# MINUTES OF THE WORK SESSION BOARD OF MAYOR AND ALDERMEN FRANKLIN, TENNESSEE CITY HALL BOARDROOM TUESDAY, AUGUST 9, 2011 – 5:00 P.M.

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Board Members			
Mayor Ken Moore	Р	Alderman Margaret Martin	Р
Alderman Clyde Barnhill	Р	Alderman Dana McLendon	Р
Alderman Pearl Bransford	Р	Alderman Ann Petersen	Р
Alderman Beverly Burger	Р	Alderman Michael Skinner	Р
Department Directors/Staff			
Eric Stuckey, City Administrator	Р	Eric Gardner, Engineering Director	Р
Vernon Gerth, ACA Community & Economic Development	Р	Shirley Harmon, HR Director	Ρ
Russell Truell, ACA Finance & Administration	Р	Mark Hilty, Water Management Director	Ρ
David Parker, CIP Executive/City Engineer	Р	Gary Luffman, BNS Director	Ρ
Kristen Corn for Shauna Billingsley, City Attorney	Р	Catherine Powers, Planning/Sustainability Director	
Rocky Garzarek, Fire Chief		Joe York, Streets Director	
David Rahinsky, Police Chief	Р	Brad Wilson, Facilities Project Manager	
Fred Banner, MIT Director	Р	Lanaii Benne, Assistant City Recorder	Р
Becky Caldwell, Solid Waste Director		Linda Fulwider, Board Recording Secretary	Р
Lisa Clayton, Parks Director	Р	. ,	

#### 1. Call to Order

Mayor Ken Moore called the August 9, 2011 Work Session to order at 5:00 p.m. in the City Hall Boardroom.

## 2. Citizen Comments

None

#### WORK SESSION DISCUSSION ITEMS

## 3. Status Update on Clovercroft School and Related Infrastructure

## Eric Stuckey, City Administrator

- Eric Stuckey gave a brief overview noting the new school opens in a few days. Many infrastructure improvements made; however, the signal has yet to be installed. In the meantime, Williamson County will provide officers during student arrival and departure times.
- Vernon Gerth said curbing, etc., and the signal should be completed within the next 60 days. Within the next 1-2 years, improvements will be made at McEwen and Wilson Pike.
- Eric Gardner mentioned the Resolution allowed additional funding. The designer has been directed to move forward with the design that includes bridge design. This should be on schedule to have the money committed by October 2012. The design selected will minimize the amount of rework needed for Phase 4.

# 4. Presentation on Water Treatment/Distribution Update

## Zack Daniel and Kati Bell, CDM

Presentation focused on Water Treatment/Distribution Updates:

- Franklin IWRP Phase II Work Plan reviewed
- City of Franklin Water Districts: City of Franklin, Mallory Valley, HBTS, Milcrofton, Brentwood
- Water Demand Graph showing Water Treatment Plant Existing Capacity @ 2MGD and Projected 30 year Water Demand

- Water Supply Graph showing Monthly Volume per 1,000 gallons: Water Treatment Plant Production, HVUD Purchase, and Total Water Distribution
- Overview of Facility Locations on the Harpeth River including Existing Wastewater Treatment Plant, Existing Water Treatment Plant, and Potential Wastewater Treatment Plant
- Decreasing Demand and Increasing Supply
  - ° Conservation measures and addressing water losses
  - ° Reservoir management and indirect potable reuse

## **Enhanced Surface Water Treatment Rule**

- The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR), promulgated January 5, 2006, addresses control of microbial pathogens; implications are primarily on the WTP
  - ° The LT<sub>2</sub>ESWTR requires systems to conduct source water monitoring to determine Cryptosporidium concentrations
  - Systems are then classified into BINS each with specific treatment requirements; Franklin is in BIN2
- Options for meeting compliance by October 2012 include:
  - ° Operations management practices
  - ° UV disinfection
  - ° Membrane filtration
  - ° Other options in the LT2ESWTR Toolbox

