

Safe, Clean Water Program

Upper Los Angeles River Watershed Area Steering Committee (WASC)



Meeting Minutes:

Thursday, March 3, 2021

2:00pm - 4:00pm

WebEx Meeting

Attendees

Committee Members Present:

Genevieve Osmena (Los Angeles County Flood Control District)

Art Castro* (LA Dept of Water and Power)

Paul Lui (LA Dept. of Water and Power)

Alfredo Magallanes (Los Angeles - Sanitation)

Cathie Santo Domingo (LA Recreation & Parks)

Ernesto Pantoja (Laborers Local 300)

Miguel Luna (Urban Semillas)

John Luker (Santa Susana Mountain Park Association)

Veronica Padilla-Campos (Pacoima Beautiful)

Yazdan Emrani (Glendale)

Patrick DeChellis (La Canada Flintridge)

Teresa Villegas (Los Angeles)

Max Podemski (Los Angeles)

Rafael Prieto (Los Angeles)

Paul Alva (Los Angeles)

Kris Markarian (Pasadena)

Committee Members Not Present:

Jacob Lipa*

*Committee Member Alternate

See attached sign-in sheet for full list of attendees

1. Welcome and Introductions

Max Podemski, Vice Chair of the Upper Los Angeles River WASC, welcomed Committee Members and called the meeting to order.

CJ Caluag (District) facilitated the roll call of Committee Members. All committee members made self-introductions and a quorum was established.

The Committee decided to move agenda item 8. Voting Items after agenda item 5. Public Comment Period.

2. Approval of Meeting Minutes from February 18, 2021

The District provided a copy of the meeting minutes from the previous meeting. Max Podemski asked the committee members for comments or revisions, there were none.

Yazdan Emrani motioned to approve the minutes. Genevieve Osmena seconded the motion. The Committee voted to approve the meeting minutes. (Approved, see vote tracking sheet).

3. Committee Member and District Updates

CJ Caluag (District) provided the District updates, noting: Watershed Coordinators (WC) are submitting their Letters of Intent and insurance requirement as well as working with the District's contracts division. The Safe Clean Water Program's (SCWP) reporting module is anticipated to go live on April 1, 2021. The reporting module is where the quarterly reports will be submitted. The reporting module can be accessed by clicking the top banner on the SCWP website. The Annual Plan Page is live on the SCWP website under the Municipalities page where the District uploaded the Annual Plans that were submitted and approved.

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Regarding Transfer Agreements (TA), the District has executed 63 TAs, received 70 Annual Plans with 47 Cities receiving payment. Cities that have not returned their executed TAs, Annual Plans, Authorizations and Resolutions the District requested that these be returned as soon as possible. For Regional TAs the District has received 35 of the 48 Scopes of Work Scopes and continue to work towards the execution of those Regional TAs.

The District noted that an email was sent out regarding Partial Funding Guidelines to the Committee members and project applicants. WASCs can award partial funds; however, Infrastructure Program (IP) project applicants will need to demonstrate how they can fulfill the entire scope of work using other funding sources and must maintain project score as identified in the original application. Additional details are available on the SCW Program website under the Regional Program page.

Veronica Padilla-Campos expressed concerns over WebEx's capability to receive calls from call-in users versus not having access to a computer. The District noted that a telephone number is provided as an option for call-in users on the agenda.

Teresa Villegas asked if the Partial Funding Guidelines are applicable to Round 1 IP projects. The District indicated that the Partial Funding Guidelines can be applied to Round 1 IP projects, on a case by case basis, dependent upon how the project is being funded and what stage the project is in. This allows more flexibility for the WASC during Stormwater Investment Plans (SIP) deliberations. Teresa Villegas asked about the process of choosing a project for SIP funding. District explained that there will be a discussion, facilitated by the District, among the Committee and project applicants during a WASC meeting where they may discuss the partial funding options. The project applicant would have to fill and sign the appropriate documentation reflecting the partial funding that would be included in the SIP.

Paul Alva requested clarification during the next meeting for applicants in Round 1 that received multiple year award that are relying on the earmarked funding award from the WASC. Paul Alva asked if an applicant that receives partial funding can return at a future year and request the difference amount of funds. The District indicated that IP project applicants may find the funding source elsewhere, get funded for a specific phase of the project and return to the WASC for funding the other phases. Mike Antos clarified that a project applicant would return to the WASC for funding by resubmitting an application.

4. Ex Parte Communications

No Ex Parte Communications

5. Public Comment Period

No Public Comment

6. Discussion Items

a) Infrastructure Program (IP) Presentations (ULAR Scoring Rubric):

i) Northridge Middle School – Los Angeles Unified School District
Presented by Jae Ko and Christos Chrysiliou. The project feature site improvements, greening, bioswales, ADA upgrades, pervious pavers, and solar reflective asphalt coating and replacement.

Paul Alva asked if the Project collected any offsite water and when the Project started in terms of construction. Christos Chrysiliou noted that the project only collects onsite water and the project design ended in 2017 and project construction ended in 2020. Paul Alva asked for confirmation that construction

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activities before November 18, 2018 are not eligible for funding. Christos Chrysiliou confirmed that the funding request is for Project activities, including construction and maintenance, after the eligible date.

Teresa Villegas requested confirmation of the funding request. Christos Chrysiliou clarified.

Cathie Santo Domingo inquired about the operation and maintenance costs. Christos Chrysiliou indicated that the costs are based on eligibility and recalculation of the retention areas.

Alfredo Magallanes requested confirmation if the school is registered as an Integrated Regional Water Management Plan (IRWMP) or Enhanced Watershed Programs (EWMP). Christos Chrysiliou replied that they are registered as an IRWMP.

ii) Victory ES – DROPS – Los Angeles Unified School District

Presented by Jae Ko and Christos Chrysiliou. The project feature site improvements, new greening, storm water capture areas, ADA upgrades, and solar reflective asphalt coating and replacement.

Genevieve Osmena asked if the Drought Response Outreach Program for Schools (DROPS) program is a reliable source for funding to be used as leveraged funding. Christos Chrysiliou replied that the DROPS program for Schools was a great program that had provided \$1 million for each five sites in the past, but it is no longer available. Genevieve Osmena inquired about capturing water from offsite areas. Christos Chrysiliou explained that the School District is sensitive to liabilities involving taking water from offsite areas.

Rafael Prieto asked if this Project has partnered with the City. Christos Chrysiliou noted to have met with the County and City on how to best support each other.

Veronica Padilla-Campos asked about the process for selecting a school. Christos Chrysiliou noted that they worked with the State to choose critical repair needed projects through Facilities Condition Index that shows the state of deterioration of components.

iii) Woodlake ES – LID Project – Los Angeles Unified School District

Presented by Jae Ko and Christos Chrysiliou. The project feature site improvements, greening, bioswale areas, reading garden, ADA upgrades, and solar reflective asphalt coating and replacement.

Alfredo Magallanes asked the purpose of the funding since the three Projects presented are complete. Christos Chrysiliou explained that the funds would be to offset costs to fund future low-impact development projects.

Teresa Villegas asked if the Project was in a Disadvantaged Community and about the points they received for Community Investments. The District shared the ULAR Scoring Rubric on the screen and explained that the Community Investment points are not based on a project being in a Disadvantaged Community, but rather elements as written in the Feasibility Study Guidelines, such as improving flood management and greening of schools. Christos Chrysiliou noted that points received were based on landscaping and vegetation.

Veronica Padilla-Campos asked if the school was a magnet school. Christos Chrysiliou said he believes it is not a magnet school and will get back to the WASC.

iv) Altadena Mariposa Green Street Demonstration Project – Amigos de los Rios

Presented by Claire Robinson and Vik Bapna. The Project is a multi-objective Green Street that will protect water quality, improve drainage, and provide community urban greening benefits.

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Paul Alva noted the Scoring Committee indicated in the ULAR Scoring Rubric that the Project is overdesigned. Vik Bapna noted that there is an existing storm drain system but there is a large amount of runoff that bypasses those catch basins that do not have local collection systems and end up at the Project area. The existing storm drain systems are effective for the 85th percentile storm event, but the extra capacity is needed for larger rain events and the area provides underground water recharge.

Teresa Villegas requested clarification on the funding request. The Funding Request slide was shown on the screen to clarify the funding request.

7. Public Comment Period

No Public Comment

8. Voting Items

a) Selection of Chair(s)

i) SCW Program – Expectations of Chair, Co-Chair and/or Vice-Chair

Rafael Prieto asked for clarification on the title of the agenda item. The District clarified that it is the title of the document that explains the expectations of the Chair, Co-Chair and Vice-Chair for the WASC. Max Podemski is currently the Vice-Chair and the new Chair is to be selected.

Miguel Luna motioned to nominate Teresa Villegas to be Chair of the Upper Los Angeles WASC and Rafael Prieto seconded the nomination. The Committee voted to approve Teresa Villegas as Chair unanimously. (Approved, see vote tracking sheet). Max Podemski would remain in his current position as the Vice Chair.

9. Items for Next Agenda

a) Infrastructure Program and Scientific Studies Presentations on March 18th, 2021. Five presentations scheduled.

11. Adjournment

Teresa Villegas thanked WASC members and the public and adjourned the meeting.

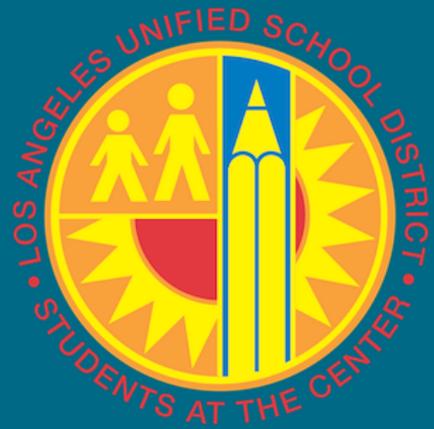
**Upper Los Angeles River
March 3, 2021**

		Quorum Present			Voting Items	
Member Type	Member	Voting?	Alternate	Voting?	Meeting Minutes	Teresa Villegas As Chair
Agency	Genevieve Osmena	x	Carolina Hernandez		y	y
Agency	Delon Kwan		Art Castro	x	y	y
Agency	Paul Liu	x	Rafael Villegas		y	y
Agency	Alfredo Magallanes	x	Michael Scaduto		y	y
Agency	Cathie Santo Domingo	x	Javier Solis		y	y
Community Stakeholder	Ernesto Pantoja	x	Sergio Rascon		y	y
Community Stakeholder	Miguel Luna	x	Yvette Lopez-Ledesma			y
Community Stakeholder	John Luker	x	Wendi Gladstone		y	y
Community Stakeholder			Jacob Lipa			
Community Stakeholder	Veronica Padilla-Campos	x	Felipe Escobar		y	y
Municipal Members	Yazdan Emrani	x			y	y
Municipal Members	Patrick DeChellis	x			y	y
Municipal Members	Teresa Villegas	x	Barbara Romero		y	y
Municipal Members	Max Podemski	x	Ackley Padilla		y	y
Municipal Members	Rafael Prieto	x			y	y
Municipal Members	Paul Alva	x	TJ Moon		y	y
Municipal Members	Kris Markarian	x			y	y
Total Non-Vacant Seats	16			Yay (Y)	15	16
Total Voting Members Present	16			Nay (N)	0	0
Agency	5			Abstain (A)	0	0
Community Stakeholder	4			Total	15	16
Municipal Members	7				Approved	

Attendees

Upper Los Angeles River WASC Meeting - March 3, 2020

Alfredo Magallanes	Jae Ko	Nayiri Vartanian
Alvin Cruz - LACFCD	ilene Ramirez	Patrick DeChellis
Alynn Sun	Jason Casanova	Paul Alva
Alysha Chan	joey galloway	Paul Glenn (GHD)
Ana Tabuena-Ruddy	Joe Venzon - LA County	Paul Liu
Anthony Nercessian	Johanna Chang	Peter Tonthat
Art Castro	John Luker	phuoc le
Blake Whittington	Josue Espino	Rafael Prieto
Cameron McCullough	Jose Rodriguez	Safe Clean Water LA
Carlos Moran	Joyce Amaro	Sarai Bhaga
Christos Chrysiliou	Justin - LACFCD	shahram Kharaghani
Carmen Andrade	katie m	Sheila Brice
Cathie Santo Domingo	Kevin Chang	Susie Santilena
Christine McLeod	Karen Lee	Teresa Villegas
CJ CALUAG - LACFCD	Kris Markarian	Thuan Nguyen
Clarasophia Gust	Limor Horowitz	TJ Moon
Conor Mossavi	Tori Klug	Wendi Gladstone
Courtney Bonilla	Veronica Padilla	Ernie Rivera
D Ready	Vik Bapna	Francisco Tesfaye
Dennis Ackel	Maritsa DRA Inc.	
Eileen Alduenda	max Podemski	
Dawn Petschauer	Mayra Cabrera	
Dustin Bambic	Miguel Luna	
Ernesto Pantoja	Mike Antos	
Fiona McHenry-Crutchfield	Yazdan Emrani	
Genevieve Osmena	Yvana Hrovat	
Gregor Patsch - Torrent Resources	Anteneh	



Northridge Middle School

17960 Chase St, Northridge, CA 91325

Safe Clean Water Infrastructure Program FY 21-22

Los Angeles Unified School District

Presented by:

Christos Chrysiliou, AIA, CCM, LEED AP BD+C

Director of Architectural and Engineering Services

Maintenance and Operations

March 3, 2021





Presentation Outline

Project Overview

Project Location and Disadvantaged Communities

Project Information

- Project Background
- Project Details
- Project Photos

Cost and Schedule

Funding Request

Preliminary Score

- Water Quality Benefits
- Community Investment and Nature Based Solutions
- Leveraged Funds



Project Overview

The Northridge Middle School Project includes school wide asphalt replacement, site utility replacement, ADA upgrades, installation of bioretention areas, pervious pavers, native plant landscaping, garden areas, and solar reflective coating.

- Project objectives
 - Create a safe, enriched learning environment for students through playground improvements and new green spaces.
 - Provide accessibility upgrades to current ADA codes.
 - Mitigate stormwater run-off through bioretention and pervious paver areas in accordance with County LID Standards.



Project Overview

- Paving, Utility, and ADA Scope
 - Replace deteriorated asphalt throughout play court areas, in between building, and parking lots
 - Provide ADA accessible path of travel including required ramps, gates, parking, and restroom upgrades
 - Lunch shelter area improvements
 - Replace deteriorated utility lines throughout site
- Water Quality and Community Investments Scope
 - Bioretention Areas
 - Pervious Pavers
 - Native Planting and Greening Areas
 - Solar Reflective Asphalt Coating
- The total project cost is \$21.19 Million and the project was completed in June 2020.
- SCW funding is being requested for cost of construction and O&M for Community Investment scope for a total of \$1,920,084.



