### ENGINEERING DEPARTMENT FUND NO. 017 ACCOUNT NO. 0803

# DESCRIPTION

The Engineering Projects/Standards Department is primarily responsible for:

- Management of the City's Capital Improvement Program and Budget;
- Management of construction contracts and activities;
- Management of contractual engineering services;
- Support to Merced Area Groundwater Pool Interests (MAGPI) Program;
- Development of Standard Designs of Common Engineering Structures;
- Engineering and technical assistance to other departments;
- Infrastructure grant procurement, monitoring, and reporting;
- Maintenance of GIS plats and other mapping and record systems;
- Development and maintenance of the pavement management system;
- Compliance with local, regional, state, and federal laws;
- Development of staff in technical, organizational, and supervisory skills;
- Chair and staff support to the Traffic Committee; and
- Management of right of way activities.

### MISSION

The Engineering Projects/Standards Division of the Development Services Department strives to support its customers (public and private agencies, other city departments, and the general public) with prompt, quality technical assistance in developing capital improvement projects and standards that will protect the City's investments, reduce its deficiencies, and plan for future needs, while recognizing and complying with current and future mandates, as well as public concerns and opinions.

# GOALS

- Manage Water, Wastewater, and Storm Drainage Master Plan activities
- Oversee Phase 4 capacity increase for WWTP
- O Pursue Railroad Grade Separation Project
- Meet commitment to provide UC infrastructure
- Manage infrastructure development through Capital Improvement Program
- Pursue funding mechanisms for capital projects
- Manage City interest in groundwater issues and support Regional Groundwater Management Program through Merced Area Groundwater Pool Interests (MAGPI) Program

# GOALS (Continued)

- ♦ Assist Fire Department in development of fifth fire station
- ♦ Develop and Manage Pavement Management Program
- O Provide technical assistance to other departments and the general public
- Assist growth management efforts by developing self-sufficient maintenance districts, making annual review of district budgets, and preparing annual Engineer's Reports
- Work with BIA in updating City Standard Designs of Common Engineering Structures
- ♦ Review AB1600 Fees
- Monitor Local Business Enterprise (LBE) Outreach Program for locally-funded projects
- Monitor Disadvantaged Business Enterprise (DBE) Program as mandated for federally-funded projects

### **OBJECTIVES**

- 1. Manage Water, Wastewater, and Storm Drainage Master Plan activities. Keep apprised of state and national issues regarding regulation and permitting of water, wastewater and storm drainage facilities.
- 2. Oversee Phase 4 capacity increase for WWTP.
- 3. Pursue Railroad Grade Separation project.

#### PERFORMANCE MEASUREMENTS/INDICATORS

Meet milestones established by Regional Water Quality Control Board. Finalize program planning, complete environmental review and permitting process for the WWTP expansion. Manage design and construction of WWTP. Continue to work with the federal, state and regional authorities to comply with existing and updated regulations for water, wastewater, and storm drain storage and conveyance systems.

Manage pre-design for expansion from 10 to 15 MGD and compliance with new permit.

Determine feasibility and funding for Grade Separation project at 24<sup>th</sup> and G Street.

- 4. Meet commitment to provide water and sewer service infrastructure to UC Merced.
- Prioritize and develop plans, specifications, and engineer's estimates for capital improvement projects, and manage consultant contracts for studies and design of capital improvement projects.

- Continue to investigate sources of funding for capital improvements, as well as operations and maintenance of the City's infrastructure.
- Manage City interest in groundwater issues and support Regional Groundwater Management Program through Merced Area Groundwater Pool Interests (MAGPI) Program.
- 8. Assist Fire Department in development of fifth fire station.

Make sure that master plans, design, and construction timetable are met to assure that commitments to provide water and sewer service to UC Merced are met. Make sure that environmental clearances are in place.

Develop twenty-five projects during the fiscal year, for bidding by June 2005. An emphasis will be placed on continued development of prior year projects. Monitoring will be conducted through monthly CIP Reports distributed in the third week of the month to Department Heads and City Council members. Staff will work with other departments to develop and evaluate Requests for Proposals (RFPs) to hire consultants with specialized engineering, architectural or scientific skills for studies and design of capital improvement projects.

Work with local, regional, state and federal agencies to identify and pursue possible grants, as funding becomes available through various sources.

Continue active involvement in MAGPI and work with MID to develop and implement various programs to protect our local and regional groundwater resources.

Coordinate efforts with other agencies and departments to meet milestones for construction of station when funding for staffing is identified.

- 9. Develop and manage Pavement Management System (PMS).
- 10. Provide technical assistance to other departments and the general public.
- 11. Assist Growth Management efforts by developing self-sufficient Maintenance Districts, making annual review of district budgets, and preparing annual Engineer's Reports.
- 12. Work with BIA in updating City Standard Designs of Common Engineering Structures.
- 13. Review AB1600 Fees.

Meet milestones established by the MCAG County-wide PMS Program, including data collection, system startup, and staff training in use and maintenance of this computerized system.

With support from Information Systems and continued technical training, gather and work with data to provide information via the Internet on a wide variety of subjects including capital improvement projects and standard designs.

Review all maintenance district budgets and prepare annual engineer's reports by April 2004. Conduct ballot hearings as necessary for any increases in budgets and develop new annual assessments based on the Consumer Price Index for western states.

Prepare proposed changes/additions to City Standard Designs that are economical, and in the best interests of the City, without compromising health, safety, and welfare, by April2004; review with the BIA by June 2005; and submit to City Council for adoption by August 2005.

Review the estimated cost of public improvements identified in the Capital Improvement Program budget and the Public Facilities Financing Plan, determine continued need for said improvements, and determine the relationship between the need and the impacts for which the fees are charged, by November 15, 2004.

- 14. Monitor the Local Business Enterprise (LBE) Outreach Program for locally-funded projects.
- Manage the Disadvantaged Business Enterprise (DBE) Programs for federally-funded projects as mandated.

Determine local business bidding opportunities in developing bid packages for capital improvement projects and conduct informational prebid meetings for each project being developed.

Update the Disadvantaged Business Enterprise (DBE) Program as required annually by FHWA, HUD, and FAA. Determine disadvantaged business bidding opportunities in developing capital improvement project bid packages, and conduct informational pre-bid meetings for each project developed with federal funding.

### 2004-2005 BUDGET HIGHLIGHTS

Engineering will work with appropriate agencies in managing water, wastewater, and storm drainage Master Plan activities, keeping apprised of regional, state and federal issues regarding regulation and permitting of water, wastewater and storm drainage facilities.

Engineering will make every effort to assure that commitments to provide infrastructure for UC Merced are met.

Engineering will work with other departments to develop the Capital Improvement Program Projects identified in the annual budget and to carefully plan for future projects in the 5-year plan. Engineering will also work with regional agencies to plan and develop projects that will provide regional infrastructure and financing thereof.