#### **Disinfection Byproduct Rule**

- EPA finalized the Stage 2 DBPR in the Federal Register on January 4, 2006 with the following requirements:
  - ° An Initial Distribution System Evaluation (IDSE) to identify compliance monitoring locations that represent high total trihalomethanes (TTHM) and haloacetic acids (HAA5) concentrations throughout the distribution system
  - ° Use of a locational running annual average (LRAA) calculated for each monitoring location in the distribution system for TTHM and HAA5 to determine compliance with the Stage 2 DBPR maximum contaminant levels (MCLs) for TTHM and HAA5
- Compliance with the LRAA is required by October 2012 (for Schedule 2 systems) with TTHM <80 ug/L and HAA <60 ug/L

#### Secondary MCLs – Taste and Odor

- EPA has National Secondary Drinking Water Regulations for non-mandatory water quality standards, including odor
- EPA does NOT enforce "secondary maximum contaminant levels" (SMCLs) because there is no risk to human health
- Taste and Odor
  - ° Caused by geosmin and methylisoborneol (MIB)
  - ° Odor threshold 10 and 29 ng/L (parts per TRILLION)
  - ° Origin is blue-green algae in source water
  - ° Treatment options
    - Activated carbon (limited)
    - Ozone-Enhanced Biofiltration (AWWA, 2005)
    - Advanced oxidation (can design for >99% removal)

## Water Treatment Plant Improvements Costs

	Ungrado Evicting	4.0 mgd 7	Freatment Alternati	ve
ltem	Upgrade Existing — 2.1 mgd WTP	No. 1 (Conventional)	No. 2 (DAF)	No. 3 (Membranes)
Raw Water P.S. w/Travelling Water Screen	\$ 1,330,000	\$ 1,330,000	\$ 1,330,000	\$ 1,330,000
Replace or Upgrade Existing Flocculation Equipment	\$ 50,000	\$ 50,000		\$ 50,000
Upgrade Existing Settling Basin Nos. 1, 2, & 3	\$ 340,000	\$ 340,000		
Construct Settling Basin Nos. 4 & 5		\$ 2,040,000		
Add DAF to Existing Settling Basin No. 3			\$ 2,480,000	
Upgrade Existing Filters	\$ 1,530,000	\$ 1,530,000	\$ 1,530,000	
Replace 2 mgd Clearwell Transfer Pump with 4 mgd Pump		\$ 260,000	\$ 260,000	
Convert Existing Filters to Membranes				\$ 6,500,000
Replace 2 mgd High Service Pumps with 4 mgd Pump		\$ 760,000	\$ 760 <b>,</b> 000	\$ 760 <b>,</b> 000
Upgrade Existing Chemical Feeders	\$ 40,000	\$ 70,000	\$ 70,000	\$ 70 <b>,</b> 000
Sitework and Buried Piping		\$ 750,000	\$ 750,000	\$ 750,000
Subtotal	\$ 3,290,000	\$ 7,130,000	\$ 7,180,000	\$ 9,460,000
Optional UV Disinfection System	\$ 684,000	\$ 684,000	\$ 684,000	\$ 684,000
Optional AOP Adder	\$ 750,000	\$750 <b>,</b> 000	\$ 750 <b>,</b> 000	\$ 750,000
Project Total with UV and AOP Option	\$ 4,724,000	\$ 8,564,000	\$ 8,614,000	\$ 10,894,000
Legal, Technical, and Other Costs (15%)	\$ 709,000	\$ 1,285,000	\$ 1,292,000	\$ 1,634,000
Project Total	\$ 5.4 M	\$ 9.8 M	\$ 9.9 M	\$ 12.5 M

## Hydraulic Model of Distribution System Map reviewed

- High water age near tanks and dead-end mains
- Low tank turnover due to high pressures from HVUD
- Tanks in south are more difficult to fill than tanks in northern part of service area

#### HVUD and City of Franklin Hydraulic Grade Chart reviewed

## **Distribution Systems Options**

- Install PRVs at HVUD supply points
  - ° Regulate high pressures
  - ° Can be adjusted seasonally
- Evaluate tanks with low turnover
- Install booster pump station to serve elevated area
- Install mains or add booster pumping to improve ability to fill tanks in south
- Flush dead-end mains
- Verify existing hydraulic model with field testing

