

WORK AUTHORIZATION NO. 2

WILLIAMSON COUNTY ROAD BOND PROJECT: CR 201 FROM CR 200 TO UMBRELLA SKY

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated March 9, 2021 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and WSB & Associates, Inc. (the "Engineer").

Part 1. The Engineer will provide the following Engineering Services set forth in Attachment "B" of this Work Authorization.

Part 2. The maximum amount payable for services under this Work Authorization without modification is \$ 539,225.

Part 3. Payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the Contract.

Part 4. This Work Authorization shall become effective on the date of final acceptance and full execution of the parties hereto and shall terminate on May 1, 2024. The Engineering Services set forth in Attachment "B" of this Work Authorization shall be fully completed on or before said date unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

Part 6. County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. Engineer understands and agrees that County's payment of amounts under this Work Authorization is contingent on the County receiving appropriations or other expenditure authority sufficient to allow the County, in the exercise of reasonable administrative discretion, to continue to make payments under this Contract. It is further understood and agreed by Engineer that County shall have the right to terminate this Contract at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by County's budget for the fiscal year in question. County may effect such termination by giving written notice of termination to Engineer.

Part 7. This Work Authorization is hereby accepted and acknowledged below.

Continued next page

EXECUTED this ____ day of Apr 26, 2023, 20__.

ENGINEER:

WSB & Associates

By: 

Signature

Robert Bailey

Printed Name

Vice President

Title

COUNTY:

Williamson County, Texas

By: 

Bill Gravell (Apr 26, 2023 16:16 CDT)

Signature

Bill Gravell

Printed Name

County Judge

Title

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

ATTACHMENT A
SERVICES TO BE PROVIDED BY THE COUNTY FOR
CR 201

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. Obtain Rights of Entry from landowners.
4. 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).
5. Provide available criteria and full information as to the client's requirements for the project. Provide examples of acceptable format for the required deliverables.
6. Provide information on any meetings/discussions held with adjoining property owners that may impact the project.
7. 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.
8. Submittal of documentation and permits to regulatory agencies for review and comment, when specified.
9. Support project development efforts with stakeholders, coordinate meetings and interface with stakeholders, as needed.
10. Post and maintain project information for public consumption on the County website.
11. Assist with Coordination between the Engineer and the County's other consultants.
12. Negotiate with all utility companies for any agreements and/or relocations required.
13. Provide an agent as necessary to secure proposed ROW and relocate/remove improvements on proposed ROW.

ATTACHMENT B
SERVICES TO BE PROVIDED BY THE ENGINEER FOR
CR 201

PROJECT DESCRIPTION

Project Limits

The project limits are from approximately 1100 ft north of Umbrella Skyway to CR 200 for approximately 2.0 miles.

Existing Facility

Existing 2-lane roadway with asphalt pavement. The existing right of way varies from 40 ft to 100 ft.

Proposed Facility

Proposed interim 2-lane roadway with 2 ft shoulders of an ultimate median arterial divided 4-lane curbed section with a raised median. The proposed ROW width is typically 120ft, the constrained with ROW varies from 76 ft to 110 ft through the project limits mention above.

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:

1. 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 (9 months assumed):

1. 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.
2. 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:

1. Plan developed and approved in WA#1; will be utilized as outlined
2. 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.

d. Project Coordination & Administration:

1. Prepare and maintain routine project record keeping including records of meetings and minutes.
2. Correspondence and coordination will be handled through & with the concurrence of the GEC.

