TASK ORDER APPROVAL FORM

CONTRACT #: <u>C19-2746-PW</u>____

TASK ORDER #: 15_____

TASK ORDER AMOUNT: \$ 369,836

OFFERED BY CONSULTANT:

HDR Engineering, Inc.

FIRM'S NAME

Jenniter E. Hunt, P.E.

REPRESENTATIVE'S PRINTED NAME

SIGN ITUI

Senior Vice President

TITLE

RECOMMENDED FOR APPROVAL (Department Director)

SIGNATURE DAVEIM ONN DATE

John Hofstad Date: 2022.02.09 13:25:51 COUNTY ADMINISTRATOR (if applicable) CONTRACT: C19-2746-PW HDR ENGINEERING, INC. GENERAL ENGINEERING SERVICES FOR PW EXPIRES: 09/30/2023

January 31, 2022

DATE

APPROVED BY OKALOOSA COUNTY (Per Purchasing Manual) Table 1

Jeffrey A Hyde Digitally signed by Jeffrey A Hyde Date: 2022.02.07 11:08:03 -06'00'

PURCHASING MANAGER

Faye Douglas Digitally signed by Faye Douglas Date: 2022.02.09 09:52:51 -0600

OMB DIRECTOR/DATE

DATE CHAIRMAN (if applicable) SEAL **Mel Ponder** FEB 1 5 2022

DATE

DATE

Revised January 21, 2020

INTRODUCTION

Okaloosa County is seeking design services to support the Live Oak Church Road Intersection Improvements. The improvements to be constructed are as follows:

- Restriping the Southbound left turn lane on SR 85 onto Live Oak Church Road
- Adding a Westbound right turn lane on Live Oak Church Road onto SR 85
- Restriping the existing Westbound right turn lane into a Thru lane
- Adding Two new westbound left turn lanes on Live Oak Church Road onto SR 85
- Adding an additional Westbound Lane on Live Oak Church Road from SR 85 to Hermosa Road (0.23 miles)
- Adding an additional Eastbound Lane on Live Oak Church Road from SR 85 to Shoal River Drive (0.35 miles)
- Associated pavement markings, signing, and signalization
 - The mast arms at SR 85 and Live Oak Church road will be replaced due to structural guidelines

This scope of work includes the design services for the improvements listed above. Ancillary activities include the following:

- Survey
- Geotechnical Exploration
- Stormwater Pond design
- 404 Permit application
- ERP Permit application
- FDOT Connection Permit application
- Utility Owner relocation coordination

The following assumptions are made for this scope:

- No Public Involvement activities are associated with this scope of work.
- No wetland mitigation projects are associated with this scope of work.
- Purchase of mitigation credits is not included in this scope of work.
- Wetland Mitigation is anticipated to be achieved by a conservation easement placed on property already owned by Okaloosa County.
- No property acquisition is anticipated for this project.
- Real Estate acquisition services are not included in this scope of work.
- Stormwater Treatment can be achieved inside the existing Okaloosa R/W and the vacant land east and west of Live Oak Church Road spur just east of the existing precast bridge.
- Lighting is not a part of this scope of services.
- Pavement design will be provided by Okaloosa County.
- Any required environmental evaluations other than the permitting activities described in this scope, including NEPA, are excluded from this scope of services.
- Post Design and Construction inspection services are excluded from this scope of work.
- The existing Pre-Cast Bridge within the project limits will be widened by County staff outside of this scope of work.

The fee for this scope of services is a divided into a not-to-exceed fee and a time and materials fee

Tasks 1-5 result in a lump sum amount of \$201,158 Tasks 6-12 result in the not-to-exceed amount of \$167,678

The total fee for this scope of services is not-to-exceed \$369,836

ACCEPTANCE: Mur

TASK 1 – Roadway Design and Plans

Objective:

Produce construction plans (30%, 60% 90% and Final) for roadway and drainage. 30% Plans will be utilized to initiate utility coordination, 60% plans will be utilized to initiate ERP Permit application, 90% Plans will be reviewed by the Florida Department of Transportation (FDOT) per the appropriation agreement, and Final Plans will be utilized for construction. All submittals will be reviewed by Okaloosa County staff.

The roadway typical section will be a four lane undivided highway with 11' lanes and no bike lanes. A 6' sidewalk will be attached to the curb and gutter on the south side.

