

# **City of San Jose Green Stormwater Infrastructure Update**

## **Transportation and Environment Committee**

**May 3, 2021**

**Presented by: Matt Cano, Mathew Nguyen & Michael Mai  
Public Works**

# Comprehensive Citywide Approach

## Low Impact Development Project



## Green Street Projects

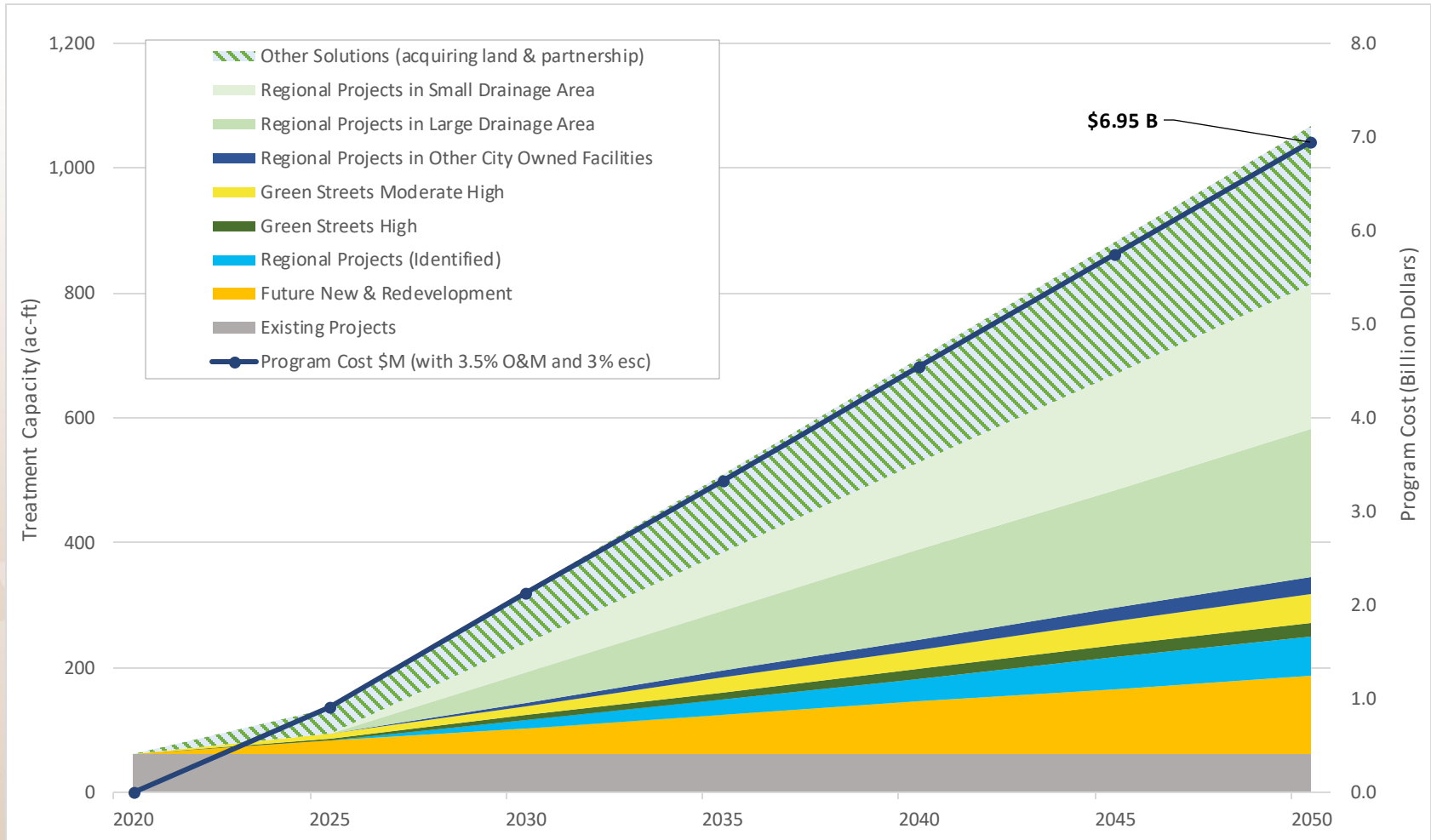


## Regional Projects (River Oaks Conceptual Design)

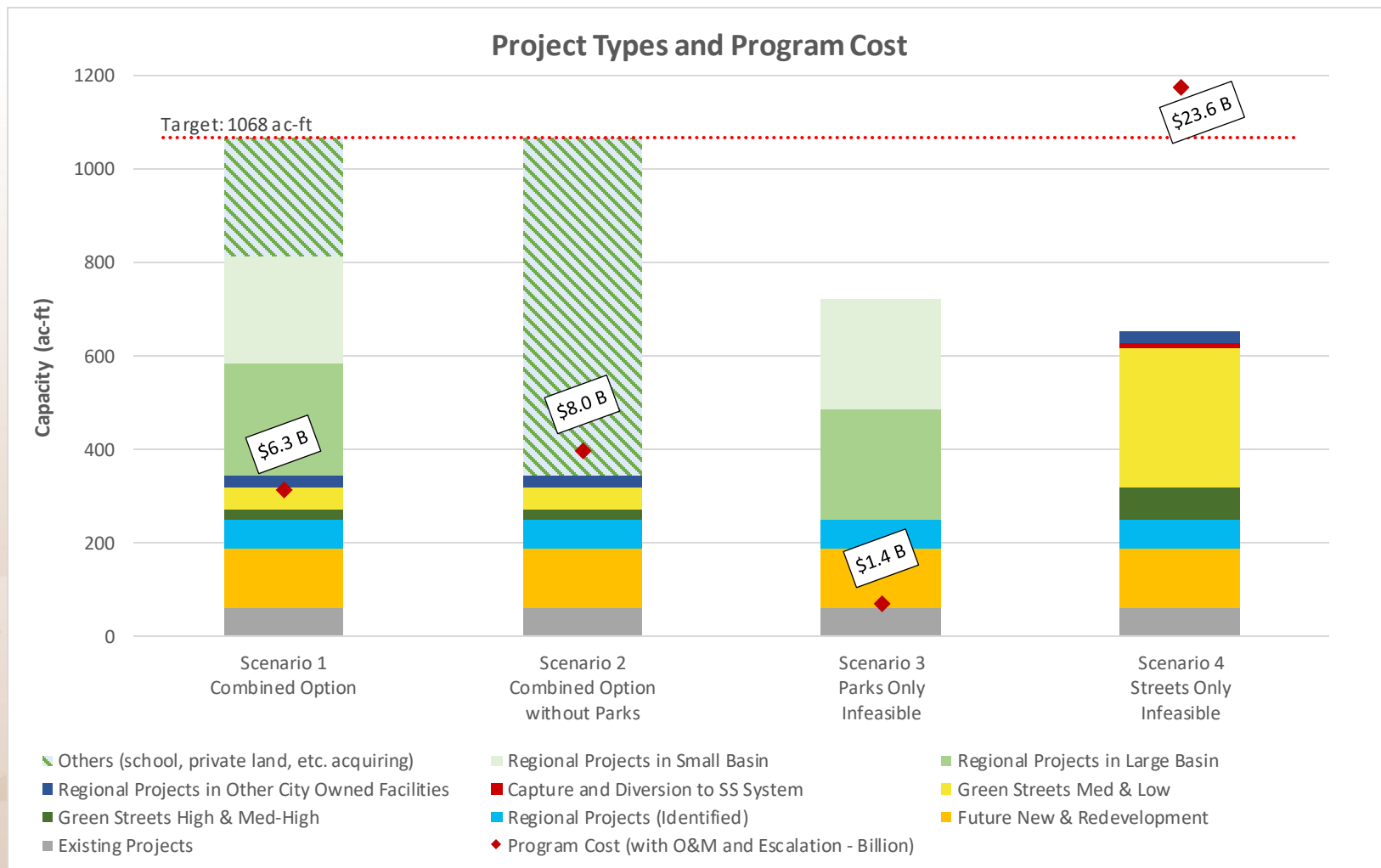
Figure ES-4 R / Figure 6-1 R: Conceptual Rendering of the Preferred Alternative Site Layout



