Exhibit 3

Traffic Memorandum

MEMORANDUM

TO: Stephanie Eyestone, Eyestone Environmental
Madonna Marcelo, Eyestone Environmental

FROM: Sarah M. Drobis, P.E.
Emily Wong, EIT

DATE: August 16, 2016

RE: AB 900 Traffic Assessment for
Crossroads Hollywood **Ref:** J1308

This study presents the analysis to support the application for Environmental Leadership Development Project for the Crossroads Hollywood project (Project) in the Hollywood community of the City of Los Angeles, California (City).

PROJECT LOCATION

Hollywood Crossroads is located at 6701 Sunset Boulevard (Project Site) and is made up of 29 individual parcels bounded by Selma Avenue to the north, a church and school to the east, Sunset Boulevard to the south, and Highland Avenue to the west. The Project Site is currently occupied with Crossroads of the World, multi-family residential uses, as well as commercial and office uses. The surrounding area is urbanized and includes historic and modern low to high-rise buildings, occupied by neighborhood-serving commercial, tourist and entertainment-related commercial uses, offices, hotels, educational institutions, and single-family and multi-family residences.

The Project Site is located less than one mile from the Hollywood Freeway (US 101), which provides regional transportation between downtown Los Angeles and the San Fernando Valley. The Project Site is served by Sunset Boulevard and Highland Avenue, both of which are designated Avenue I in *Draft Mobility Plan 2035 – An Element of the General Plan* (Los Angeles Department of City Planning, May 2015). The Project Site is also located within 1,500 feet of the Los Angeles County Metropolitan Transportation Authority's (Metro) Hollywood/Highland Station. The Hollywood/Highland Station provides service to the Metro Red Line subway, which travels between Union Station in downtown Los Angeles and North Hollywood in the San Fernando Valley at 10-minute intervals throughout the day. Bicycle routes with shared lane markings, or "sharrows", are located adjacent to the Project Site on Selma Avenue.

PROJECT DESCRIPTION

The Project would retai n, preserve, and rehabilitate Crossroads of the World and remove all other existing uses on the Project Site, including surface parking lots and approximate ly 86,947 square feet (sf) of existing floor area consisting of 84 resid ential units (including 80 multi-family dwelling units and two duplexes) and commercial/retail an d office u ses. The Project would integrate Crossroads of the World in to a new, mixed-use development t hat would include eigh t new mi xed-use building s with resid ential, hotel, commerci al/retail, office, entertainment, and restaurant uses. Upon buildout, t he Project (including e xisting uses to be retained) would include app roximately 1 ,432,000 sf of floor area consisting of 950 residential units, 308 hotel rooms, approximately 95,000 sf of office uses, and approximately 18 5,000 sf of commercial/retail uses.

The Project would also include vehicular and pe destrian circulation improvements, including the realignment of Las Palmas Avenu e between Selm a Aven ue and Sunset Boulevard, as well as the establishment of a new pedestrian pas sageway. La s Palmas Avenue bet ween Selma Avenue and Sunset Boulevard wou ld be shifte d to the west to align with the street segment south of Su nset Boulevard. This im provement would align the currently off-set int ersection of Las Palmas Avenue & Sunset Boulevard. The Project a lso propose s to constr uct a new pedestrian walkway that extends diagonally from Sun set Boulevard along the frontag e Crossroads of the World to the corner of Highland Avenue & Selma Avenue.

SITE ACCESS AND CIRCULATION

Vehicular access to the Project wo uld be provi ded via several drivewa ys located on Highland Avenue, McCadden Place, Las Palmas Avenue, and Selma Avenue. Access to Parcel A would be provided via drivewa ys on Highland Avenue, McCadden Place, and Selma Aven ue, access to Parcel B would be provided via driveway s on McCadd en Place and Las Palmas Avenu e, access to Parcel C wou ld be provid ed via dr iveways on La s Palmas Avenue, and access to Parcel D wo uld be provi ded via a driveway on Las Palmas Avenue. Loading areas for Parcel B and Parcel C would also be provided via driveways on Las Palmas Avenue.

As stated a bove, the Project would provide a new pedestrian walkway that extends diagonally from Sunset Boulevard along the fr ontage of Crossroads o f the World to Highland Avenue & Selma Aven ue. The ped estrian walkway would be linked th rough landscaped public walkways and connect the entire Project Site while promoting access fr om Sunset Boulevard, Las Palmas Avenue, Selma Aven ue, and McCadden Place. All e xisting side walks and pedestrian crosswalks adjacent to the Project Site would be retained. Visitors, patrons, and employees arriving by bicycle would have the same access opportunities as pedestrian visitors.

EXISTING TRANSIT SERVICE

The Project Site is located within 1500 feet o f the Metro Hollywood/ Highland Station, which provides se rvice to the Metro Red Line subw ay. The Metro Red Lin e travels be tween Union Station in downtown Los Angeles and North Hollywood in the San Fernando Valley at 10-minute intervals du ring the co mmuter AM and PM peak hours. The Project Site is also served by numerous transit lin es, with bus st ops adjacen t to the Project Site on Sunset Boulevard and

Highland Avenue for Metro Lines 2 and 156/656, as well as the Los Angeles Department of Transportation (LADOT) DASH Hollywood. Additional bus stops for Metro Lines 212/312, 217, 222, and 780 are located within walking distance on Hollywood Boulevard and Hawthorn Avenue.

PROJECT TRIP GENERATION AND VEHICLE MILES TRAVELED (VMT)

The Project trip generation estimates were calculated using published rates from *Trip Generation, 9th Edition* (Institute of Transportation Engineers, 2012) for apartments (ITE 220), high-rise condominiums (ITE 232), hotel (ITE 310), general office building (ITE 710), shopping center (ITE 820), supermarket (ITE 850), and high-turnover restaurant (ITE 932). As shown in Table 1, the Project is anticipated to generate 15,005 net new daily weekday trips, including 886 morning peak hour trips (378 inbound, 508 outbound) and 1,281 afternoon peak hour trips (762 inbound, 519 outbound).

The trip type and average trip lengths for each land use were determined using the California Emissions Estimator Model (CalEEMod). The trip type describes the purpose of the trip generated at each land use, such as residential trips and commercial trips. Residential trips include home-work (H-W), home-shop (H-S), and home-other (H-O). Commercial trips include commercial-customer (C-C), commercial-work (C-W), and commercial-nonwork (C-NW). The trip lengths are based on the location and urbanization of the project area. The average trip length of each land use is the sum of the trip length of each trip type multiplied by the percentage of trip type. The trip lengths and percentage of types from CalEEMod are detailed in Table 2.

As shown in Table 2, the average trip length in the Hollywood area as calculated by CalEEMod is 10.5 miles for residential apartment and high-rise condominium uses, 9.7 miles for hotel uses, 10.8 for office uses, 9.1 for restaurant uses, 9.5 for retail uses, and 8.7 for supermarket uses. These trip lengths were applied to the Project trips to develop the total VMT of the Project. As detailed in Table 2, prior to accounting for applicable reductions, the traffic generated by the Project would total 243,363 daily VMT, including 14,380 VMT during the morning peak hour (6,903 VMT inbound, 7,477 VMT outbound) and 21,337 VMT during the afternoon peak hour (11,968 VMT inbound, 9,369 VMT outbound). Bicycle routes with shared lane markings, or "sharrows", are also provided adjacent to the Project Site on Selma Avenue.

COMPARABLE PROJECT

The Project is located along two major corridors within the Hollywood community. Both Highland Avenue and Sunset Boulevard carry over 50,000 vehicles per day on an average weekday; thus, the Project will likely attract existing trips in the area that are "passing by" on the way to another destination, particularly during the weekday morning and afternoon peak hour. The pass-by reductions applied to the retail, supermarket, quality restaurant, and high-turnover restaurant uses are derived from surveys published in *Trip Generation Handbook: An ITE Recommended Practice* (ITE, 2003). As shown in Table 3, with application of the pass-by reduction, the traffic generated by the Project would total 206,069 daily VMT, including 12,832 VMT during the morning peak hour (6,002 VMT inbound, 6,830 VMT outbound) and 18,118 VMT during the afternoon peak hour (10,240 VMT inbound, 7,878 outbound). For the purposes

of this analysis, the VMT estimates with application of pass-by reduction are assumed as the "comparable project" due to the urbanized environment of the Hollywood area.

PROJECT-RELATED REDUCTIONS

The Project Site is located less than ¼ mile from the Metro Hollywood/Highland Station, therefore, a 15% transit reduction was applied to all land use components of the Project, as allowed by LADOT. In addition, a 10% internal capture reduction was applied to the retail, supermarket, and restaurant uses to account for the synergy of uses within a mixed-use development. As shown in Table 4, after accounting for the pass-by, transit, and internal capture reductions, the traffic generated by the Project would total 166,184 daily VMT, including 10,514 VMT during the morning peak hour (4,879 inbound, 5,635 outbound) and 14,647 VMT during the afternoon peak hour (8,266 inbound, 6,381 outbound). The traffic generated by the Project would be approximately 19% less than the comparable project in the Hollywood area.

As part of the Project, a transportation demand management (TDM) program will be implemented to reduce the use of single occupant vehicles by increasing the number of trips by walking, bicycle, carpool, vanpool, and transit. The TDM program would include design features, transportation services, education, and incentives intended to reduce the amount of single occupant vehicles during commuter peak hours. The TDM program would include the following strategies:

- Promotion and support of carpools and rideshares
- Pedestrian-friendly environment
- Bicycle amenities (bicycle racks, lockers, showers, etc.)
- Flexible or alternative work schedules
- Education and information on alternative transportation modes
- Transportation Information Center (TIC)
- Integration of a Mobility Hub
- Transportation Management Coordination Program
    - Promote awareness of all available TDM strategies
    - Create Transportation Management Plans (TMP) for employees, residents, and patrons of the Project
    - Guaranteed ride home (GRH) program
    - Online ride-matching and carpool/vanpool program
    - Preferential parking location for high occupancy vehicles
- Discounted employee/resident transit passes
- Unbundled Parking
- Parking Cash-Out
- Participation in the Hollywood Transportation Management Organization

The implementation of the TDM program will further reduce the VMT of the Project by 10%. As shown in Table 5, with implementation of the TDM program, the traffic generated by the Project would total 149,565 daily VMT, including 9,461 VMT during the morning peak hour (4,390 VMT inbound, 5,071 VMT outbound) and 13,182 VMT during the afternoon peak hour (7,439 VMT inbound, 5,743 VMT outbound). Thus, the traffic generated by the Project would be approximately 25% less than the comparable project in the Hollywood area.

"INFILL" PROJECT-RELATED TRIP REDUCTIONS

The Project is considered an "infill" project, as it is replacing existing residential and low-density commercial retail and office uses with a high-density, mixed-use development. The Project is also sustaining the historical Crossroads of the World. As shown in Table 6, the traffic of the existing uses of the Project Site generates approximately 26,674 daily VMT, including 2,072 VMT during the morning peak hour (1,440 VMT inbound, 632 VMT outbound) and 2,806 VMT during the afternoon peak hour (1,056 VMT inbound, 1,750 VMT outbound). After accounting for the site-related reductions, the net traffic generated by the existing uses totals approximately 23,338 daily VMT, including 1,777 VMT during the morning peak hour (1,234 VMT inbound, 543 VMT outbound) and 2,443 VMT during the afternoon peak hour (926 inbound, 1,517 outbound), as detailed in Table 7.

TOTAL PROJECT VMT

As detailed in Table 8, the net Project traffic would generate a total of 126,227 daily VMT, including 7,684 VMT during the morning peak hour (3,156 VMT inbound, 4,528 VMT outbound) and 10,739 VMT during the afternoon peak hour (6,153 VMT inbound, 4,226 VMT outbound). In comparison, the traffic of a comparable project in the Hollywood area would generate approximately 206,609 daily VMT, including 12,832 VMT during the morning peak hour (6,002 VMT inbound, 6,830 outbound) and 18,118 VMT during the afternoon peak hour (10,240 VMT inbound, 7,878 VMT outbound). Thus, the combined effects of the Project's urban infill location along major corridors, proximity to transit, and proposed TDM program would reduce the Project's anticipated VMT by approximately 65% as compared to a comparable mixed-use project in the Hollywood area. Therefore, the Project results in at least 10% greater transportation efficiency or more.

TABLE 1
PROJECT TRIP GENERATION ESTIMATES - HOLLYWOOD CROSSROADS

Land Use	Size	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation Rates								
Apartments (ITE 220)	per du	6.65	20%	80%	0.51	65%	35%	0.62
Condomiums (ITE 230)	per du	5.81	17%	83%	0.44	67%	33%	0.52
Hotel (ITE 310)	per room	8.17	61%	39%	0.56	53%	47%	0.59
General Office Building (ITE 710)	per ksf	11.03	88%	12%	1.56	17%	83%	1.49
Shopping Center (ITE 820)	per ksf	42.70	62%	38%	0.96	48%	52%	3.71
Supermarket (ITE 850)	per ksf	102.24	62%	38%	3.40	51%	49%	9.48
Quality Restaurant (ITE 931)	per ksf	89.95	55%	45%	0.81	67%	33%	7.49
High-Turnover Restaurant (ITE 932)	per ksf	127.15	55%	45%	10.81	60%	40%	9.85
Proposed Project								
Apartments	760 du	5,054	78	310	388	306	165	471
Transit/Walk Adjustment - 15%		*(758)*	*(12)*	*(46)*	*(58)*	*(46)*	*(25)*	*(71)*
Subtotal - Apartment		***4,296***	***66***	***264***	***330***	***260***	***140***	***400***
Condominiums	190 du	1,104	14	70	84	66	33	99
Transit/Walk Adjustment - 15%		*(166)*	*(2)*	*(11)*	*(13)*	*(10)*	*(5)*	*(15)*
Subtotal - High-Rise Condominiums		***938***	***12***	***59***	***71***	***56***	***28***	***84***
Hotel	308 du	2,516	105	67	172	96	86	182
Transit/Walk Adjustment - 15%		*(377)*	*(16)*	*(10)*	*(26)*	*(14)*	*(13)*	*(27)*
Subtotal - Hotel		***2,139***	***89***	***57***	***146***	***82***	***73***	***155***
Office	95 ksf	1,048	130	18	148	24	118	142
Transit/Walk Adjustment - 15%		*(157)*	*(20)*	*(2)*	*(22)*	*(4)*	*(17)*	*(21)*
Subtotal - Office		***891***	***110***	***16***	***126***	***20***	***101***	***121***
Shopping Center	61.8 ksf	2,637	37	22	59	110	119	229
Transit/Walk Adjustment - 15%		*(396)*	*(6)*	*(3)*	*(9)*	*(17)*	*(17)*	*(34)*
Internal Capture Adjustment - 10%		*(224)*	*(3)*	*(2)*	*(5)*	*(9)*	*(11)*	*(20)*
Pass-by Adjustment - 40%		*(807)*	*(11)*	*(7)*	*(18)*	*(34)*	*(36)*	*(70)*
Subtotal - Retail		***1,210***	***17***	***10***	***27***	***50***	***55***	***105***
Supermarket	40 ksf	4,090	84	52	136	193	186	379
Transit/Walk Adjustment - 15%		*(614)*	*(13)*	*(7)*	*(20)*	*(29)*	*(28)*	*(57)*
Internal Capture Adjustment - 10%		*(348)*	*(7)*	*(5)*	*(12)*	*(16)*	*(16)*	*(32)*
Pass-by Adjustment - 40%		*(1,251)*	*(26)*	*(16)*	*(42)*	*(59)*	*(57)*	*(116)*
Subtotal - Supermarket		***1,877***	***38***	***24***	***62***	***89***	***85***	***174***
Quality Restaurant	41.6 ksf	3,744	19	15	34	209	103	312
Transit/Walk Adjustment - 15%		*(562)*	*(3)*	*(2)*	*(5)*	*(31)*	*(16)*	*(47)*
Internal Capture Adjustment - 15%		*(477)*	*(2)*	*(2)*	*(4)*	*(27)*	*(13)*	*(40)*
Pass-by Adjustment - 10%		*(271)*	*(1)*	*(2)*	*(3)*	*(15)*	*(8)*	*(23)*
Subtotal - Quality Restaurant		***2,434***	***13***	***9***	***22***	***136***	***66***	***202***
High-Turnover Restaurant	41.6 ksf	5,293	248	202	450	246	164	410
Transit/Walk Adjustment - 15%		*(794)*	*(37)*	*(31)*	*(68)*	*(37)*	*(25)*	*(62)*
Internal Capture Adjustment - 15%		*(675)*	*(32)*	*(25)*	*(57)*	*(31)*	*(21)*	*(52)*
Pass-by Adjustment - 20%		*(765)*	*(36)*	*(29)*	*(65)*	*(36)*	*(23)*	*(59)*
Subtotal - High-Turnover Restaurant		***3,059***	***143***	***117***	***260***	***142***	***95***	***237***
Total - Proposed Project		***16,844***	***488***	***556***	***1,044***	***835***	***643***	***1,478***
Existing Uses to be Removed								
Apartments	84 du	559	9	34	43	34	18	52
Transit/Walk Adjustment - 15% [b]		*(84)*	*(1)*	*(5)*	*(6)*	*(5)*	*(3)*	*(8)*
Subtotal - Apartments		***475***	***8***	***29***	***37***	***29***	***15***	***44***
Office	79.1 ksf	873	108	15	123	20	98	118
Transit/Walk Adjustment - 15% [b]		*(131)*	*(16)*	*(2)*	*(18)*	*(3)*	*(15)*	*(18)*
Subtotal - Office		***742***	***92***	***13***	***105***	***17***	***83***	***100***
Shopping Center [d]	26.7 ksf	1,140	16	10	26	48	51	99
Transit/Walk Adjustment - 15% [b]		*(171)*	*(2)*	*(2)*	*(4)*	*(7)*	*(8)*	*(15)*
Pass-by Adjustment - 40% [c]		*(388)*	*(6)*	*(3)*	*(9)*	*(16)*	*(18)*	*(34)*
Subtotal - Shopping Center		***581***	***8***	***5***	***13***	***25***	***25***	***50***
High-Turnover Restaurant	0.5 ksf	60	3	2	5	3	2	5
Transit/Walk Adjustment - 15% [b]		*(9)*	*0*	*(1)*	*(1)*	*0*	*(1)*	*(1)*
Pass-by Adjustment - 20% [c]		*(10)*	*(1)*	*0*	*(1)*	*(1)*	*0*	*(1)*
Subtotal - High-Turnover Restaurant		***41***	***2***	***1***	***3***	***2***	***1***	***3***
Total - Existing Uses to be Removed		***1,839***	***110***	***48***	***158***	***73***	***124***	***197***
Net New Project Trips		**15,005**	**378**	**508**	**886**	**762**	**519**	**1,281**

