
V. ENVIRONMENTAL IMPACT ANALYSIS

I. PUBLIC UTILITIES

1. ELECTRICITY

REGIONAL AND ENVIRONMENTAL SETTING

Energy Supply and Distribution

The Southern California Edison Company (SCE) currently provides electrical service to the City of Malibu. The project area is currently served by the Tapia Substation, located within one mile of the Project Site. The Tapia Substation provides electricity to the area via a 16,000 volt underground distribution line and an underground 4/0 American wire gauge (AWG) Aluminum cable.¹

Deregulation

In 1996, the California Assembly voted unanimously to deregulate the State's electric industry. Under deregulation, the State's investor-owned utilities, ~~Southern California Edison~~ (SCE) and Pacific Gas & Electric (PG&E), were required to sell most of their power generating plants to unregulated private companies. They were required to transfer operational control of transmission lines and power grids to a private nonprofit organization – the Independent System Operator (ISO). The companies retained control and ownership of the distribution system. The California Public Utilities Commission (PUC) transferred pricing to the California Power Exchange (PX), overseen by the Federal Energy Regulatory Commission (FERC). The PX is a private, nonprofit organization that in concert with the ISO buys electricity according to need by auction from in-state power plants and elsewhere on the open market.

Deregulation has led to a certain amount of instability in the available supply of electricity in California. Energy shortages led to rolling blackouts throughout the summer of 2000 in Southern California. New energy efficiency measures were developed in 2001 in response to the energy crisis of 2000.

Energy Conservation

Energy consumption from new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of both residential and non-residential buildings and regulate

¹ *Written correspondence with Brian Deppen, Ventura Field Engineering, The Southern California Edison Company, March 5, 2003.*

energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24 guidelines. Examples of these guidelines are listed below:

- Roofing products installed in construction to take compliance credit for reflectance and emittance shall have a clear packaging label that lists the reflectance and emittance tested in accordance with ASTM Standards.
- Service water-heating systems of equipment must be equipped with automatic temperature controls capable of adjusting for the intended use.
- All exterior lighting of over 100 watts attached to buildings with air conditioning systems shall have source efficacy of at least 60 lumens per watt or be controlled by a motion sensor.²

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The City of Malibu General Plan EIR considers impacts as being potentially significant if implementation of a project would:

- Result in activities which use large amounts of electricity or which use electricity in a wasteful manner, or
- Result in an increased demand for electricity which exceeds either the existing supply or capacity of the infrastructure (or financially feasible infrastructure that could be developed) required to service additional demand and/or equipment (electric lines and substations, etc), or
- Alter the nature of demand for electricity services causing increased costs or service delivery limitations.

Project Impacts

The Project Site is currently vacant, with some storage equipment remaining from previous commercial nursery uses. The Project Site does not currently support any uses that consume electricity resources. As such, implementation of the Proposed Project would result in an increase in the amount of electricity

² 2001 Energy Efficiency Standards for Residential and NonResidential Buildings, California Energy Commission, Effective June 1, 2001.

consumed on the site. Electricity consumption associated with the Proposed Project was calculated using generation factors based on land use classifications in accordance with the SCAQMD's CEQA Air Quality Handbook. The commercial office/retail nature of the Proposed Project would not demand excessive amounts of energy or consume electricity in a wasteful manner. As shown in Table V.I-1, the

Proposed Project, as a whole, is anticipated to consume approximately 4,773 kilowatt hours of electricity per day.

**Table V.I-1
Electricity Consumption by Proposed Project**

Development	Building Size (square feet)	Consumption Rate ^a (kilowatt hours/sf/year)	Total Consumption (kilowatt hours/day)
Parcel A			
Retail	52,800	13.55	1,960
Office	15,080	12.95	535
Parcel B			
Retail	24,310	13.55	903
Office	18,745	12.95	665
Parcel C			
Civic Center	20,000	12.95	710
Total Electricity Consumption			4,773
^a SCAQMD, CEQA Air Quality Handbook, 1993.			

The existing electricity infrastructure in the project vicinity is not experiencing any problems or deficiencies and the Proposed Project would not exceed infrastructure design capacities. Therefore, the existing infrastructure would be able to handle the electricity demand of the Proposed Project.³ However, during the construction period, temporary service outages may result in the surrounding area as construction workers upgrade and extend the necessary infrastructure to service the Project Site. Such temporary disruptions in service are generally planned in advance to avoid peak demand times, however, inadvertent or unexpected periodic electricity outages may occur. Due to the temporary and intermittent nature of such outages, such impacts are considered less than significant.

CUMULATIVE IMPACTS

Implementation of the Proposed Project in conjunction with the related projects identified in Section IV, Overview of Environmental Setting, would further increase the demand for electricity service. As

³ Written correspondence, Brian Deppen, Ventura Field Engineering, The Southern California Edison Company, March 5, 2003.

shown in Table V.I-2, the total electricity consumed by the related projects and the Proposed Project would be approximately 29,114 kilowatt hours per day. Although the cumulative impact of the identified related projects may require the installation of additional electrical distribution facilities, service availability, and thus the extent of any potential locally occurring cumulative impacts on utility service, would necessarily be determined through the environmental review process for each individual project. The construction of any power distribution facilities required in association with any related project may cause limited local short-term impacts in the forms of unavoidable noise, air pollution, and traffic congestion during construction. Even so, it is not expected that the development of these projects would represent a level of use of regional energy resources that could result in a significantly adverse cumulative impact.

Table V.I-2
Electricity Consumption by Proposed Project and Related Projects

Development ^a	Size	Consumption Rate ^b	Total Consumption (kilowatt hours/day)
Commercial	65,389.5 sf	13.55 (kilowatt hours/sf/year)	2,247.5
Community Center	9,980 sf	10.5 (kilowatt hours/sf/year)	287.1
Health Spa	7,352 sf	13.55 (kilowatt hours/sf/year)	272.9
Hotel	174 rooms	9.95 (kilowatt hours/room/year)	4.7
Office	176,350 sf	12.95 (kilowatt hours/sf/year)	6,256.8
Multi-family Residential	36 du	5,626.5 (kilowatt hours/du/year)	554.9
Single-family Residential	14 du	5,626.5 (kilowatt hours/du/year)	215.8
Restaurant	12,693.5 sf	47.45 (kilowatt hours/sf/year)	1,650.2
Storage	56,600 sf	4.35 (kilowatt hours/sf/year)	674.5
University Campus	384,800 ^c	11.55 (kilowatt hours/sf/year)	12,176.5
Subtotal			24,341
Proposed Project Consumption			4,773
Total			29,114
^a Kaku Associates, Draft <i>Traffic and Circulation Study for the Malibu La Paz Project, December 2004</i> <u>April 2005</u> . ^b SCAQMD, <i>CEQA Air Quality Handbook, 1993</i> . ^c City of Los Angeles, <i>Pepperdine University Upper Campus Development Final EIR, 1998</i> .			

MITIGATION MEASURES

As stated above, the Proposed Project would not result in any significant impacts with respect to electricity resources or infrastructure. As such, it does not have the potential to cause significant impacts to electricity services. The following mitigation measures shall be implemented to the greatest extent feasible in keeping with the California Code of Regulations Title 24 for energy efficiency.

1. If connection of electricity services will result in a service disruption to surrounding properties, this connection must be done at a time of day that is the least inconvenient.