3. 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 Project-related inquiries.
- e. Progress/Coordination Meetings (4 external meetings assumed):
1. Attend a kickoff meeting and coordination/progress meeting with the County and its representatives and stakeholders, as necessary to communicate development of the project and design issues.
 2. Prepare agenda and sign-in sheets for external coordination/progress meetings.
 3. Prepare meeting minutes for review via email within three (3) business days of the external coordination/progress meeting.
 4. Conduct internal coordination meetings as required to advance the development of the project.
- f. Project Schedule:
1. Maintain a project schedule indicating tasks, subtasks, critical dates, milestones, and deliverables. Submit to County as requested.
- g. **Deliverables:**
1. Monthly Invoices and Progress Reports including Deliverable Table
 2. Meeting Minutes, Sign-In Sheets, and Agendas
 3. Project Schedule and Updates
 4. Project Files
 5. QA/QC Documentation with Deliverable

2. PRELIMINARY DESIGN DEVELOPMENT

- a. Data Collection:
1. Coordinate with surveyor to determine limits of survey data collected
 2. Maintain 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.
 3. Review the data collected and organize the information.
- b. Review and update Schematic Design elements based on survey data collected
- Adjust horizontal and vertical design elements as needed to meet ROW requirements identified in Schematic Development
 - Develop 50' cross sections through Microstation Open Roads platform. Identify Limits of Construction for proposed improvements
 - Develop Proposed ROW limits that meet project objectives. Some ROW to be acquired through conversion of existing ROW easements to ROW.
 - Develop Proposed ROW layouts for use by surveyor for further map development (Assume 56 parcels); Transmit design files to Surveyor for development of ROW maps

- c. Stakeholder Coordination (**0** meetings assumed):
 - 1. Stakeholder meetings will be performed by others

d. **Deliverables:**

- 1. Updated Ultimate Schematic and related design files.

3. **SCHEMATIC DEVELOPMENT (30% design)**

- a. Develop Interim Design Criteria consistent with latest version of Williamson County design manual; Develop and submit draft and final Design Summary Form.
- b. Develop Interim Schematic utilizing ultimate schematic design details. Minimize improvements that will not be incorporated into future improvements
- c. Prepare updated cost estimate for the construction quantities covering all items of the proposed work.
- d. Prepare a Draft Traffic Control Plan narrative memo that describes the phases of construction for the interim plan.
- e. Develop preliminary approach to Edwards Aquifer permitting including interim BMP requirements. It is assumed that vegetative filter strips will meet TCEQ requirements as BMP.
- f. Develop interim cross sections at 50-foot stations and other locations as necessary for drainage design purposes

g. **Deliverables:**

- Draft and Final Design Summary Form (pdf and hardcopies)
- Roadway Geometric Design Schematic (Interim)
- Interim Traffic Control Plan narrative memo
- Preliminary construction cost estimate
- Cross sections
- Schematic Design Review checklist

4. **SCHEMATIC DRAINAGE STUDY (5 total cross drainage structures assumed):**

a. Hydrologic Study & Modeling

Update the Schematic Design Drainage Study for Final Design. Detail the criteria, methodologies, results and project design requirements.

- 1. Modify existing hydrologic & hydraulic models to reflect the proposed interim design.
- 2. Update the drainage area maps and rate control comparisons provided with Schematic Design for the Interim condition.
- 3. Atlas 14 impacts will be reviewed and incorporated.

b. Hydraulic Study & Modeling:

- 1. Provide hydraulic models and/or calculations for the existing and proposed structures.

2. Prepare final design and layout for the cross-drainage structures and major roadside channels using appropriate software (HEC-RAS, HY-8, SWMM, Bentley or other approved hydraulic modeling software). All bridges and multiple box culverts to be analyzed in HEC-RAS.

c. Impact and Mitigation Analysis:

1. Provide documentation of all adverse impacts resulting from the proposed facility in the proposed condition. Provide a comparison of existing vs proposed condition at each outfall from the project area.
2. Provide plans to mitigate adverse impacts to nearby buildings, property access points, and runoff patterns.
3. Provide pond calculations to meet EARZ requirements.
4. Coordinate with County's GEC to determine need for maintenance or landscaping setbacks for ponds. Criteria for this determination shall be based, in part, on drainage information provided by the Engineer and on the preliminary design for the project area.

