SUPPLEMENTAL WORK AUTHORIZATION NO. 1 TO WORK AUTHORIZATION NO. 2

WILLIAMSON COUNTY ROAD BOND PROJECT: RFQ T3158-CR 404 REALIGNMENT

This Supplemental Work Authorization No. 1 to Work Authorization No. 2 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>April 20</u>, 2021 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>RPS Infrastructure, Inc.</u> (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 2 dated effective July 14, 2021 (the "Work Authorization");

WHEREAS, pursuant to Article 14 of the Contract, amendments, changes and modifications to a fully executed Work Authorization shall be made in the form of a Supplemental Work Authorization; and

WHEREAS, it has become necessary to amend, change and modify the Work Authorization.

AGREEMENT

NOW, THEREFORE, premises considered, the County and the Engineer agree that the Work Authorization shall be amended, changed and modified as follows:

- I. The Services to be Provided by the Engineer that were set out in the original Attachment "B" of the Work Authorization are hereby amended, changed and modified as shown in the attached revised Attachment "B".
- II. The Work Authorization shall become effective as of February 1, 2022, subject to final acceptance and full execution of the parties here to and shall terminate on December 31, 2022. The Services to be Provided by the Engineer shall be fully completed on or before said date unless extended by an additional Supplemental Work Authorization. The revised Work Schedule is attached hereto as Attachment "C" (must be attached).
- III. The maximum amount payable for services under the original Work Authorization and previous supplementals is hereby increased from \$504,918.37 to \$797,922.35. The revised Fee Schedule is attached hereto as Attachment "C".

Except as otherwise amended by prior or future Supplemental Work Authorizations, all other terms of the Work Authorization are unchanged and will remain in full force and effect.

This Supplemental Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

IN WITNESS WHEREOF, the County and the Engineer have executed this Supplemental Work Authorization, in duplicate, to be effective as of the date of the last party's execution below.

ENGINEER:	COUNTY:	
RPS Group	Williamson County, Texas	
By: Brent L. Christian	By:	
Signature	Signature	
Brent Christian	_	
Printed Name	Printed Name	
Executive Director		
Title	Title	
July 12, 2022		
Date	Date	
LIST OF ATTACHMENTS		
Attachment A - Services to be Provi	ded by County	
Attachment B - Services to be Provi	ded by Engineer 7/18/2022	
Attachment C - Work Schedule		

Attachment D - Fee Schedule

ATTACHMENT A SERVICES TO BE PROVIDED BY THE COUNTY

FOR CR 404 REALIGNMENT SCHEMATIC & PS&E

In general, Williamson County and its representatives to their best efforts will render services as follows:

- 1. Name, business address, and phone number of County's project manager.
- 2. Assistance to the Engineer, as necessary, with obtaining data and information from other local, regional, State and Federal agencies required for this project.
- 3. Provide available appropriate County data on file including plans and specifications that are deemed pertinent to the completion of the work required by the scope of services (including previous hydraulic studies, models, previous reports and studies, available existing traffic counts, and design year traffic projections).
- 4. Provide available criteria and full information as to the client's requirements for the project. Provide examples of acceptable format for the required deliverables.
- 5. Provide information on any meetings/discussions held with adjoining property owners that may impact the project.
- 6. Provide timely reviews and decisions necessary for the Engineer to maintain the project work schedule. Review recommendations offered by the Engineer, progress of work, and final acceptance of all documents.
- 7. Submittal of documentation and permits to regulatory agencies for review and comment, when specified.
- 8. Support project development efforts with stakeholders, coordinate meetings and interface with stakeholders, as needed.
- 9. Post and maintain project information for public consumption on the County website.
- 10. Assist with Coordination between the Engineer and the County's other consultants.
- 11. Negotiate with all utility companies for any agreements and/or relocations required.

- 12. Provide an agent as necessary to secure proposed ROW and relocate/remove improvements on proposed ROW.
- 13. Send Right of Entry letters to property owners.
- 14. Provide preferred pavement structural section for evaluation

ATTACHMENT B SERVICES TO BE PROVIDED BY THE ENGINEER FOR CR 404 REALIGNMENT SCHEMATIC & PS&E

PROJECT DESCRIPTION

Project Limits

New location Roadway from FM 3349 to CR 404.

Proposed Facility

Construct the interim roadway, a new 4 lane arterial roadway with shoulders and also determine the ROW for the ultimate roadway being modified from typical 180-foot width to 350-foot width.

Design Criteria

The proposed design criteria for the project will be developed from Williamson County and TxDOT design criteria. It is anticipated that in most cases the most stringent of the design criteria will be used.

1. PROJECT MANAGEMENT

- a. Communication:
 - Designate one Licensed Professional Engineer (Texas) to be responsible for the project management, and all communications with the County and its representatives.
- b. Monthly Progress Report, Invoices, and Billings (12 additional months assumed):
 - Submit monthly progress status reports to the GEC. Progress reports will include deliverable table, tasks completed, tasks/objectives that are planned for the upcoming periods, lists or descriptions of items or decisions needed from the County and its representatives. Subconsultant progress will be incorporated into the monthly progress report. A copy of the monthly progress report will be uploaded to ProjectWise.
 - Prepare correspondence, invoices, and progress reports on a monthly basis in accordance with current County requirements.
- c. Quality Assurance and Quality Control (QA/QC) Plan:
 - Prepare a project specific QA/QC plan and submit to the County within thirty (30) days of notice to proceed.
 - For each deliverable submittal, provide evidence of their internal review and mark-up of that deliverable as preparation for submittal and in accordance with submitted project specific QA/QC plan.
 - Provide continuous QA/QC throughout the duration of the scheduled services included herein to appraise both technical and business performance and provide direction for project activities. This includes QA/QC of all calculations, design spreadsheets, design inputs, data, sheets, estimates, and quantities throughout the project lifespan and each milestone submittal.
- d. Project Coordination & Administration:
 - Prepare for and attend bi-weekly update meetings with the County's GEC. (26 additional meetings assumed)
 - Prepare and maintain routine project record keeping including records of meetings and minutes.

