

**AGENDA REPORT**

**Planning and Zoning:** 5/5/14  
**City Council:** 5/27/14

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**SUBJECT:** To discuss and consider a recommendation to the City Council on the 5-year Capital Improvement Plan for FY 2015 - 2019

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**ANNUAL CIP PROCESS:**

Per the City Charter and the Code of Ordinances, the Planning and Zoning Commission shall annually submit a 5-year Capital Improvement Plan to the City Council and City Manager, at least 120 days before the beginning of the budget year. The plan must list projects in order of preference with a recommendation for the year of construction for each project.

**FUNDING SOURCES:**

There are different funding mechanisms for capital improvement projects; two of which are Certificates of Obligation (CO) and General Obligation (GO) bonds. A Certificate of Obligation (CO) is a bond secured by property tax in which does not require voter approval. Unlike a CO, a General Obligation (GO) bond is required to be approved by the voters, and the debt service typically placed on top of the tax rate. Historically, the City has used Certificates of Obligation (CO's) to fund roadway, drainage, sidewalk and park projects while the debt service is absorbed through the tax rate. Utility projects are typically funded by the Utility Fund, capital recovery fees (impact fees from new development) and CO's. Utility CO's are funded through utility revenue guaranteed by the tax rate.

In past years, the City issued CO's for the construction of roadways. While the current roadway projects are being funded by past CO issuances, staff does not recommend this funding mechanism for future roadway CIP projects. The General Fund 5-year pro forma does not propose additional issuances of CO's for roadways for the next 5 years. The Utility Fund has multiple funding sources such as impact fees and CO's that can be used for utility purposes.

**STREET PROJECTS:**

**Colorado Sand Drive:**

The construction of Colorado Sand Drive was completed in November 2013. This project also included other collector level streets to better facilitate the traffic near Murchison Elementary School. The project also included a combination of 16-inch and 12-inch water lines, and an 8-inch wastewater with public-private partnership between the City and the property owner.

**Kelly Lane Phase 1A:**

In fiscal year 2013, City Council allocated funding toward the construction of Kelly Lane Phase 1A (Murchison Ridge Trail to western-most intersection of Falcon Pointe Boulevard) and Colorado Sand Drive from past CO issuances.

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The construction of Kelly Lane Phase 1A commenced immediately after the construction of Colorado Sand Drive and the connecting streets. This roadway construction project is on-going and is expected to be completed in December 2014. Also, a 24-inch water transmission main along Kelly Lane will be constructed with the related roadway project.

**Kelly Lane Phase 1B:**

From the western-most intersection of Falcon Pointe Boulevard to Moorlynch Avenue, the City will pursue the reconstruction of Kelly Lane to an improved, more stable, 2-lane rural roadway. The reconstruction will greatly improve the longevity of the road until such time Kelly Lane Phase 1B extent is expanded to a four-lane divided roadway.

**Heatherwilde Boulevard Phase 1 & 2:**

Right-of-way acquisition for N. Heatherwilde Boulevard Phase 1 and 2 is on-going. The design of Heatherwilde Phase 1 and 2, a four lane divided roadway, is 90% complete, with right-of-way acquisition as the remaining design approval element. Private utility relocations are currently being designed. In order for this project to proceed to construction, it would need to be funded by a GO bond. In 2011, a street overlay was completed on N. Heatherwilde Boulevard between SH 45 and Wilke Ridge Lane, which was funded by the Streets maintenance budget and by the General Capital Reserve.

**Pfluger Farm Lane:**

As a result of economic development agreements for Project Arista (Data Center Park) and the property owner (Terrell Timmermann), the City agreed to construct Pfluger Farm Lane, a north-south collector roadway, from the intersection of Town Center Drive within Stone Hill Town Center to the southern-most property line of the proposed 40-acre data center site, approximately 1450 linear feet of roadway. In addition, 250 linear feet of roadway was constructed on the south side of the property, intersecting with W. Pflugerville Parkway. By July 2016, the remainder of Pfluger Farm Lane will ultimately be constructed connecting Pflugerville Parkway to Town Center Drive. This roadway is intended to spur development on the Terrell Timmermann tracts of land south of Stone Hill Town Center. CO's were issued in February 2013 to fund the construction of this roadway whereby PCDC agreed to fund the debt service. Construction commenced in May 2013 and is currently pending submittal of project close out documents.

