Zone 4

Report to the Zone Commissioners
Design and Construction Projects
for Calendar Year 2011
By Dusty Williams, General Manager-Chief Engineer
January 2012

GENERAL:

Throughout the District (all Zones) during Calendar Year 2011, the Design and Construction Division Issued Notices of Completion for four capital projects and three repair projects with a combined value of $10 million. Surprisingly, despite the downturn in development activity, the District issued Notices of Completion for 20 developer-built projects with a total value of almost $36 million during Calendar Year 2011. Many of these projects were "almost" finished at the end of the boom in 2008/2009 and are now being accepted as final punch-lists are finally completed. Two large projects in Zone 4, Paloma Wash in Menifee and the large storm drain associated with the "Sketchers" distribution facility in Moreno Valley accounted for nearly $20 million of the $36 million total.

With many project plan sets nearing completion at press time we expect to see a significant uptick in both the number of in-house CIP projects under construction and the total value to be constructed compared to Calendar Year 2011. We also have several other drainage projects being managed by individual cities with the District participating in funding.

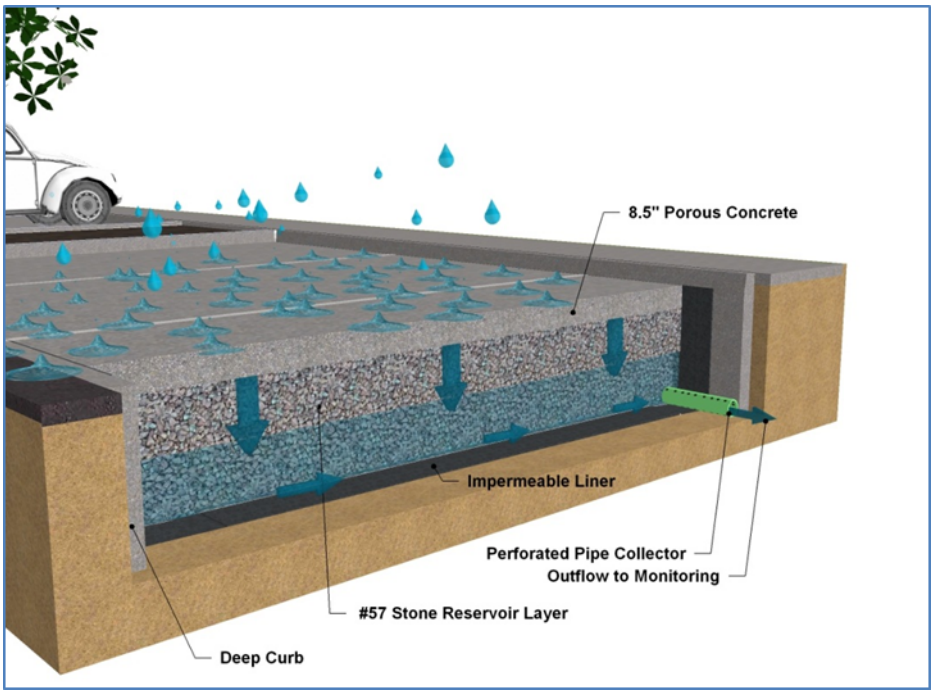
Again, during this last year, bids for District construction projects have shown that general contractors are still making very competitive bids. The District will continue to try to leverage this dip in construction costs by pushing hard to complete designs and advertise projects while prices are low.

Additionally, we are also underway with a number of repair projects that require engineered drawings due to the severity of the damage or potential damage to our facilities. Deficiencies range from exposed and rusting rebar to undermined slope paving. Most of these projects were designed by outside consulting engineers. At press time for this report three separate projects along Palm Canyon Wash and Murrieta Line F repairs have been completed. The Arlington and La Sierra channel repairs are underway. Montgomery and Cabazon channel repairs are out to bid and another repair in the south Corona area will be out to bid in January. An additional project along the San Jacinto River Levee adjacent to the Soboba Tribe's holdings will follow early this year.

Calendar Year 2011 saw completion of significant changes at the District's office site. The completed Low Impact Development (LID) Retrofit Project consists of three parts converting the District's Market Street campus into a regional example of green development concepts. The upgraded facility will be used as a regional "green" training center for municipal employees, developers, engineers, and contractors throughout the Inland Empire and Orange County.