Deliverables:

5. Schematic Preliminary and Final Drainage Reports signed and sealed by a professional engineer in the State of Texas.
6. Applicable GIS, Hydrologic Models or CAD files referenced in the drainage study.

5. **PLAN PREPARATION (PS&E) SERVICES**

Prepare 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, updated design schedule, construction time determination. The engineer will develop and submit these Plans, Specifications & Estimates (PS&E) at 60%, 90%, 100% and Final Design.

a. Roadway/General:

1. Title Sheet
 - Prepare a project title sheet as required for the construction plans, utilizing the template provided by the County.
2. Index of Sheets
 - Prepare an index sheet(s) that shows each sheet's location in the plan set.
3. Project Layout
 - Prepare a project layout sheet(s) that clearly indicates the limits of the entire project.
 - Include benchmark data needed to clearly indicate the benchmark locations and associated control information.
4. Typical Sections

- Prepare typical section(s) for all proposed and existing roadways and cross streets.
5. General Notes
 - Prepare general notes for applicable project-specific items, utilizing the master general notes provided by the County.
 6. Horizontal Alignment Data
 - Prepare horizontal alignment data sheet(s) that depict the horizontal geometric information for the roadways to be included in the construction plan set.
 7. Summary Sheets
 - Prepare summary sheet(s) that tabulate, combine, and summarize quantities of the various construction items.
 8. Removal Plans
 - Prepare removal sheet(s) that clearly identify any items to be removed.
 9. Roadway Plan & Profiles
 - Prepare roadway plan and profile sheets that depict the proposed construction.
 10. Side Street/Intersection Plans
 - Side Street/Intersections layouts sheets will be prepared for up to **five (5)** locations:
 - Umbrella Sky
 - Phillip Lane
 - Pruddy Oaks Drive
 - Quarry Bluff Cove
 - CR 201
 - Provide contours or details of drainage patterns for street intersections including slope or elevations along gutter to avoid ponding at intersections. Where applicable, provide details of volume of flow and velocity through intersections.
 11. Driveways
 - Prepare 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.
 12. Miscellaneous
 - Develop miscellaneous roadway detail sheets for the project that depict details required, which are not defined in standard detail sheets.
- b. Traffic Control Plans (TCP):
1. Prepare traffic control typical section(s) for each stage of the construction sequence to clearly delineate the position of the existing traffic with respect to the proposed construction.

2. Prepare a detailed narrative for the sequence of construction and traffic control general notes utilizing the sequence approved during the schematic phase. Any changes to the sequence of construction will be approved by the County prior to developing detailed TCP layouts.
 3. Prepare detailed TCP layouts for each phase (three phases assumed).
 4. Develop traffic control detail(s) for items not covered by County or TxDOT standard details.
 5. Compute an Engineer's opinion of construction schedule in order to determine an approximate duration for each of the phases of construction.
 6. Consider the construction sequence and plan for temporary functioning of drainage systems.
- c. Drainage:
1. Drainage Area Maps
 - Develop existing and proposed external drainage area maps to show the overall project and drainage basin divides.
 - Prepare a 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. This information may be shown on Interior Drainage Maps or Drainage Plan and Profile sheets.
 2. Interior Drainage Area Maps
 - Prepare interior drainage area maps that depict drainage area boundaries and flow direction arrows for roadside ditch, culverts and storm drain inlets in accordance with Williamson County Design Criteria Manual.
 - Each area will be identified and cross-referenced to the computation sheets.
 3. Hydraulic Data Sheets
 - Develop a hydraulic data sheet including hydraulic cross sections and hydraulic calculations at all HEC-RAS culvert and bridge locations in accordance with Williamson County Design Criteria Manual.
 4. Culvert Layout Sheets
 - Develop culvert layout sheets including plan, profile, riprap or grading details at all the major crossing locations and major roadside channels, up to **five (5)** locations:
 5. Culvert Standards and Detail Sheets
 - Select culvert standards based on headwall configuration and fill conditions. Develop details as needed for non-standard headwalls, special shoring, special grading at upstream and downstream transitions, structural excavation, backfill, permanent erosion control, bank stabilization and energy dissipation.
 6. Drainage Computation Sheets
 - Document criteria, input and computations used to calculate run-off and hydraulics for each inlet & gutter, pipe, culvert, ditch, pond or point of interest in accordance with Williamson County Design Criteria Manual.

