

To: James L. App, City Manager
From: Mike Compton, Director of Administrative Services
Subject: Sewer and Water Development Impact Fees
DATE: February 1, 2005

Needs:

For the Council to consider modifying water and sewer development impact (connection) fees.

Facts:

1. On January 4, 2005, the Council appropriated \$400,000 for special sewer and water studies to enhance and integrate the master plans currently being prepared by Boyle Engineering.
2. Staff was directed to calculate adjustments to sewer and water development impact fees related to these added costs.
3. In addition to the fee adjustments needed for the special studies noted above, it has been determined that:
 - a. The cost of the master plans included in the last fee update are understated; and
 - b. Costs of certain water system improvement projects listed in both the water CIP budget and fee study are insufficient.
4. Given that the master plans for sewer and water, as well as the water projects, are included as components of the current fees, it would be appropriate to adjust the fees to accurately reflect their true costs.

Analysis &
Conclusion:

As noted above, sewer and water development impact fees need to be adjusted for the following three items:

1. Special Studies
2. Sewer & Water Master Plans
3. Water CIP Budget Adjustments

1. Special Studies:

The Council at their January 4, 2005 meeting appropriated \$400,000 for special studies. It was noted that this cost would raise connection fees by \$10 per SFR unit for water

and \$35 per unit for sewer. These cost calculations assumed the \$400,000 is evenly split between water and sewer and allocated to new development based upon the ratios in the last study; 39% water and 90% sewer. In the case of sewer, this proposed fee increase would generate \$180,000 over the next 20 years and for water, \$78,000.

2. Sewer and Water Master Plans:

In the case of sewer and water master plans, they are included the current fee study at \$117,000 and \$56,000, respectively. However, current cost estimates put the cost at \$300,000 each (consistent with the adopted CIP budget). Sewer and water connections fees need adjustment to reflect the adopted budget. As noted previously, the master plans are being apportioned to new development at 90% and 39%, respectively. If approved, adjusting the fee study to reflect current costs, the impact on the sewer fee would be \$26 per SFR unit and \$12 for water.

3. Water CIP Budget Modifications:

It has been determined that the costs for some of the water projects contained in the adopted Water CIP Budget are understated. Additionally, there is a need to add new projects to the budget. The added projects include water treatment at the well heads for two of the Sherwood wells and relocation of a water booster station & related telemetry system (from its current location at the yard on Paso Robles Street eastward across the river).

These adjustments should also be reflected in the fee study. The attached schedule identifies the proposed adjustments to the Water CIP Budget: The net impact is an increase of \$10,397,300. It would be appropriate to modify the water impact fees to provide for the increased cost of projects already identified in the Study as well as the new projects.

Not all of the \$10,397,300 will impact connection fees. The southeast reservoir is already in the fee study at \$8 million but in the CIP budget at only \$5 million. In the case of the proposed treatment of the two Sherwood wells, only 10% of the estimated \$2 million cost is being allocated to new development, and it is proposed to adjust the cost of Thunderbird to Charolais main from \$2,563,000 to \$800,000, the Avery Well (Airport #8) from \$513,000 to \$350,300 and reduce the booster station location from \$1,500,000 to \$600,000.

Fiscal
Impact:

The inclusion of the \$400,000 for special studies, updating the costs for both the sewer and water master plans, and adjusting water CIP budget would have the following fee impact on the single family residential unit.

	<u>Sewer</u>	<u>Water</u>
Special Studies:		
Sewer @ \$200,000	\$ 35	\$ -
Water @ \$200,000	-	10
Master Plans:		
Sewer @ \$183,000	26	-
Water @ \$244,000	-	12
Water CIP Budget	<u>-</u>	<u>60</u>
	<u>\$ 61</u>	<u>\$ 82</u>

All of the connection fee categories would be impacted. The impact upon all fee categories is illustrated in the attached exhibit. It is recommended that sewer and water development impact fees be adjusted accordingly.

Options:

That the Council:

- a. Adopt Resolution No. 05-xx adjusting sewer and water development impact (connection) fees and modifying appropriations for the CIP budget for water system improvements; or
- b. Amend, modify, or reject the above option.

RESOLUTION NO. 05-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
MODIFYING SEWER AND WATER CONNECTION FEES
AND ADJUSTING APPROPRIATIONS FOR THE WATER
CAPITAL IMPROVEMENT PROJECTS BUDGET

WHEREAS, the City Council at their January 4, 2005 regular meeting did approve appropriations totaling \$400,000 for various sewer and water studies; and

WHEREAS, the City Council directed staff to return with the appropriate development impact fee adjustments for said appropriations; and

WHEREAS, the current development impact fee study contains costs for sewer and water master plans at amounts less than budget; and

WHEREAS, it is necessary to modify the water capital improvement projects budget to include certain projects that have recently been identified as necessary;

WHEREAS, some budget appropriations for existing water capital improvement projects need to be adjusted to more accurately reflect projected costs; and

WHEREAS, it is desirable to sewer and water development impact fees to reflect these needs.

