



Public Works Department
Engineering Division

MEMORANDUM

Date: December 13, 2006

To: Storm Drain Oversight Committee

From: Joe Teresi (x2129) *Joe Teresi*
Senior Engineer

Subject: Updated report on capital construction costs and potential impacts on future storm drain capital improvement program

At the November 1, 2006 meeting of the Storm Drain Oversight Committee, staff was asked to return to the Committee with updated cost information on the seven proposed storm drain capital improvement projects and the proposed 12-year CIP implementation program. Specifically, staff was asked to:

1. Use professional engineering judgment to prioritize the seven storm drain projects
2. Reassess the City's ability to implement projects based on various rates of increase in construction costs, in light of the limited revenue available from the Storm Drainage Fee

Prioritization of Storm Drain Capital Improvements

Staff re-examined the seven storm drain capital improvement projects included in the storm drain ballot measure to assess their relative importance. Staff used the following factors to perform the analysis:

- Extent of street flooding to be eliminated by the project
- Severity of the street flooding in the affected neighborhoods
- Presence of traffic safety hazards caused by street flooding
- Susceptibility to equipment failures (e.g. due to age of pump equipment)

Table 1 (attached) presents three project separate prioritization efforts (priorities set by the original Blue Ribbon Storm Drain Task Force, initial priorities set by staff for the 2005-10 Capital Improvement Budget, current staff recommended prioritization).

Reassessment of the City's Ability to Implement the Storm Drain Capital Improvements

Staff used the three annual construction cost increase scenarios (5, 10, and 15%) presented to the Committee at the November 1 Committee meeting to conduct an analysis of the City's ability to implement the proposed storm drain projects in light of the limited funding available. Under each scenario, the projects were implemented in the order of prioritization, using the funding available each year for capital expenditures, until the funds were exhausted at the sunset date for the increased Storm Drainage Fee (end of Year 12). For the 5% and 10% scenarios, an alternate approach was also studied under which staff downsized the scopes of the projects, as needed, in order to accomplish work in all of the project areas within the 12-year window. The attached spreadsheets show the results of the analysis, including the degree of downsizing needed to accomplish work in all the project areas.

As discussed at the last Committee meeting, the San Francisquito Creek Storm Water Pump Station is the highest priority project. Our engineering consultant continues to work on the project design, environmental analysis, and permitting with a goal of awarding a construction contract when FY 2007-08 budget funds become available in July 2007. Staff has notified the Committee that the current project cost estimate prepared by the consultant exceeds the available budget. Therefore, staff will be postponing the bidding of the Clara Drive storm drain improvement project (which has been 30% designed by in-house engineering staff to-date) until after the receipt of bids for the pump station project in June 2007. All of the attached implementation scenario spreadsheets include the assumption that the \$915,000 budgeted to-date for the Clara Drive project will be needed to supplement the available funding for the pump station construction.

The spreadsheets will form the basis of the Committee's discussion at the December 13 meeting. If you have any questions or need further information, please contact me at 329-2129.

Table 1

Storm Drain Project Prioritization

<u>BRC Priorities</u>	<u>Initial Budget Priorities</u>	<u>Limited Funds Priorities</u>
SF Creek Pump Station *	SF Creek Pump Station *	SF Creek Pump Station *
Channing/Lincoln SD	Gailen/Bibbits SD *	Gailen/Bibbits SD *
Southgate SD	Clara Drive SD	Channing/Lincoln SD
Gailen/Bibbits SD *	Alma Street SD	Clara Drive SD
Clara Drive SD	Southgate SD	Matadero PS/SD
Matadero PS/SD	Channing/Lincoln SD	Alma Street SD
Alma Street SD	Matadero PS/SD	Southgate SD

* Projects already underway.

Scenario 3 (5% annual increases in construction costs)

Year	FY	SF Creek Pump Station	Gailen / Bibbits	Channing Lincoln Trunk	Clara Drive	Matadero PS and Trunks	Alma Street	Southgate Area	YEARLY PROJECT TOTAL
1	FY 2005-06	\$4,500,000	\$650,000	\$4,600,000	\$900,000	\$3,000,000	\$1,500,000	\$2,000,000	\$1,730,000
2	FY 2006-07	\$900,000	\$650,000		\$180,000				\$735,000
3	FY 2007-08	\$4,985,000			\$735,000				\$4,070,000
4	FY 2008-09			\$1,390,000	(\$915,000)				\$1,390,000
5	FY 2009-10			\$1,460,000					\$1,460,000
6	FY 2010-11			\$1,535,000					\$1,535,000
7	FY 2011-12			\$1,610,000					\$1,610,000
8	FY 2012-13				\$1,330,000				\$1,330,000
9	FY 2013-14					\$2,125,000			\$2,125,000
10	FY 2014-15					\$1,850,000			\$1,850,000
11	FY 2015-16					\$850,000	\$1,080,000		\$1,930,000
12	FY 2016-17						\$1,560,000	\$450,000	\$2,010,000
		\$5,885,000	\$650,000	\$5,995,000	\$1,330,000	\$4,825,000	\$2,640,000	\$450,000	\$21,775,000

NOTE: Under this scenario, approximately 13% of the Southgate scope of work is funded.

