

# Santana West Project Water Supply Assessment

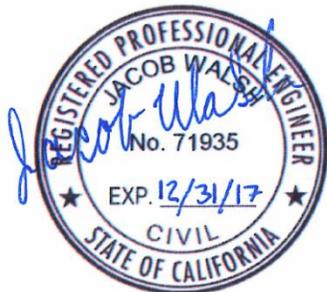
---

*January 2016*



## Prepared by

Jacob Walsh, P.E.  
Engineering Unit Manager



Andy Yang, P.E.  
Senior Civil Engineer



## Reviewed by

Bill Tuttle, P.E.  
Director of Engineering  
Water Services and Planning

## Table of Contents

Background & Purpose .....	2
Service Area & Population .....	3
Climate .....	3
Past, Current and Future Water Use .....	3
Water Rights, Contracts and Entitlements .....	5
Sources of Water – SJWC System .....	6
Groundwater Analysis – SJWC System .....	7
Water Supply Vulnerability .....	9
Transfer and Exchange Opportunities .....	10
Supply Reliability .....	10
Water Demand Management Measures .....	12
Supply and Demand Comparison .....	12
Summary .....	14

## Figures

- 1 Regional Map
- 2 Santana West Project Local Map

## Appendix

- A City of San Jose Water Supply Assessment Request

**S**an Jose Water Company (SJWC) is one of the largest privately owned water systems in the United States, providing high-quality, low-cost water and exceptional customer service to nearly one million residents of Santa Clara County since established in 1866.

## Background & Purpose

The Santana West Project (Project) is a 12.99-acre proposed development. The Project includes the redevelopment of six parcels where three movie theaters (Century 21, 22, and 23), a restaurant, and a large surface parking lot are currently located. The redevelopment involves the demolition of the Century 22 and 23 theater buildings, the construction of up to 970,000 square feet (SF) of office space, and 29,000 SF of retail space. The new buildings are proposed to be six to nine stories in height with above grade and below grade parking structures. The Century 21 Theater building will be retained as a historic City Landmark. See Figures 1 and 2 (attached) for regional and local project vicinity maps.



Source: [www.svmodern.com](http://www.svmodern.com)

This Water Supply Assessment (WSA) describes the relationship between existing and future water supplies and presents SJWC's strong ability to provide a diverse water supply to match build-out water demands under both normal and dry years. Based on Santa Clara Valley Water District's Urban Water Management Plan through year 2035 and conservation methods currently employed, SJWC is able to meet the needs of the service area through at least 2035 for normal and single-dry years. SCVWD has determined that water shortages could occur in the event of an extended 6-year drought period, and are planning to make investments as recommended in the SCVWD Water Supply and Infrastructure Master Plan such that no greater than 20% shortages are expected through year 2035 based on Santa Clara County's historic hydrology. Shortages in multi-year droughts will need to be compensated by consumer conservation.

This WSA is written in response to California Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221); legislation which requires water retailers to demonstrate whether their water supplies are sufficient for certain proposed subdivisions and large development projects subject to the California Environmental Quality Act. SB 610 includes the requirements for detailed water supply assessments, and SB 221 includes the requirement for written verification of sufficient water supply based on substantial evidence. SB 610 requires that a WSA be prepared by the local water retailer and submitted within 90 days to the requesting agency.

## Service Area & Population

SJWC's service area spans 139 square miles, including most of the cities of San Jose and Cupertino, the entire cities of Campbell, Monte Sereno, Saratoga, the Town of Los Gatos, and parts of unincorporated Santa Clara County.

The population of SJWC's service area, including growth associated with this Plan Area, is shown in the following table. These projections are based on the Association of Bay Area Governments' population projections and were included in SJWC's 2010 Urban Water Management Plan.

**Table 1: Current and Projected SJWC Service Area Population**

2010	2015	2020	2025	2030	2035
946,494	1,017,684	1,084,352	1,154,824	1,224,564	1,293,771

## Climate

The San Jose area experiences a low-humidity climate with an annual average of 14 inches of rain. Daily average temperatures range from the mid 60's to the high 80's (°F) in spring and summer and from the mid 40's to mid 50's (°F) in the winter. Most of the precipitation in the area occurs between November and March with December and January typically being the wettest months. Further climate data is listed in the table below.

**Table 2: Climate Data**

	Jan	Feb	Mar	Apr	May	Jun
<b>Average Max Temperature (°F)</b>	58.0	62.1	65.6	69.8	74.4	79.3
<b>Average Min Temperature (°F)</b>	41.5	44.2	45.7	47.6	51.2	54.8
<b>Average Precipitation (in)</b>	2.9	2.5	2.1	1.1	0.4	0.1
<b>Evapotranspiration (in)</b>	1.5	1.9	3.4	4.7	5.4	6.3

	Jul	Aug	Sept	Oct	Nov	Dec	Annual
<b>Average Max Temperature (°F)</b>	82.1	81.8	80.7	74.6	65.1	58.1	71.0
<b>Average Min Temperature (°F)</b>	56.9	57.0	56.2	51.9	46.0	41.7	49.5
<b>Average Precipitation (in)</b>	0.0	0.1	0.2	0.7	1.6	2.5	14.2
<b>Evapotranspiration (in)</b>	6.7	6.0	4.5	3.3	1.8	1.5	47.0

## Past, Current and Future Water Use

The majority of connections to SJWC's distribution system are either residential or commercial. SJWC also provides water to industrial, municipal, private fire service, and hydrant connections. The following table lists current and projected connection counts per customer type based on historical trends for the past forty years of approximately 0.5% annual service connection growth.

**Table 3: Number of Water Use Connections for SJWC**

Customer Type	2010	2015	2020	2025	2030	2035
Single Family	170,042	174,335	178,738	183,251	187,878	192,622
Multi Family	30,007	30,765	31,542	32,338	33,155	33,992
Business	20,605	21,125	21,659	22,206	22,766	23,341
Industrial	75	77	79	81	83	85
Public Authority	1,447	1,484	1,521	1,559	1,599	1,639
Resale	36	37	38	39	40	41
Other	162	166	170	175	179	184
<b>Total</b>	<b>222,374</b>	<b>227,989</b>	<b>233,746</b>	<b>239,649</b>	<b>245,700</b>	<b>251,904</b>

Annual water usage projections are estimated to increase 0.4% from 2009 usage data (2010 was an abnormally low-usage year) which is based on historical usage increases.