NOW, THEREFORE, BE IT HEREBY that the City Council of the City of El Paso de Robles hereby approves and adopts the schedule of sewer and water connection fees, attached hereto as Exhibit "A", April 1, 2005. Said fees shall be payable for each and every building permit issued on or after April 1, 2005. For fees that may have been "advance paid", the permittee shall pay the difference between the pre-paid fee and the new fee when the permit is issued; and

BE IT FURTHER RESOLVED by the City Council of the City of El Paso de Robles that the fees identified in Exhibit "A" shall be modified annually each July 1 based on the change in the Engineering News Record's construction cost index as reported for the twelve month period ending in April of each year; and

BE IT FURTHER RESOLVED by the City Council of the City of El Paso de Robles that said sewer and water connection fees shall reviewed no less than bi-annually in conjunction with the update of the City's four year financial plan to ensure that the sewer and water connection fees then in existence do not exceed the estimated reasonable costs of providing the public facilities and services for which they are imposed; and

BE IT FURTHER RESOLVED by the City Council of the City of El Paso de Robles that the following budget appropriations are hereby approved:

220-910-5452-322	\$ 500,000	Add to existing appropriation
220-910-5452-323	500,000	Add to existing appropriation
220-910-5452-498	500,000	Add to existing appropriation
220-910-5452-550	(1,300,000)	Appropriation reduction
220-910-5452-764	600,000	New appropriation
220-910-5452-765	2,000,000	New appropriation
220-910-5452-766	4,600,000	New appropriation

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 1st day of February 2005 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Frank R. Mecham, Mayor

ATTEST:

Sharilyn M. Ryan, Deputy City Clerk

EXHIBIT "A"

Sewer and Water Development Impact (Connection) Fee Schedule

TABLE A - Water Connection Fees:

\$7,734 per single-family residence	
\$6,134 per multi-family residence (unit)	
\$7,734 per mobile home park space	
\$7,734 per mobile home subdivision lot	
\$7,734 per commercial unit +	\$530 per unit
\$7,734 per hospital/convalescent home +	\$530 per room
\$7,734 per motel/hotel +	\$530 per room
\$7,734 per school +	\$530 per classroom
\$7,734 per industrial/manufacturing +	\$0.189 per sq.ft.

TABLE B - Water Connection Fees:

<u>Meter Size</u>	<u>Fee</u>
5/8"	\$ 7,734
3/4"	\$ 7,734
1"	\$ 12,916
1 1/2"	\$ 25,755
2"	\$ 41,224
3"	\$ 82,525
4"	\$128,930
6"	\$257,783
8"	\$412,468
10"	\$592,986

- (1) The applicable fee shall be the higher of Table A or Table B except for multi-family residences and mobile home park spaces for meter sizes less than 1".

Sewer Connection Fees:

\$4,351 per single-family residence	
\$4,004 per multi-family residence	
\$4,351 per mobile home park space	
\$4,351 per mobile home subdivision lot	
\$4,351 per commercial unit	
\$4,351 per hospital/convalescent home +	\$201 per room
\$4,351 per motel/hotel +	\$82 per room
\$6,148 per school +	\$82 per classroom
\$4,004 per industrial/manufacturing +	\$47 per 5 employees

City of Paso Robles
Water CIP Budget
Current vs. Proposed

	Adjusted <u>Budget</u>	Proposed <u>Budget</u>	<u>Variance</u>
- Peak NW Demand Study / Reso #04-226	\$ 33,000	\$ 33,000	\$ -
- Tower Road Well Study / Reso #04-254	20,000	20,000	-
- Install Water Main in S. River Road / Reso #04-258	1,200,000	1,200,000	-
- New Well Installation - Avery	245,000	245,000	-
- New Well Installation - Tower	155,000	655,000	500,000
- New Well #10 installation	500,000	1,000,000	500,000
- New Well #11 installation	500,000	1,000,000	500,000
- Fire Flow @ South City Limits	1,000,000	1,000,000	-
- Rehab Butterfield Well #12	48,500	48,500	-
- Rehab Tar Well #19	28,000	28,000	-
- Rehab Cuesta Well	100,000	100,000	-
- Rehab of Fox Well #21	100,000	100,000	-
- Rehab Dry Creek Well #18	100,000	100,000	-
- Rehab Osborne Well #14	100,000	100,000	-
- Rehab Sherwood Well #9	100,000	100,000	-
- Rehab Royal Oaks Well #20	100,000	100,000	-
- Rehab Sherwood Well #11	100,000	100,000	-
- Rehab Thunderbird Well #23	100,000	100,000	-
- Relocate Water Booster Station & Telemetry System	-	600,000	600,000
- Sherwood Well Treatment (2 @\$1 million each)	-	2,000,000	2,000,000
- Southeast Reservoir Siting Study, Design & Construction	5,000,000	8,000,000	3,000,000
- Install Main: Thunderbird to Charolais	2,100,000	797,300	(1,302,700)
- Install Main: Golden Hill Road to Dallons (24-inch)	800,000	800,000	-
- Nacimiento Water	500,000	500,000	-
- Replace Roof of Westside Reservoir (21st Street)	1,400,000	6,000,000	4,600,000
- SCADA/Telemetry Improvements	30,000	30,000	-
- River Road and across 13th Street Bridge (16-inch)	150,000	150,000	-
	<u>\$ 14,509,500</u>	<u>\$ 24,906,800</u>	<u>\$ 10,397,300</u>

Table 2
Revised Sewer and Water
Development Impact (Connection) Fee Schedules

TABLE A - Water Connection Fees⁽¹⁾:

<u>Current⁽²⁾</u>	<u>Revised</u>		<u>Current⁽²⁾</u>	<u>Revised</u>	
\$7,734	\$7,816	per single-family residence			
\$6,134	\$6,199	per multi-family residence (unit)			
\$7,734	\$7,816	per mobile home park space			
\$7,734	\$7,816	per mobile home subdivision lot			
\$7,734	\$7,816	per commercial unit +	\$530	\$536	per sub-unit
\$7,734	\$7,816	per hospital/convalescent home +	\$530	\$536	per room
\$7,734	\$7,816	per motel/hotel +	\$530	\$536	per unit
\$7,734	\$7,816	per school +	\$530	\$536	per classroom
\$7,734	\$7,816	per industrial/manufacturing +	\$0.189	\$0.191	per sq. ft.

