Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Existing median is removed and travel lanes remain as asphalt.
2. New painted bike lanes are proposed on both sides of the street (by others)
3. Stormwater planters and street trees accept runoff from both San Pablo Avenue and adjacent private property.
4. Boardwalks allow pedestrians to access parking and sidewalks.
5. Parallel parking configuration allows for greater space efficiency along the street.
6. A 4.5' egress zone allows pedestrians to safely exit their vehicles and pay parking meters.
   The existing ADA marked parking stall is retained at this location.
7. The east side of San Pablo Avenue could be converted to mirror west side improvements in the future.

San Pablo Avenue Green Stormwater Spine Project

City of Oakland, California

[nev-ū-non]
Nevue Ngan Associates

QUADRIGA
landscape architecture and planning, inc.
sacramento | santa rosa

WILSEY HAM
ENGINEERING ■ PLANNING ■ SURVEYING

Stormwater Improvement Concept Plan

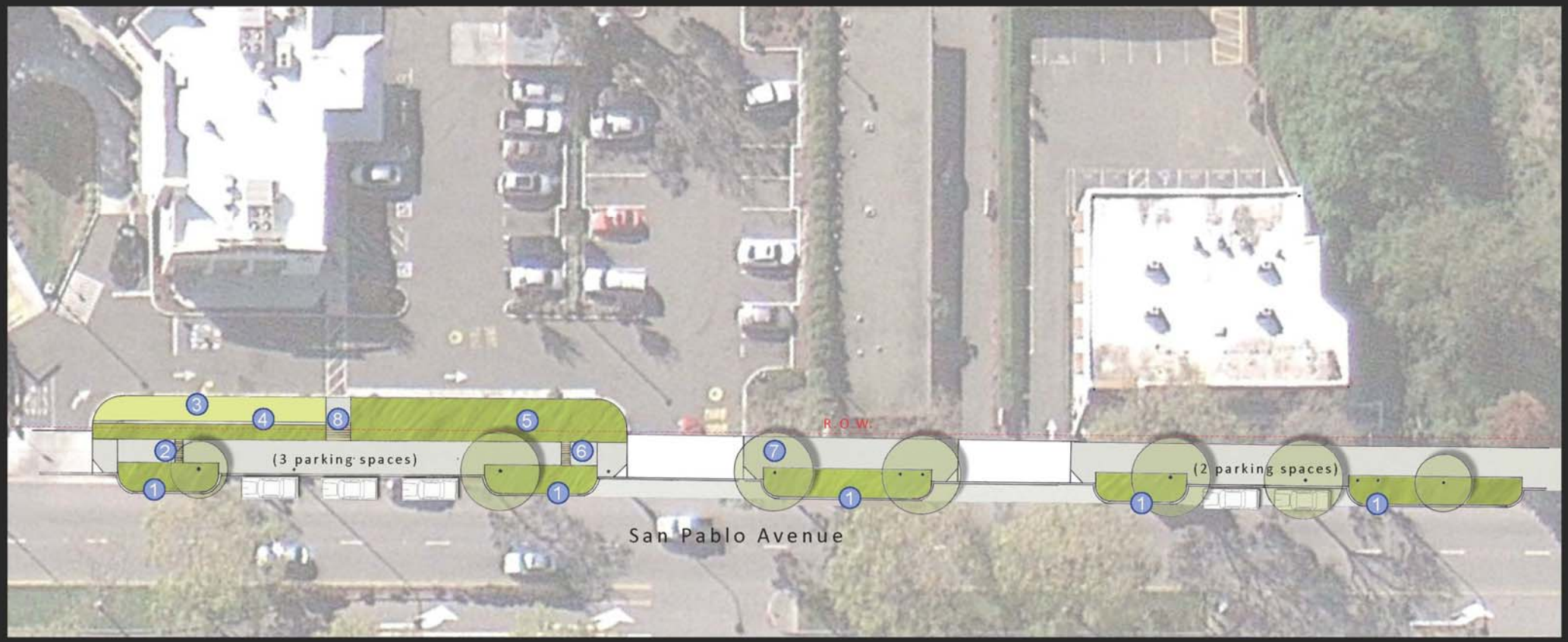
Scale: 1"=20'
January 2013

1. Entry point of stormwater flow from Apgar Street.
2. Low-flow green gutter. Higher flows spill over a small retaining wall into larger adjacent rain garden.
3. Rain garden landscape area.
4. Existing sewer manhole location.
5. Side slope landscape transitions grade from street level to the basin's finished elevations.
6. On-street asphalt parking zone (Capacity is for five vehicles)
7. New sidewalk paving to match existing brick paving along San Pablo Avenue (by private development?)