2. If a disruption to electricity services must occur, notice shall be provided to all affected properties of the service disruption.
3. High-efficiency air conditioning controlled by a computerized energy-management system shall be installed.
4. Built-in appliances and space-conditioning equipment should exceed the minimum efficiency levels mandated by Title 24.
5. Air shall be cascade ventilated from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required.
6. Lighting system heat shall be recycled for space heating during cool weather.
7. Low and medium static-pressure terminal units and ductwork shall be installed, and buildings shall be well sealed, to reduce energy consumption by air-distribution systems.
8. A performance check of the installed space conditioning system shall be completed prior to the issuance of a certificate of occupancy.
9. Exterior walls shall be finished with light-colored materials and high-emissivity characteristics to reduce cooling loads.
10. White reflective roofing material shall be used to meet standards and reflect heat.
11. Thermal insulation shall be installed in walls and ceilings which exceeds Title 24 regulations.
12. Window systems shall be designed to reduce thermal gain and loss, and shall be fitted with heat-rejecting window treatments, thus reducing cooling loads during warm weather and heating loads during cool weather.
13. Fluorescent and high-intensity-discharge (HID) lamps shall be installed inside as well as outside.
14. Photo sensitive controls and dimmable electronic ballasts shall be installed to maximize the use of natural daylight and thus reduce the artificial lighting load.
15. Occupant controlled light switches and thermostats shall be installed.
16. Time controlled interior and exterior lighting shall be installed.
17. Passive solar inset of windows or windowless walls shall be incorporated.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Following the implementation of the above listed mitigation measures, any potentially significant impacts to electricity services would be mitigated to a less than significant level.

V. ENVIRONMENTAL IMPACT ANALYSIS

I. PUBLIC UTILITIES

2. NATURAL GAS

REGIONAL AND ENVIRONMENTAL SETTING

The Southern California Gas Company (The Gas Company) provides natural gas service to the City of Malibu through gas mains that run under the streets. There are two mains that currently serve the project area: a two-inch main located under Cross Creek Road, and a three-inch main located under Civic Center Way. If necessary, gas mains can be extended in order to serve new projects.

Natural gas service for new development projects must be provided in accordance with The Gas Company's policies and extension rules on file with the California Public Utilities Commission (PUC) at the time contractual agreements are made. The availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility, The Gas Company is under the jurisdiction of the PUC, but can also be affected by actions of federal regulatory agencies. Should these agencies take any action which affects gas supply or the conditions under which service is available, gas service would be provided in accordance with those revised conditions.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The City of Malibu General Plan EIR considers impacts created by a Proposed Project as being potentially significant if implementation would:

- Result in activities which use large amounts of natural gas or which use natural gas in a wasteful manner, or
- Result in an increased demand for natural gas which exceeds either the existing supply or capacity of the existing infrastructure (or financially feasible infrastructure that could be developed) required to service additional demand and/or equipment (natural gas lines, etc), or
- Alter the nature of demand for natural gas services causing increased costs or service delivery limitations.

Project Impacts

Natural gas consumption associated with the Proposed Project was calculated using generation factors based on land use. As shown in Table V.I-3, the Proposed Project is anticipated to consume approximately 11,137 cubic feet (cf) per day of natural gas. According to The Gas Company, natural

gas service to the Proposed Project could be provided without any significant impact on the environment.⁴ Further determinations about necessary infrastructure improvements may be made upon the submission to The Gas Company of “final plans” for the Proposed Project. At that time, The Gas Company would be able to make a final determination on natural gas service to the Proposed Project. According to The Gas Company, the Proposed Project would have a less than significant impact upon natural gas services.

**Table V.I-3
Natural Gas Consumption by Proposed Project**

Development	Building Size (square feet)	Consumption Rate ^a (cubic feet/sf/month)	Total Consumption (cubic feet/day)
Parcel A			
Retail	53,917	2.9	5,211
Office	15,080	2	1,005
Parcel B			
Retail	23,917	2.9	2,312
Office	19,144	2	1,276
Parcel C			
Civic Center	20,000	2	1,333
Total Natural Gas Consumption			11,137
^a SCAQMD, CEQA Air Quality Handbook, 1993.			

CUMULATIVE IMPACTS

Implementation of the Proposed Project in conjunction with the related projects identified in Section IV would further increase the demand for natural gas. As shown in Table V.I-4, development and implementation of the related projects within the study area plus the Proposed Project would result in the consumption of approximately 67,758 cf of natural gas per day. Although the cumulative impact of the identified related projects may require the installation of additional natural gas distribution facilities, service availability, and thus the extent of any potential locally occurring cumulative impacts on utility service, would necessarily be determined through the environmental review process for each individual project. The construction of any distribution facilities required in association with any related project may cause limited local short-term impacts in the forms of unavoidable noise, air pollution, and traffic congestion during construction. Even so, it is not expected that the development of these projects would represent a level of use of regional energy resources that could result in a significantly adverse cumulative impact.

⁴ Dave McKibben, Technical Services Planner, Pacific Region, The Southern California Gas Company, March 13, 2003.

**Table V.I-4
Natural Gas Consumption by Proposed Project and Related Projects**

Development ^a	Size	Consumption Rate ^b	Total Consumption (cubic feet/day)
Commercial	65,389.5 sf	2.9 (cubic feet/sf/month)	6,321
Community Center	9,980 sf	2 (cubic feet/sf/month)	665
Health Spa	7,352 sf	2.9 (cubic feet/sf/month)	711
Hotel	174 rooms	4.8 (cubic feet/room/month)	28
Office	176,350 sf	2 (cubic feet/sf/month)	11,757
Multi-family Residential	36 du	4,011.5 (cubic feet/du/month)	4,814
Single-family Residential	14 du	4,011.5 (cubic feet/du/month)	1,872
Restaurant	12,693.5 sf	2.9 (cubic feet/sf/month)	1,227
Storage	56,600 sf	2 (cubic feet/sf/month)	3,773
University Campus	384,800 ^c	2 (cubic feet/sf/month)	25,653
		Subtotal	56,821
		Proposed Project Consumption	11,137
		Total	67,758
^a Kaku Associates, Draft -Traffic and Circulation Study for the Malibu La Paz Project, December 2004 April 2005. ^b SCAQMD, CEQA Air Quality Handbook, 1993. ^c City of Los Angeles, Pepperdine University Upper Campus Development EIR, 1998.			

MITIGATION MEASURES

The Proposed Project would not result in any significant natural gas service impacts; no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Proposed Project would not result in any significant natural gas service impacts.

V. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC UTILITIES
3. WATER

REGIONAL AND ENVIRONMENTAL SETTING

Water Supply

Water service to the City of Malibu is provided by the Los Angeles County Water Works District 29 (the District). The District obtains its water mostly from the West Basin Municipal Water District (WBMWD), but also receives portions from the Las Virgenes Municipal Water District (LVMWD) and the City of Los Angeles Department of Water and Power (LADWP).⁵

The West Basin Municipal Water District supplies water to the South Bay. The WBMWD purchases water from the Metropolitan Water District, which is imported from the Colorado River Aqueduct when groundwater sources in the South Bay cannot meet the demand of the area. Each year, the WBMWD purchases and sells approximately 210,000 acre-feet of water to local retailers for distribution to the South Bay community.⁶

The Las Virgenes Municipal Water District supplies water to Agoura Hills, Calabasas, Hidden Hills, Westlake Village, and nearby unincorporated areas of Los Angeles County. The LVMWD obtains its water from the Metropolitan Water District, which imports its water from the Colorado River Aqueduct. Annually, the LVMWD distributes about 18,500 acre-feet of water to the communities it serves.⁷

The City of Los Angeles Department of Water and Power supplies water to the City of Los Angeles, serving 465 square miles. The LADWP obtains its water from three main sources: the Los Angeles Aqueduct (LAA), local groundwater mainly from the San Fernando Basin, and the Metropolitan Water District (MWD). The LAA transports snowmelt from the Sierra Nevadas and water from Mono Basin and the Owens Valley to Los Angeles, supplying about 50 percent of the LADWP's water. The San Fernando, Central, Sylmar, and West Coast groundwater basins provide the LADWP with about 15

⁵ Brian D. Hooper, Assistant Deputy Director, Los Angeles County Waterworks District 29, March 27, 2003.

