

# City of San Jose Green Stormwater Infrastructure Update

Park and Recreation Commission  
April 7th, 2021

Presented by: Mathew Nguyen & Michael Mai, Public Works

# 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

# Where the Water Goes



# 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
  - Identified 6 potential regional projects
- Council direction to update the Plan with outreach, funding strategy, and list of near-term projects

# Comprehensive Citywide Approach

## Low Impact Development Project



## Regional Projects (River Oaks Conceptual Design)

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



River Oaks Stormwater Capture Project - Addendum  
January 29, 2021

Preferred Alternative



## Green Street Projects



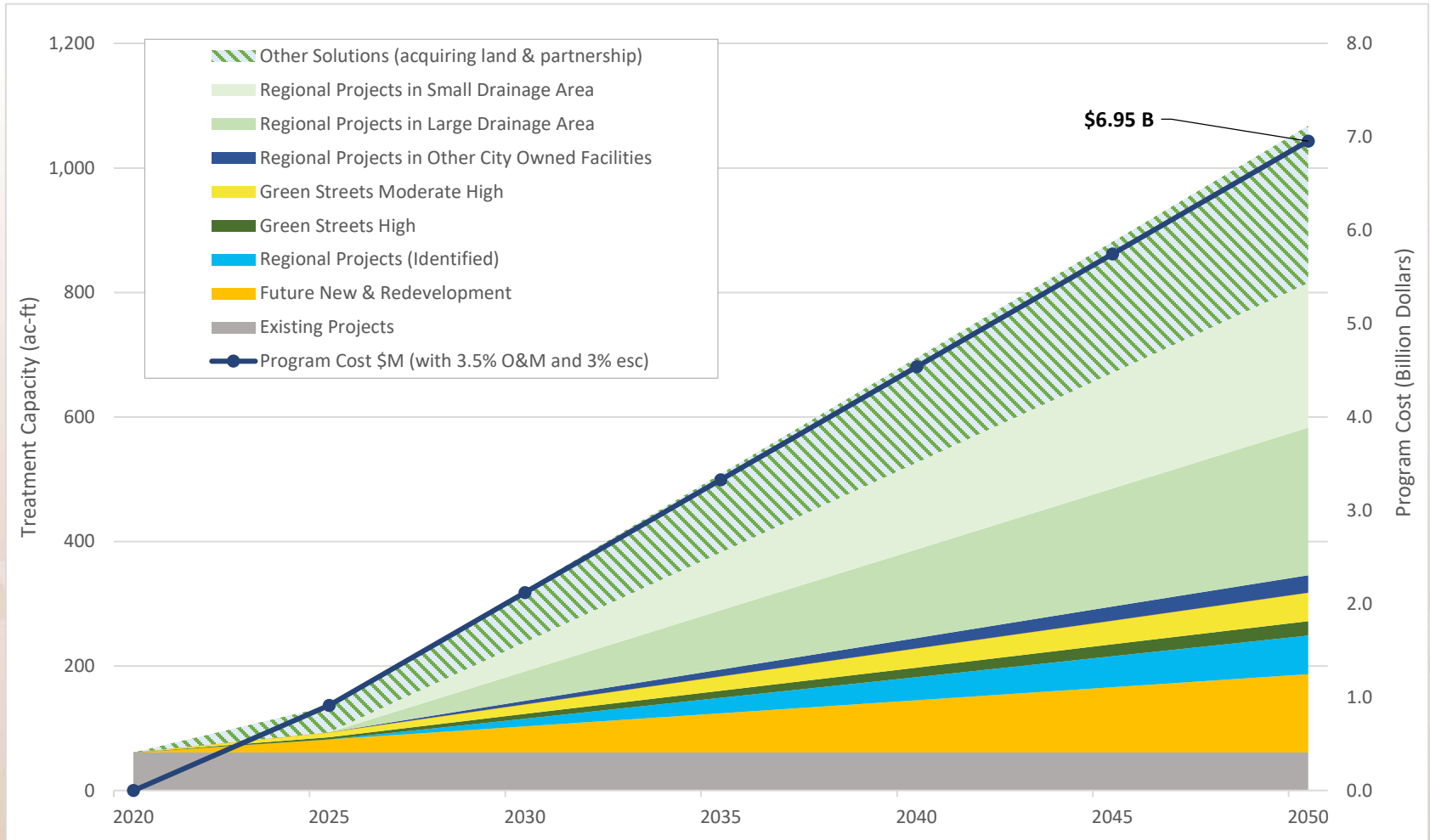
# Green Stormwater Infrastructure Needs

- Captures, retains, and infiltrates 1,068 ac-ft of stormwater runoff, with 833 ac-ft TBD
- Options include regional projects in city facilities, green-street, and low-impact development projects
- Compliance by 2050