**Table 4: SJWC Water Use by Customer Type (AF/yr)**

Customer Type	2010	2015	2020	2025	2030	2035
Single Family	62,532	67,327	68,685	70,070	71,482	72,923
Multi Family	11,035	11,881	12,121	12,365	12,615	12,869
Business	41,854	45,064	45,973	46,899	47,845	48,810
Industrial	496	534	545	556	567	578
Public Authority	6,173	6,646	6,780	6,917	7,056	7,198
Resale	581	625	638	651	664	677
Other	163	175	179	183	186	190
<b>Total</b>	<b>122,834</b>	<b>132,254</b>	<b>134,920</b>	<b>137,640</b>	<b>140,415</b>	<b>143,246</b>

SJWC's total demand is not limited to the above metered customer use. Between six and seven percent of the water produced (pumped, treated, or purchased) is not billed. Non-revenue water includes authorized unmetered uses for firefighting, main flushing and public use, while unauthorized usage is primarily attributed to leakage, meter reading discrepancies, reservoir cleaning, malfunctioning valves, and theft.

**Table 5: SJWC Total System Demand (AF/yr)**

	2010	2015	2020	2025	2030	2035
<b>Customer Metered Demand</b>	122,834	132,254	134,920	137,640	140,415	143,246
<b>Non-Revenue Water</b>	9,024	9,649	9,844	10,042	10,245	10,451
<b>Total System Demand</b>	<b>131,858</b>	<b>141,903</b>	<b>144,764</b>	<b>147,682</b>	<b>150,660</b>	<b>153,697</b>

**Water Use Associated with the Santana West Project**

Total water usage for this Project is estimated at 104,300 gallons per day (gpd), which is equivalent to an annual usage of approximately 117 acre-feet of water. However, the site being developed as part of this Project has existing water usage, which will be eliminated. Water usage at the existing

site is on average 6,000 gpd or 7 acre-feet per year. Therefore, the annual net demand increase in water usage associated with this Project is really 110 acre-feet, which represents a 0.08% increase in demand based on the 2010 water demand of 131,858 acre-feet. The projected water demand for this Project is within normal growth projections for water demand in SJWC’s system.

**Table 6: Total Water Demand Estimated for Project**

Existing Demand (gpd) <sup>1</sup>	Office Space (SF)	Retail Space (SF)	Water Demand Factor		Net Total Demand (gpd)	Net Demand (AF/yr)
			Office (gpd/SF)	Retail (gpd/SF)		
6,000	970,000	29,000	0.10	0.25	98,300	110

<sup>1</sup>Existing Demand based on 2013 Annual Daily Average Usage

### Water Rights, Contracts and Entitlements

SJWC has “pre-1914 surface water rights” to raw water in Los Gatos Creek and local watersheds in the Santa Cruz Mountains. Prior to 1872, appropriative water rights could be acquired by simply taking and beneficially using water. In 1914, the Water Code was adopted and it grandfathered in all existing water entitlements to license holders. SJWC filed for a license in 1947 and was granted license number 10933 in 1976 by the State Water Resources Control Board to draw 6,240 AF/yr from Los Gatos Creek. SJWC has upgraded the collection and treatment system that draws water from this watershed which has increased the capacity of this entitlement to approximately 11,200 AF/yr for an average rain year.



In 1981, SJWC entered into a 70-year master contract with SCVWD for the purchase of treated water. The contract provides for rolling three-year purchase schedules establishing fixed quantities of treated water to be purchased during each period. Water is treated at one of three SCVWD-operated treatment plants (Rinconada, Penitencia and Santa Teresa). SJWC and SCVWD currently have a three-year treated water contract for fiscal years 2014/2015 – 2016/2017, with contract supply ranging from 69,050 AF/yr in 2014/2015 to 70,584 AF/yr in 2016/2017.

SJWC asks for and receives underground water rights in conjunction with new developments. SJWC has the right to withdraw groundwater from aquifers below said property when in compliance with SCVWD’s permitting requirements. In Santa Clara County, this right is subject to a groundwater extraction fee levied by SCVWD based on the amount of groundwater pumped into SJWC’s distribution system. SJWC generally uses the most economical source of water, which is largely determined by SCVWD’s groundwater extraction fee and contracted water rates.

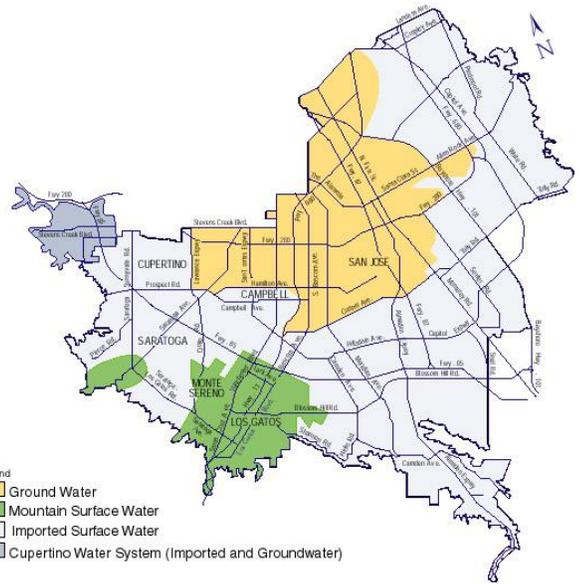
**Sources of Water – SJWC System**

SJWC has three sources of potable supply: groundwater, imported treated surface water and local surface water. A map of where each source is the predominant source is shown to the right.

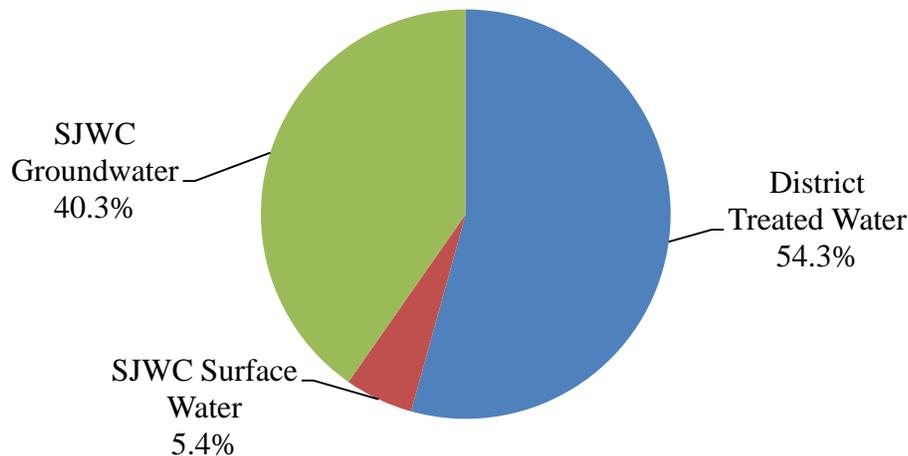
On average, groundwater from the major water-bearing aquifers of the Santa Clara Valley subbasin comprise one third of SJWC’s potable water supply. These aquifers are recharged naturally by rainfall and streams, and artificially mainly by recharge ponds operated by SCVWD.

