

SERVICES TO BE PERFORMED BY THE ENGINEER

Assumptions

1. Freese and Nichols, Inc. (FNI) standard CAD and sheet setup will be used.
2. Any floodplain or TXDOT permitting application fees will be paid for by the City.
3. No stormwater modeling services of Plum Creek will be performed.
4. The City will coordinate access onto the private landowner's site.

Basic Services:

Aerial Sewer Design Phase

1. Perform design for aerial sewer crossing along Burleson St. at Plum Creek, including structural support design.
2. Perform one site visit to Plum Creek to determine the appropriate location for the aerial sewer crossing. Determine location of two (2) additional geotechnical bore locations, if required.
3. Provide two (2) additional geotechnical bores and bore logs. ***See Arias and Associates proposal for more details.***
4. Design structural support of aerial crossing, incorporating data from geotechnical bore logs.
5. Design and produce one new plan and profile sheet of the realignment of the sewer crossing over Plum Creek.
6. Design and produce one new detail sheet with aerial creek crossing details.
7. Produce additional specifications as needed for the aerial creek crossing and structural support.
8. Coordinate with the City of Kyle and Hays County floodplain managers for permitting of the aerial crossing in the floodplain.
9. Conduct internal QC process for additional deliverables.
10. Produce 99% Plan sheets, Quantities, and Specifications for review by the City for the aerial creek crossing.
11. Incorporate City comments into the plans, specifications, and quantity adjustments.
12. Incorporate changes into Issued for Bid Plans and Specifications for the Burleson St. Improvements project.

Bidding Phase

1. None

Construction Phase

1. Review additional submittals associated with the aerial creek crossing and pipeline appurtenances (3 submittals max).
2. Review additional RFI's associated with the aerial creek crossing (2 RFI's max).

Project Management

1. General Project Management from May '16 through Oct. '16 required due to delay of letting date to March 2017.
2. Discussions and meetings related to seepage at roundabout.
3. Continued general Project Management from Nov. '16 through March '17 until Bid Phase services begin.

Garcia Property ROW

1. Garcia property survey required by mortgage company. *See McGray & McGray proposal for details.*
2. Investigation of design options to avoid acquiring Garcia property.

UPRR ROW

1. UPRR ROW survey required by UPRR for Railroad Crossing Agreement. *See McGray & McGray proposal for details.*
2. Coordination with UPRR regarding Crossing Agreement requirements, etc.

ROW Project Management

1. Coordination and meetings from May '16 through Oct. '16 regarding acquisitions of St. Anthony's Church, USDA, Mahogany Run/RV Superstore, Garcia, Bertch/Salinas, and Silverado HOA.
2. Continued coordination from Nov. '16 through March '17 (assumed completion of ROW acquisition).
3. Prepared numerous exhibits, letters, etc. required for ROW acquisition process including Mattox, St. Anthony's, Bertch/Salinas, USDA, etc.

Additional Utility Design

1. Designed additional water main and laterals. Approximately, 1689 LF more than original scope assumptions. Based on calculated price/LF from SWA #3 – approximately \$13/LF.
2. Prepared and coordinated with UPRR for pipeline crossing permit.
3. Coordination for consideration of breaking out utilities across UPRR.

Preliminary Engineering

1. Prepared numerous options and typical sections beyond original scoped level of effort.
2. Prepared quantities and estimates for all options and combination of options.
3. Prepared exhibits and presentation material for City Council meeting.

Utility Coordination

1. Additional coordination with PEC required to review each pole along Burleson St. PEC was not able to move all original poles in conflict due to lack of ability to obtain new easements. Prepared exhibits for meetings.