8. Pedestrian boardwalk crossing over rain garden system.
9. Expanded sidewalk area overlooks rain garden cells and allow for addition space for cafe/plaza seating.
10. Overflow from rain garden system.
11. Existing street trees to remain.
12. Sidewalk zone to be paved with standard scored concrete.

San Pablo Avenue Green Stormwater Spine Project

City of Emeryville, California

[nev-ū-non]
Nevue Ngan Associates
QUADRIGA landscape architecture and planning, inc. sacramento | santa rosa
WILSEY HAM ENGINEERING ■ PLANNING ■ SURVEYING



Stormwater Improvement Concept Plan

Scale: 1"=25'
January 2013

1. Stormwater curb extensions capture runoff from San Pablo Avenue.
2. Grated trench drains allow stormwater to flow into adjacent sidewalk planter.
3. Existing private landscaping/signage/utilities are retained.
4. Sidewalk planter accepts stormwater from San Pablo Avenue. A small concrete curb wall helps provide grade separation and protection of existing signs and utilities. This will require acceptance and coordination of improvements with private owner.
5. An existing vegetated swale is modified to capture stormwater from both San Pablo Avenue and McDonald's parking lot. This will require acceptance and coordination of improvements with private owner.
6. Grated trench drains allow stormwater overflow to flow into a stormwater curb extension in San Pablo Avenue.
7. All existing trees are retained with streetscape improvements.
8. Boardwalk allows stormwater to follow under pedestrian pathway.

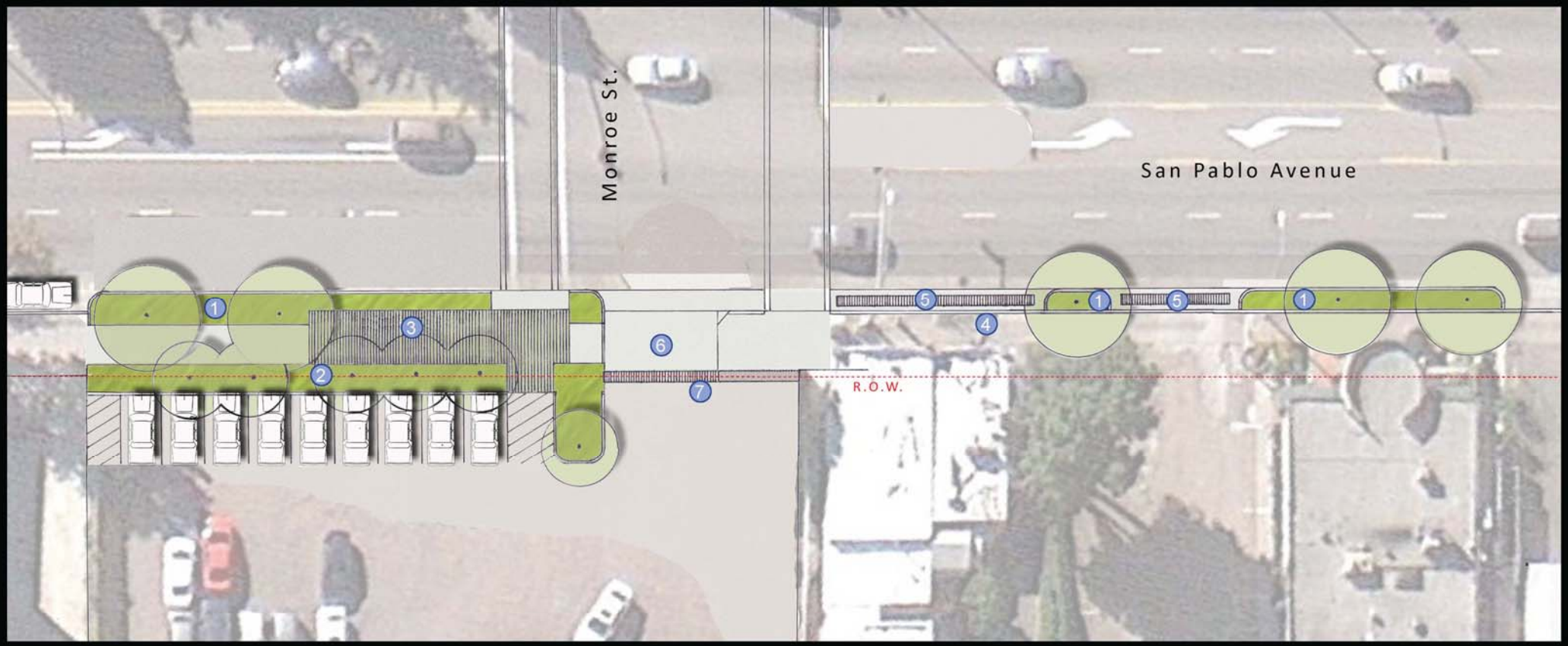
San Pablo Avenue Green Stormwater Spine Project

City of Berkeley, California

[nev-ū-non]
Nevue Ngan Associates

QUADRIGA
landscape architecture and planning, inc.
sacramento | santa rosa

WILSEY HAM
ENGINEERING ■ PLANNING ■ SURVEYING



Stormwater Improvement Concept Plan

Scale: 1"=20'
January 2013

1. Stormwater curb extensions capture runoff from San Pablo Avenue.
2. Sidewalk planters capture stormwater from private parking lot. This will require acceptance and coordination of improvements with private owner.
3. A boardwalk allows stormwater to be stored under sidewalk zone using Silva Cell technology.
4. Existing bus stop remains in current location.
5. Stormwater overflow from stormwater curb extensions is captured within a series of grated green gutters within parking zones/ driveway zones.
6. Existing driveway is modified.
7. Combination speed bump and trench drain system conveys runoff into sidewalk stormwater planter.

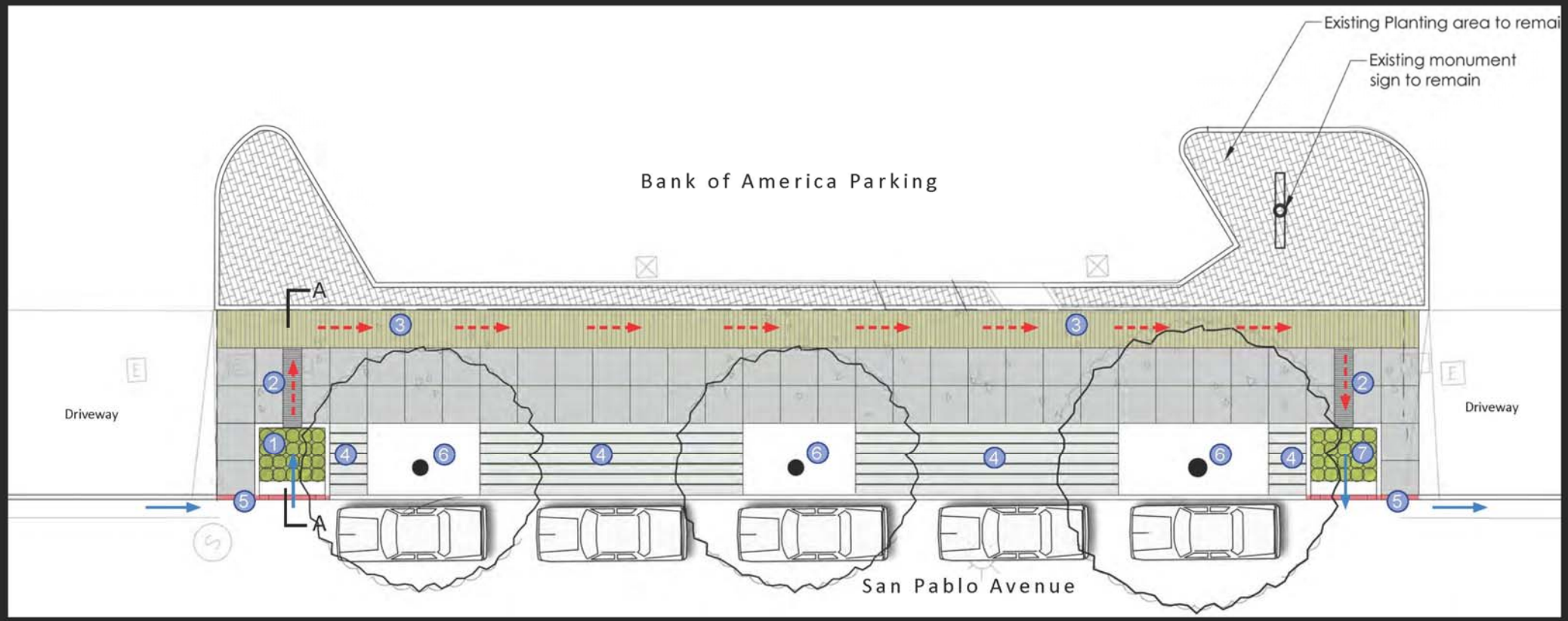
San Pablo Avenue Green Stormwater Spine Project