SJWC is under contract with SCVWD in the purchase of just over fifty percent of the needed water supply. This water originates from several sources including local reservoirs, the State Water Project and the federally funded Central Valley Project San Felipe Division. Water is piped into SJWC’s system at various turnouts after it is treated at one of the three SCVWD water treatment plants (Rinconada to the west-side pipeline and Penitencia and Santa Teresa to the east-side pipeline).

SJWC’s final source of supply is from surface water in the local watersheds of the Santa Cruz Mountains. It typically provides about ten percent of the water supply depending on the amount of annual rainfall. A series of dams and automated intakes collect the water released from SJWC’s lakes. The water is then sent to SJWC’s Montevina Filter Plant for treatment prior to entering the distribution system. SJWC’s Saratoga Treatment Plant draws water from a local stream which collects water from the nearby Santa Cruz Mountains. The following pie chart shows SJWC’s 2013 supply source breakdown for potable water.



**SJWC Sources of Water for 2013**



The following table shows the actual amount of water supplied to SJWC’s distribution system from each source in 2010 as well as the projected amounts until 2035. Projected surface water is based on a long-term average at SJWC. Groundwater and SCVWD Treated Water projections include SJWC’s plan to acquire additional water needed for development projects by installing production wells within the distribution system, by purchasing additional treated water from SCVWD and by utilizing recycled water from the South Bay Water Recycling Program. The overall long-term strategy for groundwater as discussed in the 2003 SCVWD Integrated Water Resource Planning Study (IWRP) is to maximize the amount of water available in the groundwater basins to protect against drought and emergencies. SCVWD seeks to maximize the use of treated local and import water when available.

**Table 7: Current and Planned Water Demand – With Additional Conservation (AF/yr)**

	2010	2015	2020	2025	2030	2035
<b>SCVWD Treated Water</b>	64,783	72,636	74,344	76,086	77,864	79,677
<b>SJWC Groundwater</b>	51,107	57,187	58,340	59,516	60,716	61,940
<b>SJWC Surface Water</b>	15,968	12,080	12,080	12,080	12,080	12,080
<b>Total System Demand</b>	131,858	141,903	144,764	147,682	150,660	153,697
<b>Recycled Water</b>	1,208	2,556	4,980	5,234	5,501	5,782
<b>Additional Conservation</b>	4,886	5,106	5,300	5,438	5,579	5,579
<b>Total with Conservation</b>	137,952	149,565	155,044	158,354	161,740	165,058

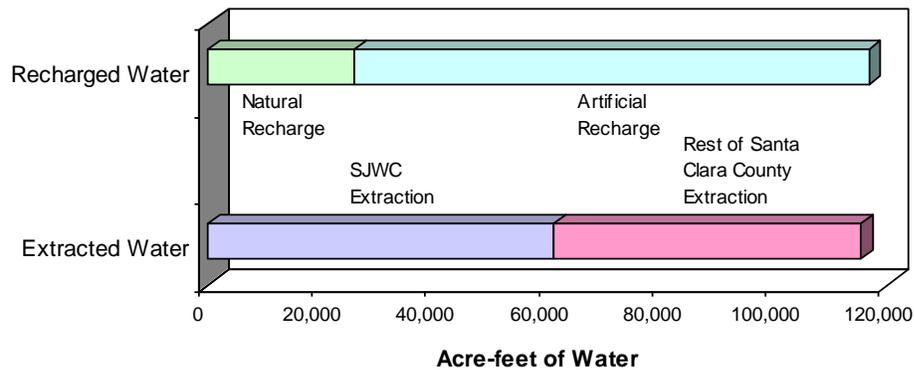
Conservation is an additional source of water that offsets potable water demand and increases system flexibility. SJWC projects an increase in conservation through 2035 to over 5,500 AF/yr. This is anticipated with the increase in the use of ultra-low flush toilets, high efficiency toilets, low flow showerheads, water efficient appliances, individual conservation, and the reduction in landscaping due to development. With the help of SCVWD, SJWC has projected additional conservation totals through 2035.

### Groundwater Analysis – SJWC System

SJWC draws water from the Santa Clara Valley subbasin (basin) in the north part of Santa Clara County. The basin extends from near Coyote Narrows at Metcalf Road to the County’s northern boundary. It is bounded on the west by the Santa Cruz Mountains and on the east by the Diablo Range; these two ranges converge at the Coyote Narrows to form the southern limit of the basin. The basin is 22 miles long and 15 miles wide, with a surface area of 225 square miles.

According to SCVWD, 115,358 acre-feet of groundwater was extracted from the basin in 2001. SCVWD estimates that 26,000 acre-feet were naturally recharged to the basin and 90,700 acre-feet were artificially recharged to the basin, mainly through recharge ponds. The following chart shows the water balance of the basin in 2001.

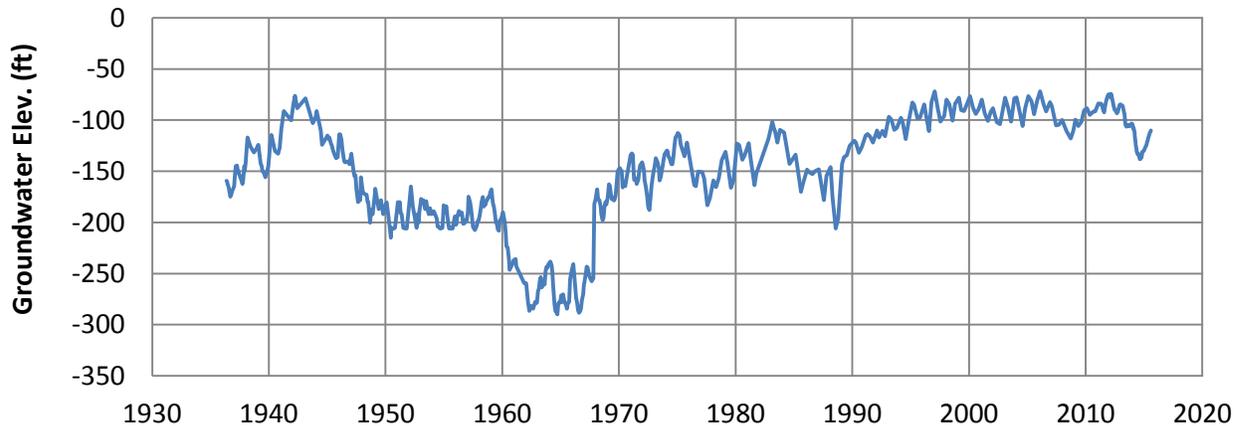
**Santa Clara Valley Groundwater Basin Water Balance (2001)**



Generally, the groundwater elevation in the basin has been steadily on the rise for over 40 years under the management of SCVWD. The following chart shows groundwater elevation in the Santa Clara Subbasin since the mid 1930’s using the well surface elevation as the datum. SCVWD has set up a successful artificial recharge system employing local reservoirs, percolation ponds, and an injection well to supplement the natural recharge of the basin to prevent overdraft. In the spring of 2012, the groundwater basin level was high at most SJWC well fields and was well prepared for the effects of a multi-year drought. The high groundwater levels were a result of less pumping, an increased use of imported water, and recharge of water into the aquifer by SCVWD.

