
13. UTILITIES

This SEIR chapter describes the water, sewer, and solid waste service implications of the proposed Stanford Outpatient Center project, focusing on project and regulatory provisions that differ from those addressed in the 1996 Midpoint Technology Park Final EIR and 1998 SEIR.

13.1 WATER SERVICE

13.1.1 Setting

This section updates the water service information included in the 1996 EIR.

(a) Existing Water Supply. Potable water is provided for the project site and most of the city by the Redwood City Water Department, which purchases its entire supply from the City and County of San Francisco, through the San Francisco Public Utilities Commission (SFPUC). Redwood City is one of 30 public and private wholesale water customers in Alameda, Santa Clara, and San Mateo Counties that purchase water from the SFPUC, under the terms of a master contract that allocates 184 million gallons per day (mgd) for wholesale use outside San Francisco. This total supply is allocated among the wholesale customers by individual contracts between the SFPUC and each user. Under the terms of its current contract, Redwood City is guaranteed an annual, assured supply of 12,243 acre-feet (10.93 mgd), subject to drought or other shortages beyond the SFPUC's control.

For at least the past six years, Redwood City has been exceeding its allotment by between 200 and 1,400 acre-feet per year (af/yr). The SFPUC has been able to satisfy the City's excess demand by drawing on water allocations that are not being fully used by other wholesale customers. Long-range projections indicate that the City expects these current water transfers of 200 to 1,400 af/yr to temporarily end by 2010, with reintroduction and gradual increase of the water transfers to 750 af/yr by the year 2030. Total water use is projected to increase by 2,189 af/yr over this 25-year period, with the shortfall made up through gradual expansion of the City's wastewater recycling program to nearly 2,000 af/yr.¹

(b) Existing Distribution Facilities. Water is supplied to the project site through a network of City-owned water mains that, in the project area, includes a 10-inch main on Broadway and an 8-inch main that runs through the site on the abandoned Douglas Avenue right of way. Fire protection is provided by hydrants on Broadway and in the parking lot behind 440 Broadway, and also by each building's internal fire suppression system. When the Midpoint Technology Park was developed, the City determined that the existing water system was able to deliver adequate hydrant flows while also meeting the buildings' domestic and fire suppression requirements.² It is noted, though, that the *2005 Urban Water Management Plan* reported that

¹City of Redwood City; *2005 Urban Water Management Plan*; December 19, 2005.

²LCP Associates, Planning Consultants. *Draft Environmental Impact Report for the Midpoint Technology Park*; September 1996.

the City may need to add storage facilities in the Friendly Acres area (which includes the project site) to address pressure drops that can now occur during prolonged interruptions in the SFPUC supply.¹

(c) Existing Water Demand. The applicant's engineer previously estimated the water demand of the four project buildings by assuming that the buildings supported a 50/50 mix of office and R&D uses.² According to Attachment Q, "Water Demand Projection Worksheet," of the Redwood City Engineering Design Standards, commercial offices have an average water demand of 130 gallons per day per 1,000 square feet (gpd/1,000 sf), while R&D space has an average demand of 210 gpd/1,000 sf. Using the 50/50 assumption, the estimated average water demand for the previous @Home occupancy would have been 170 gpd/1,000 sf, resulting in a total demand of approximately 61,285 gpd for the four buildings (360,500 square feet).

13.1.2 Pertinent Plans and Policies

The adopted Redwood City Strategic General Plan does not contain objectives or policies pertaining directly to water service; however, section 64562 of the California Health and Safety Code requires all public water systems to have sufficient water available from their water sources and distribution reservoirs to supply adequately, dependably, and safely the total requirements of all users under maximum demand conditions before agreement is made to permit additional service connections to a system (i.e., a *water supply* must be established before any specific location for development can be considered).

13.1.3 Supplemental Impacts and Mitigation Findings

(a) Supplemental Analysis Scope. The scope of this supplemental water service analysis is limited to identification of the mitigating (beneficial) effects of, and any additional adverse impacts associated with, the proposed project changes.