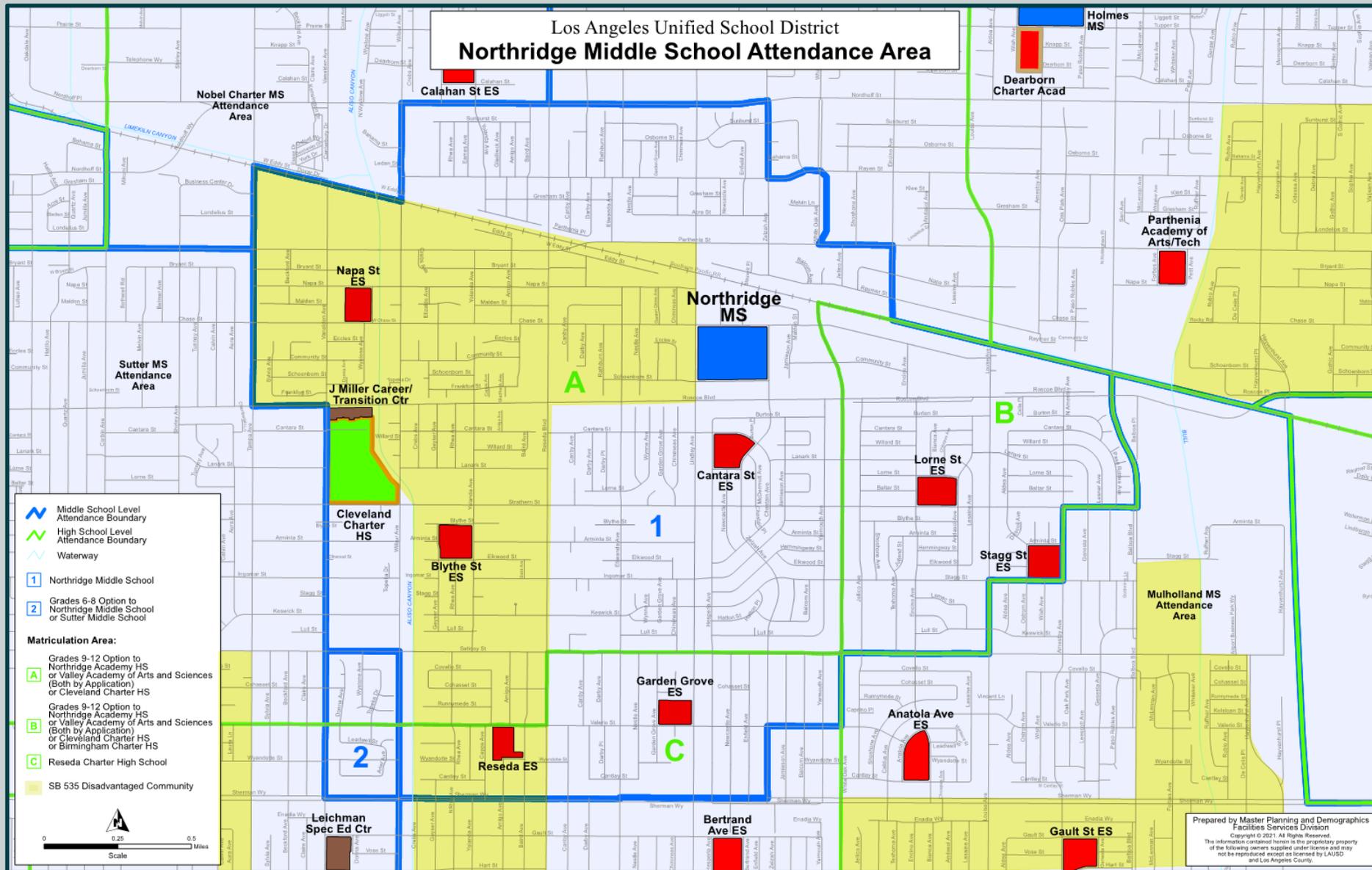
Project Location

Watershed Area – Upper Los Angeles River





Project Location – SB 535 Disadvantaged Communities



DISADVANTAGED COMMUNITIES

Prepared by Master Planning and Demographics
Facilities Services Division
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Project Background

- Northridge MS was selected as part of LAUSD's Critical Repair Program for repaving and site utility replacement.
- LAUSD saw this as an opportunity to increase greening at the site, while taking advantage of the favorable soil conditions for stormwater infiltration.
- Project also incorporated DROPS (Drought Response Outreach Program for Schools) scope into the design.





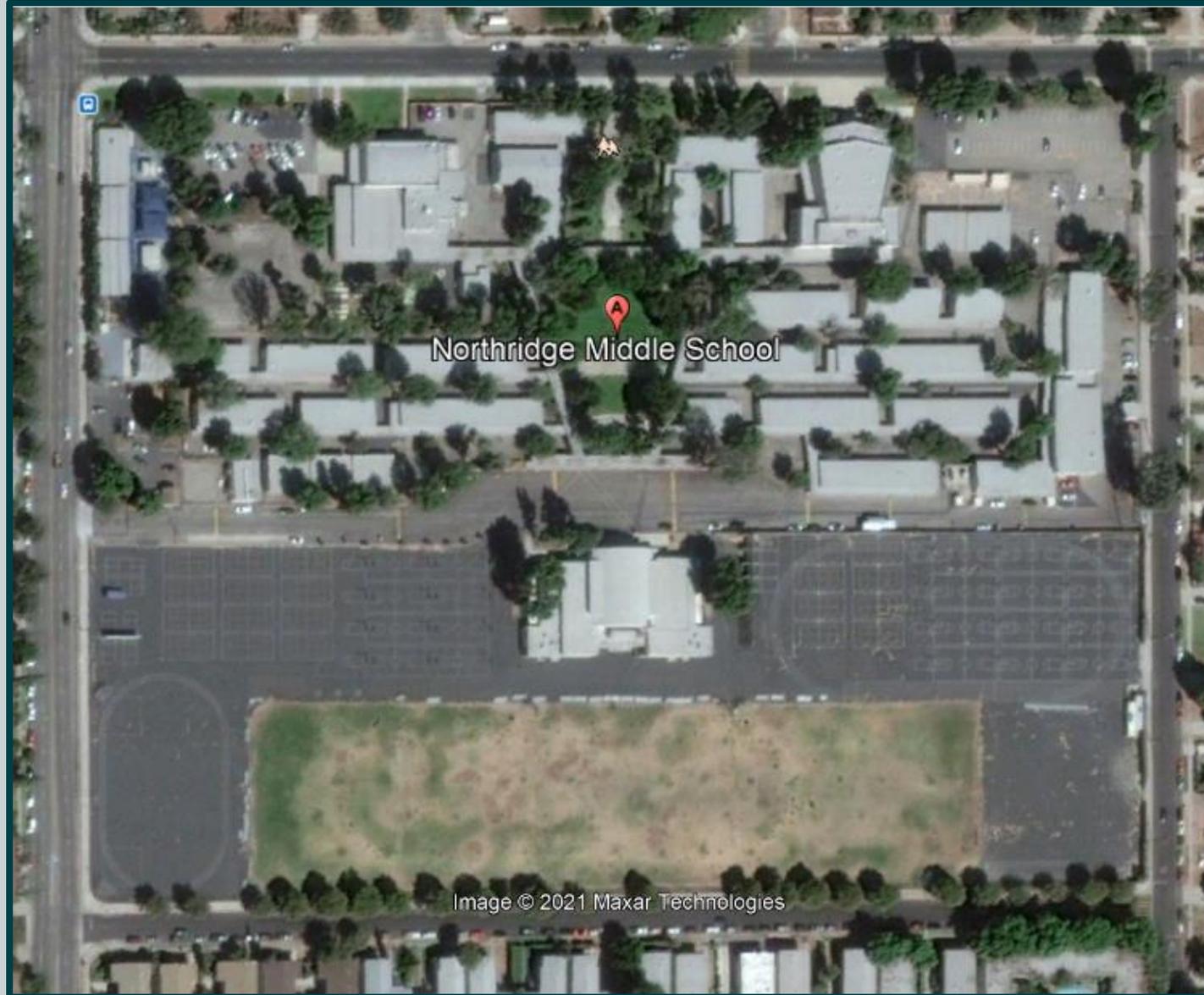
Project Background

- The DROPS program provided community outreach by educating and increasing public understanding of storm water management benefits.
- The project is registered as part of the Integrated Regional Watershed Management Plan.
- Addresses highest contributors to the pollution burden scores which consists of Ozone, Traffic, and Hazardous waste.
- The project will benefit the Disadvantaged Community Area through site improvements, water conservation, stormwater pollution reduction, and education.





Project Details – School Site Before





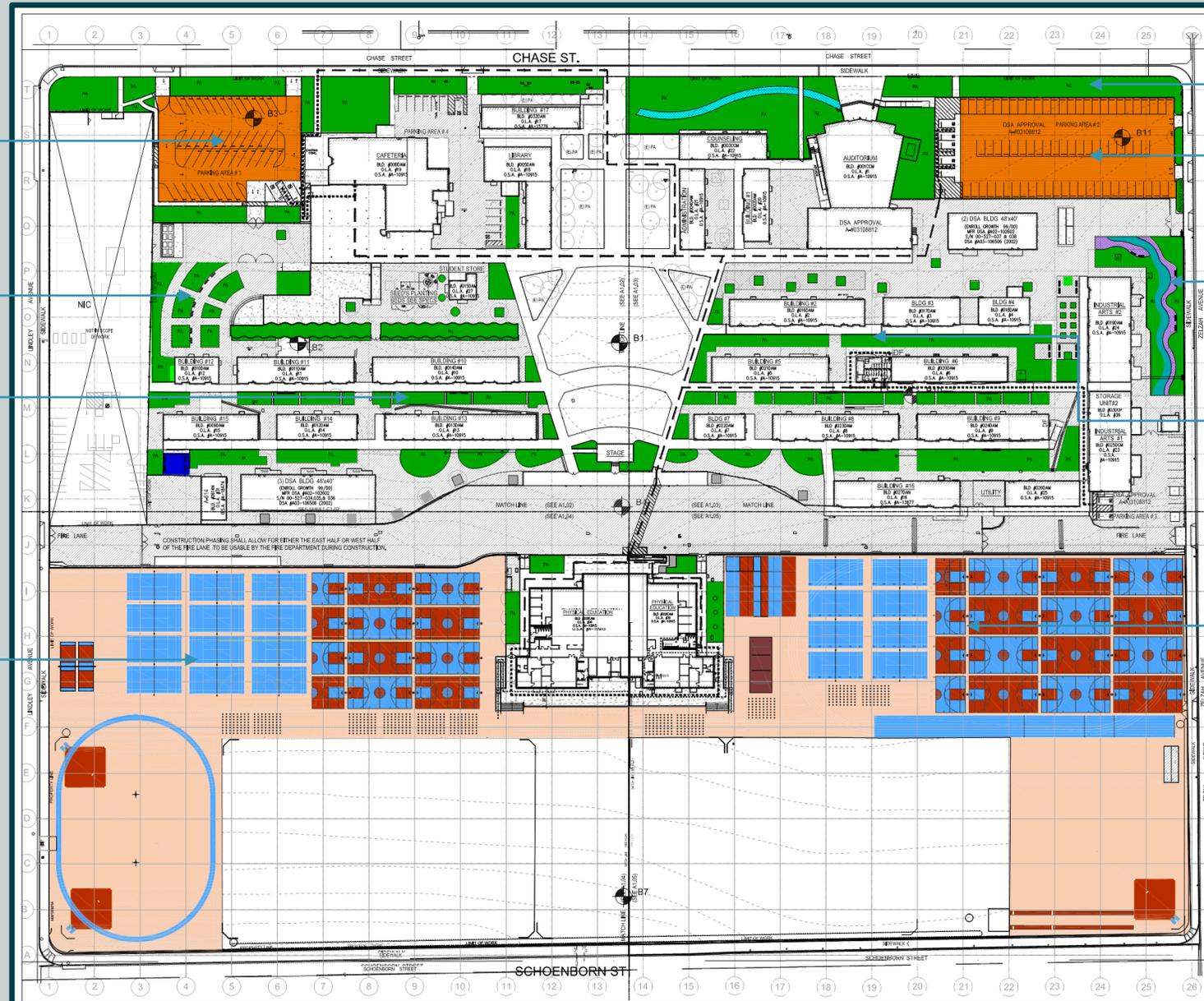
Project Details – Site Improvement Plan

PERMEABLE PAVEMENT PARKING

NEW GARDEN AREA

BIORETENTION AREAS

SOLAR REFLECTIVE COATING



NATIVE PLANT LANDSCAPING

PERMEABLE PAVEMENT PARKING

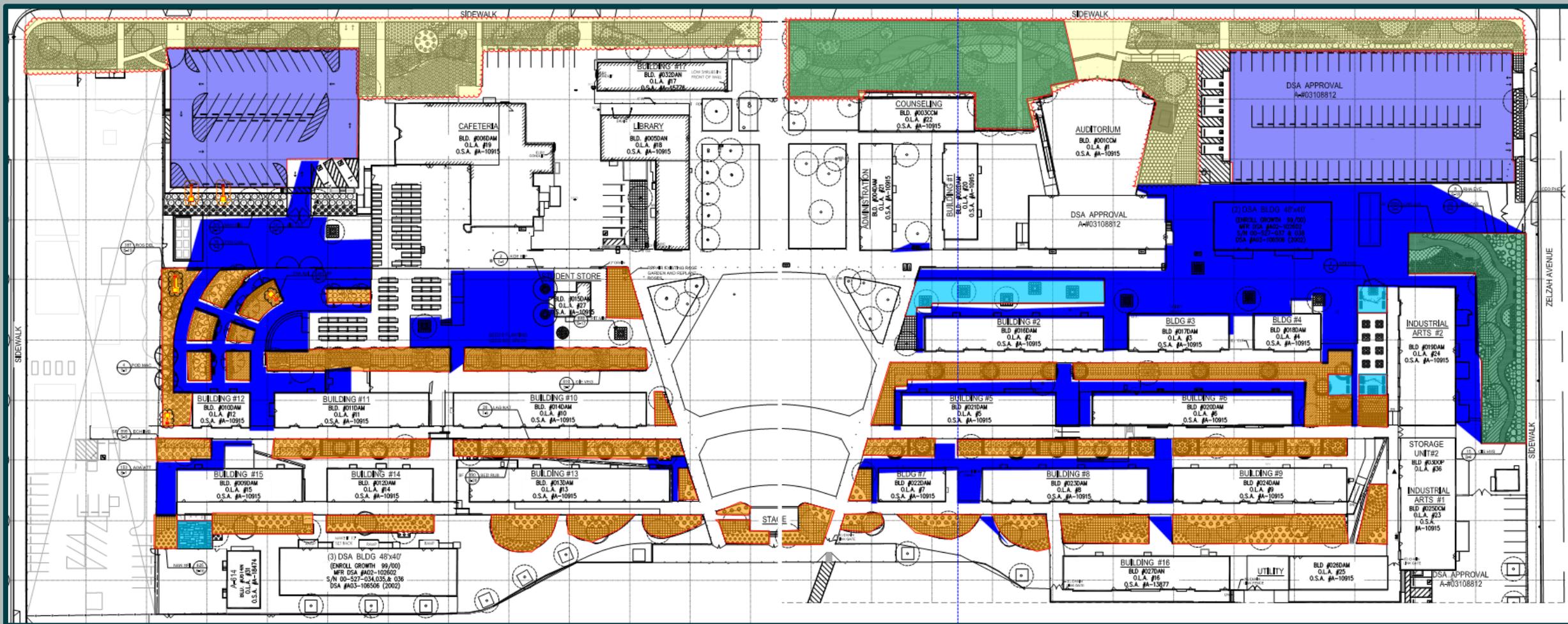
BIOSWALE AND DG PATH

BIORETENTION AREAS

SOLAR REFLECTIVE COATING



Project Details – BMP Plan



LEGEND (203,200 SF TOTAL CAPTURE AREA)

- BIOSWALE – 22,800 SF
- BIORETENTION – 48,000 SF
- DROUGHT TOLERANT LANDSCAPING – 14,000 SF
- PERMEABLE PAVER (VEHICLE) – 43,400 SF
- PERMEABLE PAVER (PEDESTRIAN) – 5,000 SF
- IMPERMEABLE CAPTURE AREA – 70,000 SF



Project Photos

- Lawn areas along school front converted to native drought-tolerant landscaping reduces irrigation usage.