⁶ West Basin Municipal Water District Website: http://www.westbasin.com/what_imported.htm, May 2003.

⁷ Las Virgenes Municipal Water District Website, <http://www.lvmwd.com/who/Who3bringing.html>, May 2003.

percent of its water. The MWD supplies about 35 percent. According to the LADWP, water demand in Los Angeles is approximately 660,000 acre-feet per year.⁸

Water Infrastructure

The City of Malibu receives water through a 30-inch water main running along Pacific Coast Highway. Smaller water mains connect to this water main and run to other parts of the city. The Project Site has water mains beneath Civic Center Way and Cross Creek Road, ranging in size from six inches to twelve inches. There are smaller mains branching off of these mains that range from four inches to eight inches. While there are water mains around the Project Site, the site is not currently served by water service, and no infrastructure for such service, with the exception of the presence of water mains, exists.

Based on correspondence from the County of Los Angeles Public Works Department, the District's "...existing (water supply) system does not currently have gravity storage reservoir capacity, feeding the pressure zone that would serve the La Paz (P)roject, sufficient to supply the required fire-flow and duration required by the Los Angeles County Fire Department...Gravity storage for fire protection is needed in the event of break in the 30-inch diameter transmission main. In this situation, the only water feeding the system is from local storage reservoirs, of which there are none directly serving the (P)roject area.⁹ The District does not have the ability to provide adequate fire-flow to the (P)roject (S)ite if the supply or transmission main from the interconnection with MWD is interrupted or damaged. As a result, the supply of water from MWD should not be relied upon to meet the fire-flow requirement for the (P)roject.¹⁰"

The County of Los Angeles Department of Public Works has a Civic Center Water Infrastructure Improvements Plan which includes a 550,000 gallon reservoir at an approximate elevation of 425 feet above mean sea level on Sweetwater Road which, once constructed, would supply fire flow to properties within the Civic Center from a gravity fed water line. The planned improvements identified in the Infrastructure improvements Plan are not yet constructed.

⁸ Los Angeles Department of Water and Power Website, <http://www.ladwp.com/water/supply/facts/index.htm>, May 2003.

⁹ Donald L. Wolfe, Director of Public Works, County of Los Angeles Department of Public Works, Written correspondence to the City of Malibu dated February 19, 2008, Re: Los Angeles County Waterworks District No. 29, Malibu Response To La Paz Ranch's Response Letter Dated February 4, 2008 Regarding District's Comments To Environmental Impact Report For La Paz Ranch Project.

¹⁰ Donald L. Wolfe, Director of Public Works, County of Los Angeles Department of Public Works, Written correspondence to the City of Malibu dated January 30, 2008 Re: Los Angeles County Waterworks District No. 29, Malibu Final Environmental Impact Report For Malibu La Paz Ranch Project.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The City of Malibu General Plan EIR considers the impacts created by the Proposed Project as being potentially significant if implementation would:

- Result in an increased demand for water services which exceeds the existing supply or capacity of the service provider's facilities, or
- Alter the demand for public services causing increased costs or service delivery limitations.

The CEQA Guidelines (Appendix G) identifies applicable criteria for determining whether a project's impacts are considered to have a significant effect on the environment. A project is considered to create a significant impact if:

- It would require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Project Impacts

Water consumption for the Proposed Project was estimated from wastewater generation factors based on land use. In order to present a conservative analysis, water consumption is assumed to be 120 percent of the wastewater generated for a given land use. Conventional methodologies generally use water factors reflecting a 10 percent increase over wastewater rates.

The Proposed Project is expected to generate a demand of approximately 43,370 gallons per day (gpd)¹¹ of water (Table V.I-5). Based on a revised water demand water estimate by Lombardo and Associates, Inc. (See Appendix L), the estimated water demand for the Proposed Project with the WSWMP, which includes a water re-use system that would utilize reclaimed treated wastewater in restrooms (for toilet flushing only) and for outdoor irrigation of landscaped areas, would significantly reduce the water demands of the Project. Lombardo Associates Inc., estimates the Proposed Project's water demands at 13,600 gpd.

Water mains for the Proposed Project do not exist, and therefore would need to be constructed. Since no service to the Project Site currently exists, the existing District infrastructure is not adequate to meet the needs of the Proposed Project. To satisfy this requirement, the Proposed Project would connect to the existing 12-inch water main located in the centerline of Civic Center Way using a "T" off from that

¹¹ City of Malibu Hydrogeology Review Sheet (Comment #8), June 26, 2008 (See Appendix M).

~~main and extend new water mains onto and within the project site to serve hydrants throughout the project in accordance with the provisions of the Los Angeles County Fire Code (Title 32) and the specifications listed in the Existing Fire Department Fire Flow/Hydrant Location and Access approvals (see Figure V.J-2 Fire Accessibility Site Plan) . A steel reservoir, a booster pumping station and pressure regulator, off-site water mains connecting the booster pumping station to the existing distribution infrastructure and to the steel reservoir, distribution mains to the project area, and other possible needs must be constructed in order to adequately serve the Project Site.¹² Land must be acquired to accommodate these facilities. The project impacts to the water system also require off-site water system facilities to be constructed; these water system facilities are described in the cumulative impacts section. Disruption to water service in the project area during the construction of new infrastructure is anticipated to occur. According to the District, service disruption is not permitted to exceed three hours.¹³~~

Water for irrigation purposes will be provided via the proposed on-site waterwater treatment system (OWTS). The proposed OWTS consists of collection, treatment, disinfection, dechlorination, and disposal-re-use of wastewater generated by the Proposed Project, as shown in Figure III-18 (processed to meet the requirements of the California Code of Regulations Title 22, Disinfected Tertiary Treatment Standards, the Los Angeles Regional Water Quality Control Board Waste Discharge Requirements (WDR)/Water Reclamation Requirements (WRR), and the City of Malibu regulations applicable to OWTS. treated effluent in 29 subsurface drip dispersal fields and 6 leach fields in landscaped areas across Parcels A and B. The calculated design maximum sustained daily wastewater flow for the properties is 36,22024,700 gpd¹⁴ and the application rate is 0.039-18 gallons per square foot per day (gpsfd).¹⁵ Because reclaimed irrigation will be provided via the OWTS, no additional source of water demands are anticipated to support landscaping. All of the daily treated wastewater generated by the OWTS (19,000 gpd) would be re-used on-site either for toilet flushing, or dispersed within the landscape irrigation system. While 100% of the treated wastewater would be used on-site for toilet flushing and irrigation demands, the irrigation demands are anticipated to be greater than the daily quantity of treated wastewater generated by the OWTS. It is estimated that approximately 3,140 gpd of potable water would be required to accommodate this shortfall. In addition, Best Management

¹² ~~Brian D. Hooper, Assistant Deputy Director, Los Angeles County Waterworks District 29, March 27, 2003.~~

¹³ ~~Ibid. Brian D. Hooper, Assistant Deputy Director, Los Angeles County Waterworks District 29, March 27, 2003.~~

¹⁴ ~~See City of Malibu Hydrogeology Review Sheet (Comment 11), June 26, 2008 contained in Appendix M to this Final EIR.~~

¹⁵ ~~Lombardo and Associates, Inc., Wastewater Management Master Plan (Table 2.10), July 2008. See Appendix L to this Final EIR.~~

Practices (BMP's) for water conservation would be used within buildings to reduce wastewater generation/water use.

To avoid damage to plants and soils, soil leaching would be necessary to "flush-out" the accumulated salts resulting from evapotranspiration of the water, regardless of the water source (i.e., treated wastewater or potable water).

While adequate water supply in the project area exists, ~~existing storage and the~~ distribution infrastructure does not currently exist to adequately serve the Proposed Project. Therefore, the project would result in a significant impact. The impact, however, could be mitigated to a less than significant level provided that mitigation measures are implemented.