(b) Significance Criteria. The current (2006) CEQA Guidelines suggest water service significance criteria different from those included in the 1996 EIR. Based on the current CEQA Guidelines, the project would be described in this SEIR as having a significant environmental impact related to water supply or service if it would:³

- (1) Result in the provision of, or the need for, new, expanded or physically altered facilities to maintain acceptable service ratios or other performance objectives for water service, the construction of which could cause significant environmental effects;
- (2) Result in the need for new or expanded water supply entitlements; or
- (3) Result in a water service condition that is inconsistent with any applicable land use plan, policy, or regulation of an agency that has jurisdiction over the project, including California Health and Safety Code provisions and Redwood City Strategic General Plan provisions, adopted for the purpose of avoiding or mitigating an environmental effect.

¹2005 *Urban Water Management Plan*. Normal system operating pressures throughout the lower parts of Redwood City are maintained through connection to the SFPUC aqueducts. When this system goes down for maintenance or during an emergency, the City has to rely on water stored in its 12 reservoirs.

²Letter from Daniel Schaefer, Brian Kangas Foulk, Engineering Consultants to the Applicant, to Jon Lynch, City Engineer, Redwood City; March 9, 2005.

³CEQA Guidelines, Appendix G, items XVI(b) and (d), and IX(b).

(c) Pertinent Project Changes. Stanford Hospital & Clinics, the project applicant, proposes to renovate and convert four of the 14 existing buildings located within the Midpoint Technology Park to create a new Stanford Outpatient Center, including a change in land use from office/R&D to medical clinic. The project would include additional water service hook-ups as necessary.

(d) Supplemental Impacts and Mitigations:

Supplemental Impact Due to Increased Water Demand. The previously cited City "Water Demand Projection Worksheet" lists "medical offices (other than hospitals)" as having an average water demand of 180 gpd/1,000 sf, or 10 gpd/1,000 sf more than under the project site's previous use (as calculated in subsection 13.1.1, Setting, herein). This change would equate to a 3,605 gpd (six percent) increase in total demand, which is less than the City Water Department's 100,000 gpd threshold for assessment of water system impacts and payment of associated fees. As a result, the proposed change in land use would not be expected to significantly affect existing water system supplies or operations, even though the City is currently using more than its contractual allocation from the SFPUC. As noted above, the City expects that a combination of excess SFPUC supply and recycled water use will be adequate to meet projected City demand for water through the year 2030. According to a representative of the City's Water Department, these projections include the minor increases in demand expected to result when existing buildings are converted to new uses, such as proposed for the project site.¹

The expected increase in demand on the project site would also not meet the threshold of Senate Bill (SB) 610, requiring the local water supplier for a proposed project (in this case, the City) to determine if the project's anticipated demand has been included in its long-range planning and if any new water supplies will be needed to meet that demand. Under SB610, a "project" is defined as a minimum of 500 dwelling units or hotel/motel rooms, 500,000 square feet of retail space, 250,000 square feet of office space, 40 acres or 650,000 square feet of industrial space, or any project that would have a demand equal to more than 500 dwelling units. The proposed project is creating minimal new space (e.g., for two lobbies and an enclosed walkway), and its projected increase in water demand is equivalent to approximately ten single-family homes, so the provisions of SB 610 would not apply.

Although the project would not substantially affect local water supplies, any retrofit of the existing interior plumbing systems would have to comply with California Assembly Bill 325, the Water Conservation and Landscaping Act. This act was adopted to limit the impact of future water shortages and minimize the environmental impacts associated with increased surface water diversions, generally by curtailing water use. The provisions of the act direct local governments to require the use of low-flow plumbing fixtures and the installation of drought-tolerant landscaping for all new development.

Based on the above analysis, the proposed project changes would result in a ***less-than-significant project and cumulative impact*** on water supply and service.

¹Peter Ingram, City of Redwood City, Public Works Services Director; personal communication, February 7, 2005.

Supplemental Mitigation. No significant project or cumulative impact has been identified; no supplemental mitigation is required.

13.2 SEWER SERVICE

13.2.1 Setting

This section updates the sewer service information included in the 1996 EIR.