HDR Activities:

This task assumes the following activities

- Roadway
 - o Develop Typical Section
 - o Develop Roadway Alignment and Plan View
 - o Develop Roadway Profile
 - Develop Cross Sections
 - o Develop temporary construction plan (2 Phases)
- Plans Production
 - o Key Sheet (1)
 - o Drainage Map (1)
 - Typical Section (1)
 - Special Details (2)
 - General Notes (1)
 - o Summary of Quantities (3)
 - o Optional Pipe (1)
 - o Plan Sheets (4)
 - o Profile Sheets (4)
 - o Drainage Structures (25)
 - o Pond sheet and Details (4)
 - o Pond Cross Sections (20)
 - Special Ditch Profile (1)
 - Special Ditch Details (2) for swale treatment areas
 - o Cross Sections (20)
 - o Erosion Control Plan Sheets (4)
 - o SWPPP Sheets (1)
 - o Temporary Traffic Control General Notes (1)
 - o Temporary Traffic Control Plan Sheets (8)
 - o Temporary Traffic Control Details (3)
 - o Utility Adjustment Sheets (4)
- Miscellaneous
 - o Cost Estimate (30%, 60% 90% and Final)
 - o Develop Bid Tabs
 - FDOT Comment coordination
- FDOT Driveway Permit Application

- Construction Plans
- Bid Tabs

TASK 2 – Drainage Design

Objective:

Design stormwater layout and stormwater treatment areas. The existing pond east of the existing bridge will be expanded and utilized for treatment. An additional pond will be added east of the expanded pond on existing Okaloosa County property. These ponds will treat the stormwater on the east side of the bridge. The stormwater on the west side of the bridge will be treated within the existing Right-of-Way via French drain pipe.

HDR Activities:

This task assumes the following activities

- Develop stormdrain layout (assume 25 structures)
- Develop pond design for expansion of existing pond
- Develop pond design for new pond
- Develop French drain pipe design

Deliverables:

- Drainage documentation for permit application and construction plans

TASK 3 – Permitting

Objective:

Obtain permits from Florida Department of Environmental Protection (FDEP) and the Northwest Florida Water Management District (NWFWMD) including both an Individual Environmental Resource Permit and State 404 Program Permit.

HDR Activities:

This task assumes the following activities

- Complete field review to document field conditions and complete functional assessment of impact areas.
- Prepare wetland impact drawings, project graphics, applications, wetland data sheets, UMAM forms and project narrative.
- Coordination meeting with FDEP
- Coordination meeting with NWFWMD
- Electronic Submittal for one Individual Environmental Resource Permit
- Electronic Submittal for one State 404 Program Permit
 - o HDR to pay permit fee (Assuming less than one acre of wetland impacts)
- Respond to Request for Additional Information

- NWFWMD Individual Environmental Resource Permit Application
- FDEP State 404 Program Permit Application

TASK 4 – Signalization Design and Plans

Objective:

Design the replacement signalization for the intersection of SR 85 and Live Oak Church Road. Given the additional lanes on Live Oak Church Road, the existing mast arms will be structural deficient per the current FDOT structural requirements. One double arm mast arm will be replaced with this project on the southwest corner of the intersection. Signalization Plans will be submitted at 90% and Final Design stages.

HDR Activities:

This task assumes the following activities

- Develop signalization layout
- Mast Arm Structural Analysis (of existing mast arm)
- Plans Production
 - o Key Sheet (1)
 - Tabulation of Quantities (1)
 - o General Notes (1)
 - o Signalization Plan Sheet (1)
 - o Mast Arm Tabulation Sheet (1)

Deliverables:

- Signalization Plans (90% and Final)

TASK 5 – Signing and Pavement Marking Plans

Objective:

Develop the Signing and Pavement Marking Plans for the project. Signing and Pavement Marking plans will be submitted at the 90% and Final Design stages.

HDR Activities:

This task assumes the following activities

- Develop the Signing and Pavement Marking Layout
- Plans Production
 - Key Sheet (1)
 - Tabulation of Quantities (1)
 - o Plan Sheets (5)
 - Guide Sign Worksheet (1)

Deliverables:

- Signing and Pavement Marking Plans (90% and Final)

TASK 6 – Survey

Objective:

Obtain topographic information for the roadway, drainage, signalization, and signing improvements; additionally, provide the mapping and legal and sketch description of the land to be utilized as the conservation easement provided by Okaloosa County.