**Table V.I-5
Water Consumption by Proposed Project**

Development	Building Size (square feet)	Consumption Rate ^a (gallons/1,000 sf/day)	Total Consumption (gallons/day)
Parcel A			
Retail	53,917	390	21,028
Office	15,080	240	3,619
Parcel B			
Retail	23,917	390	9,328
Office	19,144	240	4,595
Parcel C			
Civic Center	20,000	240	4,800
Total Water Consumption			43,370
^a County Sanitation Districts of Los Angeles County, 2002. Water consumption rates assumed to be 120% of wastewater generation rates.			

CUMULATIVE IMPACTS

Implementation of the Proposed Project in conjunction with the related projects identified in Section IV would further increase the demand for water. As shown in Table V.I-6, the total water consumption by the related projects and the Proposed Project as proposed in the Draft EIR would be approximately 192,798 gallons per day. However, the Proposed Project's 100% reuse of treated effluent would result in a reduced water demand for the Proposed Project and Related Projects.

While water supply to the area exists and is adequate, full water service to the Proposed Project and the related projects cannot be ~~accommodated by the District without~~ guaranteed because of inadequate water storage and distribution infrastructure. The District cannot cumulatively provide adequate domestic storage and fire protection without the construction of certain ~~accommodated by the District without~~ infrastructure improvements. These improvements include the off-site construction of an

800,000 gallon above ground steel reservoir at a District-owned site (Assessor Parcel No. 4452 025 901) adjacent to Sweetwater Mesa Road, 12-inch diameter water mains along 4,200 feet of Sweetwater Mesa Road from the reservoir site to Serra Road and 750 feet along Pacific Coast Highway, upgrades to existing Serra pump station, and a pressure regulating station located at Cross Creek Road and Mariposa De Oro Road (cumulative water system projects). Therefore, cumulative impacts to water supply and service would be significant unless mitigated by the construction of the cumulative water system projects to a less than significant level.¹⁶ These cumulative water system improvements are a part of the County of Los Angeles Department of Public Works Civic Center Water Infrastructure Improvements Plan for which a separate environmental clearance pursuant to the California Environmental Quality Act would be required.

¹⁶— Electronic mail communication dated June 4, 2008 from Michael L. Moore, Deputy County Counsel, Los Angeles County Counsel's Office.

**Table V.I-6
Water Consumption by Proposed Project and Related Projects**

Development ^a	Size	Consumption Rate ^b	Total Consumption (gallons/day)
Commercial	65,389.5 sf	390 (gallons/1,000 sf/day)	25,502
Community Center	9,980 sf	360 (gallons/1,000 sf/day)	3,593
Health Spa	7,352 sf	360 (gallons/1,000 sf/day)	2,646
Hotel	174 rooms	150 (gallons/room/day)	26,100
Office	176,350 sf	240 (gallons/1,000 sf/day)	42,324
Multi-family Residential	36 du	187.2 (gallons/du/day)	6,739
Single-family Residential	14 du	312 (gallons/du/day)	4,369
Restaurant	12,693.5 sf	1,200 (gallons/1,000 sf/day)	15,232
Storage	56,600 sf	30 (gallons/1,000 sf/day)	1,698
University Campus	884 students	24 (gallons/student/day)	21,216
Subtotal			149,419
Proposed Project Consumption			43,370
Total			192,789

^a Kaku Associates, ~~Draft~~ *Traffic and Circulation Study for the Malibu La Paz Project, December 2004* April 2005.

^b County Sanitation Districts of Los Angeles County, 2002. Water consumption rates assumed to be 120% of wastewater generation rates.

MITIGATION MEASURES

As stated above, the Proposed Project has the potential to cause significant impacts to water services. If mitigation measures are implemented, impacts would be less than significant. Impacts created by the Proposed Project can be mitigated if the necessary water facilities are constructed. The following measures are necessary:

1. ~~The Project Applicant shall meet with the City of Malibu, Waterworks District 29, and the LACFD to determine specific water facility needs such as but not limited to, reservoirs, pumping stations and pressure regulators, off site water mains, and distribution mains. The necessary facilities and land must be acquired and operating before project occupancy. The Applicant shall comply with the requirements of Water District 29 and the LACFD by providing the infrastructure needed to connect to the existing 12-inch water main located in the centerline of Civic Center Way, "T" off from that main and extend new water mains onto and within the project site to serve hydrants throughout the project in accordance with the provisions of the LACFD Code (Title 32) and the specifications listed in the Existing Fire~~

Department Fire Flow/Hydrant Location and Access approvals¹⁷ and any applicable regulations of the Water District 29.

2. Subsequent to the Planning Commission's consideration of the FEIR, the District has formulated a fair share plan to pay for the construction of the cumulative water system projects (estimated to be \$4.5 million) to address the cumulative impacts for the Proposed Project and related projects within the Civic Center area. Pursuant to the fair share plan, the Applicant shall pay to Waterworks District No. 29, Malibu, when a grading permit is issued, the sum of \$834,625, provided that the District and Applicant have entered into a written agreement in which the District confirms that payment constitutes the entirety of the Applicant's fair share payment in mitigation of the project's cumulative impacts to the District's water system facilities.
- ~~2.3.~~ The Project Applicant ~~is also~~ shall be responsible for any fees adopted by the City of Malibu and generally and uniformly imposed by the City of Malibu's Environmental and Building Safety Departments for ~~improvements of existing or~~ construction of new water supply and distribution facilities.
- ~~3.4.~~ Automatic sprinkler systems shall be set to irrigate landscaping during early morning hours or during the evening to reduce water loss from evaporation. Care must be taken to reset sprinklers to water less often in cooler months and during the rainfall season to avoid wasting water by excessive landscape irrigation.
- ~~4.5.~~ Selection of native, drought-tolerant, low water consuming plant varieties shall be used to reduce irrigation water consumption to the maximum extent feasible, as reflected in the project's landscape plan; Mitigation Measure A-1, at page V.A-14.
- ~~5.6.~~ Reclaimed and/or recycled Treated wastewater shall be used where possible for irrigation of landscaping, as identified in the July 7, 2008 Malibu La Paz Development Wastewater Management System Management Plan (Appendix L), and consistent with the California Department of Public Health Title 22 Disinfected Tertiary Treatment Standards.
7. Best Management Practices (BMP's) for water conservation shall be used within buildings to reduce wastewater generation/water use.

¹⁷ County of Los Angeles Fire Department, Fire Protection Engineering, Fire Flow and Hydrant Location and Access Only, approved 1/19/06 and 2/27/07.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Provided the mitigation measures stated above are implemented, project impacts would be mitigated to a less than significant level.

V. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC UTILITIES
4. WASTEWATER

REGIONAL AND ENVIRONMENTAL SETTING

The City of Malibu does not maintain a publicly owned and operated sewer system. All property in the City of Malibu is served by private onsite wastewater treatment systems (OWTS). The Project Site is vacant, and not currently served by a treatment system.

Water Quality

The water quality of water bodies and watersheds near the Project Site can be affected by the discharge of wastewater. The Tapia wastewater treatment plant is known to contribute wastewater discharge to bodies of water such as Malibu Creek, Malibu Lagoon, and consequently Santa Monica Bay. The contribution of such wastewater, along with other sources including stormwater runoff has led to increased levels of nitrogen and pathogens in area water bodies.¹⁸

Under the Clean Water Act (CWA), the State of California is required to issue a list of all impaired water bodies in the State. An impaired water body, by definition provided in CWA Section 303(d) is a body that does not meet water quality regulations and therefore has imposed Total Maximum Daily Loads (TMDLs). A TMDL is the maximum amount of wastewater allowed to be discharged into a given water body each day.¹⁹ The State Water Resources Control Board, Division of Water Quality issues the listings of impaired water bodies. According to the 1998 list, Malibu Creek, Malibu Lagoon, Malibu Beach, and Surfrider Beach are impaired water bodies with imposed TMDLs.²⁰ A complete discussion of impacts to water quality is included in Section V.G, Hydrology/Water Quality.