LAWN AREA AT SCHOOL FRONT (BEFORE)

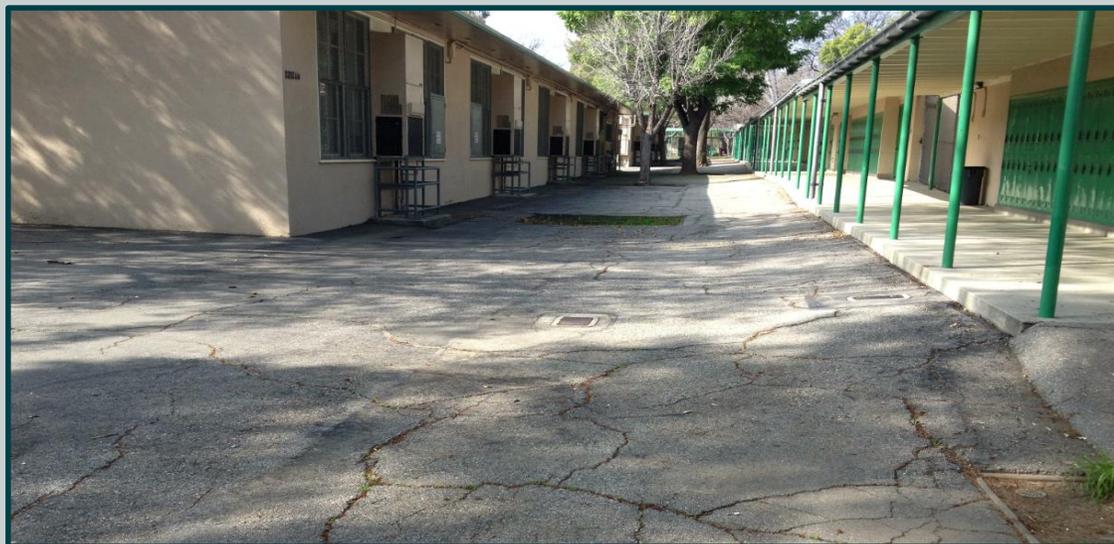


NATIVE PLANTING AT THE SCHOOL FRONT (AFTER)



Project Photos

- Bioretention areas installed between classroom building infiltrate stormwater and recharge local water table.



ASPHALT AREA BETWEEN CLASSROOM BUILDINGS
(BEFORE)



BIORETENTION AREA BETWEEN CLASSROOM BUILDINGS
(AFTER)



Project Photos

- Bioswale areas reduce runoff and stormwater pollution.
- DG walking trails and benches installed to create outdoor seating areas.



DETERIORATED AC PAVEMENT (BEFORE)

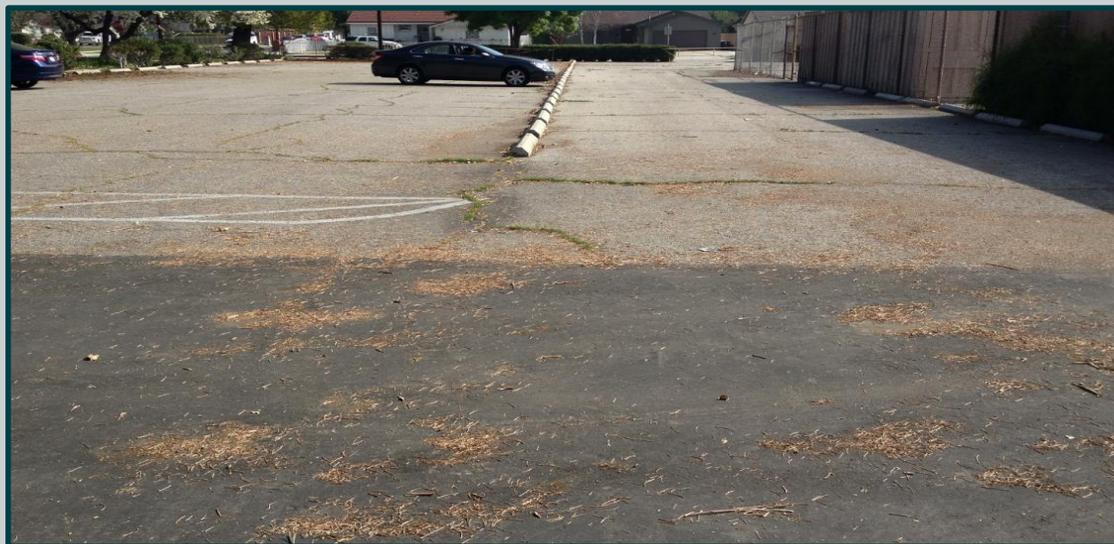


BIOSWALE AND DG PATH (AFTER)



Project Photos

- Permeable pavers at parking lots infiltrate storm water and reduces pollutants carried by run-off from vehicles.



ASPHALT AT MAIN PARKING LOT (BEFORE)



PERMEABLE PAVERS AT SIDE AND MAIN PARKING LOTS
(AFTER)



Project Photos

- Solar reflective coating installed at physical education yard to reduce high temperatures from urban heat island effect.



DETERIORATED ASPHALT AT PE YARD (BEFORE)

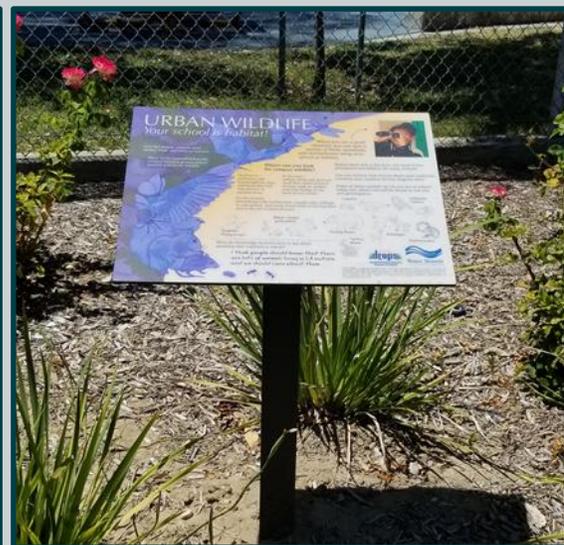


SOLAR REFLECTIVE COATING AT PE YARD (AFTER)



Project Photos

- Educational signage placed throughout school and new garden areas provide teaching opportunities in an outdoor environment.



EDUCATIONAL SIGNAGE



NEW GARDEN, PERVIOUS PAVERS, AND SEATING AREAS



Overall Project Cost

Phase	Description	Cost	Completion Date
Planning	Environmental and Site Assessment	\$171,065	04/2014
Design	Plans and Approvals	\$1,674,605	06/2017
Construction	Construction Cost	\$19,380,568	06/2020
TOTAL		\$21,226,238	

- Additional Community Investment benefits estimated cost is \$3,731,211.
- DROPS program provided \$1,648,112 to offset portion of the construction cost of Low Impact Development (LID).



Additional Community Benefits Cost & Schedule

Phase	Description	Cost*	Completion Date
Planning	Environmental and Site Assessment	\$30,125	04/2014
Design	Plans and Approvals	\$290,614	06/2017
Construction	Construction Cost	\$3,410,472	06/2020
TOTAL		\$3,731,211	

*Costs shown above include:

- Bioretention Areas
- Pervious Pavers
- Native Planting and Greening Areas
- Solar Reflective Asphalt Coating



Funding Request from Safe Clean Water Program

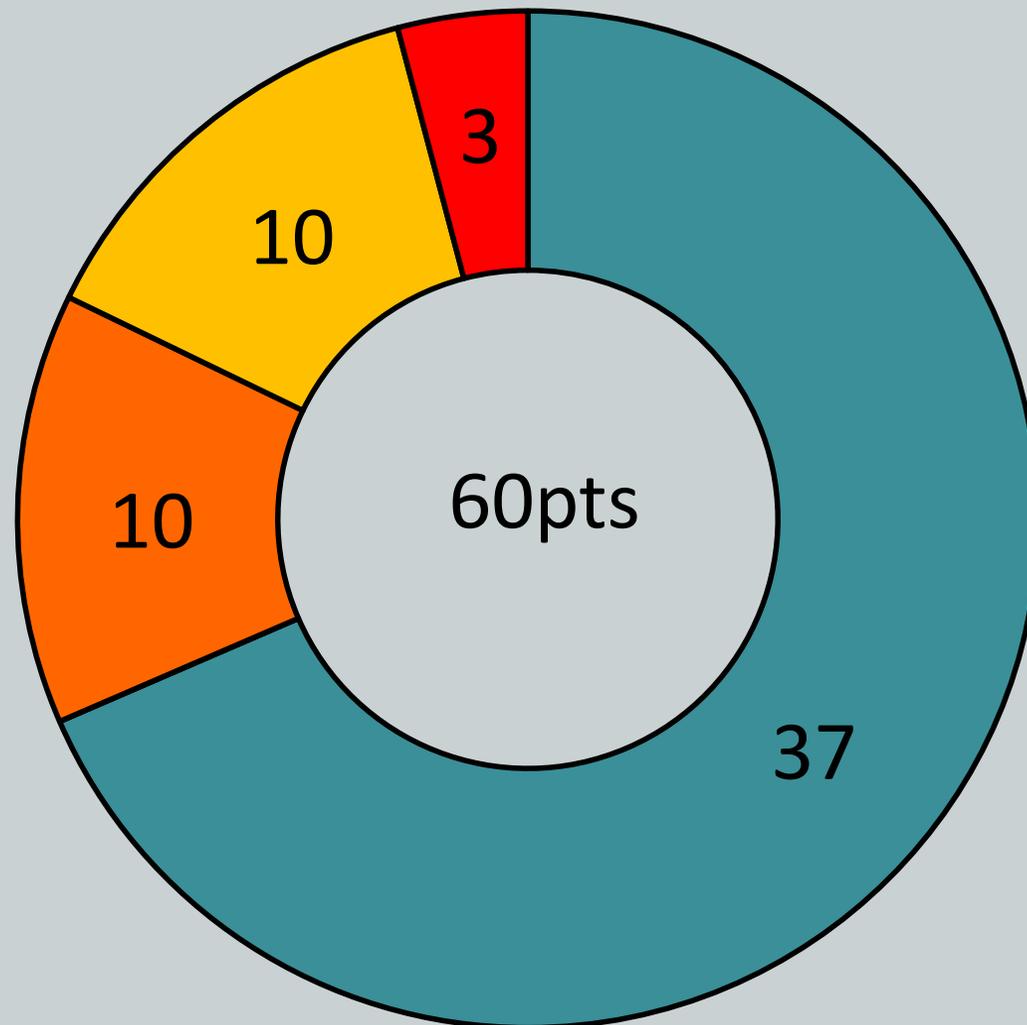
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$1,894,084	Construction	1 st Year Construction Cost
2	\$5,200	O&M	2 nd Year Maintenance Cost
3	\$5,200	O&M	3 rd Year Maintenance Cost
4	\$5,200	O&M	4 th Year Maintenance Cost
5	\$5,200	O&M	5 th Year Maintenance Cost
TOTAL	\$1,920,084		

- Future potential SCW funding requests would include Operations and Maintenance and Monitoring costs.
- Project lifespan is 50 years with a total lifecycle cost \$3,855,979.



Preliminary Score

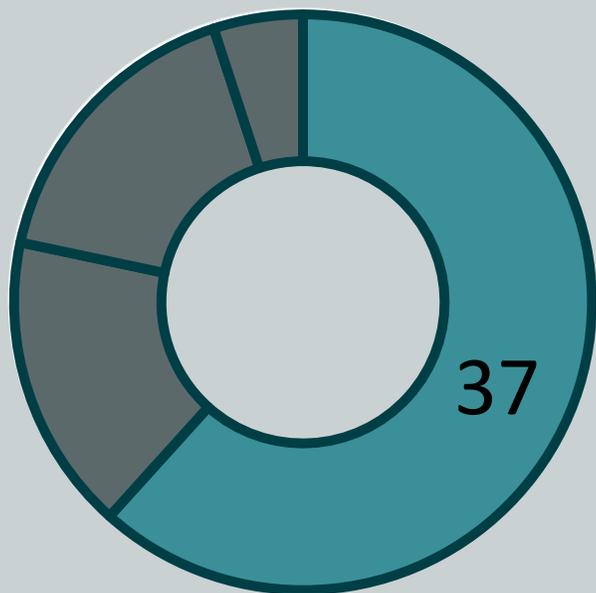
- Water Quality
37 points
- Community Investment
10 points
- Nature Based Solutions
10 points
- Leveraged Funds
3 points



*No Points received for Water Supply



Water Quality Benefits

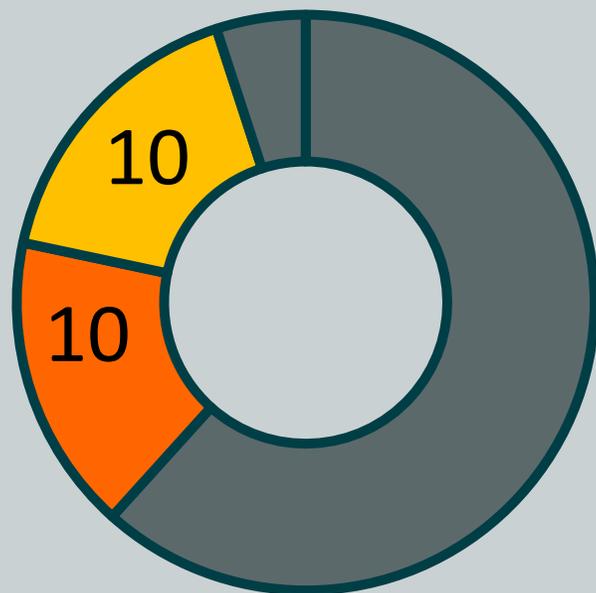


Water Quality Benefits (37 points)

- Bioretention and pervious paver areas designed to collect surface runoff.
- 3.38 acre capture area (Wet weather BMP Project).
- BMP storage capacity is 1.91 acre ft. Overall project site has a maximum 24hr BMP capacity of 17.06 acre ft.
- 100% pollutant reduction for E Coli (primary), Nitrogen (secondary), Zinc, Copper, Lead, and Phosphorus.
- Water Quality Cost Effectiveness is greater than 1 acre ft per million dollars.



Community Investment and Nature Based Solutions



Community Investment Benefits (10 points)

- Bioretention areas are designed to take in runoff and infiltrate utilizing the soil high draw down rate to help mitigate flood risks. Native planting enhances green spaces and provides shade.
- Reduced asphalt pavement areas, solar reflective coating, and new landscaped areas reduce local heat island effect.

