



ENGINEERING SERVICES

To: Mayor and Town Council

From: Hulon T. Webb Jr., P.E., Director of Engineering Services

Through: Mario Canizares, Town Manager
Chuck Ewings, Assistant Town Manager

Re: Professional Engineering Services Agreement
Legacy Drive Traffic Signals and First/Windsong Intersection Analysis

Town Council Meeting – March 26, 2024

Strategic Visioning Priority: 1. Acceleration of Infrastructure

Agenda Item:

Consider and act upon authorizing the Town Manager to execute a Professional Engineering Services Agreement between Stantec Consulting Services, Inc., and the Town of Prosper, Texas, related to the Legacy Drive Traffic Signals and First Street/Windsong Parkway Intersection Analysis project.

Description of Agenda Item:

With the completion of the First Street (Elem – DNT) project and Legacy Drive (Prairie – First) project both scheduled for Winter of 2024/2025, it is anticipated that there will be a significant increase in traffic along Legacy Drive from north of First Street to US 380. This project includes the preparation of two (2) traffic signal warrant studies, one at the intersection of Legacy Drive and First Street and the other at the intersection of Legacy Drive and Prairie Drive. With an expectation that the intersection of Legacy Drive and First Street will meet the initial warrant study for a traffic signal shortly after the two roadway projects are completed, this project includes funding for the design of a traffic signal at that intersection. As for the intersection of Legacy Drive and Prairie Drive, even though it is not expected to need a traffic signal shortly after the two roadway projects are completed, it will most likely warrant a traffic signal in the next 3 years, so this project includes the funding of the design of a traffic signal at that intersection, which will allow the construction to be accelerated when the intersection does warrant a traffic signal.

This project also includes an operational analysis at the intersection of First Street and Windsong Parkway. With the recent installation of a traffic signal at that intersection, staff has received a request for a dedicated southbound left turn lane on Windsong Parkway to alleviate traffic concerns. An operational analysis will be performed to evaluate the traffic volumes at the intersection and recommendation(s) provided on what improvements are necessary at the intersection. The recommendation(s) could include more specific traffic signal timing plans for various times of the day/week, and/or need to construct the requested dedicated southbound left turn lane on Windsong Parkway to improve efficiency.

Budget Impact:

The cost for the traffic signal warrant studies and the operational analysis is \$22,000, and the cost for the design of the two (2) traffic signals is \$106,000 for a total of \$128,000. The funding is to be transferred from the \$1,000,000 approved in FY2024 for Traffic Improvement Projects, Account No. 750-6610-10-00-2335-ST to Account No. 750-5410-10-00-2404-TR. In October 2023, \$22,800 was allocated from the Traffic Improvement Project fund for the design of the Windsong Parkway/US 380 Dual Left Turns project. With approval of this Professional Engineering Services Agreement, there will be \$849,200 remaining in the Traffic Improvement Project fund which will be used to fund the construction of the Windsong Parkway/US 380 Dual Left Turns project (\$130,000 estimated) and the traffic signal at the intersection of First Street and Legacy Drive (\$465,000 estimated).

Legal Obligations and Review:

Terrence Welch of Brown & Hofmeister, L.L.P., has approved the standard Professional Engineering Services Agreement as to form and legality.

Attached Documents:

1. Professional Engineering Service Agreement
2. Location Map

Town Staff Recommendation:

Town staff recommends that the Town Council authorize the Town Manager to execute a Professional Engineering Services Agreement between Stantec Consulting Services, Inc., and the Town of Prosper, Texas, related to the Legacy Drive Traffic Signal Warrants and First Street/Windsong Parkway Intersection Analysis project.

Proposed Motion:

I move to authorize the Town Manager to execute a Professional Engineering Services Agreement between Stantec Consulting Services, Inc., and the Town of Prosper, Texas, related to the Legacy Drive Traffic Signal Warrants and First Street/Windsong Parkway Intersection Analysis project.