On-Site Wastewater Treatment Systems (OWTS)

The City of Malibu is not served by a citywide wastewater treatment facility. Sewage from most properties within the City of Malibu is disposed of via On-site Wastewater Treatment Systems (OWTS).

¹⁸ *Malibu Bay Company DA Project, Draft EIR SCH#2001051063, September 2002.*

¹⁹ *Revision of the Clean Water Act Section 303(d) List of Water Quality Limited Segments, Staff Report by the Division of Water Quality, State Water Resources Control Board, website: http://www.swrcb.ca.gov/~rwqcb4/html/water_qty/water_quality.html#303d, February 2003.*

²⁰ *The 1998 California 303(d) List of Impaired Waters for the Los Angeles Region, Los Angeles Regional Water Quality Control Board, 1998.*

The City of Malibu is working on programs to manage stormwater runoff and wastewater. The City's main objective is to ensure that private OWTS are operating effectively, especially those near water bodies. Specific plans for wastewater management include an Operating Inspection and Permitting Program, in which OWTS are inspected prior to the issuance of permits to ensure effective operation, and a Wastewater Management Database, which is proposed to track wastewater sites and groundwater conditions related to the operation of OWTS.²¹

Treatment Processes

Primary Treatment. The purpose of primary treatment is to remove heavy or large, settleable or floatable, non-organic objects, including plastics, sand and grit. In small facilities these are removed in a septic tank. Primary tanks remove only a small amount of phosphate and no nitrogen. Phosphate removal can be enhanced through the addition of metal salts.

Secondary Treatment. The secondary treatment provides for oxidation of the wastewater and allows removal of organic materials. Air is introduced to enhance the biological activity of the organisms that convert organic materials into settleable solids.

Tertiary Treatment. Tertiary treatment is required to polish the secondary effluent. It provides a very clear effluent suitable for easy disinfection and removal of bacteria and viruses. Tertiary treatment is mandatory for irrigation applications with unlimited reuse.

Disinfection. Chlorine is the most commonly used method for disinfection of wastewater. Other disinfection processes, such as ozonation and ultraviolet light have become more acceptable in recent years. The use of ultraviolet (UV) has been accepted by the State Health Department and guidelines have been published.

Regulatory Setting

City of Malibu Ordinance 194 – Uniform Plumbing Code. The City of Malibu has adopted the Uniform Plumbing Code, 1997 Edition, as amended, Ordinance 194 of the Malibu Municipal Code, which constitutes the City of Malibu Uniform Plumbing Code (UPC). UPC Appendix K, Section K1(j) States, “Commercial building and multiple family dwellings to be constructed, or remodeled, after the effective date of this section shall have a private sewage disposal system which provides secondary sewage effluent treatment, as defined by the Administrative Authority, prior to final sewage effluent disposal, unless otherwise approved by the Administrative Authority.” Pursuant to this section, the Proposed Project will be required to install a new secondary treatment and sewage effluent disposal

²¹ *City of Malibu Presents Progress on Water Pollution Issues to L.A. Water Quality Board, City of Malibu News, March 18, 2003.*

system. The Los Angeles Regional Water Quality Control Board (LARWQCB) retains jurisdiction over private sewage disposal systems serving, or proposed to serve, commercial buildings and multiple family dwellings. The applicant will be required to submit evidence to the LARWQCB that the Propose Project meets the applicable Waste Discharge Requirements.

California Code of Regulations, Title 22 Requirements. The State of California Department of Health regulates the reuse of treated wastewater, consistent with the provisions of the California Code of Regulations (Title 22), and must approve an Engineering Report for the Production, Distribution, and Reuse of Recycled Water for the use of any recycled water.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The City of Malibu General Plan EIR considers wastewater impacts created by the project as being potentially significant if implementation would:

- Result in the potential to generate more wastewater than can be adequately and efficiently disposed of on the property where it is generated; the wastewater generated has the potential to adversely effect groundwater; the wastewater generated has the potential to percolate and affect groundwater elevations and flow directions sufficiently to contribute to slope instability: and/or the proposed wastewater disposal system is not adequate to provide the required level of wastewater treatment.

The CEQA Guidelines (Appendix G) identifies applicable criteria for determining whether a project's impacts are considered to have a significant effect on the environment. A project is considered to create a significant impact if:

- It would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Project Impacts

~~Wastewater generation associated with the Proposed Project was calculated using generation factors based on land use. As shown in Table V.I.7, the Proposed Project is anticipated to generate approximately 36,141 gpd of wastewater.~~

Wastewater from the Proposed Project is proposed to be treated and disposed of through a private on-site wastewater treatment system (OWTS). The proposed OWTS design is intended to effectively treat and dispose wastewater generated by the Proposed Project while minimizing impacts to the greatest degree feasible. The OWTS includes a network of underground septic tanks proposed to effectively remove solids and floatable oil and grease containing materials from the waste stream prior to discharging effluent on site. The effluent would be processed to meet the minimum requirements of the City of Malibu Uniform Plumbing Code and disposed into a system of leach fields proposed beneath the surface parking lots. Consistent with the City of Malibu regulations for on-site septic systems, the Applicant/Operator will be required to prepare an operations and maintenance manual prior to final plan check approval and a maintenance contract will be executed between the property owner and an entity qualified in the opinion of the City of Malibu to maintain the proposed alternative onsite wastewater disposal system.

The OWTS is designed to treat the sewerage for Parcels A, B and C independently within three separate systems. The proposed OWTS for Parcel A includes three septic tanks; a 5,000 gallon Xerxes fiberglass septic tank serving the sanitary waste flow from Buildings 1 and 2, and two 15,000 gallon Xerxes fiberglass septic tanks serving Buildings 3 through 6. Kitchen waste from the proposed restaurant uses will be processed through two 20,000 gallon Xerxes fiberglass grease interceptors prior to entering the septic tanks. Waste flow from all three septic tanks will flow to a 12,000 gallon equalization tank prior to being distributed into five micro fast treatment units. Treated effluent will then feed into a 2,000 gallon Xerxes fiberglass disinfection recirculation tank. After circulating through a chlorine tablet feeder unit and dechlorination tablet feeder unit the treated and disinfected effluent will enter a 12,000 gallon Xerxes fiberglass dosing/surge tank where it will ultimately be pumped into a series of ten leach field zones positioned within the surface parking areas within Parcel A.

The OWTS for Parcel B includes one 25,000 gallon Xerxes fiberglass septic tank serving the sanitary waste flow from Buildings 8, 9 and 10. Waste flow from the septic tank will flow to a 10,000 gallon recirculation prior to being distributed into four Advantex AX 100 textile treatment units. Secondary treated effluent will then feed into a 2,000 gallon Xerxes fiberglass disinfection/recirculation tank. After circulating through a chlorine tablet feeder unit and dechlorination tablet feeder unit the treated and disinfected effluent will enter a 10,000 gallon Xerxes fiberglass dosing/surge tank where it will ultimately be pumped into a series of five leach field zones positioned within the surface parking areas within Parcel B.

The OWTS for Parcel C includes one 12,000 gallon Xerxes fiberglass septic tank serving the sanitary waste flow from Buildings 1, 2 and 3. Waste flow from the septic tank will flow to a 4,000 gallon pre-cast concrete recirculation tank and circulated through two Advantex AX 100 textile treatment units. After circulating through a chlorine tablet feeder unit, chlorine contact chamber, and dechlorination tablet feeder unit the treated and disinfected effluent will enter a 4,000 gallon pre-cast concrete

dosing/surge tank where it will ultimately be pumped into a series of four leach field zones positioned within the easterly surface parking area on Parcel C.

