

HAYSTACK ROAD CHANNEL IMPROVEMENTS

City Council Study Session
December 12, 2024

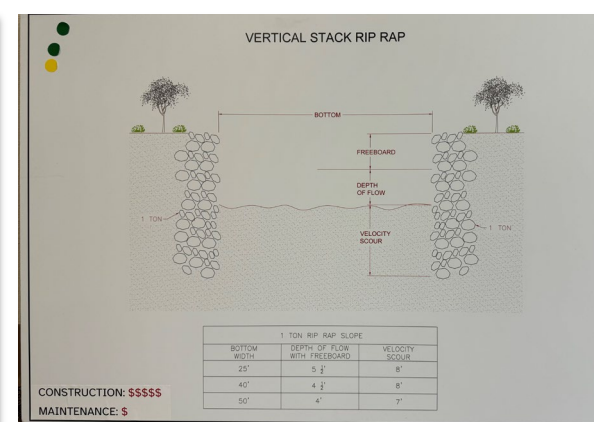
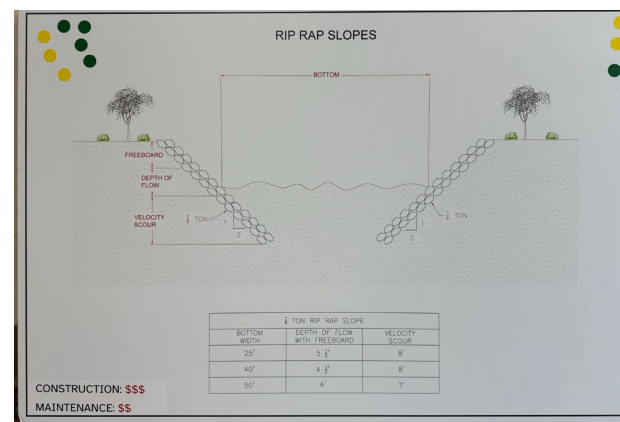
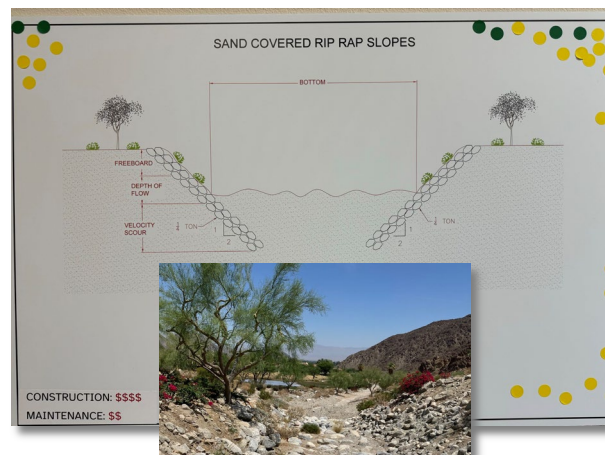
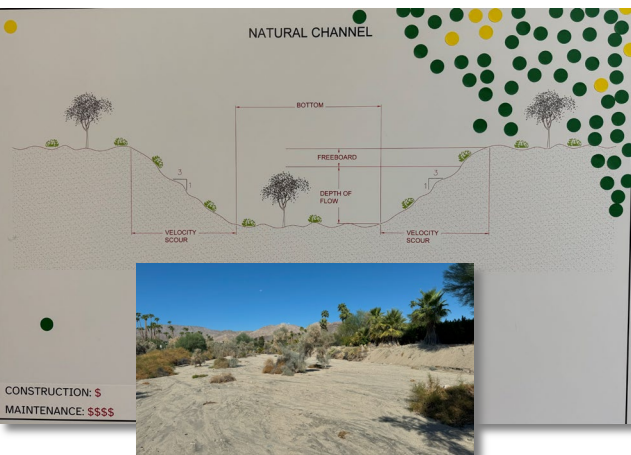


