

AGENDA ITEM 36

Consider and approve Work Authorization No. 2 for Malone/Wheeler on CR 276.

Moved: **Commissioner Boatright**

Seconded: **Commissioner Hays**

Motion: To approve Work Authorization No. 2 for Malone/Wheeler on CR 276.

Vote: 5 - 0

<Attachment>

Contract No. _____

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ATTACHMENT A**WORK AUTHORIZATION NO. 2**

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (*the "County"*) and Malone/Wheeler, Inc. (the "Engineer").

Part 1. The *Engineer* will provide the following engineering services:

Phase Two: PS & E

Part 2. The maximum amount payable for services under this Work Authorization without modification is 1,000,000.00.

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

Part 4. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate May 1, 2004, unless extended by a Supplemental Work Authorization.

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

Richard H. Malone

Richard H. Malone, P. E.
Malone/Wheeler, Inc.

4/29/03

Date

John C. Doerfler

John Doerfler
Williamson County Judge

5-13-03

Date

OK
4-29-03

Contract No. _____

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EXHIBIT II

HOURLY RATES

- 1. Project Manager.....\$ 115.00**
 - 2. Senior Engineer.....\$ 105.00**
 - 3. Staff Engineer.....\$ 90.00**
 - 4. Senior Technician.....\$ 80.00**
 - 5. CAD Technician.....\$ 70.00**
 - 6. Secretary/Clerical.....\$ 45.00**
 - 7. Expert Witness Testimony.....\$ 200.00**
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APPENDIX A
SCOPE OF SERVICES
WILLIAMSON COUNTY ROAD BOND PROGRAM
CR 276

1.0 PROJECT DESCRIPTION

CR 276 is a proposed east-west arterial roadway that is programmed to serve western Williamson County as an integral component of the Williamson County Multi-Corridor Transportation Plan. This proposed arterial corridor originates on the westerly end at Bagdad Road and runs easterly to a junction with the proposed northerly extension of Parmer Lane, east of the City of Leander. The project, as currently authorized, will consist of two (2) phases: Alignment Corridor Study and Preparation of Construction Plans, Specifications and Estimates for Phase 1 which Preliminary Engineering will include the segment of arterial roadway from U.S. 183 to C.R. 270.

Construction and implementation of this arterial roadway will be completed in phases over its length and proposed cross-section. It is anticipated that the first phase will begin at the intersection of U.S. 183 and proceed easterly to an intersection with Williamson County Road 270, a distance of approximately 7,000 linear feet (1.33 miles).

2.0 PHASE ONE PRELIMINARY ENGINEERING ALIGNMENT CORRIDOR STUDY AND SCHEMATIC DESIGN

2.1 General

As proposed, CR 276 is approximately seven (7) miles in length from Bagdad Road on the west to the proposed northerly extension of Parmer Lane. The corridor planning area is approximately 7,000 feet in width from south to north from the existing U.S. 183/F.M. 2243 intersection to the intersection of U.S. 183 and the Austin Northwest Railroad. The corridor will cross existing U.S. 183, proposed U.S. 183-A and the Austin Northwest Railroad. A Capital Metro License Agreement Application for an at-grade crossing of the railroad has been previously submitted by Williamson County to Capital Metro for consideration and approval. Based on information provided in the Williamson County Multi-Corridor Transportation Plan indicates that the right-of-way for CR 276 will be a minimum of 120 feet in width and desired to be 160 feet in width.

The Scope of Services for the Preliminary Engineering and Schematic Design Phase includes the following tasks:

2.2 Route Studies

- 2.2.1 Obtain and gather available area information and planning data for the corridor planning area. This includes any preliminary roadway layouts, Williamson County thoroughfare plans and City of Leander Master Plan information.
- 2.2.2 Obtain readily available record information on environmental issues for the route study planning area, including Edwards Aquifer Recharge Zone

locations, endangered species habitat, hazardous waste sites and other similar information.