SCVWD’s 2010 Urban Water Management Plan states that the operational storage capacity of the basin is estimated to be 350,000 acre-feet. In 2012, the Santa Clara Valley Groundwater Basin had a volume of approximately 341,000 acre-feet. However, due to a severe drought in the State of California since 2013, the amount of imported surface water available has gone down dramatically. Water from the Federal Water Project in 2014 has been available at 50% of normal, but water from the State Water Project has had an allocation of only 5%. As a result, SJWC has been relying more heavily on groundwater which has caused the groundwater elevation to decline. Should the drought continue, total groundwater storage is projected to drop to 200,000-250,000 acre-feet. It is, however, unlikely that this historic drought will persist. Therefore, it is expected that the groundwater elevation will rebound and that the groundwater basin will be replenished.

**Groundwater Elevation in Santa Clara Subbasin  
(Well ID: 07S01W25L001)**



SCVWD will continue to work with SJWC and other local water retailers to refine future projections of both treated water and groundwater use to ensure planning efforts are consistent. Groundwater from the basin is a substantial source of water for SJWC’s entire distribution system. From 2010 to 2013, groundwater has been the source for approximately one third of SJWC’s total supply. However, due to the recent drought conditions, from January to October 2014 groundwater has accounted for nearly 60% of SJWC’s total supply. The following table shows the groundwater SJWC pumped from the basin from 2010 to 2014.

**Table 8: Amount of Groundwater Pumped by SJWC (AF/yr)**

Basin Name	Metered or Unmetered	2010	2011	2012	2013	2014 (Jan-Oct)
Santa Clara Valley Subbasin	Volumetric meter data	51,107	38,501	39,696	57,708	65,590
Groundwater as a percent of total potable water supply		38.8%	29.0%	28.8%	40.3%	58.3%

Groundwater, which has historically been a vital source of supply for SJWC, has become all the more critical for SJWC particularly due to recent drought conditions. However, when weather conditions return to average historical conditions, the currently inflated groundwater usage in the SJWC service area will subside. Based on SJWC’s projections, groundwater usage is expected to comprise, on average, approximately 40% of the total potable supply and will continue to be a vital source of supply. The following table based on SJWC’s 2010 Urban Water Management Plan shows groundwater pumping projections and groundwater as a percentage of total supply until 2035.

**Table 9: Amount of Groundwater Projected to be Pumped (AF/yr)**

Basin name	2015	2020	2025	2030	2035
Santa Clara Valley Subbasin	57,187	58,340	59,516	60,716	61,940
Percent of Total Potable Water Supply	40.3%	40.3%	40.3%	40.3%	40.3%

### Water Supply Vulnerability

SJWC has identified multiple sources of water for the Project which would provide a high quality, diverse and redundant source of supply. For added backup, SJWC incorporates diesel fueled generators into its facilities system which will operate wells and pumps in the event of power outages. Since SCVWD influences over 90% of SJWC’s annual water supply, SJWC will continue to work with SCVWD to ensure water supply for this Project is reliable, while the impact to the existing Santa Clara Valley subbasin is minimal.

SCVWD recommends in their 2003 IWRP that water supply sources be maintained at 95% reliability during significant water shortages that occur during multiyear droughts. To accomplish this, SJWC can use less groundwater in certain areas or zones to achieve the overall balance which best meets SCVWD’s and SJWC’s operational goals.

## Transfer and Exchange Opportunities

SJWC's distribution system has interties with the following retailers in the San Jose area: City of Santa Clara, City of San Jose Municipal Water, City of Milpitas, Great Oaks Water and the SCVWD West Pipeline in Cupertino. The connection to the SCVWD West Pipeline allows SJWC to provide water to the Cupertino leased system that SJWC operates. SJWC currently has no plans to use these interties for normal system operation as they are exclusively used for potential emergency sources.

## Supply Reliability

SJWC applied the base years that SCVWD used for the average water year, single-dry water year and multiple-dry water years in the 2010 Urban Water Management Plan. The water years used by SJWC are listed in the table below.

**Table 10: Basis of Water Year Data**

Water Year Type	Base Year(s)
Average Water Year	2002
Single-Dry Water Year	1977
Multiple-Dry Water Years	1987-1991

Documented in the following table is the quantity of water SJWC received from each source of water during the average water year, single-dry water year and multiple-dry water years.

**Table 11: Supply Reliability – Historic Conditions (AF/yr)**

Water Source	Average Water Year (2002)	Single Dry Water Year (1977)	Multiple Dry Water Years				
			Year 1 (1987)	Year 2 (1988)	Year 3 (1989)	Year 4 (1990)	Year 5 (1991)
District Treated	90,815	36,220	57,879	65,935	81,405	64,143	63,093
Local Surface	8,167	1,364	4,576	3,548	6,500	3,719	6,435
Groundwater	56,475	72,962	92,257	81,964	37,020	55,363	42,513
<b>Total</b>	<b>155,457</b>	<b>110,545</b>	<b>154,712</b>	<b>151,447</b>	<b>124,925</b>	<b>123,225</b>	<b>112,042</b>
<b>Percent of Average Year:</b>		71.1%	99.5%	97.4%	80.4%	79.3%	72.1%

Besides a drought, other factors which could cause SJWC's sources of supply to become inconsistent are summarized below.

**Table 12: Factors Resulting in Supply Inconsistency**

Supply	Legal	Environmental	Water Quality	Climatic	Mechanical
Local Surface		x	x	x	x
Ground Water		x	x	x	x
SCVWD Treated Water	x	x	x	x	x

*Legal* - SCVWD is responsible for managing water resources in Santa Clara County, including the long-range planning for additional supplies and/or conservation needed to meet future water demands. SJWC and other retailers work closely with SCVWD to coordinate the purchase of treated imported water and the extraction of groundwater from retailer-owned wells. This activity is important to the operation of the countywide water supply and distribution system and the retailers are dependent on SCVWD's long-range resource planning.