TABLE 2
VEHICLE MILES TRAVELED (VMT) - HOLLYWOOD CROSSROADS - CONVERSION OF PROJECT TRIPS TO VMT

Land Use	Size / Average Trip Length [a]	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation (with No Reductions)								
Apartments	760 du	5,054	78	310	388	306	165	471
High-Rise Condominiums	190 du	1,104	14	70	84	66	33	99
Hotel	308 du	2,516	105	67	172	96	86	182
Office	95 ksf	1,048	130	18	148	24	118	142
Shopping Center	61.8 ksf	2,637	37	22	59	110	119	229
Supermarket	40 ksf	4,090	84	52	136	193	186	379
Quality Restaurant	41.6 ksf	3,744	19	15	34	209	103	312
High-Turnover Restaurant	41.6 ksf	5,293	248	202	450	246	164	410
Total - Proposed Project Trip Generation		***25,486***	***715***	***756***	***1,471***	***1,250***	***974***	***2,224***
VMT (with No Reductions)								
Apartments	10.5 miles	53,067	819	3,255	4,074	3,213	1,733	4,946
High-Rise Condominiums	10.6 miles	11,702	148	742	890	700	350	1,050
Hotel	9.7 miles	24,405	1,019	650	1,669	931	834	1,765
Office	10.8 miles	11,318	1,404	194	1,598	259	1,274	1,533
Shopping Center	9.5 miles	25,052	352	209	561	1,045	1,131	2,176
Supermarket	8.7 miles	35,583	731	452	1,183	1,679	1,618	3,297
Quality Restaurant	9.1 miles	34,070	173	137	310	1,902	937	2,839
High-Turnover Restaurant	9.1 miles	48,166	2,257	1,838	4,095	2,239	1,492	3,731
Subtotal - Proposed Project VMT		***243,363***	***6,903***	***7,477***	***14,380***	***11,968***	***9,369***	***21,337***

[a] Average trip lengths based on CalEEMod assumptions

TABLE 3
VEHICLE MILES TRAVELED (VMT) - HOLLYWOOD CROSSROADS - COMPARABLE PROJECT

Land Use	Reduction	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Pass-by Trip Reductions								
Apartments	0%	0	0	0	0	0	0	0
High-Rise Condominiums	0%	0	0	0	0	0	0	0
Hotel	0%	0	0	0	0	0	0	0
Office	0%	0	0	0	0	0	0	0
Shopping Center	40%	(1,055)	(15)	(9)	(24)	(44)	(48)	(92)
Supermarket	40%	(1,636)	(34)	(21)	(54)	(77)	(74)	(152)
Quality Restaurant	10%	(374)	(2)	(2)	(3)	(21)	(10)	(31)
High-Turnover Restaurant	20%	(1,059)	(50)	(40)	(90)	(49)	(33)	(82)
Subtotal - Pass-by Trip Reduction		***(4,124)***	***(101)***	***(72)***	***(171)***	***(191)***	***(165)***	***(357)***
Total Project Trips with Pass-by Reduction		***21,362***	***614***	***684***	***1,300***	***1,059***	***809***	***1,867***
Pass-by VMT Reduction								
Apartments	0%	0	0	0	0	0	0	0
High-Rise Condominiums	0%	0	0	0	0	0	0	0
Hotel	0%	0	0	0	0	0	0	0
Office	0%	0	0	0	0	0	0	0
Shopping Center	40%	(10,021)	(141)	(84)	(225)	(418)	(452)	(870)
Supermarket	40%	(14,233)	(292)	(181)	(473)	(672)	(647)	(1,319)
Quality Restaurant	10%	(3,407)	(17)	(14)	(31)	(190)	(94)	(284)
High-Turnover Restaurant	20%	(9,633)	(451)	(368)	(819)	(448)	(298)	(746)
Subtotal - Pass-by VMT Reduction		***(37,294)***	***(901)***	***(647)***	***(1,548)***	***(1,728)***	***(1,491)***	***(3,219)***
Total Project VMT with Pass-by Reduction ("Comparable Project")		***206,069***	***6,002***	***6,830***	***12,832***	***10,240***	***7,878***	***18,118***

TABLE 4
VEHICLE MILES TRAVELED (VMT) - HOLLYWOOD CROSSROADS - PROJECT AND SITE-RELATED REDUCTIONS

Land Use	Reduction	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Transit/Walk-In Trip Reductions								
Apartments	15%	(758)	(12)	(47)	(59)	(46)	(25)	(71)
High-Rise Condominiums	15%	(166)	(2)	(11)	(13)	(10)	(5)	(15)
Hotel	15%	(377)	(16)	(10)	(26)	(14)	(13)	(27)
Office	15%	(157)	(20)	(3)	(23)	(4)	(18)	(22)
Shopping Center	15%	(237)	(3)	(2)	(5)	(10)	(11)	(21)
Supermarket	15%	(368)	(8)	(5)	(13)	(17)	(17)	(34)
Quality Restaurant	15%	(506)	(3)	(2)	(5)	(28)	(14)	(42)
High-Turnover Restaurant	15%	(635)	(30)	(24)	(54)	(30)	(20)	(50)
Subtotal - Transit/Walk-In Trip Reduction		***(3,204)***	***(94)***	***(104)***	***(198)***	***(159)***	***(123)***	***(282)***
Total Project Trips with Transit/Walk-In Reduction		***18,158***	***520***	***580***	***1,102***	***900***	***686***	***1,585***
Transit/Walk-In Percentage Reduction from Comparable Project		***15.0%***			***15.2%***			***15.1%***
Transit/Walk-In VMT Reductions								
Apartments	15%	(7,960)	(123)	(488)	(611)	(482)	(260)	(742)
High-Rise Condominiums	15%	(1,755)	(22)	(111)	(133)	(105)	(53)	(158)
Hotel	15%	(3,661)	(153)	(98)	(251)	(140)	(125)	(265)
Office	15%	(1,698)	(211)	(29)	(240)	(39)	(191)	(230)
Shopping Center	15%	(2,255)	(32)	(19)	(51)	(94)	(102)	(196)
Supermarket	15%	(3,203)	(66)	(41)	(107)	(151)	(146)	(297)
Quality Restaurant	15%	(4,599)	(23)	(18)	(41)	(257)	(126)	(383)
High-Turnover Restaurant	15%	(5,780)	(271)	(221)	(492)	(269)	(179)	(448)
Subtotal - Transit/Walk-In VMT Reduction		***(30,911)***	***(901)***	***(1,025)***	***(1,926)***	***(1,537)***	***(1,182)***	***(2,719)***
Total Project VMT with Transit/Walk-In Reduction		***175,158***	***5,101***	***5,805***	***10,906***	***8,703***	***6,696***	***15,399***
Transit/Walk-In Percentage Reduction from Comparable Project		***15.0%***			***15.0%***			***15.0%***
Internal Capture Trip Reductions								
Apartments	0%	0	0	0	0	0	0	0
High-Rise Condominiums	0%	0	0	0	0	0	0	0
Hotel	0%	0	0	0	0	0	0	0
Office	0%	0	0	0	0	0	0	0
Shopping Center	10%	(135)	(2)	(1)	(3)	(6)	(6)	(12)
Supermarket	10%	(209)	(4)	(3)	(7)	(10)	(10)	(20)
Quality Restaurant	10%	(286)	(1)	(1)	(2)	(16)	(8)	(24)
High-Turnover Restaurant	10%	(360)	(17)	(14)	(31)	(17)	(11)	(28)
Subtotal - Internal Capture Trip Reduction		***(990)***	***(24)***	***(19)***	***(43)***	***(49)***	***(35)***	***(84)***
Total Project Trips with Transit/Walk-In & Internal Capture Reduction		***17,168***	***496***	***561***	***1,059***	***851***	***651***	***1,501***
Transit/Walk-In & Internal Capture Percentage Reduction from Comparable Project		***19.6%***			***18.5%***			***19.6%***
Internal Capture VMT Reductions								
Apartments	0%	0	0	0	0	0	0	0
High-Rise Condominiums	0%	0	0	0	0	0	0	0
Hotel	0%	0	0	0	0	0	0	0
Office	0%	0	0	0	0	0	0	0
Shopping Center	10%	(1,278)	(18)	(11)	(29)	(53)	(58)	(111)
Supermarket	10%	(1,815)	(37)	(23)	(60)	(86)	(83)	(169)
Quality Restaurant	10%	(2,606)	(13)	(11)	(24)	(146)	(72)	(218)
High-Turnover Restaurant	10%	(3,275)	(154)	(125)	(279)	(152)	(102)	(254)
Subtotal - Transit/Walk-In VMT Reduction		***(8,974)***	***(222)***	***(170)***	***(392)***	***(437)***	***(315)***	***(752)***
Total Project VMT with Transit/Walk-In & Internal Capture Reduction		***166,184***	***4,879***	***5,635***	***10,514***	***8,266***	***6,381***	***14,647***
Transit/Walk-In & Internal Capture Percentage Reduction from Comparable Project		***19.4%***			***18.1%***			***19.2%***

TABLE 5
VEHICLE MILES TRAVELED (VMT) - HOLLYWOOD CROSSROADS - PROJECT AND SITE-RELATED REDUCTIONS & TDM

Land Use	Reduction	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
TDM Trip Reductions								
Apartments	10%	(430)	(7)	(26)	(33)	(26)	(14)	(40)
High-Rise Condominiums	10%	(94)	(1)	(6)	(7)	(6)	(3)	(9)
Hotel	10%	(214)	(9)	(6)	(15)	(8)	(7)	(15)
Office	10%	(89)	(11)	(2)	(13)	(2)	(10)	(12)
Shopping Center	10%	(121)	(2)	(1)	(3)	(5)	(5)	(10)
Supermarket	10%	(188)	(4)	(2)	(6)	(9)	(9)	(18)
Quality Restaurant	10%	(258)	(1)	(1)	(2)	(14)	(7)	(21)
High-Turnover Restaurant	10%	(324)	(15)	(12)	(27)	(15)	(10)	(25)
Subtotal - Internal Capture Trip Reduction		***(1,718)***	***(50)***	***(56)***	***(106)***	***(85)***	***(65)***	***(150)***
Total Project Trips with Transit/Walk-In, Internal Capture & TDM Reduction		***15,450***	***446***	***505***	***953***	***766***	***586***	***1,351***
Transit/Walk-In, Internal Capture & TDM Percentage Reduction from Comparable Project		***27.7%***			***26.7%***			***27.6%***
Transit/Walk-In VMT Reductions								
Apartments	10%	(4,511)	(70)	(277)	(347)	(273)	(147)	(420)
High-Rise Condominiums	10%	(995)	(13)	(63)	(76)	(60)	(30)	(90)
Hotel	10%	(2,074)	(87)	(55)	(142)	(79)	(71)	(150)
Office	10%	(962)	(119)	(17)	(136)	(22)	(108)	(130)
Shopping Center	10%	(1,150)	(16)	(10)	(26)	(48)	(52)	(100)
Supermarket	10%	(1,633)	(34)	(21)	(55)	(77)	(74)	(151)
Quality Restaurant	10%	(2,346)	(12)	(9)	(21)	(131)	(65)	(196)
High-Turnover Restaurant	10%	(2,948)	(138)	(112)	(250)	(137)	(91)	(228)
Subtotal - Transit/Walk-In VMT Reduction		***(16,619)***	***(489)***	***(564)***	***(1,053)***	***(827)***	***(638)***	***(1,465)***
Total Project VMT with Transit/Walk-In, Internal Capture & TDM Reduction		***149,565***	***4,390***	***5,071***	***9,461***	***7,439***	***5,743***	***13,182***
Transit/Walk-In, Internal Capture & TDM Percentage Reduction from Comparable Project		***27.4%***			***26.3%***			***27.2%***

TABLE 6
VEHICLE MILES TRAVELED (VMT) - CROSSROADS HOLLYWOOD - EXISTING USES TO BE REMOVED

Land Use	Size / Average Trip Length [a]	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation								
Apartments	84 du	559	9	34	43	34	18	52
Office	79.1 ksf	873	108	15	123	20	98	118
Shopping Center [d]	26.7 ksf	1,140	16	10	26	48	51	99
High-Turnover Restaurant	0.5 ksf	60	3	2	5	3	2	5
Total - Existing Trips to be Removed		***2,632***	***136***	***61***	***197***	***105***	***169***	***274***
VMT								
Apartments	10.5 miles	5,870	95	357	452	357	189	546
Office	10.8 miles	9,428	1,166	162	1,328	216	1,058	1,274
Shopping Center [d]	9.5 miles	10,830	152	95	247	456	485	941
High-Turnover Restaurant	9.1 miles	546	27	18	45	27	18	45
Total - Existing VMT to be Removed		***26,674***	***1,440***	***632***	***2,072***	***1,056***	***1,750***	***2,806***

[a] Average trip lengths based on CalEEMod assumptions

TABLE 7
VEHICLE MILES TRAVELED (VMT) - HOLLYWOOD CROSSROADS - EXISTING USES TO BE REMOVED WITH SITE-RELATED REDUCTIONS

Land Use	Reduction	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Pass-by Trip Reductions								
Apartments	0%	0	0	0	0	0	0	0
Office	0%	0	0	0	0	0	0	0
Shopping Center	40%	(456)	(6)	(4)	(10)	(19)	(20)	(39)
High-Turnover Restaurant	20%	(12)	(1)	0	(1)	(1)	0	(1)
Subtotal - Pass-by Trip Reduction		***(468)***	***(7)***	***(4)***	***(11)***	***(20)***	***(20)***	***(40)***
Total Existing Trips to be Removed with Pass-by Reduction		***2,164***	***129***	***57***	***186***	***85***	***149***	***234***
Pass-by VMT Reduction								
Apartments	0%	0	0	0	0	0	0	0
Office	0%	0	0	0	0	0	0	0
Shopping Center	40%	(4,332)	(61)	(38)	(99)	(182)	(194)	(376)
High-Turnover Restaurant	20%	(109)	(5)	(4)	(9)	(5)	(4)	(9)
Subtotal - Pass-by VMT Reduction		***(4,441)***	***(66)***	***(42)***	***(108)***	***(187)***	***(198)***	***(385)***
Total Existing VMT to be Removed with Pass-by Reduction		***22,233***	***1,374***	***590***	***1,964***	***869***	***1,552***	***2,421***
Transit/Walk-In Trip Trip Reductions								
Apartments	15%	(84)	(1)	(5)	(6)	(5)	(3)	(8)
Office	15%	(131)	(16)	(2)	(18)	(3)	(15)	(18)
Shopping Center	15%	(103)	(2)	(1)	(3)	(4)	(5)	(9)
High-Turnover Restaurant	15%	(7)	0	0	0	0	0	0
Subtotal - Pass-by Trip Reduction		***(325)***	***(19)***	***(8)***	***(27)***	***(12)***	***(23)***	***(35)***
Total - Existing Trips to be Removed with Pass-by & Transit/Walk-In Trip Reduction		***1,839***	***110***	***49***	***159***	***73***	***126***	***199***
Transit/Walk-In VMT Reductions								
Apartments	15%	(881)	(14)	(54)	(68)	(54)	(28)	(82)
Office	15%	(1,414)	(175)	(24)	(199)	(32)	(159)	(191)
Shopping Center	15%	(975)	(14)	(9)	(23)	(41)	(44)	(85)
High-Turnover Restaurant	15%	(66)	(3)	(2)	(5)	(3)	(2)	(5)
Subtotal - Pass-by Trip Reduction		***(3,336)***	***(206)***	***(89)***	***(295)***	***(130)***	***(233)***	***(363)***
Total - Existing VMT to be Removed with Pass-by & Transit/Walk-In Trip Reduction		***23,338***	***1,234***	***543***	***1,777***	***926***	***1,517***	***2,443***

TABLE 8
VEHICLE MILES TRAVELED (VMT) - CROSSROADS HOLLYWOOD - NET PROJECT WITH PROJECT WITH REDUCTIONS

Summary	Weekday						
	Daily	A.M. Peak Hour			P.M. Peak Hour		
		In	Out	Total	In	Out	Total
Total Project Trips with Pass-by Reduction (Comparable Project)	21,362	614	684	1,300	1,059	809	1,867
Net Project Trips with Project-Related and Existing Use Reduction	13,611	336	456	794	693	460	1,152
Percentage Reduction from Comparable Project	56.9%			63.7%			62.1%
Total VMT with Pass-by Reduction (Comparable Project)	206,069	6,002	6,830	12,832	10,240	7,878	18,118
Net Project VMT with Project-Related and Existing Use Reduction	126,227	3,156	4,528	7,684	6,513	4,226	10,739
Percentage Reduction from Comparable Project	63.3%			67.0%			68.7%

Exhibit 4

Greenhouse Gas Emissions Methodology and Documentation

Greenhouse Gas Emissions Methodology and Documentation

Crossroads Hollywood Project

Project Applicant:

CRE-HAR Crossroads SPV, LLC
6363 Wilshire Boulevard, #600
Los Angeles, CA 90048

August 2016

Prepared By:

Eyestone Environmental
6701 Center Drive West, Suite 900
Los Angeles, CA 90045

August 15, 2016

CALIFORNIA AIR RESOURCES BOARD
1001 I Street
Sacramento, CA 95814-2828

RE: Greenhouse Gas Emissions Methodology and Documentation Pursuant to the "Jobs and Economic Improvement through Environmental Leadership Act" (Public Resources Code Section 21178 et seq.) for the Crossroads Hollywood Project

To California Air Resources Board:

On behalf of CRE-HAR Crossroads SPV, LLC, the Project Applicant, Eyestone Environmental prepared an Application for CEQA Streamlining for the Crossroads Hollywood Project (Project), to demonstrate that the Project meets the requirements of the Jobs and Economic Improvement through Environmental Leadership Act (Public Resources Code Section 21178 et seq.), also referred to as Assembly Bill (AB) 900. As detailed in the application, the Project would incorporate a number of Project characteristics and project design features to avoid, minimum, and reduce greenhouse gas emissions. Our findings conclude that the Project would meet the GHG emissions requirements for streamlined environmental review under CEQA.

Should you have any questions or require additional information please feel free to contact me at (424) 207-5333.