- 2.2.3 Identify corridor issues within the route study planning area limits. This includes identifying other highway, toll road and arterial design activities currently underway or planned, coordinating ramp patterns with U.S. 183-A, and defining objectives of the project.
- 2.2.4 Arrange public involvement workshop/meeting with Williamson County, City of Leander, property owners and other interested or involved agencies to present and discuss the corridor route study issues. This effort includes meeting attendance, agenda development, preparation of meeting materials/exhibits, presentation of route study issues and meeting minutes.
- 2.2.5 Coordinate with other projects currently being planned or designed within the corridor route study planning area. This includes the proposed U.S. 183-A toll road and the extensions of Lakeline Boulevard, Bagdad Road and Parmer Lane.
- 2.2.6 Coordinate alignment planning, route studies and schematic design of intersection with proposed U.S. 183-A with Texas Turnpike Authority Division, including meetings, presentations, correspondence and other communication as required with TxDOT and TTA.
- 2.2.7 Coordinate alignment planning, route studies and schematic design with the City of Leander. This includes meetings, presentations, correspondence and other communication as required with Williamson County and the City of Leander.
- 2.2.8 Identify water, wastewater, electric, gas and telecommunications utility providers in the alignment planning route study corridor. Obtain available utility location information for inclusion in route study. Coordinate with utility providers including meetings, presentations, correspondence and other communications as required with Williamson County.
- 2.2.9 Utilize traffic demand data provided by other consultants to evaluate potential cross-section designs, i.e., either 4-lane divided section or 5-lane section with continuous center turn lane.
- 2.2.10 Conduct SHPO and cultural resources review of route study planning area to identify potential preservation issues or design constraints. Coordinate environmental constraints evaluation with Williamson County's environmental consultant.
- 2.2.11 Preparation of route study and alternative design schematic utilizing data, information and public involvement input obtained in tasks 2.2.1 through 2.2.9. The alternative design schematic will take into account the various alignment design opportunities and constraints, permitting requirements and interconnectivity with other highways, toll roads and arterial roadways. The alternative design schematics will include typical sections, preliminary horizontal and vertical alignments and preliminary right-of-way lines.
- 2.2.12 Develop evaluation matrix that identifies key factors, including environmental constraints, for evaluation of alternative alignments and

comparison of potential benefits and/or adverse impacts for selection of predefined alignment.

- 2.2.13 Inspect each alignment alternative on the ground to confirm information obtained for route study planning area.
- 2.2.14 Prepare mail database of property owners utilizing Williamson County tax maps.
- 2.2.15 Select technically-preferred route alignment utilizing evaluation matrix and input from public involvement process.
- 2.2.16 Prepare preliminary engineering report and project cost estimates for construction and right-of-way.
- 2.2.17 Conduct second public meeting, if necessary, to present findings and results of route study within the planning area.
- 2.2.18 Prepare engineering summary report for the technically preferred alternative taking into account pertinent data received at the second public meeting, that includes a project description and history, alternative alignments evaluation, construction project limits, sequence of construction and project cost estimate. This summary report will not include a hydraulic study or environmental study of the proposed project.

SCOPE OF SERVICES WILLIAMSON COUNTY ROAD BOND PROGRAM PHASE TWO - PS & E

1.0 PROJECT DESCRIPTION

Preparation of design schematics and engineering design and preparation of PS & E for CR 276 will be based on the technically preferred alignment alternative "H-2" as recommended in the CR 276 Alignment Study dated May 2002. The alignment of alternative "H-2" is approximately 23,500 feet (4.46 miles) from Bagdad Rd. to Parmer Lane and includes intersections with Bagdad Rd., U.S. 183, CR 270, Parmer Lane and Capital Metro (Austin Northwest Railroad). Other intersections will involve two (2) new, proposed roadways: (1) a southern extension of Oak Grove Blvd. and (2) proposed CR 273 located east of and parallel to US 183. The railroad crossing is located 100 feet east of US 183. Approximately one mile of the western end of the CR 276 alignment alternative "H-2" is contained in the city limits of the City of Leander. Design will be based on a 50 mph design speed and other applicable requirements of the Williamson County Design Criteria Manual. This Scope of Services will include preparation of a design schematic for the entire length of the preferred alignment alternative "H-2" and preparation of plans, specifications and estimate (PS & E) for 5,600 LF of CR 276 between Oak Grove Blvd. and US 183, for 1200 LF of CR 276 between US 183 and CR 273, and for 1,000 LF of CR 276 ending at the Parmer Lane intersection. The roadway cross-section will consist of two 36 foot lanes with standard curb and gutter on the outside lanes, 8 foot shoulders adjacent to the inside lanes, a 7 foot grass median, and a 120 foot right-of-way. Outside lane back of curbs will be located 11 foot from right-of-way. Construction plans will be phased. First phase to consist of two 12 foot lanes with standard curb on outside lane and 8 foot shoulder adjacent to inside lane. First phase paving will be for those lanes closest to the north right-of-way.