**POTENTIAL STREET PROJECTS FOR GENERAL BOND ELECTION:**

The ability of the City to advance significant projects to construction is highly contingent on the development of a GO Bond program and a successful bond referendum. If this funding mechanism is pursued, City Council could create a citizen's bond advisory committee responsible for developing a list of recommended projects ultimately placed on the ballot. Some projects that should be considered are identified in Table 1.

In order to support economic development within the SH 130 corridor and providing the necessary connections to the commercial centers, a safe and efficient arterial roadway system in the high growth areas is essential. The City may need to participate in the funding and construction of roadways partially within the City Limits and the ETJ. As development occurs in these areas, the public school system is required to expand with the construction of new schools to serve these areas, resulting in an increased impact on the existing rural two lane roadway network. In addition to single-family development, commercial development is expected to increase as accessibility to

public infrastructure improves. In order to stay ahead of the development curve, it may be in City's best interest to invest in the arterial street network east of SH 130.

Potential projects to be included within a GO Bond election are included in the table below.

<b>Table 1 – Potential GO Bond Street Projects</b>		
Project Name	Project Extent	Total Cost Estimate
Pecan Street	3 lane urban, SH 130 to Weiss Lane, rehab to Cameron	\$1.67 Million
Pflugerville Parkway	2 lane urban Colorado Sand to Becker Farm, SH130 underpass	\$4.44 Million
Weiss Lane	2 lane construction w/turn lanes, Cameron to Cele, Interlocal project with Travis County, County estimates – CITY COST ONLY, Travis County contribution \$6.73 million	\$3.77 Million
Rowe Lane	2 lane construction w/ turn lanes, SH130 to Martin Lane, Interlocal project with Travis County, County estimates – CITY COST ONLY, Travis County contribution \$1.46 million	\$1.3 Million
Heatherwilde	4 lane urban roadway	\$8.3 Million
Cactus Blossom, Columbine, Ardisia, Simsbrook, Dashwood Creek	Reconstruction of local streets within the Heatherwilde Subdivision	\$2.52 Million
Blackthorn, Thackeray, Gravesend, Isle of Man, Gower	Reconstruction of local streets	\$2.5 Million
	<b>Subtotal</b>	<b>\$24.50 Million</b>
	<b>Administrative Costs (Bond issuance, engineering and construction inspection)</b>	<b>\$1.10 Million</b>
	<b>Total</b>	<b>\$25.60 Million</b>

**OTHER POTENTIAL STREET PROJECTS:**

The projects listed in Table 2 below are projects that have been identified as future City roadway projects but are not funded for design or construction.

<b>Table 2 – Other Street Projects</b>		
Project Name	Project Extent	Total Cost Estimate
Pfennig Lane	Rehabilitation of existing section, mitigation of curve, culvert and sidewalk	\$0.88 Million
Old Austin Hutto Rd	Rehabilitation of existing section w/turn lanes, mitigation of low water crossing	\$.90 Million
Sun Light Near Way	Rehabilitation of existing section w/turn lanes	\$0.45 Million

Pfluger Farm Lane	Construction of middle portion, completes connection to Pflugerville Parkway and Town Center Drive	\$3.72 Million
Pfluger Farm Lane North	Approx. 825' extension north of Town Center, includes wastewater	\$1.16 Million
Colorado Sand Drive	Construction of middle section, includes water and wastewater	\$2.85 Million
Collector A	3 lane roadway connecting Pfluger Farm to FM 685	\$2.01 Million
Collector B	3 lane roadway connecting FM 685 to SH130	\$1.47 Million
Helios Way Extension	4 lane road connection west of Sun Light Near Way, connecting to Pecan St. Includes water and signal	\$3.10 Million
<b>Total</b>		<b>\$16.54 Million</b>

**STREETS SUMMARY:**

Staff recommends that the development of a bond program for the listed GO Bond roadway projects referenced in Table 1. Funding for projects listed in Table 2 can originate from CO's or GO's, grant funding, economic development agreements and the General Capital Reserve. The roadway projects have not been ranked by staff, however the Commission may choose to rank such proposed roadway projects in order of preference.

**UTILITY PROJECTS:**

The proposed 2015-2019 CIP for water and wastewater infrastructure is based off the amended Wastewater Master Plan and the newly created Water Master Plan. On a related note, the City is in its final stretch of the process for updating the water and wastewater impact fees in accordance with state law.