(a) Treatment and Institutional Arrangements. The project site is located in the Fair Oaks Sewer Maintenance District (FOSMD, or the District). FOSMD is a San Mateo County benefit assessment district established for the collection and conveyance of wastewater to Redwood City facilities, which then convey it to the South Bayside System Authority (SBSA) wastewater treatment plant. This plant, which is jointly owned by the West Bay Sanitary District and the cities of Belmont, San Carlos and Redwood City, provides a secondary level of treatment with final effluent discharge into San Francisco Bay. The plant's permitted dry weather capacity is 29 million gallons per day (mgd), of which 14.1 mgd, almost 49 percent, is allocated for Redwood City's use. Through a contractual arrangement, 2.2 mgd, or approximately 20 percent of Redwood City's total allocation, is made available to treat wastewater generated within the FOSMD.¹ The cost of these outside treatment and conveyance services is included in the sewer charges paid by all FOSMD customers.

According to a representative of the Redwood City Public Works Department, the City currently does not know if FOSMD is exceeding its treatment allocation, because the meter used to monitor inflow at the point of connection to the City's collection system no longer works. As a result, the City would like to see the meter repaired and the status of the District's allocation confirmed before any new connections or other increases in flow (such as conversion of existing uses) are approved.²

FOSMD covers portions of Woodside, Atherton, Redwood City, and unincorporated San Mateo County. Because these areas are mostly built out, a representative of the San Mateo County Department of Public Works (which is responsible for operation of the FOSMD), does not expect wastewater flows to grow substantially in the future or cause the District to exceed its Redwood City treatment allocation (subject to resolution of the flow metering issue).³

(b) Wastewater Collection. In the project vicinity, the FOSMD collection system extends throughout the commercial/industrial neighborhood surrounding the project site, draining by gravity from south to north into a 30-inch-diameter trunk line on the north side of U.S. 101. This trunk line runs west alongside the freeway till just before Woodside Road, then crosses to the south side before discharging into the Redwood City collection system near the end of Veterans Boulevard.

¹Anne Stillman, San Mateo County Department of Public Works; personal communication, February 15, 2006.

²Chu Chang, Engineering and Construction Manager, Redwood City; personal communication, February 16, 2006.

³Stillman.

City-owned 30-inch-diameter and 33-inch-diameter trunk lines take the wastewater to a 48-inch main at Walnut Street that carries most of the City's wastewater to the main SBSA pumping station at the end of Maple Street, back on the north side of the freeway. This station discharges into a 52-inch force main that runs west and north along the edge of San Francisco Bay to the SBSA treatment plant, at the north end of Redwood Shores. According to a City official, this entire system has adequate dry weather capacity, but City discharges to the Maple Street pumping station occasionally exceed the station- and force-main capacity during periods of peak wet weather flow. As noted above, it is currently unknown how much of this excess flow originates within the FOSMD collection system.¹

Wastewater from the existing buildings on the project site is divided between two segments of the local FOSMD collection system. Four-Forty Broadway drains to Line 900, which runs from east to west through the rear parking lot, following the abandoned Douglas Avenue right of way to Line 100 in the remaining portion of Douglas Avenue. Line 100 then runs north underneath the freeway to the previously described 30-inch trunk line. Four-Twenty and 450 Broadway drain to Line 800 in Broadway, which runs east to Line 200 at the (theoretical) intersection of Broadway and Barron Avenue. Line 200 runs north in Barron, picking up wastewater from 430 Broadway before it reaches Rolison Road, and then continues under the freeway to the 30-inch trunk line.²

(c) Existing Wastewater Generation. The 1996 *Midpoint Technology Park Utilities Study* used an average wastewater generation rate of 80 gallons per day per 1,000 square feet (80 gpd/1,000 sf), resulting in a total average daily flow of 38,000 gpd for the approximately 475,000 square feet of proposed net new development anticipated in 1996 for the 48.4-acre Technology Park. The Study also determined that Lines 100 and 200 were already carrying peak wet weather wastewater flows³ that exceeded their full-flow capacity by as much as 82 percent on Line 200 and 155 percent on Line 100. To measure the Technology Park's impact on these lines, the average discharge rate was increased by 300 percent (a "peaking" factor that accounts for fluctuations in wastewater production over the course of a day), and then divided between the two collectors. These calculations showed that peak flows would increase by 23.3 gpm (3 percent) in Line 100 and by 55.8 gpm (2.1 percent) in Line 200. Because this represented only a minimal increase of already deficient peak flow conditions, the 1996 Technology Park Utilities Study concluded that capacity upgrades should not be the responsibility of the project applicant, but that the applicant should pay a proportionate share of any future systemwide improvements undertaken by FOSMD.⁴ This conclusion was repeated in the Midpoint Technology Park EIR (Impact and Certified Mitigation 7-3), which also

¹Grace Lee, City of Redwood City, Engineering and Construction Department; personal communication, February 21, 2006.