# Site Analysis and Selection

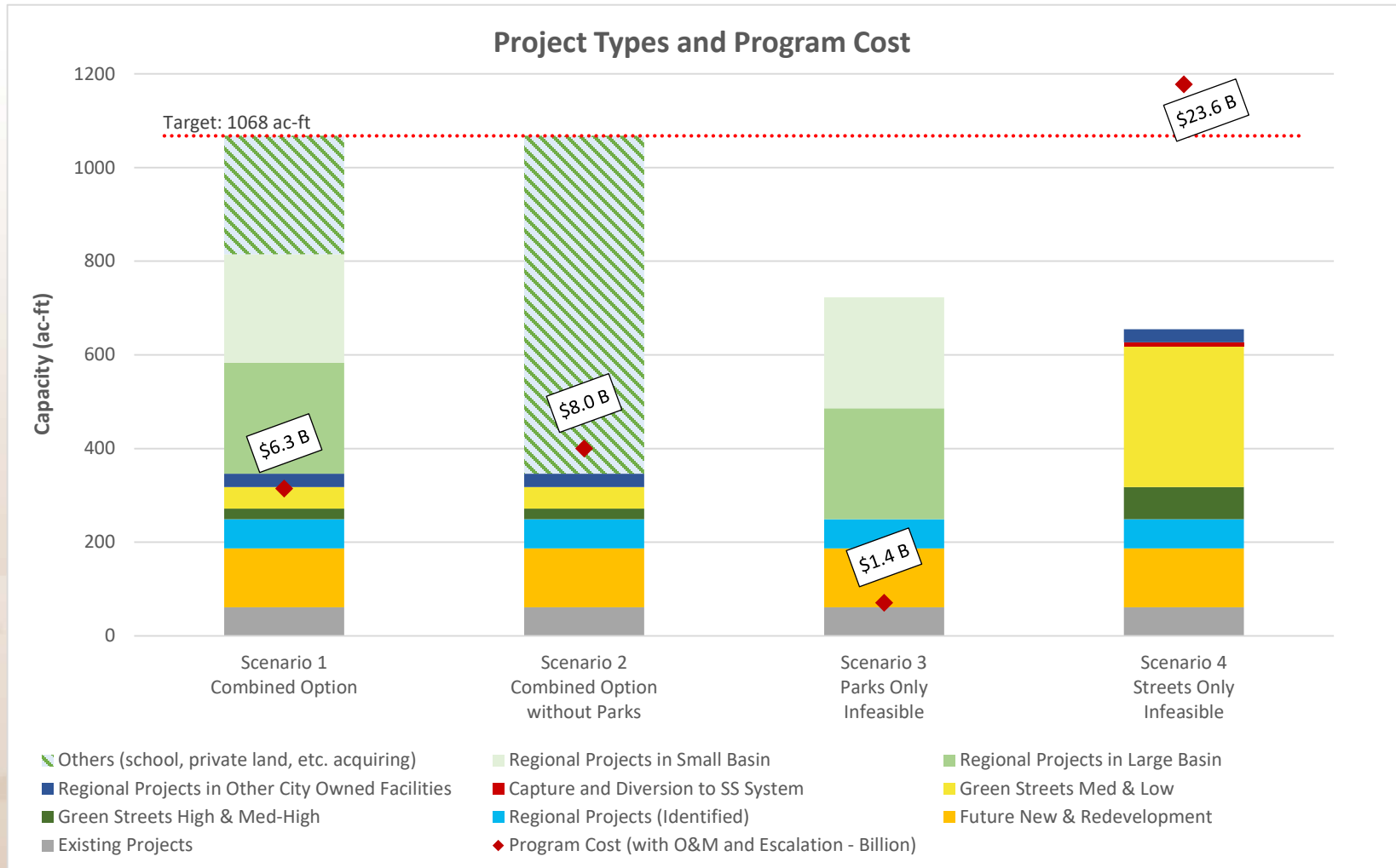
- Added additional sites to the database
- Evaluated each site using the following several factors
- Identified several general locations/sites to meet the requirement
  - City-owned land, private- and other agency-owned land, and big-box stores

