

December 18, 2019

Ms. Lorrie Lausten, PE
District Engineer
TRABUCO CANYON WATER DISTRICT
P.O. Box 500
Trabuco Canyon, CA 92678

Re: Proposal for Paloma Square Sub-Area Master Plan (SAMP)

Dear Ms. Lausten:

PSOMAS is pleased to submit this proposal to prepare a SAMP for the proposed redevelopment of the Dove Canyon Commercial Center into a 120-dwelling unit residential development named Paloma Square. The existing Dove Canyon Commercial Center is located north of Dove Canyon Drive and east of Plano Trabuco Road and the residential community would share the existing access off the signalized Dove Canyon Drive entrance to the Commercial Center which is also the access to the District's headquarters building. However, the proposed site plan would include a guard gate just off the current access road to the Commercial Center.

We propose to accomplish the tasks detailed on the attached Scope of Work with the end product being a SAMP report including exhibits showing the recommended domestic water, wastewater and non-domestic water system, project demands, calculations related to capacity requirements in regional off-site facilities and the appropriate cost allocation to the project as well as impact fees based on the estimated demands. We propose to accomplish the tasks detailed in the Scope of Work on a time and materials basis in accordance with the attached Billing Rates. Based on our knowledge of the project, a cost of \$53,350 is proposed, which would not be exceeded without prior authorization from the District. As an option, we will attend up to two additional meetings for the purposes of presenting the SAMP to the District's Engineering Committee and/or Board for an additional \$2,100, which would bring the total to \$55,450. A detailed breakdown of the anticipated work effort by task and staff is attached.

Unit demand factors for inside water demands and irrigation demands will be based on land use data, TCWD's Water, Wastewater and Reclaimed Water Master Plan (December 1999), and typical values based on local data available for similar land use and climate. If the developer wishes to provide

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Proposal for Paloma Square SAMP

information on proposed conservation measures or irrigation practices that might reduce the demands used in the SAMP, we could assist the District in reviewing this information as an additional item outside this Scope. It is estimated that we could complete the draft report and submit it for District review within ten weeks of receipt of authorization to proceed and the required information from the developer and District, as shown on the attached schedule.

Once again, it is a pleasure to submit this proposal and we look forward to completion of this work effort and the eventual successful integration of this development into the District's existing water and wastewater systems.

Sincerely,

P S O M A S

A handwritten signature in dark ink, appearing to read "Michael D. Swan", with a long horizontal flourish extending to the right.

Michael D. Swan, PE ENV SP
Vice President
Senior Project Manager

Attachments – Scope of Work, Billing Rates, Fee Estimate, Schedule

Scope of Work
Paloma Square (Dove Canyon Commercial Center) Sub-Area Master Plan

1. Attend kick-off meeting with District staff, Developer and/or Developer's Engineer to discuss project and obtain information including current tract map and grading plan, development square footages, approximate home sizes (if available) and common area irrigation areas.
2. Develop domestic water, irrigation water, and wastewater demand projections based on current lot layout, home sizes, and landscaping plan as provided by Developer. Our understanding is that the commercial center landscaping is currently being irrigated with domestic water, but metered separately from domestic water service. The SAMP will determine the feasibility of providing non-domestic water service for landscape irrigation on the new residential development. Determine additional demands for each of the three systems due to redevelopment of property, assuming common irrigation demands will be served by non-domestic water system. Existing historical domestic water demands from the commercial center will be determined from meter read information assumed to be provided by the District. This existing domestic water demand will be assumed to be equal to existing wastewater flow since irrigation demand is metered separately. In order to determine the net additional wastewater flow, the existing wastewater flow will be subtracted from the proposed flow.
3. Review engineer's layout of on-site potable and irrigation water and wastewater facilities with respect to required looping of the water systems, etc. Identify public vs. private facilities and required easements where facilities are public but within private property.
4. Determine connection points to TCWD's domestic water system. Use TCWD's existing domestic water system hydraulic model to determine available water pressure at the connection point. Identify which existing domestic water facilities will remain and which will be abandoned and discuss proper abandonment procedures. Incorporate recommended solution into TCWD's existing hydraulic model and identify any pipeline capacity constraints and recommended parallel or replacement pipe sizes, if required. Identify any off-site improvements needed to serve domestic water to site.
5. Determine connection points to TCWD's non-domestic water system. Use TCWD's existing non-domestic water system model to determine available water pressure at the connection point. Identify which current existing irrigation facilities will remain and which will be abandoned and discuss proper abandonment procedures. Identify any off-site improvements needed to serve non-potable water to site.
6. Determine connection point(s) to existing TCWD wastewater collection system. Based on net additional wastewater flow generated above, determine impact on all downstream wastewater systems including three sewer lift stations (Via Alegre, Plano Trabuco and Heritage) and force mains and all gravity line segments.

Includes development of a hydraulic model specific for this development and flow loading for downstream wastewater collection system from the project to the wastewater reclamation plant, including impacts on the wastewater reclamation plant. Identify any off-site improvements needed to provide wastewater service to site.