- Correspondence and coordination will be handled through & with the concurrence of the GEC.
- Manage Project activities (including documenting emails, phone and conference calls, maintain
 project files for the length of the project, meeting agendas, meeting minutes, and schedule meetings),
 direct Engineer's team/staff, coordinate and review sub-consultant work, correspond with the County
 and its representatives, and assist the County and its representatives in preparing responses to Projectrelated inquiries.
- e. Progress/Coordination Meetings (12 additional external meetings assumed):
 - Attend coordination/progress meeting with the County and its representatives and stakeholders, as necessary to communicate development of the project and design issues.
 - Prepare agenda and sign-in sheets for external coordination/progress meetings.
 - Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.
 - Conduct internal coordination meetings as required to advance the development of the project.

f. Project Schedule:

• Maintain a project schedule for the extended time period indicating tasks, subtasks, critical dates, milestones, and deliverables. Submit to County as requested.

g. **Deliverables:**

- Monthly Invoices and Progress Reports including Deliverable Table
- Project Specific QA/QC Plan
- Meeting Minutes, Sign-In Sheets, and Agendas
- Project Schedule and Updates
- Project Files
- QA/QC Documentation with Deliverable

2. ROUTE AND DESIGN STUDIES

a. Data Collection:

- Perform record research and obtaining existing information, including but not limited to: as-built
 plans, construction plans, right of way maps, traffic data, environmental reports, studies, future land
 use maps, floodplain data, floodplain and drainage models and analyses. Obtain construction plans
 for projects within the project limits and abutting roadways. Obtain drainage studies, reports, and
 mapping for the project area, including reports for developments affecting the drainage area for the
 additional areas of new ROW.
- Review aerial photography and contours provided by Williamson County. County provided aerial photography and contours will be the basis for developing all constraints maps and route options. Obtain the existing schematic from the GEC.
- Right of Entry (2 additional letters assumed):
- Update list of parcels requiring ROE and priority parcels for the project team including surveying, , environmental and drainage to account for modified or new parcel acquisitions.
- Develop technical content for ROE request letter to be distributed to adjacent landowners

- Conduct a field investigation of the new preferred route option and the surrounding area to determine field conditions including photographic record of notable existing features.
- Update adjacent property ownership information spreadsheet to be used for disseminating project information including owner's name, tenant name for leased property, mailing address, property address, property id number.
- Review the data collected and organize the information.
- b. Stakeholder Coordination (2 additional meetings assumed):
 - Schedule, coordinate logistics for and prepare agendas, sign in sheets, meeting minutes, discussion topics, presentations, overall exhibits, and maps of the project limits for stakeholder coordination.
 - Coordinate with affected local agencies and County's consultants. Includes preparing/reviewing presentations and other communications materials for elected official briefings.
 - Attend meeting with stakeholders (2 meetings assumed).
- c. Design Criteria:
 - In accordance with the latest version of Williamson County design criteria, prepare a Design Summary Form and highlight any recommend changes to the approved design criteria.
- d. Deliverables:
 - Meeting Minutes, Sign-In Sheets, Agendas, Presentations, Maps, and Exhibits for all Stakeholder Coordination Meetings.
 - Draft and Final Design Summary Form (pdf and hardcopies)

3. SURVEYING

- a. Design Surveying:
 - Survey the area at approximately 50-foot stations 100-feet on either side of the 350-foot proposed roadway right of way including identify existing landowners, deed recordation information, locate visible improvements and utilities including driveways, water wells, storage tanks, drainage structures (size, material, flowline elevations), edge of pavement/shoulder, physical centerline, guardrail, fences, signs, mailboxes, trees 8" inch diameter and greater, locate property boundaries sufficient to re-establish ROW.
 - Establish horizontal and vertical control and set temporary benchmarks. (4 temporary Benchmarks to be set)

b. ROW Mapping

- Records Research and Deed Study will conduct research in the Williamson County Appraisal
 District offices to confirm property ownership for the 4 affected properties (subject properties).
 Concurrently, copies of the current deeds and any plats for all subject properties will be
 obtained from the County Clerks' records. Title Commitments, Title Reports, and any other
 form of records research beyond obtaining current deeds and plats will be provided by others.
 Obtaining any additional records (including easements, chain of title, or any encumbrances) is
 outside of this scope of services.
- Field Surveys will recover monuments marking the existing ROW lines (if any) and the front corners of the properties from which ROW is to be obtained and will tie to the project control.

RPS will recover the corner or angle point monuments nearest to the proposed ROW on the sideline of each of the subject properties and these corners will be tied to the project control after ROE has been granted.