TABLE B - Water Connection Fees⁽¹⁾:

<u>Meter Size</u>	<u>Current⁽²⁾</u>	<u>Revised</u>
5/8"	\$7,734	\$7,816
3/4"	\$7,734	\$7,816
1"	\$12,916	\$13,053
1-1/2"	\$25,755	\$26,028
2"	\$41,224	\$41,661
3"	\$82,525	\$83,400
4"	\$128,930	\$130,298
6"	\$257,783	\$260,518
8"	\$412,468	\$416,844
10"	\$592,986	\$599,276

(1) The applicable fee shall be the higher of Table A or Table B except for multi-family residential and mobile homes for meter sizes less than 1".

(2) Adopted 2-1-04. The final fee schedule, per the Building Division, has been modified to eliminate any distinction between mobile home spaces vs. lots.

Sewer Connection Fees

<u>Current⁽²⁾</u>	<u>Revised</u>		<u>Current⁽²⁾</u>	<u>Revised</u>	
\$4,351	\$4,412	per single-family residence			
\$4,004	\$4,004	per multi-family residence (unit)			
\$4,351	\$4,412	per mobile home park space			
\$4,351	\$4,412	per mobile home subdivision lot			
\$4,351	\$4,412	per commercial unit			
\$4,351	\$4,412	per hospital/convalescent home +	\$201	\$203	per room
\$4,351	\$4,412	per motel/hotel +	\$82	\$83	per unit
\$6,148	\$6,234	per school +	\$82	\$83	per classroom
\$4,004	\$4,060	per industrial/manufacturing +	\$47	\$48	per 5 employees

Table W-2

Water System - Allocation of Adopted and Planned C.I.P. Project Costs

City of Paso Robles

Water System Facilities - Recent or Current CIP ^a	Year of Cost		Escalation Factor ^b	Cost	Allocation to Future Users	
	Cost ^a	Estimate ^a		(in \$2004)	Percent ^c	Cost (\$2004) ^d
Water Supply Wells						
New Well Installation #8 @ Airport	\$500,000	2003	1.025	\$350,300	100%	\$350,000
New Well #9 Installation	\$500,000	2003	1.025		\$655,000	100%
Sherwood Well Treatment (2 wells)				\$2,000,000	10%	\$200,000
New Well #10 Installation	\$500,000	2003	1.025	\$1,000,000	100%	\$1,000,000
New Well #11 Installation	\$500,000	2003	1.025	\$1,000,000	100%	\$1,000,000
Subtotal - Water Supply Wells	\$2,000,000			\$5,005,300		\$3,205,000
Future Water Supply						
Lake Nacimiento/Future Supply	\$61,300,000	2003	1.025	\$62,833,000	50%	\$31,417,000
Storage Reservoirs						
<u>Adopted or Planned CIP (e)</u>						
Southeast Reservoir Siting Study, Design & Constr.	\$8,000,000	2004	1.000	\$8,000,000	100%	\$8,000,000
New 21st Street Reservoir Tank	\$4,000,000	2004	1.000	\$4,600,000	100%	\$4,600,000
Upgrade & Re-locate City Yard Booster Pump	\$1,500,000	2004	1.000	\$600,000	65%	\$390,000
<u>Master Plan Improvements</u>						
New 0.7 MG Tank, West of Cuerno Largo Way	\$350,000	1995	1.123	\$393,000	70%	\$275,000
Subtotal - Storage Reservoirs	\$13,850,000			\$13,593,000		\$13,265,000
Transmission Projects						
<u>Adopted CIP</u>						
Fire Flow @ South City Limits	\$1,000,000	2003	1.025	\$1,025,000	39%	\$400,000
Install Main: Thunderbird to Charolais	\$2,500,000	2003	1.025	\$800,000	39%	\$312,000
Install Main: Golden Hill Road to Dallona (24-inch)	\$800,000	2003	1.025	\$820,000	39%	\$320,000
SCADA/Telemetry Improvements	\$30,000	2003	1.025	\$31,000	39%	\$12,000
19th St, Install 16" line, Spring to Pine Streets	\$80,000	1999	1.205	\$96,000	100%	\$96,000
Subtotal - Adopted CIP	\$4,410,000			\$2,772,000		\$1,140,000
<u>Master Plan Improvements</u>						
Update Water Master Plan	\$55,000	2003	1.025	\$500,000	39%	\$195,000
Chestnut St., 17th to 19th, Upgrade 10" to 16"	\$70,000	1995	1.304	\$91,000	70%	\$64,000
Hwy 101, T.B. Well Site to Volpi Yasbel, New 16"	\$1,000,000	1995	1.304	\$1,304,000	70%	\$913,000
Volpi Yasbel Rd., 101 to Theater Dr., New 16"	\$1,100,000	1995	1.304	\$1,434,000	70%	\$1,004,000
1,060 Zone, From Tank to 10" line, New 12"	\$114,000	1995	1.304	\$149,000	70%	\$104,000
1,060 Zone, From Tank to Theatre Dr., New 10"	\$818,000	1995	1.304	\$1,067,000	70%	\$747,000
Golden Hill/Rolling Hills Rd to Union Upgrade to 24"	\$269,000	1995	1.304	\$351,000	70%	\$246,000
Golden Hill/Union to Dry Creek Rd Upgrade to 24"	\$1,155,000	1995	1.304	\$1,506,000	100%	\$1,506,000
Dry Creek Rd/Golden Hill to Airport Rd Upgrade to 24"	\$653,000	1995	1.304	\$852,000	100%	\$852,000
Gilead Lane/Golden Hill to So. Of Union Rd New 24"	\$640,000	1995	1.304	\$835,000	100%	\$835,000
Airport Rd/Hwy 46 to So. Of Union New 24"	\$495,000	1995	1.304	\$645,000	100%	\$645,000

