporary noise barriers shall be constructed around construction sites adjacent to, or within 150 feet of, operational business, residences, or other noise-sensitive land uses. Temporary noise barriers shall be constructed of material with a minimum weight of 4 pounds per square foot with no gaps or perforations. Noise barriers may be constructed of, but are not limited to, 5/8-inch plywood, 5/8-inch oriented strand board, or hay bales. If a project-specific noise analysis determines that the barriers described above would not be sufficient to avoid a significant construction noise impact, a temporary sound control blanket barrier, shall be erected along building façades facing construction sites. This mitigation would only be necessary if conflicts occurred that were irresolvable by proper scheduling and other means of noise control were unavailable. The sound blankets are required to have a minimum breaking and tear strength of 120 pounds and 30 pounds, respectively. The sound blankets shall have a minimum sound transmission classification of 27 and noise reduction coefficient of 0.70.	Verification that construction specifications for individual project components within 150 feet of noise sensitive uses incorporate applicable requirements; field verification of compliance	Construction specification review prior to issuance of demolition permits; field verification during construction	Once per individual project component for construction specification review; field verification periodically throughout construction of individual project components	LBDS, OCM			

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The sound blankets shall be of sufficient length to extend from the top of the building and drape on the ground or be sealed at the ground. The sound blankets shall have a minimum overlap of 2 inches.							
DT Mitigation Measure Noise-2 The City shall review all construction projects for potential vibration-generating activities from demolition, excavation, pile– driving, and construction within 100 feet of existing structures and shall require site-specific vibration studies to be conducted to determine the area of impact and to identify appropriate mitigation measures. The studies shall, at a minimum, include the following: • Identification of the project's vibration compaction activities, pile driving, and other vibration-generating activities that have the potential to generate ground-borne vibration; and the sensitivity of nearby structures to ground-borne vibration. This task should be conducted by a qualified structural engineer. • A vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; establish a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies shall be identified for actions to be taken when vibration levels approached the defined vibration limits. • Maintain a monitoring log of vibrations during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for a more or less intensive measurement schedule. • Vibration levels limits for suspension of construction activities and implementation of contingencies to either lower vibration levels or secure the affected structures. • Post-construction survey on structures where either monitoring has indicated high vibration levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.	Vibration analysis conducted as part of the SEIR; verification that vibration plans, ongoing monitoring, and post-construction survey are conducted is required	Verification that vibration analysis and plan prepared prior to issuance of demolition/ grading permits; verification that monitoring log maintained through construction; verification that post-construction survey conducted prior to issuance of occupancy permits	Once per individual project component for vibration analysis/plan and post-construction survey; periodically throughout construction for monitoring log	LBDS, OCM			

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DT Mitigation Measure Noise-5 In areas where new residential development would be exposed to L_{dn} of greater than 65 dBA, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following: • Utilize site planning to minimize noise in shared residential outdoor activity areas by locating the areas behind the buildings or in courtyards, or orienting the terraces to alleyways rather than streets, whenever possible. • Provide mechanical ventilation in all residential units proposed along roadways or in areas where noise levels could exceed 65 dBA L_{dn} so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 45 dBA L_{dn}. Install sound-rated windows and construction methods to provide the requisite noise control for residential units proposed along roadways or in areas where noise levels could exceed 70 dBA L_{dn}.	Implemented in Civic Center Project SEIR; no further action is required						
DT Mitigation Measure Noise-6 In areas where new residential development would be located adjacent to commercial uses, the City will require site-specific noise studies prior to issuance of building permits to determine the area of impact and to present appropriate mitigation measures, which may include, but are not limited to the following: • Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses. • Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible. Require the provision of localized noise barriers or rooftop	Implemented in Civic Center Project SEIR; no further action is required						

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parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked.							
DT Mitigation Measure Noise-7 The project developer shall retain the services of a qualified acoustical engineer with expertise in design of building sound isolations, who shall submit a signed report to the City during plan check for review and approval, which demonstrates that the proposed building design for the residential uses and the hotel building achieves an interior sound environment of 45 dBA (CNEL), as required by City's building code.	Verification that a signed acoustical report has been submitted by the applicant for individual project components	Prior to issuance of building permits	Once per individual project component	LBDS			
SEIR Mitigation Measure Noise-1 Noise Control Plan. If demolition occurs by implosion, the City shall approve a Noise Control Plan that protects public health and includes: • A site-specific map that delineates the hearing damage radius. • Safety measures to ensure that community members would not be within this radius during implosion. • Control measures designed by an implosion expert to reduce noise at the source of the implosion. • A statement that all demolition-related damage shall be repaired.	Verification that a Noise Control Plan is prepared	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-2(a) Loading Areas. The applicant shall submit site plans to the Department of Development Services showing that all loading and unloading areas would be oriented away from existing sensitive receptors and/or shielded by the proposed buildings such that the line-of-sight would be broken.	Review of final building plans to verify that loading areas are oriented away from existing sensitive receptors	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-2(b) Sound-Rated Windows and Glass Doors Near Commercial Uses. The applicant shall install sound-rated windows and sliding glass doors on all residential units that are within 50 feet of commercial uses. Windows shall be at least STC 35 to ensure that commercial activities do not result in interior noise levels exceeding 35 dBA when the windows are closed.	Review of final building plans to verify use of sound-rated windows and glass doors	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			

