

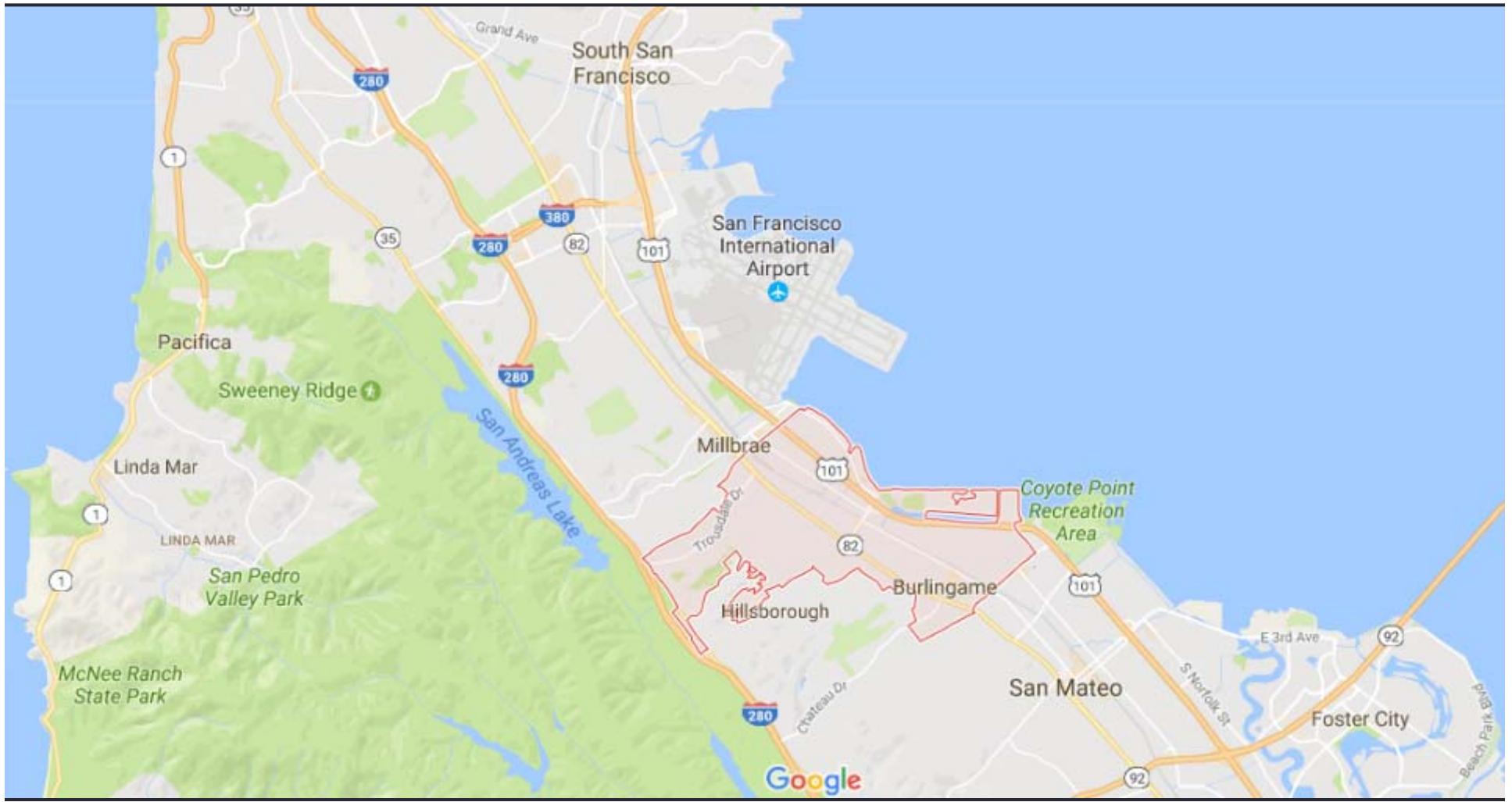


LESSONS LEARNED: CALTRANS 101 INTERCHANGE PROJECT

Pam Boyle Rodriguez
Stormwater Manager, City of Palo

Presented on behalf of the City of
Burlingame

Project Location



Feb. 2014



Project Details

- Reconstruction of 1947 Broadway/US-101 interchange
- Four-lane overcrossing → 7-lane (realigned 170 ft. north)
- Total project = 0.76 mile; approx. 14 ac
- Retaining walls, sidewalks and bike lanes, bioswales
- Groundbreaking: Sep. 2014
- Completion: mid-2017