Table W-2

Water System - Allocation of Adopted and Planned C.I.P. Project Costs

City of Paso Robles

Water System Facilities - Recent or Current CIP ^a	Year of Cost		Escalation Factor ^b	Cost (in \$2004)	Allocation to Future Users	
	Estimate ^a	Cost ^a			Percent ^c	Cost (\$2004) ^d
Airport Rd/Paso Robles Rd to Hwy 46 New 16"	1995	\$132,000	1.304	\$172,000	100%	\$172,000
Hwy 46/Airport Rd to Eastern Boundary New 16"	1995	\$818,000	1.304	\$1,067,000	100%	\$1,067,000
Future N. to S. Road/Hwy 46 to Tower Rd New 16"	1995	\$1,179,000	1.304	\$1,537,000	100%	\$1,537,000
Tower Rd/E. side of Airport to W. side of Airport New 16"	1995	\$669,000	1.304	\$872,000	100%	\$872,000
Airport Rd/Tower to Rollie Gate New 16"	1995	\$502,000	1.304	\$655,000	100%	\$655,000
Dry Creek Rd/Airport Rd to East. Boundary New 16"	1995	\$730,000	1.304	\$952,000	60%	\$571,000
Linne Road/Fontana to Future Arterial Upgrade to 16"	1995	\$554,000	1.304	\$722,000	25%	\$181,000
Future N to S Arterial/S of Union to Linne New 16"	1995	\$1,056,000	1.304	\$1,377,000	20%	\$275,000
Meadowlark Rd/Creston to Beechwood Upgrade to 10"	1995	\$81,000	1.304	\$106,000	70%	\$74,000
Creston Rd/ Charolais to Future Arterial New 16"	1995	\$502,000	1.304	\$655,000	25%	\$164,000
So River Rd/Union to E of Ronconi Wells Upgrade to 16"	1995	\$466,000	1.304	\$608,000	70%	\$426,000
E of So River Rd/ So River Rd to Red Cloud New 8"	1995	\$86,000	1.304	\$112,000	70%	\$78,000
Subtotal - Master Plan Improvements		\$13,144,000		\$17,569,000		\$13,183,000
Subtotal - All Transmission Projects		\$17,554,000		\$20,341,000		\$14,323,000
Completed Projects						
Malcom Pirnie WWW Quality Study	2003	\$42,000	1.025	\$43,000	100%	\$43,000
Sewer Development Impact Fee Study (original)	2001	\$17,000	1.069	\$18,000	100%	\$18,000
Review of Sewer Development Impact Fees	2004	\$6,000	1.000	\$6,000	100%	\$6,000
Install 16" Union Road Main	2003	\$211,000	1.025	\$216,000	100%	\$216,000
Subtotal - Completed Projects		\$276,000		\$283,000		\$283,000
Total - All Projects		\$94,980,000		\$102,055,300		\$62,493,000

Note: All costs rounded to nearest \$1,000. Projects that had no allocation percentage to new development are not shown.

a. From Table W-1.

b. Factor needed to inflate cost to 2004 dollars, using the Handy-Whitman Index for Water Utility Construction (Bulletin No. 158, 1912 to July 2003).

1.304 adjusts 1995 costs to 2004 costs for Transmission Plant, concrete cylinder mains, line 29.

1.205 adjusts 1999 costs to 2004 costs for Transmission Plant, concrete cylinder mains, line 29.

1.1236 adjusts 1995 costs to 2004 costs for Transmission Plant, Steel Reservoirs, line 23.

1.069 adjusts 2001 costs to 2004 general Structures & Improvements, line 15.

c. See Table W-3 for explanation of cost allocation percentages.

d. Cost in year of estimate (e.g. 1995) times allocation percent to get \$2004.

e. Cost estimates from Michael Compton, 3/23/04 and/or 5/12/04 email to Greg Clumpner/Foresight Consulting.

Table WWTP-2

Wastewater Treatment Plant - Allocation of Adopted and Planned C.I.P. Project Costs

City of Paso Robles

Wastewater Treatment Plant Facilities ^a	Cost ^a	Year of Cost Estimate ^b		Escalation Factor ^c	Cost (in \$2004)	Allocation to Future Users		Financing Adj. Costs ^f
		Estimate ^b				Percent ^d	Cost (\$2004) ^e	
Existing Facilities								
WWTP (FA Appraisal - Through 6/84)	\$230,000	2004		1.000	\$230,000	31%	\$71,000	\$71,000
WWTP expansion (Acquired 11/89)	\$4,693,000	2004		1.000	\$4,693,000	31%	\$1,455,000	\$1,455,000
Subtotal - Existing Facilities	\$4,923,000				\$4,923,000		\$1,526,000	\$1,526,000
Immediate-Term Projects								
Sludge Dewatering System	\$915,000	2000		1.086	\$994,000	70%	\$696,000	\$696,000
Subtotal - Immediate-Term Projects	\$915,000				\$994,000		\$696,000	\$696,000
Short-Term Projects								
Sludge System Upgrade	\$650,000	2003		1.025	\$666,000	70%	\$466,000	\$466,000
Upgrade WWTP Solids Handling Facilities	\$4,000,000	2003		1.025	\$4,100,000	31%	\$1,271,000	\$1,271,000
Primary Sludge Pump Station	\$318,000	2000		1.086	\$345,000	50%	\$173,000	\$173,000
Admin., Legal, Planning, Design, CM (35%)	\$144,000	2000		1.086	\$156,000	50%	\$78,000	\$78,000
Subtotal - Short-Term Projects	\$5,112,000				\$5,267,000		\$1,988,000	\$1,988,000
Long-Term Projects								
Secondary Clarifier Polymer System	\$98,000	2000		1.086	\$106,000	70%	\$74,000	\$74,000
New Chlorine Contact Basin	\$420,000	2000		1.086	\$456,000	70%	\$319,000	\$319,000
Admin., Legal, Planning, Design, CM (35%)	\$184,000	2000		1.086	\$200,000	70%	\$140,000	\$140,000
Update Sewer Master Plan (g)	\$108,000	2000		1.086	\$500,000	90%	\$450,000	\$450,000
Subtotal - Long-Term Projects	\$810,000				\$1,262,000		\$983,000	\$983,000
Completed Projects								
Malcom Pirnie W/WW Quality Study	\$42,000	2003		1.025	\$43,000	100%	\$43,000	\$43,000
Sewer Development Impact Fee Study (original)	\$17,000	2001		1.069	\$18,000	100%	\$18,000	\$18,000
Review of Sewer Development Impact Fees	\$6,000	2004		1.000	\$6,000	100%	\$6,000	\$6,000
Ferric Chloride Bulk Plant (#572)	\$127,000	2004		1.000	\$127,000	100%	\$127,000	\$127,000
Subtotal - Completed Projects	\$192,000				\$194,000		\$194,000	\$194,000
Total - All WWTP Projects	\$11,952,000				\$12,640,000		\$5,387,000	\$5,387,000