- d. Signing and Pavement Markings Layouts:
 - 1. Prepare signing and pavement marking layouts.
 - 2. Prepare pavement marking details for non-standard conditions.
 - 3. Prepare detail sheets for small signs for non-standard signs.
- e. Stormwater Pollution Prevention Plan (SW3P):
 - 1. Develop SW3P narrative in conformance with the TCP to minimize potential impacts to receiving waterways.
 - 2. Prepare Temporary Erosion & Sediment Control Layouts.
- f. TCEQ Edwards Aquifer permitting:
 - 1. Develop a Draft and Final Contributing Zone Plan (CZP) since this project is within the Edwards Aquifer Contributing Zone. Once the CZP is approved by the County, submit documentation to Texas Commission on Environmental Quality (TCEQ).
 - 2. Prepare water quality, temporary and permanent, Best Management Practices (BMPs) to comply with TCEQ regulations. Plans for BMP's are primarily based on temporary erosion control layouts. Vegetative Filter Strips are presumed to be the BMPs utilized.
 - 3. Prepare and submit Agent Authorization form with Draft CZP.
 - 4. Pay Application Fee(s). After the initial TCEQ Review Fee is paid, any County-driven design-related changes that require additional TCEQ review fees including extension requests, exception requests or new CZP reviews shall be paid directly by the County. County-driven design changes that require extension requests, modifications to the original CZP application or re-submittal of a new application shall be considered supplemental services.
- g. Existing Utilities:
 - 1. Develop layouts of all utilities within project limits identified by surveyor. Provide legend identifying specific utility type and provider.
- h. Cross Sections:
 - 2. Develop plan sheets with scaled grids showing proposed cross sections on 50 ft. increments for project limits.
- i. Standard Detail Sheets: Select Standard detail sheets
- j. Miscellaneous PS&E components:
 - 1. Develop Project Construction Manual including Standard Specifications, Special Specifications, Special Provisions
 - 2. Develop Estimate of Probable Construction Cost
 - 3. Develop Construction Phase Duration Schedule

k. **Deliverables:**

- 60%, 90%, 100% & Final PS&E Submittals including applicable Williamson County Submittal Checklists.
- Project Construction Manual
- Estimate of Probable Construction Cost
- Construction Phase Duration Schedule
- Draft & Final CZP
- Drainage Models

6. **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. 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.

7. **DELIVERABLES:**

c. Documents:

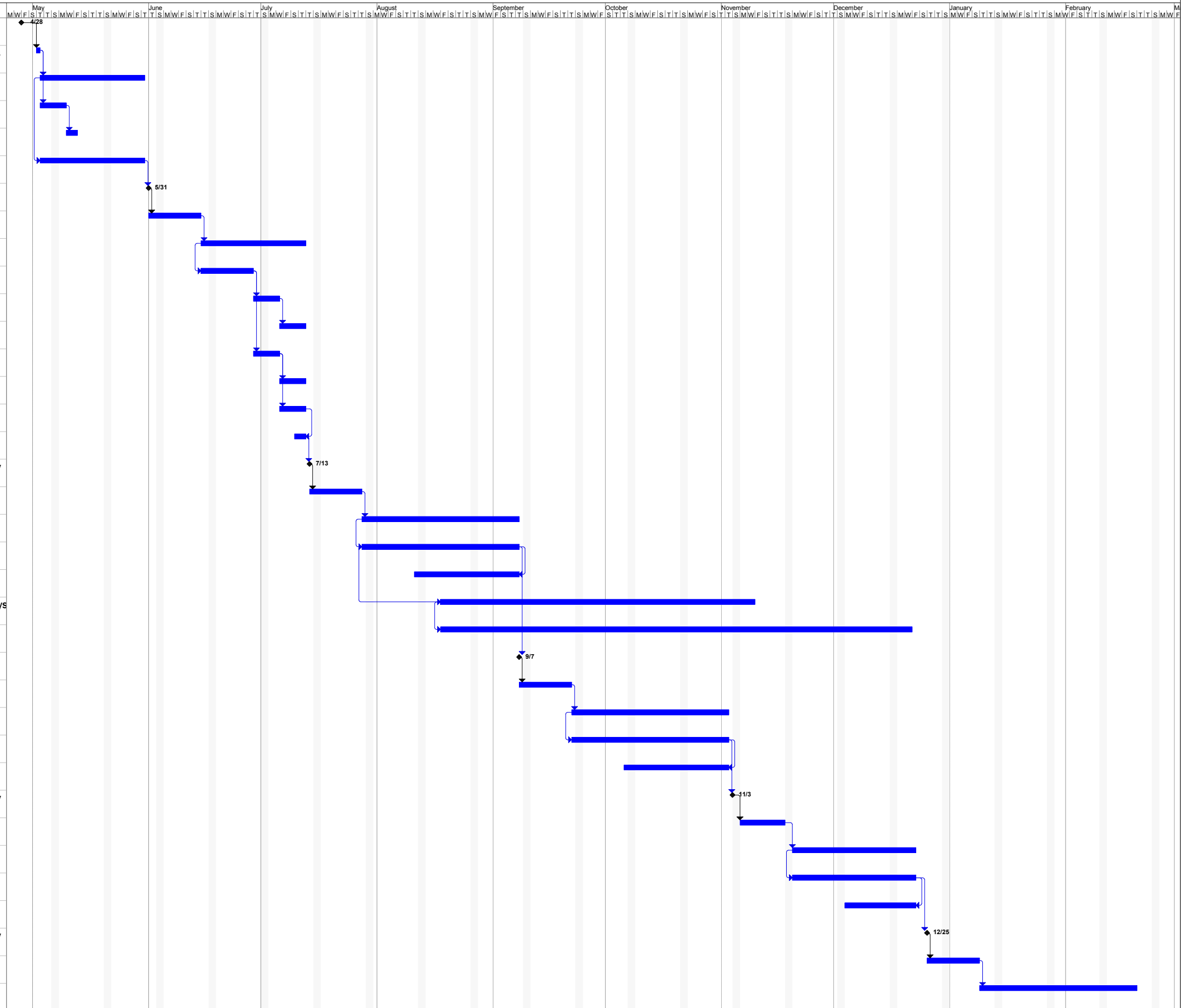
- All contract documents, including a pdf copy of each deliverable, native electronic files, models and calculations will be uploaded to the County's project management database at each milestone and at the completion of the project. One hard copy of each deliverable will be provided unless additional copies are required per the submittal checklist.

8. **EXCLUSIONS:**

a. The following items are not included in this work authorization:

1. PUBLIC INVOLVEMENT
2. SURVEY
3. TRAFFIC STUDY
4. ROW MAPPING
5. ENVIRONMENTAL STUDIES, DOCUMENTS, PERMITS (OTHER THAN EARZ CZP)
6. GEOTECHNICAL SERVICES
7. CONSTRUCTION PHASE SERVICES.
8. UTILITY COORDINATION OR RELOCATION ESTIMATES.