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SEIR Mitigation Measure Noise-3 Vibration Control Plan. If demolition occurs by implosion, the City shall approve a Vibration Control Plan that promotes public health and adjacent buildings, and includes: • A site-specific estimate of the potential zones of vibration perceptibility and building damage. • A pre-construction survey to assess the foundations and facades of buildings within the damage zone. • A post-construction survey to assess damage, if any, caused by implosion. • A statement that all demolition-related damage shall be repaired.	Verification that a Vibration Control Plan is prepared	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-6(a) Mechanical Ventilation. The applicant shall provide mechanical ventilation in all residential units proposed along Broadway, Pacific Avenue, Third Street, Cedar Avenue, Chestnut Avenue, and First Street so that windows can remain closed at the choice of the occupants to maintain interior noise levels below 35 dBA Ldn.	Review of final building plans to verify use of mechanical ventilation in all residential units	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
SEIR Mitigation Measure Noise-6(b) Sound-Rated Windows and Sliding Glass Doors. The applicant shall install sound-rated windows and sliding glass doors on the residential units that face Broadway, Pacific Avenue, Third Street, and Cedar Avenue, as well as the proposed library, such that interior noise levels would not exceed 35 dBA Ldn when the windows are closed.	Review of final building plans to verify use of sound-rated windows and sliding glass doors on residential units	Prior to issuance of building permits	Once per individual project component	LBDS, OCM			
Traffic and Circulation							
DT Mitigation Measure Traf-1(a) As the system's capacity is reached, it will become important to manage the street system in a more efficient and coordinated manner. Improvements to the Project area transportation system are proposed as part of the overall Downtown development, including improvements that have been required of other area projects previously approved by the City. Therefore, the mitigation focuses on improvements that would not require significant additional rights-of-way and are achievable within the life of the Plan. There are five proposed mitigation measures for the Downtown Plan,	Implemented in Civic Center Project SEIR; no further action is required						

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as follows: 1. Implement traffic control system improvements in Downtown on selected arterials. 2. Improve the Alamitos Avenue corridor via removal of selected parking spaces and the implementation of additional travel lanes plus bike lanes in each direction. 3. Reconfigure the 6th Street and 7th Street intersections with Martin Luther King Jr. Avenue and Alamitos Avenue for safety and traffic flow enhancements. 4. Enhance freeway access to I-710 to and from Downtown Long Beach. 5. Implement transit facilities and programs to encourage public transit usage and Transportation Demand Management Policies.							
DT Mitigation Measure Traf-1(b) A series of traffic signal system improvements are recommended in Downtown to accommodate the anticipated growth in travel. The following traffic signal system improvements are recommended as part of this mitigation measure: 1. Implement Adaptive Traffic Signal Control System (ATCS) improvements throughout Downtown consistent with currently planned improvements on Ocean Boulevard and Atlantic Avenue. Streets that are proposed to be included in the ATCS as a mitigation measure for the Downtown Long Beach Strategic Plan include the following: • Alamitos Avenue north of Ocean Boulevard • Pine Avenue north of Ocean Boulevard • Pacific Avenue north of Ocean Boulevard • 7th Street from I-710 to Alamitos Avenue • 6th Street from I-710 to Alamitos Avenue • Broadway from I-710 to Alamitos Avenue • Ocean Boulevard from Shoreline to Alamitos Avenue (to join the proposed system starting at Alamitos Avenue)	Based on SEIR traffic analysis, these DT PEIR requirements not specifically needed for the Civic Center Project; no further action required						

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• Others as needed, to be determined by the City Traffic Engineer and Public Works Director 2. Implement pan/tilt/zoom Closed Circuit Television Camera (CCTV) surveillance and communications with power and control capability to the Department of Public Works to monitor real-time traffic operations from rooftops of selected new buildings as needed and to be determined based on the location of appropriate new high-rise structures along the Alamitos Avenue, Shoreline Drive, and Ocean Boulevard corridors. 3. Implement transit signal priority for Long Beach Boulevard and upgrade traffic signal system equipment and operations along the Blue Line light rail route. 4. Upgrade and improve traffic signal equipment throughout Downtown for safety and operational enhancements.							
DT Mitigation Measure Traf-1(c) As part of this mitigation measure, a number of intersections would receive major or minor signal modifications, depending on their current status. In addition to the enhancements listed, other potential improvements that can be included are: • Bicycle improvements (detection, signalization, etc.) • In-pavement LED crosswalk lights • Automatic pedestrian detection (i.e., infrared, microwave, or video detection) • Illuminated push buttons • Countdown pedestrian signals • Adaptive pedestrian clearance (increasing the flashing DON'T WALK time based on location of pedestrians in the crosswalk) • Enhanced signal equipment including mast arms, poles, signal heads, and other necessary enhancements for safety and operations Communications enhancements as needed to tie the system together with the Traffic Control Center in City Hall.	Review of traffic impacts completed as part of the Civic Center Project SEIR; no specific requirements identified, but final building plans to be reviewed to determine whether listed improvements would enhance conditions at study intersections	Prior to issuance of building permits	Once per individual project component				