Note: All costs rounded to nearest \$1,000. Projects that had no allocation percentage to new development are not shown.

a. From Table WWTP-1.

b. The year in which the cost estimate was prepared based on source of estimates.

c. Factor needed to inflate cost to 2004 dollars, using the Handy-Whitman Index for Water Utility Construction (Bulletin No. 158, 1912 to July 2003).

Conversion factor from 2003 to 2004 is assumed to be 1.025.

1.086 adjusts 2000 dollars to the current value (year 2004) based on Pumping Plant, Structures & Improvements, from line 15 of the Handy-Whitman Index

1.075 adjusts 2000 dollars to the current value (year 2004) based on Collecting & Impounding Reservoir, from line 2 of the Handy-Whitman Index.

1.069 adjusts 2001 costs to 2004 general Structures & Improvements, line 15.

d. See following table for explanation of cost allocation percentages.

e. Cost in 2001 dollars times allocation percent to get costs allocated to future users.

f. The City intends to finance certain projects (Mike Compton, 6-28-01 email). These projects are reduced to \$0 here and excluded from the costs allocated to growth to avoid double-charging new development.

g. Cost estimates from Michael Compton, 3/23/04 and/or 5/12/04 email to Greg Clumpner/Foresight Consulting.

Table W-1

Water System - Summary of Costs of Adopted and Planned Projects*City of Paso Robles*

Water System Facilities - Recent or Current CIP		Projected Cost	Yr. of \$ Est.^b
<u>Water Supply Wells</u>			
New Well Installation #8 @ Airport	c	\$500,000	2003
New Well #9 Installation	c	\$500,000	2003
New Well #10 Installation	c	\$500,000	2003
New Well #11 Installation	c	\$500,000	2003
Subtotal - Water Supply Wells		\$2,000,000	
<u>Future Water Supply</u>			
Lake Nacimiento/Future Supply	e	\$61,300,000	2003
<u>Storage Reservoirs</u>			
<u>Adopted or Planned CIP</u>			
Southeast Reservoir Siting Study, Design & Constr.	e	\$8,000,000	2004
New 21st Street Reservoir Tank	e	\$4,000,000	2004
Upgrade & Re-locate City Yard Booster Pump	e	\$1,500,000	2004
<u>Master Plan Improvements</u>			
New 0.7 MG Tank, West of Cuerno Largo Way	b	\$350,000	1995
Subtotal - Storage Reservoirs		\$13,850,000	
<u>Transmission Projects</u>			
<u>Adopted CIP</u>			
Fire Flow @ South City Limits	c	\$1,000,000	2003
Install Main: Thunderbird to Charolais	c	\$2,500,000	2003
Install Main: Golden Hill Road to Dallona (24-inch)	c	\$800,000	2003
SCADA/Telemetry Improvements	c	\$30,000	2003
19th St, Install 16" line, Spring to Pine Streets	a	\$80,000	1999
Subtotal - Adopted CIP		\$4,410,000	
<u>Master Plan Improvements</u>			
<u>Update Water Master Plan</u>			
Chestnut St., 17th to 19th, Upgrade 10" to 16"	e	\$55,000	2003
Hwy 101, T.B. Well Site to Volpi Yasbel, New 16"	b	\$70,000	1995
Volpi Yasbel Rd., 101 to Theater Dr., New 16"	b	\$1,000,000	1995
1,060 Zone, From Tank to 10" line, New 12"	b	\$1,100,000	1995
1,060 Zone, From Tank to Theatre Dr., New 10"	b	\$114,000	1995
1,060 Zone, From Tank to Theatre Dr., New 10"	b	\$818,000	1995
Golden Hill/Rolling Hills Rd to Union Upgrade to 24"	b	\$269,000	1995
Golden Hill/Union to Dry Creek Rd Upgrade to 24"	b	\$1,155,000	1995
Dry Creek Rd/Golden Hill to Airport Rd Upgrade to 24"	b	\$653,000	1995
Gilead Lane/Golden Hill to So. Of Union Rd New 24"	b	\$640,000	1995
Airport Rd/Hwy 46 to So. Of Union New 24"	b	\$495,000	1995
Airport Rd/Paso Robles Rd to Hwy 46 New 16"	b	\$132,000	1995
Hwy 46/Airport Rd to Eastern Boundary New 16"	b	\$818,000	1995
Future N. to S. Road/Hwy 46 to Tower Rd New 16"	b	\$1,179,000	1995
Tower Rd/E. side of Airport to W. side of Airport New 16"	b	\$669,000	1995
Airport Rd/Tower to Rollie Gate New 16"	b	\$502,000	1995
Dry Creek Rd/Airport Rd to East. Boundary New 16"	b	\$730,000	1995
Linne Road/Fontana to Future Arterial Upgrade to 16"	b	\$554,000	1995
Future N to S Arterial/S of Union to Linne New 16"	b	\$1,056,000	1995
Meadowlark Rd/Creston to Beechwood Upgrade to 10"	b	\$81,000	1995
Creston Rd/ Charolais to Future Arterial New 16"	b	\$502,000	1995
So River Rd/Union to E of Ronconi Wells Upgrade to 16"	b	\$466,000	1995