7. Determine off-site facility construction costs, capacity buy-in requirements, and impact fees based on current development plan, statistics and demands. Reservoir capacity requirement and other off-site impacts and fees will be calculated based on estimated proposed project demands minus existing Dove Canyon Center demands converted to equivalent dwelling units.
8. Prepare graphics to reflect current site plan and facility requirements developed above. Assume tract map or grading plan is available in digital format for this purpose.
9. Prepare on-site cost estimates for domestic and non-domestic water and wastewater facilities, if to be public (TCWD), and summarize along with buy-in costs and fees.
10. Document above information into a Sub-Area Master Plan report including a draft and final SAMP.
11. Attend up to two meetings (in addition to kick-off meeting) with District staff, Developer and/or Developer's Engineer; one intermediate meeting to discuss project status and schedule and one to present and discuss draft SAMP report.
12. Option: Attend up to two meetings to present findings to TWCD Engineering Committee and Board of Directors, if necessary.

HOURLY RATE SCHEDULE

For services by Psomas
Effective through December 2019

Water and Wastewater Engineering Services

\$ 85 - \$ 100	Project Assistant
\$ 65 - \$ 100	Engineering Assistant, Intern
\$ 95 - \$130	Civil Engineering Designer, Survey Technician
\$125 - \$145	Lead CAD Designer
\$100 - \$135	Professional Engineer
\$120 - \$150	Field Survey Coordinator
\$125 - \$165	Project Engineer, Project Surveyor, Senior Environmental Scientist
\$180 - \$200	Senior Project Engineer, Project Technical Manager
\$155 - \$205	Project Manager
\$190 - \$240	Senior Project Manager, QA/QC Manager, Principal-In-Charge
\$260 - \$285	Two-Man Survey Crew

- ▶ Standard computer and technology costs are incorporated into these hourly rates, as well as direct labor, overhead, fringe benefits and fee.
- ▶ Survey and other specialty equipment will be charged at a per unit per day rate.
- ▶ Expert witness testimony is two times the normal rate.
- ▶ Per Diem is calculated at current State Department of Transportation rates (or other appropriate Agency rate).

Reimbursables

Mileage at \$0.58 per mile (or current IRS allowable rate) and parking expenses incurred by office employees are charged at cost. Prints, plots, messenger service, subsistence, air travel, and other direct expenses will be charged at cost plus ten percent. The services of outside consultants will be charged at cost plus five percent.

**Paloma Square SAMP
Fee Estimate**

Task No.	Task Description	Sr. Proj. Manager	Sr. Proj. Engineer	Prof. Engineer	Proj. Asst.	Total Hours	Labor Fee	Direct Costs	Total Fee
	Rates	\$240	\$180	\$115	\$100				
1	Kick-off Mtg	3	3	0	1	7	\$1,360	\$25	\$1,385
2	Demand Projections	3	16	0	0	19	\$3,600		\$3,600
3	Review Layout On-site Water, Sewer and Irrigation Facilities	2	10	0	0	12	\$2,280		\$2,280
4	Off-site Domestic Water Connections & Modeling	2	12	4	0	18	\$3,100		\$3,100
5	Off-site Non-Dom. Water Connection & Modeling	2	12	4	0	18	\$3,100		\$3,100
6	Wastewater Collection System Capacity Analysis	4	24	32	0	60	\$8,960		\$8,960
7	Off-Site Facilities and Impact Fee Development	6	32	8	0	46	\$8,120		\$8,120
8	Graphics	2	8	24	2	36	\$4,880	\$100	\$4,980
9	Cost Estimates & Summarize Buy-in Costs & Fees	4	20	8	0	32	\$5,480		\$5,480
10	Sub-area Master Plan Report Draft & Final	6	36	8	8	58	\$9,640	\$185	\$9,825
11	Meetings to Review Status & Draft SAMP	5	6	1	1	13	\$2,495	\$25	\$2,520
	Totals	39	179	89	12	319	\$53,015	\$335	\$53,350
12	Optional Additional Meetings (Committee & Board)	4	5	1	1	11	\$2,075	\$25	\$2,100
	Totals with Optional Task	43	184	90	13	330	\$55,090	\$360	\$55,450

**Paloma Square SAMP
Schedule**

Task No.	Task Description	Weeks									
		1	2	3	4	5	6	7	8	9	10
1	Kick-off Mtg										
2	Demand Projections										
3	Review Layout On-site Water, Sewer and Irrigation Facilities										
4	Off-site Domestic Water Connections & Modeling										
5	Off-site Non-Dom. Water Connection & Modeling										
6	Wastewater Collection System Capacity Analysis										
7	Off-Site Facilities and Impact Fee Development										
8	Graphics										
9	Cost Estimates & Summarize Buy-in Costs & Fees										
10	Sub-Area Master Plan Report Draft										
11	Meetings to Review Status, Draft SAMP, Comm. & Board										

Committee and Board Meetings would follow week 10.