Nature Based Solutions (10 points)

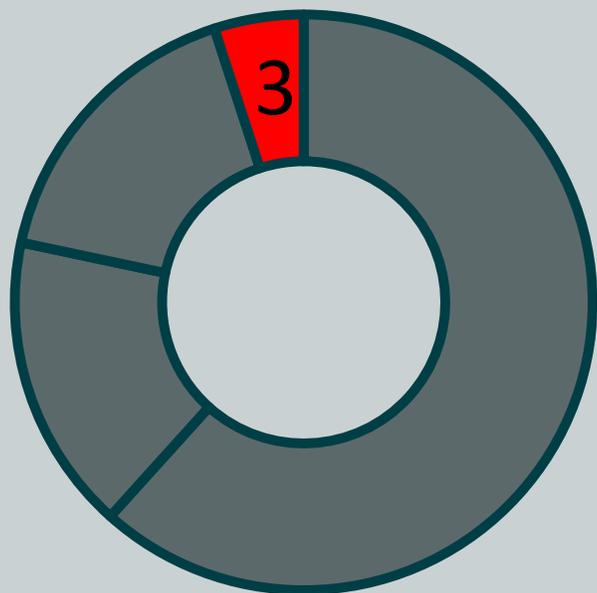
- Project surface is graded at minimal slopes to slow runoff flows and direct stormwater towards bioretention areas.
- Drought tolerant plants help with erosion control and reduce runoff through water consumption and infiltration.
- Restores native shrubland and creates areas for natural habitat.



Leveraged Funds

Leveraged Funds (3 points)

- DROPS Grant received from the State Water Resources Control Board.
- DROPS provided \$1,648,112 funding for construction.

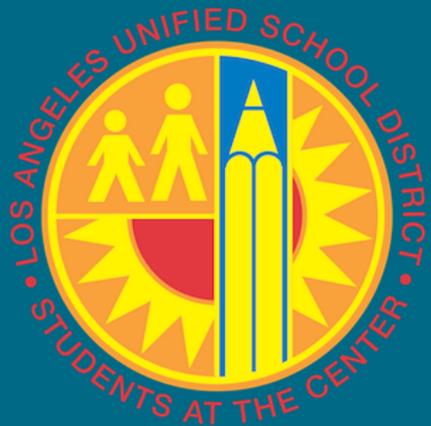


Los Angeles Unified



Questions?





Victory Blvd Elementary School

6315 Radford Ave, North Hollywood, CA 91606

Safe Clean Water Infrastructure Program FY 21-22

Los Angeles Unified School District

Presented by:

Christos Chrysiliou, AIA, CCM, LEED AP BD+C

Director of Architectural and Engineering Services

Maintenance and Operations

March 03, 2021





Presentation Outline

Project Overview

Project Location and Disadvantaged Communities

Project Information

- Project Background
- Project Details
- Project Photos

Cost and Schedule

Funding Request

Preliminary Score

- Water Quality Benefits
- Community Investment
- Nature Based Solutions



Project Overview

The Victory ES project is a school wide asphalt replacement which includes various site improvements, installation of new greening and storm water capture features, ADA upgrades, and solar reflective coating.

- Project objectives
 - Create a safe, enriched learning environment for students through playground improvements and new green spaces.
 - Provide accessibility upgrades to current ADA codes.
 - Mitigate stormwater run-off through bioretention and pervious pavers areas in accordance with County LID Standards.



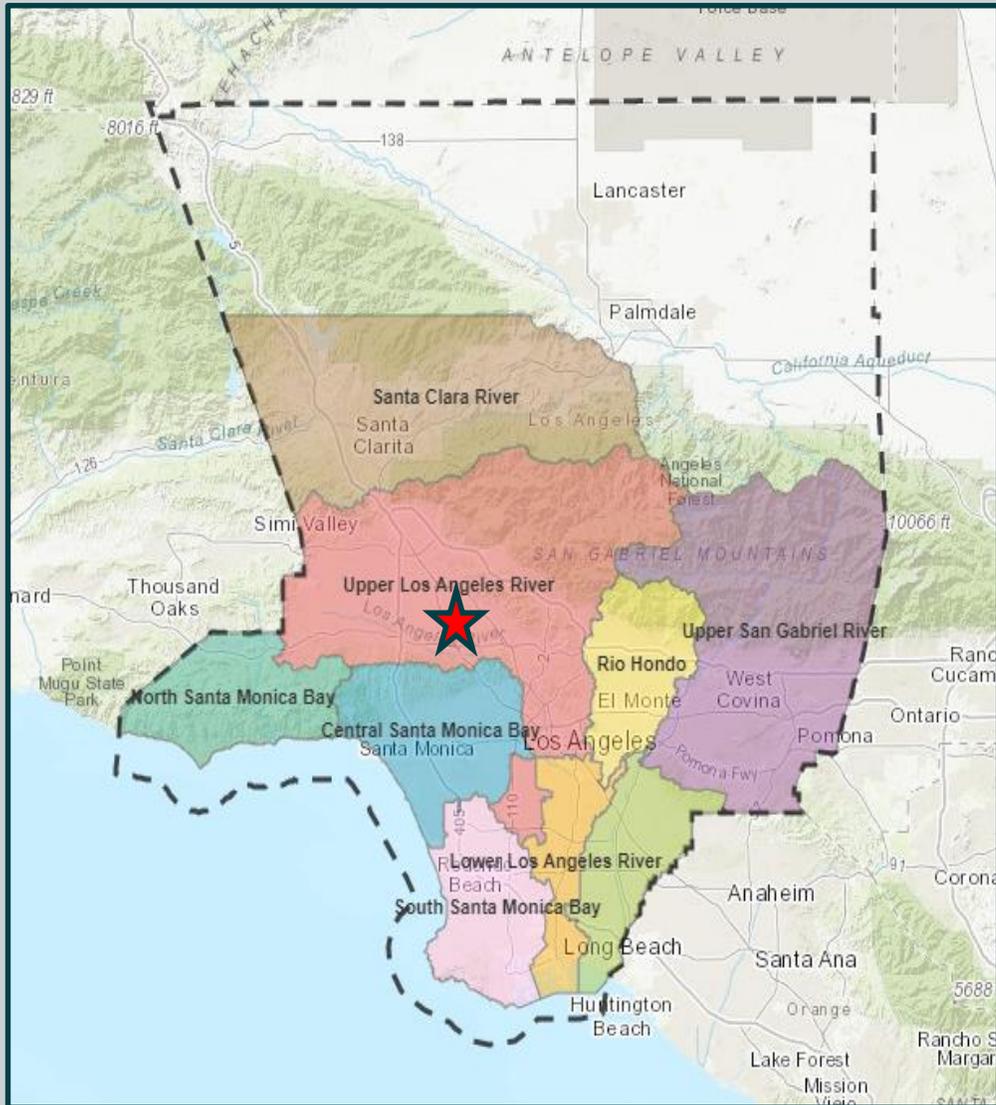
Project Overview

- Paving and ADA Scope
 - Replace deteriorated asphalt throughout playground areas and parking lots
 - Provide accessible path of travel including required ramps, gates, ADA parking, and restroom upgrades.
- Water Quality and Community Investment Scope
 - Bioretention Areas
 - Pervious Pavers
 - Native Planting and Greening Areas
 - Underground Infiltration Chamber
 - Rain Barrels
 - Outdoor Amphitheater Area
 - Solar Reflective Asphalt Coating
- The total project cost is \$5.43 Million and the project was completed in February 2019.
- Eligible SCW funding being requested consists of the project construction and O&M cost for Community Investment scope for a total of \$178,585.

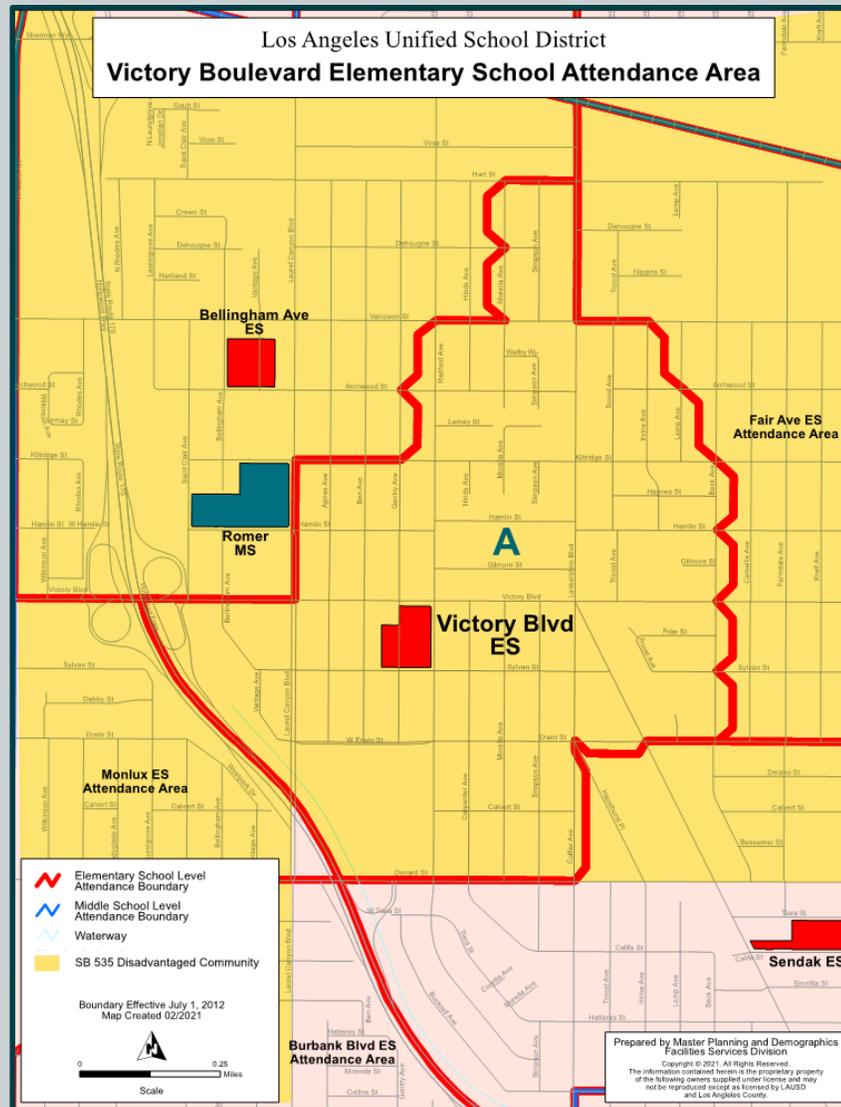


Project Location and Disadvantaged Community Area

WATERSHED AREA- UPPER LOS ANGELES RIVER



ATTENDANCE MAP

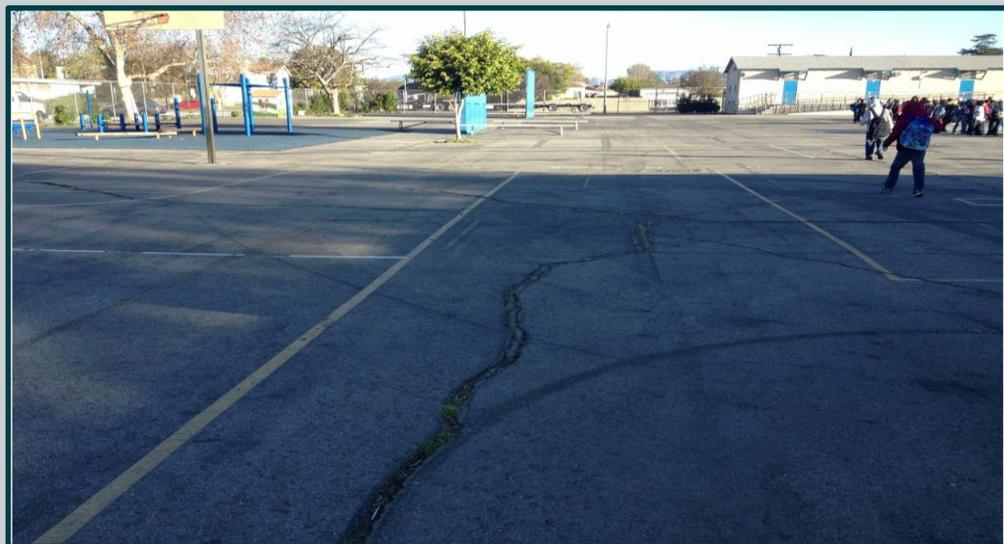


DISADVANTAGED COMMUNITY AREA



Project Background

- Victory ES was selected to be repaved as part of LAUSD's Critical Repair Program.
- LAUSD saw this as an opportunity to increase greening at the site, while taking advantage of the favorable soil conditions for stormwater capture and infiltration.
- Project also incorporated DROPS (Drought Response Outreach Program for Schools) scope into the design.





Project Background

- The DROPS program provided community outreach by educating and increasing public understanding of storm water management benefits.
- The project is registered as part of the Integrated Regional Watershed Management Plan.
- Addresses highest contributors to the pollution burden scores which consists of ozone, traffic, and hazardous waste.
- Project will benefit the Disadvantaged Community Area through site improvements, water conservation, stormwater pollution reduction, and education.