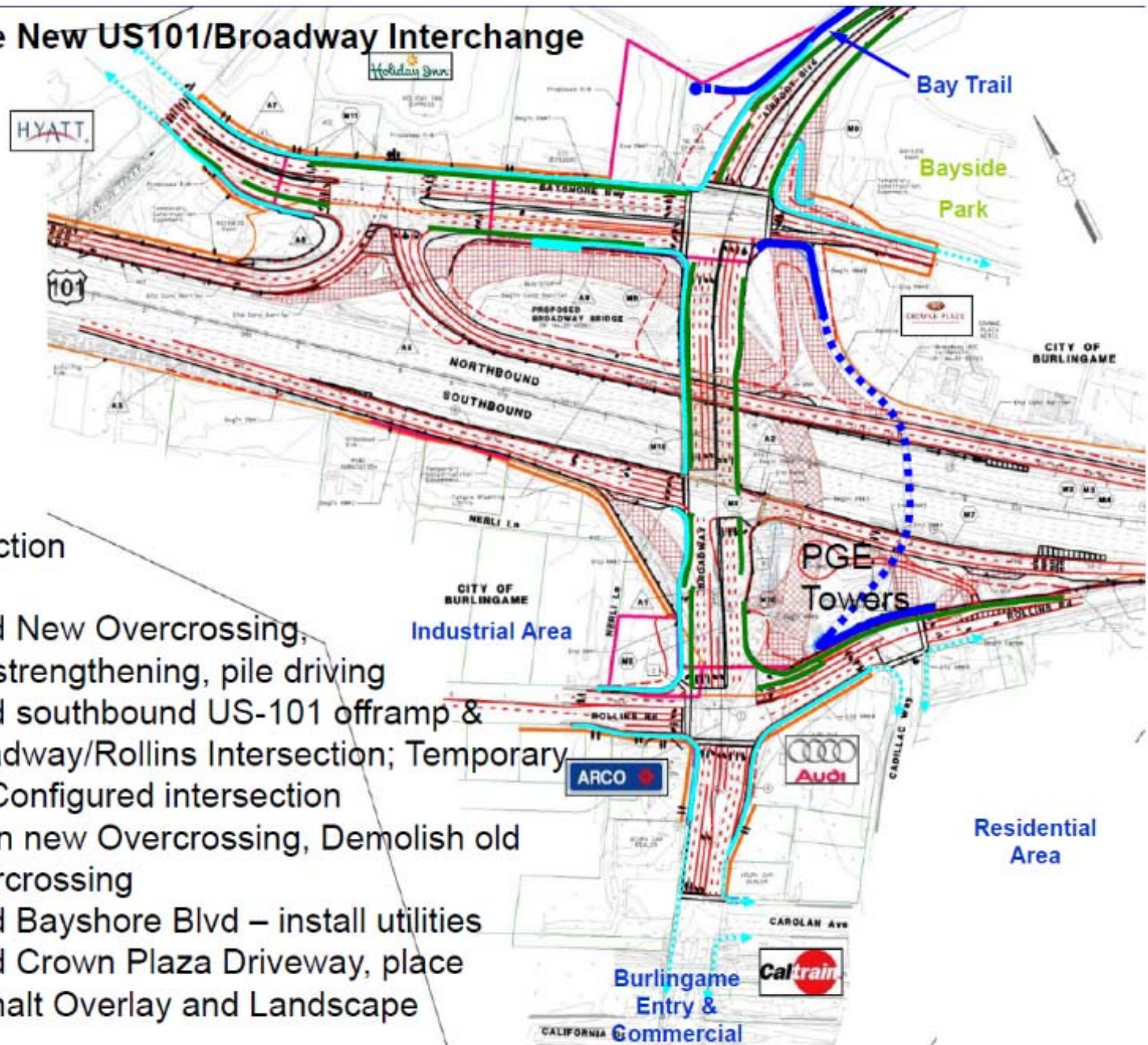


Project Budget

- \$32M from San Mateo County Transportation Authority (SMCTA) ½ cent sales tax
- \$11M State Transportation Improvement Program (STIP) as sponsored by C/CAG
- \$3.6M of Federal Funds from One Bay Area Grant (OBAG) Federal program
- \$5M from the City of Burlingame