- Boundary Analysis will analyze the results of the survey and perform computations related to the
 analysis. Location of the existing ROW lines and the side property lines of each of the subject
 properties will be determined
- Documents will be submitted in two rounds (preliminary and final). Preliminary ROW
 documents shall be submitted based upon found monumentation within the existing ROW.
 Final ROW documents shall be submitted at a later date once review comments have been
 received from the County.
- 5/8-inch iron rod with "Williamson County" aluminum caps will be set at PCs, PTs, angle points and at no greater than 1,000 foot intervals along tangents on the proposed right-of-way line (up to 15 total).
- Stake the proposed ROW and proposed centerline for the updated CR 404 realignment one (1) time for the 4 affected properties.

c. **Deliverables:**

- 2D Planimetrics & 3D DTM (Microstation V8i)
- GPK & TIN file
- 1-Foot Contour map in Microstation V8i DGN format
- Reference Deeds and Plats (PDF Format)
- One (1) copy of each Parcel Description/Plat on 8.5"x11" paper (signed/sealed by a Texas RPLS)
- Digital files (Microstation V8i) of all Parcel Plats
- PDF Field Book Copies
- ASCII file of points

4. SCHEMATIC DEVELOPMENT

- a. Schematic:
 - Develop Ultimate Typical Sections for 350' PROP ROW.
 - Revise Final (Ultimate) Schematic submittal with new alignment and PROP ROW between CR 3349 (western limits) and CR 404 (eastern limits) per Williamson County Schematic submittal checklist and selected design criteria.
 - Design will be completed using County data and readily available internet data (contours, aerials, etc.)
 - Develop preliminary plan and profile to determine Ultimate ROW needed.
 - Develop corridor 3D model using OpenRoads for the ultimate typical section to determine ROW footprint. This is to include ROW needed for direct connectors at the FM 3349 interchange. Develop Roadway Cross Sections at 100-ft increments and display on a roll plot.
 - Develop schematic level drainage analysis to determine ROW footprint.
 - Develop Control of Access for Ultimate Schematic
- b. Prepare Engineering Cost Estimate
 - Revise Final Engineering Costs Estimate for the construction quantities covering all items of the proposed work for the revised ultimate section from FM 3349 to CR 404.

Deliverables:

- Proposed ROW basemap for the ultimate typical section.
- Revised Final Schematic including cost estimate for ultimate section from FM 3349 to CR 404.
- 5. <u>DRAINAGE STUDY</u> (Revising 3 total cross drainage structures
 - a. Revise Hydrologic Study & Modeling to include interim and ultimate roadway design from FM 3349 to CR 404:

Detail the criteria, methodologies, results and recommendations of the revised analysis.

- Collect, prepare and modify existing hydrologic & hydraulic models to reflect the existing, & proposed conditions. Compare and document the study results with existing studies or models from WCIDs, USACE, TWDB, cities, etc., if available.
- Provide existing and proposed condition drainage area maps.
- b. Revise Hydraulic Study & Modeling for interim and ultimate roadway design from FM 3349 to CR 404:
 - Provide revised hydraulic models and/or calculations for the proposed structures and existing structures to remain.
 - Document existing conditions including size, length, flowline elevations, scour, flooding, erosion or other notable conditions. Document source of hydraulic/channel cross sections.
 - Prepare design of the right of way drainage system, including cross drainage structures, using appropriate software (HEC-RAS, HY-8, SWMM, Bentley or other approved hydraulic modeling software). Culverts will be sized hydraulically, all other design of ROW drainage including roadside ditches will be included in the PS&E (Section 9) Section.
 - Compare and document the study results with existing studies or models from WCIDs, USACE, TWDB, cities, etc., if available.
 - Minimum pavement elevations based on design event WSEL for cross drainage flood elevations.
 - Determine the need for ROW or easements for the project. Coordinate with the County's GEC as needed to ensure that ROW, easements and the space required for the appropriate maintenance equipment, activities and personnel is provided.
 - Provide electronic files for all data collected and any developed Hydrologic & Hydraulic models. Provide CAD and/or GIS files used in the study.
- c. Revise the Impact and Mitigation Analysis for interim and ultimate roadway design from FM 3349 to CR 404:
 - Provide documentation of all adverse impacts resulting from the proposed facility in proposed condition. Provide a comparison of existing vs proposed at each outfall from the project area.
 - Coordinate with the County's GEC as needed to ensure that proposed mitigation and/or detention
 facilities are in an acceptable location and have acceptable maintenance access and safety features.
 Provide landscaping setbacks, if requested. Criteria for this determination will be based, in part, on
 drainage information provided by the Engineer and on the existing and proposed design for the
 project area.

- Provide plans to mitigate adverse impacts to nearby buildings, property access points, and runoff patterns.
- If detention is required, provide routing analysis of storm hydrographs for the proposed condition. Design stormwater control structures, detention basin layouts and details and provide a detailed maintenance plan.
- Calculate the volume of fill to be placed in the 100-year floodplain and recommend locations for compensatory storage.

d. **Deliverables:**

- Revise the Preliminary & Final Drainage Report (Ultimate and Interim Design)
- Provide electronic files for all data collected and any developed Hydrologic & Hydraulic models. Provide CAD and/or GIS files used in the study.