Sincerely,

Mark Hagmann, P.E.
EYESTONE ENVIRONMENTAL
Air Quality Director

6701 Center Drive West, Suite 900, Los Angeles, California 90045
Phone: (424) 207-5333 Fax: (424) 207-5349

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1. Introduction

Eyestone Environmental has been retained to conduct a comprehensive greenhouse gas (GHG) emissions assessment for the Crossroads Hollywood Project (the "Project") and to demonstrate that the Project meets the requirements of the *Jobs and Economic Improvement Through Environmental Leadership Act* ("the Act") (Public Resources Code Section 21178 et seq.), also referred to as Assembly Bill (AB) 900. This assessment describes the methodology used to estimate the GHG emissions from baseline and Project conditions, provides an estimate of the net change in GHG emissions for the Project as compared to baseline conditions, and describes the methodology uses to quantify GHG emission reductions from project design features and mitigation measures. The following baseline and Project-related emission sources have been evaluated:

- Construction Activities—Fossil fueled on- and off-road vehicles and equipment needed for demolition, mass and fine grading, building construction, paving, and architectural coating;
- Direct Emission Sources—Consumption of natural gas on-site for cooking, space heating and water heating, combustion of fossil fuels for lawn care and maintenance activities, and motor vehicles including employee transportation; and
- Indirect Emission Sources—Off-site electricity generation, water conveyance and wastewater treatment, and solid waste disposal.

a. Assembly Bill 900

In September 2011, the Governor Brown signed the Act, which required the Governor to establish procedures for applying for streamlined environmental review under the California Environmental Quality Act (CEQA) for projects that meet certain requirements. The Office of Planning and Research (OPR) has provided approved guidelines for submitting applications for streamlined environmental review pursuant to the Act. With respect to GHG emissions, a project must demonstrate that it would not result in

any net additional GHGs including GHG emissions from employee transportation in accordance with Public Resources Code Section 21183(c). For purposes of California Public Resources Code Section 21183(c) the following process applies:

1. The applicant shall submit electronically to AB900ARBsubmittals@arb.ca.gov a proposed methodology for quantifying the project's net additional GHG emissions. The CARB will review and comment on the methodology, at its discretion, within 30 days of submission.

2. At the same time, the applicant shall submit to AB900ARBsubmittals@arb.ca.gov documentation that the project does not result in any net additional GHG emissions. The documentation must at least quantify:

   a. Both direct and indirect GHG emissions associated with the project's construction and operation, including emissions from the project's projected energy use and transportation related emissions; and

   b. The net emissions of the project after accounting for any mitigation measures that will be monitored and enforced consistent with Public Resources Code section 21183(d).

3. Within 60 days of receiving the documentation (in 2. above), the CARB will determine whether the condition specified in Public Resources section 21183(c) has been met or, if more time is needed, notify the applicant of the expected completion date.

4. The CARB will determine and report to the Governor in writing that a project does not result in any net additional emissions of greenhouse gases if the project demonstrates through a combination of project design features, compliance with (or exceeding minimum requirements of) existing regulations, and mitigation that it would result in zero additional greenhouse gas emissions.

b. Global Climate Change and GHG Emissions

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in average temperature of the Earth's surface and atmosphere. One identified cause of global warming is an increase of GHGs in the atmosphere. GHGs are those compounds in the Earth's atmosphere that play a critical role in determining the Earth's surface temperature.

By definition, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).[1] Carbon dioxide is the most abundant GHG. Other GHGs are less abundant, but have higher global warming potential than CO_2. Thus, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions. A general description of the GHGs discussed is provided in Table 1 on page 4.

Global Warming Potentials (GWPs) are one type of simplified index based upon radiative properties that can be used to estimate the potential future impacts of emissions of different gases upon the climate system in a relative sense. GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. A summary of the atmospheric lifetime and GWP of selected gases is presented in Table 2 on page 5. As indicated below, GWP range from 1 to 22,800.

c. Project Description

CRE-HAR Crossroads SPV, LLC, the Project Applicant, proposes to construct a mixed-use development across four City blocks in the Hollywood Community of the City of Los Angeles (the Project Site). The 8.0-acre (348,419-square-foot) Project Site is generally bounded by Selma Avenue to the north; the Blessed Sacrament Catholic Church and School to the east; Sunset Boulevard to the south; and Highland Avenue to the west. The Project Site includes the Crossroads of the World complex (Crossroads of the World), which is a designated City Cultural-Historic Monument (Monument #134) and also appears on the National Register of Historic Places and the California Register of Historical Resources. The Project would retain and rehabilitate Crossroads of the World and remove all other existing uses on the Project Site, including surface parking lots and approximately 172,573 square feet of existing floor area consisting of 84 residential units (including 80 multi-family dwelling units and two duplexes) and commercial/retail and office uses. The Project would integrate Crossroads of the World into a new, mixed-use development that would include eight new mixed-use buildings with residential, hotel, commercial/retail, office, entertainment, and restaurant uses and one additional commercial/retail building. Upon buildout, the Project (including existing uses to be retained within the Crossroads of the World complex) would include approximately 1,432,000 square feet of floor area

[1] *As defined by California AB32 and SB104.*

Table 1
Description of Identified Greenhouse Gases[a]

Greenhouse Gas	General Description
Carbon Dioxide (CO_2)	An odorless, colorless GHG, which has both natural and anthropocentric sources. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of carbon dioxide are burning coal, oil, natural gas, and wood.
Methane (CH_4)	A flammable gas and is the main component of natural gas. When one molecule of methane is burned in the presence of oxygen, one molecule of carbon dioxide and two molecules of water are released. A natural source of methane is the anaerobic decay of organic matter. Geological deposits, known as natural gas fields, also contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.
Nitrous Oxide (N_2O)	A colorless GHG. High concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, race cars, and as an aerosol spray propellant.
Hydrofluorocarbons (HFCs)	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. Because they destroy stratospheric ozone, the production of CFCs was stopped as required by the Montreal Protocol in 1987. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs as refrigerants. HFCs deplete stratospheric ozone, but to a much lesser extent than CFCs.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above the earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
Sulfur Hexafluoride (SF_6)	An inorganic, odorless, colorless, non-toxic, and nonflammable gas. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Nitrogen Trifluoride (NF_3)	An inorganic, non-toxic, odorless, non-flammable gas. NF_3 is used in the manufacture of semi-conductors, as an oxidizer of high energy fuels, for the preparation of tetrofluorohydrazine, as an etchant gas in the electronic industry, and as a fluorine source in high power chemical lasers.

[a] *Greenhouse gases identified in this table are ones identified in the Kyoto protocol and other synthetic gases recently added to the IPCC's Fifth Assessment Report.*

Source: Association of Environmental Professionals, Alternative Approaches to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final, June 29, 2007; Environmental Protection Agency, Acute Exposure Guideline Levels (AEGLs) for Nitrogen Trifluoride, January 2009.

Table 2
Atmospheric Lifetimes and Global Warming Potentials

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide	50–200	1
Methane	12 (+/-3)	21
Nitrous Oxide	120	310
HFC-23	264	11,700
HFC-134a	14.6	1,300
HFC-152a	1.5	140
PFC-14: Tetrafluoromethane (CF_4)	50,000	6,500
PFC-116: Hexafluoroethane (C_2F_6)	10,000	9,200
Sulfur Hexafluoride (SF_6)	3,200	23,900
Nitrogen Trifluoride (NF_3)	740	17,200

Source: IPCC, 2007, www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html, accessed August 10, 2016.

consisting of 950 residential units, 308 hotel rooms, approximately 95,000 square feet of office uses, and approximately 185,000 square feet of commercial/retail uses.

(1) Project Location and Surrounding Uses

The Project Site is located in the Hollywood Community of the City of Los Angeles, approximately 7 miles northwest of downtown Los Angeles and approximately 12 miles east of the Pacific Ocean. A regional map of the Project area is provided in Figure 1 on page 6. The Project Site is irregularly-shaped and consists of 29 individual parcels across four City blocks, as well as Las Palmas Avenue – between Selma Avenue and Sunset Boulevard – that would be re-aligned. As shown in the aerial map in Figure 2 on page 7, the individual parcels are grouped into four Project areas referred to as Development Parcels A, B, C, and D. Generally, the Project Site is bounded by Selma Avenue to the north; the Blessed Sacrament Church and School and associated surface parking to the east; Sunset Boulevard to the south; and Highland Avenue to the west. Development Parcels A, B, and C are located south of Selma Avenue. Development Parcel D is located on the northeastern corner of Selma Avenue and Las Palmas Avenue.

(2) Existing Project Site Conditions

As detailed below, the Project Site is currently developed with various uses, including low-density commercial and office uses in the historic Crossroads of the World

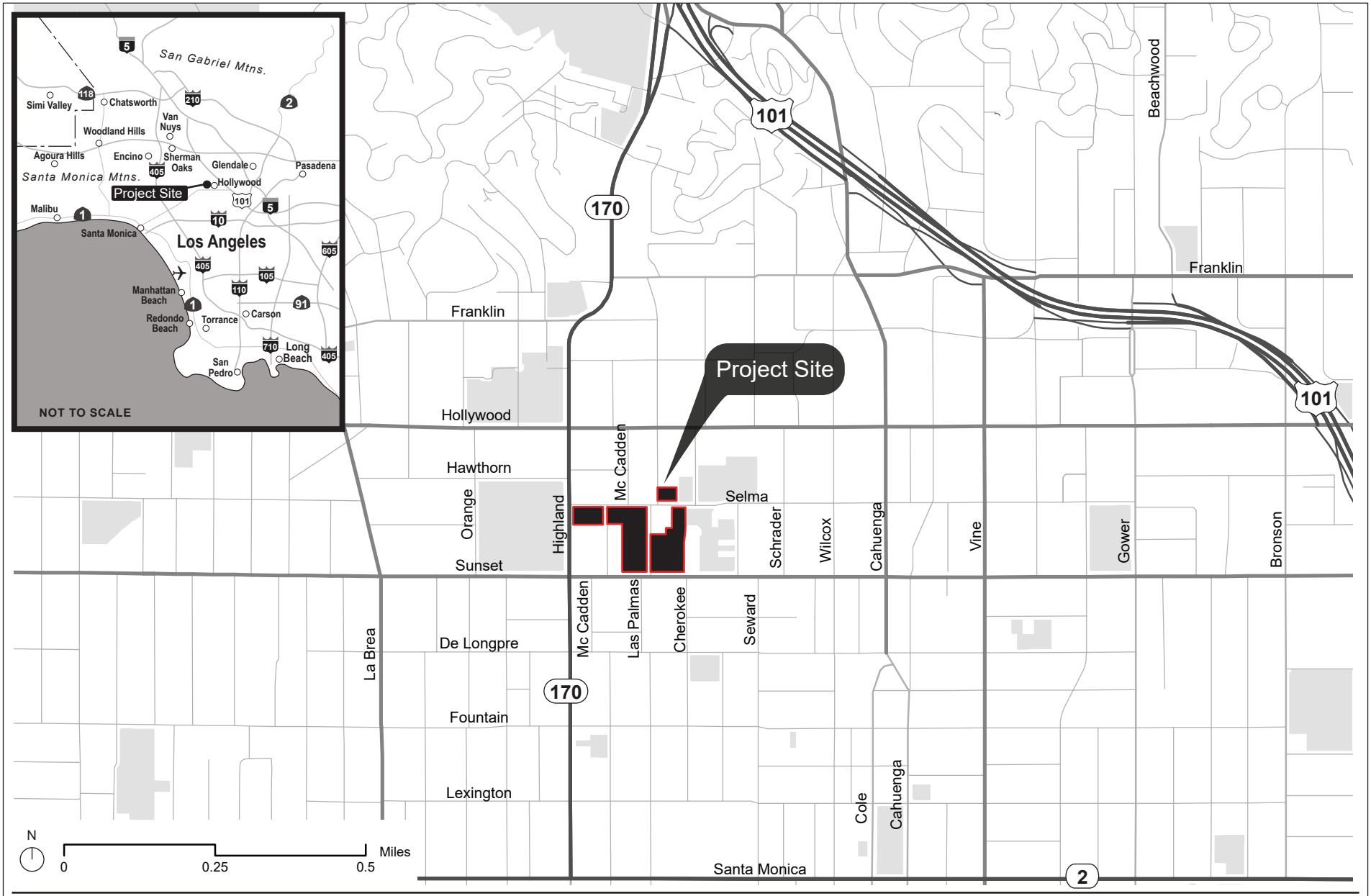

Figure 1
Project Location Map

Source: LA County GIS; Eyestone Environmental, 2015.

Figure 2
Aerial Photograph of the Project Vicinity

Source: Google Earth, 2015; Skidmore Owings & Merril LLP and Rios Clementi Hale Studios, 2015.

property; two residential duplexes; three two-story, multi-family apartment buildings housing a total of 84 dwelling units; one- and two-story structures used for commercial office and retail uses; and surface parking lots. Existing on-site uses include a total of approximately 154,947 square feet of floor area. Intermittent landscaping is dispersed throughout the Project Site and generally consists of ornamental trees and shrubs. The existing site plan is provided in Figure 3 on page 9.

Development Parcel A of the Project Site includes one- and two-story commercial/retail uses, including a small acting school and music rehearsal store and surface parking areas. Development Parcel B includes a single-story commercial use fronting McCadden Place, two residential duplexes on the south side of Selma Avenue, three two-story multi-family residential buildings along Selma Avenue and Las Palmas Avenue, a small single-story chiropractic office along Las Palmas Avenue, a one- to two-story building consisting of community-serving small retail shops along Sunset Boulevard, and a one- to three-story office building also along Sunset Boulevard.

Existing development on Development Parcel C of the Project Site includes the Crossroads of the World, which is a designated City Cultural-Historic Monument (Monument #134) and also listed on the National Register of Historic Places and the California Register of Historic Resources. The approximate 50,000-square-foot Crossroads of the World complex consists of one- and two-story office, retail and restaurant shops in a variety of architectural styles such as Streamline Moderne, and French-,English-, Moorish- and Spanish-influenced styles. The shops are connected by a series of landscaped walkways with pedestrian entrances on Sunset Boulevard and Las Palmas Avenue; pedestrian access from Selma Avenue has been removed and currently blocked off with a locked wrought iron gate. The complex was designed in 1936 to create an “Old World” Atmosphere and was the City’s first outdoor pedestrian village that included a mix of shopping, dining, and entertainment uses.

Development Parcel C of the Project Site includes a two-story office/retail building west of Crossroads of the World and along Sunset Boulevard, one- and two-story office buildings along Las Palmas Avenue, and a surface parking lot. Existing development on Development Parcel D of the Project Site includes a two-story commercial/retail building and a surface parking lot.

(3) Project Characteristics

The Project proposes to redevelop the Project Site with a cohesive, mixed-use development that blends the character of Crossroads of the World with a collection of new buildings of modern design and creates an open-air pedestrian district with a mix of shopping, dining, and entertainment uses. Crossroads of the World, which is a designated

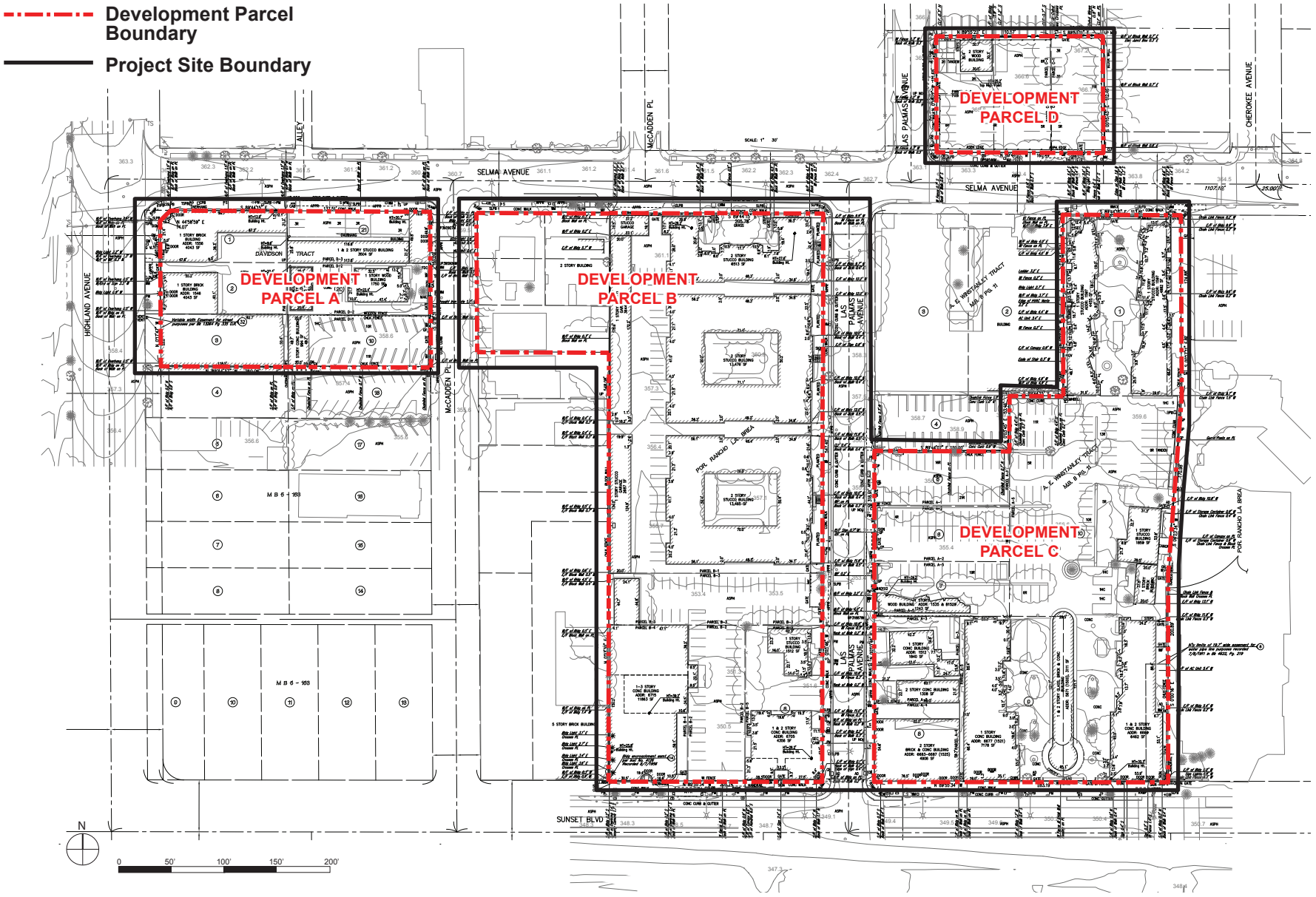

Figure 3
Existing Site Plan

Source: Skidmore Owings & Merril LLP and Rios Clementi Hale Studios, 2015.

City Cultural-Historic Monument (Monument #134) and is also listed on the National Register of Historic Places and the California Register of Historical Resources, would be retained, preserved, and rehabilitated as part of the Project. Eighty-four existing residential units (including 80 multi-family dwelling units and two duplexes) and low-density commercial/retail and office uses, as well as surface parking lots, would be demolished and replaced with eight new mixed-use buildings that would include residential, hotel, commercial/retail, office, entertainment, and restaurant uses and one additional small commercial/retail building.

Upon build-out, the Project would include approximately 950 residential units, 308 hotel rooms, approximately 95,000 square feet of office uses, and approximately 185,000 square feet of commercial/retail uses, totaling approximately 1,432,000 square feet of floor area (including existing uses to be retained within the Crossroads of the World complex). The Project would demolish a total of approximately 131,656 square feet of existing development. In total, the Project would result in an increase of approximately 1,259,927 square feet of net new floor area on the Project Site.

