

## CHAPTER 8. CAPITAL IMPROVEMENT PROGRAM

The Master Plan developed procedures and a City-wide XP-SWMM computer model of the storm drainage system downstream of detention basins that will be used to evaluate drainage problems and solutions. The Master Plan identifies specific drainage projects needed to correct existing problems and propose new projects to meet the needs of General Plan growth. The storm drain system and needs were discussed in Chapter 5 and proposed improvements were presented in Chapter 7. This CIP estimates costs for the recommended projects and presents a coordinated list of projects, project priorities and the dates when projects must be brought on line.

With the exception of the South Drain and Drain 3 North that have longer build-out periods, most improvements are needed in the near future, within five years. Phasing of improvements is based on information available from City Planning and from previous PFIPs. Phasing of future improvements is development driven and will be adjusted as necessary to meet the needs of a growing community.

Table 8-1 is a list of recommended projects and construction dates. Some CIP projects are also included in the City's PFIP.

**Table 8-1. Capital Improvement Program**

PFIP Project Number	Project	Encumbered Year	Total Cost, dollars
D-032-002	FCOC French Camp Road	2007-2009	730,000
D-032-003	FCOC Roth Road	2006-2007	429,000
D-032-004	FCOC Union Pacific Railroad Crossing	2006-2007	321,000
D-034-001	FCOC Louise Road	2005-2006	365,000
D-035-001	FCOC Farm Road	2005-2006	93,000
D-031-001	Drain 3N – Tidewater to Drain 3	2006-2007	844,000
D-031-002	Drain 3N – Highway 99 to Tidewater	2008-2009	830,000
D-031-003	Drain 3 N – East of Highway 99	2009-2010	2,537,000
D-032-008	Drain 3A – Connect to Drain 3N at Lathrop Road	2006-2007	14,000
D-032-007	Drain 3 – Monterey Place	2007-2008	63,000
D-032-005	Drain 3 – Airport Way	2005-2006	146,000
D-032-006	Drain 3 – Road Crossing Upstream of Airport Way	2005-2006	460,000
D-034-004	Drain 5 – Airport Way	2008-2009	146,000
D-034-002	Drain 5 – Remove 2 48” pipes	2008-2009	74,000
D-034-003	Drain 5 – Golf Course to Airport Way	2008-2009	3,152,000
D-035-003	Drain 7 – Industrial Park Drive Force Main	2008-2009	38,000
D-035-002	Drain 8 – Road Crossing North of Highway 120	2005-2006	107,000
D-036-001	South Drain – Austin Road Drain	2021-2019	2,395,000
D-036-003	South Drain – Austin Road to Spreckels Road	2019-2020	2,349,000
D-036-004	Spreckels Road to Main Street	2008-2009	1,958,000
D-036-005	South Drain – Main Street to Union Road	2007-2008	3,429,000
D-036-006	South Drain – Union Road to Airport Way	2006-2007	5,232,000
D-036-007	South Drain Industrial – Main Lateral	2010-2011	8,395,000
D-036-008	South Drain North – Airport Way to South Drain Pump Station	2006-2007	3,586,000
D-036-010	South Drain – South Drain Station and Discharge Line	2006-2007	3,200,000
D-036-011	South Drain South – Woodward Avenue to Drain 10 and Pump Station	2010-2011	7,610,000
D-036-012	South Drain Drains 10 and 11 Widening and Improvements	2010-2011	1,015,000
D-036-013	South Drain – Woodward Avenue West Drain	2010-2017	3,124,000
D-036-014	SCADA System Updates	2007-2008	154,000
D-036-009	South Drain North – Channel-Highway 120 to FCOC	2006-2007	252,000
D-032-009	Update Master Drainage Plan	2014-2015	600,000

**Table 8-2. Cost Estimating Assumptions for Capital Improvement Program Projects**

Item	Unit Type	Unit Cost, dollars
10-foot by 10-foot box culvert	LF	900
10-foot by 8-foot box culvert	LF	819
8-foot by 6-foot box culvert	LF	638
8-foot by 4-foot box culvert	LF	600
6-foot by 3-foot box culvert	LF	448
Structural Excavation	CY	42
Structural Backfill	CY	51
Channel Excavation	CY	5
30-inch force main	LF	176
24-inch diameter RCP	LF	124
30-inch diameter RCP	LF	156
36-inch diameter RCP	LF	187
42-inch diameter RCP	LF	218
48-inch diameter RCP	LF	250
54-inch diameter RCP	LF	275
60-inch diameter RCP	LF	312
66-inch diameter RCP	LF	342
72-inch diameter RCP	LF	374
84-inch diameter RCP	LF	500
Manhole	Each	3,800
Subtotal		10,217
Design, Construction Management Percentage (20%)		2,040
Contingency Percentage (25%)		2,300
Administration & Permits Percentage (30%)		3,065
Total		17,622