Total Programmed Construction Capital \$51.6M

Building the New US101/Broadway Interchange



Stage Construction

- Stage 1 – Build New Overcrossing, soil strengthening, pile driving
- Stage 2 – Build southbound US-101 offramp & Broadway/Rollins Intersection; Temporary Re-Configured intersection
- Stage 3 – Open new Overcrossing, Demolish old Overcrossing
- Stage 4 – Build Bayshore Blvd – install utilities
- Stage 5 – Build Crown Plaza Driveway, place Asphalt Overlay and Landscape

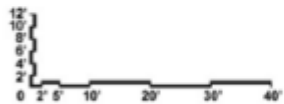
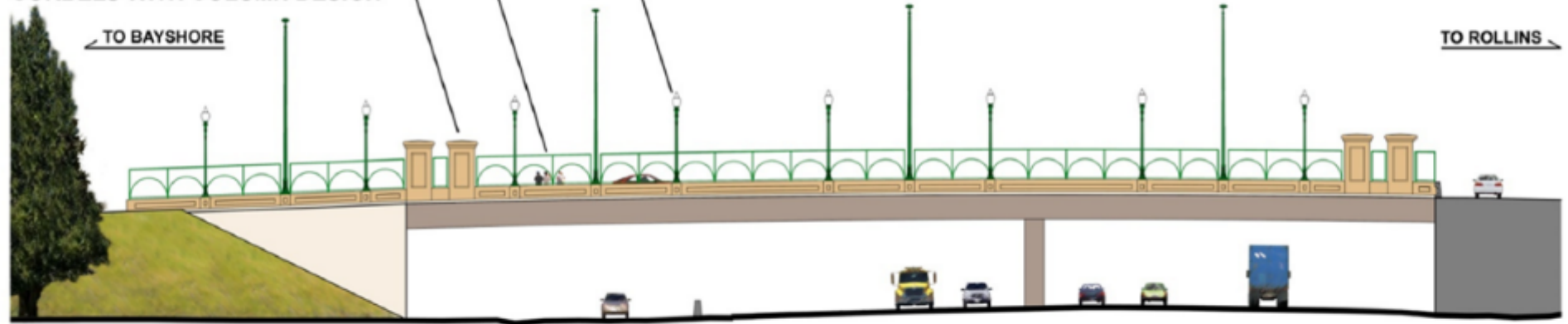