²Brian Kangas Foulk, Consulting Engineers; *Midpoint Technology Park Utilities Study*; August 27, 1996.

³Peak flows during the dry season occur as wastewater production varies over the course of a day. Peak flows are higher during the rainy season because a combination of inflow and infiltration (I&I) is added to the base, dry weather flow. Inflow is mainly caused by the connection of private storm drain lines to the sanitary sewer system, while infiltration is caused by groundwater seepage through leaking pipe joints and broken sewer mains. Both problems are common within older collection systems.

⁴Brian Kangas Foulk, August 27, 1996. It is noted the Technology Park's cited peak flow contributions included wastewater discharges from all six new buildings, only four of which, totaling approximately 360,500 square feet, are included in the currently proposed Stanford Outpatient Center project. In addition, wet weather I&I was not included in these calculations, because it had already been accounted for within the pre-existing local collection system.

recommended the deficient lines be monitored to provide early identification of excess flow conditions before they resulted in overflows or unacceptable back-ups.¹

Downstream of these local collection lines, the 1996 Technology Park Utilities Study estimated that total Technology Park flows would equal less than 0.8 percent of total capacity within the 30-inch-diameter trunk line that connects FOSMD to Redwood City's collection system; it was therefore concluded the project's impact on this facility would not be significant.²

FOSMD reports that several collection system improvements have been completed since construction of the Midpoint Technology Park, but it does not appear they fully addressed the pre-existing capacity problems in Lines 100 and 200.³ No improvements have been made to Line 100, and the segment of Line 200 between Broadway and Rolison Road was replaced with a slightly longer line of the same diameter. Calculations prepared for this SEIR indicate that this replacement may have increased capacity within the segment by approximately 50 percent (from 1,423 gpm to 2,130 gpm), but, even with this improvement, Line 200 would still provide only about 80 percent of the capacity needed to accommodate previously estimated peak flow rates prior to construction of the Midpoint Technology Park.⁴

13.2.2 Pertinent Plans and Policies

The adopted Redwood City Strategic General Plan contains no objectives or policies related to sewer service and pertinent to potential environmental impacts of the proposed project.

13.2.3 Supplemental Impact and Mitigation Findings

(a) Supplemental Analysis Scope. The scope of this supplemental sewer service analysis is limited to identification of the mitigating (beneficial) effects of, and any additional adverse impacts associated with, the proposed project changes.

(b) Significance Criteria. The current (2006) CEQA Guidelines suggest sewer service significance criteria different from those included in the 1996 EIR. Based on the current CEQA Guidelines, the project would be expected to have a significant impact on sewer service if it would:⁵

- (1) Exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board;

¹LCP Associates, Planning Consultants. Draft Environmental Impact Report for the Midpoint Technology Park; September 1996.

²Brian Kangas Foulk, August 27, 1996.

³Stillman.

⁴The principal flow constraint in Line 200 between Broadway and Rolison was within a 365-foot section with a very flat 0.12 percent slope. The other section had a much higher capacity because its 0.47 percent slope was nearly four times as steep. If the change in grade between existing manholes at Broadway and Rolison was evenly distributed over the entire length of the longer replacement sewer, its slope would be approximately 0.2 percent, resulting in a peak capacity of 2,108 gpm, or 478 gpm less than needed to accommodate pre-Midpoint Technology Park peak flow rates.

⁵ CEQA Guidelines, Appendix G, items XVI(a), (b), and (e), and IX(b).

- (2) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts;
- (3) Result in a determination by the wastewater treatment provider that serves the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or
- (4) Result in a public service condition that is inconsistent with any applicable land use plan, policy, or regulation of an agency that has jurisdiction over the project, including the Redwood City Strategic General Plan, adopted for the purpose of avoiding or mitigating an environmental effect.