The Project Site includes four areas referred to as Development Parcels A, B, C, and D. The Development Parcels include 10 sub-areas: Parcel A includes Building A1; Parcel B includes Buildings B1, B2, B3, and B4; Parcel C includes Buildings C1, C2, and C3 and Crossroads of the World; and Parcel D includes Building D1. These sub-areas are discussed in further detail below. Table 3 on page 11 provides a summary of the types and sizes of land uses included in the Project. The proposed conceptual site plan is included in Figure 4 on page 12. A conceptual rendering of the Project from Sunset Boulevard is illustrated in Figure 5 on page 13.

(a) Development Parcel A—Hotel Area (Building A1)

The Project would remove all existing land uses on Development Parcel A and construct Building A1, which would be located on the south side of Selma Avenue between Highland Avenue and McCadden Place. Building A1 would consist of an approximately 377,000-square-foot high-rise structure with a 308-room hotel, ancillary meeting rooms, a lobby lounge and bar, a rooftop bar and lounge, and ground floor restaurant and retail uses. Building A1 would be approximately 26 stories tall and would reach a maximum height of approximately 365 feet.

(b) Development Parcels B and D—Mixed-Use Residential and Retail Area (Buildings B1, B2, B3, B4, and D1)

The Project would remove all existing land uses on Development Parcels B and D and construct a total of five mixed-use residential buildings with ground-floor commercial/ retail uses: Buildings B1, B2, B3, B4, and D1. Development Parcel B, consisting of

Table 3
Summary of the Proposed Development Areas

Development Area	Land Use	Proposed Development[a]
Development Parcel A	Hotel	348,500 sf[b] (308 rm)
	Commercial/Retail	28,500 sf
Development Parcel B	Residential	743,500 sf (872 du)
	Commercial/Retail	58,500 sf
Development Parcel C	Commercial/Retail	93,500 sf
	Office	95,000 sf
Development Parcel D	Residential (Rental)	60,500 sf (78 du)
	Commercial/Retail	4,500 sf
Total Residential (Condominiums + Rental)		**804,000 sf 950 du (190 du condominiums) (760 du rental units)**
Total Retail		**185,000 sf**[d]
Total Office		**95,000 sf**
Total Hotel		**348,500 sf (308 rm)**
Total Proposed Floor Area[c]		**1,432,500 sf**[e]
Total Subterranean Parking Area		**1,223,700 sf**

sf = square feet

du = dwelling unit

rm = hotel rooms

[a] *Square footages are rounded up to the nearest 500 square feet.*

[b] *Hotel square footage includes approximately 39,000 square feet of hotel amenities.*

[c] *Except where otherwise noted, square footage is calculated pursuant to the LAMC definition of floor area for the purpose of calculating FAR. In accordance with LAMC Section 12.03, floor area is defined as: "[t]he area in square feet confined within the exterior walls of a building, but not including the area of the following: exterior walls, stairways, shafts, rooms housing building-operating equipment or machinery, parking areas with associated driveways and ramps, space for the landing and storage of helicopters, and basement storage areas."*

[d] *Approximately 83,200 square feet and 40,000 square feet of the proposed retail area would consist of restaurant uses (with a maximum total of 3,376 seats) and a supermarket, respectively.*

[e] *Includes the existing Crossroads of the World complex, which would be retained.*

Source: Skidmore Ownings & Merrill, LLP/Rios Clementi Hale Studios, 2016.

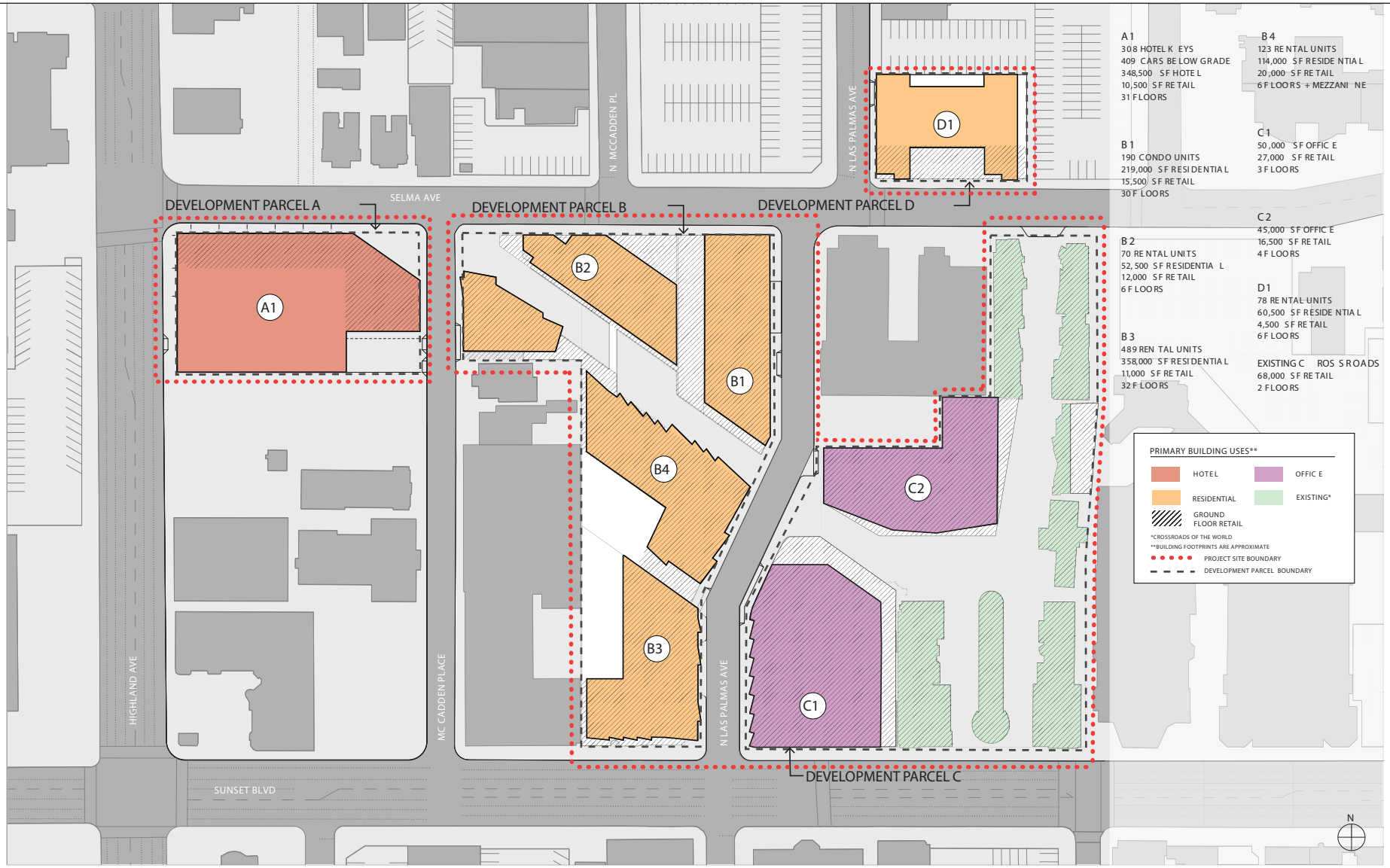

Figure 4
Conceptual Site Plan

Source: Skidmore Owings & Merril LLP and Rios Clementi Hale Studios, 2015.

Figure 5
Conceptual Rendering of the Project from Sunset Boulevard

Source: Skidmore Owings & Merril LLP and Rios Clementi Hale Studios, 2015.

Buildings B1, B2, B3, and B4, would include a total of approximately 872 residential units (190 condominium units and 682 rental units) and approximately 58,500 square feet of commercial/retail uses. Building B1 would consist of 30 floors and would reach a maximum height of approximately 402 feet above grade. Building B2 would consist of 6 floors and would reach a maximum height of approximately 87 feet above grade. Building B3 would consist of 32 floors and would reach a maximum height of approximately 386 feet above grade. Building B4 would consist of six floors in addition to a mezzanine floor and would reach a maximum height of approximately 95 feet above grade. All buildings in Development Parcel B would include ground floor commercial/retail uses with residential units above.

Development Parcel D consists of Building D1, which would include approximately 78 residential units and approximately 4,500 square feet of ground-floor commercial/retail uses. Building D1 would consist of 6 floors and would reach a maximum height of approximately 85 feet above grade.

In total, Development Parcels B and D would have 950 residential units (including 190 condominiums and 760 apartments) and approximately 63,000 square feet of ground-floor commercial/retail uses. Of the 760 apartment units proposed, 84 units would be affordable housing rental units. These affordable housing rental units would replace the existing 84 rent-stabilized units located in Development Parcel B that would be removed.

(c) Development Parcel C—Commercial Area (Buildings C1 & C2, and C3, and Crossroads of the World)

The commercial portion of the Project, consisting of creative office and retail/ restaurant uses, would be located in Development Parcel C located east of Las Palmas Avenue and directly adjacent to the historic Crossroads of the World complex. As previously discussed, Crossroads of the World, would be retained and rehabilitated as part of the Project. New development on Development Parcel C would include Buildings C1, C2, and C3, together adding up to approximately 95,000 square feet of office uses and approximately 43,500 square feet of ground-floor retail uses. Building C1 would be three stories tall and would reach a maximum height of approximately 65 feet above grade. Building C2 would consist of two floors and would reach a maximum height of approximately 81 feet above grade. Building C3 would consist of one floor with a maximum height of 19 feet. In total, Development Parcel C would consist of approximately 95,000 square feet of office uses and approximately 93,500 square feet of retail and other commercial uses (including existing uses to be retained within the Crossroads of the World complex).

(d) Parking

All proposed parking for the Project would consist of new subterranean parking garages. Development Parcels A would have six levels of subterranean parking with 307 parking spaces to serve the hotel building on this development parcel. Development Parcels B and C would have five connected/shared levels of subterranean parking with 2,083 parking spaces to accommodate all the uses in Buildings B1, B2, B3, B4, C1, C2, C3, and the Crossroads of the World complex. Development Parcel D would have three levels of subterranean parking with 104 parking spaces to serve the primarily residential building on this development parcel. Vehicle and bicycle parking would be provided in accordance with applicable LAMC requirements. A total of 2,494 vehicle parking spaces would be provided in the three subterranean parking garages, and a total of 1,307 bicycle parking spaces would also be provided.

The Project also proposes to establish a new pedestrian passageway/paseo that would extend diagonally from Sunset Boulevard/Crossroads of the World to the corner of Selma Avenue and Highland Avenue. Additional landscaped public walkways would connect the entire Project Site, while promoting access from Sunset Boulevard, Las Palmas Avenue, Selma Avenue, and McCadden Place.

(e) Landscaping and Open Space

The Project would provide a variety of open space and recreational amenities. The Project would include open space and green space, consisting of a series of integrated walkways that connect the dynamic mixed-use district created by the Project with the Hollywood neighborhood. Proposed additional landscaped public walkways, including 34,786 square feet of the pedestrian paseo, would also promote access and connectivity to and through the Project Site from Sunset Boulevard, Las Palmas Avenue, Selma Avenue, and McCadden Place.

In addition, the Project would also include active and passive recreational spaces, including roof decks and pools, community rooms and recreational facilities, courtyards, landscaped gardens, terraces, and common open space with gathering and seating areas. In total, approximately 108,611 square feet of open space, consisting of approximately 73,411 square feet of common open space and approximately 35,200 square feet of private open space (i.e., balconies), would be provided in accordance with the open space provisions for new residential projects set forth in LAMC Section 12.21.G. Furthermore, the existing Crossroads of the World courtyards would provide an additional 44,177 square feet of open space.

(f) Project Construction and Scheduling

Construction of the Project would be conducted in phases. Project construction would commence with demolition of the existing buildings (excluding Crossroads of the World) and surface parking lots, followed by grading and excavation for the subterranean parking garages. Building foundations would then be placed, followed by building construction, paving/concrete installation, and landscape installation. Project construction is anticipated to occur over approximately 48 months and be completed in 2022. It is estimated that approximately 643,753 cubic yards (cy) of soil would be hauled from the Project Site during the grading and excavation phase, as well as an additional 1,490 cy during off-site improvements to the existing sanitary sewer system related to the re-alignment of Las Palmas Avenue. Haul trucks arriving and leaving the Project Site would travel via one of the following routes: Sunset Boulevard to the Hollywood Freeway; Sunset Boulevard and Highland Avenue to the Hollywood Freeway; or Sunset Boulevard, Highland Avenue, and Santa Monica Boulevard to the Hollywood Freeway.

A Construction Traffic Management Plan and Truck Haul Route Program would be implemented during construction to minimize potential conflicts between construction activity and through traffic. The Construction Traffic Management Plan and Truck Haul Route Program would be subject to LADOT review and approval.

2. Greenhouse Gas Emissions Methodology

The California Climate Action Registry (Climate Registry) General Reporting Protocol provides basic procedures and guidelines for calculating and reporting GHG emissions from a number of general and industry-specific activities.[2] The General Reporting Protocol is based on the "Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard" developed by the World Business Council for Sustainable Development and the World Resources Institute through "a multi-stakeholder effort to develop a standardized approach to the voluntary reporting of GHG emissions."[3] Although no numerical thresholds of significance have been developed, and no specific protocols are available for land use projects, the General Reporting Protocol provides a basic framework for calculating and reporting GHG emissions from the project. The information provided in this section is consistent with the General Reporting Protocol's reporting requirements.

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[2] *California Climate Action Registry, General Reporting Protocol Version 3.1, January 2009.*

[3] *Ibid.*

The General Reporting Protocol recommends the separation of GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct GHG emissions from human activity (e.g., stationary combustion of fuels, mobile combustion of fuels in transportation).
- Scope 2: Indirect GHG emissions associated with activities of the reporting entity but occur at sources controlled by another entity (e.g., purchased electricity or purchased steam).
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy (e.g., energy used to convey, treat, and distribute water and wastewater).[4]

According to the California Air Resources Board (CARB), the consideration of so-called indirect emissions provides a more complete picture of the GHG footprint of a facility: "As facilities consider changes that would affect their emissions—addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example—the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Annually reported indirect energy usage also aids the conservation awareness of the facility and provides information" to CARB to be considered for future strategies by the industrial sector.[5] Additionally, the Office of Planning and Research directs lead agencies to "make a good-faith effort, based on available information, to calculate, model, or estimate… GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities."[6] Therefore, direct and indirect emissions are considered in this assessment.

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.)

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[4] *Embodied energy is a scientific term that refers to the quantity of energy required to manufacture and supply to the point of use a product, material, or service.*

[5] *California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), (2007).*

[6] *Office of Planning and Research, Technical Advisory, p. 5.*

have been provided by the various California air districts to account for local requirements and conditions. The model is considered by the SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California.[7]

a. Construction

The Project's construction emissions were calculated using CalEEMod Version 2013.2.2. CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted by assuming a conservative start date (i.e., assuming all construction would occur at the earliest feasible date) and applying the mobile-source emissions factors derived from the SCAQMD recommended CalEEMod. The emissions were estimated using the CalEEMod tool, which incorporates the CARB OFFROAD2011 and EMFAC2011 models. These values were applied to the construction phasing assumptions to generate GHG emissions values for each year of construction activity. The calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment that would be used to remove existing uses; grade and excavate the Project Site; construct the proposed building and related improvements; and plant new landscaping within the Project Site.

b. Operation

Similar to construction, the SCAQMD-recommended CalEEMod was used to calculate potential GHG emissions generated by new land uses on the Project Site, including area source, energy sources (electricity and natural gas), mobile source, solid waste generation and disposal, and water usage/wastewater generation.

(1) Area Source Emissions

Area source emissions were calculated using the CalEEMod emissions inventory model, which includes fireplaces and landscape maintenance equipment

CalEEMod calculates GHG emissions associated with natural gas fired fireplaces based on emission factors from the California Climate Action Registry (CCAR) assuming an average heating rate in British Thermal Units (BTU) per hour for fireplaces in homes is

[7] *See www.caleemod.com.*

60,000 BTU/hr.[8] Default values for annual fireplace usage were selected for Los Angeles County.

The combustion of fossil fuels to operate landscape equipment such as lawnmowers and trimmers, results in GHG emissions of CO_2 and smaller amounts of CH_4 and N_2O. The emissions occur on-site and are a direct result of activity from the existing land uses; therefore, the GHG emissions are considered to be direct. The emissions for landscaping equipment are based on the size of the land uses, the GHG emission factors for fuel combustion, and the GWP values for the GHGs emitted. Annual GHG emissions from landscaping equipment in units of $MTCO_2e$ are generally calculated in CalEEMod as follows:

Landscaping Equipment:

$$\text{Annual Emissions } [MTCO_2e] = \left(\Sigma_i \left(\text{Units} \times EF_{LE} \times A_{LE} \times GWP \right)_i \right) \div 10^6$$

Where: Units = Number of land use units (same land use type) [1,000 sf]

EF_{LE} = GHG emission factor [grams (g)/1,000 sf/day]

A_{LE} = Landscaping equipment operating days per year [day/yr]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

10^6 = Conversion factor [g/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod uses landscaping equipment GHG emission factors from the CARB OFFROAD2011 model and the CARB *Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (6/13/2003)*.[9] CalEEMod estimates that landscaping equipment operate for 250 days per year in the South Coast Air Basin.

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[8] *SCAQMD Rule 445 Staff Report, www.aqmd.gov/hb/2008/March/080337a.html, and SCAQMD Final EA, www.aqmd.gov/ceqa/documents/2008/aqmd/finalEA/FEA445.pdf.*

[9] *California Air Resources Board, OFFROAD Modeling Change Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment, (6/13/2003), www.arb.ca.gov/msei/2001_residential_lawn_and_garden_changes_in_eqpt_pop_and_act.pdf, accessed March 2, 2016.*

(2) Energy Emissions (Electricity and Natural Gas)

GHGs are emitted as a result of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; when this occurs in a building, it is a direct emission source associated with that building. GHGs are also emitted during the generation of electricity from fossil fuels. When electricity is used in a building, the electricity generation typically takes place off-site at the power plant; electricity use in a building generally causes emissions in an indirect manner.

Energy demand emissions were calculated using the CalEEMod emissions inventory model. Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. CalEEMod calculates energy use from systems covered by Title 24 Building Energy Efficiency Standards (e.g., heating, ventilation, and air conditioning [HVAC] system, water heating system, and lighting system); energy use from lighting; and energy use from office equipment, appliances, plug-ins, and other sources not covered by Title 24 or lighting.