#### Next Steps

- Incorporate results of analyses into integrated model
  - ° Water demand reduction options
  - ° Water supply options
  - ° Water treatment plant improvements options
  - ° Distribution system improvement options
- Staff to consider compliance options for LT2 and DBPR
- Additional BOMA Updates
  - ° August 23<sup>rd</sup> Collection System/Wastewater/Biosolids Update
  - September 13<sup>th</sup> Technical Analysis Summary
     September 28<sup>th</sup> Stakeholder Workshop (Tentative)
- 5.\* Consideration of ORDINANCE 2011-29, An Ordinance to Amend Title 22, Chapter 18, to Establish New Water Rates and Sanitary Sewer User Rates; Establishing a Public Hearing for August 23, 2011
- 6. Consideration of RESOLUTION 2011-32, the Estimate of Revenues and Expenditures for the Water and Sewer Utility Fund, Fiscal Year 2011-2012 and Fiscal Year 2012-2013
- Consideration of RESOLUTION 2011-33, a Five Year Financial Plan for the Water, Sewer, and Reclaimed Water Utility Fund, Fiscal Year 2012-2013 Through Fiscal Year 2016-2017

## Mark Hilty, Water Management Director

Eric Stuckey noted the presentation was given to the Budget & Finance Committee at their last meeting. Mark Hilty presented the following:

#### Water and Sanitary Sewer Funds

• The water and sanitary sewer enterprise funds are established to account for operations and capital investments. The expenditures associated with providing services to customers on a continuing basis are recovered solely though user charges and development fees.

#### Financial Planning Path

- Cost of Service Analyses 2007, 2009 & 2010
  - ° Rate Funded Capital
  - ° Operations Reserve
  - ° User Charges
- Biennial Budgeting and Financial Plans
- Development Fee Evaluation in progress
- Integrated Water Resources Planning
- Cost of Service Analyses FY 2012 (inclusive of Reclaimed Water)

## **Budget Overview**

- Operations Revenues
- Operations Expenditures
  - Operations Capital
  - Rate Funded Capital

• Proposed Rate Adjustments

## Water and Sanitary Sewer Revenue

- Water consumption declined from 2005 through 2010
- Sanitary Sewer service declined from 2008 through 2010
  - ° Variable consumption
  - ° Rate adjustments

#### Water Sales Revenues

• Bar graphs reviewed for Sales (Gallons) and Sales Revenues (\$)

## Water and Sanitary Sewer Expenditures (Spreadsheet reviewed)

- Water Section: Actual 2009, Actual 2010, Budget 2011, Estimated 2011, and Budget 2012
- Water Section: Budget 2013, and Forecasts 2014, 2015, 2016, and 2017
- Wastewater Section: Actual 2009, Actual 2010, Budget 2011, Estimated 2011, and Budget 2012
- Wastewater Section: Budget 2013, and Forecasts 2014, 2015, 2016, and 2017

Water Operation & Maintenance Expenditures Budget 2012

\$205,875
\$202,496
\$438,500
\$1,279,276
\$150,800
\$3,300,000
\$256,310
\$1791 <b>,</b> 686

Wastewater Operation and Maintenance Expenditures Budget 2012						
Contractual Services	\$668,075					
Debt Service	\$1,105,010					
Operation & Maintenance Expenses	\$441,800					
Other	\$1,901,237					
Repair & Maintenance Services	\$233,550					
Utilities	\$1,451,200					
Personnel	\$3,267,741					

#### Water & Sanitary Sewer Capital Expenditures

- Operations Capital
  - ° Vehicles, equipment
- Rate Funded Capital
  - ° Infrastructure replacement and rehabilitation

