APPENDIX C1
Sewer Study

SEWER STUDY
Prepared by Bill Bielefeld
(Last Revised 9/20/02)

Environmental Setting

The project site is vacant. Baseline (existing) conditions are assumed by this analysis to be zero.

The City of Los Angeles Department of Public Works, Bureau of Sanitation operates four wastewater treatment and water reclamation plants within a 600-square-mile service area. The largest of these is the Hyperion Treatment Plant (HTP), which is located in Playa del Rey. HTP is designed with a 450 million gallon-per-day (MGD) capacity. Over two-thirds of the City's wastewater, primarily from the central and western sections of the City, are treated at Hyperion[1]. The project site will contribute to the 360 MGD to 400 MGD sewage flow now treated at Hyperion.

In 1998, the City's four wastewater treatment and water reclamation plants will have the combined capacity to provide secondary treatment to a daily flow of 580 MGD. The first phase of the new secondary treatment system at Hyperion was placed in operation in 1995, with the second phase presently under construction. Effluent discharged from Hyperion currently meets all of the 1998 State and Federal water quality standards, except those for biochemical oxygen demand.

There are about 6,500 miles of mainline sewers in the Hyperion Service Area. Five major sewers collect and convey wastewater to the HTP. The majority of the wastewater system is completely separate from the stormwater collection system. However, flows from selected storm drains are being diverted to Hyperion for treatment in order to keep beaches and the Santa Monica Bay as clean as possible.

Most of the daily flow receiving secondary treatment is discharged deep into Santa Monica Bay through a five-mile submerged pipeline. Approximately 10 percent of the effluent is recycled for process and irrigation uses within Hyperion. Another 60 MGD is planned for dumping to the West Basin Municipal Water District recycled water treatment plant in El Segundo, where it will be marketed for various reuse projects throughout the South Bay region.

[1] City of Los Angeles, Department of Public Works, City San, 1998.

11444 West Olympic Blvd.
Suite 750
West Los Angeles, CA 90064-1549

310.954.3700
310.954.3777 Fax
www.psomas.com

Environmental Impact Analysis

Upon construction and occupancy of the proposed 29 new homes, the project site would generate approximately 9,570 gallons of sewage per day, as tabulated in Table 3.

Table 3
Project-Related Wastewater

Land Use	Number of Units	Generation Factor (GPD)	Gallons Per Day (GPD)
Residential	29 units	330	9,570

Recent studies by the Bureau of Sanitation have found that there has been a successful use of residential water conservation devices. Over the past five to ten years, the residential generation factor has been reduced. For some areas, the factor could be set as low as 250 GPD. This report will continue to use the old standard, which leads to a more conservative analysis.

The project's 9,570 GPD sewage flow will not adversely affect HTP treatment capacity. The City had adopted the sewer permit allocation Ordinance 160060, July, 1990, in order to regulate the issuance of sewer connection permits in the HTP service area. This ordinance is no longer followed because of the completion of expansion projects at HTP.

The project's wastewater will require two separate connections to the existing sewage system. Canyonback Road will gravity-flow through an eight-inch main to an existing main. Stoney Hill Road will require a gravity collection main that flows to a pump station. The pump station would then pump the wastewater northerly to the existing sewer main in Stoney Hill Road, which is part of the existing Mountaingate development. The wastewater would then flow along with a portion of Mountaingate sewage in an existing eight-inch main to an 18-inch trunk main in Sepulveda Boulevard. Presently, there are two eight-inch connections to this trunk main from the Mountaingate tract. Adequate trunk sewer capacity is available for the proposed project.

The sewers, laterals and pump stations required to collect wastewater within the tract will be developer-installed. When adequate drawings are prepared for the tracts, lots, roadways, sewers, services and pump station, financial agreements can be completed between the City and the Developer. Included in the financial agreement will be sewage facility charges that allow the projects to pay a share of the cost of treatment facilities.

Cumulative Impacts

The Mountaingate tract was originally planned for the construction of approximately 476 units (homes). The proposed project is a small part of this total, and together with the master plan development would have a cumulative sewage generation of approximately 189,280 GPD, as tabulated in Table 4. This flow can be treated adequately at the HTP facility.

Table 4
Cumulative Wastewater

Land Use	Number of Units or Square Feet	Generation Factor (GPD)	Gallons Per Day (GPD)
Proposed Residential Project	29 u	330	9,570
Existing Residential	447 u	330	147,510
Office	48,000 sf	150	7,200
Restaurant (Assumed Banquet)	26,544 sf	800	21,200
Retail	47,499 sf	80	3,800
TOTAL	**476 u**		**189,280**

Mitigation Measures

1. The installation of low-flush toilets, low-flush showers and faucets, designed to reduce water consumption are now required by Los Angeles Municipal Codes. Project applicant compliance with Los Angeles Municipal Code requirements shall serve to reduce sewage impacts on HTP.

2. Compliance with the requirements of the City's Water Conservation Ordinance No. 163532 shall be required.

3. Compliance with Section 64.11.2 of the Los Angeles Municipal Code, which requires the payment of a Sewer Facilities Charge prior to the recordation of the Final Tract Map, shall be required.

Adverse Impacts

Adequate trunk-sewer capacity is available for the proposed project. Following implementation of all recommended mitigation measures and standard code requirements, no significant adverse environmental impacts would result for sewage. The treatment facility at HTP will adequately process the anticipated cumulative wastewater generated by the Mountaingate projects.