# Ideal Scenario to Meet the Target



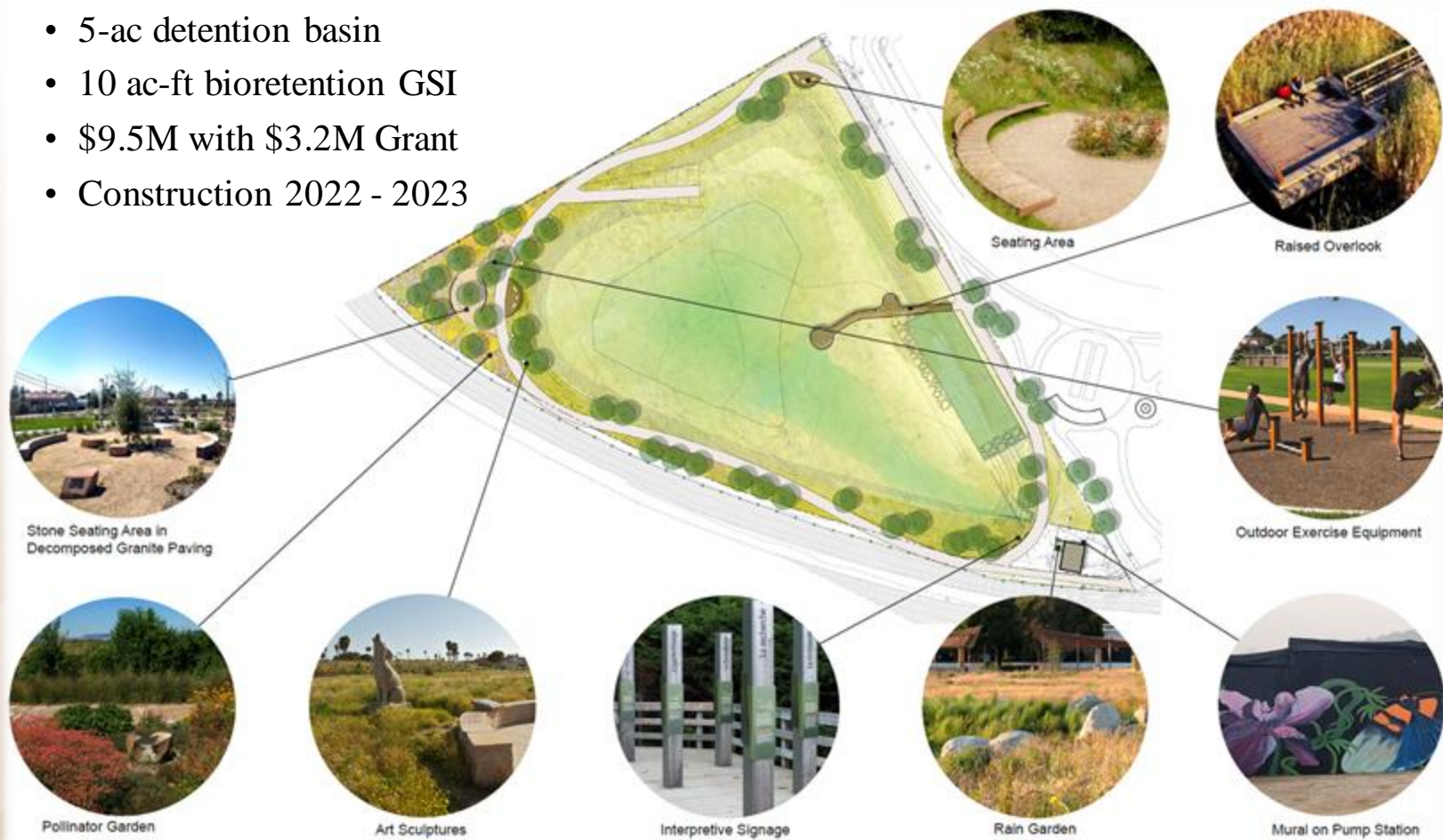
# Other Scenarios





# River Oaks Conceptual Designs

- 5-ac detention basin
- 10 ac-ft bioretention GSI
- \$9.5M with \$3.2M Grant
- Construction 2022 - 2023