PALM DESERT



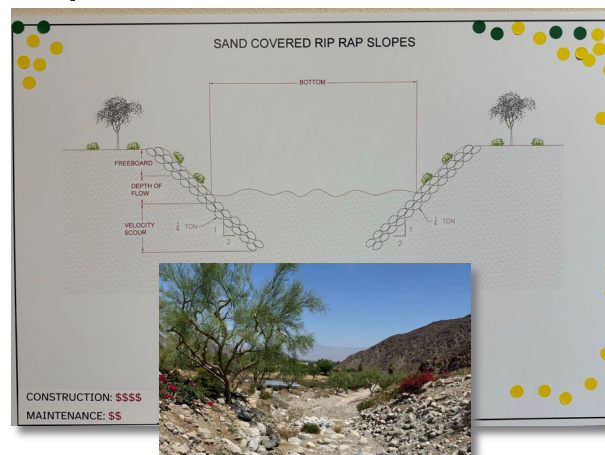
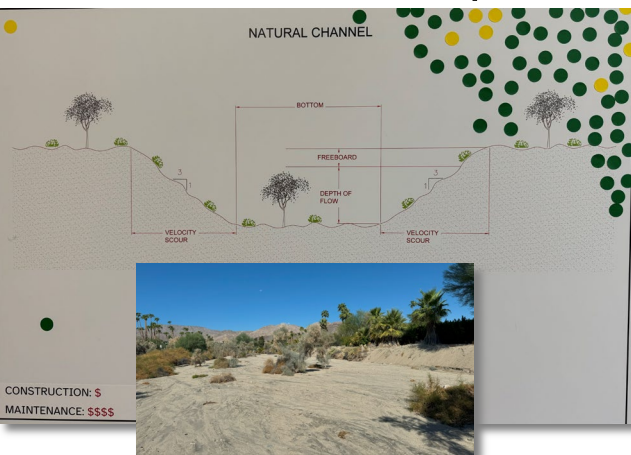
PROJECT PURPOSE

- General Manager of Marrakesh Country Club contacted the City about channel erosion concerns
- Capital Improvement Project is created by the City
- City hires Engineering and Environmental Consultants
- Project presented to Planning Commission May 7, 2024
- Project re-presented to Planning Commission June 4, 2024
- Community Engagement Meeting June 26, 2024
 - 4 options presented



PROJECT PURPOSE

- General Manager of Marrakesh Country Club contacted the City about channel erosion concerns
- Capital Improvement Project is created by the City
- City hires Engineering and Environmental Consultants
- Project presented to Planning Commission May 7, 2024
- Project re-presented to Planning Commission June 4, 2024
- Community Engagement Meeting June 26, 2024
 - 4 options presented
 - 2 preferred options

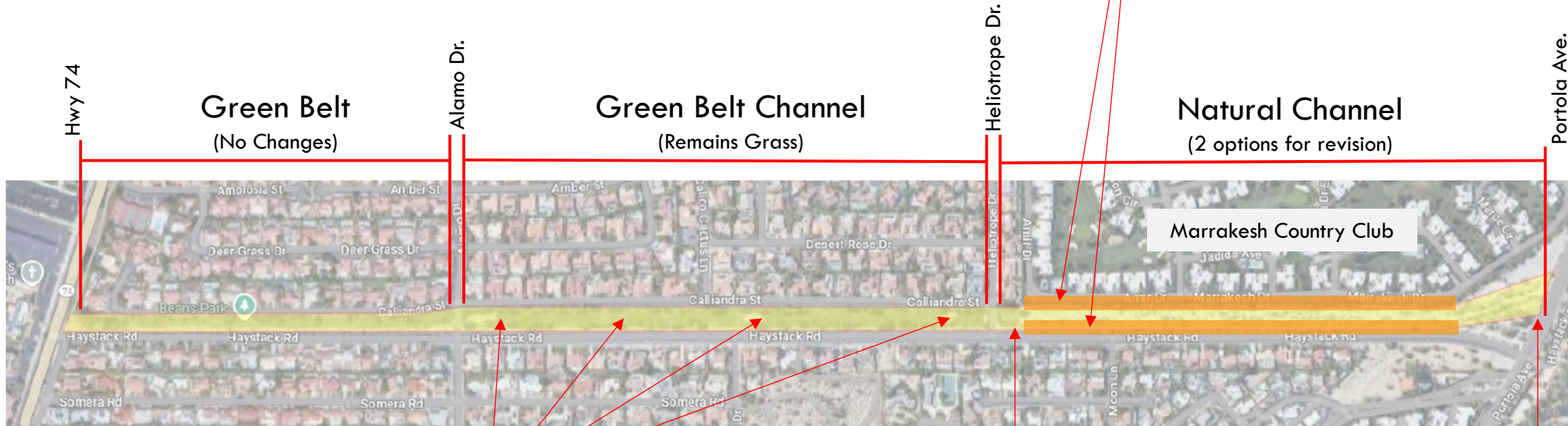


PROJECT PURPOSE

- General Manager of Marrakesh Country Club contacted the City about channel erosion concerns
- Capital Improvement Project is created by the City
- City hires Engineering and Environmental Consultants
- Project presented to Planning Commission May 7, 2024
- Project re-presented to Planning Commission June 4, 2024
- Community Engagement Meeting June 26, 2024
 - 4 options presented
 - 2 preferred options
- July 14, 2024 – Heavy rain causes damage requiring immediate emergency repairs
- Community Engagement Meeting November 7, 2024
 - Presented analysis of the 2 preferred options