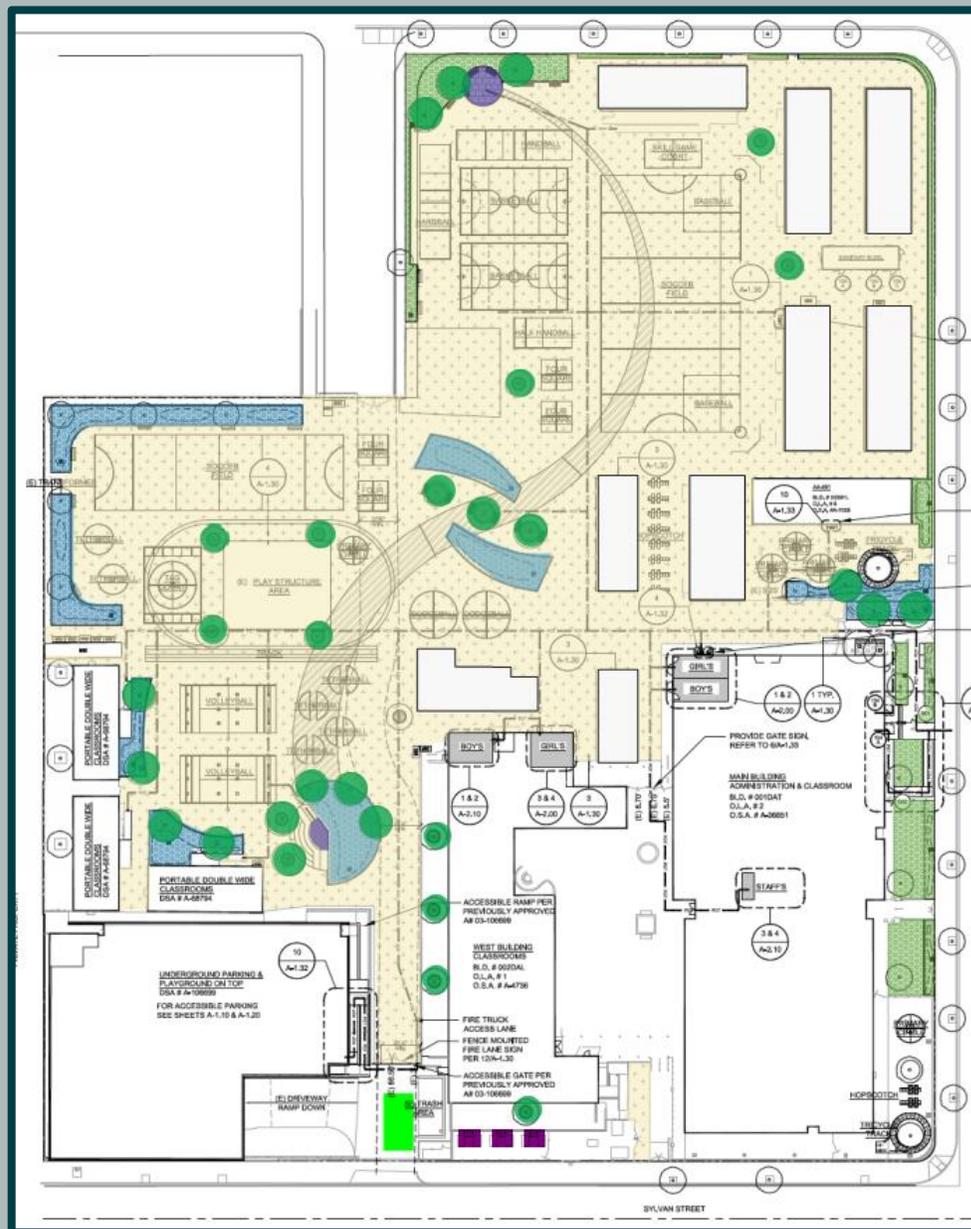


Project Details – School Site Before and After





Project Details – BMP Plan

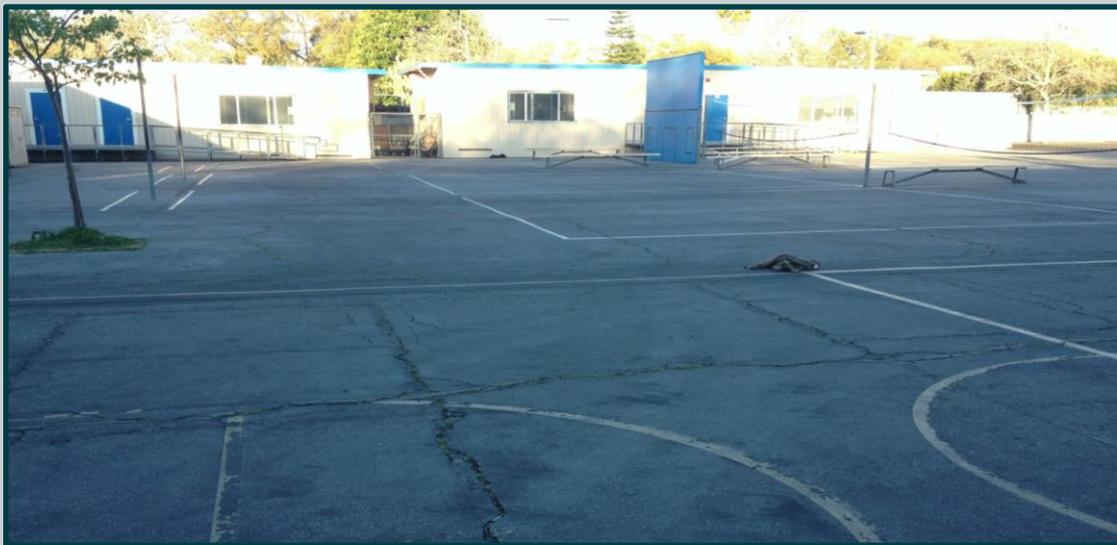


- 8,900 SF** Bioretention Areas
- 3,743 SF** New plantings
- Reflective surfacing
- 314 SF** Permeable pavers
- New trees
- 128 SF** Infiltration Chamber
- Rain Barrels



Project Photos

- Deteriorated asphalt replaced with new paving, bioretention areas, and native landscaping.



ASPHALT PLAYGROUND (BEFORE)

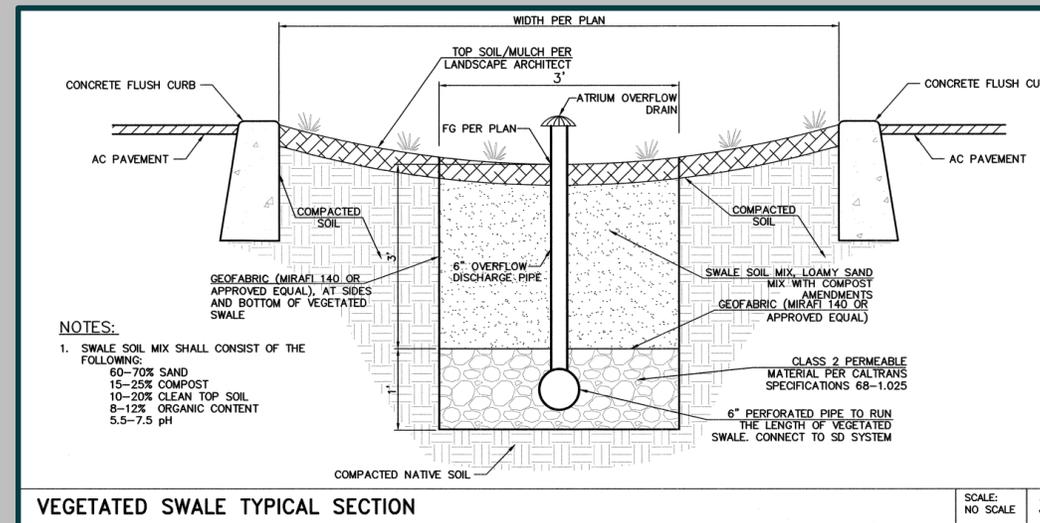


PLAYGROUND GREENING AND SOLAR COATING (AFTER)



Project Photos

- Bioretention areas installed to infiltrate site stormwater to help recharge local water table and reduce run-off and pollutants.



BIORETENTION DURING A RAIN EVENT



BIORETENTION AT PLAY YARD



Project Photos

- Solar reflective coating installed to reduce high temperatures from urban heat island effect.



PLAYGROUND SOLAR COATING

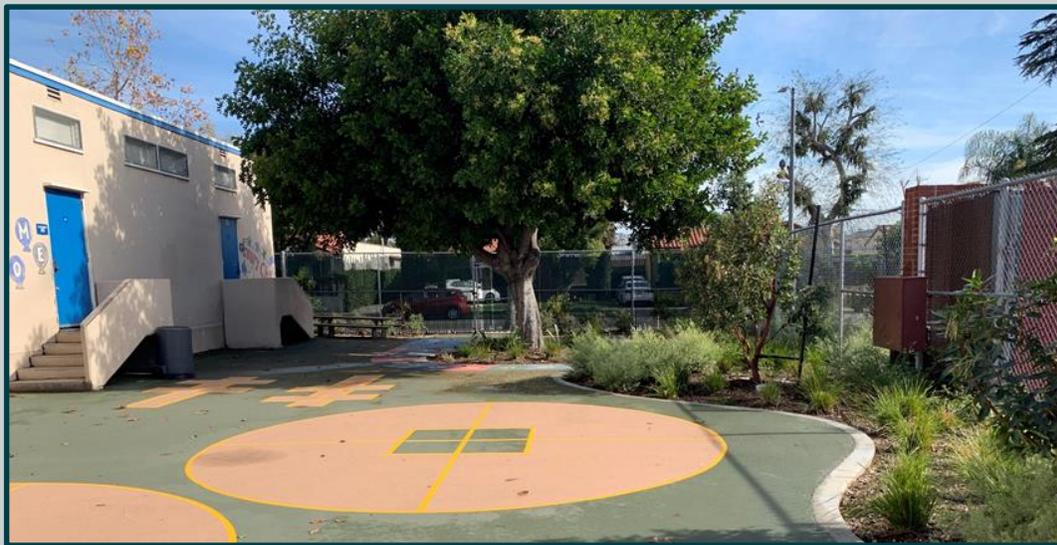


PLAYGROUND SOLAR COATING AND BIORETENTION



Project Photos

- Native planting provides cooler and natural environment for both students and native species.



NATIVE LANDSCAPE AND SOLAR COATING AT K-YARD

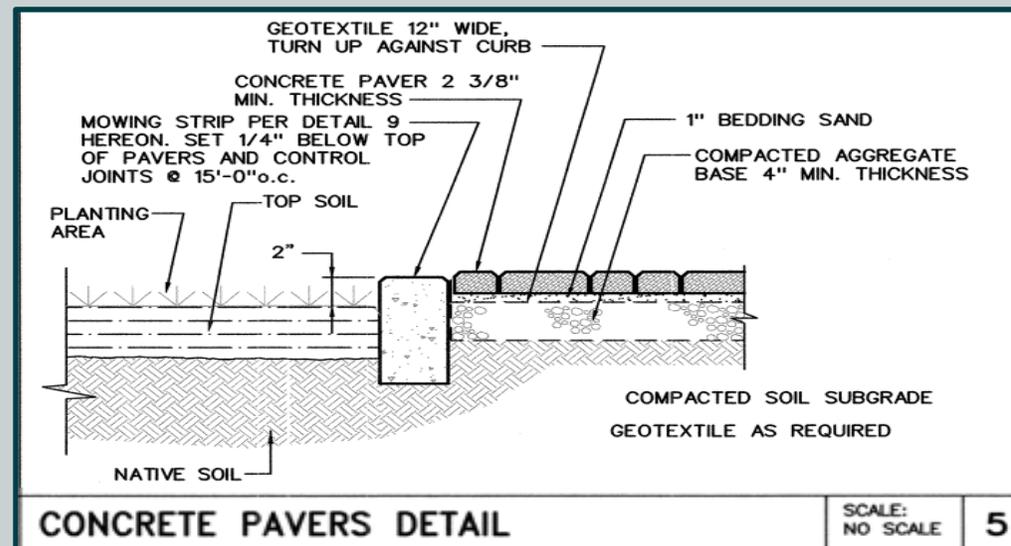


NATIVE LANDSCAPING AT SCHOOL ENTRANCE AND PLAY YARD



Project Photos

- Pervious pavers reduce storm water run-off and keeps pollutants from reaching major water bodies.



PERVIOUS PAVERS AT MAIN PLAY YARD



BIORETENTION AND PERVIOUS PAVERS BY AMPHITHEATER

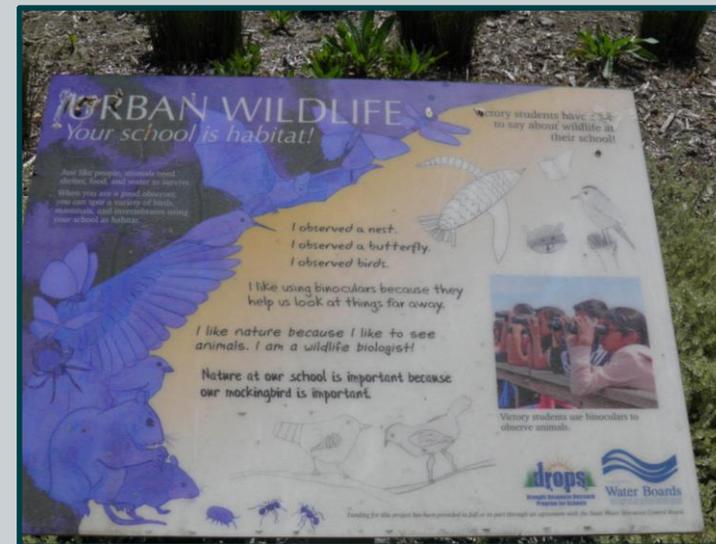


Project Photos

- Educational signage placed throughout school and new amphitheater provide teaching opportunities in an outdoor environment.



NEW OUTDOOR AMPHITHEATER



EDUCATIONAL SIGNAGE



Overall Project Cost

Phase	Description	Cost	Completion Date
Planning	Environmental and Site Assessment	\$33,708	11/2015
Design	Plans and Approvals	\$426,809	08/2017
Construction	Construction Cost	\$4,966,320	02/2019
TOTAL		\$5,426,837	

- Additional Community Investment benefits estimated cost is \$690,076 see next slide.
- DROPS program provided total of \$778,529 to offset portion of the cost of Low Impact Development (LID).



Additional Community Benefits Cost & Schedule

Phase	Description	Cost*	Completion Date
Planning	Environmental and Site Assessment	\$4,286	11/2015
Design	Plans and Approvals	\$54,273	08/2017
Construction	Construction Cost	\$631,517	02/2019
TOTAL		\$690,076	

*Costs shown above include:

- Bioretention Areas
- Pervious Pavers
- Rain Barrels
- Outdoor Amphitheater
- Underground Infiltration Chamber
- Native Planting and Greening Areas
- Solar Reflective Asphalt Coating



Funding Request from Safe Clean Water Program

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$176,825	Construction	1 st Year Construction Cost (3 months)
2	\$440	O&M	2 nd Year Maintenance Cost
3	\$440	O&M	3 rd Year Maintenance Cost
4	\$440	O&M	4 th Year Maintenance Cost
5	\$440	O&M	5 th Year Maintenance Cost
TOTAL	\$178,585		

- Future potential SCW funding requests would include Operations and Maintenance and Monitoring costs.
- Project lifespan is 50 years with a total lifecycle cost \$718,869.