Currently, there are limited locations and opportunities to demonstrate the proper application of LID BMPs. This facility is uniquely designed to accomplish both demonstration and monitoring of the effectiveness of LID practices. This project is intended to facilitate the support and implementation of LID BMPs by municipalities and developers. The cost of this project was partially subsidized by a $475,000 State Proposition 13 grant administered by SAWPA.

Centralized Monitoring Point for Low Impact Demonstration Project



Pervious Portland Cement Concrete

Following is a status summary of the capital improvement projects for Zone 4:

Current Year Capital Projects (Budgeted FY 2011/2012)

- **San Jacinto River, Stage 4 (4-8-00020-04)** - This project, a joint venture with the City of San Jacinto, was conceived as a multi-year plan to construct the ultimate levee system (approximately 1,200 feet river bottom width) between the existing Corps of Engineers' levee 9,500 feet upstream of State Street, and a point about 8,200 feet downstream of Sanderson Avenue, a distance of about 5 miles. Floodwalls on piles are required to be constructed over the Metropolitan Water District facilities just east of State Street.

  The District and the City began work on the project in 2000 after the Corps of Engineers prepared a Reconnaissance Study and determined there was no justification for Corps participation. The City, with funding from the District, contracted with CH2MHILL for preparation of a Biological Assessment of the area impacted by the proposed levee project. In December 2002, the District executed an agreement with the City to share the cost of design and construction of the proposed levee project up to a maximum of $7 million. On February 9, 2010 the District's Board approved an amendment to that agreement to raise the District's contribution to $12 million, place the burden of property acquisition entirely on the City and establish the City as the Lead Agency for CEQA.

  A preliminary design report was prepared by Albert A. Webb Associates in 2004. Work on the Final Design and EIR commenced in 2007. The City entered into a contract for Final Design with prime consultant Albert A. Webb Associates, and sub-consultants CHJ (geotechnical, special pile design), PACE (sediment transport) and Terrain Engineering (floodwall design).

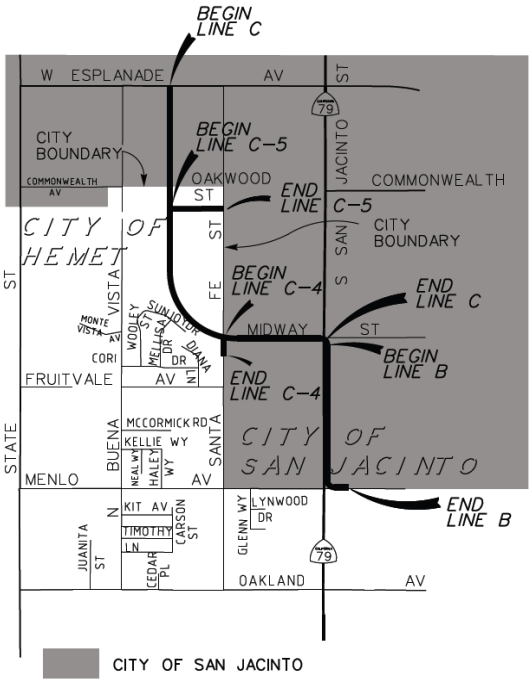
  Albert A. Webb Associates is also the primary consultant on the EIR document with Glenn Lukos and Associates providing the biological survey data. The District covered 100% of the cost for the environmental work. A CEQA Notice of Preparation of a DEIR was originally circulated in July 2007. Since the Notice of Preparation was circulated, the proposed project has changed in the following ways: a shift in the alignment of the proposed southern levee; an increase in the extent of northern levee and floodwall enhancements; protection of the Metropolitan Water District underground pipelines; a reach of floodwall was added along the southern levee; preparation of an Operation and Maintenance Plan for the proposed facilities; and extension of the project area approximately 6,800 feet downstream (to the northwest). Another CEQA Notice of Preparation was circulated in July 2010 to address these project changes.