PROJECT LOCATION

- Areas of concern for flooding
- Surrounding homes at risk of damage
 - Public safety concerns (pedestrian and roads)
 - Compromised utility infrastructure

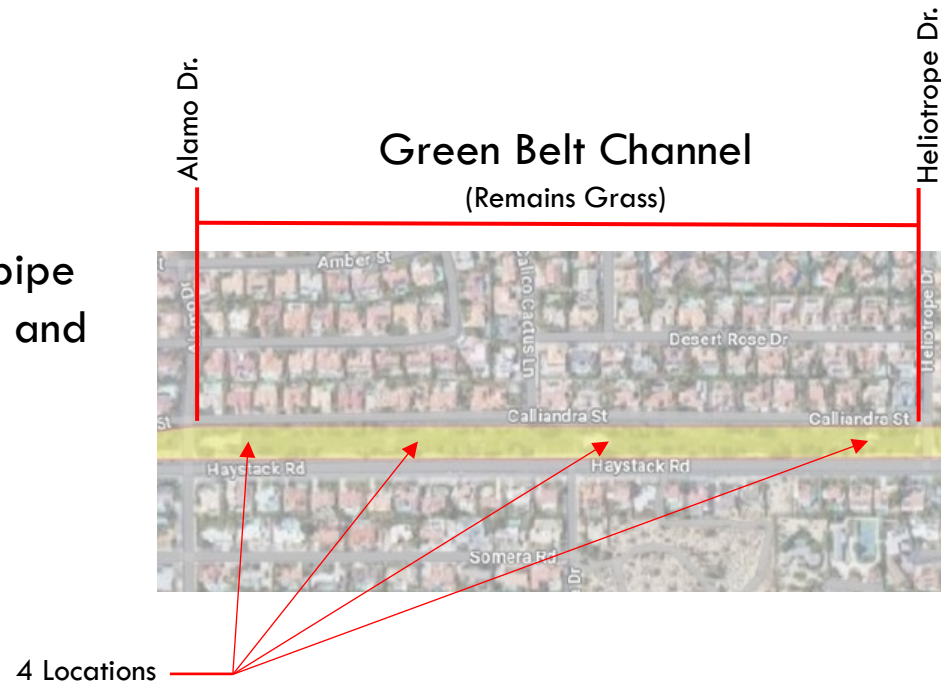


Proposed Underground Infiltration System to mitigate erosion and standing water (Re-install grass afterward)

Significant Erosion Throughout

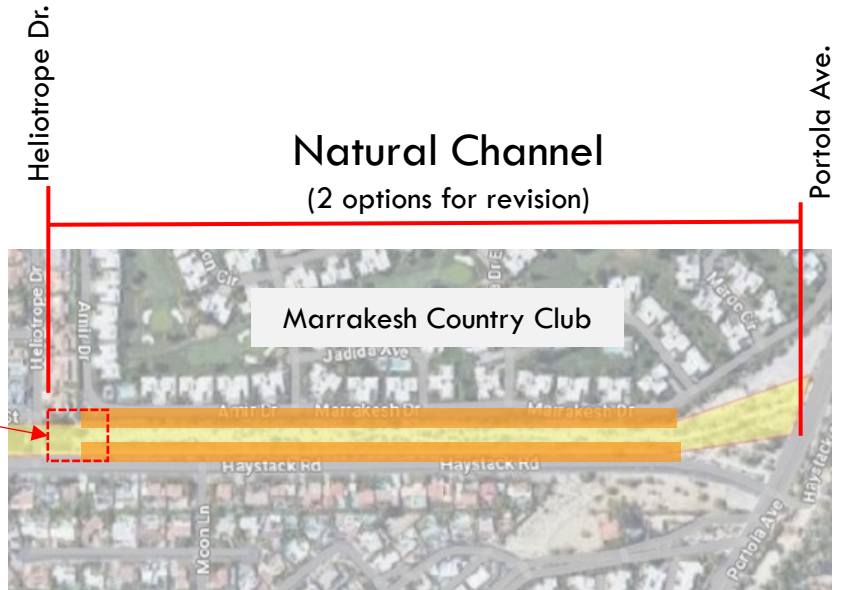
GREEN BELT IMPROVEMENTS

- Underground perforated pipe will help to reduce erosion and standing water that invites mosquitos
- **Grass will be replaced following installation**