ID	Task Name	Duration	Start	Finish	Predecessors
1	Notice To Proceed	0 days	Fri 4/28/23	Fri 4/28/23	
2	Kick-Off Meeting	1 day	Tue 5/2/23	Tue 5/2/23	1FS+2 days
3	Develop Revised Ultimate Schematic	20 days	Wed 5/3/23	Tue 5/30/23	2
4	Data Collection	5 days	Wed 5/3/23	Tue 5/9/23	2
5	Develop Design Criteria	3 days	Wed 5/10/23	Fri 5/12/23	4
6	Develop revised schematic	20 days	Wed 5/3/23	Tue 5/30/23	3SS
7	Submit updated ultimate schematic	0 days	Wed 5/31/23	Wed 5/31/23	6FS+1 day
8	County review of updated ultimate schematic	10 days	Thu 6/1/23	Wed 6/14/23	7
9	Schematic Development	20 days	Thu 6/15/23	Wed 7/12/23	8
10	Develop roadway geometrics	10 days	Thu 6/15/23	Wed 6/28/23	9SS
11	Develop cross sections	5 days	Thu 6/29/23	Wed 7/5/23	10
12	Develop schematic layout	5 days	Thu 7/6/23	Wed 7/12/23	11
13	Hydrologic Study and Modeling	5 days	Thu 6/29/23	Wed 7/5/23	10
14	Hydraulic Study and Modeling	5 days	Thu 7/6/23	Wed 7/12/23	13
15	Impact and Mitigation Analysis	5 days	Thu 7/6/23	Wed 7/12/23	13
16	Develop Schematic Drainage Study	3 days	Mon 7/10/23	Wed 7/12/23	15FF
17	Submittal of Schematic & Drainage Study	0 days	Thu 7/13/23	Thu 7/13/23	16FS+1 day
18	County review of Schematic Submittals	10 days	Fri 7/14/23	Thu 7/27/23	17
19	Develop 60% PS&E	30 days	Fri 7/28/23	Thu 9/7/23	18
20	Develop Roadway PS&E	30 days	Fri 7/28/23	Thu 9/7/23	19SS
21	Develop Drainage PS&E	20 days	Fri 8/11/23	Thu 9/7/23	20FF
22	Develop TCEQ Permitting documentation	60 days	Fri 8/18/23	Thu 11/9/23	20SS+15 days
23	coordinate utility relocation efforts	90 days	Fri 8/18/23	Thu 12/21/23	22SS
24	Submit 60% PS&E Package	0 days	Thu 9/7/23	Thu 9/7/23	20
25	County review of 60% Submittal	10 days	Fri 9/8/23	Thu 9/21/23	24
26	Develop 90% PS&E	30 days	Fri 9/22/23	Thu 11/2/23	25
27	Develop Roadway PS&E	30 days	Fri 9/22/23	Thu 11/2/23	26SS
28	Develop Drainage PS&E	20 days	Fri 10/6/23	Thu 11/2/23	27FF
29	Submit 90% PS&E Package	0 days	Fri 11/3/23	Fri 11/3/23	27FS+1 day
30	County review of 90% Submittal	10 days	Mon 11/6/23	Fri 11/17/23	29
31	Develop 100% PS&E	25 days	Mon 11/20/23	Fri 12/22/23	30
32	Develop Roadway PS&E	25 days	Mon 11/20/23	Fri 12/22/23	31SS
33	Develop Drainage PS&E	15 days	Mon 12/4/23	Fri 12/22/23	32FF
34	Submit 100% PS&E Package	0 days	Mon 12/25/23	Mon 12/25/23	32FS+1 day
35	County review of 100% Submittal	10 days	Tue 12/26/23	Mon 1/8/24	34
36	Develop Bid Documents	30 days	Tue 1/9/24	Mon 2/19/24	35



ATTACHMENT "D"