# Ideal Scenario to Meet the Target





# Other Scenarios



# 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*

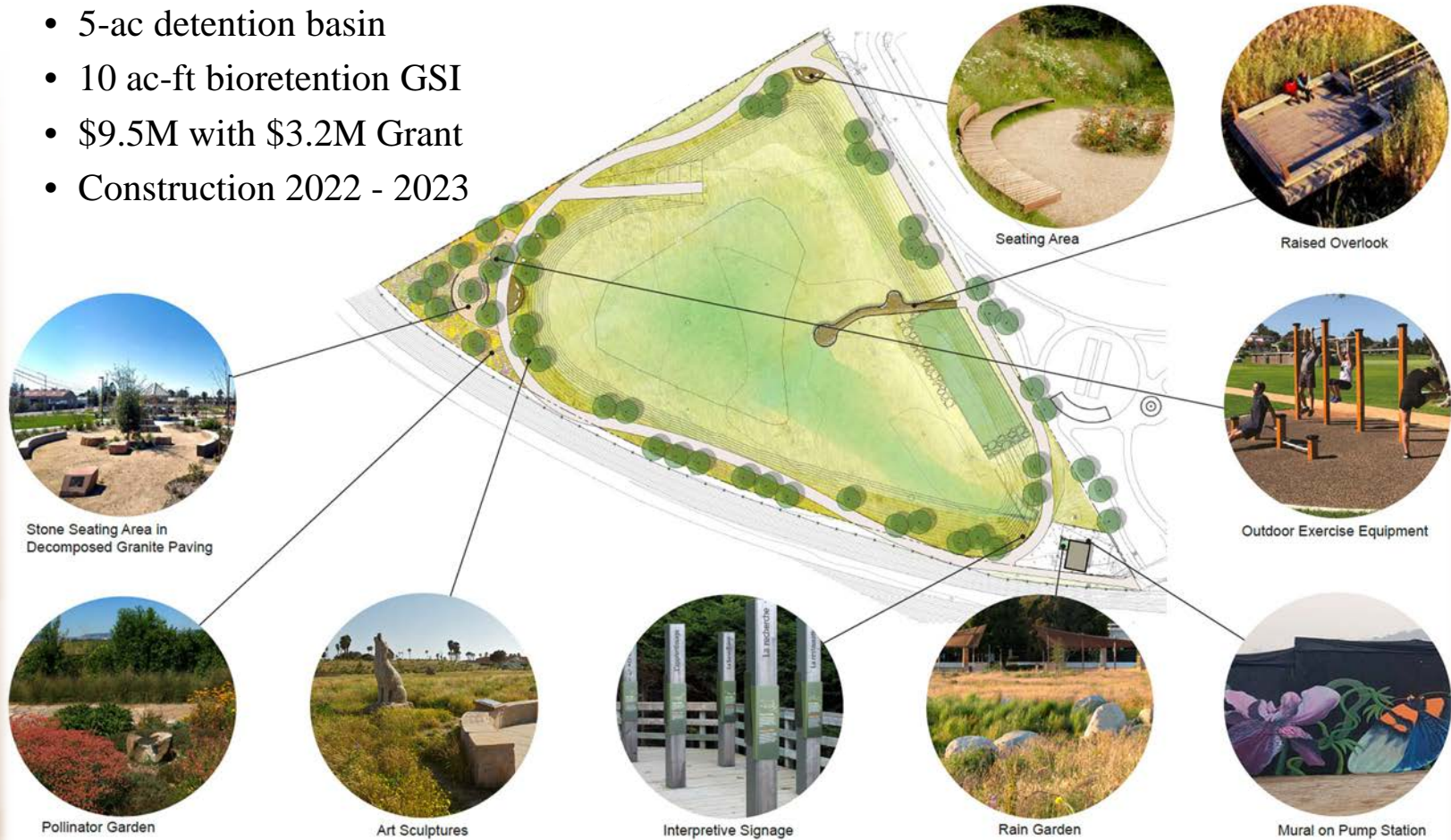
# Near-term Green-Street Projects

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