**Table V.I-7
Wastewater Generation by Proposed Project**

Development	Building Size (square feet)	Generation Rate^a (gallons/1,000 sf/day)	Total Generation (gallons/day)
Parcel A			
Retail	53,917	325	17,523
Office	15,080	200	3,016
Parcel B			
Retail	23,917	325	7,773
Office	19,144	200	3,829
Parcel C			
Civic Center	20,000	200	4,000
Total Wastewater Generation			36,141
^a —County Sanitation Districts of Los Angeles County, 2002.			

Biosolids are a by product of wastewater processing. They are produced from septic tanks and treatment plants. Septic tanks are periodically pumped out. Cartage of septic tank solids and liquid are also pumped when needed. Treatment plants produce biosolids that must be removed periodically from the site. Biosolids from Civic Center properties are either trucked to a sewer contributing to the Los Angeles Hyperion Treatment Plant (HTP) or are transported directly to the HPT for processing, reuse, or disposal. The Tapia treatment facility will not receive any sewage from the City of Malibu.²²

In accordance with the City of Malibu Uniform Plumbing Code (UPC), the project plans include an on-site wastewater treatment system, including a treatment plant, which will treat wastewater according to UPC guidelines. The treatment facility will be housed in an enclosed building on the southern side of the Project Site. In a letter dated July 16, 1999, the City of Malibu listed the requirements below for the project OWTS. Prior to final project approval the Applicant must submit:

- A plot plan for review to the City which includes construction details, and the proposed drainage and landscape plans.
- System specifications for all components proposed in project OWTS.

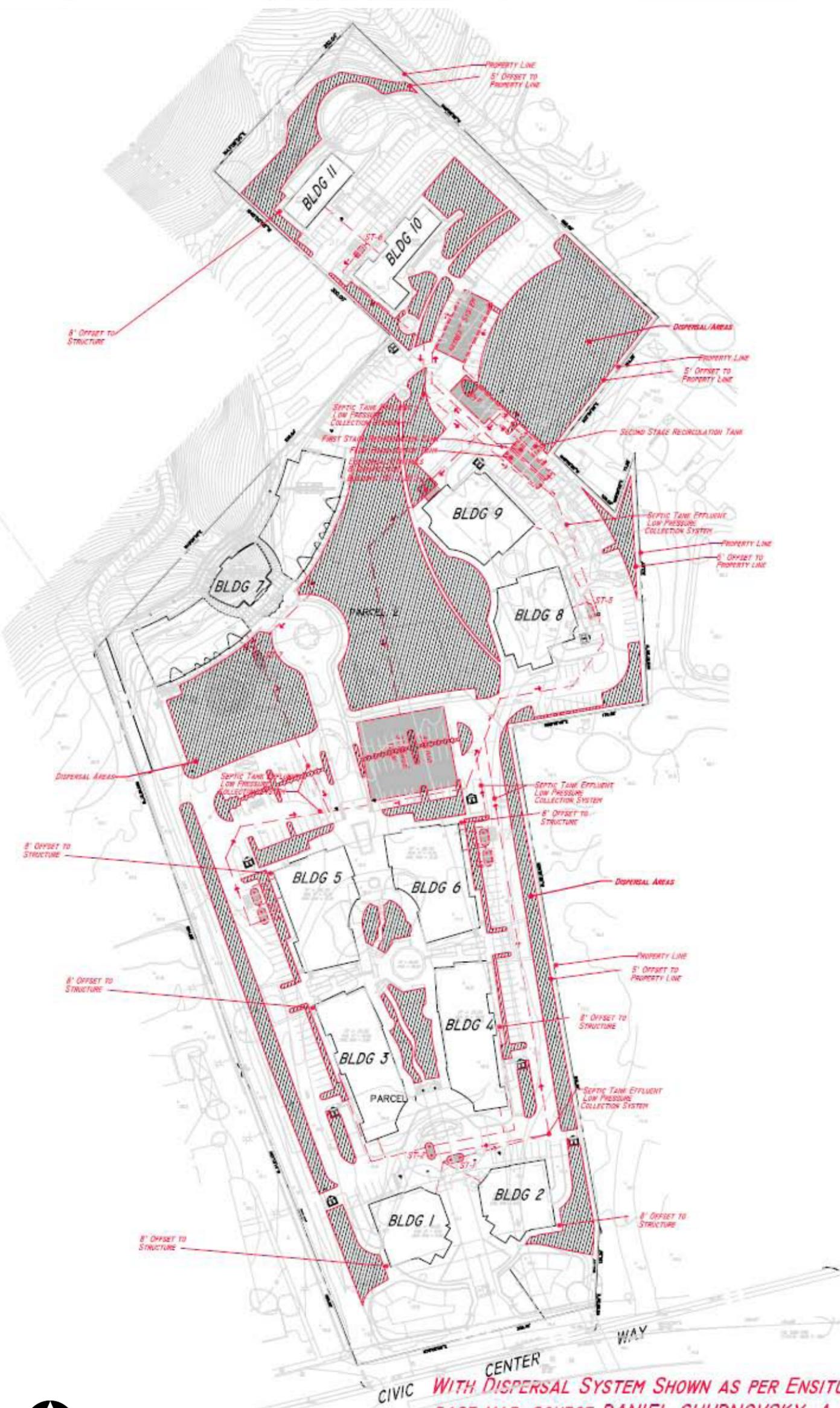
²² City of Malibu, Malibu Civic Center Specific Plan, Background Information, Existing Conditions, May 1996 (at Page V-9).

- ~~An operations and maintenance manual, also to be submitted to the owner/operator of the proposed OWTS.~~
- ~~A maintenance contract between the property owner and a third party, to be approved by the City.~~
- ~~City of Malibu Geologist and Geotechnical Engineer approval.~~
- ~~Proof of ownership of Project Site.~~
- ~~A covenant provided by the City of Malibu Environmental Health Specialist, executed between the City of Malibu and property owner. The covenant will be filed with the Los Angeles County Recorder's Office and will state the value of the OWTS.~~

Wastewater generation from the Proposed Project was estimated as a part of the Wastewater Management System Master Plan (WMSMP) prepared by Lombardo Associates, Inc., dated July 7, 2008 (see Appendix L to this Final EIR). This Section has been prepared based on excerpts from this Plan, unless otherwise noted.

As presented in Section II.C Project Characteristics, wastewater from the Proposed Project is proposed to be collected, treated, and reused on-site using the proposed onsite wastewater management system. This system would provide for the wastewater management needs of the Proposed Project and provide a source of non-potable water for reuse in commercial buildings (i.e., toilet flushing only) and for landscape irrigation. Wastewater design flows for the Proposed Project were calculated as a part of the Wastewater Management Master Plan (WMMP) prepared by Lombardo Associates, Inc. dated July 7, 2008, and were based on several factors including actual/comparable wastewater generation data for the nearby Malibu Creek Plaza. The wastewater design flows for the Proposed Project, based on the Los Angeles County Plumbing Code Table K-3 (Wastewater Design Flows) are estimated to be 37,120 gpd, as shown in Table V.I-7. However, based on the Malibu Creek influent data reported in the WMSMP the design capacity (or flow into) of the wastewater treatment system would be 28,000 gpd; based on Malibu Creek influent data and an influent equalization tank size of 28,000 gallons, the annual average daily wastewater flow would be 19,000 gpd (see Table 2.10). The City of Malibu Hydrogeology Review Sheet dated 6-28-08 identified the maximum sustained daily wastewater flow for the Proposed Project to be estimated at 24,700 gpd (See Appendix M to this Final EIR).

A site plan for the wastewater management system is presented in Figure VI-1 Wastewater Collection, Treatment, and Reuse System With Dispersal Areas Shown, and Figure VI-2 Wastewater Collection, Treatment, and Reuse System With Landscape Irrigation Areas Shown.



*WITH DISPERSAL SYSTEM SHOWN AS PER ENSITU PLANS
 BASE MAP: SOURCE DANIEL CHUDNOVSKY, A.I.A. ARCHITECTS, INC.*



Not to Scale

Source: Lombardo Associates, Inc., Wastewater Management Master Plan, July 7, 2008.



Not to Scale

Source: Lombardo Associates, Inc., Wastewater Management Master Plan, July 7, 2008.

Table V.I-7
Wastewater Design Flows for Proposed Project

Building	Retail Space (sf)	Flow from Retail (gpd)	Office Space (sf)	Max # Employees	Flow from Office Space (gpd)	Restaurant (# Seats)	Restaurant Flow (gpd)	Building Flow
Plumbing Code K-3 Assumptions	10 sf/gpd flow	0.1 gpd/sf	100 sf/employee		20 gpd/employee 0.2 gpd/SF		50 gpd/seat	
Parcel A								
Building 1	6,200	620	=	=	=	=	=	620
Building 2	6,200	620	=	=	=	=	=	620
Building 3	10,248	1,030	=	=	=	=	=	1,030
Building 4	10,240	1,030	=	=	=	=	=	1,030
Building 5	10,339	1,040	7,540	76	1,520	175	8,750	11,310
Building 6	10,290	1,030	7,540	76	1,520	175	8,750	11,300
Building 7	400	40	=	=	=	=	=	40
Total Flow for Parcel A		5,410			3,040		17,500	25,950
Parcel B								
Building 8	7,702	780	7,598	76	1,520	=	=	2,300
Building 9	7,883	790	7,757	78	1,560	=	=	2,350
Building 10			7,258	73	1,460	=	=	1,460
Building 11			5,236	53	1,060	=	=	1,060
Total Flow for Parcel B		1,570			5,600		0	7,170
Parcel C								
City Hall	=	=	20,000	200	4,000	=	=	4,000
Total Flow for Parcel C					4,000		0	4,000
TOTAL DESIGN FLOW		6,980			12,640		17,500	37,120
Source: Lombarbo Associates, Inc., July 7, 2008								
Note: The percentage of restaurant flow is estimated at 47%.								

Biosolids are a by-product of wastewater processing. They are produced from septic tanks and treatment plants. Septic tanks are periodically pumped out. Cartage of septic tank solids and liquid are also pumped when needed. Treatment plants produce biosolids that must be removed periodically from the site. Biosolids from Civic Center properties are either trucked to a sewer contributing to the Los Angeles Hyperion Treatment Plant (HTP) or are transported directly to the HPT for processing, reuse, or disposal. The Tapia treatment facility will not receive any sewage from the City of Malibu.²³ In November 1998, the HTP was upgraded to provide full secondary treatment for all wastewater based on an average dry weather flow of 450 million gallons per day (mgd). HTP currently processes average wastewater flows of approximately 362 mgd, resulting in a remaining capacity of approximately 88 mgd.²⁴ As such the HTP has the capacity to serve the project and impacts associated with disposal of bio solids would be less than significant.

In accordance with the City of Malibu Uniform Plumbing Code (UPC), the project plans include an on-site wastewater treatment system, ~~including a treatment plant,~~ which will treat wastewater according to UPC guidelines. ~~The treatment facility will be housed in an enclosed building on the southern side of the Project Site.~~ would include the components and technologies described in Section III.C Project Description and would be located as shown in Figures VI-1 and VI-2. In a letter dated July 16, 2008 (see Appendix K of this Final EIR), the City of Malibu has listed the requirements for the project OWTS.

For further discussion regarding the water quality requirements of OWTS, refer to Section V.F, Hydrology/Water Quality.

CUMULATIVE IMPACTS

Cumulative impacts related to wastewater in the project vicinity involve the combined effects of several private OWTSs operating within the Malibu Lagoon watershed. Potential adverse effects include “groundwater mounding” and groundwater quality impairment. Due to the relatively shallow groundwater table in the project vicinity, the effects of effluent from the proposed on-site wastewater treatment system could result in “groundwater mounding”, which may cause existing septic systems to fail. Groundwater mounding could adversely alter the characteristics of the soil, thus affecting the liquefaction potential of the soil beneath the proposed structures. The project hydrologic consultant Fugro West Inc., and Ensitu Engineering have demonstrated that the proposed OWTS will not result in a significant rise in groundwater levels across the site including the areas adjacent to the subterranean

²³ *City of Malibu, Malibu Civic Center Specific Plan, Background Information, Existing Conditions, May 1996 (at Page V-9).*

²⁴ *City of Los Angeles Department of Public Works, Bureau of Sanitation, Major Activities, website: <http://www.lacity.org/san/sanmact.htm>, February 7, 2008.*

parking structures. Additionally, as part of the City's Conformance Review contained in Appendix K to this Final EIR, the Proposed Project is conditioned to submit a cumulative impact analysis to the City of Malibu Geologist and Geotechnical Engineer in consultation with the City of Malibu Environmental Health Specialist. An AOWTS Final Design that is engineered to meet the effluent limits specified in WDRs, taking into account the Malibu Lagoon bacteria and nutrient total maximum daily load (TMDL) requirements of the RWQCB and the U.S. EPA, will be deemed to satisfy City of Malibu Environmental Health requirements for the LCP/LIP Cumulative Impact Analysis of groundwater quality. Similar to the Proposed Project, other developments proposed within the Civic Center would be reviewed and evaluated to determine the cumulative effect on adjacent properties. Therefore, cumulative impacts relative to soil stability would be less than significant.

With respect to water quality, the wastewater discharge of the related projects, as well as the Proposed Project, would be required to meet the TMDL standards set forth in the Waste Discharge Requirements which is considered a vehicle for moving towards attainment of federal and state water quality standards in the Civic Center area. Because the TMDL program requires the RWQCB to set water quality limits in the WDR based on an analysis of cumulative impacts, the City of Malibu Environmental Health ~~Administrator~~ Specialist will consider the project to be in conformance with the LCP Chapter 18 requirements for a cumulative Impact Analysis, provided that this condition is met. Therefore, the Proposed Project's contribution to cumulative wastewater impacts would be less than significant.

MITIGATION MEASURES

To ensure that no significant impacts to wastewater service occur, the following mitigation measures are required:

1. Detailed plans for the OWTS shall be submitted to the City of Malibu Environmental and Building Safety Department for review and approval.
2. The project Applicant shall obtain a Waste Discharge Permit from the Los Angeles Regional Water Quality Control Board (LARWQCB) prior to building permit issuance.
3. The project Applicant shall obtain an Operating Permit from the City of Malibu Environmental and Building Safety Department prior to construction.
4. Effluent for gray water/re-use irrigation in designated areas on-site shall at all times be a disinfected, high quality, filtered reclaimed water and shall not exceed the effluent quality limits of the RWQCB's Total Daily Maximum Load (TDML) requirements for the Malibu Creek Watershed.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Proposed Project would not create significant impacts to wastewater service.

V. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC UTILITIES
5. SOLID WASTE

REGIONAL AND ENVIRONMENTAL SETTING

Statewide Setting

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum amount feasible. Specifically, the Act required city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream away from landfill disposal by the year 2000 and 70 percent by the year 2020. The Act also requires each city and county to promote source reduction, recycling, and safe disposal or transformation.

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of the Act, including the above-noted diversion goals, and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the California Integrated Waste Management Board to update the Board on the city's progress toward the AB 939 goals. To date, implementation of AB 939 has proven to be a successful method of reducing landfill waste.