In determining the long-range availability of water, considerations must also be given to decisions at the state or federal level that are out of the SCVWD's control. SCVWD has contracts for water deliveries with both the State Water Project (SWP) and the Federal Central Valley Project (CVP). Due to flow restrictions for the protection of water quality and the habitat of fish and wildlife in the Delta, water deliveries may be reduced from previous levels. During critical dry periods the SCVWD can expect additional reductions in water deliveries. Long-range planning success depends on the SCVWD's ability to obtain adequate imported water supplies and on proper management of the local groundwater basin.

*Environmental & Climatic* - SCVWD contracts with the State of California to receive raw water from the California Central Valley through the State Water Project (SWP). Water supplied through this aqueduct (which originates from the Sacramento-San Joaquin Delta) may be limited because of subsidence problems which are beginning to occur in that area and due to pumping restrictions associated with the protection of endangered species. SCVWD has also contracted with the Federal Central Valley Project (CVP) to supply raw water from the San Joaquin Valley via the Santa Clara Conduit. The reliance of water from inland sources through the SWP or the CVP is very critical; the loss of any or all of these sources due to pipe failure, levee failure, earthquake, or human intervention can have an extreme effect on SJWC's water supply. Given the above factors which could result in an inconsistent water supply, it is crucial that SJWC have sufficient backup wells and pumping capacity to supply customers for as long as several months solely from groundwater sources. SJWC believes it has this capacity in an emergency if mandatory conservation is enacted.



*Water Quality* - The quality of groundwater in the basins, surface water from the Santa Cruz Mountains, or the raw water supply to SCVWD's treatment plants could decrease or be contaminated such that existing treatment facilities are not adequate to meet current drinking water standards. Contamination could cause a source of supply to become unusable until further treatment techniques are utilized, or the contamination is no longer a threat to the source of supply.

*Mechanical Failures* - All sources of water require mechanical equipment to bring water to the public. Mechanical failures may cause water service shutdowns until repairs are made. To reduce the occurrence of failures, SJWC routinely inspects above-grade facilities at all stations. In addition, SJWC has created and implemented infrastructure replacement programs for all wells, pumps, and pipelines. To reduce the impact of mechanical failures, SJWC's maintenance department is staffed 24-hours, seven-days a week to respond to and repair any water related emergency.

## Water Demand Management Measures

SJWC provides a full range of water conservation services to both residential and commercial customers. The cornerstone of SJWC's conservation programs is the water audit program. The audit program is an excellent method for customers to learn about ways to reduce their consumption, as well as identify and fix any leaks they may have. The audits are performed at a customer request, typically in response to a high water bill concern and/or in response to marketing efforts. Audits are performed for both residential and commercial customers.

SCVWD offers conservation programs, such as rebates for high efficiency toilets and washing machines. SJWC takes advantage of all regional rebate programs and all of SCVWD's rebate programs are offered to SJWC customers. Typically customers are recommended to specific rebate programs during the course of a water audit based on a customer's need. Customers can also access rebates directly from retail outlets when purchasing equipment such as high efficiency washing machines. SJWC collaborates with SCVWD on public outreach and education including such items as customer bill inserts and conservation campaign advertising.

SJWC has also increased the outreach and educational programs on outdoor water use. SJWC constructed a water-smart demonstration garden that is open to the public (see photo to the right). Customers can visit the garden in person or take a virtual tour on SJWC's website. SJWC also developed a dedicated water wise landscaping website where customers can access a plant information database that includes hundreds of low water use plants as well as a photographic database of water wise gardens in the San Jose-Santa Clara County area. The landscaping website and the demonstration garden tour can be accessed from the SJWC home web page.



In addition to these programs, SJWC engages in other activities that contribute to the overall goal of reducing water waste, but are not specifically designated as conservation or water management programs. These include SJWC's meter calibration and replacement program, corrosion control program, valve exercising program and metering all service connections.

## Supply and Demand Comparison

To strengthen water supply reliability, SJWC has established a well replacement program. The adopted program identifies and replaces two wells per year based on numerous criteria, including a well's production and observed water quality problems. The replacement of older wells and optimization of existing wells should allow SJWC to meet future groundwater demands. SJWC's projected supply and demand is listed in the following table, which shows SJWC's projected supply is sufficient to meet projected demand.

**Table 13: Supply and Demand Comparison – Normal Year (AF/yr)**

	2010	2015	2020	2025	2030	2035
<b>Supply</b>	131,858	141,903	144,764	147,682	150,660	153,697
<b>Demand</b>	131,858	141,903	144,764	147,682	150,660	153,697
<b>Difference</b>	0	0	0	0	0	0

Listed in the following tables are comparisons between the 2010 and 2035 projected supply and demand during normal, single-dry and multiple-dry year droughts. These numbers were generated by multiplying the current and 2035 demands by the percentages of normal water supply SJWC experienced during the 1977 single year and the 1987-1992 multi-year droughts. During these drought times, SJWC may experience shortages of supply and will enact the current Water Shortage Contingency Plan. Although there appears to be shortages during droughts, in reality voluntary and involuntary water conservation greatly reduces demand. SJWC foresees meeting all future demands.

**Table 14: 2010 Supply and Demand for Normal, Single-Dry and Multiple-Dry Years (AF/yr)**

2010 Supply & Demand	Normal Water Year	Single-Dry Water Year	Multiple-Dry Water Years				
			Year 1	Year 2	Year 3	Year 4	Year 5
<b>Supply Total</b>	131,858	93,751	131,199	128,430	106,014	104,563	95,070
<b>Demand Total</b>	131,858	93,751	131,199	128,430	106,014	104,563	95,070
<b>Difference</b>	0	0	0	0	0	0	0

**Table 15: 2035 Supply and Demand for Normal, Single-Dry and Multiple-Dry Years (AF/yr)**

2035 Supply & Demand	Normal Water Year	Single-Dry Water Year	Multiple-Dry Water Years				
			Year 1	Year 2	Year 3	Year 4	Year 5
<b>Supply Total</b>	153,697	109,279	152,929	149,701	123,572	121,882	110,816
<b>Demand Total</b>	153,697	109,279	152,929	149,701	123,572	121,882	110,816
<b>Difference</b>	0	0	0	0	0	0	0

## Summary

This Water Supply Assessment represents a comprehensive water supply plan for the Santana West Project. In summary:

- (1) Total water usage for this Project is estimated at 117 acre-feet per year. However, the existing development, which is being replaced, uses an average of 7 acre-feet per year. Therefore, the estimated net system increase in water demand for the Project is 110 acre-feet per year or a 0.08% increase in system demand when compared to SJWC's 2010 potable water demand.
- (2) SJWC currently has contracts or owns rights to receive water from the following sources:
  1. Groundwater - from the Santa Clara Valley Subbasin
  2. Imported surface water - from the Santa Clara Valley Water District
  3. Local surface water - from Los Gatos Creek and Local Watersheds
  4. Recycled water – from South Bay Water Recycling
- (3) Based on Santa Clara Valley Water District's Urban Water Management Plan through year 2035 and conservation methods currently employed, there is sufficient water available to supply the Project. Also, the projected water demand for this development is within normal growth projections for water demand in SJWC's system.

