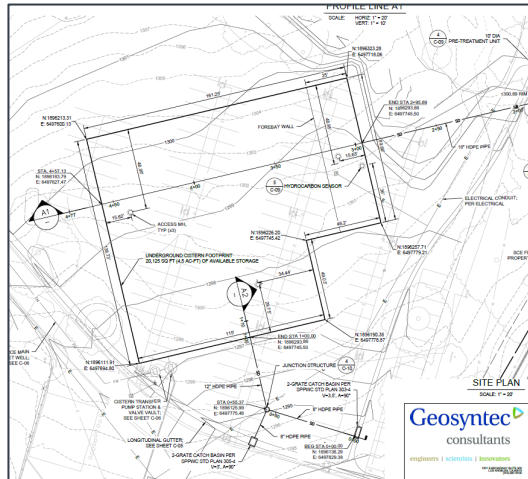
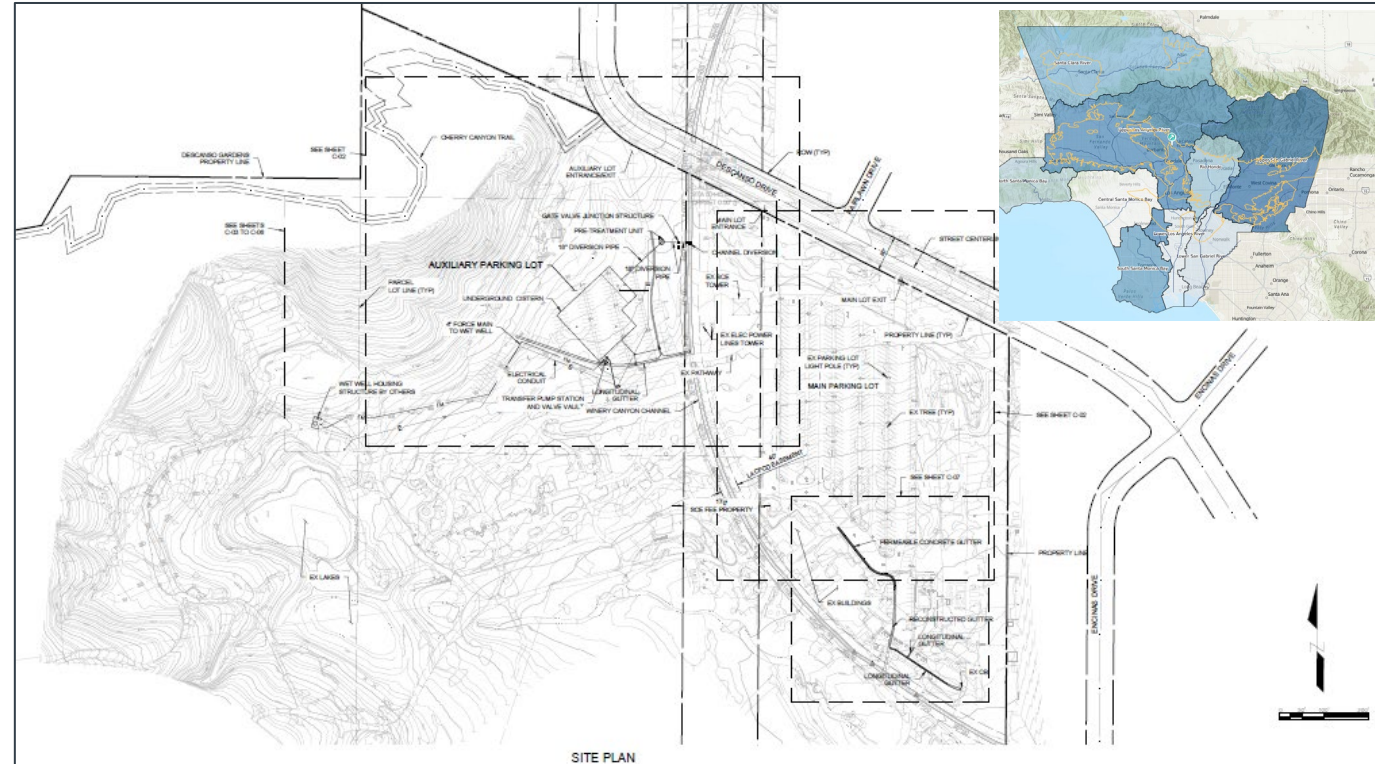
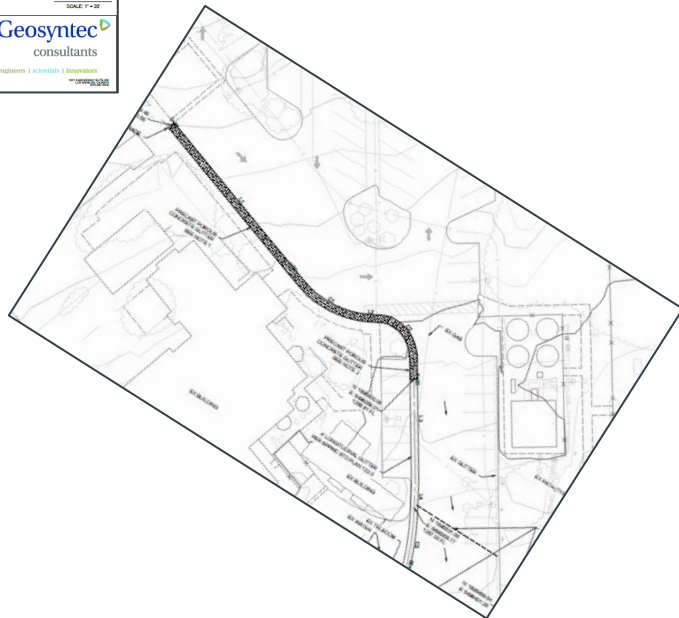
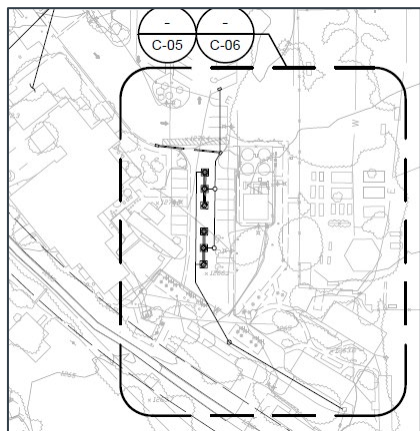