Recently, the City entered upon an agreement with Manville W.S.C. that released Manville's obligation to provide service to the old North Travis County MUD No. 5 (NTCMUD#5) and their ability to require impact fees within such NTCMUD#5 geographical boundary. The agreement also requires the City to purchase 685,000 gallons of water per day from Manville at a designated location, for the remainder of the term of the agreement for the District, expiring in September 2036. Also, in order for the City to serve the customers directly within the NTCMUD#5, the City is required to construct a few water utility projects.

Utility projects are typically funded by revenue from existing utility customers, impact fees associated with new development, and bonds. The tables provided below list the water and wastewater utility project needs, purpose, preliminary cost estimates, and proposed dates of design and construction.

**WATER:** The water utility projects are listed in four categories.

- 1) System Strength and Reliability
- 2) Storage
- 3) Distribution
- 4) Miscellaneous System Improvements

Please refer to the table below for more information. This table lists staff's recommendation for water utility projects for the 5-year CIP and denotes a proposed timeframe for design and construction.

Table 3 – Water Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/Construct
<b>System Strength and Reliability</b>			
Pfennig Pump Station Improvements	Add two (2) pumps, increase ground storage and yard piping	\$3,800,000	2013/2015
Pflugerville Parkway Transmission Main	Construct second 16" Main to Pfennig Pump Station	\$877,800	2013/ 2015
Pfennig Lane Transmission Main	Replace 12" Main with 16" Main from Rocky Creek to Railroad	\$214,375	2013/ 2015
Pfennig Lane Transmission Main Connection	Construct a 16" Transmission Main Connection (Swenson Farms to Gazania)	\$472,550	2013/2015
Heatherwilde/ Wilke Ridge Transmission Main	Construct 24" Transmission Main with connections to 950 Elevated Storage, Timothy John Dr., Kingston Lacy Blvd. Great Basin Ave., Heatherwilde Blvd., and N. Cascades.Ave.	\$2,793,820	2014/2015
<b>Total</b>		<b>\$8,158,545</b>	
<b>Storage</b>			
Elevated Storage Tank for 950 Pressure Plane	Construct an Elevated Storage to serve customers west of SH 130	\$6,750,000	2014/ 2016
<b>Total</b>		<b>\$6,750,000</b>	
<b>Distribution</b>			
Black Locust Drive	Construct a 16" water line along Black Locust Drive from 1000 feet west of Golden Eagle to 120 feet east of Gazania	\$394,000	2014/2015
Black Locust to Wilke Ridge Lane Transmission Main	Construct a 16" Transmission Main	\$763,400	2014/2015
Pflugerville Parkway 16" Transmission Main (Wilke Lane to Heatherwilde Blvd)	Construct a 16" Transmission Main (Wilke Lane to Heatherwilde Blvd)	\$451,200	2014/ 2015
Pflugerville Parkway 16" Transmission Main Connection (Heatherwilde to Regis)	Construct a 16" Transmission Main (Heatherwilde Blvd. to Picadilly)	\$505,800	2014/ 2015
Pflugerville Parkway 16" Transmission Main (West Meter to Great Basin to Mammoth Cave Drive)	Construct a 16" Transmission Main (West Meter to Great Basin to Mammoth Cave Drive)	\$159,740	2014/ 2015

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Table 3 – Water Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/Construct
Transmission Main connection at Pflugerville Parkway and Heatherwilde Blvd	Construct a 8” Transmission Main connection	\$58,680	2014/ 2015
Transmission Main connection along Regis Drive from Pflugerville Parkway to Dansworth Drive	Construct a 12” Transmission Main (Regis Drive from Pflugerville Parkway to Dansworth Drive)	\$81,500	2014/ 2015
Transmission Main connection along New Meister Lane from MKT ROW to Timothy John Dr.	Construct a 8” Transmission Main (New Meister Lane from MKT ROW to Timothy John Drive)	\$166,260	2014/ 2015
Kelly Lane Transmission Main	Construct a 24” Transmission Main along with the Kelly Lane Road Construction project (SH 130 to western-most intersection of Falcon Pointe Blvd)	\$750,000	2013/2014
Weiss Transmission Main	Construct a Transmission Main from the Water Treatment Plant to the Sorento Development	\$1,712,000	2014/ 2015
SH 45 Interconnect	Bore 900 Linear Feet of 24” Water Line Under SH 45 to provide water service to properties north and east of SH 45 and SH 130	\$848,000	2019/2020
South Weiss Transmission Main	Construct a Transmission Main from the Water Treatment Plant to Wilbarger Creek	\$1,285,000	2015/2016
<b>Total</b>		<b>\$7,173,580</b>	
Miscellaneous System Improvements			
Downtown Pressure Zone Re-delineation	Install Pressure Relief Valves (PRVs) and Check Valves for Pressure and Proper Flow	\$225,000	2014
2015 Water Treatment Plant Membrane Replacement	Install two new trains at the Water Treatment Plant to increase capacity and provide maintenance to plant’s operations	\$1,900,000	2015
2016 Water Treatment Plant Membrane Replacement	Install one new train at the Water Treatment Plant to increase capacity and provide maintenance to plant’s operations	\$950,000	2016
Manville Connection to Water Treatment Plant	Construct a metered take point and 12” pipeline to connect the Manville pipeline at Weiss Lane and Pflugerville Parkway to the Water Treatment Plan	\$400,000	2014