River Oaks Stormwater Capture Project - Addendum

January 29, 2021

Preferred Alternative



**rhaa**  
LANDSCAPE ARCHITECTURE + PLANNING

# Near-term Regional Projects

Location	Size (ac-ft)	Conceptual Cost
City Land South of Phelan <sup>(1)(2)</sup>	7.5	\$18.1M
Sycamore Terrace <sup>(2)</sup>	0.5	\$3.0M
Hellyer Avenue Property	1.2 - 2.7	\$5.6M
Kelley Park Gravel Parking Lot <sup>(2)</sup>	11.0	\$23.1M
Other Agency Land	varies	TBD

(1) *Indicates site that was included in 2019 GSI Plan*

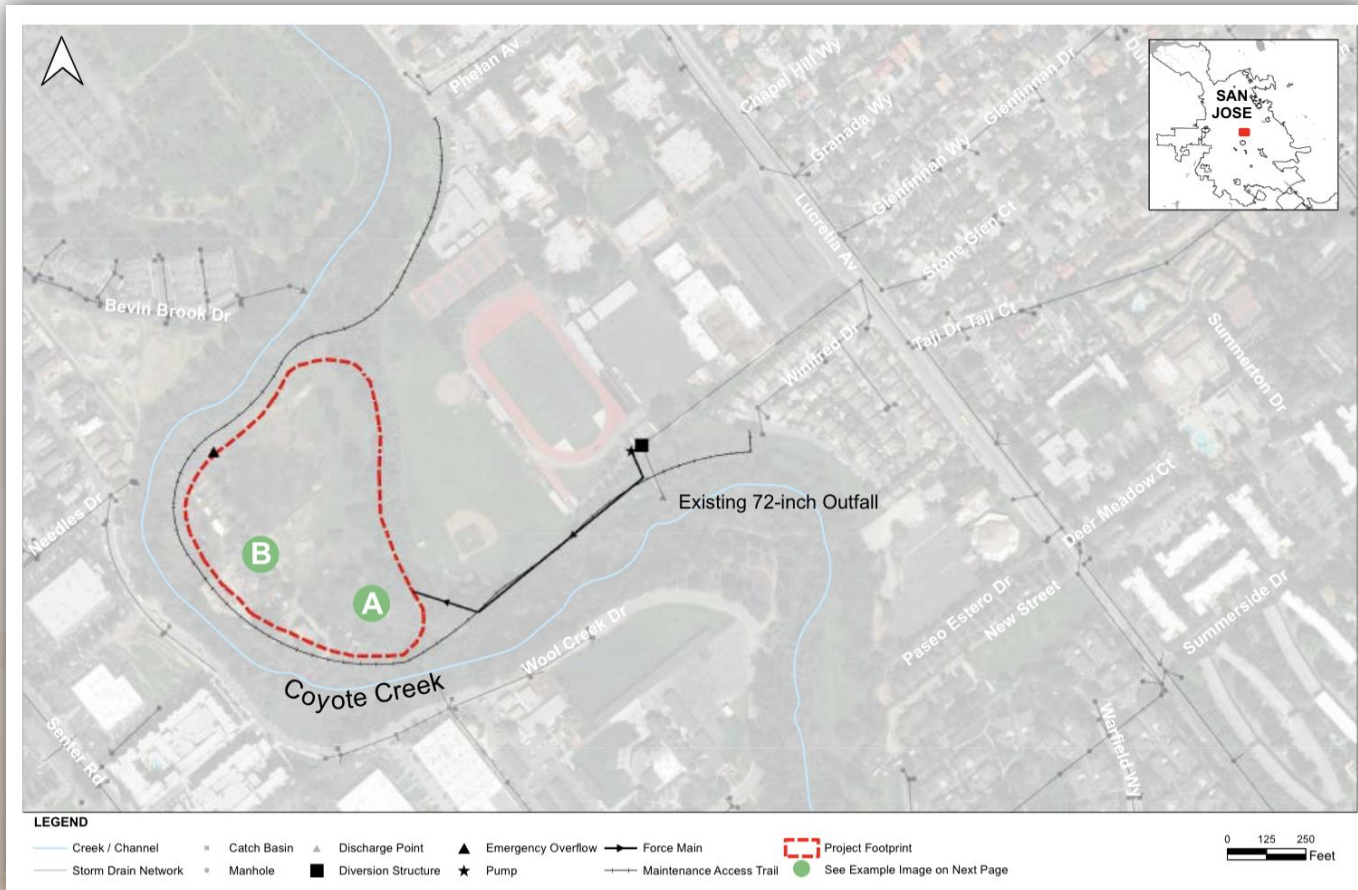