2.0 DESIGN ENGINEERING

Design Engineering Services will be provided in two phases – design schematic phase and PS & E phase. The design schematic phase will include The services to be provided in these two phases are described as follows:

2.1 Design Schematic Phase

The Design Schematic Phase for this project will begin with the development of a schematic design in order to establish ROW location vis-à-vis property ownership, a profile grade line (PGL), and locations of drainage structures and water quality control facilities. This data will be utilized to determine the ROW parcels and the extent of drainage easements that may be needed, if any, outside of the proposed ROW. ROW widths will be sized to contain side slopes and water quality facilities. This design schematic information will be provided to the City of Leander for that portion of CR 276 contained within the Leander city limits so that a consistent

application of design criteria and construction phasing can be maintained throughout the length of the project. The tasks to be performed for this phase are described as follows:

2.1.1 Initial Geometric Layout

Acquire ownership deeds of properties across which the preferred alignment traverses. Prepare deed plot for entire project. Superimpose preferred alignment on deed plot. Reference centerline alignment to property lines. Provide map of right-of-way on deed plot for Road Bond Management Team review and approval. Adjust centerline alignment per Road Bond Management Team recommendations. If record deed conflicts are discovered, resolutions will be provided as an additional service.

2.1.2 Capitol Metro Coordination

Using approved alignment field stake centerline alignment at crossing of Capitol Metro rail line. Meet in field with Capitol Metro staff to review centerline of crossing. Adjust centerline of crossing as needed.

2.1.3 Aerial Survey

Acquire available aerial survey (2' contour interval) from Williamson County. Determine alignment of technically preferred alternative on aerial survey. Field verify centerline elevations at approximately 1000' intervals. Provide field survey of eleven (11) culvert locations. Survey to extend 200' upstream and downstream of roadway center line. Compare field elevations to aerial elevations. If significant differences are noted or data is questionable due to being obscured by vegetation additional field survey would be provided as an additional service.

2.1.4 Plan/Profile Schematic

Utilizing the plot of the alignment on the aerial survey, prepare a profile grade line of the outside edges of pavement for the ultimate roadway section through the entire length of the project.

2.1.5 Drainage Area Mapping

Delineate drainage area boundaries based on available topographic mapping and aerial surveys. Determine extent of upstream runoff areas and existing conveyance features, if any.

2.1.6 Calculate Flows and Discharges

Determine conveyance paths, culvert crossing locations, extent of needed upstream and downstream conveyance easements, time of concentration, runoff

coefficients/SCS curve numbers and land use assumptions needed to calculate design year flows.

2.1.7 Channels

Determine extent of channel improvements that may be needed for conveyance of stormwater flows and inundation areas on the upstream and downstream sides of the proposed culvert crossings. If needed, develop dynamic models of conveyance elements utilizing Hec-Ras models. Identify extent of needed drainage easements upstream and downstream of culvert crossings.

2.1.8 Stormwater Quality

Coordinate drainage study with evaluation of stormwater treatment required to comply with TCEQ Stormwater Pollution Program (SW3P) Edwards Aquifer requirements and EPA NPDES General Permit requirements. Water quality treatment will be provided by vegetative filter strips. Determine size and location for filter strips.

2.1.9 Alignment Adjustment

Using the data developed in Sections 2.1.1 through 2.1.8 meet with the County Road Bond Management Team to discuss issues and constraints. Make alignment adjustments as appropriate per this meeting. Establish boundary control throughout length of project. Survey property lines. Based on adjusted alignment, field stake centerline at all P.C.'s and P.T's, 100' stations in curves and 200' stations in tangents. Walk centerline with Road Bond Management Team, property owners, and/or other affected parties. Provide alignment to County's Utility Relocation and Environmental Consultants.

2.1.10 Final Geometric Layout, Plan and Profile Schematic

Incorporating the information acquired in Section 2.1.9 prepare a final design schematic.

2.1.11 Typical Sections

Refine typical roadway cross-section from CR 276 Alignment Study report to include drainage easement areas and drainage culvert crossings, side slopes, and water quality improvements to ascertain final ROW width or extent of easements.