Scenario 3a (5% annual increases in construction costs)

Year	FY	SF Creek Pump Station	Gailen / Bibbits	Channing Lincoln Trunk	Clara Drive	Matadero PS and Trunks	Alma Street	Southgate Area	YEARLY PROJECT TOTAL
1	FY 2005-06	\$4,500,000	\$650,000	\$4,600,000	\$900,000	\$3,000,000	\$1,500,000	\$2,000,000	\$1,730,000
2	FY 2006-07	\$900,000	\$650,000		\$180,000				\$735,000
3	FY 2007-08	\$4,985,000			\$735,000				\$4,070,000
4	FY 2008-09			\$1,390,000	(\$915,000)				\$1,390,000
5	FY 2009-10			\$1,460,000					\$1,460,000
6	FY 2010-11			\$1,535,000					\$1,535,000
7	FY 2011-12			\$600,000	\$1,015,000				\$1,615,000
8	FY 2012-13					\$1,685,000			\$1,685,000
9	FY 2013-14					\$1,770,000			\$1,770,000
10	FY 2014-15						\$1,850,000		\$1,850,000
11	FY 2015-16							\$1,925,000	\$1,925,000
12	FY 2016-17							\$1,570,000	\$1,570,000
		\$5,885,000	\$650,000	\$4,985,000	\$1,015,000	\$3,455,000	\$1,850,000	\$3,495,000	\$21,335,000

NOTE: Under this scenario, all the projects are partially funded, with the following percentages of the original scopes of work completed.

SF Creek Pump Station	100%
Channing/Lincoln Trunk	85%
Southgate Area	100%
Gailen/Bibbits	100%
Clara Drive	80%
Matadero PS and Trunks	75%
Alma Street	75%
+ \$450,000 left over in Year 12 for other capital improvements	

Scenario 4 (10% annual increases in construction costs)

Year	FY	SF Creek Pump Station	Gailen / Bibbits	Channing Lincoln Trunk	Clara Drive	Matadero PS and Trunks	Alma Street	Southgate Area	YEARLY PROJECT TOTAL
1	FY 2005-06	\$4,500,000	\$650,000	\$4,600,000	\$900,000	\$3,000,000	\$1,500,000	\$2,000,000	\$1,730,000
2	FY 2006-07	\$900,000	\$650,000		\$180,000				\$735,000
3	FY 2007-08	\$4,985,000			\$735,000				\$4,070,000
4	FY 2008-09			\$1,390,000	(\$915,000)				\$1,390,000
5	FY 2009-10			\$1,465,000					\$1,465,000
6	FY 2010-11			\$1,530,000					\$1,530,000
7	FY 2011-12			\$1,610,000					\$1,610,000
8	FY 2012-13			\$1,680,000					\$1,680,000
9	FY 2013-14			\$625,000	\$1,145,000				\$1,770,000
10	FY 2014-15				\$1,075,000	\$780,000			\$1,855,000
11	FY 2015-16					\$1,925,000			\$1,925,000
12	FY 2016-17					\$2,010,000			\$2,010,000
		\$5,885,000	\$650,000	\$8,300,000	\$2,220,000	\$4,715,000	\$0	\$0	\$21,770,000

NOTE: Under this scenario, approximately 55% of the Matadero PS and Trunks scope of work is funded.

Scenario 4a (10% annual increases in construction costs)

Year	FY	SF Creek Pump Station	Gailen / Bibbits	Channing Lincoln Trunk	Clara Drive	Matadero PS and Trunks	Alma Street	Southgate Area	YEARLY PROJECT TOTAL
1	FY 2005-06	\$4,500,000	\$650,000	\$4,600,000	\$900,000	\$3,000,000	\$1,500,000	\$2,000,000	\$1,730,000
2	FY 2006-07	\$900,000	\$650,000		\$180,000				\$735,000
3	FY 2007-08	\$4,985,000			\$735,000				\$4,070,000
4	FY 2008-09			\$1,390,000	(\$915,000)				\$1,390,000
5	FY 2009-10			\$1,465,000					\$1,465,000
6	FY 2010-11			\$1,535,000					\$1,535,000
7	FY 2011-12				\$1,170,000				\$1,170,000
8	FY 2012-13					\$2,125,000			\$2,125,000
9	FY 2013-14					\$1,770,000			\$1,770,000
10	FY 2014-15						\$1,840,000		\$1,840,000
11	FY 2015-16							\$1,940,000	\$1,940,000
12	FY 2016-17							\$2,010,000	\$2,010,000
		\$5,885,000	\$650,000	\$4,390,000	\$1,170,000	\$3,895,000	\$1,840,000	\$3,950,000	\$21,780,000

NOTE: Under this scenario, all the projects are partially funded, with the following percentages of the original scopes of work completed.