6. ENVIRONMENTAL SERVICES

- a. Revise Data Collection & Field Reconnaissance:
 - Obtain and update periodically publicly available information including but not limited to: locations
 of public buildings (schools, churches, cemeteries, parks), aerial photography, National Wetland
 Inventory Maps, County Soil Survey Maps, Vegetation Information, Environmental Information
 from the appropriate local, state, or federal agencies,.
 - Conduct a regulatory records review to identify listed hazardous waste generators, treatment, storage
 and disposal facilities; solid waste landfills, unauthorized sites; documented spills; oil and gas
 exploration and production sites; and underground storage tank sites within the proposed site location
 for the new limits of ROW. The review will also identify other environmental risks along the project
 corridor.
 - Conduct field reconnaissance to visually inspect the project site for additional risks and field verify any environmental risks identified by the regulatory records review for the new limits of ROW.

b. Revise Constraints Mapping

Update the constraints map that includes environmental resources, known constraints (structures, floodplain, karst features), cultural and historic resources, hazardous material sites, aerial photography, contour information, utility information, that is based on research of public databases and sources to include the new limits of ROW.

c. Revise County Due Diligence:

- The Environmental Services will include studies and documentation required, per the Williamson County Environmental Protocol, for the various regulating authorities, including the Texas Historical Commission (THC), U.S. Army Corp of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), and Williamson County Conservation Foundation (WCCF). The intention of the Environmental Services is to attain necessary clearance letters and approvals in order to proceed with the proposed project.
- d. Revise Section 404 Clean Water Act Compliance:

- Conduct a site visit that will delineate any new wetland boundaries and ordinary high-water marks of jurisdictional waters within the new limits of project ROW. It is anticipated that this project will be covered under a Nationwide Permit (NWP 14) without a pre-construction notification (PCN).
- Update the Jurisdictional Waters Delineation Report identifying specific impacts of the project on the Waters of the U.S. (including special aquatic sites), measures to minimize the impacts will be identified, and discuss applicable Section 404 options in accordance with current permits and conditions based on data collection and field reconnaissance.
- If it is determined, after the Jurisdictional Waters Delineation Report, that a PCN is required; a supplemental work authorization would be required. The Jurisdictional Waters Delineation Report and NWP with PCN are subject to the U.S. Army Corps of Engineers Forth Worth District review and issuance of a permit.

e. Revise Historical Site Compliance:

 If necessary, update the historic building survey that will follow the Secretary of the Interior's Standards and guidelines for Archeology and Historic Preservation and document historic buildings and structures within the Area of Potential Effect based on data collection and field reconnaissance.

f. Revise Phase I Environmental Site Assessment:

• Revise the previously completed Phase I Environmental Site Assessment based on the new limits of ROW for the proposed project.

g. Revise Texas Antiquities Code (TAC) Compliance:

- Update the Project Initiation Letter, Texas Antiquities Permit Application, and Associated Scope of Work based on data collection and field reconnaissance for the new limits of ROW.
- Conduct a background survey and report of sufficient intensity to determine the nature, extent, and
 potential significance of any cultural resources located within the Area of Potential Effect in
 accordance with full report guidelines as outlined by the Texas Historical Commissions Rules of
 Practice and Procedures.
- Coordination with Texas Historical Commission including submittals to Texas Historical Commission and project records to the appropriate curation facility per Texas Historical Commission requirements.

h. Revise TxDOT Categorical Exclusion (CE) Environmental Clearances:

- Update environmental documentation utilizing the appropriate outline in accordance with Title 23, Part 771, 772, FHWA's Technical Advisory T6640.8A, TxDOT's 1996 Noise Guidelines, and TxDOT 2021 Air Guidelines. Information needed for the TxDOT clearance is anticipated to be required only for the work in TxDOT ROW.
- Per TxDOT's Environmental Compliance Oversight System (ECOS), it is assumed a Work Plan Development (WPD) process would determine the appropriate technical documentation in support of and in compliance with the National Environmental Policy Act (NEPA).
- All TxDOT environmental documentation would be performed in accordance with up-to-date Environmental Compliance Toolkits.

Deliverables:

Williamson County Due Diligence

- Draft and Final Environmental Constraints Map (Revised)
- Draft & Final Phase I Environmental Site Assessment (Revised)
- Draft & Final Aquatic Resources Delineation Report (Revised)
- Draft & Final Historic Building Survey (Revised)
- Draft & Final Texas Antiquities Permit Application Associated Scope of Work and Report (Revised)

TxDOT Environmental Documentation

- Draft & Final TxDOT WPD I and II
- Species Analysis Form
- Species Analysis Spreadsheet
- Surface Water Analysis Form

7. GEOTECHNICAL SERVICES

8. PLAN PREPARATION (PS&E) SERVICES

Prepare revised plans per the current Williamson County Design Criteria Manual including applicable submittal requirements including cost estimate, checklists, hardcopies, CAD files, comment responses, design waivers/exceptions, general notes, quantities, specifications, updated design schedule, construction time determination. The engineer will develop and submit these revised Plans, Specifications & Estimates (PS&E) at 100% and Final Design for the interim arterial typical section within the revised ultimate ROW.

- a. Roadway/General (Revised):
 - Title Sheet
 - Revise the project title sheet as required for the construction plans, utilizing the template provided by the County.
 - Index of Sheets
 - Revise the index sheet(s) that shows each sheets location in the plan set.
 - Project Layout
 - Revise the project layout sheet(s) that clearly indicates the limits of the entire project.
 - Typical Sections
 - Revise typical section(s) for all proposed and existing roadways and cross streets.
 - Survey data
 - Revise benchmark layout sheet(s) that clearly indicate the benchmark locations and associated control information.
 - Horizontal Alignment Data
 - Revise horizontal alignment data sheet(s) that depict the horizontal geometric information for the roadways to be included in the construction plan set.
 - Summary Sheets
 - Revise summary sheet(s) that tabulate, combine, and summarize quantities of the various construction items.