HEAVY RAIN

July 2024



CHANNEL EROSION



Looking South: SCE Power Pole



Looking East: Marrakesh CC on left



Looking East: Haystack Rd. on right



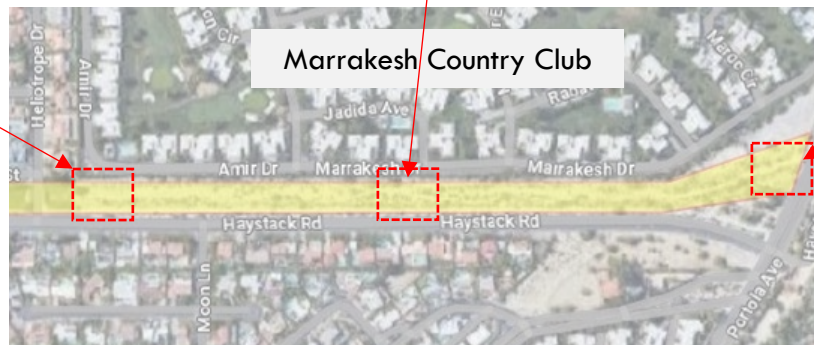
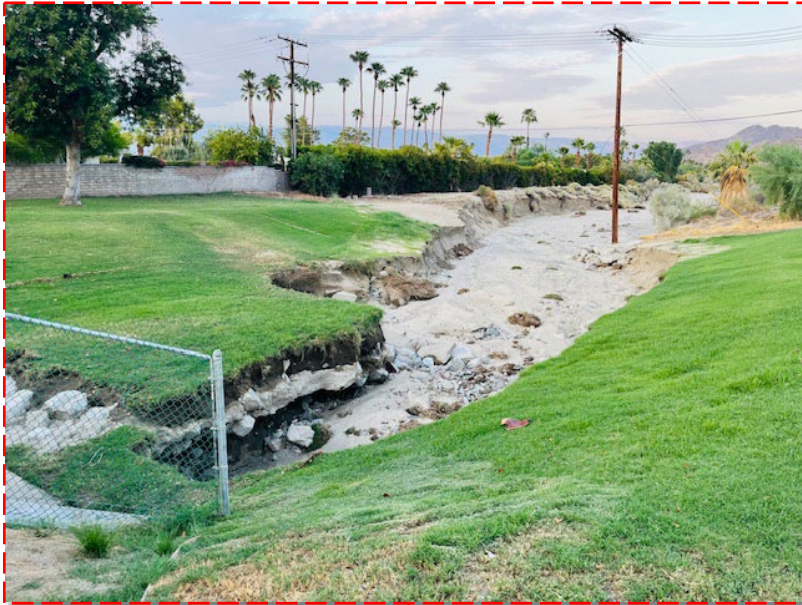
Looking South-East toward Haystack Rd.

- Private property at risk
- Public safety concerns
- Compromised utility infrastructure

EMERGENCY REPAIRS

Aug.-Sep. 2024 (\$200,000)

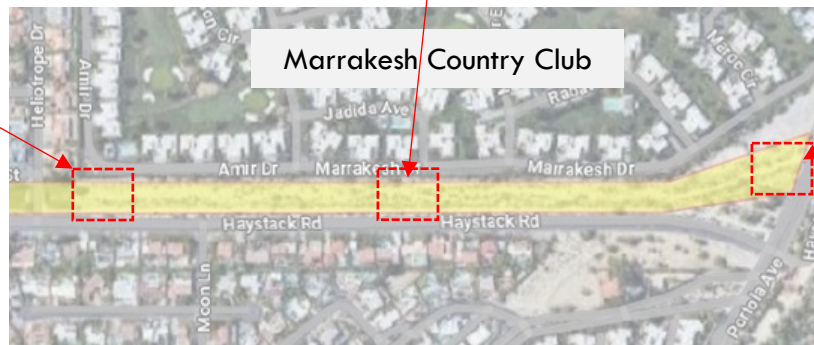
Before:



EMERGENCY REPAIRS

Aug.-Sep. 2024 (\$200,000)

After:



2 OPTIONS FOR CONSIDERATION

Natural Slopes



Boulders & Soil Slopes



NATURAL OPTION

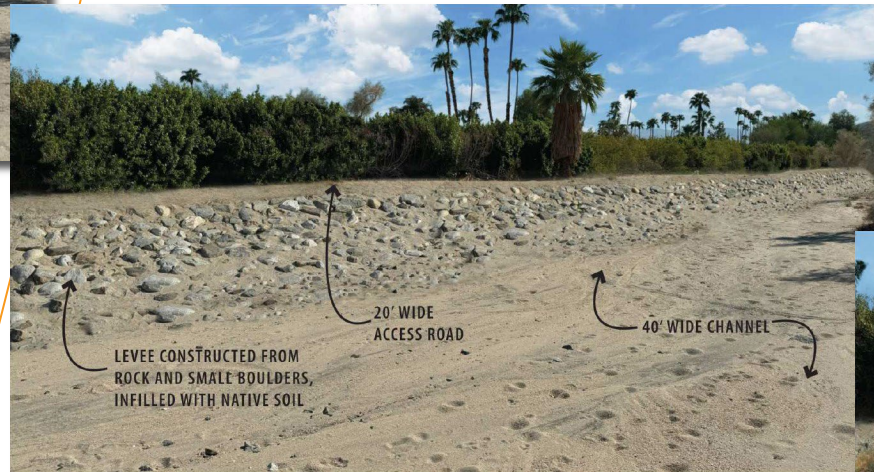


- Sand moved through the channel and onto slopes to repair erosion
- Consequence of continued maintenance is destruction of vegetation

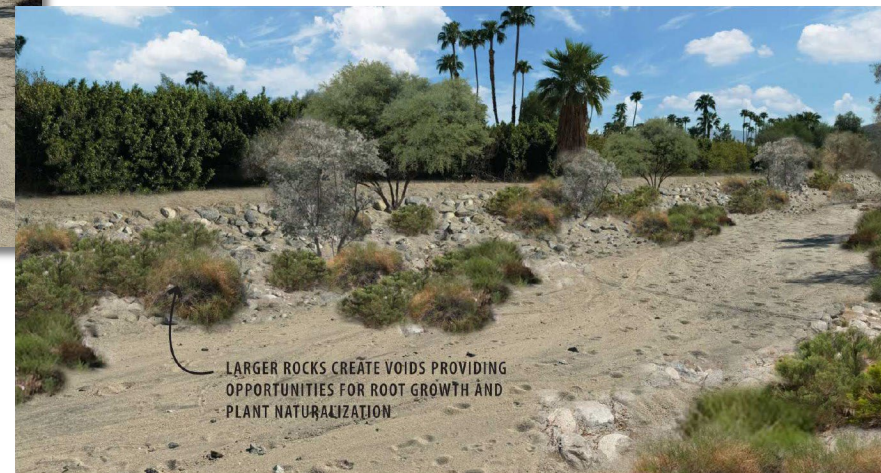
BOULDER & SOIL OPTION



Before Repairs



After Repairs



Improvements at Maturity

COMPARISONS

Channel repairs East of Heliotrope Dr.

Natural Slopes

- Level of protection:
 - 100-year storm or larger presents a significant threat to channel functionality and integrity
 - Unmitigated erosion at channel walls within feet of significant damage to private property and public infrastructure
- No Access Road for maintenance
- Lower upfront costs - Construction Cost Estimate: \$500K
- More Maintenance: \$150K annually
- Plant impact: Less initially, but more long term with ongoing repairs

Boulder Slopes

- Level of protection:
 - 100-year storm would present minimal threat to channel functionality and integrity
 - Controlled and predictable outcomes due to more robust channel walls
- Access Road for maintenance
- Higher upfront costs - Construction Cost Estimate: \$3.3M
- Less Maintenance: \$50K-\$75K annually
- Plant Impact: More initially, but less long term due to more robust side slopes requiring less repairs

ENGAGE PALM DESERT

engagepalmdesert.com/projects

The screenshot shows a web browser window with the URL `engagepalmdesert.com/projects`. The page features a navigation bar with tabs for "All", "Published", and "Archived", and a search filter labeled "Filter by name". The main content is a grid of project cards, each with a "PUBLISHED" or "ARCHIVED" status tag. The "Haystack Channel Project" card is highlighted with a black border.

Project Name	Status
Palm Desert Unified Development Code	PUBLISHED
Historic Context Statement and Survey	PUBLISHED
Street Projects in Palm Desert	PUBLISHED
Haystack Channel Project Update	PUBLISHED
Palm Desert Vision Zero Strategy	PUBLISHED
University Neighborhood Specific Plan Update	PUBLISHED
Contribute to the New Community Mural	ARCHIVED
Palm Desert Library	PUBLISHED
Construction Projects in Palm Desert	PUBLISHED
Tell Us Your Priorities	PUBLISHED
Neighborhood Traffic Management Program	PUBLISHED
San Pablo Roundabout Project	ARCHIVED