SJWC works closely with the District to manage its demands and imported water needs. After evaluating demands estimated for the Project and information summarized in this Water Supply Assessment, San Jose Water Company concludes that sufficient water supply exists to serve the Santana West Project.

# Santana West Project - Regional Vicinity



Service Layer Credits: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCANI, GEBCO, NOAA, increment P Corp.

# Santana West Project

## Proposed Renovation of Century Theaters



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

December 18, 2015

Bill Tuttle, P.E.  
Director of Engineering  
San Jose Water Company  
1265 S. Bascom Ave.  
San Jose, CA 95128

**RE: WATER SUPPLY ASSESSMENT FOR DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE  
“SANTANA WEST” PROJECT IN SAN JOSÉ (FILE NO. PDC14-068)**

Dear Mr. Tuttle,

As the Lead Agency, the City of San José is preparing an Environmental Impact Report for the *Santana West* project, located in San Jose. The proposed project is a Planned Development Rezoning of six parcels from Commercial General (CG) to Planned Development CP (PD) to allow the construction of a phased development that would include demolition of the two non-historic theater buildings on-site (Century 22 and 23), construction of up to 970,000 square feet of office space and 29,000 square feet of retail space, and retention of the Century 21 Theater building. Parking would be provided in above grade and below grade parking structures within the new buildings.

The 12.99 gross-acre project site is located west of Winchester Boulevard between Olin Drive and Olsen Drive (3161 Olsen Drive).

A description of the proposed project and location maps are included in the Notice of Preparation, attached. In accordance with the requirements of State law (SB 610) and the California Environmental Quality Act (CEQA) Guidelines, the City of San José requests that you provide an analysis of whether the San Jose Water Company has adequate water supply to serve this project.

Please advise the City whether this proposed development was included under the latest Urban Water Management Plan (UWMP). If the proposed development was not accounted for in the UWMP, please provide the City with a water supply assessment (WSA) identifying if the projected water supply for the next 20 years, based on normal, single year, and multiple dry years, and including existing and planned future water users, is adequate to meet the demand projected for the proposed development. In conformance with California’s Water Code Section 10910(d)(1), the WSA shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system. In addition, the following information shall be provided in the WSA:

- a) Written contracts or other proof of entitlement to an identified water supply;
- b) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system;
- c) Federal, State, and local permits for construction of necessary infrastructure associated with delivering the water supply; and
- d) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

If the water supply for this project will also include groundwater, please also provide the following additional information in your WSA analysis:

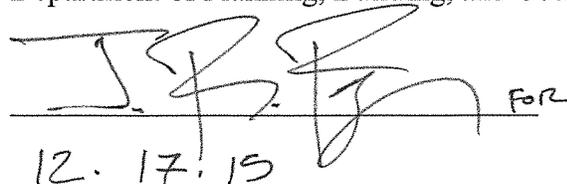
- e) A review of any information contained in the UWMP relevant to the identified water supply for the proposed project;
- f) A description of any groundwater basin or basins from which the proposed project will be supplied;
- g) A detailed description and analysis of the amount and location of groundwater pumped by the public water system; and
- h) An analysis of the sufficiency of the groundwater from the basin or basins from which the project will be supplied to meet the projected water demand associated with the proposed project.

According to California Water Code Section 10910(g)(1), the deadline for your response is 90 days after receipt of this request; however, we would appreciate an earlier response, if possible. Please identify a contact person, and send your response to:

Attention: David Keyon  
City of San José  
Department of Planning, Building, and Code Enforcement  
200 East Santa Clara Street, 3<sup>rd</sup> Floor Tower  
San José, CA 95113-1905

Thank you for your assistance in this matter. Please do not hesitate to contact David Keyon project manager, at 408-535-7898 or via email at [david.keyon@sanjoseca.gov](mailto:david.keyon@sanjoseca.gov) if you have any questions regarding this request or the proposed project.

Harry Freitas, Director  
Department of Planning, Building, and Code Enforcement

  
12.17.15

Date

**NOTICE OF PREPARATION OF A  
DRAFT ENVIRONMENTAL IMPACT REPORT  
FOR THE SANTANA WEST DEVELOPMENT PROJECT AND THE  
I-280/WINCHESTER/MOORPARK TRANSPORTATION DEVELOPMENT POLICY**

FILE NO: PDC14-068  
PROJECT APPLICANT: Federal Realty Investment Trust  
APNs: 303-40-010, 303-40-12 to 303-40-16

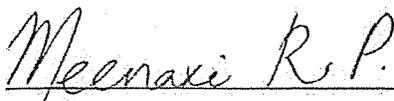
As the Lead Agency, the City of San José will prepare an Environmental Impact Report (EIR) for the project referenced above. The City welcomes your input regarding the scope and content of the environmental information that is relevant to your area of interest, or to your agency's statutory responsibilities in connection with the proposed project. If you are affiliated with a public agency, this EIR may be used by your agency when considering subsequent approvals related to the project. The project description, location, and probable environmental effects that will be analyzed in the EIR for the project are attached.

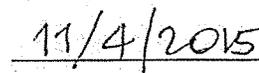
**Community/Scoping Meeting:** A Community/EIR Scoping meeting will be held on **Thursday, November 19, 2015** from 6:30 p.m. to 8:00 p.m. at the Cypress Community and Senior Center at 403 Cypress Avenue, San Jose, CA 95117.

According to State law, the deadline for your response is 30 days after receipt of this notice; however, we would appreciate an earlier response, if possible. Please identify a contact person, and send your response to:

City of San José  
Department of Planning, Building, and Code Enforcement  
Attn: David Keyon  
200 East Santa Clara Street, 3<sup>rd</sup> Floor Tower  
San José CA 95113-1905  
Phone: (408) 535-7898, E-mail: [david.keyon@sanjoseca.gov](mailto:david.keyon@sanjoseca.gov)

Harry Freitas, Director  
Planning, Building and Code Enforcement

  
Deputy

  
Date

**Notice of Preparation for an Environmental Impact Report for the City of San Jose  
Santana West Development Project and  
I-280/Winchester/Moorpark Transportation Development Policy**

November 2015

***Introduction***

The purpose of an Environmental Impact Report (EIR) is to inform decision-makers and the general public of the environmental effects of a proposed project that an agency may implement or approve. The EIR process is intended to provide information sufficient to evaluate a project and its potential for significant impacts on the environment; to examine methods of reducing adverse impacts; and to consider alternatives to the project.