- Roadway Plan & Profiles
 - Revise roadway plan and profile sheets that depict the proposed construction and clearly identify any required removals.
- Side Street/Intersection Plans
 - Side Street/Intersections layouts sheets will be prepared for up to three (3) locations.
 - Provide contours or details of drainage patterns for street intersections including slope or elevations along edge of pavement to avoid ponding at intersections. Where applicable, provide details of volume of flow and velocity through intersections.
- Driveways
 - Revise driveway profiles/culverts for each driveway along the project corridor. When possible, these driveways will be defined in a tabular format. Non-typical driveways may require special details.
 - Where applicable, provide details of volume of flow and velocity across driveway intersections.
- Cross Sections
 - Revise the 3D corridor model using OpenRoads for the interim typical section and cross sections at 50-foot stations and other locations as necessary for the determination of cut and fill quantities.
 These sections will also be used to further refine the design vertical geometry.
- b. Traffic Control (Revised):
 - Traffic Control Plans (TCP)
 - Revise traffic control typical section(s) and phasing layouts showing the new roadway footprint within the revised ROW limits for each stage of the construction sequence to clearly delineate the position of the existing traffic with respect to the proposed construction.
 - Revise the Engineer's opinion of construction schedule in order to determine an approximate duration for each of the phases of construction.
- c. Drainage (Revised):
 - Revise Drainage Area Maps
 - Develop existing and proposed external drainage area maps to show the overall project and drainage basin divides.
 - Revise Culvert Layout Sheets
 - Develop culvert layout sheets at all the major crossing locations, up to **five** (5) locations.
 - Revise Hydraulic Data Sheets
 - Develop a hydraulic data sheet at all the major crossing locations using HY-8 or HEC-RAS software.
 - Revise Culvert Standards and Detail Sheets
 - Select culvert standards based on headwall configuration and fill conditions. Develop details as needed for non-standard headwalls, special grading at upstream and downstream transitions and energy dissipation.

Roadside Ditch Design

- Prepare revised interior drainage area maps that depict drainage area boundaries and flow direction arrows. Each area will be identified and cross-referenced to the calculation sheets.
- Calculate revised run-off to each hydraulic crossing or driveway culvert(s) and ditch hydraulic
 information in accordance with Williamson County Design Criteria Manual and shown on the
 run-off and ditch computation sheets.
- Prepare a revised tabular ditch layout schedule that depicts pertinent information about the roadside ditch geometry and design. This table will include station, offset, flow line elevation, velocity, ditch lining material, as well as ditch bottom width. The tables will be shown on the hydraulic data sheets.
- Provide revised drainage design details for "non-standard" drainage structures in instances where they are not covered by County or TxDOT standard details. Use County or TxDOT standards details where practical.
- Identify revised areas of the culvert construction that will require trench protection or special shoring.

d. Signing and Pavement Markings Layouts:

- Prepare revised signing and pavement marking layouts.
- Prepare revised pavement marking details for non-standard conditions.
- Prepare revised detail sheets for small signs for non-standard signs.

e. Stormwater Pollution Prevention Plan (SW3P):

- Develop revised SW3P narrative in conformance with the TCP to minimize potential impacts to receiving waterways and prepare the TxDOT SW3P information sheet.
- Prepare revised Temporary Erosion Control Layouts to minimize potential impact to receiving waterways
- Include revised County and TxDOT standard details in the PS&E package as appropriate.

f. Engineer's Cost Estimate:

• Develop a revised engineers estimate construction cost estimate based on tabulated summary of quantities and current average low bid unit prices for each design submittal (60%, 90%, 100% & Final PS&E).

g. Project Manual:

• Revise the project bid manual including latest edition of Williamson County bid information, bid form, contract requirements, plans and specifications for the 100% and Final design submittals.

h. Work Product Submittal Preparation (100% & Final):

 Prepare each work product submittal including updating the index of sheets and subsequent sheet numbering, combining plan sheets for each construction plan submittal, updating specification lists, development and update of special specifications or required County or TxDOT forms, and submittal of the entire work product package to the County. All contract documents, including a pdf copy of each deliverable, native electronic files, models and
calculations will be uploaded to the County's project management database at each milestone and at
the completion of the project. One hard copy of each deliverable will be provided unless additional
copies are required per the submittal checklist.

i. Deliverables:

- 100% & Final PS&E Submittals including applicable Williamson County Submittal Checklists.
- Drainage Models