City of Albany, California

[nev-ū-non]
Nevue Ngan Associates

QUADRIGA
landscape architecture and planning, inc.
sacramento | santa rosa

WILSEY HAM
ENGINEERING ■ PLANNING ■ SURVEYING



Stormwater Improvement Concept Plan

Scale: 1"=10'
November 2013

1. Stormwater planter captures runoff from San Pablo Avenue. This planter is to be recessed 4" below gutter grade.
2. Trench drains connects stormwater flow from the stormwater planter to sidewalk boardwalk zone.
3. A 4' wide boardwalk allows for continuous stormwater planter along street frontage. It is anticipated that the excavation for the stormwater planter will be outside of the existing tree root zone
4. Existing concrete sidewalk adjacent to street trees to be converted to a pervious paving system.
5. Curb frontage at stormwater planter locations are to be painted as a red zone (However, 5 spaces for on-street parking are retained).
6. Existing trees are preserved and protected.
7. Stormwater planter captures runoff from San Pablo Avenue and overflow from boardwalk planter. Any overflow from planter is allowed to exit along San Pablo Avenue.

San Pablo Avenue Green Stormwater Spine
City of El Cerrito, California

Urban Rain | Design
The Office of Kevin Robert Perry, ASLA

[nev-ū-non]
Nevue | Ngan | Associates

QUADRIGA
landscape architecture and planning, inc.
sacramento | santa rosa

WILSEY HAM
ENGINEERING ■ PLANNING ■ SURVEYING

Stormwater Improvement Concept Plan

Scale: 1"=40'
January 2014

1. Stormwater curb extension extends out into San Pablo Avenue and captures street runoff. Existing drain inlet is modified to capture overflow.
2. Landscaped curb extensions located within the parking zone of the street helps define parking spaces along San Pablo Avenue.
3. Existing trees are preserved and protected.
4. 5' wide separated bike path with 2' buffer zone is located along existing curb line. Bike path runoff flows towards on-street parking zone.
5. Bike path transitions from a separated condition to a integrated condition at intersection.
6. 2' painted bike buffer zone.
7. Sidewalk is expanded to varying widths(possibly retained at current widths at existing tree locations).
8. Pervious paving system between existing trees captures rainfall and runoff from sidewalk zone.
9. To accommodate new improvements, travel lanes are reconfigured and shifted to the west.
10. Existing median must be altered to accommodate new lane configurations.
11. Traffic lanes transition to match current traffic layout.