CalEEMod energy demand is based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.[10] The data is specific for climate zones and, therefore, Zone 11 was selected for the Project Site based on the zip code tool. Since the data from the CEUS is from 2002, CalEEMod incorporates correction factors to account for compliance with the 2008/2010 Title 24 Building Standards Code. However, the model dose not account for the 2013 Title 24 Building Standards Code (2013 CalGreen). Thus, an adjustment was made for the Project scenario to account for compliance with 2013 CalGreen. The 2013 CalGreen is anticipated to be 25 percent more efficient than the 2008 Title 24 for residential construction and 30 percent more efficient for nonresidential construction.[11] Furthermore, an adjustment was made to account for the 2016 Title 24 standards. The 2016 Title 24 standards would be applicable to the Project as the Project would be built after January 1, 2017, when the 2016 Title 24 standards come into effect. The 2016 Title 24 standards are anticipated to be 28 percent more efficient than the 2013 Title 24 standards for residential construction and five percent more efficient for

[10] *CEC, October 2010, Commercial End-Use Survey, www.energy.ca.gov/ceus/.*

[11] *Website www.energy.ca.gov/releases/2012_releases/2012-05-31_energy_commission_approves_more_efficient_buildings_nr.html.*

nonresidential construction.[12] CalEEMod also provides the ability to select electricity and natural gas usage rates that would reflect previous versions of Title 24 Building Standards Code. This assessment conservatively assumes that energy demand for the older buildings on the Project site, most of which were constructed in the early 20th Century, under the Baseline scenario would be consistent with 2005 Title 24 Building Standards Code.

(a) Electricity

Emissions of GHGs associated with electricity demand are based on the size of the residential, commercial and retail land uses, the electrical demand factors for the land uses, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. Annual electricity GHG emissions in units of $MTCO_2e$ are calculated as follows:

Electricity:

Annual Emissions [$MTCO_2e$] = (Σ_i (Units × D_E × EF_E × GWP)$_i$) ÷ 2,204.62

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_E = Electrical demand factor [megawatt-hour (MWh)/1,000 sf/yr]

EF_E = GHG emission factor [pounds per megawatt-hour (MWh)]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

2,204.62 = Conversion factor [pounds/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

GHG emissions from electricity use are directly dependent on the electricity utility provider. The Los Angeles Department of Water and Power (LADWP) provides electric service to the Project Site. Thus, GHG intensity factors for LADWP were selected in CalEEMod. Intensity factors for GHGs due to electrical generation to serve the electrical demands of the Baseline Condition were obtained from the LAWDP 2013 Power Integrated

[12] *State of California Energy Commission, Adoption Hearing, 2016 Building Energy Efficiency Standards, www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf, accessed April 7, 2016.*

Resource Plan, which provides a CO_2 intensity of 1,094 pounds of CO_2 per MWh.[13] Currently, LADWP provides 20 percent of electricity via renewable sources.[14] By 2020, LADWP is expecting to meet the State's Renewables Portfolio Standard of at least 33 percent of electricity via renewable sources. Based on data obtained from CARB staff, "[i]f an applicant would like to use an EF [emission factor] that represents the state's Renewable Portfolio Standard (RPS) law and growth in electricity demand, the EF of 595 lbs CO_2/MWh may be used."[15] According to CARB staff, the "EF represents a 'marginal' supply profile for new generation that will be added to the grid in the years 2020 and beyond, and is consistent with the methodology used in state emission rule impact assessments."[16] Therefore, consistent with the CARB staff recommendation, a CO_2 intensity factor of 595 pounds of CO_2 per MWh was used for electricity emissions for years 2020 and beyond. Emission factors for CH_4 and N_2O were obtained from the California Emissions Estimator Model (CalEEMod).[17]

(b) Natural Gas

As with electricity, the emissions of GHGs associated with natural gas combustion are based on the size of the land uses, the natural gas combustion factors for the land uses in units of million British thermal units (MMBtu), the GHG emission factors for natural gas combustion, and the GWP values for the GHGs emitted. Annual natural gas GHG emissions in units of $MTCO_2e$ were calculated as follows:

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[13] *Los Angeles Department of Water and Power, 2012 Power Integrated Resource Plan, (2012) C-11.*

[14] *Los Angeles Department of Water and Power, 2013 Power Integrated Resource Plan, (2013) ES-31.*

[15] *California Air Resources Board, Statewide Emission Factors (EF) For Use With AB 900 Projects, March 2014. The emission factor of 595 lbs CO_2/MWh is from the California LEV III Initial Statement of Reasons (ISOR, Dec. 7, 2011), www.arb.ca.gov/regact/2012/leviiighg2012/leviiighg2012.htm, based on analysis with CA-GREET model. This document is provided in Appendix A.*

[16] *California Air Resources Board, Statewide Emission Factors (EF) for Use with AB 900 Projects, March 2, 2016.*

[17] *California Air Pollution Control Officers Association, California Emissions Estimator Model, www.caleemod.com/, accessed March 2, 2016.*

Natural Gas:

Annual Emissions [$MTCO_2e$] = (Σ_i (Units × D_{NG} × EF_{NG} × GWP)$_i$) ÷ 2,204.62

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_{NG} = Natural Gas combustion factor [MMBtu/1,000 sf/yr]

EF_{NG} = Natural Gas combustion factor [pounds/MMBtu]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

2,204.62 = Conversion factor [pounds/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

The combustion of natural gas results in relatively equal amounts of GHG emissions per unit of gas combusted in the state. Emission factors for GHGs due to natural gas combustion to serve the heating and cooking demands were obtained from the CalEEMod tool, which provides statewide emission factors.[18]

(3) Mobile Source Emissions

Mobile-source emissions were calculated using the CalEEMod emissions inventory model. CalEEMod calculates the emissions associated with on-road mobile sources associated with residents, employees, visitors, and delivery vehicles visiting the Project Site based on the number of daily trips generated and vehicle miles traveled (VMT). CalEEMod calculates VMT based on the type of land use, trip purpose, trip type percentages for each land use subtype in the project (primary, diverted, and pass-by). The model assumes that diverted trips are assumed to be 25 percent of the primary trip lengths and pass-by trips are assumed to be 0.1 mile in length and are a result of no diversion from the primary route. The Los Angeles County urban primary trip distance was selected for this analysis. Modeling was also conducted using the Los Angeles County vehicle fleet mix for all vehicle types as provided in EMFAC2011.

Annual mobile source GHG emissions in units of $MTCO_2e$ were generally calculated in CalEEMod as follows:

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[18] *California Air Pollution Control Officers Association, California Emissions Estimator Model, www.caleemod.com/, accessed March 2014.*

Mobile:

Annual Emissions [$MTCO_2e$] = (Σ_i (Units × ADT x D_{TRIP} × EF × GWP)$_i$) ÷ 2,204.62

Where: Units = Number of vehicles (same vehicle model year and class)

ADT = Average daily trip rate [trips/day]

D_{TRIP} = Trip distance [miles/trip]

Days = Number of days per year [days/yr]

EF = GHG emission factor [pounds per mile]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

2,204.62 = Conversion factor [pounds/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

Mobile source operational emissions were calculated based on the project trip-generation estimates provided for the Project by Gibson Transportation Consulting, Inc. (Included as Appendix A) and were based on the Institute of Transportation Engineers (ITE)'s *Trip Generation, 9th Edition*. Trip length values were based on the residential and commercial trip distances provided in CalEEMod. The trip distances were applied to the maximum daily trip estimates for each land use to estimate the total vehicle miles traveled (VMT). The trips take into account VMT reductions from characteristics including the site's proximity to existing public transit and its urban infill location. The estimated VMT reductions were calculated using the equations and methodologies prescribed in the California Air Pollution Control Officer's Association (CAPCOA) guidance document, *Quantifying Greenhouse Gas Mitigation Measures*, which provides VMT reduction values for transportation characteristics and measures.[19] Specific VMT reduction measures for both the Baseline and Project scenarios are discussed in detail in Section 3.b.3, below.

CalEEMod may not adequately reflect future year GHG emissions because it does not incorporate the emission factors for the 2017–2025 vehicle emissions standards. The national policy for fuel efficiency and emissions standards for the United States auto industry requires that new passenger cars and light-duty trucks achieve an average fuel

[19] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, (2010).*

economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO_2 per mile by model year 2016 (Phase I standards), based on USEPA calculation methods. In August 2012, more stringent phased-in standards were adopted for new model year 2017 through 2025 passenger cars and light-duty trucks. By 2020, new vehicles are projected to achieve 41.7 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 213 grams of CO_2 per mile (Phase II standards). By 2023, new vehicles are projected to achieve 49.4 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 180 grams of CO_2 per mile (Phase II standards). By 2025, new vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO_2 per mile (Phase II standards). CARB staff has provided future year CO_2 emission factors for statewide on-road mobile sources that may be used for AB 900 projects if the project's mobile sources include "all vehicle classifications."[20] As discussed above, it was assumed that all vehicle types would visit the site. Therefore, this assessment uses the CO_2 emission factors provided by CARB staff to estimate future year GHG emissions from mobile sources.

(4) Solid Waste Emissions

The generation of municipal solid waste (MSW) from day-to-day operational activities generally consists of product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, plastic, and other items routinely disposed of in trash bins. A portion of the MSW is diverted to waste recycling and reclamation facilities. Waste that is not diverted is usually sent to local landfills for disposal. MSW that is disposed in landfills results in GHG emissions of CO_2 and CH_4 from the decomposition of the waste that occurs over the span of many years.

Emissions of GHGs associated with solid waste disposal were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the commercial and retail land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted. Annual waste disposal GHG emissions in units of $MTCO_2e$ were calculated in CalEEMod as follows:

[20] *California Air Resources Board, Statewide Emission Factors (EF) for Use with AB 900 Projects, March 2014.*

Solid Waste:

Annual Emissions [$MTCO_2e$] = (Σ_i (Units × D_{MSW} × EF_{MSW} × $GWP)_i$) ÷ 1.1023

Where: Units = Number of land use units (same land use type) [1,000 sf]

D_{MSW} = Waste disposal rate [tons/1,000 sf/yr]

EF_{MSW} = GHG emission factor [tons/ton waste]

GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]

1.1023 = Conversion factor [tons/MT]

i = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod allows the input of several variables to quantify solid waste emissions. The model requires the amount of waste disposed, which is the product of the waste disposal rate times the land use units. Annual solid waste disposal rates used in CalEEMod are based on data from the California Department of Resources Recycling and Recovery (CalRecycle). The rates were based on statewide averages and the total amount of waste disposed was reduced by the diversion of 50 percent, pursuant to the City of Los Angeles Solid Waste Management Policy Plan, which was adopted by the City to comply with Assembly Bill 939. The GHG emission factors, particularly for CH_4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery), which are statewide averages, were used in this assessment.

(5) Water Usage and Wastewater Generation Emissions

GHG emissions are related to the energy used to convey, treat, and distribute water and wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water and include: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water.

Emissions related to water usage and wastewater generation were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the

land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted. Annual water demand and wastewater GHG emissions due to electricity are calculated in CalEEMod as follows for indoor and outdoor water demand:

Water Supply, Treatment, and Distribution; Wastewater Treatment (electricity):

$$\text{Annual Emissions } [MTCO_2e] = (\Sigma_i \ (\text{Units} \times D_W \times (EI_W \div 1{,}000) \times EF_W \times GWP)_i \ ) \div 2{,}204.62$$

Where:
- Units = Number of land use units (same land use type) [1,000 sf]
- D_W = Water demand factor [million gallons (Mgal)/1,000 sf/yr]
- EI_W = Electricity intensity factor [kilowatt-hours (kWh)/Mgal]
- 1,000 = Conversion factor [kWh/MWh]
- EF_W = GHG emission factor [pounds/MWh]
- GWP = Global warming potential [CO_2 = 1, CH_4 = 21, N_2O = 310]
- 2,204.62 = Conversion factor [pounds/MT]
- *i* = Summation index

Note: For residential land uses, emission factors are specified in units of dwelling units (DU) instead of 1,000 sf.

CalEEMod calculates water demand based on annual rates in the Pacific Institute Waste Not Want Not report.[21] CalEEMod provides options to account for the use of water saving features such as the use of low-flow water fixtures (e.g., low-flow faucets, low-flow toilets). The same electricity GHG emissions factors discussed above were used for water and wastewater energy usage.

The emissions of GHGs associated with wastewater treatment process emissions were also calculated using CalEEMod. The emissions were calculated using the default settings in CalEEMod for the type of wastewater treatment.

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[21] *Gleick, P.H.; Haasz, D.; Henges-Jeck, C.; Srinivasan, V.; Cushing, K.K.; Mann, A. 2003. Waste Not, Want Not: The Potential for Urban Water Conservation in California. Pacific Institute for Studies in Development, Environment, and Security. Full report www.pacinst.org/reports/urban_usage/waste_not_want_not_full_report.pdf. Appendices www.pacinst.org/reports/urban_usage/appendices.htm.*

3. Greenhouse Gas Emissions Calculations

The Project would result in direct and indirect GHG emissions generated by different types of emissions sources, including:

- Construction: emissions associated with demolition of the existing parking lot, site preparation, excavation, grading, and construction-related equipment and vehicular activity;
- Area Source: emissions associated with hearths and landscape equipment; [22]
- Building operations: emissions associated with space heating and cooling, water heating, energy consumption, and lighting;
- Solid waste: emissions associated with the decomposition of the waste which generates methane based on the total amount of degradable organic carbon; and
- Water: emissions associated with energy used to pump, convey, deliver, and treat water.

A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Baseline Condition and Project is provided below.

a. Construction

Project construction would commence with demolition of the existing buildings and surface parking lots, followed by excavation and grading for the subterranean parking garages. Building foundations would then be placed, followed by building renovations of the historic Crossroads of the World complex and building construction, paving/concrete installation, and landscape installation. Project construction is anticipated to occur over approximately 48 months and be completed in 2022. It is estimated that approximately 707,500 cubic yards (cy) of soil would be hauled from the Project Site during the excavation and grading phase. A summary of construction details (e.g., schedule, equipment mix, and vehicular trips) and CalEEMod modeling output files are provided in Appendix A of this assessment. The emissions of GHGs associated with construction of

[22] *Area source emissions include direct sources of GHG emissions located at the project site (e.g., hearths) with the exception of building operations. For the Project, this would be limited to landscape maintenance equipment.*

the Project were calculated for each year of construction activity. A summary of GHG emissions for each year of construction is presented in Table 4 on page 30.

b. Operation

(1) Area Source Emissions

Area source emissions were calculated for both the Baseline and Project scenarios. The Project scenario includes a reduction in GHG emissions due to a commitment to limit the use of natural gas fired fireplaces to 20 percent of the proposed residential units. The estimated annual emissions from area sources under Baseline and Project are provided in Table 5 on page 30. Detailed emissions calculations are provided in Appendix A of this assessment.

(2) Energy Emissions (Electricity and Natural Gas)

(a) Electricity

As discussed above in Section 2, Methodology, the Baseline condition assumes that the existing land uses would meet 2005 Title 24 Building Standards Code. This assumption is conservative as most of the existing structures were constructed in the early 20th Century. The estimated annual emissions from electrical demand from the Baseline Condition are provided in Table 6 on page 31. Detailed emissions calculations are provided in Appendix A.

The Project would be designed to incorporate project design features (PDFs) that would reduce its energy demand with the goal of achieving or exceeding the requirements of the State of California Green Building Standards (CALGreen) Code, the City of Los Angeles Green Building Code, and the USGBC LEED Silver rating. Thus, the Project would reduce its electricity demand as compared to the default electricity factors in CalEEMod. The PDFs were accounted for in CalEEMod by selecting the appropriate options in the "mitigation measures" section of the model. A summary of the energy-efficiency PDFs is provided below:

Green Building Measures: The Project would be designed and operated to meet or exceed the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code and achieve the USGBC LEED Silver Certification. The Project would incorporate measures and performance standards to support its LEED Silver Certification, which include but are not limited to the following:

Table 4
Construction-Related Emissions
(metric tons of CO_2e)

Year	Annual Metric Tons CO_2e[a]
2018	4,302
2019	1,556
2020	1,532
2021	1,227

[a] *CO_2e was calculated using CalEEMod and the results are provided in Section 2.0 of the Construction CalEEMod output file within Appendix A of this assessment.*

Source: Eyestone Environmental, 2016.

Table 5
Area Source Greenhouse Gas Emissions

GHG Emissions Source	Annual GHG Emissions ($MTCO_2e$/yr)
Baseline	
Fireplaces	26.8
Landscaping	1.5
Total	28.3
Project	
Fireplaces	45.9
Landscaping	16.4
Total	62.3

Source: Eyestone Environmental, 2016.

- The Project would implement a construction waste management plan to recycle and/or salvage a minimum of 75 percent of nonhazardous construction debris or minimize the generation of construction waste to 2.5 pounds per square foot of building floor area. (LEED Materials and Resources Credit 5 [v4][23]);

[23] *The bracketed text "v4" denotes version 4 of the LEED Building Design and Construction credits.*

Table 6
Electrical Demand Greenhouse Gas Emissions

Land Use	Units (sf or DU)	Annual Electrical Demand Factor (MWh/ 1,000 sf/year)	Annual Electrical Demand (MWh/year)	Annual GHG Emissions[a] ($MTCO_2e$/yr)
Baseline				
Apartments (Low Rise)	84 du	3,612	303.4	150.9
Office	79,107 sf	15.2	1,205.6	599.6
Restaurant	475 sf	48.3	23.0	11.4
Retail	26,690 sf	16.0	426.0	211.9
Parking Lot (Spaces)	344 sp	0.9	121.1	60.2
Total Baseline			**2,079.1**	**1,034.0**
Project				
Apartments High Rise	760 du	3,382.7	2,339.0	633.9
Condominiums High Rise	190 du	4,235.2	727.4	197.1
Hotel (Rooms)	308 rm	7.4	2,885.7	782.0
Office	95,000 sf	12.6	1,040.1	281.9
Restaurant (High Quality)	41,600 sf	43.4	1,621.2	439.3
Restaurant (High Turnover)	41,600 sf	43.4	1,688.4	457.6
Retail	61,800 sf	13.5	703.3	190.6
Supermarket	40,000 sf	37.3	1,264.6	342.7
Parking Structure (Spaces)	2,596 sp	3.0	2,310.0	626.0
Total Project			**14,580**	**3,951.2**

du = dwelling units
sf = square feet
sp = spaces
rm = rooms
[a] *Totals may not add up exactly due to rounding in the modeling calculations.*
Source: Eyestone Environmental, 2016.

- The Project would be designed to optimize energy performance and reduce building energy cost by 10 percent for new construction compared to ASHRAE 90.1-2010, Appendix G and the Title 24 Building Standards Code. (LEED Energy and Atmosphere Credit 2 [v4]);

- The Project would reduce emissions through the use of grid-source, renewable energy technologies and carbon mitigation projects. The Project would engage in a contract for qualified resources, for a purchase of 261,246 $MTCO_2e$ to offset GHG emissions resulting from the life of the project (30 years).