Preliminary Score

Water Quality

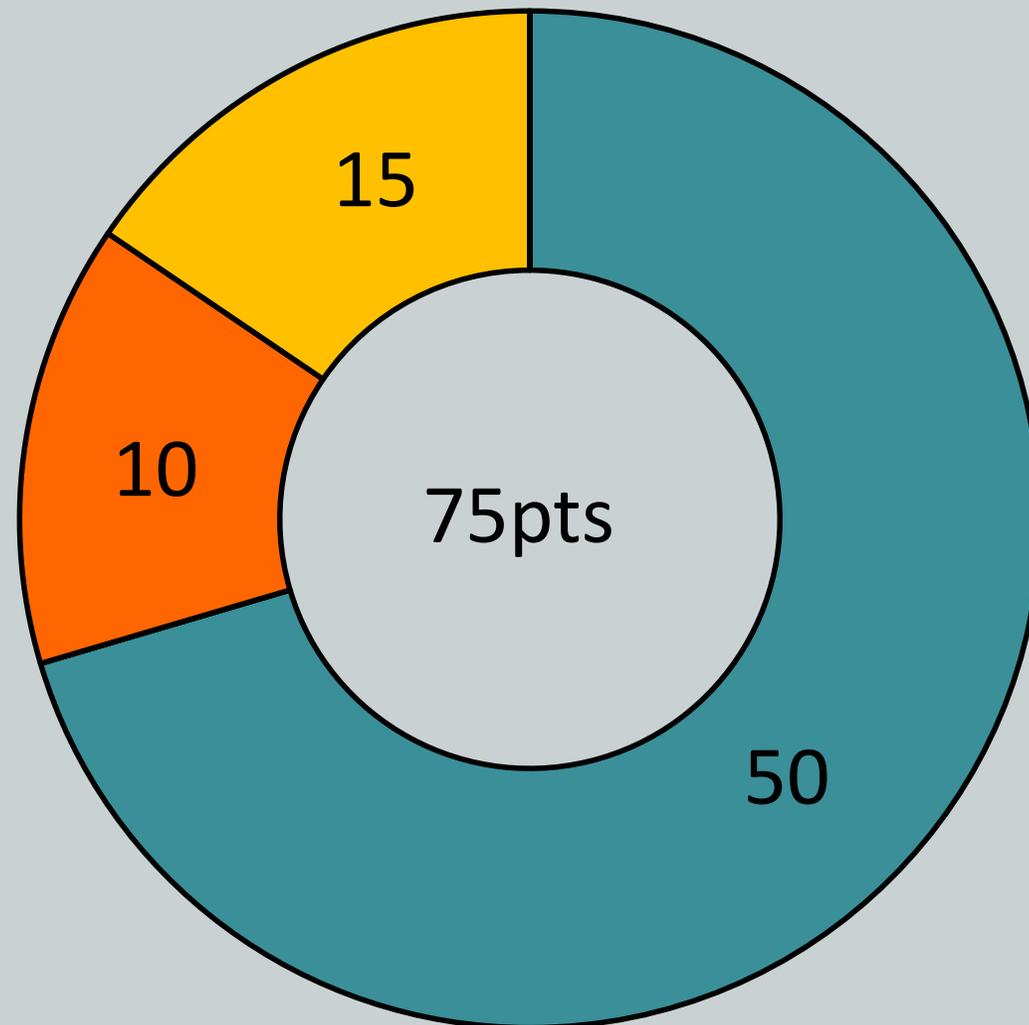
50 points

Community Investment

10 points

Nature Based Solutions

15 points



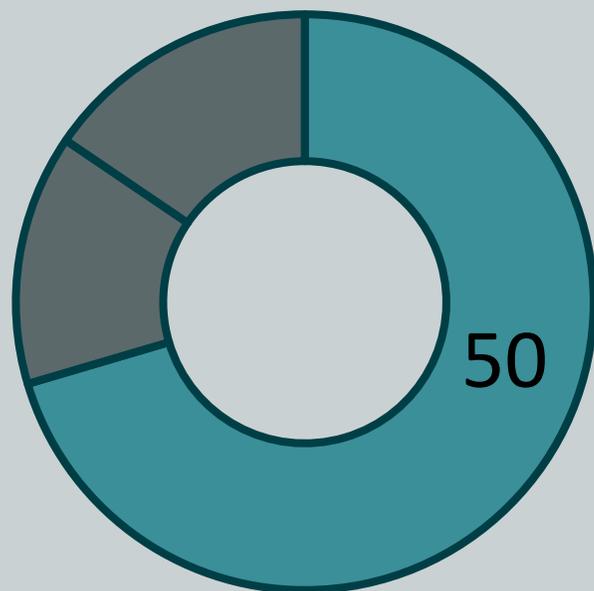
*No Points received for Water Supply or Leveraged Funds and Community Support



Water Quality Benefits

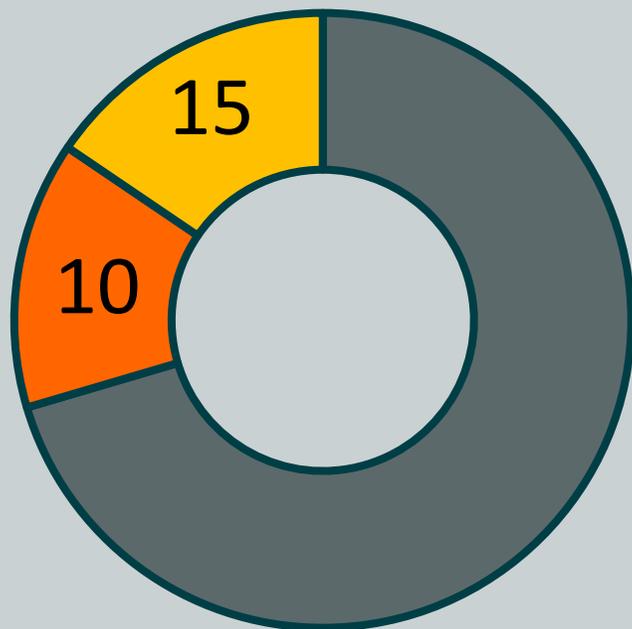
Water Quality Benefits (50 points)

- Bioretention and pervious paver areas designed to collect surface runoff.
- 4.44 acre capture area (Wet weather BMP Project).
- BMP storage capacity is 0.76 acre ft. Overall project site has a maximum 24hr BMP capacity of 1.97 acre ft.
- 100% pollutant reduction for E Coli (primary), Nitrogen (secondary), Zinc, Copper, Lead, and Phosphorus.
- Water Quality Cost Effectiveness is greater than 1 acre ft per million dollars.





Community Investment and Nature Based Solutions



Community Investment Benefits (10 points)

- Bioretention areas are designed to take in runoff and infiltrate utilizing the soil high draw down rate to help mitigate flood risks. Native planting enhances green spaces and provides shade in a predominantly asphalt covered community.
- Increased greening in playground areas add enhanced recreational and educational opportunities.
- Reduced asphalt pavement areas, solar reflective coating, and new landscaped areas reduce local heat island effect.

Nature Based Solutions (15 points)

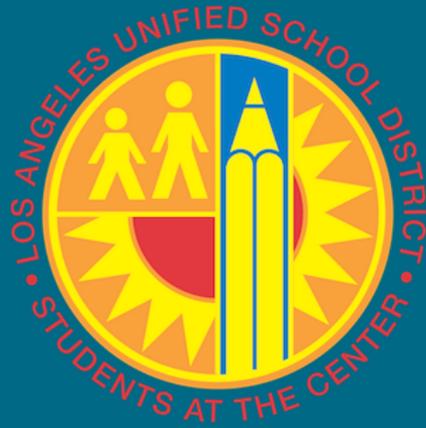
- Project surface is graded at minimal slopes to slow runoff flows and direct stormwater towards bioretention areas.
- Drought tolerant plants help with erosion control and reduce runoff through water consumption and infiltration.
- Restores native shrubland and creates areas for natural habitat.

Los Angeles Unified



Questions?





Woodlake Elementary School

23231 Hatteras St, Woodland Hills, CA 91367

Safe Clean Water Infrastructure Program FY 21-22

Los Angeles Unified School District

Presented by:

Christos Chrysiliou, AIA, CCM, LEED AP BD+C

Director of Architectural and Engineering Services

Maintenance and Operations

March 3, 2021





Presentation Outline

Project Overview

Project Location and Attendance Area

Project Information

- Project Background
- Project Details
- Project Photos

Cost and Schedule

Funding Request

Preliminary Score

- Water Quality Benefits
- Community Investment
- Nature Based Solutions



Project Overview

The Woodlake ES Project includes site wide asphalt paving replacement, greening, bioretention areas, outdoor learning areas, ADA upgrades, and solar reflective coating.

- Project objectives
 - Create a safe, enriched learning environment for students through playground improvements and new green spaces.
 - Provide accessibility upgrades to current ADA codes.
 - Mitigate stormwater run-off through bioretention areas in accordance with County LID Standards.



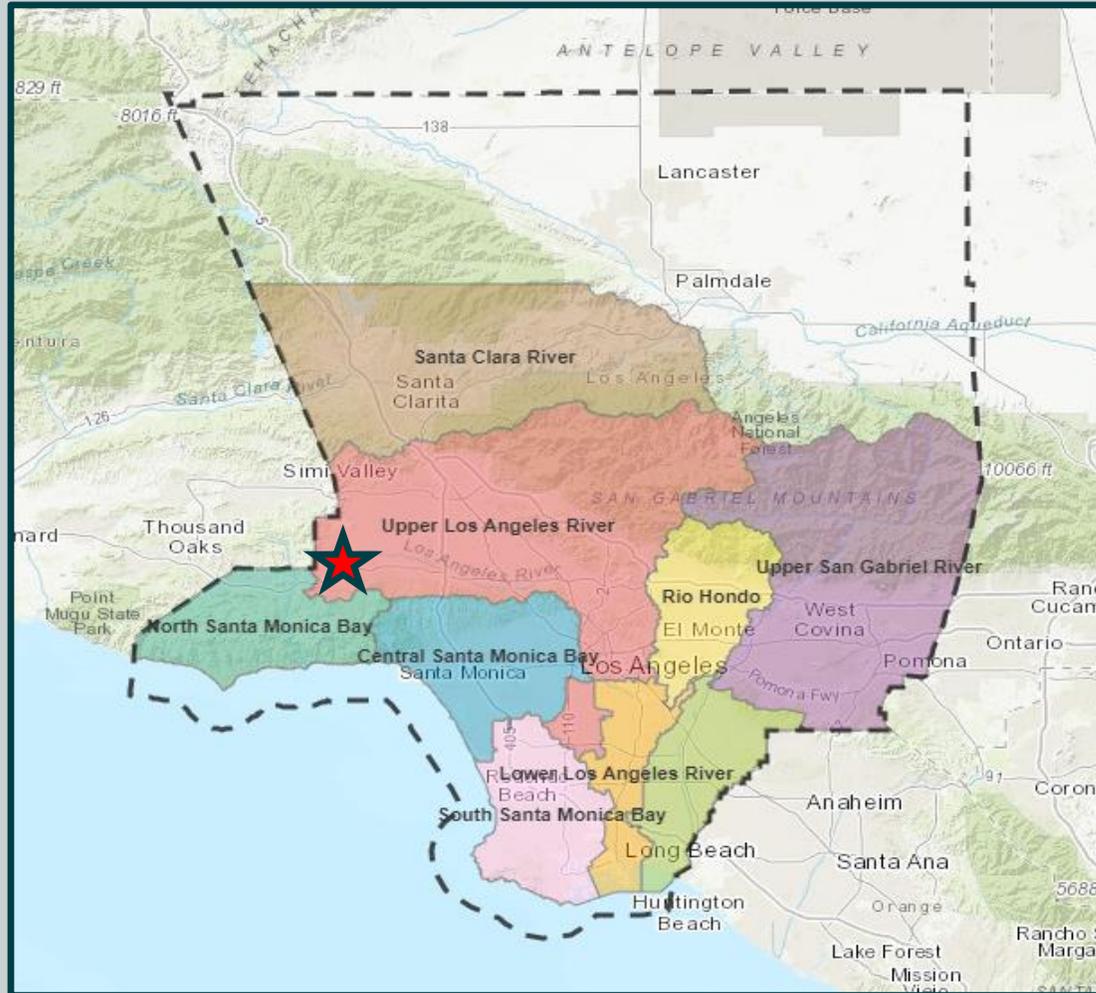
Project Overview

- Paving and ADA Scope
 - Replace deteriorated asphalt throughout playground areas, between buildings, and parking lots
 - Provide ADA accessible path of travel, gates, parking, and restroom upgrades
- Water Quality and Community Investment Scope
 - Bioretention Areas
 - Reading Garden
 - Native Planting and Greening Areas
 - Solar Reflective Asphalt Coating
- The total project cost is \$7.86 Million and the project was completed in August 2020.
- SCW funding is being requested for cost of construction and O&M for Community Investment scope for a total of \$1,006,629.

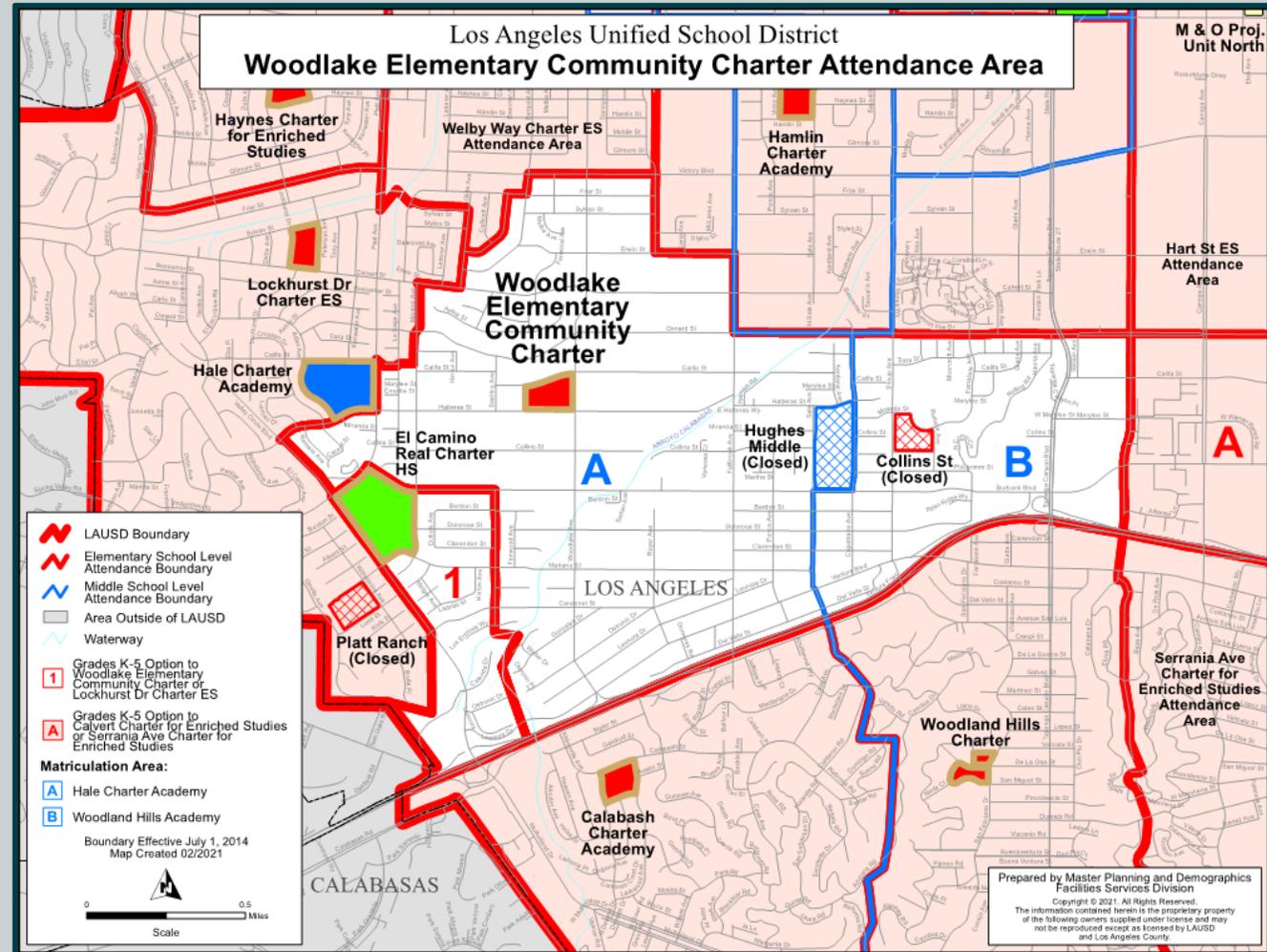


Project Location and Attendance Area

WATERSHED AREA- UPPER LOS ANGELES RIVER



ATTENDANCE MAP





Project Background

- Woodlake ES was selected to be repaved as part of LAUSD's Critical Repair Program.
- LAUSD saw this as an opportunity to increase greening at the site, while taking advantage of the favorable soil conditions for stormwater infiltration.
- The project will benefit students, staff and the neighboring areas through site improvements, water conservation, and stormwater pollution reduction.





