



AGENDA MEMORANDUM

Action Item for the City Council Meeting of October 19, 2021

DATE: October 19, 2021

TO: Peter Zaroni, City Manager

FROM: Al Raymond, III, AIA, CBO, Director of Development Services
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Additional Services Request

Infrastructure Master Planning and Impact Fee Study

CAPTION:

Motion authorizing the approval of an additional services request with Pape-Dawson Engineers, Inc., San Antonio, Texas, for a comprehensive storm water master plan in a total amount of \$1,192,000 with FY 2022 funding available from the Development Services Fund.

SUMMARY:

This additional services request (ASR) authorizes for additional analysis to be performed for the purpose of producing a thorough, comprehensive stormwater master plan. This will include One-Dimensional Hydrology Modeling, CIP Planning, Design Criteria Manual Development, Hydraulics, and Direct Expenses that will increase the total contract value to 1,192,000.

BACKGROUND AND FINDINGS:

On March, 2021, the City of Corpus Christi executed an agreement with Pape-Dawson Engineers, Inc. to prepare master plans for water, wastewater, storm water and roads. The purpose was to develop capital improvement projects and conduct an impact fee study for the respective infrastructure. The storm water master plan was scoped to build upon and update the city's existing 2009 "draft" storm water master plan and associated hydrologic and hydraulic models for riverine and storm drainage systems.

Over the past several months, the exhaustive data collection efforts involved has either produced limited data and/or data that uses outdated modeling techniques that are not easily amendable to upgrade or reuse. Additionally, in significant portions of the city, there were no data models provided, the consultant would need to create new models from scratch using current techniques. Neither of these major developments were anticipated in the original scope of work and are a substantial undertaking for the consultant given the size of the City.

In pursuit of the overall purpose and goal of the March 2021 contract, a summary of the major distinctions between the original scope and additional services requested is below:

1. This change order is a grass roots approach to building a new hydrologic and hydraulic

model for the blue, green and brown areas to the south of Corpus Christi bay – originally it was assumed that these detailed models would be available

2. This change order is adding additionally 70 square miles of new InfoWorks 1D/2D modeling (green area) in the urbanized areas of the City instead of the hot spots only approach in the original scope
3. Approximately 7 square miles of new HEC-RAS 2D modeling (brown areas) will be performed for the developed Flour Bluff costal area of the city
4. Update the 1D/2D modeling of the Central Business District to Atlas 14 rainfall (not originally anticipated)
5. Develop a comprehensive drainage criteria manual in the current scope of work

PROJECT TIMELINE WITH CHANGE ORDER:

Additional services request will not add any additional time to the original project schedule timeline of 24 months.

ALTERNATIVES:

The City could choose not to perform this work, but this would result in a major piece of infrastructure to be the only utility to not have a comprehensive look at the growth of the city.

FISCAL IMPACT:

The fiscal impact for FY 2022 is an amount of \$1,192,000 with funding available from the Development Services Fund.

1. Hydrology for One Dimensional Modeling	\$140,100
2. Hydraulics	\$1,224,500
3. CIP Planning	\$92,300
4. Development of Design Criteria Manuel	\$153,300
5. Direct Expenses	<u>\$5,200</u>
	\$1,615,400
6. Pape-Dawson Engineers Credit	<u>\$(423,400)</u>

Increase in Total Contract Value: \$1,192,000

FUNDING DETAIL:

Fund: **4670 Development Services**
Mission Elem: 281
Account: 530000
Activity: 11300
Amount: \$1,192,000

RECOMMENDATION:

Staff recommends approval of this additional services request to award Pape-Dawson Engineers, Inc. for a comprehensive study for the storm water master plan.

LIST OF SUPPORTING DOCUMENTS:

Location Map

Additional Services Request