(2) *Indicates site operated by PRNS*

# Near-term Green-Street Projects

Location	Green Component Cost
West San Carlos Urban Village	\$1M – \$2M
Story-Keyes Complete Streets	\$0.6M - \$1M
Monterey Road (10 segments, \$7M for a high priority segment)	\$7M - \$144M

*Average cost: \$20M/ac-ft*

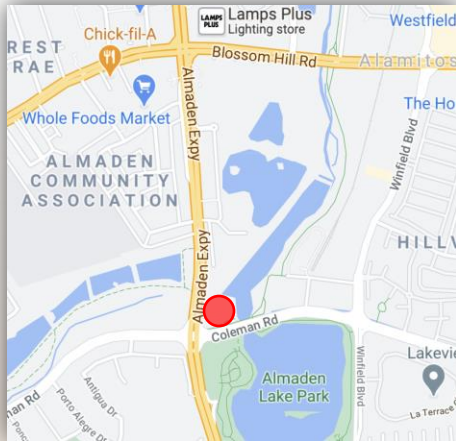
# Preliminary Conceptual Designs & Ideas



City land south of Phelan – 2019 GSI Plan Concept

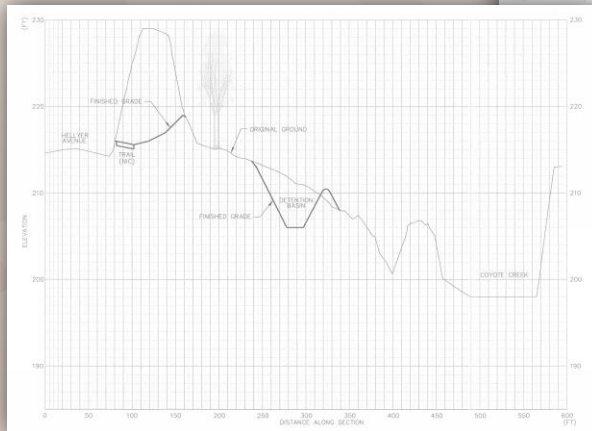
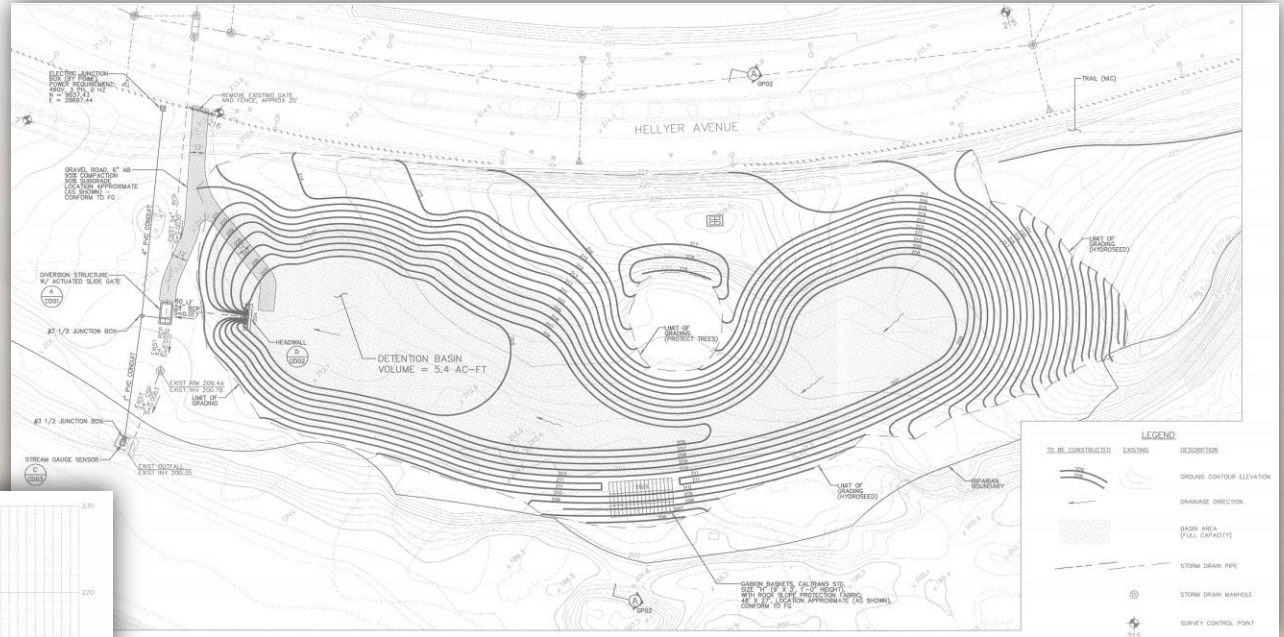
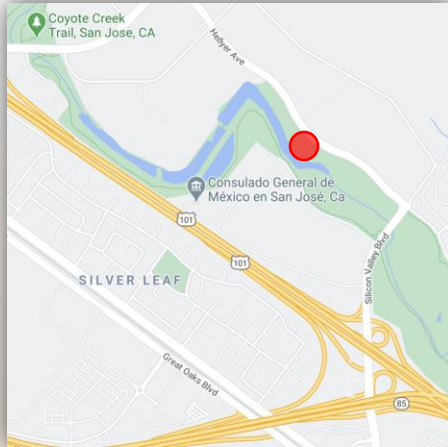


