



Legislation Details (With Text)

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Title: Consider and take action on a resolution authorizing a professional services agreement with Gauge Engineering, LLC. for design work related to drainage improvements for the FM 518 & Wesley Drive Drainage Improvements Project (DR2010) in an amount not to exceed \$626,082 (Director of Engineering)

Sponsors:

Indexes:

Code sections:

Attachments: 1. Data Sheet, 2. Proposed Resolution, 3. Exhibit A - Agreement with Gauge Engineering, 4. Project Aerial Map

Date	Ver.	Action By	Action	Result
4/27/2021	1	City Council	Approved	Pass

Consider and take action on a resolution authorizing a professional services agreement with Gauge Engineering, LLC. for design work related to drainage improvements for the FM 518 & Wesley Drive Drainage Improvements Project (DR2010) in an amount not to exceed \$626,082 (Director of Engineering)

Approval of this resolution will authorize the City Manager to enter into an agreement with Gauge to design drainage improvements in the FM 518 and Wesley Drive area for an amount not to exceed \$626,082.

In 2014, a drainage study for League City was conducted by LAN Engineering. The study noted some deficiencies in the drainage systems along the FM 518 corridor and specifically noted that roadway flooding in moderate rainfall events can happen in the Highland Terrace area. the study noted that Highland Terrace is a significant sheet flow path for the neighborhood to the south. Using neighborhood streets to convey excess flows during significant rainfall events is appropriate; however, the Highland Terrace sheet flow path is blocked by a local high point near its intersection with FM 518. This causes the 100-year sheet flow to inundate properties to the west. It was also noted that the storm sewer network surcharges above the ground elevation in several locations. The 2014 study noted 3 possible solutions for this issue: Raise the vertical profile of FM 518, Create alternate overland flow paths, and Improve sub-surface drainage.

The executed PSA will allow for the following:

- Updated Drainage Study of the area to either validate the 2014 project recommendations or to develop a modified recommendation that efficiently and effectively addresses the flooding issues and prevents downstream impacts. This updated study will use the Atlas 14 rainfall intensities, current modeling technology, and updated models in Clear Creek in reviewing solutions.
- Design Phase which will include the production of a detailed set of plans and cost estimate (at 60% and 90%), coordination with utility owners on conflicts, project manuals including SW3P manuals and the final preparations for getting the project ready to bid. This phase will also include sub-contracted work for Topographic Surveys, Geotechnical Investigation, Environmental Assistance, and dependent on need structural design for conveyance system.
- Bidding Phase which will allow for Gauge to assist the City during the bidding of the project by issuing any needed Addendums, evaluating received Bids, and recommendation on award of the construction contract.
- Construction Administration Phase which will allow for Gauge to assist the City during the construction of

the project by reviewing material submittals, testing reports, contractor pay applications, and make change order recommendations if the need arises. Gauge will also make site visits, attend and contribute to the final acceptance field inspection and prepare Record Drawings (As-Builts) once the project is completed.

- Project Management and Coordination Services which will in general include coordination meetings with the City, field visit, public and private utility coordination work, and 2 public meetings.

These base services result in a total cost of \$459,555.

The PSA will also allow for some additional services to be performed on an as needed basis:

1. It is anticipated that a detention pond will be needed for this project. An Additional Service to perform boundary surveying services for easement/ROW acquisition. The proposed cost for this additional service is \$2,228.
2. It is anticipated that a USACE Nationwide Permit (either a type 7 or 43) will needed and cost for this permit is included in the Design Phase under the Environmental Assistance, but this project has the potential to trigger compliance with National Environmental Policy Act (NEPA) and as a result Additional Service items to handle public involvement duties and to conduct a Cultural Resources Pedestrian Survey have been provided. The cost of this Additional Service is \$40,700.
3. Because of portions of this work taking place within TxDOT ROW, an Additional Service to address any accessibility issues has been provided. The cost of this Additional Service is \$1,100.
4. While basic Tree Protection and Permitting work is provided for in the Design Phase, not knowing the size/location of a potential detention pond opens up the possibility of a more specialized tree protection process. Because of that, Gauge has provided a proposal for this purpose in an amount not to exceed \$5,500.
5. Because of the type of work being proposed with this project, it is easy to imagine an additional public meeting being needed. Because of this, Staff requested Gauge to provide a proposal for an additional public meeting should more than the 2 meetings in the base proposal be needed. The cost associated with this additional meeting is \$5,000.
6. With the City's Bond Program CIP projects and the normal CIP projects, there is a concern that multiple projects may go to construction at the same time which could overload our Inspectors. With that in mind, Gauge was asked to provide a price to provide full time inspection services for this project. The cost for this additional service is \$112,000.

Staff recommends executing the attached PSA with Gauge for the engineering services in an amount not to exceed \$626,082, but only providing a Notice to Proceed for the Basic Services (\$459,555) and Additional Services for Item 1 (\$2,228) at this time. As work on the project continues, Staff can then make a decision on whether to proceed with the other additional service items or remove them from the PSA.

Because of the complexities associated with the project area and the amount of outside coordination needed, the design phase of this project is estimated to take approximately 13 months to complete.

This project received some level of grant funding. While the City will make the initial payments related to the items in the PSA, it is anticipated that once the grant reimbursements have been made the total costs for the project will be broken down as follows:

Total Program Totals	CDBG-DR	FEMA-HMGP	Bond Funding	Total Funding
FM 518 & Wesley Dr	\$ 2,246,282	\$ 363,994	\$ 539,724	\$ 3,150,000

This represents an estimated savings of \$2,660,276 from Bond Funds allocated for these projects.

Attachments:

1. Data Sheet
2. Proposed Resolution

3. Exhibit A - Agreement with Gauge Engineering
4. Project Aerial Map

CONTRACT ORIGINATION: Professional Services Agreement reviewed and approved by City Attorney's Office

FUNDING

X}Base Service:

Funding in the amount of \$459,555 is available from a 75%/25% split from FEMA HMGP (75%) - \$344,666.25 and CDBG-DR (25%) - \$114,888.75; with expenses charged to project expense strings (\$344,666.25) DR2010-PLAN DESIGN- DESIGN-HMGP and (\$114,888.75) DR2010-PLAN DESIGN- DESIGN-CDBG-DR.

{X} Additional Services:

Funding for additional Services will be allocated on an as needed basis:

Boundary Survey (\$2,228) and the additional Construction Inspection (\$112,000) will be paid directly from CDBG-DR Grant with expenses charged to DR2010-PLAN DESIGN- DESIGN-CDBG-DR.

USACE Permit (\$40,700), TxDOT Accessibility (\$1,100), Tree Protection (\$5,500), and Additional Meeting Expenses (\$5,000) will be factored into the original base service amount as a percentage split 75%/25% until the FEMA HMGP Grant has reached its max Federal Cost Share Amount of \$363,993.75. Any expenses after the Federal Cost Share Amount are exceeded will be paid directly from GO Bond funds.

STRATEGIC PLANNING

{X} Addresses Strategic Planning Critical Success Factor #1 - Develop & Maintain our Infrastructure