Regarding significance criteria (1), (2), and (4) above, the sewer service evaluation in this section concludes that the proposed project changes would result in less-than-significant impacts.

(c) Pertinent Project Changes. The project includes renovation and conversion of applicant, proposes four of the 14 existing buildings located within the Midpoint Technology Park to create a new Outpatient Center, including a change in land use from office/R&D to medical clinic. The project would include additional sewer service hook-ups as necessary.

(d) Supplemental Impacts and Mitigations.

Supplemental Impact 13-1: Increased Peak Wastewater Flows in the Local FOSMD Collection System. It is estimated that the proposed Stanford Outpatient Center would increase peak flows in existing collector sewers in Douglas Avenue and in Barron Avenue by approximately two percent over flow rates projected upon build-out of the Midpoint Technology Park. Since these lines were already operating substantially over their design capacities before development of the Technology Park, these additional project-related flows could represent a ***potentially significant project and cumulative impact*** (see criterion [3] under subsection 13.2.3[b], "Significance Criteria," above).

Explanation:

According to Attachment L of the Redwood City Engineering Design Standards, typical wastewater generation citywide is currently estimated as 95 percent of domestic water consumption (excluding irrigation). As a result, water demand calculations prepared by the applicant's engineer indicate the proposed Stanford Outpatient Center project's average wastewater flow would increase by approximately six percent, from 58,220 gpd to 61,645

gpd.¹ This increase would equal less than two-tenths of one percent (0.155%) of FOSMD's 2.2 mgd allocation of conveyance and treatment capacity from Redwood City.

This estimated change in average daily flow would result in a peak flow increase of 7.1 gpm,² with approximately 21 percent (1.5 gpm) discharged into FOSMD Line 100 and 79 percent (5.6 gpm) into Line 200.³ These additional peak flows would increase flow rates in Lines 100 and 200 by 0.2 percent above the rates calculated in the 1996 *Midpoint Technology Park Utilities Study* and EIR⁴; however, the proposed conversion would likely have a greater impact on the FOSMD collection system than these numbers indicate, because the 1996 impact calculations were based on a wastewater generation rate of 80 gpd/1,000 sf, rather than the current water demand rate of 170 gpd/1,000 sf cited in subsection (d) above (based on a letter from the applicant's engineer to the City Engineer). If it is assumed that the proposed project changes would increase wastewater generation rates from 80 gpd/1,000 sf to 171 gpd/1,000 sf (95 percent of the proposed clinic's estimated water demand), the net increase for the proposed 360,500-square-foot project would be 32,805 gpd, rather than 3,425 gpd, over the site's previous use. This higher daily flow rate would increase the proposed project's peak flow contribution to the FOSMD collection system beyond the levels calculated in the previous paragraph. Peak flows in Line 100 would increase by 14.2 gpm, or 1.8 percent, while peak flows in Line 200 would increase by 54.1 gpm, or 2.0 percent, over the peak flow rates expected to result after build-out of the Midpoint Technology Park.⁵ These increases in wastewater generation would be added to an existing collection system that is already operating over its design capacity.

¹Letter from Daniel Schaefer, Brian Kangas Foulk, Consulting Engineers to the Applicant, to Jon Lynch, City Engineer, Redwood City; March 9, 2005. As described in section 13.1 (Water Service) and outlined in the cited letter, the proposed medical clinics would have a water demand of approximately 180 gpd/1,000 sf, while the previous use had an assumed average demand of 170 gpd/1,000 sf (130 gpd/1,000 sf for offices; 210 gpd/1,000 sf for R&D). The expected change in total wastewater production can be found by multiplying these water demand figures by 95% and applying them to the project's 360,500 square feet of total floor area:

180 gpd/1,000 sf x 95%	= 171 gpd/1,000 sf x 360,500 sf	= 61,645 gpd
170 gpd/1,000 sf x 95%	= 161.5 gpd/1,000 sf x 360,500 sf	= <u>58,220</u> gpd
Net increase		= 3,425 gpd

²(3,425 gpd flow increase x 300%) / 1,440 minutes/day = 7.1 gpm

³The *Midpoint Technology Park Utilities Study* determined the project site would have a total peak flow of 60 gpm, with 12.5 gpm (20.8%) discharged to Line 100 and 47.5 gpm (79.2%) discharged to Line 200. These percentages have been applied to the SEIR calculations of the proposed project's impact on each sewer line.