Table W-1

Water System - Summary of Costs of Adopted and Planned Projects*City of Paso Robles*

Water System Facilities - Recent or Current CIP		Projected Cost	Yr. of \$ Est.^b
E of So River Rd/ So River Rd to Red Cloud New 8"	b	\$86,000	1995
Subtotal - Master Plan Improvements		<u>\$13,144,000</u>	
Subtotal - All Transmission Projects		<u>\$17,554,000</u>	
Completed Projects			
Malcom Pirnie W/WW Quality Study		\$42,000	2003
Sewer Development Impact Fee Study (original)		\$17,000	2001
Review of Sewer Development Impact Fees		\$6,000	2004
Install 16" Union Road Main		<u>\$211,000</u>	2003
Subtotal - Completed Projects		<u>\$276,000</u>	
Total - All Projects		\$94,980,000	

Note: All costs rounded to nearest \$1,000. Projects that had no allocation percentage to new development are not shown.

a. Source: City of Paso Robles, Appendix "F", Adopted Capital Improv. Program, Four Year Period Ending June 30, 2002. No date given.

b. 1999 costs are from Appendix "F" and assumed to be in \$1999. 1995 costs are from 1995 Master Plan Update and assumed to be in \$1995.

c. Exhibit "J", Capital Improvements Projects Budget, Fiscal Year 2004 to 2007, City of Paso Robles, November 2003.

d. Source: City of Paso Robles, Depreciation Schedule - FY 2003, Water Operations Fund (*Water Depreciation.xls FY2003*), lines 414 and 440.

e. Cost estimates from Michael Compton, 3/23/04 and/or 5/12/04 email to Greg Clumpner/Foresight Consulting.

Table W-2

Water System - Allocation of Adopted and Planned C.I.P. Project Costs

City of Paso Robles

Water System Facilities - Recent or Current CIP ^a	Year of Cost		Escalation Factor ^b	Allocation to Future Users	
	Cost ^a	Estimate ^a		Cost (in \$2004)	Percent ^c
Water Supply Wells					
New Well Installation #8 @ Airport	\$500,000	2003	1.025	\$513,000	100%
New Well #9 Installation	\$500,000	2003	1.025	\$513,000	100%
New Well #10 Installation	\$500,000	2003	1.025	\$513,000	100%
New Well #11 Installation	\$500,000	2003	1.025	\$513,000	100%
	<u>\$2,000,000</u>			<u>\$2,052,000</u>	
Subtotal - Water Supply Wells					
Future Water Supply					
Lake Nacimiento/Future Supply	\$61,300,000	2003	1.025	\$62,833,000	50%
Storage Reservoirs					
Adopted or Planned CIP (e)					
Southeast Reservoir Siting Study, Design & Constr.	\$8,000,000	2004	1.000	\$8,000,000	100%
New 21st Street Reservoir Tank	\$4,000,000	2004	1.000	\$4,000,000	100%
Upgrade & Re-locate City Yard Booster Pump	\$1,500,000	2004	1.000	\$1,500,000	65%
<u>Master Plan Improvements</u>					
New 0.7 MG Tank, West of Cuerno Largo Way	\$350,000	1995	1.123	\$393,000	70%
	<u>\$13,850,000</u>			<u>\$13,893,000</u>	
Subtotal - Storage Reservoirs					
Transmission Projects					
<u>Adopted CIP</u>					
Fire Flow @ South City Limits	\$1,000,000	2003	1.025	\$1,025,000	39%
Install Main: Thunderbird to Charolais	\$2,500,000	2003	1.025	\$2,563,000	39%
Install Main: Golden Hill Road to Dallona (24-inch)	\$800,000	2003	1.025	\$820,000	39%
SCADA/Telemetry Improvements	\$30,000	2003	1.025	\$31,000	39%
19th St, Install 16" line, Spring to Pine Streets	\$80,000	1999	1.205	\$96,000	100%
	<u>\$4,410,000</u>			<u>\$4,535,000</u>	
Subtotal - Adopted CIP					
<u>Master Plan Improvements</u>					
Update Water Master Plan	\$55,000	2003	1.025	\$56,000	39%
Chestnut St., 17th to 19th, Upgrade 10" to 16"	\$70,000	1995	1.304	\$91,000	70%
Hwy 101, T.B. Well Site to Volpi Yasbel, New 16"	\$1,000,000	1995	1.304	\$1,304,000	70%
Volpi Yasbel Rd., 101 to Theater Dr., New 16"	\$1,100,000	1995	1.304	\$1,434,000	70%
1,060 Zone, From Tank to 10" line, New 12"	\$114,000	1995	1.304	\$149,000	70%
1,060 Zone, From Tank to Theatre Dr., New 10"	\$818,000	1995	1.304	\$1,067,000	70%
Golden Hill/Rolling Hills Rd to Union Upgrade to 24"	\$269,000	1995	1.304	\$351,000	70%
Golden Hill/Union to Dry Creek Rd Upgrade to 24"	\$1,155,000	1995	1.304	\$1,506,000	100%
Dry Creek Rd/Golden Hill to Airport Rd Upgrade to 24"	\$653,000	1995	1.304	\$852,000	100%
Gilead Lane/Golden Hill to So. Of Union Rd New 24"	\$640,000	1995	1.304	\$835,000	100%
Airport Rd/Hwy 46 to So. Of Union New 24"	\$495,000	1995	1.304	\$645,000	100%