9. BIDDING PHASE SERVICES

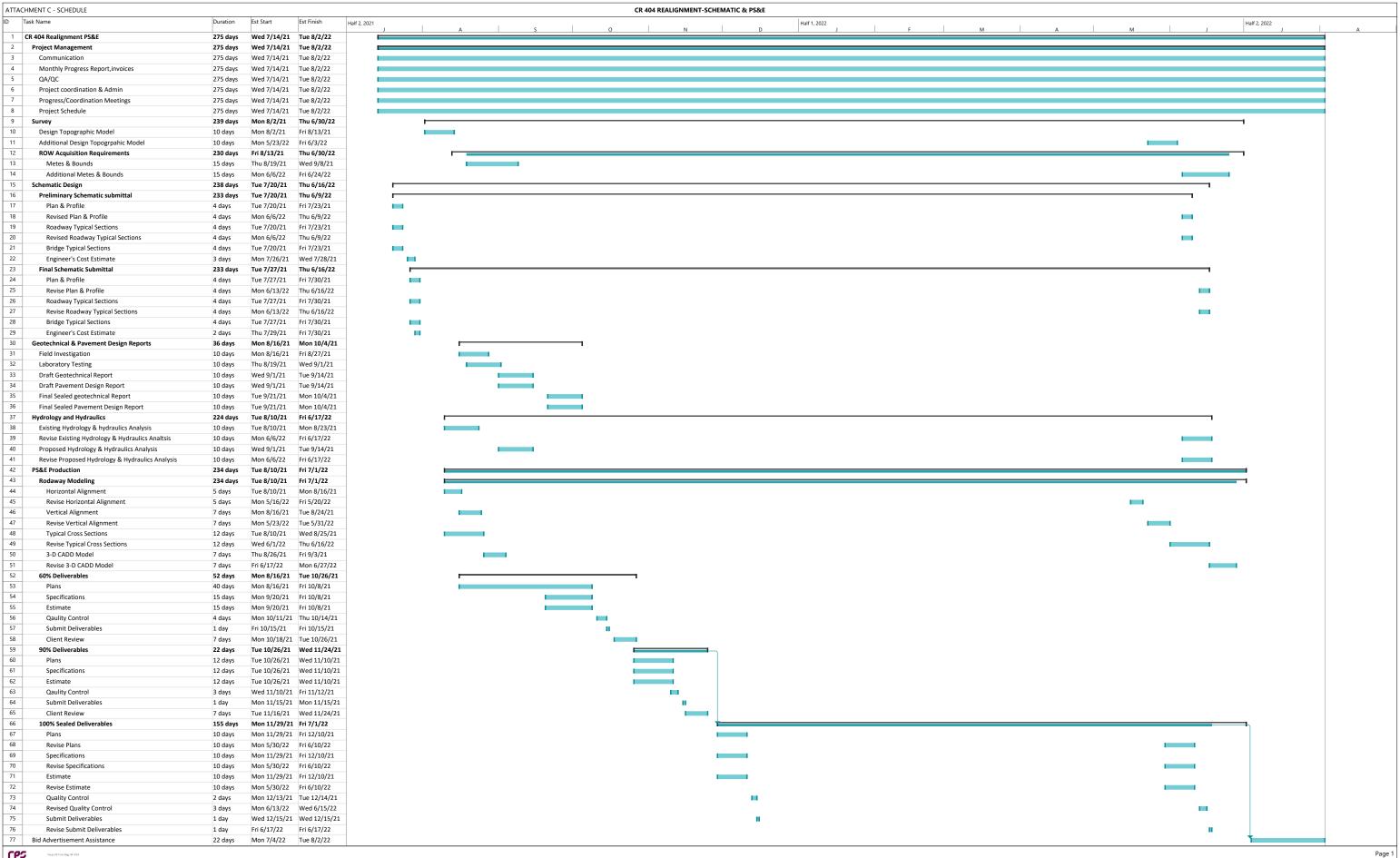
- a. Bidding Phase Services:
 - Prepare all applicable construction documents for bidding. Attend the pre-bid meeting. Respond to bidder's questions during the bid period. Prepare project addenda up to two (2) during bid period. Analyze contractor bids, prepare bid tabulation, and make recommendation for award to the apparent low bidder via a letter. Attend the pre-construction conference.

b. **Deliverables:**

• Letter of Recommendation for Award, with Bid Tabulation.

10. EXCLUSIONS:

- a. The following items are not included in this work authorization:
 - TRAFFIC DATA COLLECION OR TRAFFIC ANALYSIS.
 - ROW ACQUISITION
 - PUBLIC INVOLVEMENT (AREADY COVERED IN CR404 CORRIDOR STUDY WA#1)
 - DETENTION & WATER QUALITY PLANS
 - DRAFT & FINAL RHCP APPLICATION
 - DRAFT & FINAL THREATENED AND ENDANGERED SPECIES HABITAT ASSESSMENT REPORT
 - DRAFT & FINAL TXDOT SPECIES ANALYSIS FORM AND SPREADSHEET
 - FEMA COORDINATION CLOMR OR LOMR.
 - NATIONWIDE PERMIT (NWP) 14 WITH A PRE-CONSTRUCTION NOTIFICATION (PCN).
 - PAVEMENT DESIGN REPORT
 - CONSTRUCTION PHASE SERVICES.
 - UTILITY COORDINATION OR RELOCATION ESTIMATES.



ATTACHMENT D FEE SCHEDULE

PROJECT NAME: CR 404 Realignment SWA#1 to WA#2

PRIME PROVIDER NAME: RPS Infrastrucure, Inc.