  The environmental work is ongoing. The CEQA and MSHCP documents must address the potential impacts to the Southwest Willow Flycatcher, least Bell's vireo, Los Angeles Pocket Mouse, San Bernardino Kangaroo Rat (SBKR) and riparian/riverine habitat. Potential impacts to SBKR, in particular, have been the cause of much concern by the U.S. Fish and Wildlife Service and the California Department of Fish and Game. As part of the MSHCP process, the agencies finally provided comments on the SBKR on September 6, 2011. To respond to the agencies comments, the City has retained SJM Biological Consultants who are SBKR specialists. Because mitigation measures may significantly impact the form of the project, work to finish up the construction drawings and the Draft EIR have been suspended until the SBKR issues are settled with the Agencies.

- **<u>San Jacinto River North Levee Repair (4-6-00020-00)</u>** - This project will repair approximately 77 lineal feet of slope protection and flood wall along the northerly side of San Jacinto River approximately 2,000 feet downstream of State Street Bridge. The project includes the removal of existing rock, debris and trash covering the damaged reach. Since the project is classified as maintenance to an existing facility, environmental permits will not be needed with the exception of a 401 Permit which has already been obtained. Albert A. Webb Associates should have approved design drawings by February 2012.

- **<u>San Jacinto MDP Lines C, C-4, C-5 and B (4-8-00124-02)</u>** - This project is an underground storm drain that connects to the upstream terminus of the District's existing Line C, Stage 1 facility. Line C, Stage 2 will continue south for approximately 3,600 feet in an open field before continuing easterly on Midway Street for another 1,350 feet. San Jacinto MDP Line B, Stage 1 will begin at the intersection of Midway Street and San Jacinto Street, where the alignment will extend southerly on San Jacinto Street for 1,950 feet prior to terminating 320 feet east of San Jacinto Street on Menlo Avenue. Design of MDP laterals, Line C-4 and Line C-5, was included to help alleviate the flooding issues encountered within the project limits.

  The project alignments have been finalized and deep excavation is expected along San Jacinto Street and Menlo Avenue to avoid existing utilities. CEQA compliance documents are being prepared and 30% plans are being completed. The anticipated project advertising date is late 2012.

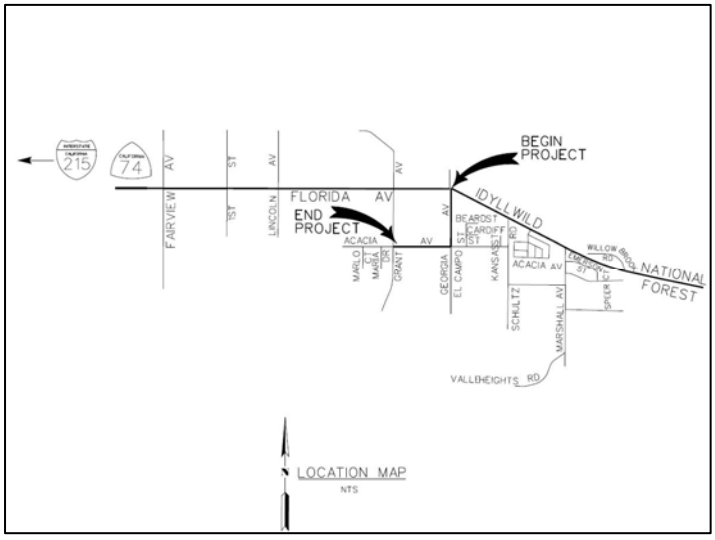


- **<u>San Jacinto MDP Line G (4-8-00125-01)</u>** - This project consists of a one-time contribution of $1 million to the construction of an underground storm drain that extends from a proposed detention basin at the intersection of Potter Road and De Anza Drive then southwest in De Anza to Young Street. The City of San Jacinto is administering the project; the District will own and operate the facility upon completion of construction and the Potter Road Basin outfall. The District is in the process of reviewing construction drawings for the storm drain. The District's last contact with this project was plan check number four in December 2008. The construction schedule is controlled by the City of San Jacinto.

- **<u>Menifee - Hawthorne Avenue Storm Drain (4-8-00163-01)</u>** - This project is an underground storm drain from an outlet north of Holland Road southerly in Hawthorne Avenue to a collection system south of Craig Avenue. The District's contractor has installed the storm drain system and the Notice of Completion was filed in March 2011.