SAM Activities:

This task assumes the following activities:

- Topographic Survey of:
 - o Existing right of way of Live Oak Church Road from SR 85 to 100' past Shoal River Drive
 - o Existing R/W of SR 85 300' north and south of the Live Oak Church Road intersection
 - Existing R/W of sidestreets 100' back from intersection along Live Oak Church Road as well as Old Antioch Road west of SR 85.
 - A portion of the pond parcels east and west of Live Oak Church Road spur to be utilized as stormwater pond (approximately 2 acres)
 - Survey shall include drainage features, wetland lines, aboveground visible utility location, underground utility marking location per utilities marked based on a Sunshine One Call dig ticket
- Establish centerline of construction both along Live Oak Church Road and SR 85
- Based on limited boundary monumentation collected, depict:
 - o calculated right of way lines along Live Oak Church Road and SR 85
 - o calculated right of way lines along sidestreets connected to Live Oak Church Road
 - o calculated right of way lines around County Parcels to be utilized as ponds
- Excavate 10 SUE Test hole located within project.
- One legal and sketch of the proposed Okaloosa County conservation easement.
- Assume one day of field work. No boundary survey to be produced.
- Locate 10 Geotechnical bore holes
- Collect 4 150' wide upstream/downstream cross sections

- Survey CADD File in Microstation format to current FDOT standards
- Existing Utility Elevation data at SUE locations and SUE data forms.
- Legal and sketch of proposed conservation easement

TASK 7 – Geotechnical Exploration

Objective:

Perform and analyze Geotechnical Borings for roadway improvements, bridge widening, pond construction/expansion, and mast arms. This task will be completed by Tierra Inc.

Tierra Activities:

This task assumes the following activities

- Field Activities (2-acre pond)
 - Field stake borings.
 - o Obtain utility clearances for borings.
 - o Perform 4 @ 35' deep auger borings in the proposed pond area and pond expansion area
- Laboratory Soil Testing
 - o Soil classification test (gradation, Atterberg limits, organic content test).
 - Soil permeability tests in the event groundwater is encountered at depth and a conventional dry pond may work.
- Roadway Borings for widening 13 @ 5' deep auger borings + 2 pavement cores
- Mast Arm borings 1 @ 30' deep SPT boring
- Engineering Services
 - o Coordinate field work.
 - o Classify soil samples and assign lab testing.
 - o Estimate Seasonal High/Low Water Table (SHWT) levels for wet pond design.
 - o Prepare Boring Location Plan and Soil Profiles
 - o Stormwater pond recommendations.
 - o Prepare report of findings.

Deliverables:

Report of findings

TASK 8 – Conservation Easement

Objective:

Assess possible conservation easement sites for utilization if mitigation is required and prepare the conservation easement.

Activities:

- Assess three parcel possibilities for conservation easement suitability
- Site visit to proposed conservation easement and project site with FDEP
- Site visit to proposed conservation easement and project site with NWFWMD
- Prepare supporting documentation for conservation easement such as Baseline documentation report

Assumption:

- Should wetland mitigation be required for this project, it will be in the form of a conservation easement of land provided by Okaloosa County. No mitigation project will be required.
- The County legal staff will prepare the conservation easement document and complete required title documentation.

Deliverables:

Conservation Easement documentation for permit application.

TASK 9 – Utility and FDOT Coordination

Objective:

Coordinate the utility relocations for the project.

HDR Activities:

This task assumes the following activities

- Individual Utility Owners contacts
 - o Assume 10 utility owners with one contact a month for 10 Months
- Preliminary Utility Meeting (Virtual)
- Monthly Utility Meetings (7 Virtual meetings)
- Individual Utility Owner Site Meetings (Assume 5)
- FDOT coordination with ongoing construction resurfacing project on SR 85

- Construction Plans
- Bid Tabs

TASK 10 – Mast Arm Structural Design

Objective:

Should the existing mast arm on the southwest corner not be able to be utilized in the proposed roadway layout, this activity will handle the structural analysis and plan sheets for replacing the mast arm.

HDR Activities:

This task assumes the following activities

- Mast arm structural analysis
- Mast Arm Tabulation Sheet (1)
- Mast Arm Data Table (1)
- Report of Core Borings (1)

Deliverables:

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- Mast arm plans

TASK 11 - Bridge Widening Coordination

Objective:

Coordinate design and improvements to Pre-Cast Bridge with County Staff. County staff is responsible for the design, permitting, and construction of the bridge widening

HDR Activities:

This task assumes the following activities

- Horizontal and Vertical Coordination
- Grading Coordination

Deliverables:

- Design Documentation

TASK 12 - Bridge Hydraulic Report

Objective:

Develop a Bridge Hydraulic Report for FDOT or Permitting agency if deemed necessary

HDR Activities:

This task assumes the following activities

- Bridge Hydraulic Report Preparation

Deliverables:

- Bridge Hydraulic Report