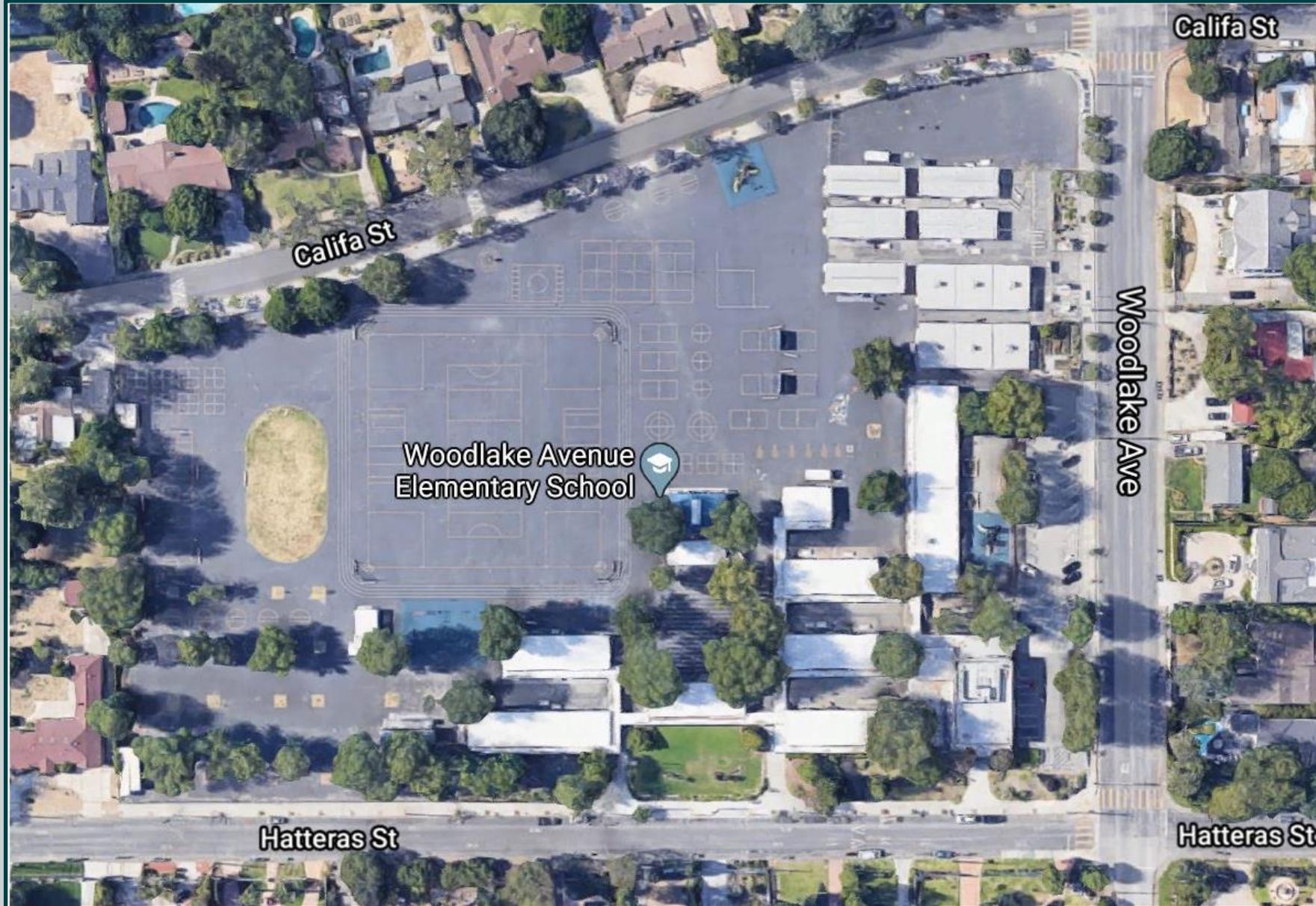
Project Background

- Design team consulted with school end users to address needs for greening and outdoor learning space.
- Project is registered as part of the Integrated Regional Watershed Management Plan.
- Addresses highest contributors to the pollution burden scores which consists of Ozone, Traffic, and Hazardous waste.
- Reduces asphalt surfaces and increases green spaces for site beautification and stormwater quality improvement.



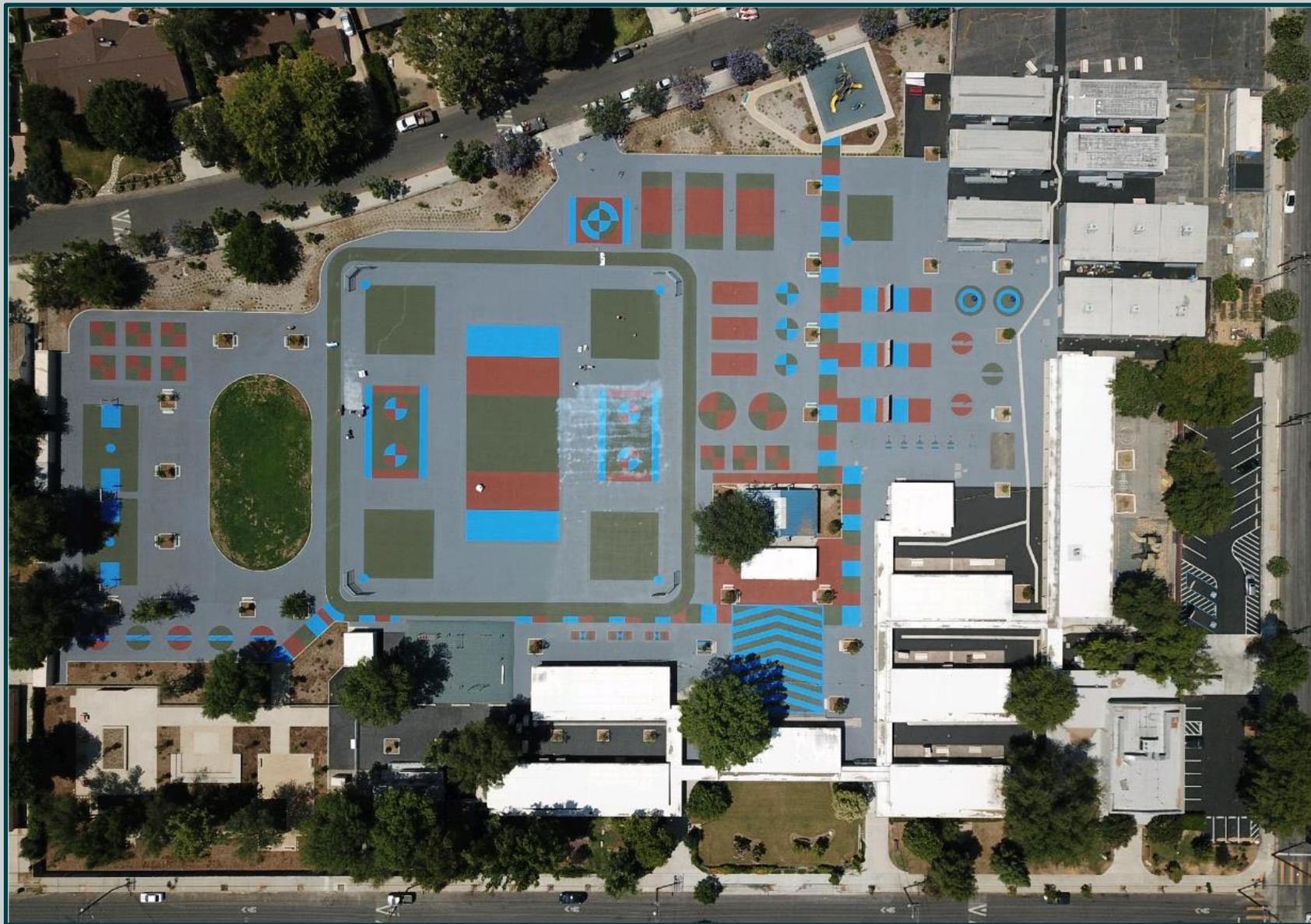


Project Details – School Site Before



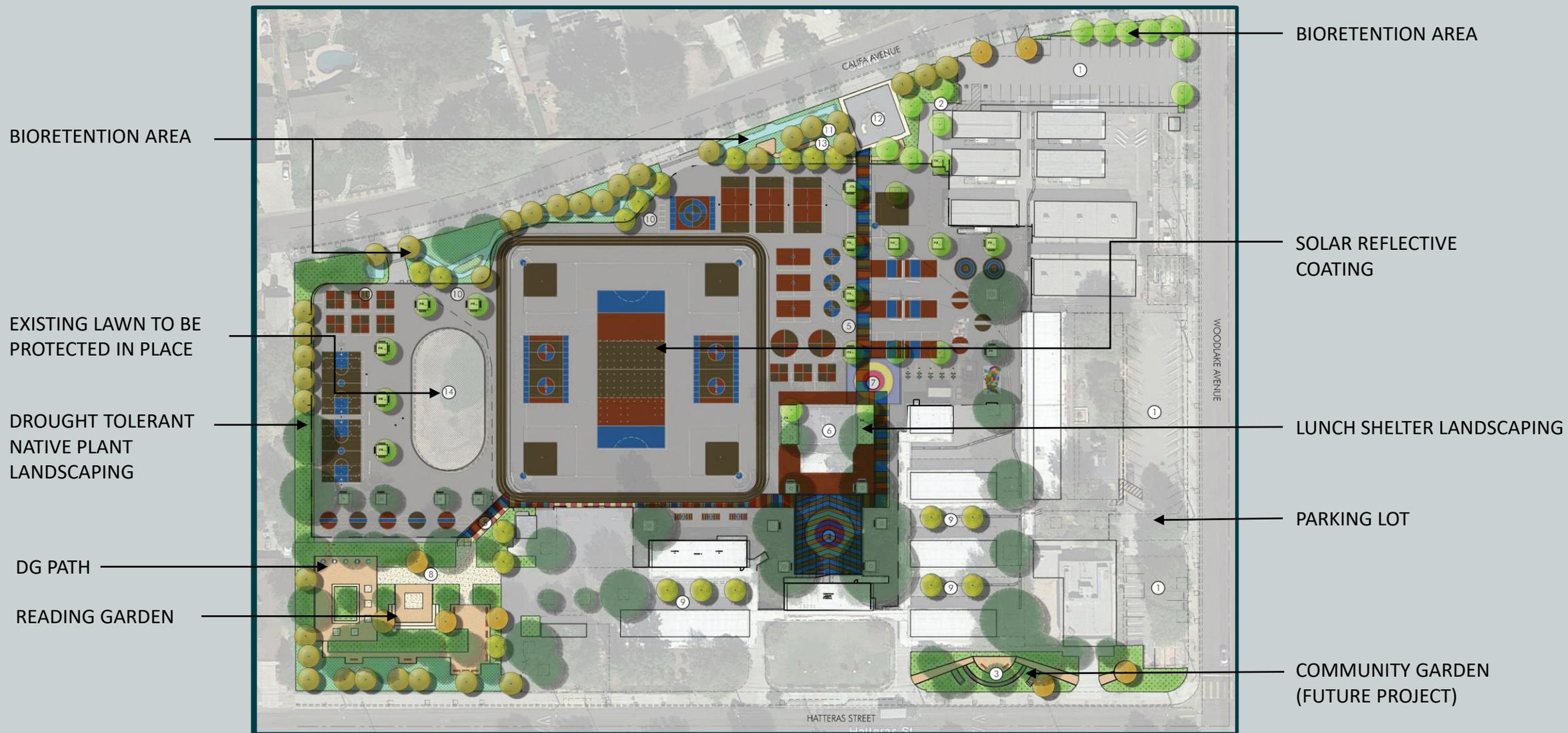


Project Details – School Site After





Project Details – BMP Plan



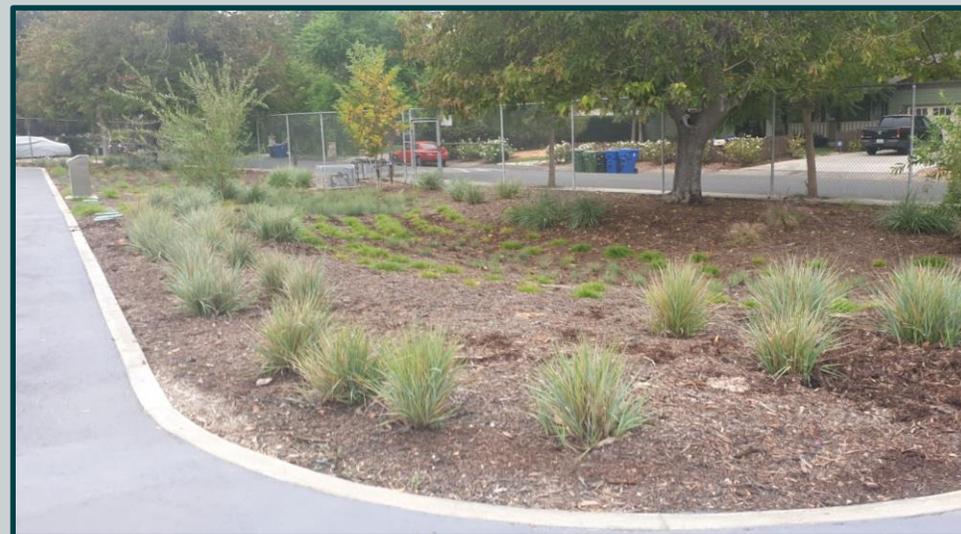


Project Photos

- Bioretention areas infiltrate site stormwater to help recharge local water table and reduce run-off and pollutants.



DETERIORATED ASPHALT PLAYGROUND (BEFORE)



BIORETENTION AREAS IN PLAYGROUND (AFTER)



Project Photos

- Native planting helps capture stormwater, uses less irrigation, and provides natural habitat for local species.



DETERIORATED ASPHALT PLAYGROUND (BEFORE)



BIORETENTION AND NATIVE PLANTING AREAS (AFTER)



Project Photos

- Solar reflective coating installed at playground to reduce high temperatures from urban heat island effect.



DETERIORATED ASPHALT PLAYGROUND (BEFORE)



SOLAR REFLECTIVE COATING AT PLAYGROUND (AFTER)



Project Photos

- New reading garden provides an outdoor learning experience within a natural environment.



DETERIORATED ASPHALT PAVEMENT (BEFORE)



BIORETENTION AREA WITH READING GARDEN (AFTER)



Overall Project Cost

Phase	Description	Cost	Completion Date
Planning	Environmental and Site Assessment	\$46,529	02/2017
Design	Plans and Approvals	\$662,132	06/2018
Construction	Construction Cost	\$7,149,010	08/2020
TOTAL		\$7,857,671	

- Community Investment benefits estimated cost is \$1,101,096, see next slide.



Community Benefits Cost & Schedule

Phase	Description	Cost*	Completion Date
Planning	Environmental and Site Assessment	\$6,770	02/2017
Design	Plans and Approvals	\$95,558	06/2018
Construction	Construction Cost	\$998,768	08/2020
TOTAL		\$1,101,096	

*Costs shown above include:

- Bioretention Areas
- Native Planting and Greening Areas
- New Outdoor Learning Area
- Solar Reflective Asphalt Coating



Funding Request from Safe Clean Water Program

Year	SCW Funding Requested	Phase	Efforts during Phase and Year
1	\$799,014	Construction	1 st Year Construction Cost
2	\$201,462	Construction & O&M	2 nd Year Construction and Maintenance Cost
3	\$2,051	O&M	3 rd Year Maintenance Cost
4	\$2,051	O&M	4 th Year Maintenance Cost
5	\$2,051	O&M	5 th Year Maintenance Cost
TOTAL	\$1,006,629		

- Future potential SCW funding requests would include Operations and Maintenance and Monitoring costs.
- Project lifespan is 50 years with a total lifecycle cost \$805,012.

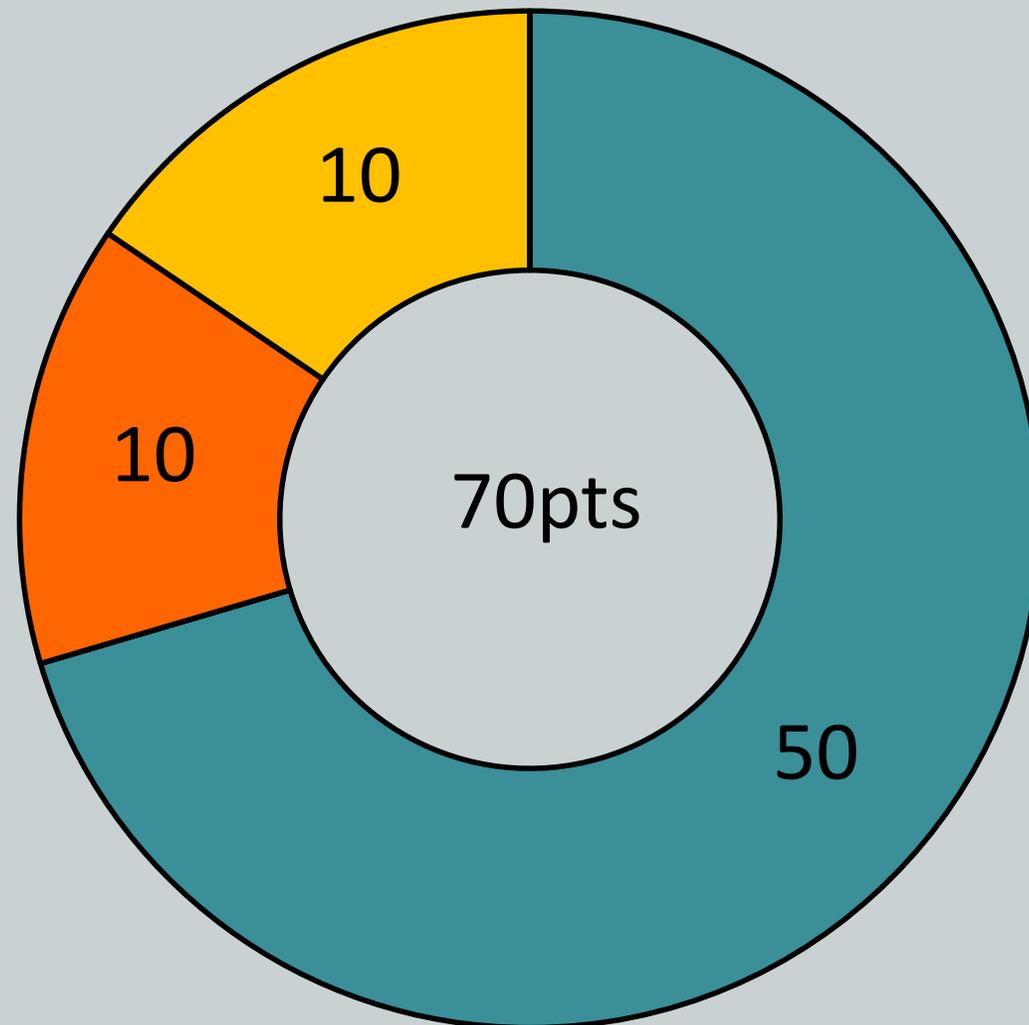


Preliminary Score

Water Quality
50 points

Community Investment
10 points

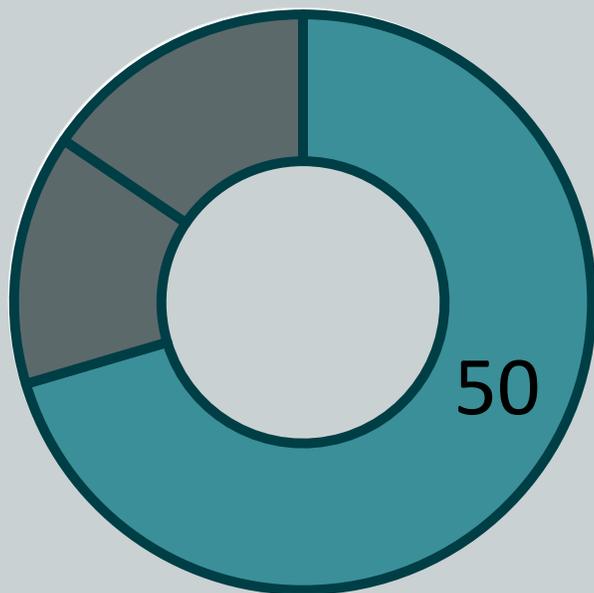
Nature Based Solutions
10 points



*No Points received for Water Supply or Leveraged Funds and Community Support



Water Quality Benefits

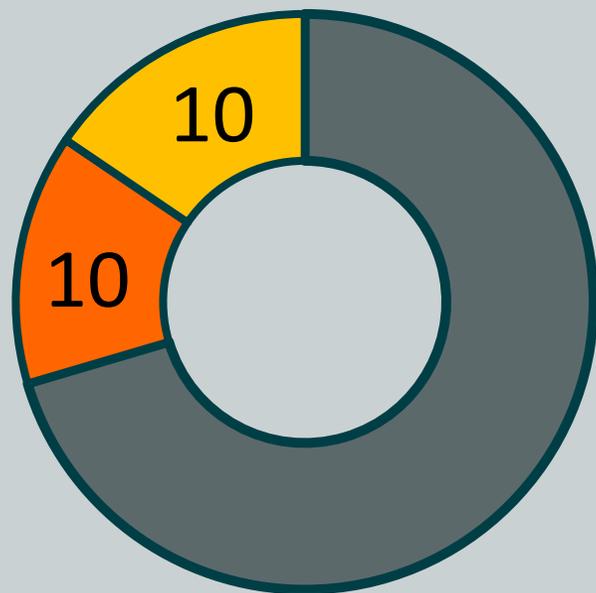


Water Quality Benefits (50 points)

- Bioretention areas designed to collect surface runoff.
- 8.90 acre capture area (Wet weather BMP Project).
- BMP storage capacity is 0.54 acre ft. Overall project site has a maximum 24hr BMP capacity of 5.52 acre ft.
- 97% pollutant load reduction for E Coli (primary), 97.1% Nitrogen (secondary), 99.8% Zinc, 99.7% Copper, 99.7% Lead, and 97.1% Phosphorus.
- Water Quality Cost Effectiveness is greater than 1 acre ft per million dollars.



Community Investment and Nature Based Solutions



Community Investment Benefits (10 points)

- Bioretention areas are designed to take in runoff and infiltrate utilizing the soil draw down rate to help mitigate flood risks. Native planting enhances green spaces and provides shade.
- Reduced asphalt pavement areas, solar reflective coating, and new landscaped areas reduce local heat island effect.

Nature Based Solutions (10 points)

- Project surface is graded at minimal slopes to slow runoff flows and direct stormwater towards bioretention areas.
- Drought tolerant plants help with erosion control and reduce runoff through water consumption and infiltration.
- Restores native shrubland and creates areas for natural habitat.

Los Angeles Unified



Questions?





Altadena Mariposa Green Street Demonstration Project

Safe, Clean Water Program

Claire Robinson, Amigos de los Rios

Managing Director - claire@amigosdelosrios.org



Project Overview

Project is a Green Street that will protect water quality & supply, improve drainage and provide community urban greening benefits.

- **MS4 Compliance** - Multi-Objective Green Street/LID project will manage storm water, address **TMDLS** to protect water quality
- **Community Benefits /Urban Greening Benefits** - Urban Heat Island Reduction, Shade, Habitat, Air Quality Protection, Pedestrian & COVID Safe Outdoor Civic Spaces – Civic Pride
- Design **Prioritizes Nature Based Solutions** - LID Planters, Pervious Surfaces w/ Infiltration, Tree Wells, Soil Health & related Interpretive Elements
- **Project Status** - SCW funding requested for Design & Construction
- **Total Funding Requested: \$739,772**





Project Location

Altadena Mariposa Green Street Development Project



Expanded Emerald Necklace Plan:
Altadena Mariposa Green Street Development Project



Safe Clean Water Program

- **TMDL Compliance** - Upper Los Angeles River Watershed EWMP specifically discusses **Green Streets & Low Impact Development BMPs**
- Helps meet **Total Maximum Daily Load** requirements for bacteria, copper and other pollutants through retention and infiltration of storm water in the livable environment
- Helps implement SCW's goals of **capturing water, protecting coast from contaminants, protecting public health, ensuring safe, greener, healthier, and more livable spaces for all, and ensures community oversight**



Project Benefits

Nexus Storm water & Urban Run off Capture & Pollution Reduction

- **MS4/TMDL Compliance** - Improve Water Quality w/LID & Natural Infrastructure Solutions
- **Storm water Capture Capacity** - 5 acre-feet per storm event
- **Treatment Technologies** - Infiltration using natural media & bioretention

Serves Unincorporated Altadena County Community & DAC w/in 0.6 mi.

Community Benefits

- Heat Island, Shade, Habitat, Drainage/Flood Improvements, Creation of Outdoor COVID Safe Civic Spaces - 0.13 acres
- Celebrate Water Resources Stewardship w/General Public



Community Engagement

- Community Project in development since 2016, part of Altadena Pedestrian Loop Project: series of interconnected streets, parks, civic spaces linked by urban greening and improved natural infrastructure.
- 63+ Letters of Support from Local Organizations, Residents, Businesses, and Institutions – presentation to Complete Streets Committee; Altadena Town Council; DAC School Communities; Families /Residents /local CBOs w/hands on EN Watershed Events
- Best Location for Project - Strategic Place within 1940's storm drain network, w/in 7% topo slope/key Civic Space for Community
- Community is asking for this Green Street /Natural Infrastructure Development & myriad benefits



Project Details



Legend Proposed Elements:

- Tree
- Plants
- Pervious Pavement/Cross Walks
- Pervious Pavement/Infiltration
- Decorative Cross Walk
- Infiltration Planter
- Pervious Permeable Gutter/Slats

East Mariposa St. : Proposed



SCALE: 1"=40'



Cost & Schedule

Phase Costs			
Phase	Description	Cost	Completion Date
Design	Final Engineering and Permitting	\$ 226,160.00	12/2021
Construction	Construction Management and Construction	\$ 617,656.00	12/2022
Total Funding:		\$ 843,816.00	

Annual Cost Breakdown	
Annual Maintenance Cost:	\$ 5,000.00
Annual Operation Cost:	\$ 4,000.00
Annual Monitoring Cost:	\$ 1,500.00
Project Life Span:	30 years

REQUEST
\$739,772

MATCH
\$132,544

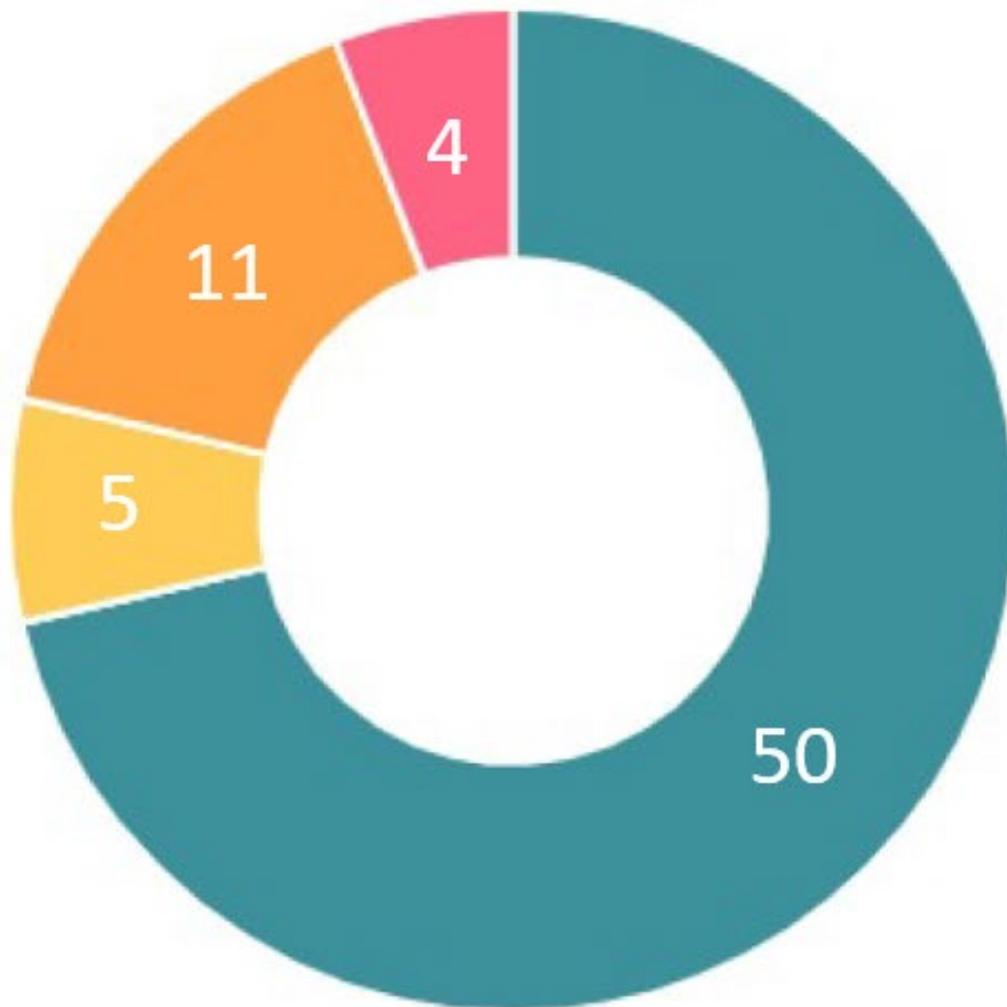


Funding Request

Funding Requested by Year & Phase			
Year	SCW Funding Requested	Phase	Efforts during Phase and Year
Year 1	\$ 201,300.00	Design	Final design and permitting
Year 1	\$ 344,000.00	Construction	Construction and CM
Total Year 1	\$ 545,300.00		
Year 2	\$ 165,972.00	Construction	Construction and management
Total Year 2	\$ 165,972.00		
Year 3	\$ 9,000.00	O & M	O&M for first year
Year 3	\$ 1,500.00	Monitoring	Annual Monitoring
Total Year 3	\$ 10,500.00		
Year 4	\$ 9,000.00	O & M	O&M for Year 2
Total Year 4	\$ 9,000.00		
Year 5	\$ 9,000.00	O & M	O&M for Year 3
Total Year 5	\$ 9,000.00		
Total Funding:	\$ 739,772.00		



Preliminary Score: 70





Score Benefits

Category	Points	Description
Water Quality Wet + Dry (Part 1 and Part 2)	50	Cost effective project when comparing volume capture to total cost and reduces bacteria and other pollutant loading to the Los Angeles River
Community Investment	5	Reducing local island effect and increasing shade through the planting of additional trees
Nature-Based Solutions	11	Replacing asphalt with permeable pavement, enhancing the landscape with additional trees and vegetation, and promoting infiltration, which naturally occurred prior to development.
Leveraged Funding	4	The Project demonstrates strong support from local Non-Profit Organizations and Community-Based Organizations
Total:	70	



Questions?