- **<u>Vista Channel Extension (4-8-00180-02)</u>** - The proposed project consists of extending Valle Vista Channel from its terminus at Georgia Avenue. Approximately 100 feet of reinforced box culvert will extend the channel under Acacia Avenue, followed by approximately 650 feet of open channel along the south side of Acacia Avenue. Mapping has been completed and the project design will begin in 2012. Right of way acquisition will be necessary for this project.

The Biological Survey needs to be completed before the CEQA and Permit Application process can begin.



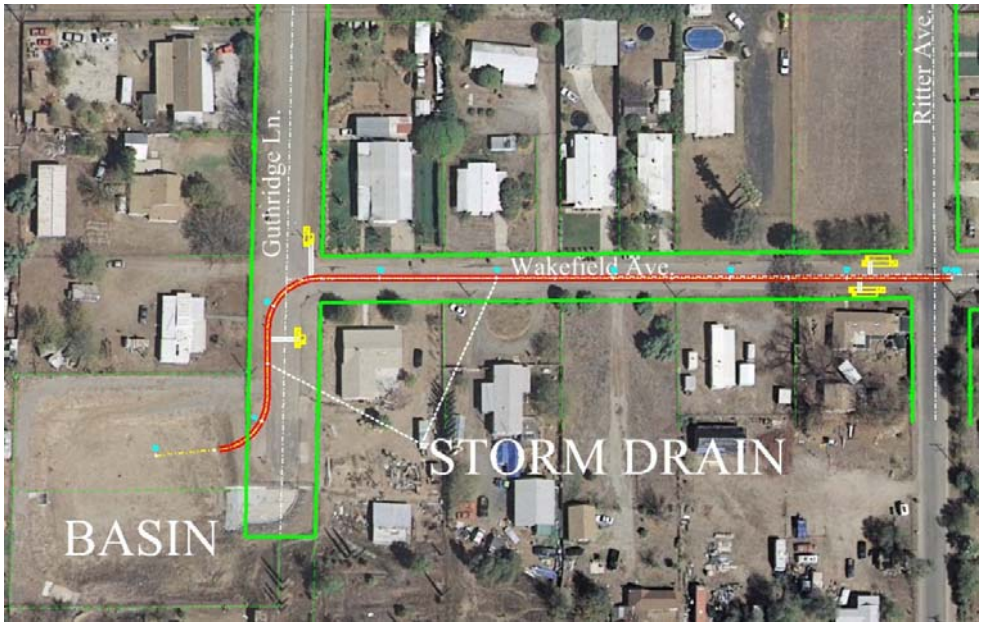
- **<u>Hemet MDP Line C, Stage 4 (4-8-00212-04)</u>** - This project is an underground storm drain approximately 6,600 feet long located in the city of Hemet. The project is proposed within Whittier Avenue extending from the existing storm drain at Palm Avenue east to San Jacinto Street. The District has contracted the design of this project with Albert A. Webb Associates. The preliminary design work has been completed and we are proceeding with creating 30% plans. We anticipate the design to be completed by the end of 2012 and construction to begin in early 2013.

- **<u>Little Lake MDP Line B (4-8-00265-01)</u>** - This project is an approximately 1.5 mile underground storm drain extending from Meridian Street Channel south of South Hampton Court and then southerly along Meridian Street and Park Avenue. The storm drain will terminate at Whittier Avenue. The proposed storm drain will be constructed in two stages. The first stage will terminate approximately 200 feet south of Florida Avenue. Stage 2 construction will begin at the termination point of Stage 1 and extend southerly along Meridian to Whittier. Unfortunately, the storm drain project will require relocation of approximately 6,200 feet of existing 8-inch water main line, owned by Lake Hemet Municipal Water District. Additionally, an existing 8-inch sewer main line at the downstream of Stage 1 will need to be relocated to avoid the storm drain, consisting of approximately 530 feet. Currently, the Stage 1 project is in the 60% plan phase with project advertising anticipated in the fall of 2012. Design of Stage 2 will begin right after design of Stage 1 is complete.