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

# River Oaks Conceptual Designs

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

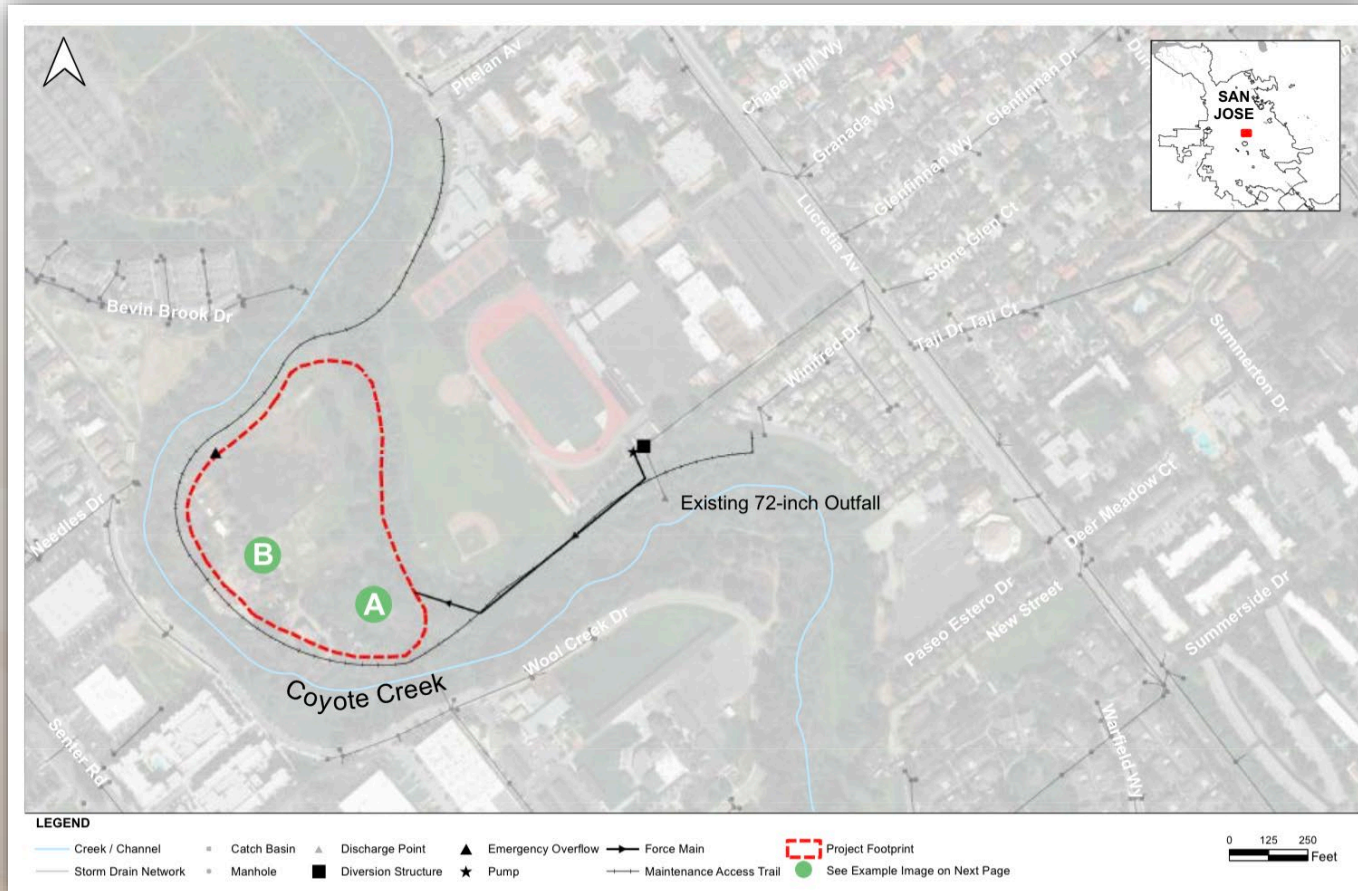


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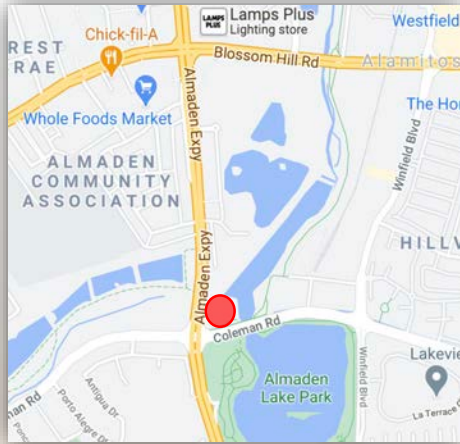


