

Thayne Town Council Work Session Meeting March 2, 2022

FINAL

Council in attendance: Mayor Simpson, Councilwoman Passey, Councilman Heward, Councilman Woolley, Councilman Schwab and Rebecca Hutchinson

Welcome: Mayor Devin Simpson

Pledge of Allegiance: Mayor Devin Simpson

Prayer: Councilman Heward

Adoption of Agenda as finalized.

Motion- Councilwoman Passey

Seconded- Councilman Woolley

Motion Carried

Town Infrastructure:

- See notes attached

Budget:

- Discussion on 2022/2023 Budget

Need to put the Town of Thayne Logo on the town's vehicles.

Councilman Woolley asked if some shelving, wardrobe, bookcases and a cove heater could be purchased for the maintenance shop.

Motion to Adjourn.

Motion- Councilwoman Passey

Seconded- Councilman Heward

Motion Carried

Meeting Adjourned at 8:14 p.m.

MEETING NOTES

TOWN OF THAYNE COUNCIL MEETING

MARCH 2, 2022

GIVEN BY ROBERT HOOD AND JASON LINFORD



1) Review of Town Infrastructure

Water System

Water Use

Thayne water demand data from master meter readings for the well and spring:

Year	Average Daily Flow Rate (gal. per day)
2011-2012	410,000
2013	-
2014	301,160
2015	273,021
2016	302,402
2017	333,943
2018	355,434
2019	373,694
2020	378,766
2021	383,838

System Growth

- In 2008 the system had 261 Equivalent Residential Units (ERUs)
- At the end of 2021 the system had 364 ERUs
- This is an average annual growth rate of 2.5%
- The Average Day water use per ERU is currently 1,055 gpd
- The estimated Max Day water use per ERU is 3,164 gpd

Water Source Capacity

- Total source capacity for the system is 650 gpm (well) + 800 gpm (spring) = 1,450 gpm
- Based on the Max Day water use estimated above this enough to serve 296 additional ERUs.
- With the largest source out of service (the spring) the system can serve an additional **175 ERUs** on the Average Day.

Water Storage Capacity

- Total storage capacity is 340,000 gallons (steel tank) + 300,000 gallons (concrete tank) = 640,000 gallons.
- The 2016 Water Storage Preliminary Engineering Report used 2014-2016 data. The new tank was then designed for a 30-year projection at a 1.5% growth population growth.
- Based on these criteria, the design horizon for the tank was the year 2046 with an estimated water demand in Thayne of 440,000 gpd.
- Water demand currently is 383,000 gpd and the excess storage capacity is equal to **72 ERUs** based on WYDEQ design guidelines.

Better to go with an additional source than storage.

More risk with a spring than a well.

Water Transmission Capacity

- The transmission and distribution waterlines are in good shape and have excellent capacity to meet daily demands and fire flow scenarios.

Water Quality

- There are no water quality concerns with the Thayne system.
- The spring has historically been a reliable and low-cost water source but may be vulnerable low flow issues due to drought and future regulatory complications (EPA is waging war on springs).

Recommendations

- The next logical improvement for the Thayne System is to add source capacity by drilling a second well.
- System capacity and emergency operation can be improved by adding backup power to the existing well.
- When additional storage is needed, we recommend replacing the steel tank with a larger tank. The life expectancy of the improvements made to the steel tank in 2018 is about 20 years.
 Councilman Heward suggested putting a well by Hokanson where there is already a pipe and backup power. Councilman Schwab questioned being in the same aquifer as our existing well. Jason Linford recommended if the growth is on the north side of town that it would be beneficial to put a well on that side.

Wastewater System

Wastewater Flow

We do not have good flow data for the wastewater system because there is no meter for wastewater entering the plant.

Year	Average Daily Flow Rate (gal. per day)
2013	101,800
2021 (estimated)	125,000

Wastewater Treatment Facility Capacity

- The 2013 upgrade was designed for 20 years (2033 design horizon) with a treatment capacity of 140,000 gallons per day
- The permit limit is 145,000 gallons per day.
- The system is an aerated lagoon system with two primary aerated cells, one polishing cell and an infiltration cell.

Collection System Capacity

- We have not evaluated the system in detail, but north end of trunkline on the west side of the canal will be the first area to reach maximum capacity.

Recommendations

- Without accurate flow data is difficult to estimate the life expectancy of the system, but we believe the design horizon of 2033 is fairly accurate.
- The current process (aerated lagoons with infiltration cell), but the next upgrade to the system will be significant with the replacement of the building and the enlargement of all the lagoons.

Roads

- Road masterplan map
- Standard road sections

2) Town Subdivision Process

Existing Process

Preliminary Plat

- Submit plat 2 weeks prior to P&Z (may be the 1st time the Town is aware of project)

- Notice of Public Hearing
- Approval or Disapproval by Commission
- Governing Body Action – within 30 days of P&Z

Final Plat

- Incorporate Council and P&Z requirements
- Engineering Drawings submitted for approval (must meet Town design requirements)
- Agreements/Bonds submitted for approved
- P&Z approval
- Governing Body Action – within 30 days of P&Z
- Mayor Signs Plat

Recommendations for Consideration

Require a Conceptual Plan Conference (attendees – developer, Mayor, Engineer, P&Z rep?) **and/or Council**

- Can the Town provide water service
- What are the Impacts to the water system – what upgrades needed if any
- Can the Town provide wastewater service
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- Potential Roadway Requirements and/or upgrades
- Wetland Impacts
- Lighting requirements
- Drainage
- Pathways
- Existing Irrigation
- Roadway cross-section discussion

Over a certain size the town would need a traffic study.

After Conceptual Pan Conference prepare a Preliminary Evaluation of Impact Report (PEIR) to identify existing and future impacts to Town infrastructure.

Additional Items to Consider

How do you want your Town to look?

- Open space requirements
- Additional Parks/Park maintenance
- Zoning Designations
- Walking/biking paths

Review and evaluation fees