SF Creek Pump Station	100%
Channing/Lincoln Trunk	60%
Southgate Area	65%
Gailen/Bibbits	100%
Clara Drive	65%
Matadero PS and Trunks	60%
Alma Street	50%

Scenario 5 (15% annual increases in construction costs)

Year	FY	SF Creek Pump Station	Gailen / Bibbits	Channing Lincoln Trunk	Clara Drive	Matadero PS and Trunks	Alma Street	Southgate Area	YEARLY PROJECT TOTAL
1	FY 2005-06	\$4,500,000	\$650,000	\$4,600,000	\$900,000	\$3,000,000	\$1,500,000	\$2,000,000	\$1,730,000
2	FY 2006-07	\$900,000	\$650,000		\$180,000				\$735,000
3	FY 2007-08	\$4,985,000			\$735,000				\$4,070,000
4	FY 2008-09			\$1,390,000	(\$915,000)				\$1,390,000
5	FY 2009-10			\$1,460,000					\$1,460,000
6	FY 2010-11			\$1,540,000					\$1,540,000
7	FY 2011-12			\$1,610,000					\$1,610,000
8	FY 2012-13			\$1,680,000					\$1,680,000
9	FY 2013-14			\$1,775,000					\$1,775,000
10	FY 2014-15			\$1,840,000					\$1,840,000
11	FY 2015-16			\$1,395,000	\$535,000				\$1,930,000
12	FY 2016-17				\$2,000,000				\$2,000,000
		\$5,885,000	\$650,000	\$12,690,000	\$2,535,000	\$0	\$0	\$0	\$21,760,000

NOTE: Under this scenario, approximately 55% of the Clara Drive scope of work is funded.

Scenario 3b (30% increase to present, then 5% annual increases in construction costs)

Year	FY	SF Creek Pump Station \$4,500,000	Gailen / Bibbits \$650,000	Channing Lincoln Trunk \$4,600,000	Clara Drive \$900,000	Matadero PS and Trunks \$3,000,000	Alma Street \$1,500,000	Southgate Area \$2,000,000	YEARLY PROJECT TOTAL
1	FY 2005-06	\$900,000	\$650,000		\$180,000				\$1,730,000
2	FY 2006-07				\$735,000				\$735,000
3	FY 2007-08	\$4,985,000			(\$915,000)				\$4,070,000
4	FY 2008-09			\$1,390,000					\$1,390,000
5	FY 2009-10			\$1,465,000					\$1,465,000
6	FY 2010-11			\$1,535,000					\$1,535,000
7	FY 2011-12			\$1,610,000					\$1,610,000
8	FY 2012-13			\$1,245,000	\$445,000				\$1,690,000
9	FY 2013-14				\$1,180,000	\$585,000			\$1,765,000
10	FY 2014-15					\$1,845,000			\$1,845,000
11	FY 2015-16					\$1,925,000			\$1,925,000
12	FY 2016-17					\$995,000	\$1,030,000		\$2,025,000
		\$5,885,000	\$650,000	\$7,245,000	\$1,625,000	\$5,350,000	\$1,030,000	\$0	\$21,785,000

NOTE: Under this scenario, approximately 70% of the Alma Street scope of work is funded.

Scenario 4b (30% increase to present, then 10% annual increases in construction costs)

Year	FY	SF Creek Pump Station \$4,500,000	Gailen / Bibbits \$650,000	Channing Lincoln Trunk \$4,600,000	Clara Drive \$900,000	Matadero PS and Trunks \$3,000,000	Alma Street \$1,500,000	Southgate Area \$2,000,000	YEARLY PROJECT TOTAL
1	FY 2005-06	\$900,000	\$650,000		\$180,000				\$1,730,000
2	FY 2006-07				\$735,000				\$735,000
3	FY 2007-08	\$4,985,000			(\$915,000)				\$4,070,000
4	FY 2008-09			\$1,390,000					\$1,390,000
5	FY 2009-10			\$1,460,000					\$1,460,000
6	FY 2010-11			\$1,535,000					\$1,535,000
7	FY 2011-12			\$1,610,000					\$1,610,000
8	FY 2012-13			\$1,695,000					\$1,695,000
9	FY 2013-14			\$1,420,000	\$340,000				\$1,760,000
10	FY 2014-15				\$1,840,000				\$1,840,000
11	FY 2015-16				\$320,000	\$1,610,000			\$1,930,000
12	FY 2016-17					\$2,025,000			\$2,025,000
		\$5,885,000	\$650,000	\$9,110,000	\$2,500,000	\$3,635,000	\$0	\$0	\$21,780,000

NOTE: Under this scenario, approximately 38% of the Matadero PS and Trunks scope of work is funded.