2.1.12 Schematic Design Cross-sections

Prepare schematic design cross-sections on 100' station intervals. Proposed pavement elevation (PGL) and cuts and fills will be depicted together with ROW limits, pavement and median cross-slopes, and drainage crossings.

2.1.13 Utilities

Review previously identified utility locations as determined by field survey and observation and/or by the County's Utility Relocation Consultant. Assist with coordination with utility companies or utility providers to identify potential utility crossings along the entirety of the preferred alignment alternative "H-2". Determine locations for traffic signalization conduits at the six (6) major roadway intersections, i.e. Bagdad Road, Oak Grove, CR 273, US 183, CR 270, and Parmer Lane. Determine if ducts or carrier pipes for future crossings need to be included in the PS & E.

2.1.14 Coordination Meetings

Attend utility coordination meetings with the Williamson County Road Bond Program Utility Relocation Consultant and utility providers. Provide technical support to Williamson County and utility provider's engineering staff to facilitate the development of relocation plans and future utility crossing plans. Provide plan/profile information to the Road Bond Management Team for application to Capital Metro for at grade crossing.

2.1.15 Prepare Drainage Report

Prepare a drainage report summarizing the findings and design recommendations of the drainage study. Document relevant calculations for inclusion in PS & E.

2.1.16 ROW Determination

Based on the schematic and design cross sections, a determination will be made as to the adequacy of the proposed ROW. Additional easements for drainage conveyance will also be identified. This information will be utilized to prepare the ROW strip map and will become the basis of ROW field note descriptions. Prepare ROW strip map and field note description for twelve (12) separate ownership parcels plus eight (8) easements. Land area within Benbrook subdivision will not be included in this work. Additional easements if required will be provided as an additional service.

2.2 PS & E Phase

Preparation of PS & E for CR276 will be done in accordance with Chapter 7 of the Williamson County Design Criteria Manual. PS&E will be prepared for three separate roadway segments. The three segments are as follows:

- STA 48+00 (Oak Grove Connection) to STA 102+00 (US 183)
- STA 102+00 (US183) to STA 114+00 (CR273)
- STA 230+00 to STA 240+00 (Parmer Lane).

The individual elements of the PS&E work will be provided in accordance with the elements listed in Chapter 7 with the following modifications, clarification or additions.

2.2.1 Design Survey

Acquire on-the-ground topographic survey of ROW plus cross-sections of eight (8) existing drainageways 200' upstream and downstream of the ROW at eight (8) culvert locations. Survey to extend 200' beyond project limits.

2.2.8 Plan/Profile Sheets

Utilize approved design schematic as the base drawing prepare plan/profile sheets in accordance with Williamson County Design Criteria Manual. Horizontal scale will be 1" = 50'. Vertical scale will be 1" = 5'.

2.2.11 Structures Layout

The only structures proposed are culverts.

2.2.13 & 2.2.14 Utility Plans & Details

Incorporate utility plans prepared by others for relocations and/or proposed future utility crossings.

2.2.15 & 2.2.16 Traffic Signals & Illumination

Prepare traffic signal plan for intersections of CR276, U.S. 183 and Parmer Lane. Prepare layout design of conduits for signals at CR273. Coordinate plan preparation and review with TXDOT Austin District. Plans will be provided by subconsultant.

2.2.18 & 2.2.19 Erosion Control & Details

Prepare SW3P in accordance with TCEQ Edwards Aquifer regulations and EPA NPDES permit requirements.

2.2.22 Construction Cost Estimate

Complete and tabulate quantities of the various construction items included in the project. Calculate engineers estimate of probable construction cost based on bid prices for similar work in the Williamson County area. Road Bond Management Team will provide template for estimate and make available database of bid prices for previous road bond projects.

2.2.23 Project Manual

Modify standard Project Manual as provided by the County for purpose of bidding.

2.2.24 Geotech Coordination

Assist geotechnical engineer to determine pavement and structure design requirements by providing plan/profile information and field staking bore locations. For the roadway segment from STA. 46 + 00 to 114 + 00 a total of twelve (12) bore sites will be staked; for segment from 230 + 00 to 240 + 00 a total of three (3) bore sites will be staked.

3.0 PROJECT MANAGEMENT

3.1 General Project Coordination

Provide general project coordination for the project design activities and preparation of PS & E within the overall limits of the project. Develop work plans for various sub-consultants such as surveyors, geotechnical engineering, and environmental consultants whether they are retained directly by Malone/Wheeler, Inc. or are engaged directly by Williamson County.