# Preliminary Conceptual Designs & Ideas



Sycamore Terrace

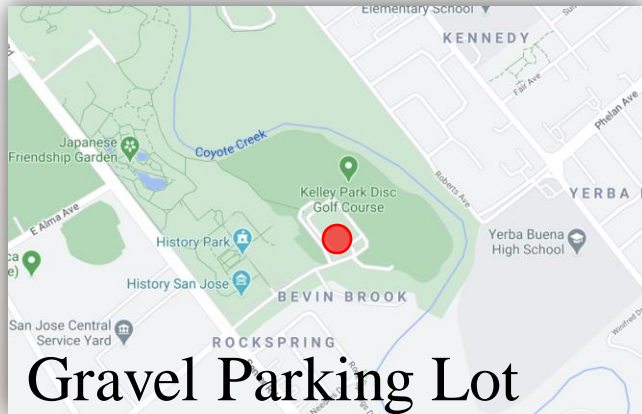
# Preliminary Conceptual Designs & Ideas



Hellyer Avenue Property



# Preliminary Conceptual Designs & Ideas



Example of Subsurface Infiltration System at Bolivar Park in Lakewood, California



Example of Subsurface Infiltration Chambers at University of St Thomas in St Paul, MN

# Preliminary Conceptual Designs & Ideas

## Green Street Design & Stormwater Management

Bioretention in Sidewalk



Green Gutters



Photo credit: Kevin Robert Perry

Stormwater Tree Wells



Source: City of Philadelphia

Infiltration & Flow Through Planters



Rain Gardens



## Green-street Design Guidelines

## Chynoweth Project





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# Green Stormwater Infrastructure Plan

- Council approved Green Stormwater Infrastructure Plan in September 2019
  - High level comprehensive plan
  - Capture and treat 1,068 ac-ft run-off (2050)
  - Identified 6 potential regional projects
- Council direction to update the Plan with outreach, funding strategy, and list of near-term projects

# Background / GSI Drivers

- Municipal Regional Stormwater Permit
- Consent Decree
- Alignment with City Initiatives
- Citywide shift to green stormwater infrastructure
- Reduces run-off and pollutants, and provide additional benefits

# GSI Plan Coordination

- Conducts internal meetings with other departments, stakeholders including the Parks and Recreation Commission, Baykeeper, Save the Bay, Open Space Authority, City Council offices, park advocates and the community
- Continue to reach out to other public agencies and organizations seeking for opportunities