## Summary of Operations Capital Expenditures Per Division

	Budget	Projected	Projected	Projected	Projected	Projected
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Utility Administration	\$52,000	\$0	\$0	\$0	\$0	\$0
VEHICLES	\$52,000	\$0	\$0	\$0	\$0	\$0
Utility Billing	\$0	\$28,000	\$0	\$0	\$0	\$0
MACHINERY & EQUIPMENT	\$0	\$28,000	\$0	\$0	\$0	\$0
Wastewater Collection	\$210,000	\$425,000	\$140,000	\$85,000	\$250,000	\$30,000
COMPUTER SOFTWARE	\$0	\$0	\$0	\$0	\$0	\$0
MACHINERY & EQUIPMENT	\$105,000	\$350,000	\$115,000	\$0	\$250,000	\$30,000
VEHICLES	\$105,000	<b>\$</b> 75 <b>,</b> 000	\$25 <b>,</b> 000	\$85 <b>,</b> 000	\$0	\$0
Wastewater Treatment	\$389,000	\$640 <b>,</b> 000	\$235 <b>,</b> 000	\$465 <b>,</b> 000	\$397,000	\$100,000
MACHINERY & EQUIPMENT	\$311,000	\$640,000	\$235,000	\$465,000	\$397,000	\$100,000
VEHICLES	\$78,000	\$0	\$0	\$0	\$0	\$0
Water Distribution	\$139,000	\$208,000	\$30,000	\$30,000	\$50 <b>,</b> 000	\$50,000
MACHINERY & EQUIPMENT	\$50,000	\$88,000	\$0	\$0	\$50 <b>,</b> 000	\$50,000
VEHICLES	\$89,000	\$120,000	\$30,000	\$30,000	\$0	\$0
Water Treatment	\$320,000	\$225,000	\$200,000	\$60,000	\$0	\$0
BUILDING IMPROVEMENTS	\$45,000	\$0	\$200,000	\$60,000	\$0	\$0
MACHINERY & EQUIPMENT	\$275,000	\$225 <b>,</b> 000	\$0	\$0	\$0	\$0
TOTAL	\$1,110,000	\$1,526,000	\$605,000	\$640,000	\$697,000	\$180,000

## Sample Rate Funded Capital Priority Projects

WATER	SANITARY SEWER
Booker Trailer Park Water Line Replacement	<ul> <li>West Main Street Sanitary Sewer Line Replacement; in coordination with Water Replacement Project</li> </ul>
Old Carters Creek Pike Water Line Replacement; Downs Boulevard to Approximately Incinerator Road	• 11 <sup>th</sup> Avenue at Boyd Mill
Old Peytonsville Road Water Line Replacement; Interstate Crossing to Goose Creek Bypass	Frasier Drive Sanitary Sewer Rehab
Bobby Drive Water Line Replacement; Hillsboro Road to Overlook Drive	Evans Street Sanitary Sewer Replacement/Rehab
Forrest Street Water Line Replacement; Brookwood to West Main Street	North Petway Sanitary Sewer Replacement/Rehab
Advanced Metering Infrastructure	<ul> <li>South Margin; Sanitary Sewer Line Replacement from 1<sup>st</sup> Avenue to 5<sup>th</sup> Avenue</li> </ul>
West Main Street Water Line Replacement in Coordination with Sanitary Sewer Replacement Project	South Margin 2 <sup>nd</sup> Avenue to 5 <sup>th</sup> Avenue
Berry Circle Water Line Replacement	Eastview Circle Sanitary Sewer Line Replacement

## **Cost of Service Curves**

• Residential Inside – Cost Curve/Kgal and Residential Inside Cost Curve/Kgal reviewed

## <u>Proposed Water and Sanitary Sewer Rate Adjustments</u>

- Consistent with 5-Year approach established by BOMA in October 2010
- Proposed changes target availability charges which is the largest area of under-recovery
  - ° Reduces the fluctuation of revenues due to variables that drive consumption and stabilizes revenues to cover fixed costs