Table W-2

Water System - Allocation of Adopted and Planned C.I.P. Project Costs

City of Paso Robles

Water System Facilities - Recent or Current CIP ^a	Year of Cost		Escalation Factor ^b	Allocation to Future Users	
	Estimate ^a	Cost ^a		Cost (in \$2004)	Percent ^c Cost (\$2004) ^d
Airport Rd/Paso Robles Rd to Hwy 46 New 16"	1995	\$132,000	1.304	\$172,000	100%
Hwy 46/Airport Rd to Eastern Boundary New 16"	1995	\$818,000	1.304	\$1,067,000	100%
Future N. to S. Road/Hwy 46 to Tower Rd New 16"	1995	\$1,179,000	1.304	\$1,537,000	100%
Tower Rd/E. side of Airport to W. side of Airport New 16"	1995	\$669,000	1.304	\$872,000	100%
Airport Rd/Tower to Rollie Gate New 16"	1995	\$502,000	1.304	\$655,000	100%
Dry Creek Rd/Airport Rd to East. Boundary New 16"	1995	\$730,000	1.304	\$952,000	60%
Linne Road/Fontana to Future Arterial Upgrade to 16"	1995	\$554,000	1.304	\$722,000	25%
Future N to S Arterial/S of Union to Linne New 16"	1995	\$1,056,000	1.304	\$1,377,000	20%
Meadowlark Rd/Creston to Beechwood Upgrade to 10"	1995	\$81,000	1.304	\$106,000	70%
Creston Rd/Charolais to Future Arterial New 16"	1995	\$502,000	1.304	\$655,000	25%
So River Rd/Union to E of Ronconi Wells Upgrade to 16"	1995	\$466,000	1.304	\$608,000	70%
E of So River Rd/ So River Rd to Red Cloud New 8"	1995	\$86,000	1.304	\$112,000	70%
Subtotal - Master Plan Improvements		\$13,144,000		\$17,125,000	
Subtotal - All Transmission Projects		\$17,554,000		\$21,660,000	
Completed Projects					
Malcom Pirnie W/MW Quality Study	2003	\$42,000	1.025	\$43,000	100%
Sewer Development Impact Fee Study (original)	2001	\$17,000	1.069	\$18,000	100%
Review of Sewer Development Impact Fees	2004	\$6,000	1.000	\$6,000	100%
Install 16" Union Road Main	2003	\$211,000	1.025	\$216,000	100%
Subtotal - Completed Projects		\$276,000		\$283,000	
Total - All Projects		\$94,980,000		\$100,721,000	\$61,840,000

Note: All costs rounded to nearest \$1,000. Projects that had no allocation percentage to new development are not shown.

a. From Table W-1.

b. Factor needed to inflate cost to 2004 dollars, using the Handy-Whitman Index for Water Utility Construction (Bulletin No. 158, 1912 to July 2003).

1.304 adjusts 1995 costs to 2004 costs for Transmission Plant, concrete cylinder mains, line 29.

1.205 adjusts 1999 costs to 2004 costs for Transmission Plant, concrete cylinder mains, line 29.

1.1236 adjusts 1995 costs to 2004 costs for Transmission Plant, Steel Reservoirs, line 23.

1.069 adjusts 2001 costs to 2004 general Structures & Improvements, line 15.

c. See Table W-3 for explanation of cost allocation percentages.

d. Cost in year of estimate (e.g. 1995) times allocation percent to get \$2004.

e. Cost estimates from Michael Compton, 3/23/04 and/or 5/12/04 email to Greg Clumpner/Foresight Consulting.

TO: City Council

FROM: James L. App, City Manager

SUBJECT: Water & Wastewater Resource Management

DATE: January 4, 2005

NEEDS: For the City Council to consider amending Boyle Engineers' Water & Sewer Master Plan contract to broaden and integrate planning for water and wastewater resources.

- FACTS:**
1. The City provides water and wastewater services to residences and businesses within City limits.
 2. The City relies on water supply from two groundwater sources – the Salinas River underflow and the Paso Robles groundwater basin. Sixteen wells produce approximately 7,500 acre feet per year but are strain to meet high summer water demands.
 3. Salinas River underflow withdrawals are expressly limited by State permit/license. Groundwater basin use is not, but is subject to competitive pressures, limited safe annual yields, and localized water level decline.
 4. Groundwater is hard, locally affected by selected constituents, and subject to diminishing quality. Water treatment is provided at each wellhead.
 5. The City recently committed to the Nacimiento Lake surface water project, which will deliver 4,000 acre feet per year of relatively high quality, raw (untreated) water beginning in approximately 2009/10.
 6. Approximately 2,900,000 gallons per day (3,300 acre feet per year) of wastewater is collected, treated, and disposed from a central plant located adjacent to the Salinas River.
 7. City water and wastewater services are regulated by a number of public agencies including:
 - San Luis Obispo County Department of Environmental Health
 - Regional Water Quality Control Board
 - State Department of Fish and Game
 - State Department of Health Services
 - State Department of Water Resources
 - State Water Resources Control Board
 - U.S. Army Corp of Engineers
 - U.S. Department of Fish & Wildlife
 - U.S. Environmental Protection Agency

8. County, State and Federal regulations control the quality (concentrations of salts and specific constituents) of water supply sources and wastewater. Regulatory limits on specific constituent concentrations are increasingly rigorous.
9. Development and delivery of water and wastewater services is also guided by the City's General Plan, Municipal Code, Urban Water Management Plan, Water Master Plan, and Sewer Master Plan.
10. Increasing water demands and ever-tightening regulations on both water and wastewater quality necessitate development of *integrated* water and wastewater management practices and more advanced treatment regimens. New management strategies need to include:
 - Identification of specific water quality targets to meet multiple objectives and rigorous requirements for public health, groundwater, Salinas River, watershed sustainability, and environmental enhancement; and
 - Definition of water treatment alternatives to achieve water quality targets, and
 - Recognition of recycled wastewater as a resource that can help address seasonal water shortages, water conservation, groundwater basin supply, watershed enhancement, and environmentally sound wastewater treatment and disposal objectives; and
 - Development of integrated management of surface water, groundwater, recycled water and river resources, so that the integrity, quality, and supply of these unified resources can be sustained for the long term.