# GSI Plan Update

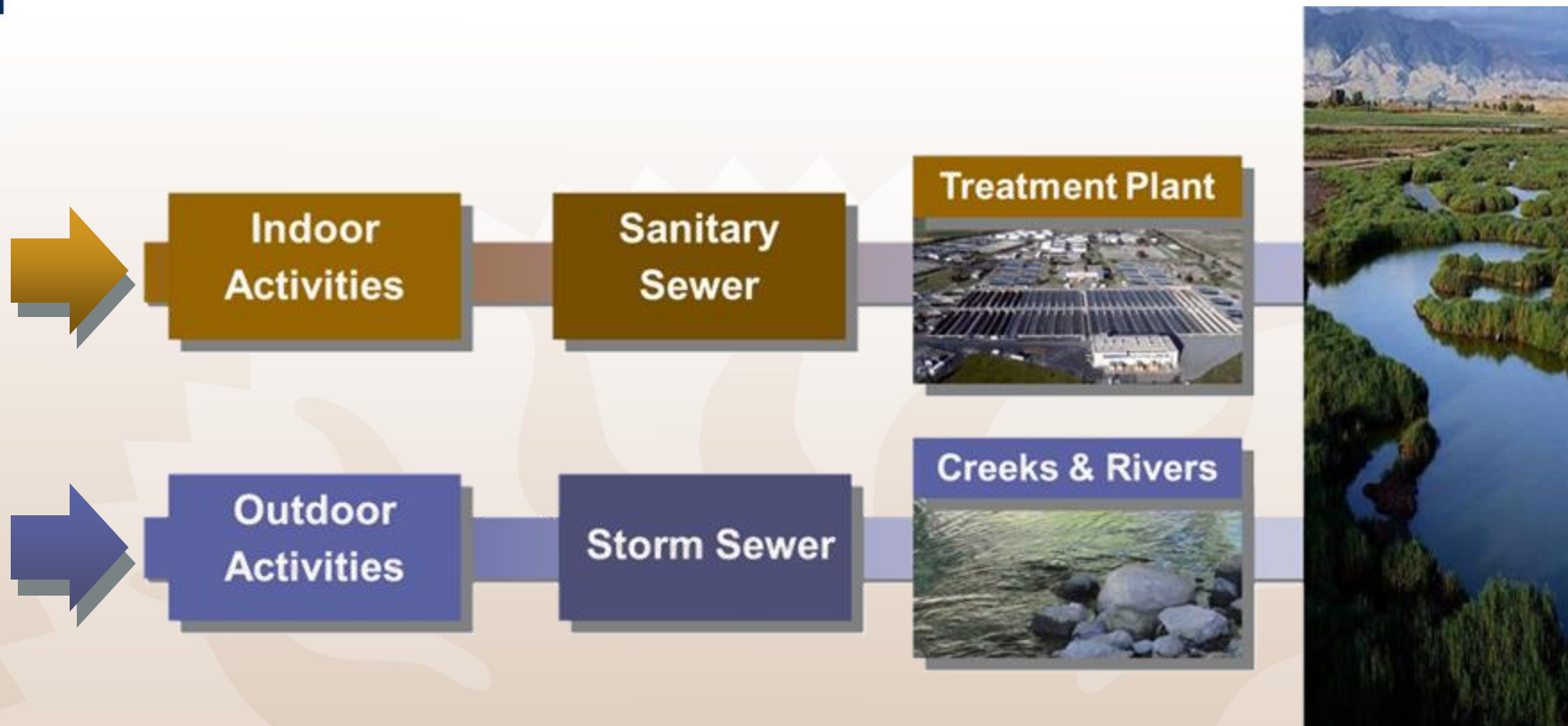
- Develop an inclusive communications strategy
- Develop a list of near-term projects and approaches with a funding strategy for capital and ongoing maintenance
- Include elements from the GSI plan in projects where eligible grant funding is available
- Pursue partnerships

# Site Analysis and Selection

- Added additional sites to the database
- Evaluated each site using several factors
- Identified several general locations/sites to meet the requirement
  - Park land, City-owned land, private- and other agency-owned land, and big-box stores



# Where the Water Goes



# Recommendations

1. Provide funding to support Story-Keyes Corridor Completed Street Project
2. Conduct a detailed feasibility analysis for the Sycamore Terrace regional project and Monterey Road (at Umbarger Road)
3. Look for funding opportunities to advance a feasibility analysis for other regional projects on the list