⁴The 1996 Utilities Study estimated pre-development peak flow rates of 767 gpm in Line 100 and 2,673 gpm in Line 200. Dividing the proposed project's peak flow contributions by these figures yields percentage increases of 0.196% and 0.21%, respectively.

⁵The cited percentage increases are obtained by dividing the estimated, project-related flow increase within each sewer line by the sum of pre-Midpoint Technology Park development flows and flows attributable to the Technology Park itself, as cited in the 1996 Utilities Study:

Line 100 = 14.2 gpm) (766.6 gpm + 23.3 gpm)	= 1.80%
Line 200 = 54.1 gpm) (2,672.9 gpm + 55.8 gpm)	= 1.98%

Supplemental Mitigation 13-1. The project applicant's engineer shall work with FOSMD and the San Mateo County Engineering Department to re-evaluate existing peak flow conditions in the local collection network, particularly Lines 100 and 200, to determine if peak flows expected to be generated by the proposed project changes would result in total flows exceeding adopted operational and/or pipe-flow criteria. In the event FOSMD determines that specific collection system improvements are required, the project applicant would contribute its fair share toward the design and construction of these improvements by the County. Implementation of these measures would reduce the identified impact to a ***less-than-significant level***.

Because the over-capacity conditions in Lines 100 and 200 pre-existed both the development of the Midpoint Technology Park and the proposed Stanford Outpatient Center, the project sponsor should not be responsible for implementation of all the required improvements, only payment of a fair share, as described in *Mitigation 13-2* and prescribed by CEQA Guidelines section 15041 (Authority to Mitigate). Section 15041 states, "A lead agency for a project has authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the 'nexus' and 'rough proportionality' standards established by case law."

Supplemental Impact 13-2: Increased Wastewater Discharges to Redwood City Facilities. Preliminary calculations indicate the proposed project changes would increase FOSMD flows to the Redwood City collection system by approximately 32,800 gpd, which could exceed FOSMD's current conveyance and treatment allocation. This would represent a ***potentially significant project and cumulative impact*** (see criterion [3] in subsection 13.2.3[b], "Significance Criteria," above).

Explanation:

The estimated increase in average daily flow from the project site would equal approximately 1.5 percent of FOSMD's 2.2 mgd Redwood City allocation. Until the FOSMD flow meter is placed back into service and existing flow rates are documented, this increase would be considered a potentially significant project and cumulative impact.

Supplemental Mitigation 13-2. The project applicant shall be required to:

(a) Coordinate with FOSMD to identify and implement off-site measures designed to reduce existing wastewater flows originating from other properties, thereby freeing up the capacity needed to accommodate the proposed Stanford Outpatient Center's increased wastewater production, and

(b) Pay its fair share toward FOSMD's acquisition from Redwood City of any additional sewer capacity required for the project.

Implementation of measures (a) and (b) above would ensure that the identified project and cumulative sewer impact would be limited to a ***less-than-significant level***.

In summary, the potential significance of this impact may be greater than the calculated two percent peak flow increase would indicate. Because the site has been vacant for several years, the additional flows introduced to the collection system when the project changes are complete and the buildings occupied would increase peak flows by almost five percent on Line 100 and four percent on Line 200 over current conditions. In addition, changes that may have occurred elsewhere within these lines' upstream drainage areas since development of the Midpoint Technology Park could have further increased existing peak flow rates, making the proposed Outpatient Center's contribution even more significant.

13.3 SOLID WASTE SERVICE

13.3.1 Setting

This setting updates the solid waste service information included in the 1996 EIR.

(a) Solid Waste Collection and Disposal Services. BFI Peninsula in San Carlos provides solid waste collection, recycling, transportation, and disposal services to Redwood City and other Peninsula cities. Residential and commercial solid waste from Redwood City is taken to the South Bayside Integrated Facility, located on Shoreway Road in San Carlos.