# Preliminary Conceptual Designs & Ideas



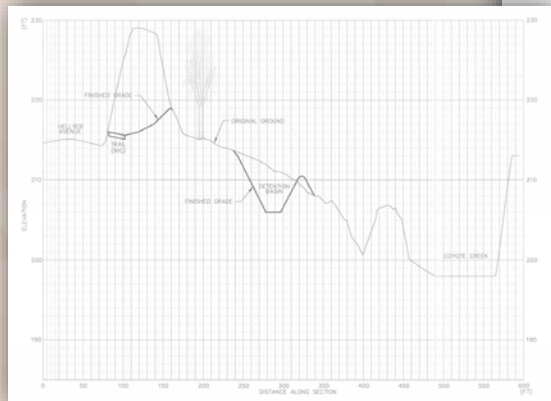
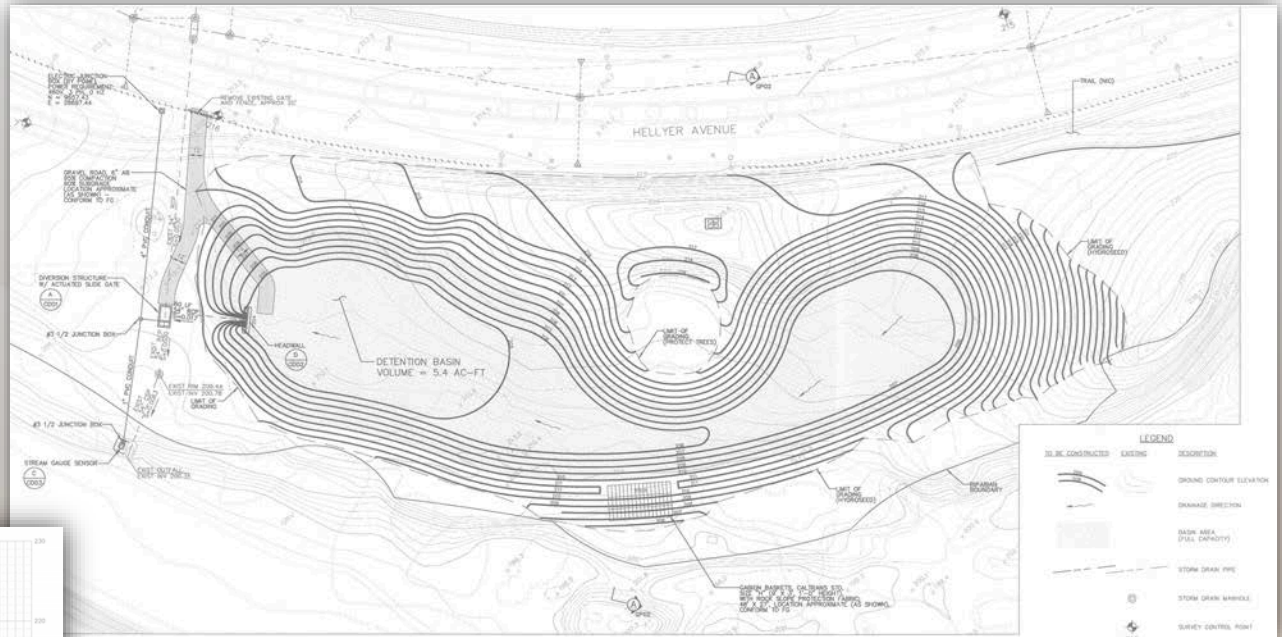
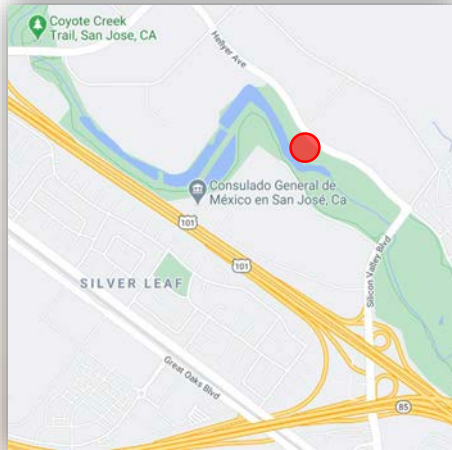
City land south of Phelan – 2019 GSI Plan Concept

# Preliminary Conceptual Designs & Ideas



Sycamore Terrace

# Preliminary Conceptual Designs & Ideas



Hellyer Avenue Property

# Preliminary Conceptual Designs & Ideas





# 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



## Chynoweth Project



## Green-street Design Guidelines

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