The EIR for the proposed project will be prepared and processed in accordance with the California Environmental Quality Act (CEQA) of 1970, as amended. In accordance with the requirements of CEQA, the EIR will include the following:

- A summary of the project;
- A project description;
- A description of the existing environmental setting, environmental impacts, and mitigation measures for the project;
- Alternatives to the project as proposed; and
- Environmental consequences, including (a) any significant environmental effects which cannot be avoided if the project is implemented; (b) any significant irreversible and irretrievable commitments of resources; (c) the growth inducing impacts of the proposed project; and (d) cumulative impacts.

***Project Location***

The 11.8-acre project site is located at the southwest corner of Winchester Boulevard and Olin Avenue in the City of San José. (see Figures 1 and 2)

***Project Description***

The project site is currently developed with three movie theaters (Century 21, 22, and 23), a restaurant, and a large surface parking lot. The movie theaters were closed in March 2014 and have remained vacant since that time. The City Council designated one of the three theater buildings, Century 21, as a City Landmark on June 10, 2014. The buildings has also been determined to be eligible for listing on the National Register of Historic Places and the California Register of Historic Resources. A public road, Olsen Drive, traverses the site, connecting Winchester Boulevard to a residential neighborhood west of the project site. The project site is adjacent to the historic Winchester Mystery House.



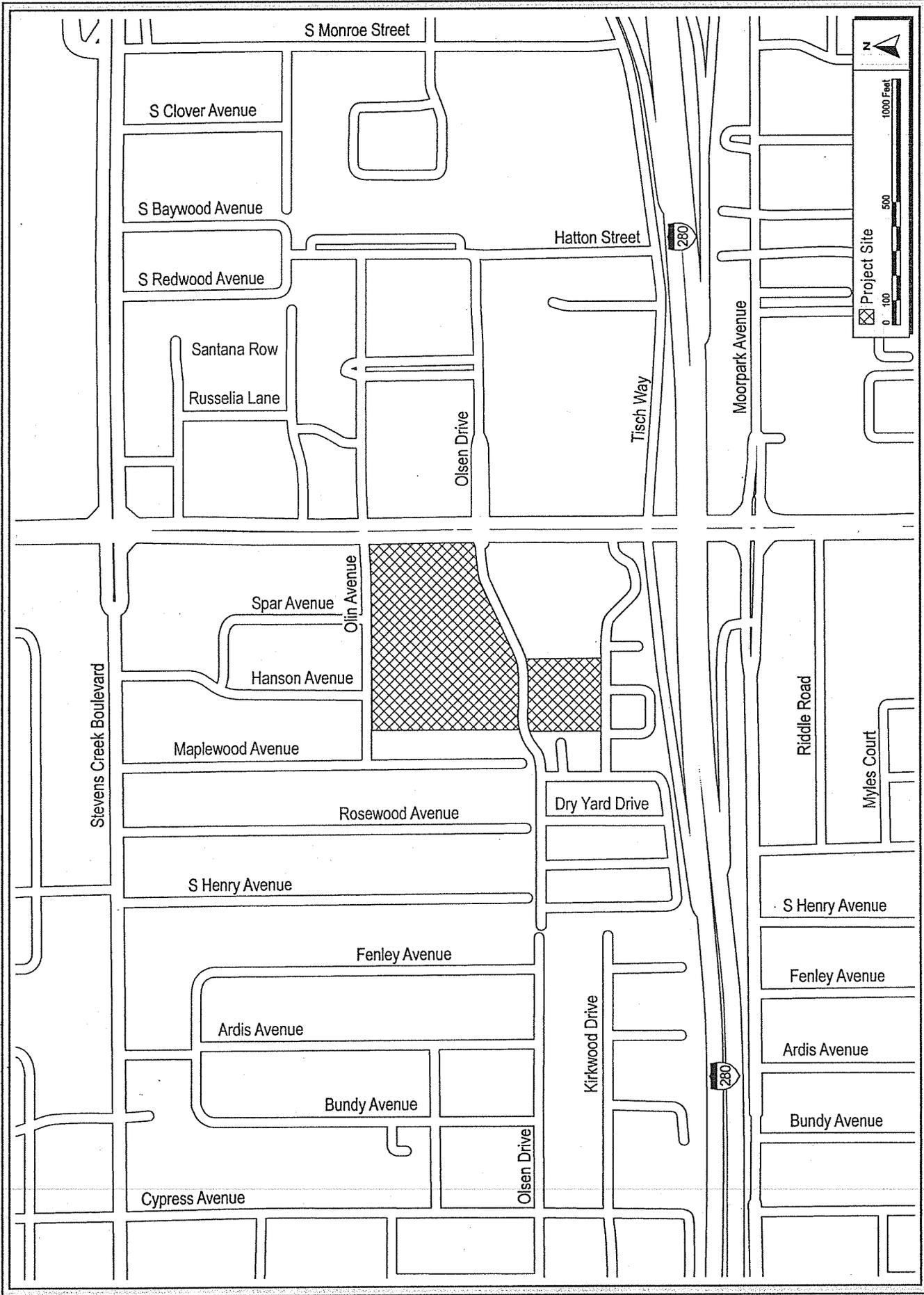


FIGURE 2

VICINITY MAP

The proposed project is a phased development that would include demolition of the two non-historic theater buildings on-site (Century 22 and 23) and construction of up to 970,000 square feet of office space and 29,000 square feet of retail space in six buildings, and retention of the Century 21 Theater building. Parking would be provided in above grade and below grade parking structures within the new buildings. The buildings would range in height from six to nine stories with the nine story buildings along Winchester Boulevard and in the center of the site. The six story buildings would be located near the western property line.

### *Circulation*

As proposed, the project would vacate the Olsen Drive right-of-way within the project boundary, converting it to a private street, and realign the road. Currently, the roadway is curved and would be realigned to make it straight. The road would then dead end at the Century 21 theater building. A new 180-space surface parking lot would be installed south of the roadway to support the Winchester Mystery House. New internal access roads would be constructed in a grid pattern between the proposed buildings, providing one main driveway from Winchester Boulevard and three driveways on Olin Avenue. Sidewalks would be provided on the internal access roads. Because Olsen Drive would no longer connect through the project site to the residential neighborhood to the west, a new roadway would be constructed along the western property line that would connect Olsen Drive (west of the project site) to Olin Avenue.