COUNTY ROAD 201 WA#2 Fee Estimate	Principal	Sr. Project Manager	Sr. Project Engineer	Project Engineer II	Graduate Engineer II	Engineering Specialist IV	Sr. Planner	Project Analyst II	Total Labor Hours	Task Cost
	\$230.00	\$210.00	\$195.00	\$160.00	\$125.00	\$160.00	\$180.00	\$115.00		
	Original approved rates	\$230.00	\$210.00	\$195.00	\$160.00	\$125.00	\$160.00	\$180.00		
1. Project Management										
b. Develop monthly progress reports, invoices, and billing (9 months assumed)		18							18	
c. Perform QC review for 5 submittals			80						80	
d. Project Coordination and Administration	12	120		60			48	12	252	
e. Progress Coordination Meetings (4 assumed)		8		8			2		18	
f. Develop and maintain project schedule for Project Development tasks		12							12	
TASK HOURS SUB-TOTALS	12	158	80	68	0	0	50	12	380	
TASK FEE TOTAL	\$2,760.00	\$33,180.00	\$15,600.00	\$10,880.00	\$0.00	\$0.00	\$9,000.00	\$1,380.00		\$72,800.00
2. Preliminary Design Development										
a. Data Collection		4		4	4				12	
b. Review/update Final Schematic design elements based on survey data collected; establish ROW		24		40	40	32			136	
TASK HOURS SUB-TOTALS		28	0	44	44	32	0		148	
TASK FEE TOTAL		\$5,880.00	\$0.00	\$7,040.00	\$5,500.00	\$5,120.00	\$0.00			\$23,540.00
3. Schematic Development										
a. Develop Interim Design Criteria		\$2.00	\$1.00	\$4.00					7	
a. Develop Interim Schematic		24		36	48	36			144	
b. Prepare Cost Estimate for Interim Schematic		2		4	8				14	
c. Develop Draft Traffic Control Plan Narrative Memo		4		4	8				16	
d. Develop EARZ permitting plan		2	4	4					10	
e. Develop Interim Schematic Cross Sections (50' spacing)		8		24	36	12			80	
TASK HOURS SUB-TOTALS		40	4	72	100	48	0		264	
TASK FEE TOTAL		\$8,400.00	\$780.00	\$11,520.00	\$12,500.00	\$7,680.00	\$0.00			\$40,880.00
4. Schematic Drainage Study										
a. Hydrologic Study and Modeling			8	12	20	22			62	
b. Hydraulic Study and modeling (5 cross drain structures assumed)			6	16	32	32			86	
c. Impact and Mitigation Analysis			8	12	4	8			32	
TASK HOURS SUB-TOTALS		0	22	40	56	62	0		180	
TASK FEE TOTAL		\$0.00	\$4,290.00	\$6,400.00	\$7,000.00	\$9,920.00	\$0.00			\$27,610.00
6. PS&E Preparation										
a.1. Develop Title Sheet		2		4	4	4			14	
a.2. Develop Index of Sheets		2		4	8				14	
a.3. Develop Project Layout Sheets including survey data (6 sheets)		6		24	24	36			90	
a.4. Develop Existing and Proposed Typical Sections (4 sheets)		8		20	20	24			72	
a.5. Develop General Notes		6		6	4				12	
a.6. Develop Horizontal Alignment Data Sheet		2		4	4				10	
a.7. Develop Quantity Summary Sheets (5 sheets)		5		22	32	20			79	
a.8. Develop Removal Plan Sheets (6 sheets)		6		12	30	24			72	
a.9. Develop Roadway Plan & Profile Sheets (11 sheets)		33		44	66	44			187	
a.10. Develop Intersection/Side Street Plan Sheets (5 intersections)		10		20	30	20			80	
a.11. Develop Driveway Detail Sheets (9 sheets, 37 driveways)		9		30	36	30			105	
a.12. Develop Miscellaneous Roadway Detail Sheets (1 sheet)		2		4	4	4			14	
b.1. Develop Traffic Control Typical Sections (6 sheets)		10		24	30	24			88	
