#### **Neil Jensen**

From:

Bill Angerman <bangerman@whks.com>

Sent:

Friday, November 8, 2024 3:37 PM

To:

Neil Jensen; 'Laura Qualey'

Cc:

pw director; sryan@hoffbarry.com

Subject:

**RE: Tract Development Utilities** 

I received updated information from Jed – please see revised below

Neil and Laura – Per our previous discussions, following is a summary of City data and information. Much of this information will be incorporated into Tract's AUAR.

#### Water Supply and Storage

- Ground water appropriation, the City's authorized volume is 250 MGY. In 2023 the City used 157 MGY.
- Storage Capacity, City has two storage tanks: 500,000 gallon ground storage and 1,000,000 gallon elevated storage
  - o City needs storage equal to average day demand which was 430,000 gpd in 2023.
  - o City has approximately 1.07 MG available before more storage is needed.
- Well capacity, City has three wells with a firm (largest well out of service) capacity of 3.2 MGD.
  - City needs well capacity equal to peak day demand. Peak day was approximately 930,000 in 2023
  - o City has approximately 2.3 MG available before more well capacity is needed.
- Water quality
  - See water quality data that was previously provided to Tract. City feeds chlorine (disinfection), fluoride (health), and polyphosphate (iron sequestration)

# Water Distribution System

- Pressure and fire flow
  - o City can provide static pressure near the site if requested.
  - City can perform a fire flow test if requested.
  - Water modeling of the distribution system may be required depending upon volumes requested.
  - Tract will most likely need to loop watermain to the site from the south near Highway 20/County Road 29 and from the north at Holiday Ave. This will depend on water volume needed and fire flow requirements.
  - Tract will need to evaluate if constructing water storage on site is warranted.

# Wastewater Treatment

- Plants rated capacities are: AWW (1.09 MGD), MWW (2.18 MGD), PHWW (3.27 MGD)
- Current flows available based on 2022 data, AWW (0.7 MGD), MWW (1.2 MGD), PHWW (no data)
- A treatment plant plan (facilities plan) may be need to be prepared by the City depending upon requested flows.

# Wastewater Collection System

- Sewer capacity along Highway 20 will need to be evaluated. Pipe sizes range from 8" to 18". Capacity available will depend upon flow requested. Suggestion is the City perform CCTV of all existing pipe to determine condition now.
- Lift Station capacity. All of the Tract Development land flows to the new lift station at the intersection of Cannon and 3<sup>rd</sup>. It has an ultimate firm capacity of 2,000 gpm or 2.88 MGD. Current capacity is 900 gpm or 1.3 MGD. This lift station is new so data is not available but assumption is lift station is about 25% utilized currently.

# What we will need from Tract.

- Projected water usage. Peak day and average day.
- Projected wastewater discharge in the form of AWW, MWW, PHWW.
- Projected wastewater discharge strength for the following: BOD, TSS, P, Chlorides, Sulfates, Metals, TKN, and potentially others.

Please review and then we should discuss. Thanks
Bill

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