Project lighting would be energy efficient, effective and aesthetically pleasing and would minimize light trespass from the Project Site. All on-site exterior lighting would be automatically controlled to illuminate only when necessary and would be shielded or directed toward areas to be illuminated and, thereby, limit spillover onto nearby residential areas. In addition, all interior lighting would be equipped with occupancy sensors that would automatically extinguish and/or dim lights when not in use. Electricity from lighting would also be reduced consistent with the Energy Independence and Security Act, which requires approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014.

The estimated annual emissions from electrical demand from the Project are provided in Table 6 on page 31. Detailed emissions calculations are provided in Appendix A.

(b) Natural Gas

As discussed above in Section 2, Methodology, the Baseline condition assumes that the existing land uses would meet 2005 Title 24 Building Standards Code. This assumption is conservative as many of the existing structures were built well before 2005. The estimated annual emissions from natural gas demand from the Baseline Condition are provided in Table 6. Detailed emissions calculations are provided in Appendix A.

The Project would be designed to incorporate PDFs that would reduce its energy demand with the goal of achieving or exceeding the requirements of the State of California Green Building Standards (CALGreen) Code, the City of Los Angeles Green Building Code, and the USGBC LEED Silver rating. Thus, the Project would reduce its electricity demand as compared to the default electricity factors in CalEEMod. The PDFs were accounted for in CalEEMod by selecting the appropriate options in the "mitigation measures" section of the model.

The Project would be designed to incorporate PDFs that would reduce its energy demand with the goal of achieving or exceeding the requirements of the CALGreen Code, the City of Los Angeles Green Building Code, and the USGBC LEED Silver rating. Thus, the Project would reduce its natural gas demand as compared to the default natural gas factors in CalEEMod. The PDFs were accounted for in the CalEEMod tool by selecting the appropriate options in the "mitigation measures" section of the model. A summary of the energy-efficiency PDFs is provided above in PDF-GHG-1.

The estimated annual emissions from natural gas combustion from the Project are provided in Table 7 on page 33. Detailed emissions calculations are provided in Appendix A.

Table 7
Natural Gas Combustion Greenhouse Gas Emissions

Land Use	Units	Annual Natural Gas Demand Factor[a] (MMBtu/ 1,000 sf/year)	Annual Natural Gas Demand[a] (MMBtu/year)	Annual GHG Emissions[a] ($MTCO_2e$/yr)
Baseline				
Apartments (Low Rise)	84 du	14,251.6	1,197.1	64.3
Office	79,107 sf	12.4	984.1	52.8
Restaurant	475 sf	234.4	111.3	6.0
Retail	26,690 sf	1.8	48.6	2.6
Parking Lot (Spaces)	344 sp	0	0	0
Total			**2,341.1**	**125.7**
Project				
Apartments High Rise	760 du	5,530.4	3,909.1	209.9
Condominiums High Rise	190 du	13,676.8	2,396.6	128.7
Hotel (Rooms)	308 rm	18.7	7,720.3	414.5
Office	95,000 sf	7.8	668.0	35.9
Restaurant (High Quality)	41,600 sf	219.4	8,997.0	483.0
Restaurant (High Turnover)	41,600 sf	219.4	8,997.0	483.0
Retail	61,800 sf	1.3	77.6	4.2
Supermarket	40,000 sf	19.5	750.6	40.3
Parking Structure (Spaces)	2,596 sp	0	0	0
Total			**33,516.2**	**1,799.4**

du = dwelling units
sf = square feet
sp = spaces
rm = rooms
[a] *Totals may not add up exactly due to rounding in the modeling calculations.*
Source: Eyestone Environmental, 2016.

(3) Mobile Source Emissions

Emissions of GHGs from motor vehicles are dependent on model years and the specific types of vehicles that are used to travel to and from the existing Project Site. The emissions were calculated using a representative motor vehicle fleet mix for year 2015 as provided in CalEEMod. The estimated annual emissions from mobile sources from the Baseline Condition are provided in Table 8 on page 34. Detailed emissions calculations are provided in Appendix A.

Table 8
Mobile Source Greenhouse Gas Emissions

Condition	Fleet Mix Year (All Vehicle Classes)	Estimated Annual VMT	CO_2 Emission Factor (grams/mile)	Annual GHG Emissions[a] ($MTCO_2e$/year)
Baseline	2015	4,857,412	CalEEMod[a]	2,296
Project	2022	28,223,330	400	11,289
	2023	28,223,330	391	11,035
	2024	28,223,330	384	10,838
	2025–Beyond	28,223,330	375	10,584

[a] *Mobile source GHG emissions for 2015 are based on the direct model result output from CalEEMod.*
Source: Eyestone Environmental, 2016.

The Project represents an infill development within an existing urbanized area that would concentrate new residential, office, and neighborhood serving commercial uses within a High-Quality Transit Area (HQTA), which is defined in SCAG's 2012–2035 RTP/SCS as generally walkable transit villages or corridors that are within 0.5 mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. The Project site is located approximately 0.13 mile from the Metro Red Line Station at Hollywood Boulevard and Highland Avenue. As such, the Project Site's location would support the use of public transportation and a reduction in vehicle miles traveled by Project residents.

The Project would incorporate characteristics and PDFs that would reduce trips and VMT as compared to standard ITE trip generation rates. The Project characteristics listed below are consistent with the CAPCOA guidance document, *Quantifying Greenhouse Gas Mitigation Measures*,[24] which provides emission reduction values for recommended mitigation measures, and would reduce VMT and vehicle trips to the Project site by approximately 46 percent compared to a development without these characteristics. They would therefore result in a corresponding reduction in VMT and associated GHG emissions.

- **Increase Density (LUT-1):** Increased density, measured in terms of persons, jobs, or dwelling units per unit area, reduces emissions associated with

[24] *California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, (2010).*

transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Project would increase the site density from 11 dwelling units per acre and 10 jobs per acre to approximately 119 dwelling units per acre and 208 jobs per acre.

- **Increase Location Efficiency (LUT-2):** Location efficiency describes the location of the Project relative to the type of urban landscape, such as an urban area, compact infill, or suburban center. In general, compared to the statewide average, a project could realize VMT reductions up to 65 percent in an urban area, up to 30 percent in a compact infill area, or up to 10 percent in a suburban center from land use/location strategies. The Project Site represents an urban/compact infill location within the Hollywood community of the City of Los Angeles. The Project Site is served by existing public transportation located within 0.25 mile. The Project Site is also located within the Hollywood Center, which is generally located on both sides of Hollywood and Sunset Boulevards between La Brea Avenue and Gower Street.[25] The Community Plan calls for the Hollywood Center to function as: (1) the commercial center for Hollywood and surrounding communities; and (2) an entertainment center for the entire region. The Community Plan further states that development, combining residential and commercial uses, is especially encouraged in the Hollywood Center. The location efficiency of the Project Site would result in benefits that would reduce vehicle trips and VMT compared to the statewide average and would result in corresponding reductions in transportation-related emissions.

- **Increase Diversity of Urban and Suburban Developments (Mixed-Uses) (LUT-3):** The Project would co-locate complementary commercial and residential land uses in proximity to other existing off-site commercial and residential uses. The Project would also introduce new uses on the Project Site, including a new hotel and increase in open space. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions.

- **Increased Destination Accessibility (LUT-4):** The Project would be located in an area that offers access to multiple other nearby retail and entertainment destinations, including Hollywood & Highland Center located approximately 0.13 mile to the northwest of the Project Site. In addition, the Project Site is located within 5.5 miles of Downtown Los Angeles, a primary job center, also easily accessible by public transportation (including the Metro Red Line, which connects the Hollywood/Highland Station to several stations in Downtown Los Angeles and North Hollywood). The access to multiple destinations in proximity

[25] *City of Los Angeles, Hollywood Community Plan, December 13, 1988, p. HO-2.*

to the Project Site would reduce vehicle trips and VMT compared to the statewide average and encourage walking and non-automotive forms of transportation and would result in corresponding reductions in transportation-related emissions.

- **Increase Transit Accessibility (LUT-5):** The Project would be located approximately 0.13 mile from the Metro Red Line Hollywood/Highland Station and along several Metro transit and DASH routes. The Project would also provide adequate bicycle parking spaces for residential and commercial uses to encourage utilization of alternative modes of transportation.

- **Integrate Affordable and Below Market Rate Housing (LUT-6):** Below market rate housing provides greater opportunity for people to live closer to job centers and to accommodate more people in urban infill areas. The Project would include 84 below market rate dwelling units, which would result in an increase in alternative transit usage and a corresponding reduction in transportation-related emissions as income has a statistically significant effect on the probability that a commuter would take transit or walk to work.

- **Improve Design of Development (LUT-9)**: The project would include improved design elements including developing ground floor retail, pedestrian paseos, open space and improved streetscape which would enhance walkability in the project vicinity. The Project would also locate a development in an area with 113 intersections per square mile which improves street accessibility and connectivity.

- **Provide Pedestrian Network Improvements (SDT-1):** Providing pedestrian access that minimizes barriers and links the Project Site with existing or planned external streets encourages people to walk instead of drive. The Project would provide an internal pedestrian network that links to the existing off-site pedestrian network including existing off-site sidewalks, to encourage and increase pedestrian activities in the area, which would further reduce VMT and associated transportation-related emissions. Furthermore, the Project would result in an improved and aesthetically appealing streetscape that would promote pedestrian activity, particularly between the Metro Red Line Hollywood/Highland Station and the Hollywood & Highland Center and the Project Site, and enhance the urban lifestyle of the surrounding neighborhood.

- **Traffic Calming Measures (SDT-2):** Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift results in a decrease in VMT. Streets within 0.5 mile of the Project Site are equipped with sidewalks, and approximately 25 percent of the intersections include marked crosswalks and/or count-down signal timers.

The estimated annual emissions from mobile sources from the Project are provided in Table 8 on page 34. Detailed emissions calculations are provided in Appendix A.

(4) Solid Waste Emissions

Emissions of GHGs associated with solid waste disposal were calculated using the CalEEMod emissions inventory model. The emissions are based on the size of the commercial and retail land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted. Annual solid waste disposal rates used in CalEEMod are based on data from the California Department of Resources Recycling and Recovery (CalRecycle). The rates were based on statewide averages and the total amount of waste disposed was reduced by the diversion rate of 50 percent, pursuant to the City of Los Angeles Solid Waste Management Policy Plan, which was adopted by the City to comply with Assembly Bill 939. The estimated annual emissions from solid waste disposal from the Baseline Condition and Project are provided in Table 9 on page 38. Detailed emissions calculations are provided in Appendix A.

(5) Water Usage and Wastewater Generation Emissions

The Baseline condition assumes that the existing land uses would not include any reductions in indoor and outdoor water usage in comparison to CalEEMod default usage rates. This assumption is conservative based on the age of many of the existing structures on the Project site. The estimated annual emissions from water and wastewater from the Baseline Condition are provided in Table 10 on page 39. Detailed emissions calculations are provided in Appendix A.

The Project would be designed to incorporate PDFs that would reduce its indoor and outdoor water usage with the goal of achieving or exceeding the requirements of the State of California Green Building Standards (CALGreen) Code, the City of Los Angeles Green Building Code, and the USGBC LEED Silver rating. Thus, the Project would reduce its indoor and outdoor water usage as compared to the default factors in CalEEMod. The PDFs were accounted for in CalEEMod by selecting the appropriate options in the "mitigation measures" section of the model. A summary of the water-efficiency PDFs is provided below:

- The Project would reduce indoor water use by a minimum of 35 percent by installing water fixtures that exceed applicable standards. (LEED Water Efficiency Credit 2 [v4].)
- The Project would reduce outdoor water us by a minimum of 50 percent from the calculated baseline at peak watering month by installing efficient irrigation.

Table 9
Baseline Condition Solid Waste Disposal Greenhouse Gas Emissions

Land Use	Waste Disposal Rate (tons/yr)	Waste Disposal Rate after 50% Diversion (tons/yr)	Annual GHG Emissions[a] ($MTCO_2e$/yr)
Baseline			
Apartments (Low Rise)	38.6	19.3	8.8
Office	73.6	36.8	16.7
Restaurant	5.7	2.9	1.3
Retail	28	14	6.4
Parking Lot (Spaces)	0	0	0
Total			**33.2**
Project			
Apartments High Rise	349.6	174.8	79.5
Condominiums High Rise	87.4	43.7	19.9
Hotel (Rooms)	168.6	84.3	38.4
Office	88.34	44.2	20.1
Restaurant (High Quality)	38	19	8.6
Restaurant (High Turnover)	495	247.5	112.6
Retail	64.9	32.4	14.8
Supermarket	225.6	112.8	51.3
Parking Structure (Spaces)	0	0	0
Total			**345.2**

[a] *Totals may not add up exactly due to rounding in the modeling calculations.*

Source: Eyestone Environmental, 2016.

The estimated annual emissions from water and wastewater from the Project are provided in Table 10 on page 39. Detailed emissions calculations are provided in Appendix A.

(6) Summary of GHG Emissions and Comparison to Baseline Condition

Table 11 on page 40 provides a summary of the determination of net additional GHG emissions comparing the existing site GHG emissions and the Project GHG emissions. As shown in Table 11, the Project site generates approximately 3,757 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year under the Baseline Condition. This excludes any one-time construction GHG emissions that were generated when the existing uses and related infrastructure were originally built. Construction of the Project would

Table 10
Baseline Condition Water and Wastewater Greenhouse Gas Emissions

Land Use	Indoor Water Demand[a] (Mgal/yr)	Outdoor Water Demand[a] (Mgal/yr)	Annual GHG Emissions[a] ($MTCO_2e$/yr)
Baseline			
Apartments (Low Rise)	5.5	3.5	61.3
Office	14.1	8.6	156.1
Restaurant	0.2	<0.1	1.2
Retail	2.0	1.2	22.0
Parking Lot (Spaces)	0	0	0
Total			**240.5**
Project			
Apartments High Rise	32.2	15.6	196.5
Condominiums High Rise	8.1	3.9	49.1
Hotel (Rooms)	5.1	0.4	24.9
Office	11.0	2.2	66.6
Restaurant (High Quality)	8.2	0.4	39.4
Restaurant (High Turnover)	8.2	0.4	39.4
Retail	3.0	1.4	18.1
Supermarket	3.2	<0.1	15.1
Parking Structure (Spaces)	0	0	0
Total			**449.0**

[a] *Totals may not add up exactly due to rounding in the modeling calculations.*

Source: Eyestone Environmental, 2016.

generate one-time GHG emissions of approximately 4,302 $MTCO_2e$ per year during the first year, 1,556 $MTCO_2e$ during the second year, 1,532 $MTCO_2e$ per year during the third year, and 1,227 $MTCO_2e$ during the fourth year. At Project buildout, the Project Site would generate approximately 17,955 $MTCO_2e$ during the first full year of operation. Future year emissions would decline as a greater percentage of motor vehicles meet more stringent emissions standards, including the Pavley Phase I and Phase II emissions standards, and power companies meet the 33 percent Renewables Portfolio Standard. In 2030, annual Project emissions would be reduced to approximately 15,736 $MTCO_2e$. As shown in Table 11 on page 40, the Project would commit to purchase electricity from green power,

Table 11
Summary of Annual GHG Emissions ($MTCO_2e/yr$)

GHG Emission Source	2018	2019	2020	2021	2022	2023	2024	2025–2029	2030–2051
Baseline									
Area					28	28	28	28	28
Energy					1,160	1,160	1,160	1,160	1,160
Mobile					2,296	2,296	2,296	2,296	2,296
Waste					33	33	33	33	33
Water					241	241	241	241	241
Total					**3,757**	**3,757**	**3,757**	**3,757**	**3,757**
Project									
Construction	4,302	1,556	1,532	1,227	0	0	0	0	0
Area					62	62	62	62	62
Energy					5,751	5,751	5,751	5,751	4,415
Mobile					11,289	11,035	10,838	10,584	10,584
Waste					345	345	345	345	345
Water					449	449	449	449	330
Total	4,302	1,556	1,532	1,227	17,896	17,642	17,445	17,191	15,736
Project less Baseline	4,302	1,556	1,532	1,227	14,139	13,885	13,688	13,434	11,979
Greenpower/Offsets/RECs[a]	(4,302)	(1,556)	(1,532)	(1,227)	(14,139)	(13,885)	(13,688)	(13,434)	(11,979)
Difference	0	0	0	0	0	0	0	0	0
Exceed Baseline?	No	No	No	No	No	No	No	No	No

[a] *Total Greenpower/Offsets/RECs required for the life of the Project (30 years) equal 261,246 MT CO_2e.*

Source: Eyestone Environmental, 2016.

carbon offsets, and/or RECs for the life of the project (30 years) with an equivalent reduction value of 261,246 MT CO_2e.[26]

Based on this assessment, the Project would not result in any net additional GHGs including GHG emissions from employee transportation in accordance with Public Resources Code Section 21183(c) with the purchase of emission offset credits. Therefore, the Project would meet the GHG emissions requirements for streamlined environmental review under CEQA.

[26] *SCAQMD recommends a 30-year lifetime for Projects (SCAQMD Governing Board Agenda Item 31, December 5, 2008). The SCAQMD clarified that offsets should have a 30 year project life, should be real, quantifiable, verifiable, and surplus and will be considered in the following prioritized manner: (1) Project design feature/on-site reduction measures; (2) Offsite within neighborhood; (3) Offsite within district; (4) Offsite within state; and (5) Offsite out of state.*

Appendices

Appendix A

Greenhouse Gas Emissions

Crossroads Hollywood

Application for CEQA Streamlining
Appendix A, Greenhouse Gas Worksheets

- Summary of Assumptions and Emissions
- CalEEMod Output (Project Construction)
- CalEEMod Output (Existing Conditions)
- CalEEMod Output (Project Conditions)
- CalEEMod Output (Project Conditions - Post 2030 RPS)

Crossroads Hollywood
Application for CEQA Streamlining

- Summary of Assumptions and Emissions

PROJECT (Daily Trip Generation)

	size	daily	trip rate	Transit/Walk	Internal	Pass-by	CalEEMod Default Daily Rates weekday	sat	sun	Scalar	Adjusted Daily Rates weekday	sat	sun
Apartments (du)	760	5054	6.65	CalEEMod was used to calculate these reductions			6.59	7.16	6.07	1.01	6.65	7.23	6.13
High-Rise Condominiums (ksf)	190	794	4.18	CalEEMod was used to calculate these reductions			6.59	7.16	6.07	0.63	4.18	4.54	3.85
Hotel (rooms)	308	2516	8.17	CalEEMod was used to calculate these reductions			8.17	8.19	5.95	1.00	8.17	8.19	5.95
Office (ksf)	95	1048	11.03	CalEEMod was used to calculate these reductions			11.01	2.37	0.98	1.00	11.03	2.37	0.98
Retail (ksf)	61.8	2639	42.70	CalEEMod was used to calculate these reductions			44.32	42.04	20.43	0.96	42.70	40.50	19.68
Supermarket (ksf)	40	4090	102.24	CalEEMod was used to calculate these reductions			102.24	177.59	166.44	1.00	102.24	177.59	166.44
Rest High Quality (ksf)	41.6	3742	89.95	CalEEMod was used to calculate these reductions			89.95	94.36	72.16	1.00	89.95	94.36	72.16
Rest High Turnover(ksf)	41.6	5289	127.15	CalEEMod was used to calculate these reductions			127.15	158.37	131.84	1.00	127.15	158.37	131.84
Parking Structure	2596	0	0.00	CalEEMod was used to calculate these reductions			0	0	0	0.00	0.00	0.00	0.00
Total:		25172											

Existing (Daily Trip Generation)

	size	daily	trip rate	Transit/Walk	Internal	Pass-by	CalEEMod Default Daily Rates weekday	sat	sun		weekday	sat	sun
Apartments (du)	84	559	6.65	CalEEMod was used to calculate these reductions			6.59	7.16	6.07	1.01	6.65	7.23	6.13
Office (ksf)	79.107	873	11.03	CalEEMod was used to calculate these reductions			11.01	2.37	0.98	1.00	11.03	2.37	0.98
Rest (ksf)	0.475	60	127.15	CalEEMod was used to calculate these reductions			127.15	158.37	131.84	1.00	127.15	158.37	131.84
Retail (ksf)	26.69	1140	42.70	CalEEMod was used to calculate these reductions			44.32	42.04	20.43	0.96	42.70	40.50	19.68
Parking Lot	344	0	0.00	CalEEMod was used to calculate these reductions			0	0	0	0.00	0.00	0.00	0.00
Total:		2631											

Applicable VMT Reduction Measures selected in CalEEMod based on CAPCOA's Quantifying Greenhouse Gas Mitigation Measures, August, 2010.

