
City Council Regular Meeting

DEPARTMENT: Public Works & Engineering
FROM: Michelle McCullough, P.E., CFM, Assistant Director/City Engineer
MEETING: January 22, 2024

SUBJECT:

Receive a report, hold a discussion, and provide staff feedback on the Hooper Business Park Drainage. *(Staff Presenter: Michelle McCullough, Assistant Director/City Engineer)*

SUMMARY:

In June 2021, the Burleson 4A Economic Development Corporation Board (EDCB) purchased approximately 106 acres with the intent to develop the Hooper Business Park. The City Council approved a Chapter 380 and Economic Development and Performance Agreement (Agreement). R.A. Development, Ltd. acts as the Developer for Chisholm Summit on behalf of the property owners who are a party to the Agreement. As part of the Agreement, the Developer was obligated to design and construct the roadway and sanitary sewer infrastructure to serve Hooper Business Park (HBP), master-planned community, and future development. The City will reimburse the Developer for costs pursuant to the terms of the Agreement. The roadway is currently under construction, and the sanitary sewer improvements are expected to begin summer 2024.

Stormwater management is a component of the public infrastructure that will serve the HBP. Craftmasters is the first development proposed within the business park. The development is a private campus that specializes in education involving trades and vocations. Craftmasters also plans to construct their national headquarters facility within the business park as part of the overall development. As part of a Performance Agreement the EDCB and City Council approved on June 30, 2023, the City will design and construct a stormwater retention facility. Construction of the retention facility is to begin no later than June 30, 2024, and be completed no later than September 30, 2026.

The City Council approved a professional services contract to design the stormwater detention/retention pond in October 2022. During the initial drainage analysis, it was determined a significant volume of stormwater was conveyed from adjacent properties through the HBP. The consultant's preliminary recommendation was two detention/retention ponds, a channel to convey flow from adjacent properties, and realigning County Road 1019 to alleviate flooding from heavy rain events. Realigning the road would also provide additional land that could be used in the design of the retention ponds.

The EDCB and City Council approved the amended scope in July 2023 to add additional analysis and to include the realignment of County Road 1019. The revised scope considered the following with the design:

- Preserve as much developable land as possible
- Accommodate the sanitary sewer lift station site
- Allow for a potential 0.65-acre Atmos easement site for a regulator station to serve HBP and Chisholm Summit
- Preserve approximately 3.0 acres for a *potential* fire station
- Accommodate a 20-foot-wide JCSUD water line easement

Three alternatives were analyzed keeping the considerations above in mind: single detention (dry) pond, two detention (dry) ponds, and two retention (wet) ponds.

Dry ponds are designed to only have water in the pond during a rain event. The pond collects the water and releases it over time. Wet ponds are designed to always hold water, with a fountain for aeration. These ponds are deeper to allow for the “detention” component during rain events.

The single dry detention pond alternative provided for the least amount of developable land and included a channel that would discharge to the property to the north. The two dry detention ponds and two retention ponds preserved approximately the same amount of developable land; however, the retention pond option provides a more aesthetically pleasing water feature adjacent to the entrance of the business park. Cost estimates were provided for all alternatives and were within the construction budget of \$6.5M.

To serve the business park and surrounding area, Atmos Energy (Atmos) plans to extend an existing high-pressure gas transmission line from FM 917 along FM 1902 to the proposed 0.65-acre site located within the HBP. A proposed regulator station at the site will convert high pressure gas to low pressure distribution lines to serve the business park, Chisholm Summit Master planned Community, Craftmasters, and future development. The alternate locations were presented to the Infrastructure and Development Committee on January 10, 2024. After discussing the advantages and disadvantages of each location, the committee supported the site located within the HBP.

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