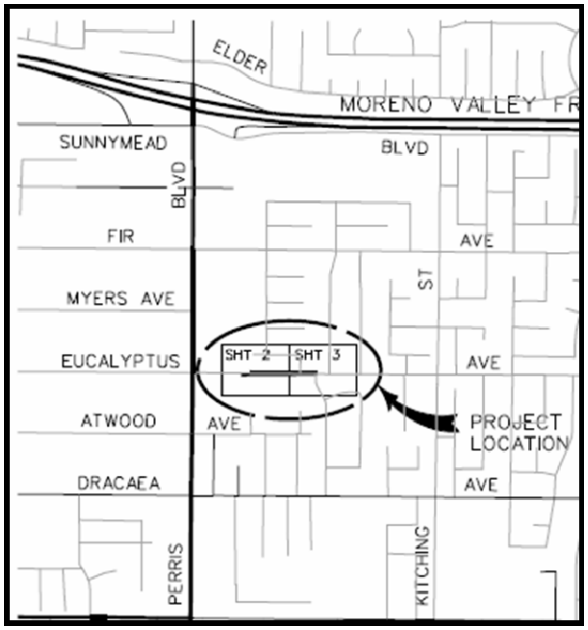
- **<u>Romoland MDP Line A (4-8-00310-01)</u>** - The Line A system is a major flood control project that extends from the San Jacinto River near Goetz Road east approximately six miles to Juniper Flats Road and incorporates both lined and unlined open channel, underground storm drains and two major detention basins. This was a developer administered project in which the plans were completed and signed in late 2007. Ultimately, the developer-formed corporation elected not to award the construction contracts due to financing. At the request of the City of Menifee the District plans to construct over 2 miles of the earthen interim channel with ultimate road crossings from the downstream portion near the San Jacinto River to just upstream of Encanto Drive. The plans need to be updated in order for the District to administer the construction of this portion of the project. The District anticipates advertising construction for this portion of the project before the end of 2012.

- **<u>Green Acres Dam and Outlet (4-8-00330-00)</u>** - The proposed project consists of a retention basin and its associated outlet. The retention basin will be located near Cortrite Avenue and Los Limones Lane, and the outlet will extend south to State Highway 74. The preliminary size of the dam includes a maximum height of 46 feet and a maximum storage volume of 149 acre-feet. The dam will be under the jurisdiction of the State's Division of Safety of Dams. The District has hired URS Corporation to conduct a geotechnical investigation and assess the feasibility of constructing a dam at the proposed project site. The geotechnical work is expected to be completed by June 2012.

- **<u>Homeland MDP Line 2, Stage 2 (4-8-00337-02)</u>** - The project was spawned from flooding complaints from residents in the area. Local residences are impacted by two major floodplains in this area. Due to the interim nature of the existing drainage facility downstream, the storm drain is being designed to collect and convey runoff from small and frequent storms. The project consists of a 42" reinforced concrete pipe that extends from the existing basin in Guthridge Lane, upstream to the intersection of Wakefield Avenue and Ritter Avenue. The project construction plans have been completed and the project was advertised for construction on December 6, 2011. The contract has a six-week construction window and will be underway by February/March 2012.

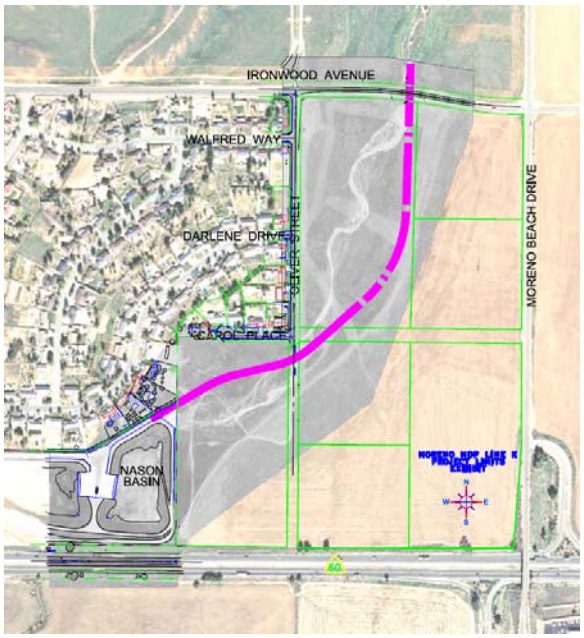


- **<u>Sunnymead MDP Line P-6, Stage 2 (4-8-00716-02)</u>** - This project is an underground 36" RCP storm drain approximately 700 feet long located in the city of Moreno Valley. It is an extension of the existing Sunnymead MDP Line P-6, Stage 1, and will complete the master-planned Line P-6 storm drain system. The project starts approximately 600 lineal feet east of the intersection of Perris Boulevard and Eucalyptus Avenue and ends at the intersection of Eucalyptus and Shirebourn Road. The 60% plans of the project are nearly complete. Advertising of project construction is anticipated in July 2012.