LUT-1: Increase Density LUT-1 CAPCOA measures dwellings per acre and jobs per acre .

Data Needed: number of housing units per acre or jobs per acre	DU/Acre	Jobs/Acre
Project: 8.0 acres, 950 residential units, 1660 employees	118.75	207.5
Existing: 8.0 acres, 84 residential units, 82 employees	10.5	10.25

LUT-3 Increase Diversity of Urban and Suburban Developments (Mixed Use) (Internally calculated in CalEEMod based on mix of land uses)

LUT-4 Increase Destination Accessibility

Distance to downtown/job center (Los Angeles)	5.5	miles

LUT-5 Increase Transit Accessibility (0.5-24.6% reduction)

Distance to Metro Red Line Station at Hollywood Boulevard and Highland Avenue	0.13	miles

LUT-6 Integrate Below Market Rate Housing

Number of dwelling units below market rate	80	dwelling units

LUT-8/SDT-1 Provide pedestrian Network Improvements — Yes

LUT-9 Improve Walkability Design

Intersections within one square mile of the Project site	113	intersections

SDT-2 Provide Traffic Calming Measures

Percent of Streets with sidewalks within one square mile of the Project site	100	Percent
Percent of intersections with crosswalks within one square mile of the Project site	25	Percent

Adjustments to Energy Factors to account for Title 24 2013 and 2016 requirements.
2016 savings equal 28% for Residential and 5% for Nonresidential for electricity
2013 savings equal 25% for Residential and 30% for Nonresidential

	CalEEMod Default					Adjusted to Account for 2013 and 2016 Title 24 Standards				
EnergyUseLand	T24E	NT24E	LightingElect	T24NG	NT24NG	T24E	NT24E	LightingElect	T24NG	NT24NG
Apartments Hig	185.97	2553.86	741.44	5157.8	1662	87.41	2553.86	741.44	3868.35	1662.00
Condo/Townho	230.21	3125.85	1001.1	14173.61	3046.55	108.20	3125.85	1001.10	10630.21	3046.55
Enclosed Parkin	3.92	0.19	2.63	0	0	0.42	0.19	2.33	0	0
General Office I	5.62	4.62	4.29	10.54	0.39	3.65	4.62	4.29	7.38	0.39
High Turnover (	9.91	28.16	8.84	45.23	187.78	6.44	28.16	8.84	31.66	187.78
Hotel	3.12	2.89	2.49	20.96	4.06	2.03	2.89	2.49	14.67	4.06
Quality Restaur	9.91	28.16	8.84	45.23	187.78	6.44	28.16	8.84	31.66	187.78
Strip Mall	4.9	3.23	7.04	1.21	0.49	3.19	3.23	7.04	0.85	0.49
Supermarket	5.4	25.88	7.89	10.35	12.24	3.51	25.88	7.89	7.25	12.24

Consistent with Section 120.6(c), Mandatory Requirements for Enclosed Parking Garages, the ventilation rate shall be at least 0.15 cfm/sq f when the garage is scheduled to be occupied.

Parking Garage Ventilation

Square Footage =	1038400	ft2
Minimum Ventilation =	0.15	cfm/ft2
Flowrate =	155760	cfm
Number of Fans (20,000 cfm)	7.788	fans
Number of Fans	8	fans
Horsepower per Fan	15	hp
Horsepower to kW Conv.	0.746	kW per hp
Total kW =	89.52	
Annual kW =	392,098	conservatively assumes operational 50 percent of the time even though it would only be operational when CO sensors read CO concentrations in excess of 25 ppm (2013 Building Energy Efficiency Stanards
Usage Rate:	**0.38**	kWh/sq ft annual
Adjustment:	0.42	(CalEEMod applies mititgation to all land uses. So, this adjustement accounts for the 10% reduction in Title 24 standards associated with LEED Silver

Parking Garage Lighting

Square Footage =	1038400	ft2
Allowed Lighting Power =	0.2	watts per ft2 (Table 140.6 (Complete Building Method Lighting Power Density Value) of the 2013 Building Energy Efficiency Standards)
Annual kW =	1,814,729	conservatively assumes maximum lighting power 24 hours per day)
Annual kW/sq ft =	**1.75**	kWh/sq ft annual
Adjustment:	2.33	(CalEEMod applies mititgation to all land uses. So, this adjustement accounts for the 25% reduction in lighting associated with LEED Silver

Elevator (no change CalEEMod Default) **0.19** kWh/sq ft annual

Summary of GHG Emissions

	Baseline	**Project**	**Project Post 2030**
Area	28.27	62.31	62.31
Energy	1,159.70	5,750.60	4,414.76
Mobile	2,295.57		
Waste	33.20	345.16	345.16
Water	240.52	449.02	330.28
Total	**3,757.25**	**6,607.10**	**5,152.52**

Summary of Yearly Projections

Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030-2051**	
Baseline					3757	3757	3757	3757	3757	3757	3757	3757	3757	
Project	4,302.28	1,556.29	1,532.36	1,227.32	17,896.43	17,642.42	17,444.86	17,190.85	17,190.85	17,190.85	17,190.85	17,190.85	15,736.26	
Shortfall	(4,302.28)	(1,556.29)	(1,532.36)	(1,227.32)	(14,139)	(13,885)	(13,688)	(13,434)	(13,434)	(13,434)	(13,434)	(13,434)	(11,979)	(261,246.38)
				Annual VMT	28223330	28223330	28223330	28223330	28223330	28223330	28223330	28223330	28223330	
				CARB EF (g/mile)	400	391	384	375	375	375	375	375	375	
				Annual VMT Emissions MTCO2e	11289	11035	10838	10584	10584	10584	10584	10584	10584	

Crossroads Hollywood
Application for CEQA Streamlining

- CalEEMod Output (Project Construction)

Crossroads Project Construction

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95.00	1000sqft	2.18	95,000.00	0
Enclosed Parking with Elevator	2,646.00	Space	23.81	1,058,400.00	0
High Turnover (Sit Down Restaurant)	41.60	1000sqft	0.96	41,600.00	0
Hotel	308.00	Room	10.27	447,216.00	0
Apartments High Rise	760.00	Dwelling Unit	12.26	760,000.00	2174
Condo/Townhouse High Rise	190.00	Dwelling Unit	2.97	190,000.00	543
Strip Mall	61.80	1000sqft	1.42	61,800.00	0
Supermarket	40.00	1000sqft	0.92	40,000.00	0
Quality Restaurant	41.60	1000sqft	0.96	41,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1227.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Site Specific

Construction Phase - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Off-road Equipment - Site Specific

Trips and VMT - site specific

Demolition -

Grading -

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves -

Energy Use -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	75.00	356.00
tblConstructionPhase	NumDays	1,110.00	718.00
tblConstructionPhase	NumDays	70.00	23.00
tblConstructionPhase	NumDays	110.00	107.00
tblConstructionPhase	NumDays	75.00	66.00
tblConstructionPhase	NumDays	40.00	131.00
tblConstructionPhase	PhaseEndDate	2/10/2023	9/30/2021
tblConstructionPhase	PhaseEndDate	6/29/2018	6/30/2018
tblConstructionPhase	PhaseStartDate	10/1/2021	5/21/2020
tblGrading	MaterialExported	0.00	707,500.00
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.36	0.36
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.31	0.31
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	OperationalYear	2014	2022
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripNumber	637.00	660.00
tblTripsAndVMT	HaulingTripNumber	88,438.00	52,000.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	50.00
tblTripsAndVMT	VendorTripNumber	394.00	75.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	30.00	76.00
tblTripsAndVMT	WorkerTripNumber	30.00	76.00
tblTripsAndVMT	WorkerTripNumber	30.00	88.00
tblTripsAndVMT	WorkerTripNumber	1,414.00	360.00
tblTripsAndVMT	WorkerTripNumber	283.00	0.00
tblTripsAndVMT	WorkerTripNumber	23.00	30.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018																4,302.2847
2019																1,556.2858
2020																1,532.3586
2021																1,227.3217
Total																**8,618.2508**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2018	1/31/2018	5	23	
2	Grading	Grading	2/1/2018	6/30/2018	5	107	
3	Foundation	Site Preparation	7/1/2018	12/31/2018	5	131	
4	Building Construction	Building Construction	1/1/2019	9/30/2021	5	718	
5	Architectural Coating	Architectural Coating	5/21/2020	9/30/2021	5	356	
6	Paving	Paving	10/1/2021	12/31/2021	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 1,923,750; Residential Outdoor: 641,250; Non-Residential Indoor: 2,678,424; Non-Residential Outdoor: 892,808

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Air Compressors	3	8.00	78	0.48
Demolition	Concrete/Industrial Saws	3	8.00	81	0.73
Demolition	Cranes	1	8.00	226	0.29
Demolition	Excavators	2	8.00	162	0.38
Demolition	Rubber Tired Dozers	0	8.00	255	0.40
Demolition	Rubber Tired Loaders	2	8.00	199	0.36
Demolition	Welders	1	8.00	46	0.45
Grading	Bore/Drill Rigs	2	8.00	205	0.50
Grading	Cranes	2	8.00	226	0.29
Grading	Excavators	4	8.00	162	0.38
Grading	Graders	0	8.00	174	0.41
Grading	Pumps	4	8.00	84	0.74
Grading	Rubber Tired Dozers	0	8.00	255	0.40
Grading	Scrapers	0	8.00	361	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Cement and Mortar Mixers	2	8.00	9	0.56
Foundation	Concrete/Industrial Saws	2	8.00	81	0.73
Foundation	Cranes	2	8.00	226	0.29
Foundation	Plate Compactors	2	8.00	8	0.43
Foundation	Pumps	2	8.00	84	0.74
Foundation	Rubber Tired Dozers	0	8.00	255	0.40
Foundation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Foundation	Welders	2	8.00	46	0.45
Building Construction	Aerial Lifts	4	8.00	62	0.31
Building Construction	Air Compressors	4	8.00	78	0.48
Building Construction	Cement and Mortar Mixers	3	8.00	9	0.56
Building Construction	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	3	8.00	226	0.29
Building Construction	Forklifts	4	8.00	89	0.20

Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Plate Compactors	3	8.00	8	0.43
Building Construction	Pumps	3	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	0	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	0	8.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Pumps	1	8.00	84	0.74
Paving	Rollers	1	8.00	80	0.38
Paving	Skid Steer Loaders	2	8.00	64	0.37
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	12	76.00	0.00	660.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Grading	12	76.00	20.00	52,000.00	14.70	6.90	40.00	LD_Mix	HDT_Mix	HHDT
Foundation	12	88.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	28	360.00	75.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	30.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																62.6468
Total																**62.6468**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																43.0664
Vendor																0.0000
Worker																8.6752

Total																**51.7416**

3.3 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																366.3968
Total																**366.3968**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																3,393.1138
Vendor																20.6185
Worker																40.3584
Total																**3,454.0908**

3.4 Foundation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust																0.0000
Off-Road																247.0882
Total																**247.0882**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																63.1081

Worker																57.2125
Total																**120.3206**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																923.5459
Total																**923.5459**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																184.7301
Worker																448.0098
Total																**632.7399**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																919.4076
Total																**919.4076**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e

Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																181.3065
Worker																431.6444
Total																**612.9510**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																684.2099
Total																**684.2099**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																134.8384
Worker																316.2135
Total																**451.0519**

3.7 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road																70.9710
Paving																0.0000
Total																**70.9710**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling																0.0000
Vendor																12.1700
Worker																8.9188
Total																**21.0889**

Crossroads Hollywood
Application for CEQA Streamlining

- CalEEMod Output (Existing Conditions)

Crossroads Existing Conditions

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	79.11	1000sqft	1.00	79,107.00	0
Parking Lot	344.00	Space	2.00	137,600.00	0
High Turnover (Sit Down Restaurant)	0.48	1000sqft	0.01	475.00	0
Hotel	0.00	Room	0.00	0.00	0
Apartments Low Rise	84.00	Dwelling Unit	4.00	84,000.00	240
Condo/Townhouse High Rise	0.00	Dwelling Unit	0.00	0.00	0
Strip Mall	26.69	1000sqft	1.00	26,690.00	0
Supermarket	0.00	1000sqft	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2015
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	1094	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2013

Land Use - Site Specific

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - Site Specific

Energy Use - Existing Uses

Water And Wastewater -

Mobile Land Use Mitigation -

Waste Mitigation -

Solid Waste -

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	79,110.00	79,107.00
tblLandUse	LandUseSquareFeet	480.00	475.00
tblLandUse	LotAcreage	1.82	1.00
tblLandUse	LotAcreage	3.10	2.00
tblLandUse	LotAcreage	5.25	4.00
tblLandUse	LotAcreage	0.61	1.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	1094
tblProjectCharacteristics	OperationalYear	2014	2015
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	ST_TR	42.04	40.51

tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	SU_TR	20.43	19.69
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	44.32	42.71

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																28.2725
Energy																1,159.6972
Mobile																2,866.2211
Waste																66.3904
Water																240.5294
Total																**4,361.1106**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																28.2725
Energy																1,159.6972
Mobile																2,295.5659
Waste																33.1952
Water																240.5185
Total																**3,757.2492**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction																**13.85**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated																2,866.2211
Mitigated																2,295.5659

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	558.60	607.32	514.92	1,911,281	1,518,587
Condo/Townhouse High Rise	0.00	0.00	0.00		
General Office Building	872.58	187.49	77.53	2,129,816	1,692,221
High Turnover (Sit Down Restaurant)	61.03	76.02	63.28	86,532	68,753
Hotel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	1,139.93	1,081.21	525.53	1,985,871	1,577,851
Supermarket	0.00	0.00	0.00		
Total	2,632.15	1,952.04	1,181.26	6,113,501	4,857,412

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down [illegible])	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.534619	0.058604	0.178185	0.126004	0.038986	0.006286	0.016079	0.029769	0.002429	0.003158	0.003693	0.000543	0.001646

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated																125.6914
NaturalGas Unmitigated																125.6914
Electricity Mitigated																1,034.0057

Electricity Unmitigated																1,034.0057

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	1.19714e+006																64.2726
Condo/Townhouse High Rise	0																0.0000
General Office Building	984091																52.8344
High Turnover (Sit Down Restaurant)	111316																5.9764
Hotel	0																0.0000
Parking Lot	0																0.0000
Strip Mall	48575.8																2.6080
Supermarket	0																0.0000
Total																	**125.6914**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	0																0.0000
General Office Building	984091																52.8344
High Turnover (Sit Down Restaurant)	111316																5.9764
Hotel	0																0.0000
Parking Lot	0																0.0000
Strip Mall	48575.8																2.6080
Supermarket	0																0.0000
Apartments Low Rise	1.19714e+006																64.2726
Total																	**125.6914**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Low Rise	303427				150.9096
Condo/Townhouse High Rise	0				0.0000
General Office Building	1.20559e+006				599.6005
High Turnover (Sit Down Restaurant)	22952				11.4152
Hotel	0				0.0000
Parking Lot	121088				60.2231
Strip Mall	425972				211.8574
Supermarket	0				0.0000
Total					**1,034.0057**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	303427				150.9096
Condo/Townhouse High Rise	0				0.0000
General Office Building	1.20559e+006				599.6005
High Turnover (Sit Down Restaurant)	22952				11.4152
Hotel	0				0.0000
Parking Lot	121088				60.2231
Strip Mall	425972				211.8574
Supermarket	0				0.0000
Total					**1,034.0057**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated																28.2725
Mitigated																28.2725

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Hearth																26.8147
Landscaping																1.4578
Total																**28.2725**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Hearth																26.8147
Landscaping																1.4578
Total																**28.2725**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated				240.5294
Mitigated				240.5185

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	5.47294 / 3.45033				61.2945
Condo/Townhouse High Rise	0 / 0				0.0000
General Office Building	14.0605 / 8.61774				156.1094
High Turnover (Sit Down Restaurant)	0.145696 / 0.0092997 6				1.1756

Hotel	0 / 0			0.0000
Parking Lot	0 / 0			0.0000
Strip Mall	1.977 / 1.21171			21.9500
Supermarket	0 / 0			0.0000
Total				**240.5294**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	5.47294 / 3.45033				61.2917
Condo/Townhouse High Rise	0 / 0				0.0000
General Office Building	14.0605 / 8.61774				156.1023
High Turnover (Sit Down Restaurant)	0.145696 / 0.00929976				1.1755
Hotel	0 / 0				0.0000
Parking Lot	0 / 0				0.0000
Strip Mall	1.977 / 1.21171				21.9490
Supermarket	0 / 0				0.0000
Total					**240.5185**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				33.1952
Unmitigated				66.3904

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Apartments Low Rise	38.64			17.5780
Condo/Townhouse High Rise	0			0.0000
General Office Building	73.57			33.4682
High Turnover (Sit Down Restaurant)	5.71			2.5976
Hotel	0			0.0000
Parking Lot	0			0.0000
Strip Mall	28.02			12.7467
Supermarket	0			0.0000
Total				**66.3904**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	19.32				8.7890
Condo/Townhouse High Rise	0				0.0000
General Office Building	36.785				16.7341
High Turnover (Sit Down Restaurant)	2.855				1.2988
Hotel	0				0.0000
Parking Lot	0				0.0000
Strip Mall	14.01				6.3734
Supermarket	0				0.0000
Total					**33.1952**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Crossroads Hollywood
Application for CEQA Streamlining

- CalEEMod Output (Project Conditions)

Crossroads Project Conditions

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95.00	1000sqft	8.00	95,000.00	0
Enclosed Parking with Elevator	2,494.00	Space	0.00	997,600.00	0
High Turnover (Sit Down Restaurant)	41.60	1000sqft	0.00	41,600.00	0
Hotel	308.00	Room	0.00	447,216.00	0
Quality Restaurant	41.60	1000sqft	0.00	41,600.00	0
Apartments High Rise	760.00	Dwelling Unit	0.00	760,000.00	2174
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.00	190,000.00	543
Strip Mall	61.80	1000sqft	0.00	61,800.00	0
Supermarket	40.00	1000sqft	0.00	40,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	595	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS 33%

Land Use - Site Specific

Trips and VMT -

Architectural Coating -

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - No fireplaces within residences

Area Coating -

Energy Use - Land uses adjusted to account for 2013/2016 Building Energy Efficiency Standards.