El Cerrito Urban Greening Grant Project

City of El Cerrito, California

Urban Rain | Design
The Office of Kevin Robert Perry, ASLA

[nev-ū-non]
Nevue | Ngan | Associates

QUADRIGA
landscape architecture and planning, inc.
sacramento | santa rosa

WILSEY HAM
ENGINEERING ■ PLANNING ■ SURVEYING

Stormwater Improvement Concept Plan

Scale: 1"=25'
May 2013

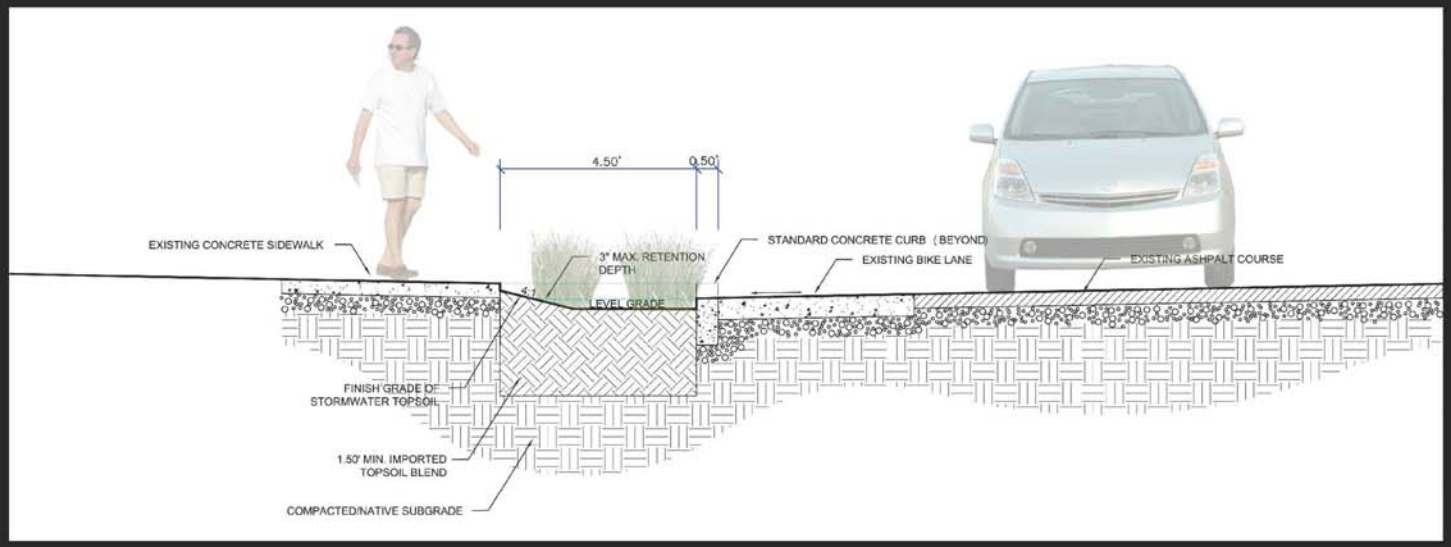
1. Stormwater curb extensions capture runoff from San Pablo Avenue, Andrade Avenue, and McBryde Avenue.
2. A new rain gardens capture stormwater from private parking lot. This will require acceptance and coordination of improvements with private owner.
3. Boardwalks allow stormwater to be connected between the curb extensions and rain garden.
4. Existing parking spaces are modified to allow for only parallel parking, however, additional parallel parking is allowed on McBryde Avenue
5. A new bus stop canopy conveys stormwater to adjacent rain garden (by others).
6. Trench drains used for stormwater conveyance.
7. A new corner plaza for placemaking opportunity (art, pedestrian seating, other amenities by others).
8. Boardwalk allows for additional stormwater storage adjacent to stormwater curb extension.
9. Existing private signage/utilities are to be protected within rain garden.
10. Optional new bike racks (by others)

San Pablo Avenue Green Stormwater Spine Project
City of Richmond, California

[nev-ū-non]
Nevue Ngan Associates
QUADRIGA landscape architecture and planning, inc. sacramento | santa rosa
WILSEY HAM ENGINEERING ■ PLANNING ■ SURVEYING

Stormwater Improvement Concept Plan

Scale: 1"=40'
January 2014



Typical Stormwater Plan Cross Section

Not To Scale

1. Stormwater planters capture runoff from San Pablo Avenue. Each planter has a flush curb condition next to bike lane for sheet flow of stormwater.
2. Existing street tree is retained and new landscape area is created at base of tree.
3. Existing bike lane is retained.

San Pablo Avenue Green Stormwater Spine Project
City of San Pablo, California

Urban Rain | Design [nev-G-non] The Office of Kevin Robert Perry, ASLA
Nevue | Ngan | Associates
QUADRIGA landscape architecture and planning, inc. sacramento | santa rosa
WILSEY HAM ENGINEERING ■ PLANNING ■ SURVEYING