Improving Stormwater Management

STORMWATER IMPROVEMENT THROUGH AN URBAN GREENWAY

LOS ANGELES RIVER AND ALISO CREEK GREENWAY, LOS ANGELES, CALIFORNIA, EPA REGION 9

In the 19th and 20th centuries, the Los Angeles (LA) River powered the city's industry and served as an important transportation corridor, creating economic value and growth. As development encroached upon the river's floodplain in the 1930s and 1940s, the city channelized the river. Over the years, the river was neglected and became an eyesore in many areas. Today, the city recognizes the potential benefits of revitalizing the river and the positive impact it could bring to adjacent neighborhoods. Under the LA River Revitalization Master Plan, over 50 organizations are participating in projects to improve the LA River corridor. The entire LA River watershed is undergoing a transformation as part of a master planning process aimed toward returning the flood control channel to a natural and scenic waterway system that will enhance the value of the river to the region recreationally, economically, and ecologically.

Figure 1. Photo looking west showing typical condition of the existing channel corridor.

LA County and the Trust for Public Land (TPL) requested assistance from the U.S. Environmental Protection Agency (EPA) Land Revitalization Team in designing environmentally-sensitive public improvement projects along the LA River. TPL focused on developing trails and open spaces, and using stormwater best management practices (BMPs) throughout the river corridor to improve water quality.

The project area is an approximately ¼-mile stretch of channel corridor near the confluence of Aliso Creek with the LA River in the Reseda section of Los Angeles. The project goal is to advance the design for a greenway and trail segment to be developed at an existing maintenance service area within the channel right-of-way on the north bank of the LA River and the west bank of Aliso Creek. The project incorporates brownfield restoration along the trail and street-side BMPs at three street end locations along the greenway that also serve as public access points into the trailway. The greenway and pedestrian facilities are intended to be first installments within a larger trail system running along the region's waterway. Future plans include connecting various area parks and open spaces via the trail system.

The Team conducted a site visit to gather data and meet with local stakeholders including TPL and city and county agencies that have jurisdictional and review control over portions of the project. The Team was provided with 30% design drawings of the project area developed as part of a previous design effort. The Team tested the 30% design against information gathered during the site visit and subsequent analysis. As it developed the 60% design drawings, the Team refined the initial design concept to reflect physical conditions, other related projects, and BMPs. The design includes: a multi-use trail with granite and concrete banding at street ends to provide visual interest; permeable paver systems; riprap spillways with native stone cobbles; biofiltration planters with native, wet-tolerant plantings; street-side planting beds with shade trees; terraced planters; elevated deck features; street end and greenway landscaping; low-water-use irrigation; lawn gathering space; retaining walls and natural stone outcroppings; decorative gates, fences, and guardrails; flagstone paving and seating; and kinetic sculptures and accent pedestals.

The Team delivered a 60% design set and a high-level Basis of Design Report that summarized existing site information, captured design decisions, and identified major plan objectives to be referenced with future advancement of the project.

LESSONS LEARNED

- When designing a small, incremental trail/greenway project, it is vital to follow the standards of the larger master plan.
- Strict federal or local guidelines and standards do not have to limit creative design solutions.
- Even small stormwater BMPs can have a large impact on sustainability.

PLANNED POST-TECHNICAL ASSISTANCE ACTIVITIES

- Further evaluate existing site conditions and continue to engage stakeholders.
- Engage adjacent neighborhoods to build support and interest for the project.
- Advance construction documents to final (100%) level and build project.

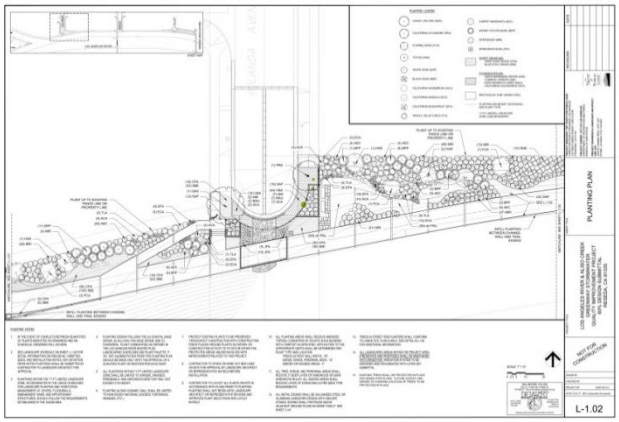

Figure 2. Planting Plan at Yolanda Avenue Street End.

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