PMR 3 – LIKE-FOR-LIKE MODIFICATION NO CHANGE TO PROJECT OBJECTIVES, BENEFITS

Winery Canyon Channel / Descanso Gardens Measure W
Stormwater Capture and Reuse Project



Geosyntec
consultants
ENGINEERS | ARCHITECTS | SCIENTISTS



Location	Mitigated Storm Event	Mitigation Flowrate	BMP	Required BMP Quantity
Main Lot	85th percentile, 24-hour storm (1.15 inch)	1.3 cfs	Drywell	>10 units
			Porous Concrete Gutter	750 sq. ft.
Aux Lot	(1.15 inch)	1 cfs	Drywell	4 units
			Catch Basins/Cistern	2 catch basins, no change in cistern size

PMR 4 – ADDITIONAL FUNDING REQUEST

Winery Canyon Channel / Descanso Gardens Measure W Stormwater Capture and Reuse Project

Description	Unit	Quantity	Unit Price	Item Total
LAKE IMPROVEMENTS:				
Lake Improvements (Lining)				
Dredge Sediment (dredge, dewater, remove; assume 3 ft of existin	CY	1,000	\$ 280	\$ 279,500
Regrade at edges (gentle slopes to permit water storage in the top	LF	2,010	\$ 103	\$ 207,299
Remove Existing Liner	SF	76,500	\$ 1	\$ 70,380
Install New Liner (60 mil textured HDPE) - Changed to a soil liner	SF	46,000	\$ 3	\$ 126,422
Aeration System (0.5 hp shore based compressor in a cabinet anc	LS	1	\$ 29,536	\$ 38,397
Circulation System (four 0.5 hp pumps)	LS	1	\$ 659,854	\$ 725,839
Active wetlands - Edge Improvements (includes 2ft gravel media,	LS	1	\$ 72,183	\$ 72,183
Wetland Shelves (approx. 60% of top 2ft of lake; plant with emerg	LF	910	\$ 187	\$ 169,711
Floating wetlands	SF	1,550	\$ 57	\$ 110,438
Sediment bays (lined with large rock where surface drainage ente	EA	4	\$ 38,802	\$ 155,207
Lake Improvements (Perimeter)				
Lake perimeter walk (wood boardwalk w/rail at lake edge, 8ft wid	SF	2,400	\$ 748	\$ 1,795,347
Bridge across center of lake (wood bridge 100ft long, 8ft wide)	LF	100	\$ 17,830	\$ 1,782,965
Lighting Type 1 and Type 2	LS	1	\$ 368,000	\$ 368,000
Landscaping (8ft plant buffer along boardwalk)	LS	1	\$ 946,895	\$ 946,895
Wood deck with railing and 40'x60' pier	LS	1	\$ 581,940	\$ 581,940
Subtotal 1 (Construction Capital without Contingencies)				\$ 15,019,701
General Conditions & Requirements, Mobilization - 5% of Subtotal (1)				
Escalation - 4% (6 mo of 2024), 7% (FY24/25) per year of Subtotal (5), used compound amount factor: (1+				\$ 750,985
Subtotal 2 (GPR and Escalation)				\$ 1,201,228
				\$ 16,971,914
Construction Contingency, used 10%				
				\$ 1,697,191
Total Estimated Construction Cost (Excluding Construction Mgmt and Support)				\$ 18,669,105
Permit Allowance and CEQA Amendments				
CEQA Amendments (included in "Permit Allowance and CEQA Amendments" above				\$ 358,825
Project Right of Way - no longer applicable to Project				\$ -
Design Phase Cost				
Pre-construction management				\$ 864,539
Construction Phase Cost (was 8% of Subtotal 1; now fixed at original budget amount)				\$ 67,225
				\$ 604,800
Post Construction Cost - First Year of O&M				
Post Construction Cost - First Year of O&M				\$ 122,000
Post Construction Cost - First Year of Monitoring				\$ 68,000
Total Estimated Construction Delivery Cost				\$ 20,754,494

TOTAL PROJECT COST:	\$20,754,494
LEVERAGED FUNDING:	\$6,618,877
Planning and Engineering:	
Current Commitment by Descanso Gardens	\$300,000
Additional Leveraged Funding from Descanso Gardens ^{New}	\$749,877
Lake Improvements Construction:	
Current Commitment by Descanso Gardens	\$2,000,000
Additional Leveraged Funding from Wildlife Conservation Board ^{Now}	\$3,569,000
COMMITTED SAFE CLEAN WATER PROGRAM FUNDING:	\$6,848,600
Planning and Engineering:	
Current Commitment by Safe Clean Water Program	\$493,800
Lake Improvements Construction:	
Current Commitment by Safe Clean Water Program	\$588,076
Stormwater Capture Construction:	
Current Commitment by Safe Clean Water Program	\$5,576,724
First Year of Monitoring Operation and Maintenance:	
Current Commitment by Safe Clean Water Program	\$190,000
ADDITIONAL FUNDING REQUEST TO SCWP:	\$3,000,000
LEFT TO RAISE BY DESCANSO GARDENS:	\$4,287,017

With the project design reaching the 90% Design milestone, the consultant team's Construction Cost Estimate was thoroughly updated and compared with the Feasibility Study budget projection performed in 2021. Construction costs in southern California have risen steadily and, in some cases, dramatically over the last five years. Despite our value engineering efforts, the project is incurring the following additional costs:

- Design, permitting, and pre-construction management costs increased by \$749,877 (check overreported number in 2023)
- Total project cost increased from \$8,958,600 to \$20,754,494 due to material and labor shortages, inflation, prevailing wage and labor rate escalation. The updated budget reflects like-for-like modifications approved in PMR 1 and PMR 2 and value engineering of the project.

Primary factors related to these cost increases include:

- 1) Impacts from the COVID-19 Pandemic spanned from early 2020 to mid-2023, causing material and labor shortages across the globe, significantly increasing labor rates and material costs. As explained below, this drove annual inflation rates to all-time highs.
- 2) Per the California Construction Cost Index (CCCI), inflation from July 2021 to April 2024 was 22.7%. This is a compounded annual rate of about 7% for that time period. In preparation of the Construction Cost Estimate for the Feasibility Study in 2021 the annual national average escalation rate of 3% was used. This factor is responsible for approximately \$1M of the additional cost.
- 3) Due to the high inflation rates experienced, the Bureau of Engineering (BOE) prepared a report to address construction cost increases and suggested inflation rates for project budgeting. The below chart is BOE's suggested inflation rates to use for future estimates:
 - July 1, 2022-June 30, 2023: Annual rate of 15%
 - July 1, 2023-June 30, 2024: Annual rate of 8%
 - July 1, 2024-June 30, 2025: Annual rate of 7%
 - July 1, 2025-June 30, 2026: Annual rate of 6%
 - July 1, 2026-June 30, 2027: Annual rate of 5%
- 4) According to RS Means Data, the contractor's costs for general conditions should range from 5 to 15% of the total cost – with 10% as the standard allowance when estimating project costs.