Water And Wastewater -

Solid Waste -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Consistency with Title 24.

Water Mitigation -

Waste Mitigation -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblApplianceMitigation	PercentImprovement	30.00	15.00
tblApplianceMitigation	PercentImprovement	50.00	30.00

tblApplianceMitigation	PercentImprovement	15.00	30.00
tblEnergyUse	LightingElect	2.63	2.33
tblEnergyUse	T24E	185.97	87.41
tblEnergyUse	T24E	230.21	108.20
tblEnergyUse	T24E	3.92	0.42
tblEnergyUse	T24E	5.62	3.65
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	3.12	2.03
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	4.90	3.19
tblEnergyUse	T24E	5.40	3.51
tblEnergyUse	T24NG	5,157.80	3,868.35
tblEnergyUse	T24NG	14,173.61	10,630.21
tblEnergyUse	T24NG	10.54	7.38
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	20.96	14.67
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	10.35	7.25
tblFireplaces	NumberGas	646.00	0.00
tblFireplaces	NumberGas	161.50	190.00
tblFireplaces	NumberNoFireplace	76.00	760.00
tblFireplaces	NumberNoFireplace	19.00	0.00
tblFireplaces	NumberWood	38.00	0.00
tblFireplaces	NumberWood	9.50	0.00
tblLandUse	LotAcreage	2.18	8.00
tblLandUse	LotAcreage	22.45	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	10.27	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	12.26	0.00
tblLandUse	LotAcreage	2.97	0.00
tblLandUse	LotAcreage	1.42	0.00
tblLandUse	LotAcreage	0.92	0.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	595
tblProjectCharacteristics	OperationalYear	2014	2022
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	ST_TR	7.16	4.54
tblVehicleTrips	ST_TR	42.04	40.50
tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	SU_TR	6.07	3.85
tblVehicleTrips	SU_TR	20.43	19.68
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	6.59	4.18
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	44.32	42.70
tblWoodstoves	NumberCatalytic	38.00	0.00
tblWoodstoves	NumberCatalytic	9.50	0.00
tblWoodstoves	NumberNoncatalytic	38.00	0.00
tblWoodstoves	NumberNoncatalytic	9.50	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																62.3120
Energy																6,421.1609
Mobile																20,969.9680
Waste																690.3211
Water																743.7520
Total																**28,887.5140**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																62.3120
Energy																5,750.6255
Mobile																11,754.2385
Waste																345.1606
Water																449.0241
Total																**18,361.3606**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction																**36.44**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated																20,969.9680
Mitigated																11,754.2385

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	5,054.00	5,494.80	4658.80	17,292,546	9,367,798
Condo/Townhouse High Rise	794.20	862.60	731.50	2,716,685	1,471,695
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	1,047.85	225.15	93.10	2,557,610	1,385,520
High Turnover (Sit Down Restaurant)	5,289.44	6,588.19	5484.54	7,499,449	4,062,636
Hotel	2,516.36	2,522.52	1832.60	5,773,484	3,127,638
Quality Restaurant	3,741.92	3,925.38	3001.86	5,213,914	2,824,505
Strip Mall	2,638.86	2,502.90	1216.22	4,597,057	2,490,339
Supermarket	4,089.60	7,103.60	6657.60	6,448,292	3,493,198
Total	25,172.23	29,225.14	23,676.22	52,099,037	28,223,330

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.524776	0.057859	0.179826	0.126122	0.039940	0.006459	0.017277	0.035948	0.002564	0.003184	0.003733	0.000527	0.001784

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated																1,799.4352
NaturalGas Unmitigated																1,881.0315

Electricity Mitigated																3,951.1903
Electricity Unmitigated																4,540.1294

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	4.20307e+006																225.6566
Condo/Townhouse High Rise	2.59858e+006																139.5143
Enclosed Parking with Elevator	0																0.0000
General Office Building	738150																39.6302
High Turnover (Sit Down Restaurant)	9.1287e+006																490.1071
Hotel	8.37636e+006																449.7146
Quality Restaurant	9.1287e+006																490.1071
Strip Mall	82812																4.4461
Supermarket	779600																41.8556
Total																	**1,881.0315**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.39661e+006																128.6706
Enclosed Parking with Elevator	0																0.0000
General Office Building	668040																35.8661
High Turnover (Sit Down Restaurant)	8.997e+006																483.0360
Hotel	7.72029e+006																414.4913
Quality Restaurant	8.997e+006																483.0360
Strip Mall	77559																4.1640
Supermarket	750600																40.2986
Apartments High Rise	3.90907e+006																209.8725
Total																	**1,799.4351**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.57086e+006				696.7219
Condo/Townhouse High Rise	804678				218.0738
Enclosed Parking with Elevator	2.93294e+006				794.8495
General Office Building	1.1932e+006				323.3660
High Turnover (Sit Down Restaurant)	1.8071e+006				489.7385
Hotel	3.31387e+006				898.0834
Quality Restaurant	1.8071e+006				489.7385
Strip Mall	831828				225.4315
Supermarket	1.4912e+006				404.1262
Total					**4,540.1294**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.33904e+006				633.8980
Condo/Townhouse High Rise	727410				197.1335
Enclosed Parking with Elevator	2.30994e+006				626.0116
General Office Building	1.04011e+006				281.8768
High Turnover (Sit Down Restaurant)	1.68838e+006				457.5628
Hotel	2.88566e+006				782.0355
Quality Restaurant	1.62117e+006				439.3498
Strip Mall	703346				190.6119
Supermarket	1.26458e+006				342.7105
Total					**3,951.1903**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated																62.3120
Mitigated																62.3120

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Hearth																45.9037
Landscaping																16.4082
Total																**62.3120**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Hearth																45.9037
Landscaping																16.4082
Total																**62.3120**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated				743.7520
Mitigated				449.0241

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr		
Apartments High Rise	49.5171 / 31.2173			330.1308
Condo/Townhouse High Rise	12.3793 / 7.80432			82.5327
Enclosed Parking with Elevator	0 / 0			0.0000
General Office Building	16.8847 / 10.3487			111.6793
High Turnover (Sit Down Restaurant)	12.627 / 0.805979			62.6429
Hotel	7.81297 / 0.868107			39.8726
Quality Restaurant	12.627 / 0.805979			62.6429
Strip Mall	4.57768 / 2.80568			30.2778
Supermarket	4.93073 / 0.152497			23.9730
Total				**743.7520**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	32.1861 / 15.6086				196.5442
Condo/Townhouse High Rise	8.04652 / 3.90216				49.1360
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	10.9751 / 5.17435				66.5735
High Turnover (Sit Down Restaurant)	8.20755 / 0.402989				39.3486
Hotel	5.07843 / 0.434054				24.9031
Quality Restaurant	8.20755 / 0.402989				39.3486
Strip Mall	2.97549 / 1.40284				18.0490
Supermarket	3.20497 / 0.0762484				15.1211
Total					**449.0241**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				345.1606
Unmitigated				690.3211

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2 CH4	N2O	CO2e
Land Use	tons	MT/yr		
Apartments High Rise	349.6			159.0386
Condo/Townhouse High Rise	87.4			39.7596
Enclosed Parking with Elevator	0			0.0000
General Office Building	88.35			40.1918
High Turnover (Sit Down Restaurant)	495.04			225.2015
Hotel	168.63			76.7125
Quality Restaurant	37.96			17.2686
Strip Mall	64.89			29.5195
Supermarket	225.6			102.6290
Total				**690.3211**

Mitigated

	Waste Disposed	Total CO2 CH4	N2O	CO2e
Land Use	tons	MT/yr		
Apartments High Rise	174.8			79.5193
Condo/Townhouse High Rise	43.7			19.8798
Enclosed Parking with Elevator	0			0.0000
General Office Building	44.175			20.0959
High Turnover (Sit Down Restaurant)	247.52			112.6008
Hotel	84.315			38.3562
Quality Restaurant	18.98			8.6343
Strip Mall	32.445			14.7597
Supermarket	112.8			51.3145
Total				**345.1606**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Crossroads Hollywood
Application for CEQA Streamlining

- CalEEMod Output (Project Conditions - Post 2030 RPS)

Crossroads Project Conditions-Post 2030 RPS

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	95.00	1000sqft	8.00	95,000.00	0
Enclosed Parking with Elevator	2,494.00	Space	0.00	997,600.00	0
High Turnover (Sit Down Restaurant)	41.60	1000sqft	0.00	41,600.00	0
Hotel	308.00	Room	0.00	447,216.00	0
Quality Restaurant	41.60	1000sqft	0.00	41,600.00	0
Apartments High Rise	760.00	Dwelling Unit	0.00	760,000.00	2174
Condo/Townhouse High Rise	190.00	Dwelling Unit	0.00	190,000.00	543
Strip Mall	61.80	1000sqft	0.00	61,800.00	0
Supermarket	40.00	1000sqft	0.00	40,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	11			**Operational Year**	2022
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	393	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - RPS for Post 2030

Land Use - Site Specific

Trips and VMT -

Architectural Coating -

Vehicle Trips - Project Specific Traffic Study

Vechicle Emission Factors -

Vechicle Emission Factors -

Vechicle Emission Factors -

Woodstoves - No fireplaces within residences

Area Coating -

Energy Use - Land uses adjusted to account for 2013/2016 Building Energy Efficiency Standards.

Water And Wastewater -

Solid Waste -

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation - Consistency with Title 24.

Water Mitigation -

Waste Mitigation -

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblApplianceMitigation	PercentImprovement	30.00	15.00

tblApplianceMitigation	PercentImprovement	50.00	30.00
tblApplianceMitigation	PercentImprovement	15.00	30.00
tblEnergyUse	LightingElect	2.63	2.33
tblEnergyUse	T24E	185.97	87.41
tblEnergyUse	T24E	230.21	108.20
tblEnergyUse	T24E	3.92	0.42
tblEnergyUse	T24E	5.62	3.65
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	3.12	2.03
tblEnergyUse	T24E	9.91	6.44
tblEnergyUse	T24E	4.90	3.19
tblEnergyUse	T24E	5.40	3.51
tblEnergyUse	T24NG	5,157.80	3,868.35
tblEnergyUse	T24NG	14,173.61	10,630.21
tblEnergyUse	T24NG	10.54	7.38
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	20.96	14.67
tblEnergyUse	T24NG	45.23	31.66
tblEnergyUse	T24NG	1.21	0.85
tblEnergyUse	T24NG	10.35	7.25
tblFireplaces	NumberGas	646.00	0.00
tblFireplaces	NumberGas	161.50	190.00
tblFireplaces	NumberNoFireplace	76.00	760.00
tblFireplaces	NumberNoFireplace	19.00	0.00
tblFireplaces	NumberWood	38.00	0.00
tblFireplaces	NumberWood	9.50	0.00
tblLandUse	LotAcreage	2.18	8.00
tblLandUse	LotAcreage	22.45	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	10.27	0.00
tblLandUse	LotAcreage	0.96	0.00
tblLandUse	LotAcreage	12.26	0.00
tblLandUse	LotAcreage	2.97	0.00
tblLandUse	LotAcreage	1.42	0.00
tblLandUse	LotAcreage	0.92	0.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	393
tblProjectCharacteristics	OperationalYear	2014	2022
tblVehicleTrips	ST_TR	7.16	7.23
tblVehicleTrips	ST_TR	7.16	4.54
tblVehicleTrips	ST_TR	42.04	40.50
tblVehicleTrips	SU_TR	6.07	6.13
tblVehicleTrips	SU_TR	6.07	3.85
tblVehicleTrips	SU_TR	20.43	19.68
tblVehicleTrips	WD_TR	6.59	6.65
tblVehicleTrips	WD_TR	6.59	4.18
tblVehicleTrips	WD_TR	11.01	11.03
tblVehicleTrips	WD_TR	44.32	42.70
tblWoodstoves	NumberCatalytic	38.00	0.00
tblWoodstoves	NumberCatalytic	9.50	0.00
tblWoodstoves	NumberNoncatalytic	38.00	0.00

tblWoodstoves	NumberNoncatalytic	9.50	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																62.3120
Energy																4,886.1756
Mobile																20,969.9680
Waste																690.3211
Water																543.1739
Total																**27,151.9505**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area																62.3120
Energy																4,414.7563
Mobile																11,754.2385
Waste																345.1606
Water																330.2837
Total																**16,906.7509**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction																**37.73**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Integrate Below Market Rate Housing

Improve Pedestrian Network

Provide Traffic Calming Measures

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated																20,969.9680
Mitigated																11,754.2385

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	5,054.00	5,494.80	4658.80	17,292,546	9,367,798
Condo/Townhouse High Rise	794.20	862.60	731.50	2,716,685	1,471,695
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	1,047.85	225.15	93.10	2,557,610	1,385,520
High Turnover (Sit Down Restaurant)	5,289.44	6,588.19	5484.54	7,499,449	4,062,636
Hotel	2,516.36	2,522.52	1832.60	5,773,484	3,127,638
Quality Restaurant	3,741.92	3,925.38	3001.86	5,213,914	2,824,505
Strip Mall	2,638.86	2,502.90	1216.22	4,597,057	2,490,339
Supermarket	4,089.60	7,103.60	6657.60	6,448,292	3,493,198
Total	25,172.23	29,225.14	23,676.22	52,099,037	28,223,330

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Condo/Townhouse High Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Supermarket	16.60	8.40	6.90	6.50	74.50	19.00	34	30	36

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.524776	0.057859	0.179826	0.126122	0.039940	0.006459	0.017277	0.035948	0.002564	0.003184	0.003733	0.000527	0.001784

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
NaturalGas Mitigated																1,799.4352
NaturalGas Unmitigated																1,881.0315
Electricity Mitigated																2,615.3211
Electricity Unmitigated																3,005.1441

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	4.20307e+006																225.6566
Condo/Townhouse High Rise	2.59858e+006																139.5143
Enclosed Parking with Elevator	0																0.0000
General Office Building	738150																39.6302
High Turnover (Sit Down Restaurant)	9.1287e+006																490.1071
Hotel	8.37636e+006																449.7146
Quality Restaurant	9.1287e+006																490.1071
Strip Mall	82812																4.4461
Supermarket	779600																41.8556
Total																	**1,881.0315**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse High Rise	2.39661e+006																128.6706
Enclosed Parking with Elevator	0																0.0000
General Office Building	668040																35.8661
High Turnover (Sit Down Restaurant)	8.997e+006																483.0360
Hotel	7.72029e+006																414.4913
Quality Restaurant	8.997e+006																483.0360
Strip Mall	77559																4.1640
Supermarket	750600																40.2986
Apartments High Rise	3.90907e+006																209.8725

Total																	**1,799.4351**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.57086e+006				461.1652
Condo/Townhouse High Rise	804678				144.3446
Enclosed Parking with Elevator	2.93294e+006				526.1165
General Office Building	1.1932e+006				214.0383
High Turnover (Sit Down Restaurant)	1.8071e+006				324.1614
Hotel	3.31387e+006				594.4478
Quality Restaurant	1.8071e+006				324.1614
Strip Mall	831828				149.2147
Supermarket	1.4912e+006				267.4940
Total					**3,005.1441**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.33904e+006				419.5816
Condo/Townhouse High Rise	727410				130.4841
Enclosed Parking with Elevator	2.30994e+006				414.3615
General Office Building	1.04011e+006				186.5763
High Turnover (Sit Down Restaurant)	1.68838e+006				302.8641
Hotel	2.88566e+006				517.6349
Quality Restaurant	1.62117e+006				290.8088
Strip Mall	703346				126.1674
Supermarket	1.26458e+006				226.8425
Total					**2,615.3211**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Unmitigated																62.3120
Mitigated																62.3120

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Hearth																45.9037
Landscaping																16.4082
Total																**62.3120**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating																0.0000
Consumer Products																0.0000
Hearth																45.9037
Landscaping																16.4082
Total																**62.3120**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Unmitigated				543.1739
Mitigated				330.2837

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	49.5171 / 31.2173				239.2762
Condo/Townhouse High Rise	12.3793 / 7.80432				59.8190
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	16.8847 / 10.3487				81.0003
High Turnover (Sit Down Restaurant)	12.627 / 0.805979				46.7577
Hotel	7.81297 / 0.868107				29.6676
Quality Restaurant	12.627 / 0.805979				46.7577
Strip Mall	4.57768 / 2.80568				21.9603
Supermarket	4.93073 / 0.152497				17.9351
Total					**543.1739**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	32.1861 / 15.6086				143.5881
Condo/Townhouse High Rise	8.04652 / 3.90216				35.8970
Enclosed Parking with Elevator	0 / 0				0.0000
General Office Building	10.9751 / 5.17435				48.6668
High Turnover (Sit Down Restaurant)	8.20755 / 0.402989				29.4862
Hotel	5.07843 / 0.434054				18.6127
Quality Restaurant	8.20755 / 0.402989				29.4862
Strip Mall	2.97549 / 1.40284				13.1943
Supermarket	3.20497 / 0.0762484				11.3524
Total					**330.2837**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				345.1606
Unmitigated				690.3211

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	349.6				159.0386
Condo/Townhouse High Rise	87.4				39.7596
Enclosed Parking with Elevator	0				0.0000
General Office Building	88.35				40.1918
High Turnover (Sit Down Restaurant)	495.04				225.2015
Hotel	168.63				76.7125
Quality Restaurant	37.96				17.2686
Strip Mall	64.89				29.5195
Supermarket	225.6				102.6290
Total					**690.3211**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	174.8				79.5193
Condo/Townhouse High Rise	43.7				19.8798
Enclosed Parking with Elevator	0				0.0000
General Office Building	44.175				20.0959
High Turnover (Sit Down Restaurant)	247.52				112.6008
Hotel	84.315				38.3562
Quality Restaurant	18.98				8.6343
Strip Mall	32.445				14.7597
Supermarket	112.8				51.3145

Total				**345.1606**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation