

**Town of Thompson's Station
Utility Board
Meeting Agenda
October 16 2019**

1. Call Meeting To Order

2. Consideration Of The Minutes Of The August 21, 2019 Meeting (September Meeting Was A Workshop)

Documents:

[UTILITY BOARD MINUTES 08_21_2019.PDF](#)

3. System Operator's Report

4. Update On Hill Property Drip Construction

5. I&I Investigation Update

6. Tap And Future Capacity Needs Discussion

Documents:

[TS FUTURE TAP REQUIREMENTS.PDF](#)

7. Wastewater Master Plan Follow Up

Documents:

[DRAFT_T_STATION_WW_ALTERNATIVES_101519.PDF](#)

8. Wastewater Fund Financials – As Of Sep 30, 2019

Documents:

[WW FINANCE REPORT.PDF](#)

9. Announcements

10. Adjourn

*This meeting will be held at 6:00 p.m. at the Thompson's Station Community Center
1555 Thompson's Station Rd West*

**Town of Thompson's Station
Utility Board
Meeting Minutes
August 21, 2019 6:00 p.m.**

Call to Order:

The meeting of the Utility Board of the Town of Thompson's Station was called to order at 6:00 p.m. on August 21, 2019 at the Thompson's Station Community Center with the required quorum. Members and staff in attendance were: Chairman Jeff Ridsen, Alderman Brian Stover, Bruce DiFrancisco, John Peterson, Brad Wilson, Finance Director Steve Banks and Town Attorney Kirk Vandivort.

Minutes:

Consideration of the minutes of the June 19, 2019 regular meeting were presented.

Mr. Brian Stover made a motion to approve the June 19, 2019 regular meeting minutes. The motion was seconded and carried unanimously.

1. System Operators Update/Cell 1 Update:

Brandon Haskins updated the Utility Board Members on the status of Cell 1. He said levels for Cell 1 is about the same as it has been. Offsite bush hogging has been completed to look for any I & I issues but none were identified. Telemetry has been approved to put on lift stations and this should be helpful for monitoring.

2. Update on Hill Property Drip Project:

Matthew Johnson with Barge Designs informed the Utility Board that BOMA had approved W & O Construction Co. as low bidder on this project and a contract has been approved by BOMA. The contract is in the process of being executed at this time. TDEC has issued a permit and it is under public notice until the end of the month. Barring any complications it should be finalized by the end of the month. A Pre-Construction meeting will be held Wednesday, August 28th with Barge, W & O Construction and Town Staff. The date for the notice to proceed should be approximately September 1st, with five months to completion of said project, otherwise liquidated damages will be assessed. Barge will follow up with TDEC identifying any issues with the public hearing. Once the project starts, W & O Construction will have 210 or 240 days (intermediate milestone) 150 days to get the drips installed otherwise liquidated damages will be assessed. Brian Stover ask how many taps would be available upon completion of said project. Matthew with Barge Design estimates 180 – 200 taps would be available upon completion. There will be no performance bonuses for work completed ahead of time. Barge did discuss with the Project Manager of W & O Construction Company if they would entertain completing the repairs on Cell 1 as a change order. The project manager did agree to repairing cell 1. Brian Stover ask Matthew if W & O would entertain pump and hauling of Cell 1 and was advised that the cost could run into millions of dollars. He is concerned that that this is going to run into the summer of next year. He would like to have the cell pumped down and complete repairs before December. He also suggested that we obtain quotes just to be safe. Matthew with Barge said they could look into obtaining quotes for the pump and haul of Cell 1. Jeff Ridsen feels that once the drip project is complete the problems should begin to take care of itself.

Whistle Stop Pipe Line letter of town to accompany TDEC approval should be forthcoming. On site sewer system work between site and work main on Hay 31 have not seen anything yet.

3. I & I Investigation

A motion was made by to approve a task order from the Town. Six tasks have been identified 1. Look lift station operation, run time at lift stations, review map where all low lying areas are 3. Obtain Utility Board member comments to enable BOMA agenda. Each layer of bonding remain in place until project is completed.

Reach out to comcast, unusual where they were working. 4. Smoke testing iin those areas.

Looking at HBTS water info to discuss any data water loss. Constant source independent of rainfall obtain conversations on smoke tests.

Flow monitoring data smoke testing cct investigation find where defects are.

4. Drafted Memorandum of Understanding for the Littlebury Project.

Pleasant Creek BOMA approved system Bio-Clere for SBR system in Pleasant Creek

A motion was made by to recommend the substitution of the Bio-clere system instead of the SBR system that BOMA had already approved. A motion was made by to recommend the substitution of a Bio-clere System instead of the SBR system for the Pleasant Creek Project. to BOMA Pleasant Creek to dates lot delivery bio cler e system be stbstituted for the Pleasant Creek plan of service. BOMA had already approved for SBR. On site system.

5. Master Plan Work Session.

A motion was made by to change the September meeting to a Work Session/Utility Board meeting with a time change of 5:30 p.m. 8:00 p.m. with the majority of the time for discussion of the Barge Design Master Plan. The motion was seconded and carried unanimously.

New Business:

6. Alexander Property Soil Testing

A motion was made by to proceed with the recommendation to move forward on the Alexander Property Soil Testing and to submit a solicitation for formal bids for surveying and soil testing on said property. The motion was seconded and carried unanimously.

Announcements:

7. New Board Member Recommendation

A motion was made by to make the recommendation that Skip Beasley fill the Vacant Utility Board position and to forward this recommendation to BOMA for their approval.

Adjourn:

There being no further business, the meeting adjourned at 8:10 p.m.

Chairman, Jeff Riden

Thompson's Station Future Tap Requirements

	2020 - 1	2020 - 2	2020 - 3	2020 - 4	2021 - 1	2021 - 2	2021 - 3	2021 - 4	2022 - 1	2022 - 2	2022 - 3	2022 - 4	2023 - 1	2023 - 2	2023 - 3	2023 - 4	2024 - 1	2024 - 2	2024 - 3	2024 - 4	2025 - 1	2025 - 2	2025 - 3	2025 - 4	2026 - 1	2026 - 2	2026 - 3	2026 - 4	
Canterbury	0	0	106	0	0	139	0	0	0	22	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Station Hill	0	0	0	0	0	0	50	0	0	0	50	0	0	0	50	0	0	0	50	0	0	0	50	0	0	0	35	0	
Littlebury	32	0	0	0	37	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Whistle Stop	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roderick Place	0	0	59	0	0	208	0	0	0	0	13	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	
Twice Daily	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Parson's Valley	0	0	0	0	90	0	0	0	63	0	0	0	72	0	0	0	38	0	0	0	43	0	0	0	47	0	0	0	
Holt Property	0	0	0	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tollgate Village	74	41	12	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avenue Downs	0	0	0	0	0	0	0	0	0	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pleasant Creek	0	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	100	0	0	0	0	0	0	0	
Total	108	41	177	266	227	347	50	100	185	22	63	100	241	53	61	0	138	0	50	0	143	0	50	0	47	0	35	0	
Capacity @ 250	27000	10250	44250	66500	56750	86750	12500	25000	46250	5500	15750	25000	60250	13250	15250	0	34500	0	12500	0	35750	0	12500	11750	11750	0	8750	0	
Capacity @ 350	37800	14350	61950	93100	79450	121450	17500	35000	64750	7700	22050	35000	84350	18550	21350	0	48300	0	17500	0	50050	0	17500	0	16450	0	12250	0	
Annual Capacity @ 250				148000				181000				92500				88750				47000				60000				20500	637750
Annual Capacity @ 350				207200				253400				129500				124250				65800				67550				28700	876400

NOTES:

* Avenue Downs represents the 69 taps that will go to Canterbury to reimburse the transfer of taps from Canterbury to Avenue Downs.

** This list only contemplates when plats for each phases will be presented to the town. On average, the town issues 200-250 building permits per year so while capacity will be committed upon signing the plats, not all capacity will be utilized within the calendar year.

*** Whistle Stop does not include the 46 lots that will connect to Heritage Commons TF. At some point those lots will connect to the Regional Plant when capacity is available.

**** Does not factor in any additional development that has not been presented to the town at this point for consideration.

Existing Capacity	Current Flow
280,000	297,000
Permitted Capacity	
470,000	
Disposal Capacity with Hill Property Drip Fields	
520,000	
Potential Disposal Capacity with Alexander Property Drip Fields (ESTIMATE at 40 usable acres)	
920,000	
Average Capacity Requirement per Building Permits	
@ 250 gpd	50,000 to 62,500 gpd
@ 350 gpd	70,000 to 87,500 gpd

Received on 10/15/19, not reviewed by Town Staff



Thompson's Station, Tennessee

Wastewater Treatment Plant Alternatives Evaluation

October 16, 2019

Paul Bizier, P.E.
Matthew Johnson, P.E.



WWTP Comparison

OPTION 1:

Construct new MBR at Regional WWTP

- Expand to 1.5 MGD

OPTION 2:

Build New Third Regional WWTP

- Expand 1.0 MGD Existing Regional Plant
- Construct 0.6 MGD New Third Plant

Option 1 – Construct New MBR at Regional Plant

Capital Costs*

- Regional WWTP Upgrades (to 1.0 MGD) - \$14,196,000
- Alexander Property Effluent Disposal - \$9,769,000
- Future Regional WWTP Expansion (Add'l 0.5 MGD) - \$7,190,000
- Additional Effluent Disposal - \$10,151,000

Total Cost: \$41,306,000

*Account for contingency and soft costs

Option 2 – Build New Third Regional WWTP

Capital Costs*

- Regional WWTP Upgrades (to 1.0 MGD) - \$14,196,000
- New 0.3 MGD WWTP - \$5,359,000
- Alexander Property Effluent Disposal - \$9,769,000
- Additional Effluent Disposal (serve existing Regional WWTP) - \$12,986,000
- Future 0.3 MGD WWTP Upgrade - \$4,834,000

Total Cost: \$47,144,000

*Account for contingency and soft costs

WWTP Cost Comparison Summary

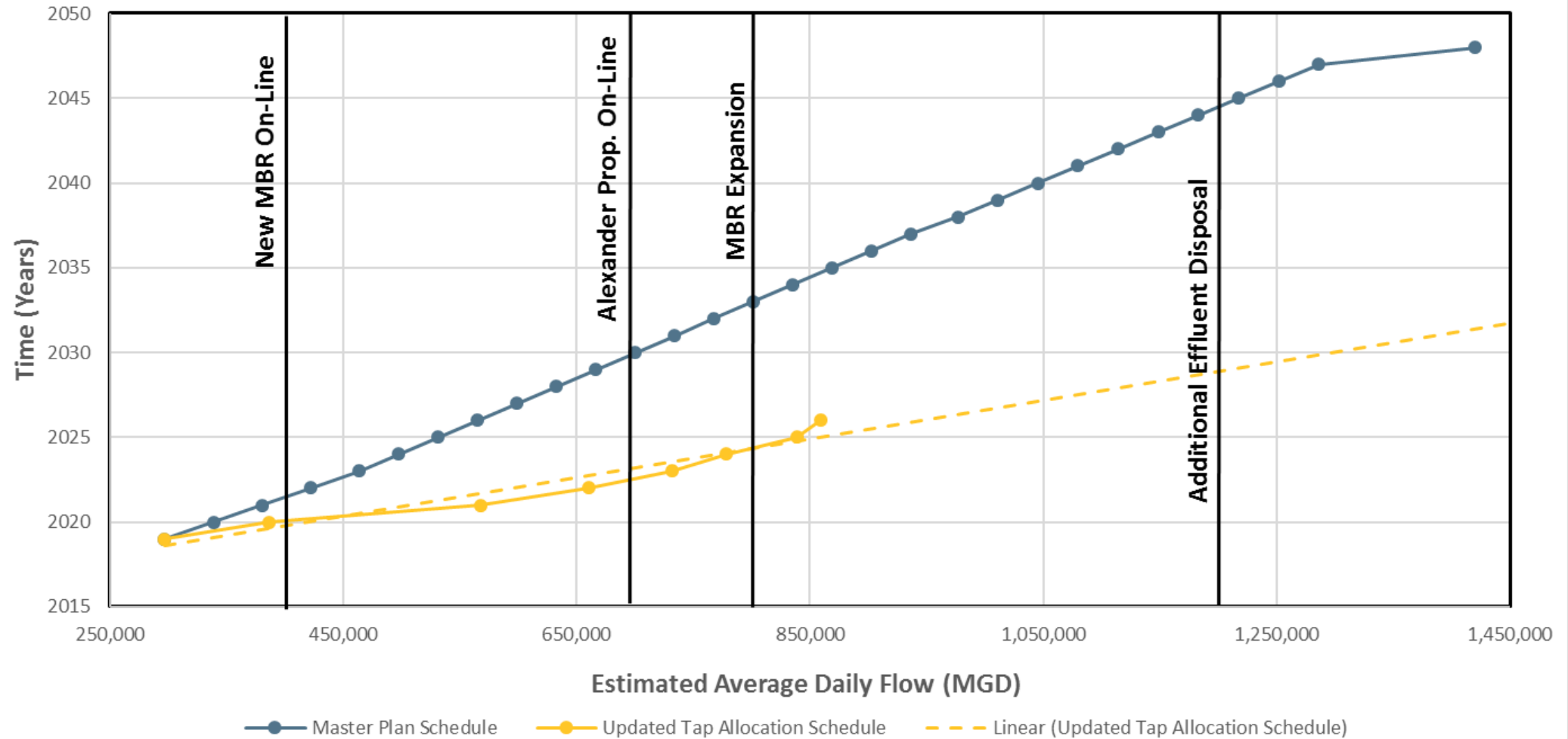
	Capital Cost¹	Annual O&M²	Lifecycle Cost (30 year period)³
Option 1	\$41,306,000	\$674,000	\$34,450,000
Option 2	\$47,144,000	\$1,138,000	\$52,870,000

1. 2019 \$

2. Annualized O&M Costs calculated over 30 year project life

3. Life cycle costs include credit for salvage value.

Wastewater System Schedule



Heritage Commons Plant Comparison

OPTION 1: Leave plant in service

Lifecycle Cost: \$3.1M

OPTION 2: Demo existing plant and build new pump station

Lifecycle Cost: \$3.0M



BARGEDESIGN.COM



Thank You!





Wastewater Fund

Unaudited

	Jul	Aug	Sep	YTD Actual	Budgeted	% Act/Bud
Wastewater Fees	\$ 105,788	\$ 107,549	\$ 103,596	\$ 316,933	\$ 1,201,619	26.4%
Tap Fees	\$ 32,500	\$ 62,500	\$ 35,000	\$ 130,000	\$ 500,000	26.0%
Other	\$ 1,986	\$ 2,087	\$ 1,984	\$ 6,057	\$ 40,350	15.0%
Total Revenues	\$ 140,274	\$ 172,136	\$ 140,580	\$ 452,990	\$ 1,741,969	26.0%
Payroll Expenses	\$ 11,269	\$ 12,464	\$ 11,866	\$ 35,599	\$ 256,078	13.9%
Operating Expense	\$ 26,386	\$ 14,955	\$ 21,162	\$ 62,503	\$ 355,350	17.6%
Depreciation	\$ 37,500	\$ 37,500	\$ 37,500	\$ 112,500	\$ 450,000	25.0%
Interest Expense	\$ 889	\$ 898	\$ 879	\$ 2,666	\$ 9,500	28.1%
Total Expenses	\$ 76,044	\$ 65,817	\$ 71,407	\$ 213,268	\$ 1,070,928	19.9%

Income from

Operations	\$ 64,230	\$ 106,319	\$ 69,173	\$ 239,722	\$ 671,041
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Wastewater Funds

Cash Position	Jul	Aug	Sep
Checking	\$ 187,430	\$ 125,930	\$ 198,052
Savings	\$ 4,122,614	\$ 4,224,702	\$ 4,225,390
Less: Reserve	\$ (500,000)	\$ (500,000)	\$ (500,000)
Total Cash	\$ 3,810,044	\$ 3,850,632	\$ 3,923,442

Add:

Accounts Receivable	\$ 160,488	\$ 180,092	\$ 160,112
Due from Gen Fund	\$ 318,365	\$ 395,029	\$ 418,963

Less:

Note Balance (Franklin Synergy)	\$ (425,926)	\$ (416,667)	\$ (407,408)
Accounts Payable	\$ (25,167)	\$ -	\$ (1,708)
Deposits	\$ (2,775)	\$ (3,900)	\$ (5,400)
Total Available Funds	\$ 3,835,029	\$ 4,005,186	\$ 4,088,001

Town of Thompson's Station

Budget vs. Actuals: FY2020 Wastewater Fund

As of Sep 30, 2019

	Wastewater			% of Budget
	Actual	Budget	Remaining	
Income				
31000 Wastewater Treatment Fees	\$ 306,562	\$ 1,177,019	\$ 870,457	26.05%
31010 Septage Disposal Fees	\$ 1,450	\$ 9,600	\$ 8,150	15.10%
31050 Late Payment Penalty	\$ 8,921	\$ 15,000	\$ 6,079	59.47%
33000 Tap Fees	\$ 130,000	\$ 500,000	\$ 370,000	26.00%
36120 Interest Earned - Invest. Accts	\$ 5,987	\$ 40,000	\$ 34,013	14.97%
37990 Other Revenue	\$ 70	\$ 350	\$ 280	20.00%
Total Revenues	\$ 452,990	\$ 1,741,969	\$ 1,288,979	26.00%
Expenses				
41110 Payroll Expense	\$ 27,567	\$ 213,104	\$ 185,537	12.94%
41141 Payroll Taxes - FICA	\$ 1,709	\$ 13,212	\$ 11,503	12.94%
41142 Payroll Taxes - Medicare	\$ 400	\$ 2,877	\$ 2,477	13.89%
41147 Payroll Taxes - SUTA		\$ 630	\$ 630	0.00%
41289 Employee Retirement Expense	\$ 1,378	\$ 10,655	\$ 9,277	12.94%
41514 Insurance - Employee Medical	\$ 4,544	\$ 15,600	\$ 11,056	29.13%
Payroll Expenses	\$ 35,599	\$ 256,078	\$ 220,479	13.90%
41211 Postage, Freight & Express Chgs	\$ 2,215	\$ 9,000	\$ 6,785	24.62%
41220 41220 Lab Water Testing	\$ 163	\$ 4,000	\$ 3,838	4.06%
41221 Printing, Forms & Photocopy Exp	\$ 1,998	\$ 8,000	\$ 6,002	24.98%
41241 Utilities - Electricity	\$ 22,946	\$ 85,000	\$ 62,054	27.00%
41242 Utilities - Water	\$ 741	\$ 6,000	\$ 5,259	12.35%
41245 Telecommunications Expense	\$ 475	\$ 3,600	\$ 3,125	13.18%
41253 Prof. Fees - Auditor	\$ -	\$ 2,500	\$ 2,500	0.00%
41254 Prof. Fees-Consulting Engineers	\$ 3,960	\$ 100,000	\$ 96,040	3.96%
41259 Prof. Fees - Other	\$ 8,886	\$ 5,000	\$ (3,886)	177.72%
41260 Repairs & Maint WW	\$ 17,790	\$ 100,000	\$ 82,210	17.79%
41320 Supplies Expense	\$ 1,752	\$ 5,000	\$ 3,248	35.05%
41513 Insurance - Liability		\$ 20,000	\$ 20,000	0.00%
41720 Donations		\$ 250	\$ 250	0.00%
42100 Permits and Fees	\$ 1,577	\$ 6,000	\$ 4,423	26.28%
41899 Other Expenses		\$ 1,000	\$ 1,000	0.00%
Operating Expenses	\$ 62,503	\$ 355,350	\$ 292,847	17.59%
Depreciation	\$ 112,500	\$ 450,000	\$ 337,500	25.00%
41633 Interest Expense - Note Payable	\$ 2,666	\$ 9,500	\$ 6,834	28.06%
Total Expenses	\$ 213,268	\$ 1,070,928	\$ 857,660	19.91%
Net Operating Income	\$ 239,722	\$ 671,040	\$ 431,317	35.72%

Tuesday, Oct 08, 2019 10:45:13 AM GMT-7 - Accrual Basis



Capital Projects FY2020

WW	Repairs of Cell #1	\$ 500,000			
WW	Hill Property Drip Fields	\$ 3,100,000	W & O Constr.	\$ 2,926,500	
WW	Equipment Replacements (items over \$5,000)	\$ 100,000	Barge Design	\$ 175,000	
Total Wastewater Funds		\$ 3,700,000		\$ 3,101,500	\$ -