ALIGNMENT STUDY																	
TASK DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS
1. Project Management																	
Progress Status Reports, Invoices, & Billings		4	12											6	22	NA	
QA/QC		4	8	24											36	NA	
Progress / Coordination Meetings		•	•	•		•	•					,	•			NA	
External Meetings (12)		8	18											6	32		
Weekly internal Meeting (Virtual) (26)		8	13												21		
Project Schedule & Updates		4	16												20	NA	
HOURS SUB-TOTALS	0	28	67	24	0	0	0	0	0	0	0	0	0	12	131	0	
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$7,840.00	\$17,085.00	\$4,680.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,080.00	\$30,685.00		
TASK DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS
2. Route And Design Studies																	
Data Collection				2	6							12			20	N/A	
StakeHolder Coordination (2 Meetings)		2	6												8	N/A	
HOURS SUB-TOTALS	0	2	6	2	6	0	0	0	0	0	0	12	0	0	28	0	
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$560.00	\$1,530.00	\$390.00	\$750.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,040.00	\$0.00	\$0.00	\$5,270.00		
TASK DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
3. Surveying																	
Design Survey Review & Coordination			4	4	12										20	N/A	
ROW Mapping Review & Coordination			4	4	12										20		
HOURS SUB-TOTALS	0	0	8	8	24	0	0	0	0	0	0	0	0	0	40		
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$0.00	\$2,040.00	\$1,560.00	\$3,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,600.00		
TASK DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
4. Schematic Development																	
Final Schematic															0		
Plan			4	16	24							24			68		
Profile Control of Access			4	16	16							16			52		
Control of Access Typical Section			4	12	12							12			0		
Roadway			2	8	8							8			26		
3D Corrior Model & Cross Section Roll Plot (100-foot)			4	8								40	32		84		
HOURS SUB-TOTALS	0	0	18	60	60	0	0	0	0	0	0	100	32	0	270	i	
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$0.00	\$4,590.00	\$11,700.00	\$7,500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$17,000.00	\$3,200.00	\$0.00	\$43,990.00		

Date:

7/12/2022

ATTACHMENT D FEE SCHEDULE

PROJECT NAME: CR 404 Realignment SWA#1 to WA#2

PRIME PROVIDER NAME: RPS Infrastrucure, Inc.

TASK DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL LABOR HRS.	NO OF DWGS	LABOR HRS PER SHEET
			, i	Ů		_									& COSTS		
5. Drainage Study																	
Hydrologic Study and Modeling		1	2												3	N/A	
Collect, prepare, Modify Exsting H&H models				2	16										18	N/A	
Existing Conditions				2	24										26	N/A	
Proposed Conditions				2	24										26	N/A	
Hydraulic Study and Modeling		2													2	N/A	
Model Proposed and Existing Structures			2	4	24										30	N/A	
Design ROW Drainage System				8	24										32	N/A	
Impact Mitigation Analysis		1	2												3	N/A	•
Document Prosed Facility's adverse impacts				4	8										12	N/A	
Develop Mitigation Plan				4	12										16	N/A	•
County Coordination		1	2												3	N/A	-
Detention requirement determination			2	8	32										42	N/A	
100 Yr Flood Plain Impact				4	12										16	N/A	
Drainage Report					<u> </u>											N/A	
Priliminary		1	2	4	12									3	22	N/A	
Final		1	2	4	12									2	21	N/A	
Tind			_											_	2.	14/71	•
HOURS SUB-TOTALS	0	7	14	46	200	0	0	0	0	0	0	0	0	5	272	N/A	
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL PROJECT MANAGEMENT	\$0.00	\$1,960.00	\$3,570.00	\$8,970.00	\$25,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$450.00	\$39,950.00		
TASK DESCRIPTION			Camian Brain at	Camian Danisast	A i - t -			Deinainal					Design on (CADD	Desi	TOTAL	NO OF	LABOR HRS
	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	LABOR HRS.	DWGS	PER SHEET
			Mariagor	Engineer	Engineer			Corlocatoric					roomiolam	, and minotifator	& COSTS		
6. Environmental Services																	
Data Collection Field Reconnaissance											1				1	N/A	
Constraints Map											2				2	N/A	
County Due Diligence						1	40		2						3	N/A	
Section 404 Compliance						4	16		32		4				56	N/A	
Historical Site Compliance Phase 1 ESA						1									<u> </u>	N/A N/A	
TX Antiquities Compliance3						1									1	N/A N/A	
TxDOT CE Clearance						4			32						36	N/A	-
INDO I OL OIGHANGO						4			52						30	14//\	
HOURS SUB-TOTALS	0	0	0	0	0	11	16	0	66	0	7	0	0	0	100		
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,168.00	\$4,320.00	\$0.00	\$10,230.00	\$0.00	\$770.00	\$0.00	\$0.00	\$0.00	\$18,488.00		

7/12/2022

Date:

PROJECT NAME: CR 404 Realignment SWA#1 to WA#2

PRIME PROVIDER NAME: RPS Infrastrucure, Inc.

Date: 7/12/2022

TASK DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Mange	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL LABOR HRS. & COSTS	NO OF DWGS	LABOR HRS PER SHEET
8. Plan Preparation (PS&E) Services																	
Roadway/General																	
Title (1 Sht)			1	1								2	2		6	1	6
Index (1 Sht)			1	1								2	2		6	1	6
Project Layout (1 Sht)			1	1								2	2		6	1	6
Typical Sections (2 Shts)			2	2								5	8		17	2	9
General Notes (1 Sht)			2	2								4	2		10	1	10
Survey Data (1 Sht)				1								4	4		9	1	9
Horizontal Alignment Data (1 Sht)			1	2	2							2	6		13	1	13
Quantity Summary (2 Shts)			2	2	4							4	6		18	2	9
Roadway P&P (10 Shts)			2	8	8							20	20		58	10	6
Side Street/Intersections (3 Shts)			2	4	5							12	8		31	3	10
Driveways (2 Shts)			1	2	3							8	6		20	2	10
Miscellaneous (2 Shts)			2	3	4							8	6		23	2	12
3d Corridor Model & Cross Sections (25 Shts)			2	4								30	12		48	25	2
Traffic Control Plans																	
Typical Sections (2 Shts)			2	3	4								8		17	2	9
Narritive (1 Sht)			1	3								2	2		8	1	8
DetailedTCP (4 Shts)			2	2	5							16	16		41	4	10
Standards (16 Shts)				2	4										6	16	0
Special Details (2 Shts)			1	2	2							4			9	20	0
Const. Schedule (1 Sht)			2	4											6	1	6
Drainage																	
Drainage Maps (2 Shts)			2	4								12	4		22	2	11
Culvert Layouts (5 Shts)			4	5	6								16		31	5	6
Hydraulic Data (5 Shts)			2	4	6							16	24		52	5	10
Roadside Ditches (4 Shts)			2	4	6							16	24		52	4	13
Signing and Pavement Markings																	
Plan (10 Shts)			2	8	8							16	16		50	10	5
Special Sign Details (1 Sht)			2	2	3								5		12	1	12
Storm Water Pollution Plans																	
SW3P Narrative/Information Sheet (1 Sht)			2	6	5							2	4		19	1	19
EC Layout (10 Shts)			2	4	8							8	16		38	10	4
Engineers Cost Estimate				8								16	6		30	NA	
Project Manual			2	4	8							8			22	NA	
100% Submittal Preparation		2	4	6								3	4	2	21	NA	
Final Sealed Submittal Prparation		2	4	5								3	4	2	20	NA	
·																	
HOURS SUB-TOTALS	0	4	55	109	91	0	0	0	0	0	0	225	233	4	721	134	5
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$1,120.00	\$14,025.00	\$21,255.00	\$11,375.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38,250.00	\$23,300.00	\$360.00	\$109,685.00		

DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL COSTS TASK	NO OF DWGS	LABOR HRS PER SHEET
9. Bid Advertisement Serivecs																	
Attend Pre-Bid Meeting		2	2												4	NA	
Response to Bidders' Questions			2	4											6	NA	
Prepare Project Addemda (2 Assumed)			2												2	NA	
Anylize Bid Packages			2	4											6	NA	
Letter of recommendation to award with Bid Tabulation			1	1											2	NA	
HOURS SUB-TOTALS	0	2	9	9	0	0	0	0	0	0	0	0	0	0	20	NA	
LABOR RATE PER HOUR	\$300.00	\$280.00	\$255.00	\$195.00	\$125.00	\$288.00	\$270.00	\$205.00	\$155.00	\$145.00	\$110.00	\$170.00	\$100.00	\$90.00			
SUBTOTAL	\$0.00	\$560.00	\$2,295.00	\$1,755.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,610.00		

PROJECT NAME: CR 404 Realignment SWA#1 to WA#2 PRIME PROVIDER NAME: RPS Infrastrucure, Inc.

GRAND TOTAL

7/12/2022 Date:

DESCRIPTION	Principal	Team Leader	Senior Project Manager	Senior Project Engineer	Associate Engineer	ENV Dept Manger	SR ENV Planner	Principal Consultant	ENV Scientist	Consultant III	ENV Planner I	Senior Designer	Designer/CADD Technician	Proj. Andministrator	TOTAL COSTS TASK	NO C
SUMMARY																
1. Project Management	0	28	67	24	0	0	0	0	0	0	0	0	0	12	\$30,685.00	N/A
2. Route And Design Studies	0	2	6	2	6	0	0	0	0	0	0	12	0	0	\$5,270.00	N/A
3. Surveying	0	0	8	8	24	0	0	0	0	0	0	0	0	0	\$6,600.00	N/A
4. Schematic Development	0	0	18	60	60	0	0	0	0	0	0	100	32	0	\$43,990.00	N/A
5. Drainage Study	0	7	14	46	200	0	0	0	0	0	0	0	0	5	\$39,950.00	N/A
6. Environmental Services	0	0	0	0	0	11	16	0	66	0	7	0	0	0	\$18,488.00	N/A
8. Plan Preparation (PS&E) Services	0	4	55	109	91	0	0	0	0	0	0	225	233	4	\$109,685.00	134
9. Bid Advertisement Serivecs	0	2	9	9	0	0	0	0	0	0	0	0	0	0	\$4,610.00	N/A
																<u> </u>
SUBTOTAL LABOR EXPENSES	0	43	177	258	381	11	16	0	66	0	7	337	265	21	\$259,278.00	
DIRECT EXPENSES Environmental Service direct expensed															\$880.00	-
MILEAGE (@ \$0.57 per mile)	1,200														\$684.00	
IN HOUSE B/W PHOTO COPY (8.5"x11", @ \$0.12 per sheet)	240														\$28.80	
IN HOUSE COLOR PHOTO COPY (8.5"x11", @ \$0.75 per sheet)	240														\$180.00	
IN HOUSE COLOR PHOTO COPY (11"x17", @ \$1.50 per sheet)	650														\$975.00	
IN HOUSE PLOTS (COLOR on BOND, @ \$1.75/SQFT)	0														\$0.00	
Hazardous Materials Database Search (\$600.75)	1														\$600.75	1
SUBTOTAL DIRECT EXPENSES															\$3,348.55	1
																7
RPS TOTAL															\$262,626.55	1
																-
SUB CONSULTANTS:																4
Survey And Mapping (SAM)															\$21,821.45	1
AmaTerra															\$4,980.98	4
RPS Environmental Risk for the Revised Phase 1 ESA															\$3,575.00	1
																1

\$293,003.98