(b) Integrated Facility and Landfill Capacity. The South Bayside Integrated Facility in San Carlos accepts Class III wastes from Redwood City and a number of surrounding communities. The current permitted through-put capacity of the Integrated Facility is 3,000 tons per day.¹ Total annual waste disposal for Redwood City is estimated at 98,043 tons (which takes into account the City's current estimated 60 percent diversion rate).²

¹California Integrated Waste Management Board Solid Waste Information System (SWIS) website [www.ciwmb.ca.gov/SWIS], accessed March 2, 2006.

²Rick Simonson, Hilton Farnkopf & Hobson, LLC; written communication, March 1, 2006.

After leaving the South Bayside Integrated Facility, materials are then transferred to Ox Mountain Landfill, a Class III landfill in Half Moon Bay which accepts a slightly broader range of materials than the transfer station. The Ox Mountain landfill has a permitted through-put capacity of 3,598 cubic yards per day, and total capacity of 37,900,000 cubic yards of material. The expected closure date of this landfill is in the year 2018.¹

(c) Recycling and Waste Diversion. The BFI Recyclery is also located on Shoreway Road, adjacent to the Integrated Facility and BFI administrative offices in Redwood City. BFI operates a voluntary curbside recycling program in its service area, including Redwood City. Materials accepted include plastic, glass, aluminum, tin, paper, and newspaper. Recyclables are picked up once a week along with regular waste and then processed at the BFI Recyclery, which also operates an on-site Buy-Back Center open to the public.

In 1998, the California Integrated Waste Management Board (CIWMB) approved Redwood City's waste stream diversion estimates of 46 percent (103,089 tons disposed of a total 191,025 tons generated). In 2004, the most recent year for which figures are available, the City reported a 60 percent diversion rate (which has not yet been approved by the CIWMB).²

13.3.2 Pertinent Plans and Policies

The adopted Redwood City Strategic General Plan contains no objectives or policies related to solid waste service and pertinent to potential environmental impacts of the proposed project.

13.3.3 Supplemental Impact and Mitigation Findings

(a) Supplemental Analysis Scope. This section describes impacts associated with the proposed conversion of the existing site buildings to Outpatient Center use. The scope of this supplemental analysis is limited to identification of the mitigating (beneficial) effects of, and any additional adverse impacts associated with, the proposed land use change.

(b) Significance Criteria. The significance criteria used in the 1996 EIR are not the same as those suggested in the current (2006) CEQA Guidelines. Based on the current CEQA Guidelines, the project would be expected to have a significant impact on solid waste service if it would:³

- (1) Result in a need for new or physically altered facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for solid waste service;
- (2) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- (3) Fail to comply with federal, state, and local statutes and regulations related to solid waste.

¹SWIS website.

²Simonson.

³CEQA Guidelines, Appendix G, items XIII(9), XVI(f-g), and IX(b).

(c) Hazardous Waste. Chapter 7 (Hazards and Hazardous Materials) of this SEIR addresses the handling and disposal of medical waste anticipated from the proposed project changes.

(d) Supplemental Impacts and Mitigations:

Supplemental Impacts on Solid Waste Service. The proposed project land use changes would increase demands for solid waste collection and disposal services. Based on average solid waste generation rates for the proposed project land uses,¹ the Stanford Outpatient Center would be expected to generate a total of approximately 21,340 pounds (10.67 tons) per day of solid waste, an increase of approximately 19,400 pounds (9.7 tons) per day of solid waste beyond that projected in the 1996 EIR for the proposed @Home office/R&D buildings.

This increase and total would not represent an inordinate amount of solid waste for the project size, i.e., a rate inconsistent with adopted land use plans, policies, or regulations, and could be adequately served by landfills with sufficient capacities to accommodate both the project and anticipated future solid waste disposal needs. Therefore, project and cumulative impacts on solid waste service are considered ***less-than-significant***.

Supplemental Mitigation. The proposed Stanford Outpatient Center would be subject to the recycling program identified in the 1996 EIR (Certified Mitigation 7-2). No additional significant project cumulative impact has been identified; no supplemental mitigation is required.

¹Average solid waste generation rates are estimated at 0.059 pound/square foot/day for "medical office/hospital" uses. These rate estimates were derived by Wagstaff and Associates from data provided by the California Integrated Waste Management Board (CIWMB) (www.ciwmb.ca.gov/WasteChar/WasteGenRates). Accessed March 2, 2006.