DOUBLE ACORN PEDESTRIAN LIGHT

ROADSTAR LED COBRA-HEAD LIGHT

FENCE POSTS AND ARCH DESIGN
WITH CHAIN LINK FENCE FABRIC
POWDER COATED GREEN

5' LONG X 2' WIDE X 12'-6" HIGH
CORBELS WITH COLUMN DESIGN



VIEW SOUTH FROM HIGHWAY



101 BROADWAY INTERCHANGE PROJECT OVERCROSSING AESTHETICS

ARCHED FENCE AND COLUMN CORBELS

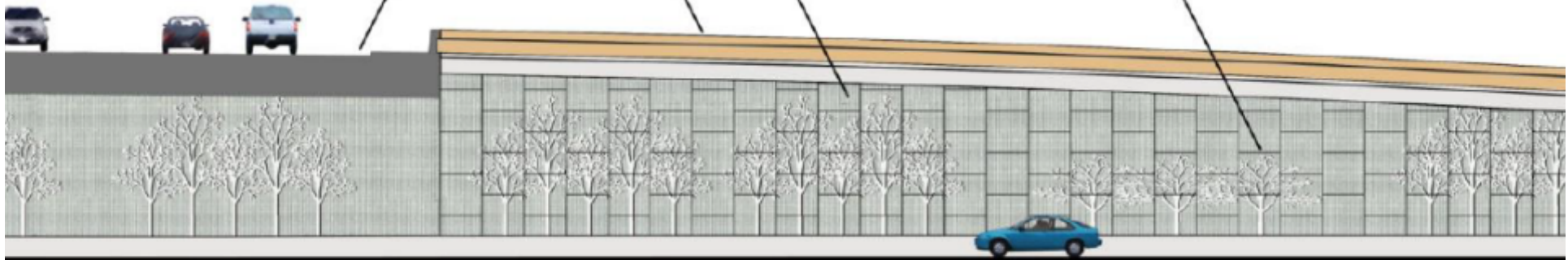


BULKHEAD AND MSE RETAINING WALLS WITH TREE PATTERN OVER FRACTURED RIB

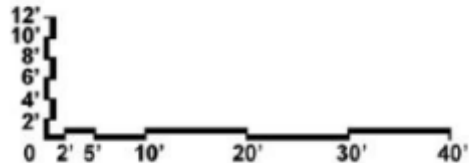
5' X 5' MSE WALL PANELS, TYPICAL

101 SOUTHBOUND OFF-RAMP TO BROADWAY

BROADWAY OVERCROSSING



VIEW WEST FROM HIGHWAY



101 BROADWAY INTERCHANGE PROJECT RETAINING WALL AESTHETICS



Nov. 2016



Inspection Responsibilities

- Ghilotti contractor on-site: two env. staff (one QSP)
- Caltrans: monthly inspections; major inspection by HQ
- City Stormwater Inspector (contractor, change of staff)
- City Stormwater Coordinator

Project Issues

- Lack of City stormwater staff at planning and project initiation
- SWPPP – difficult to oversee implementation
- Misunderstanding of permit jurisdiction
- Lack of interest/respect from contractor
- Inadequate SWPPP implementation budget (as of Nov. 2016)
- City Project Manager lacked SW knowledge
- Repeated violations – delicate relationship
- Inconsistent communication with Caltrans

BMP Issues

- Inadequate SWPPP implementation and maintenance
 - Sediment tracking
 - Materials & waste management
 - Inlet protection
 - Housekeeping practices
 - Soil erosion & slope protection