Proposed Water Rate Design to Achieve Approximately 4% Revenue Increase

Water-Residential Inside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$14.94 (\$10.71+\$4.23)	\$8.82	\$10.42	\$1.60
Next 9,000 Gallons		\$3.72	\$3.72	\$0.00
Next 15,000 Gallons		\$4.65	\$4.65	\$0.00
All Additional		\$5.58	\$5.58	\$0.00
Water-Residential Outside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$15.12 (\$10.84+\$4.28	\$10.82	\$12.42	\$1.60
Next 9,000 Gallons		\$5.80	\$5.80	\$0.00
Next 15,000 Gallons		\$6.38	\$6.38	\$0.00
All Additional		\$6.96	\$6.96	\$0.00
Water-Commercial Inside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$18.66 (\$14.46+\$4.20)	\$11.61	\$13.21	\$1.60
Next 9,000 Gallons		\$3.72	\$3.72	\$0.00
Next 15,000 Gallons		\$4.65	\$4.65	\$0.00
All Additional		\$5.58	\$5.58	\$0.00
Water-Commercial Outside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$19.89 (\$15.54+\$4.35)	\$12.41	\$14.01	\$1.60
Next 9,000 Gallons		\$5.80	\$5.80	\$0.00
Next 15,000 Gallons		\$6.38	\$6.38	\$0.00
All Additional		\$6.96	\$6.96	\$0.00

Proposed Rate Design to Achieve 7% Revenue Increase

Wastewater-Residential Inside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$24.82 (\$21.56+\$3.26	\$12.30	\$14.55	\$2.25
Next 14,000 Gallons		\$3.61	\$3.61	\$0.00
All Additional		\$2.82	\$2.82	\$0.00

Wastewater-Residential Outside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$22.94 (\$19.68+\$3.26)	\$15.21	\$19.21	\$4.00
Next 14,000 Gallons		\$5.62	\$5.62	\$0.00
All Additional		\$4.47	\$4.47	\$0.00

Wastewater-Commercial Inside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$46.87	\$21.00	\$29.00	\$8.00
	(\$43.52+\$3.35	\$21.00	\$29.00	\$0.00
Next 14,000 Gallons		\$4.42	\$4.42	\$0.00
All Additional		\$3.43	\$3.43	\$0.00

Wastewater-Commercial Outside	Cost of Service	Current	Proposed	Difference
Availability Charge (plus 1,000 Gallons Included)	\$40.81	\$23.00	\$31.00	\$8.00
	(\$37.46+\$3.35)	\$23.00	\$31.00	\$0.00
Next 14,000 Gallons		\$6.91	\$6.91	\$0.00
All Additional		\$5.02	\$5.02	\$0.00

## Water Rate Comparison

• Reviewed bar graph of COF rates compared to HVUD, MVUD, Brentwood, NCGUD, MUD, & HB&TS. The average (not including COF current) is \$12.16 per 1,000 gallons, \$37.57 per 7,000 gallons.

## Wastewater Rate Comparison

• Reviewed bar graph of COF rates compared to HVUD and Brentwood. The average (not including COF current) is \$14.70 for 1,000 gallons, and \$43.37 for 7,000 gallons

## Proposed Reclaimed Water Rate Adjustment

- Reclaimed water is an alternative disposal method of treated sanitary sewer which provides a source of revenue to sustain its operation
- \$0.10 proposed increase to reclaimed water user fee
- FY 2012 Cost of Service Analysis
- The City has about 40 reclaimed water customers

#### **ARRA Proceeds**

	Water (Reservoir)	Wastewater (Country Road, Boyd Mill, Simmons Ridge)	Reclaimed (West, Downs Boulevard	Total
FY 2010	\$2,348,557	\$310,677	\$44,580	\$2,703,814
FY 2011	<u>\$151,443</u>	<u>\$777,914</u>	<del>\$774,</del> 937	<u>\$1,704,294</u>
Total	\$2,500,000	\$1,088,591	\$819,517	\$4,408,108
Principal Forgiveness	\$1,000,000	\$435,436	\$327,807	\$1,763,243
Loan to be Repaid	<u>\$1,500,000</u>	<u>\$653,155</u>	<u>\$491,710</u>	<u>\$2,644,865</u>
Total	\$2,500,000	\$1,088,591	\$819,517	\$4,408,108

## **Revenue Assumptions**

- Water Growth of 1%/year; rate increased 2% through FY 15, then 1% for 16/17
- Sewer Growth of 1%/year; rate increased 4% through FY 15, then 2% for 16/17

## Sanitary Sewer Service Revenues

• Bar graphs for Sales (gallons) and Sales Revenue (\$) through 2017 presented

#### Water Section Operation & Maintenance Expenditures Budget 2011

Contractual Services	<b>\$111,</b> 688
Debt Service	\$410,587
Operation & Maintenance Expenses	\$416,425
Other	\$1,185,465
Repair & Maintenance Services	<b>\$122,9</b> 00
Supplies for Resale	\$3,300,000
Utilities	\$238,250

## Water Section Operation & Maintenance Expenditures Budget 2012

Contractual Services	\$205,875
Debt Service	\$202,496
Operation & Maintenance Expenses	\$438,500
Other	\$1,279,276
Repair & Maintenance Services	\$150,800
Supplies for Resale	\$3,300,000
Utilities	\$256,310

## Water Section Operation & Maintenance Expenditures Budget 2013

Contractual Services	\$21,000
Debt Service	\$ 191,321
Operation & Maintenance Expenses	\$440,050
Other	\$1,208,347
Repair & Maintenance Services	\$121,800
Supplies for Resale	\$3,400,000
Utilities	263,350

#### get 2011 Waster

eration & Maintenance Expenditures Budget 2012
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Contractual Services	\$668,075
Debt Service	\$1,105,010
Operation & Maintenance Expenses	\$441,800
Other	\$1,901,237
Repair & Maintenance Services	\$233,550
Utilities	\$1,451,200

#### Wastewater Section Operation & Maintenance Expenditures Budget 2011

Contractual Services	\$492,087
Debt Service	\$ 1,760,367
Operation & Maintenance Expenses	\$422,400
Other	\$1,319,590
Repair & Maintenance Services	\$236,750
Utilities	\$1,356,710

## Wastewater Section Operation & Maintenance Expenditures Budget 2013

Contractual Services	\$169 <b>,</b> 800
Debt Service	\$\$1,101,801
Operation & Maintenance Expenses	\$432,156
Other	\$1,817,898
Repair & Maintenance Services	\$233,350
Utilities	\$1,510,076

Propose a 10-cent rate increase for Reclaimed Water. Alderman Petersen requested discussion on the difference in rates for water reconnection service.

8. Consideration of RESOLUTION 2011-37, Authorizing the City of Franklin's Joint Participation with Williamson County Regarding Joint Bids on Delinquent Tax Items

Shauna Billingsley, City Attorney

Kristen Corn noted the City and County are working together.

9.\* Consideration of RESOLUTION 2011-38, a Resolution Authorizing The City of Franklin, Tennessee to Participate in the TML Risk Management Pool "Safety Partners" Loss Control Matching Grant Program

Shirley Harmon, Human Resources Director Rodney Escobar, Risk Manager

The City has participated for several years.

10.\* Consideration of COF Contract #2011-0110, a Grant Agreement from National Park Service for Battlefield Acquisition-Lorings Advance Tract

Catherine Powers, Planning & Sustainability Director

City acts as a pass through and has done so numerous times.

11.	Consideration of COF Contract #2011-0111, an Interlocal Agreement Between The City of Franklin, Tennessee and Williamson County, Tennessee Concerning Performance Surety  Catherine Powers, Planning & Sustainability Director
	This codifies improvements by Williamson County and does not cover the school district.
12.	Consideration of Inter-Planning Commission Review of a Preliminary Plat for Watkins Creek Subdivision, Section 5, Containing 5 Lots on 41.85 Acres, Located Off North Chapel Road  Alderman Ann Petersen, FMPC Board Representative
	No questions or comments
13.	Consideration of Program Year 2011-12 Emergency Shelter Grant Contract with Tennessee Housing Development Agency (Contract #2011-0114)  Vernon Gerth, ACA Community & Economic Development  Kethlese Saves de Jetavier Development Constitutors
	Kathleen Sauseda, Interim Housing Development Coordinator No questions or comments
	ADJOURN
	Work Session adjourned 6:29 PM.

Minutes prepared by: Linda Fulwider, Board Recording Secretary, City Administrator's Office - 11/22/2011 3:21 PM

Mayor Ken Moore