b.2. Develop Sequence of Construction and General Notes (2 sheets)		8		8	8	8			32	
b.3. Develop Traffic Control Plan Sheets for 3 phases of construction (33 sheets)		33		132	132	132			429	
b.4. Develop TCP Details (1 sheet)		4		4	4	4			16	
b.5. Develop Construction Phase Duration Schedule		2		2					4	
b.6. Develop Construction Drainage System phased construction Details Sheets (5 sheets)			4	24	44	8			80	
c.1. Develop Drainage Area Maps and Ditch Detail sheets (13 sheets)			26	36	52	26			140	
c.2. Develop Internal Drainage Area Map Sheets (6 sheets)			12	16	36	20			84	
c.3. Develop Hydraulic Data Sheets (2 sheets)			2	6	20				28	
c.4. Develop Culvert layout Sheets (5 sheets)			5	20	30	25			80	
c.5. Develop Culvert standards and details (2 sheets)			2	8	8	8			26	
c.6. Develop Drainage computation sheets (9 sheets)			15	15	60	30			120	
d.1. Develop Signing and Pavement Marking Sheets (11 sheets)		11		44	44	66			165	
d.2. Develop marking details for non-standard conditions (1 sheet)		2		4	6				12	
d.3. Develop small sign detail sheet for non-standard signs (1 sheet)		2		4	8				14	
e.1. Develop SW3P Sheet		4		8					12	
e.2. Develop Temporary Erosion and Sediment Control Sheets (6 sheets)		6		18	18	18			60	
f.1. Develop Draft and Final CFP and submit to TCEQ		24			24				48	
f.2. Develop Temporary and Permanent BMP Plan Sheets (12 sheets)		2		12	12	12			38	
f.3. Develop and submit Agent Authorization Form		2							2	
f.4. Submit TCEQ Review fee		2							2	
g.1. Develop Utility Layout sheets (11 sheets)									0	
h.1. Develop cross sections (50' increments) on plan sheets w/ scaled grid (80 sheets)		8		24	36	24			92	
i.1. Select Standard detail sheets		4		4					8	
j.1. Develop Project Construction Manual including selecting Standard Specs, Special Specs, etc.		4		4	8				16	
j.2. Develop estimate of probable construction cost		4		8	8				20	
j.3. Develop construction duration schedule		4		4					8	
TASK HOURS SUB-TOTALS		227	66	623	846	611	0		2373	
TASK FEE TOTAL		\$47,670.00	\$12,870.00	\$99,680.00	\$105,750.00	\$97,760.00	\$0.00			\$363,730.00
7. Bid Phase Services										
a. Attend Pre-bid Meeting		2		2					4	
b. Respond to Bidders Questions; Document Q&A		4		4	4				12	
c. Prepare Addenda (Assumed 1)		2		2	2				6	
d. Review and Analyze Bids; Identify apparent best value bidder		4								
e. Attend Pre-Construction Meeting		2		2						
TASK HOURS SUB-TOTALS		14	0	10	6	0	0		30	
TASK FEE TOTAL		\$2,940.00	\$0.00	\$1,600.00	\$750.00	\$0.00	\$0.00			\$5,290.00
TOTAL WSB LABOR HOURS	12	467	172	857	1052	753	50	12	3375	
TOTAL WSB LABOR COSTS	\$2,760.00	\$98,070.00	\$33,540.00	\$137,120.00	\$131,500.00	\$120,480.00	\$9,000.00	\$1,380.00		\$533,850.00
OTHER DIRECT EXPENSES		QUANTITY		UNIT	Rate				TOTAL	
WSB Direct Expenses										
TCEQ EARZ Submittal fee		1		LS	5000				\$5,000.00	
									\$0.00	
									\$0.00	
Mileage		600		miles	\$ 0.625				\$375.00	
SUBTOTAL DIRECT EXPENSES									\$5,375.00	
SUMMARY										
Subtotal Labor				\$533,850.00						
Subtotal Direct Expenses				\$5,375.00						
TOTAL WA#1 FEE				\$539,225.00						