- 5) For the 2021 Feasibility Study, a 5% cost estimate was used. For the 90% Design Cost Estimate, we used 10% per industry standards.
- 6) In the 2021 Feasibility Study, a relatively low construction contingency value of 10% was used. For the 90% Design Cost Estimate, a contingency value of 15% is used to more accurately plan for unknown aspects of project design.

PMR 4 – ADDITIONAL FUNDING REQUEST

Winery Canyon Channel / Descanso Gardens Measure W
Stormwater Capture and Reuse Project



WASC Role in the PMR Process

Potential questions for the Recipient:

1. Would the additional funding request be the **only option** that would allow the project to be implemented?
2. Would **delaying funding allocations** impact the project's ability to be implemented?
3. Would funding only a **portion** of the additional funding request impact the project's ability to be implemented?
4. If a Recipient has multiple projects under consideration, which projects are the **highest priority** for the Recipient?
5. Has the Recipient considered **other funding sources**?

Yes

No

Yes

N/A

Yes

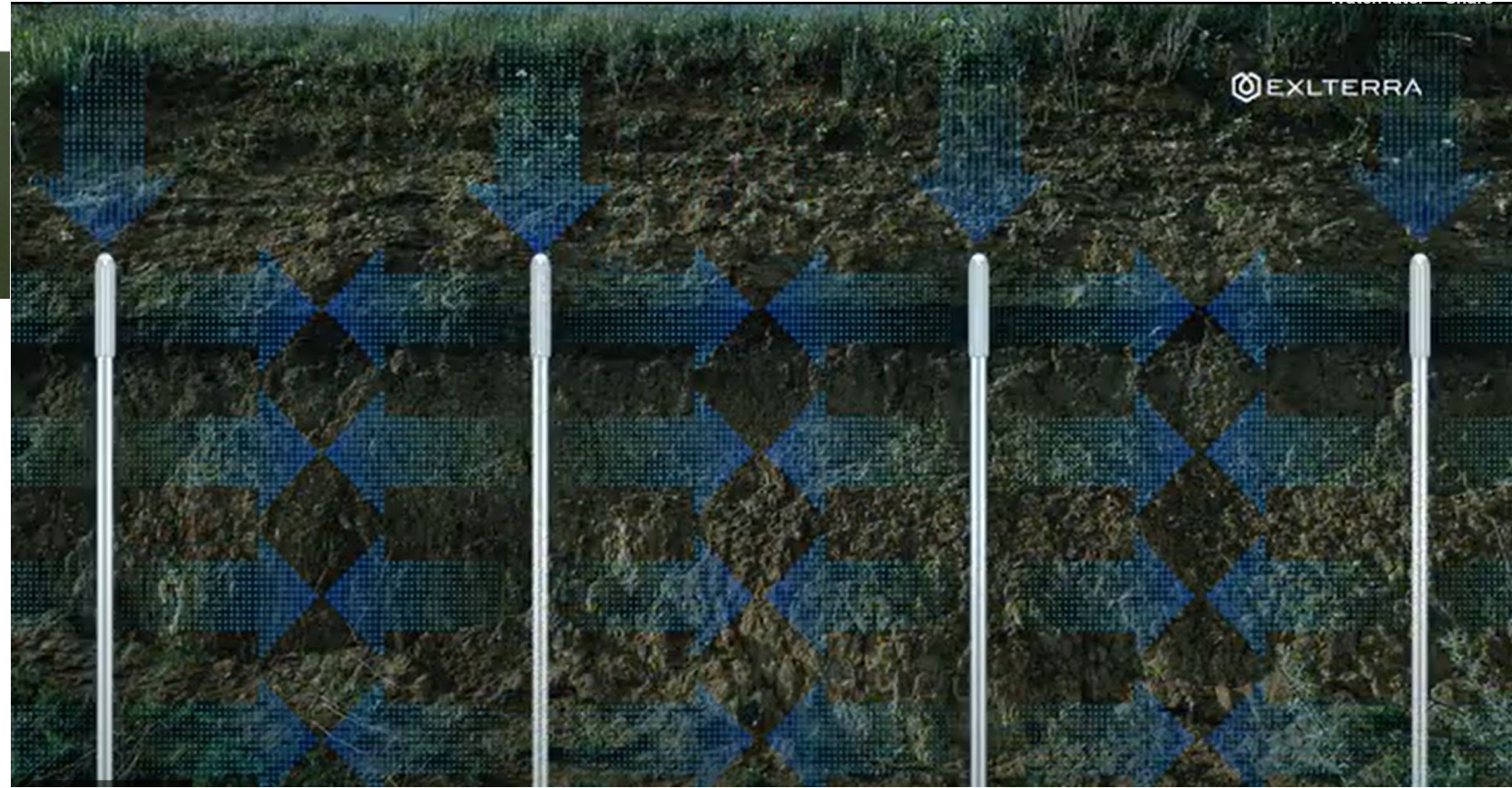
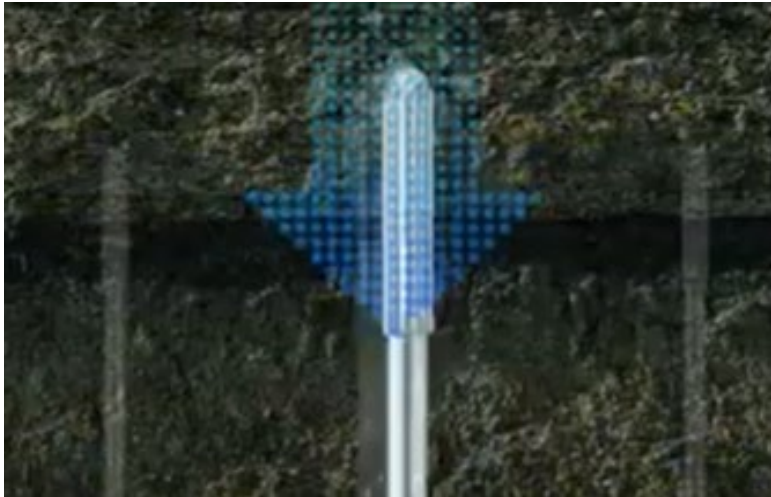
Related Q&A:

Project concerns or delays:

- Permitting timeline
- Firefighting connections and air support adaptation

Los Angeles Pierce College Stormwater Capture & Use and Biofiltration Project

Groundwater Energy Passive System (GEPS)



Unlike conventional drainage systems that redirect water through pipes, GEPS restores equilibrium to the ground by emulating the natural functionality of underground tree roots.

Los Angeles Pierce College Stormwater Capture & Use and Biofiltration Project

Benefits of GEPS

GEPS promotes natural water infiltration in any type of soil.

Improved Infiltration



Remove Standing Water & Runoff

GEPS maximizes natural water infiltration instead of moving water into stormwater/sewer systems.

Enhanced Subsoil



Manage Soil Moisture Content

GEPS balances moisture in the ground allowing for more consistent, firmer soil, and allows for recharging of groundwater.

Sustainable Technology



No Maintenance, no Energy Input

GEPS works without energy input and is maintenance free. A unique sustainable long-term solution that operates in synergy with its environment.

Los Angeles Pierce College Stormwater Capture & Use and Biofiltration Project Summary

- LAPC Project Design Capture Volume
 - DCV for the GEPS system portion of the project: 283,233 cubic ft (6.50 acre feet)
 - DCV for the parking lot biofiltration system: 13,343 cubic feet (0.31 acre feet)
 - Total Project DCV: 6.81 acre feet
- GEPS Information Provided to SCWP
 - Scientific Principles Behind GEPS® Technical Report 2024
 - GEPS Specification Sheets
 - LAPC Project GEPS drawings
 - Locations of GEPS installations
- GEPS installations
 - 27 in USA since 2022 (one in CA)
 - 53 in Europe since 2019
- PMR Form/Project Cost Summary
 - New total project capital cost: \$19,244,715 (additional \$9,710,760)
 - LACCD: additional \$5,910,760 (61%)
 - SCWP request: additional \$3,800,000 (39%)