### *Century 21 Theater*

As proposed, the Century 21 Theater building would be retained in its current location and separated from the proposed buildings by open space. A pedestrian/bicycle trail would run through the open space area connecting Olsen Drive west of the project site to the realigned Olsen Drive within the project site. Various reuse options for the Century 21 Theater building are being considered. One option would be to incorporate the building as part of the public open space on-site by removing the façade and roof of the building and retaining the underlying metal substructure, allowing the building to be utilized as an outdoor pavilion. Reuse options which retain the full structure are also under consideration. Additional outdoor open space designated for the office buildings is proposed.

### *I-280 Winchester/Moorpark Transportation Development Policy*

In addition to the Santana West development, the EIR will evaluate implementation of a Transportation Development Policy (TDP) to fund potential interchange improvements at Interstate 280, Winchester Boulevard, and Moorpark Avenue to address area traffic impacts. This TDP will include the potential implementation of traffic impact fees that will be applicable to the Santana West project and future developments that add trips to the I-280, Winchester Boulevard, and Moorpark Avenue interchange.

***Required Project Approvals:***

1. Adoption of the I-280 Winchester/Moorpark Transportation Development Policy
2. Planned Development Rezoning
3. Planned Development Permits
4. Historic Preservation Permit for alterations/restoration of the Century 21 Theater
5. Vacation of Olsen Drive and street re-alignment
6. Tentative Map
7. Issuance of grading, building, and occupancy permits.

***Potential Environmental Impacts of the Project***

The EIR will identify the significant environmental effects anticipated to result from development of the project as proposed. Mitigation measures will be identified for significant impacts, as warranted. The EIR will include the following specific environmental categories as related to the proposed project:

*1. Land Use*

The project site is located in a developed urbanized area surrounded by commercial, office, and residential land uses. The EIR will describe the existing land uses adjacent to and within the project area. Land use impacts that would occur as a result of the proposed project will be analyzed, including the consistency of the project with the City's General Plan and zoning code and compatibility of the proposed and existing land uses in the project area. The effect of the project on the City's jobs/housing balance will also be analyzed.

*2. Aesthetics*

The project site is surrounded by a mix of land uses at varying heights. The EIR will describe the existing visual setting of the project area and the visual changes that are anticipated to occur as a result of the proposed project. The EIR will also discuss possible light and glare and shade and shadow impacts from the development.

*3. Geology*

The project site is located in the most seismically active region in the United States. The EIR will discuss the possible geological impacts associated with seismic activity and the existing soil conditions on the project site.

*4. Hydrology and Water Quality*

Based on the Federal Emergency Management Agency (FEMA) flood insurance rate maps, the EIR will address the possible flooding issues of the site as well as the effectiveness of the storm drainage system and the projects effect on storm water quality consistent with the requirements of the Regional Water Quality Control Board.

## 5. *Biological Resources*

The project site is currently developed with three vacant movie theaters and a large surface parking lot. The site has minimal landscaping consisting mainly of landscape trees. The EIR will provide a discussion of the loss of trees on-site. The EIR will also discuss the overall loss of existing urban habitat and the project's consistency with the Santa Clara Valley Habitat Plan.

## 6. *Hazards and Hazardous Materials*

The project site is surrounded by commercial businesses (including a gas station), offices, and residential land uses. The EIR will summarize known hazardous materials conditions on and adjacent to the project site and will address the potential for the proposed development to be significantly impacted by hazardous materials.

## 7. *Cultural Resources*

This area of San Jose is not considered a sensitive area for prehistoric and historic resources. The Century 21 Theater building is located on-site and is a designated City Landmark and is eligible to be designated as a national and state historic resource. The EIR will address the potential for as yet undocumented subsurface resources to be located on-site. The EIR will also address the impacts of the development on the historic structure, including any proposed modifications to the building itself.

## 8. *Transportation and Circulation*

The EIR will examine the existing traffic conditions in the immediate vicinity of the project site and the regional transportation system. A transportation impact analysis will be prepared for the proposed project in order to identify the transportation impacts of the proposed project on the existing local and regional transportation system and the planned long-range transportation network. The analysis will also address the regional transportation facilities at I-280/Winchester Boulevard and Moorpark Avenue, evaluate potential interchange improvements at this location to address area traffic impacts, and evaluate implementation of a Transportation Development Policy including a traffic impact fee applicable to this development and future developments.

## 9. *Air Quality*

The EIR will address the regional air quality conditions in the Bay Area and discuss the proposed project's construction and operational impacts to local and regional air quality according to 2010 Bay Area Air Quality Management District (BAAQMD) guidelines and thresholds.

## 10. *Noise*

The existing noise environment on the project site is created primarily by traffic on Stevens Creek Boulevard, Winchester Boulevard, I-280, and the surrounding roadways. The EIR will discuss impacts to the proposed project from existing off-site noise sources. The EIR will also discuss the increase in traffic noise that would result from implementation of the proposed project, and temporary construction noise. Noise levels will be evaluated for consistency with applicable standards and guidelines in the City of San Jose.

11. *Utilities*

Implementation of the proposed project will result in an increased demand on utilities and public facilities compared to existing conditions. The EIR will examine the impacts of the project on public services, including utilities such as sanitary and storm drains, water supply/demand, and solid waste management.

12. *Public Services*

Implementation of the proposed project will increase the daytime employee population of the City which will result in an increased demand on public services, including police and fire protection. The EIR will address the availability of public facilities and service systems and the potential for the project to require the construction of new facilities.

13. *Energy*

Implementation of the proposed project will result in an increased demand for energy on-site. The EIR will address the increase in energy usage on-site and proposed design measures to reduce energy consumption.

14. *Greenhouse Gas Emissions*

The EIR will address the proposed project's contribution to regional and global greenhouse gas emissions. Proposed design measures to reduce energy consumption, which in turn would reduce greenhouse gas emissions, will be discussed.

15. *Alternatives*

The EIR will examine alternatives to the proposed project including a "No Project" alternative and one or more alternative development scenarios depending on the impacts identified. Other alternatives that may be discussed could include reduced development alternatives (e.g., smaller project site or reduced density alternatives), alternative land uses, and/or alternative locations. Alternatives discussed will be chosen based on their ability to reduce or avoid identified significant impacts of the proposed project while achieving most of the identified objectives of the project.

16. *Significant Unavoidable Impacts*

The EIR will identify those significant impacts that cannot be avoided, if the project is implemented as proposed.

17. *Cumulative Impacts*

The EIR will include a Cumulative Impacts section that will address the potentially significant cumulative impacts of the project when considered with other past, present, and reasonably foreseeable future projects in the development area.

In conformance with the CEQA Guidelines, the EIR will also include the following sections: 1) consistency with local and regional plans and policies, 2) growth inducing impacts, 3) significant irreversible environmental changes, 4) references and organizations/persons consulted, and 5) EIR authors.