Tracking from Work Site



Sediment Tracking



Sediment Tracking



Sediment Tracking



Improper Materials Management



Improper Materials Management



Improper Materials Management



Improper Materials Management



Improper Materials Management



Improper Waste Management



Improper Waste Management



Lack of/Inadequate Inlet Protection



Lack of/Inadequate Inlet Protection



BMP Maintenance



Poor Housekeeping Practices



Poor Housekeeping Practices



Poor Housekeeping Practices



Poor Housekeeping Practices



Poor Housekeeping Practices



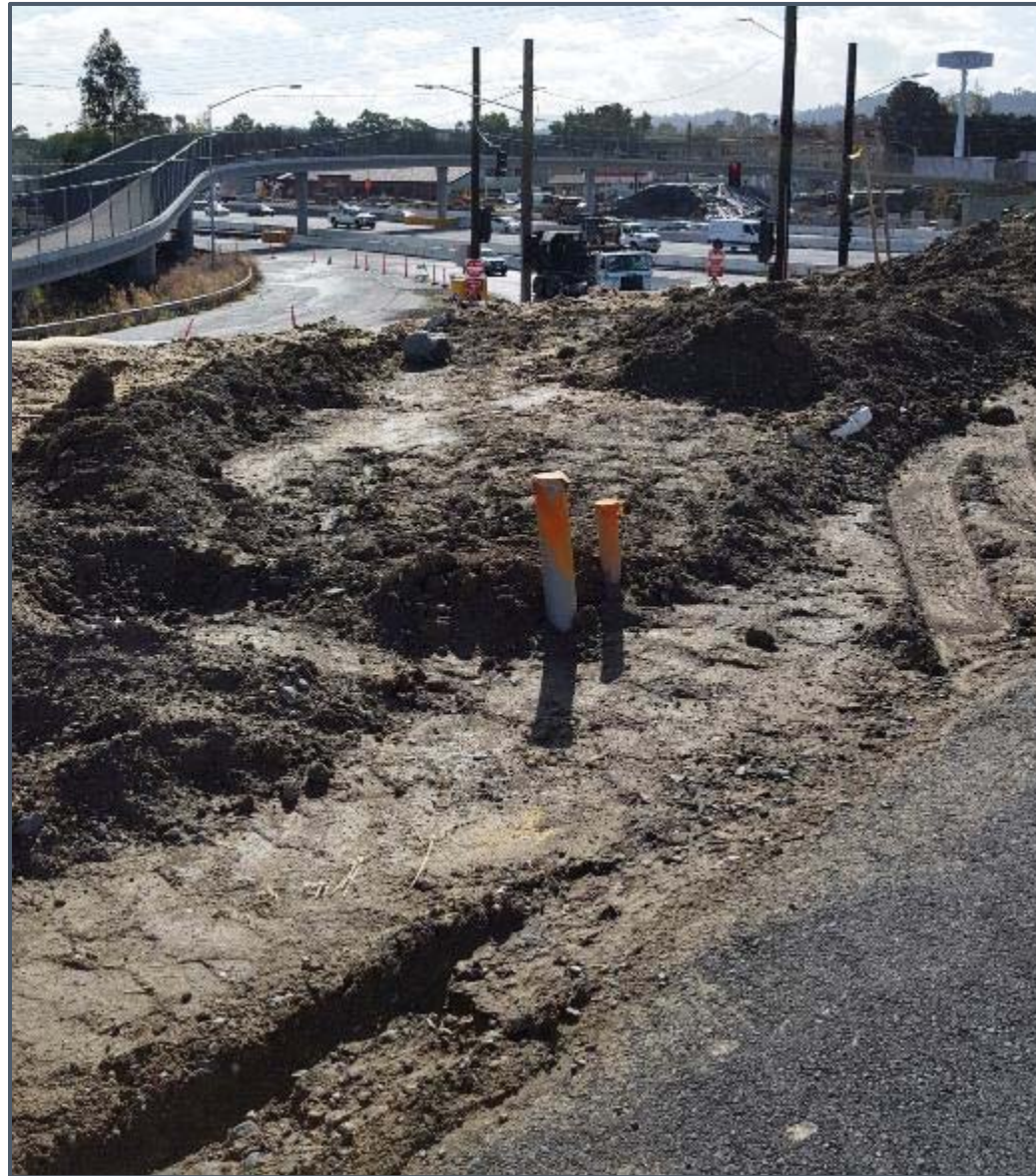
Soil Erosion and Lack of Slope Protection



Soil Erosion and Lack of Slope Protection



Soil Erosion & Lack of Slope Protection



Lack of Slope Protection



Lack of Street Sweeping/Cleaning



Lack of Street Sweeping/Cleaning



Lack of Street Sweeping/Cleaning



BMPs: Some Progress...



Sediment Tracking (Example 1, before)



Sediment Tracking (Example 1, before)



Sediment Tracking (Example 1, after)



Sediment Tracking (Example 1, after)



Sediment Tracking (Example 2)



Sediment Tracking (Example 2)



Lack of Inlet Protection (before)



Inlet Protection (after)



Street Sweeping



Lessons Learned

Project Planning

- Meet/build relationships with agency staff initially
- Educate and get buy-in from City staff
- Introduce Water Board staff to project
- Plan for appropriate resources
 - Designate funds for extra inspector time
- Agree upon map of entire mgt. area
- Communicate with project neighbors beforehand
- Review SWPPP funding w/ agency

Lessons Learned

Inspections

- Conduct pre-scheduled & surprise inspections
- Require permanent inlet protection for long-term projects; go beyond project boundaries
- Simplify and use agreed-upon abbreviated SWPPP
- Require sign-off from construction inspector before initiation of project
- Obtain permission to provide direction directly to contractor