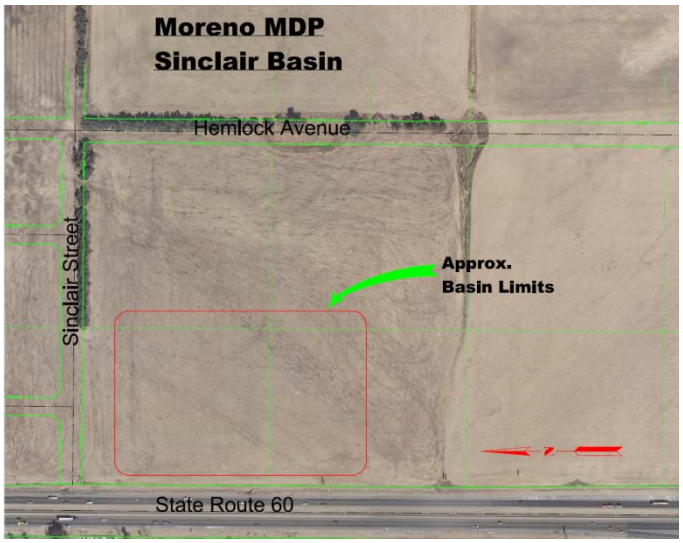


- **<u>Moreno MDP Line K-1 (4-8-00766-01)</u>** – This project extends from Line K east in Ironwood Avenue to Petit Street. This project is being designed by a consultant as part of the work the City of Moreno Valley is doing in association with improvements to the Moreno Beach Drive and the 60 Freeway interchange. After Line K-1 is constructed by the City, the District will accept, own and maintain the facility. The City intends to start Line K-1 construction in July 2013. The District has agreed to acquire the necessary right of way for the construction and maintenance of the Line K-1 outlet structure. The Line K-1 right of way is located within the proposed inundation easement that the District is currently acquiring for Moreno MDP Line K.

- **<u>Moreno MDP Line K (4-8-00767-01)</u>** - This project is an open channel extending from Nason Basin northeasterly approximately 2,500 feet to Ironwood Avenue. As a result of the Preliminary Design Report, the open channel has transformed into a floodplain preservation project with no physical improvement needed. Floodplain limits have been established. Appraisals for the floodplain right of way have been completed and the acquisition process has begun. Initial fee acquisition has been changed to an inundation easement after initial negotiations with the property owners. The CEQA process has begun and we anticipate compliance to coincide with right of way acquisition within the next six months.



- **<u>Moreno MDP Sinclair Basin (4-8-00770-01)</u>** - This project, consisting of a stormwater detention basin located north of State Route 60 and east of Sinclair Street, was slated to occupy approximately 10.5 acres according to the Moreno Master Drainage Plan. The required storage capacity of the proposed basin is approximately 132 acre-feet. The project is currently in the preliminary stages of determining the scope of the project that may include using the proposed basin for water quality mitigation, water conservation and/or a dual-use basin for recreation activities. Incorporation of these accessory functions would almost certainly increase the project footprint. Once the potential design concepts and basin usage have been confirmed for the feasibility study, we will prepare the preliminary design report which documents the analysis in determining the appropriate project for the detailed design phase.



- **<u>West End MDP Line LL (4-8-00783-01)</u>** - The City of Moreno Valley has requested this project. The project consists of constructing approximately 2,000 feet of storm drain entirely within the road right of way for Dracaea Avenue and Old Highway 215 Parkway from the sump location within Dracaea Avenue near Arvonna Street to the west of Old Highway 215. Originally, in 2003 the City of Moreno Valley anticipated administering the design and construction of this project with Engineering Resources of Southern California contracted to accomplish this task. Plans were not completed due to lack of funding. Currently, the District has retained Engineering Resources to complete the engineering design and plans for this project. We anticipate the construction of this project to be underway by the end of 2012.

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