Regional and Local Setting

Public agencies and private companies within the County of Los Angeles administer solid waste management, including collection and disposal services and landfill operation. Los Angeles County Sanitation Districts, the City of Los Angeles, and private companies operate waste disposal sites. Transfer stations are used to temporarily store debris until larger hauling trucks are available to transport the materials directly to the landfills. Landfill availability is limited by several factors, some of which include the following: 1) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; 2) tonnage permit limitations; 3) operational constraints; and 4) corporate objectives of landfill owners and operators.

Solid waste in Los Angeles County is disposed of at a variety of landfills, depending on with whom the hauler has contracts. Waste from the Proposed Project will be hauled by GI Rubbish to either the

Calabasas Sanitary Landfill or the Simi Valley Landfill.²⁵ The Calabasas Landfill, located in Agoura, has approximately 23,674,000 cubic yards of capacity remaining with an average daily intake of 1,350 tons per day.^{26, 27} Under its initial approved capacity the Simi Valley Landfill had 6,700,000 cubic yards remaining, however due to a recently approved expansion it has 19,800,000 cubic yards of capacity remaining with an average daily intake of 2,200 to 2,400 tons per day.²⁸ The daily maximum intake at the Calabasas Landfill is 3,500 tons, the daily maximum at the Simi Valley Landfill is 3,000 tons.

Facility expansions and new landfills are being sought as existing facility capacity diminishes. Also, mandatory City waste reduction and recycling programs, in compliance with the September 1989 California Integrated Solid Waste Management Act, AB 939, are greatly reducing the amount of waste that would otherwise have entered area landfills.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The City of Malibu General Plan EIR considers the impacts created by the Proposed Project as being significant if implementation would:

- Result in an increased demand for solid waste facilities which exceeds either the existing capacity of the infrastructure (or financially feasible infrastructure that could be developed) required to service additional demand and or equipment, or
- Alter the nature of the demand for solid waste services causing increased costs or service delivery limitations.

The CEQA Guidelines (Appendix G) identifies applicable criteria for determining whether a project's impacts are considered to have a significant effect on the environment. A project is considered to create a significant impact if:

- It cannot be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, or

²⁵ Marilyn Gallagher, *Government Affairs, GI Rubbish Company, March 21, 2003.*

²⁶ *Remaining capacity as of March 31, 2003.*

²⁷ Felicia Ursitti, *Civil Engineer, Los Angeles County Sanitation Districts, May 14, 2003.*

²⁸ James P. Riley, *Environmental Engineer, Simi Valley Landfill and Recycling Center, May 15, 2003.*

- If it does not comply with federal, state and local statutes and regulations related to solid waste.

Project Impacts

Construction

Much of the solid waste generated during the construction phase such as wood, metal scrap, and formed construction board (cement and dry wall board) would be recycled and salvaged to the maximum feasible extent. Materials not recycled would be disposed of at local landfills, and possibly a Class III landfill for any hazardous materials. With the recycling of most of the solid waste generated by the construction phase of the Proposed Project, short-term construction impacts to landfills and solid waste service would be less than significant.

Operation

As can be seen in Table V.I-8, upon full occupancy of the Proposed Project, daily solid waste associated with the Proposed Project would be approximately 794 pounds of solid waste per day. Solid waste generated on-site would be disposed of in accordance with all applicable federal, state and local regulations related to solid waste. The Proposed Project would, as applicable for project operations, incorporate storage and collection of recycling items into the project design, including applicable provisions of ordinances related to hours of collection and operation of on-site equipment. Project design would reserve space adequate for the support of recycling, storage, and access, as appropriate.

Correspondence with the G.I. Rubbish Company has suggested that the Proposed Project would utilize a waste pick up service three times a week, using three trash bins, each three cubic yards in size and a recycling pick up service two times a week, using two trash bins of the same size. This level of service is expected to accommodate the solid waste generated by the Proposed Project.²⁹

²⁹ Marilyn Gallagher, *Government Affairs, GI Rubbish Company, March 21, 2003.*

**Table V.I-8
Solid Waste Generation by Proposed Project**

Development	Building Size (square feet)	Generation Rate ^a (lbs/10,000 sf/week)	Total Generation (lbs/day)
Parcel A			
Retail	53,917	420	324
Office	15,080	420	91
Parcel B			
Retail	23,918	420	144
Office	19,144	420	115
Parcel C			
Civic Center	20,000	420	120
Total Solid Waste Generation			794
^a City of Santa Monica, Master Plan Environmental Assessment, September 2000. (Solid waste generation rates for City of Malibu unavailable.)			

CUMULATIVE IMPACTS

Implementation of the Proposed Project in conjunction with the related projects identified in Section IV would further increase the amount of solid waste generated in the area and demand for solid waste services. As shown in Table V.I-9, the total solid waste generation by the Proposed Project and the related projects would be approximately 5,890 pounds per day (approximately 3 tons). The solid waste generation by the Proposed Project and the related projects are accommodated by private waste haulers. Cumulative solid waste generation would represent less than 0.1 percent of the remaining permitted daily amount accepted at both the Calabasas Sanitary Landfill and the Simi Valley Landfill.

As with the Proposed Project, future projects would be required to participate in recycling programs, thus reducing the amount of solid waste to be disposed of at the landfills. Source reduction and recycling programs mandated by AB 939 would also reduce cumulative solid waste generation. Although the Proposed Project and related projects would not produce an amount of solid waste that exceeds available landfill capacity, they would contribute to a significant adverse cumulative impact on solid waste disposal capacity caused by regional growth. Additional capacity to accommodate the cumulative disposal needs of the Proposed Project and related projects may become available as the County develops solutions to meet the future disposal needs at a regional level (e.g., expanding existing landfills, transporting waste to other landfills, converting waste to energy, recycling and waste reduction). Therefore, cumulative impacts upon solid waste services by the Proposed Project are less than significant.

**Table V.I-9
Solid Waste Generation by Proposed Project and Related Projects**

Development^a	Size	Generation Rate^b	Total Generation (lbs/day)
Commercial	65,389.5 sf	420 (lbs/10,000 sf/week)	392.3
Community Center	9,980 sf	420 (lbs/10,000 sf/week)	59.9
Health Spa	7,352 sf	420 (lbs/10,000 sf/week)	44.1
Hotel	174 rooms	20 (lbs/room/week)	497.1
Office	176,350 sf	420 (lbs/10,000 sf/week)	1,058.1
Multi-family Residential	36 du	35 (lbs/du/week)	180
Single-family Residential	14 du	70 (lbs/du/week)	140
Restaurant	12,693.5 sf	420 (lbs/10,000 sf/week)	76.2
Storage	56,600 sf	420 (lbs/10,000 sf/week)	339.6
University Campus	384,800 sf ^c	420 (lbs/10,000 sf/week)	2,308.8
		Subtotal	5,096.1
		Proposed Project Generation	794
		Total	5,890
^a Kaku Associates, Draft-Traffic and Circulation Study for the Malibu La Paz Project, December 2004 April 2005. ^b City of Santa Monica, Master Plan Environmental Assessment, September 2000. All non-residential/hotel uses assumed to be commercial for purpose of determining solid waste generation rate. (Solid waste generation rates for City of Malibu unavailable.) ^c City of Los Angeles, Pepperdine University Upper Campus Development Draft EIR, July 1998.			

MITIGATION MEASURES

To ensure that the least possible impact occurs, the following mitigation measures shall be implemented:

1. The Proposed Project shall recycle all construction debris in a practical, available, and accessible manner, to the maximum extent feasible, during the demolition and construction phases.
2. Where economically feasible, the Proposed Project shall incorporate the use of recycled materials in building materials, furnishing operations and building maintenance.
3. The design of the Proposed Project shall allocate space for a recycling collection area for use by both on-site employees and visitors.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to solid waste services or capacity would be less than significant.