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Table 3 – Water Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/Construct
Pecan Street Parkway Drive Interconnect	Bore a 12" interconnection under Pecan Street to interconnect with system acquired from Austin	\$318,000	2014
<b>Total</b>		<b>\$3,793,000</b>	
<b>WATER TOTAL 5-YR CIP</b>		<b>\$25,875,125</b>	

**WASTEWATER**

By completing the expansion the Central WWTP to 6.9 million gallons per day (MGD) by fiscal year 2019, the construction of another regional wastewater treatment facility to serve the Wilbarger and the Cottonwood watershed basins can now be deferred well beyond the 5-year utility CIP to approximately the year 2034. The final design and construction of another regional wastewater treatment facility up to 25 MGD east of SH 130 and corresponding wastewater interceptor lines may be deferred until such time the City reaches 75% capacity at the Central WWTP. Please refer to the table below for the recommended wastewater utility projects and the proposed years of design and construction.

Table 4 – Wastewater Utility Projects			
Project Name	Project Description	Total Cost Estimate	Design/Construct
Rowe Loop Wastewater Service Extension	Increase service and line capacity along Rowe Loop	*\$850,000	2013/2014
Central WWTP Expansion	Increase capacity at the WWTP to 6.9 MGD	*\$8,265,000	2017/2019
Sorento/ Carmel Lift Station and Force Main	Construct a Collection/Transmission Line per development agreement	\$5,129,672	2014/2015
Sorento Wastewater Interceptor	Install a 36" Collection and Transmission Line	\$4,189,026	2014/2015
Lakeside Wastewater Interceptor Phase 1	Install a 18" Collection and Transmission Line	\$887,522	2016
SH 45/ SH 130 Tunnel	Extend Service Area to the North of SH 45	\$803,800	2016
5-Year Impact Fee and CIP Update	Perform Strategic Planning Efforts to Update the Impact Fees and CIP	\$256,000	2018
New Sweden Package Treatment Plant	Install a 0.475 MGD package treatment plant	\$2,200,000	2017
Wastewater Master Plan Update	Perform Strategic Planning Efforts to Update the Wastewater Master	\$230,000	2018
<b>WASTEWATER TOTAL</b>		<b>\$22,811,020</b>	

\*Design funded in fiscal year 2012.

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**UTILITY 5-YR CIP SUMMARY:**

The proposed water and wastewater utility projects referenced in the proposed 5-YR CIP total approximately \$49 million dollars. It is important to note that the construction of the utility projects will require additional funding aside from Utility Fund Balance and capital recovery fees. The City will need to issue CO bonds for the construction of these projects.

**STAFF RECOMMENDATION:**

Staff recommends that the development of a bond program for the listed GO Bond roadway projects referenced in Table 1. Funding for projects listed in Table 2 can originate from CO's or GO's, grant funding, economic development agreements and the General Capital Reserve. The roadway projects have not been ranked by staff, however the Commission may choose to rank such proposed roadway projects in order of preference. Also, staff recommends the 5-YR Utility CIP as provided in the Tables 3 and 4.

Please note, these recommendations are based on evaluated needs and do not reflect a fiscally constrained Capital Improvement Plan; rather they fulfill the requirement that the Commission provide a project list in order of preference with a recommendation for year of construction.

**ATTACHMENTS:**

- Project Locator Map For Roadway Projects
- (Additional graphics will be provided in the presentation)