ANALYSIS &

CONCLUSION:

A long-term, reliable supply of good quality water is essential to life, public health, environment, business, and a strong economy. Paso Robles water resources are limited, subject to ever-increasing demands, and at risk of water quality degradation. The management of water supplies, demands, uses, discharge and replenishment must, therefore, be a guiding criterion in public decisions.

Paso Robles provides water and wastewater service to over 27,000 people today, increasing to over 40,000 by 2025. The City's use of, and discharge to, area waters may affect even more. A long-term strategic and integrated management plan to sustain these resources and services must be developed.

Boyle Engineers is currently preparing the City's water and wastewater master plans, as well as a wastewater treatment plant operations audit. Their work should be expanded to integrate water and wastewater planning so that the City may amplify and galvanize its efforts to:

- Improve water quality;
- Increase & diversify water supplies;
- Increase reliability of water supplies;
- Lessen groundwater basin pumping;
- Reduce salt loading into groundwater;
- Anticipate and comply with regulatory mandates;
- Safeguard water rights; and
- Prioritize expenditures to achieve these goals.

Integrating water and wastewater master planning will fuse water source development, treatment, reclamation, disposal, use, and reuse together as a complete water cycle/system management effort. The integrated plan would be comprised of a wide range of strategies, programs and projects. Boyle Engineers is currently developing some of the plan's components:

- Sewer Master Plan update.
- Water Master Plan update.
- NPDES Wastewater Discharge Permit.
- Wastewater Treatment Plant Operational Audit.
- Water Storage Tank Site Evaluation, Design and Development.

Additional features needed to both fulfill current obligations and permits, and effect integrated water cycle/system management planning include development of:

- Nacimiento, groundwater, and wastewater treatment alternatives;
- Groundwater source analysis (well field operations and recharge options);
- Recycled Water Study update and demand analysis;
- Wastewater Pretreatment/Source Control Program;
- Salt Reduction program update; and
- Prioritized capital improvements program, schedule and cash flow analysis.

Given the complexity and broad scope of such an effort, it is prudent to take advantage of Boyle Engineer's comprehensive knowledge of, and involvement with, the City's water and wastewater systems, operations, regulatory challenges, and the Nacimiento Water Project. Accordingly, Boyle Engineers was asked to develop a supplemental proposal to integrate the City's water and wastewater master planning. Their proposal (attached) takes advantage of the work already under contract/development, and incorporates and integrates all of the features listed above.

An integrated plan will provide an approach which unifies water cycle, demand, treatment, use, discharge and replenishment management to ensure adequate, sustainable, diverse, and quality water supplies for the long-term. It is an effort vital to the community's future.

POLICY

REFERENCE: California Urban Water Management Planning Act; California Toxics Rule; Paso Robles General Plan, Municipal Code, Urban Water Management Plan, Water Master Plan, & Sewer Master Plan.

FISCAL

IMPACT: \$400,000 to be appropriated from the Water and Sewer Funds.


Phases I & II of the supplemental work are estimated at \$300,000. Phase III costs will be determined following completion of the preceding phases, but are expected to be approximately \$40-70,000. Additionally, it is possible that new, unforeseen conditions/complications will be discovered in the course of the evaluation necessitating additional work and associated costs. Accordingly, a budget of \$400,000 is sought to provide for these contingencies.

Until such time as the nature and extent of study outcome is determined, 50% of the cost will come from Water, and 50% from Sewer, resources - both retained earnings and impact fees.

The impact fee, or new development, shares will be equivalent to the cost allocations for preparation of the sewer and water master plans, 90% and 39%, respectively. This will necessitate a future minor increase in both the sewer and water impact fees. For sewer, the increase would be \$35 per residential unit and \$10 for water. A connection fee resolution will be presented for action at a future date.

- OPTIONS:**
- a. Adopt Resolution No. 05-xx appropriating \$400,000 for, and authorizing the City Manager to amend the contract with, Boyle Engineers to prepare an Integrated Water & Wastewater Master Plan.
 - b. Amend, modify, or reject the above option.

Attachments: Resolution
Proposal

TO: James L. App, City Manager
FROM: Meg Williamson, Interim Director of Public Works 
SUBJECT: Award a Contract to Update the City's Water and Sewer Master Plans
DATE: May 4, 2004

NEEDS: For the City Council to authorize a contract to update the City's Water and Sewer Master Plans.

- FACTS:**
1. The City's current Sewer and Water Master Plans were prepared in 1993.
 2. With the recent update of the General Plan, these Master Plans need to be updated as well.
 3. A Request for Proposal was sent to fifteen (15) firms for this work. Three firms responded.

**ANALYSIS
AND**

CONCLUSION: The three firms were invited to appear before a City Council Ad Hoc Committee consisting of Gary Nemeth and George Finigan for an interview. The panel concluded that Boyle Engineering evidenced the best knowledge of the City's system. The fees proposed were as follows:

Boyle Engineering	\$159,470
Carollo Engineers	\$303,000
Penfield & Smith	\$415,000

The decision of the Ad Hoc Committee was based on the fact that the team from Boyle Engineering provided the most comprehensive proposal with a competitive cost.

POLICY Adopted General Plan
Adopted Capital Improvement Program

**FISCAL
IMPACT:** The following budget has been adopted for these Master Plan updates:

600.310.5224.165	\$300,000
601.310.5224.163	\$300,000

- OPTIONS:**
- a. (1) Authorize the City Manager to enter a contract with Boyle Engineering in the amount of \$159,470 to update the City's Water and Sewer Master Plans
 - (2) Terminate the Water and Sewer Master Plans ad hoc committee formed March 2004 with Councilmembers Finigan and Nemeth.
 - b. Amend, modify, or reject the above option.

Attachments:
1) Scope of Work and Fee Proposal

Report Prepared By:
Ditas Esperanza, P.E.
Capital Projects Engineer