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DT Mitigation Measure Traf-1(d) Traffic Calming and Pedestrian Amenities. Appropriate traffic calming and pedestrian amenities shall be provided in conjunction with development projects. Potential improvements include corner curb extensions, enhanced paving of crosswalks, and pedestrian-activated signals at mid-block crossings to make it easier for pedestrians to cross the street and to make them more visible to motorists. Other potential improvements include wider sidewalks in locations where the existing sidewalks are less than 10 feet wide, pedestrian-scale street lights, and street furniture (City of Long Beach 2005).	Review and approval of improvement plans for individual project components to verify compliance with City requirements	Prior to issuance of building permits	Once per individual project component	LBPWD			
DT Traf-1(e) Currently, due to on-street parking, there is only one lane of travel on Alamitos Avenue in the southbound direction between 3rd Street and Broadway. Parking spaces on the west side of Alamitos Avenue will be removed, the street will be restriped and reconstructed, a bike lane will be added in each direction of travel, and the street will provide for two travel lanes in each direction plus exclusive left turn lanes from 7th Street to Ocean Boulevard. Traffic signal enhancements to implement the Alamitos Avenue improvements shall also be implemented as needed.	Not applicable to location of project site						
DT Traf-1(f) Developments in the project area will be required to coordinate with area transit providers to accommodate and encourage transit use by residents and patrons. For non-residential sites, appropriate programs and facilities will be included to encourage car and van pooling, provide information on transportation alternatives, and encourage trip reduction strategies in accordance with the City's TDM policies for non-residential development.	Review and approval of improvement plans for individual project components to verify compliance with City requirements	Prior to issuance of building permits	Once per individual project component	LBPWD, LBDS			

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UTILITIES/SERVICE SYSTEMS							
DT Mitigation Measure Utilities-3(a) All construction related to Project implementation shall include verification by the construction contractor that all companies providing waste disposal services recycle all demolition and construction-related wastes. The contract specifying recycled waste service shall be submitted to the City Building Official prior to approval of the certificate of occupancy	Verification that construction specifications for individual project components include use of a waste disposal company that recycles demolition and construction wastes	Prior to issuance of demolition or building permits	Once per individual project component	LBDS			
DT Mitigation Measure Utilities-3(b) In order to facilitate onsite separation and recycling of construction related wastes, all construction contractors shall provide temporary waste separation bins onsite during demolition and construction.	Review and approval of construction waste management plan for individual project components; field verification of compliance	Review and approval of construction waste management plan prior to issuance of demolition permit; field verification during construction	Once per individual project component for plan review; periodically throughout construction	LBDS, OCM			
DT Mitigation Measure Utilities-3(c) All future developments in the Project area shall include recycling bins at appropriate locations to promote recycling of paper, metal, glass, and all other recyclable materials. Materials from these bins shall be collected on a regular basis consistent with the City's refuse disposal program.	Review and approval of final building plans for individual project components; field verification of compliance	Building plan review and approval prior to issuance of building permit; field verification prior to issuance of occupancy permits	Once per individual project component for building plan review and approval; once for field verification	LBDS			
DT Mitigation Measure Utilities-3(d) All Project area residents and commercial tenants shall be provided with educational materials on the proper management and disposal of household hazardous waste, in accordance with educational materials made available by the Los Angeles County Department of Public Works.	Verification that educational materials are made available to project occupants of individual project components	Prior to issuance of occupancy permits	Once per individual project component	LBDS			

Key: **LBPWD – City of Long Beach Public Works Department**
LBDS – City of Long Beach Development Services Department
OCM – Onsite Construction Manager
DT – Downtown Plan Final EIR
SEIR – Civic Center Project Supplemental EIR

Mitigation Measure/Condition of Approval	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
OTHER CEQA							
SEIR Mitigation Measure Other-1 Fumigation. Prior to issuance of demolition permits, the project applicant shall fumigate all buildings.	Verification that fumigation has occurred	Prior to issuance of demolition permits	Once per individual project component	LBDS			

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Appendix A

Initial Study/NOP and NOP Comment Letters