3.2 Project Administration

Provide project administration oversight as needed to track schedules, budgets, project correspondence, subconsultant contract administration, invoice billings and progress reports. Schedule and conduct project progress reports with Williamson County to discuss work tasks completed and underway.

ENGINEERING/SURVEYING COST
WILLIAMSON COUNTY ROAD BOND PROGRAM
CR 276 DESIGN SCHEMATIC PHASE

Task Description		Project Manager	Survey Engineer	Soil Engineer	Survey Technician	Soil Technician	Design Engineer	Design Technician
2.1.1	Initial Geometric Layout	2	4	6	8	20	4	1,000
2.1.2	Capital Metro Coordination	2	8	-	8	12	-	2,000
2.1.3	Aerial Survey	2	8	6	40	40	-	13,100
2.1.4	Plan/Profile Schematic	4	8	24	60	100	-	
2.1.5	Drainage Area Mapping	2	6	16	80	60	4	
2.1.6	Calculate Flows and Discharges	2	8	16	80	60	4	
2.1.7	Channels	-	6	10	80	40	4	
2.1.8	Stormwater Quality	8	20	30	80	80	4	
2.1.9	Alignment Adjustment	80	-	-	20	60	2	50,000
2.1.10	Final Geometric Layout, Plan and Profile Schematic	2	8	8	30	80	-	
2.1.11	Typical Sections	2	2	4	16	40	-	
2.1.12	Schematic Design Cross-sections	2	4	8	40	100	-	
2.1.13	Utilities	20	6	-	12	-	-	5,000
2.1.14	Coordination Meetings	20	10	-	10	30	2	
2.1.15	Prepare Drainage Report	2	2	16	40	24	4	
2.1.16	Right-of-Way Determination	12	12	-	8	-	-	33,500
Total Hours		162	112	144	612	746	28	
Hourly Rate		\$115.00	\$105.00	\$90.00	\$80.00	\$70.00	\$45.00	
Labor Cost		\$18,630.00	\$11,760.00	\$12,960.00	\$48,960.00	\$52,220.00	\$1,260.00	\$104,600.00
Total Cost		\$250,390.00						
Reimbursables (estimate) \$6000								

ENGINEERING/SURVEYING COST
WILLIAMSON COUNTY ROAD BOND PROGRAM
CR 276 DESIGN PS & E PHASE
(STA. 46 - 00 to STA. 102 + 00)

	Task Description	Project Manager	Senior Engineer	Staff Engineer	Senior Draftsman	CAD Operator	Subcontractor	Subtotal
2.2.1	Design Survey	4	4	4	6	34	-	11,500
2.2.2	Title Sheet/Project Layout	5	8	8	24	50	-	-
2.2.3	Typical Sections	6	-	12	24	40	-	-
2.2.4	Note Sheet	6	6	-	8	32	24	-
2.2.5	Survey Data	6	6	4	8	24	8	1,600
2.2.6	Quantity Sheets	12	16	32	32	48	24	-
2.2.7	Traffic Control/Const. Sequencing	12	70	32	100	50	16	-
2.2.8	Roadway Plan/Profile	32	66	130	170	320	-	-
2.2.9	Roadway Details	6	10	10	16	48	-	-
2.2.10	Drainage Area Map	4	4	16	100	48	-	-
2.2.11	Culvert Layouts	3	-	6	70	100	-	-
2.2.12	Drainage Details	3	4	-	16	48	-	-
2.2.13	Utilities	8	-	8	8	20	-	-
2.2.14	Utility Details	6	-	6	6	16	-	-
2.2.15	Traffic Signals & Illumination	16	20	-	20	20	-	8,800
2.2.16	Traffic Signal/Illumination Details	6	-	4	8	10	-	-
2.2.17	Pavement Markings & Signs	8	50	32	100	64	-	-
2.2.18	Pavement Markings & Signs Details	4	8	6	32	32	-	-
2.2.19	Erosion Control	32	64	80	100	80	-	-
2.2.20	Erosion Control Details	6	16	8	16	50	-	-
2.2.21	Cross Sections	4	12	12	16	64	-	-
2.2.22	Cost Estimate	16	16	4	16	24	-	-
2.2.23	Project Manual & Contract Documents	16	70	36	10	26	64	-
2.2.24	Geotech Coordination	6	-	-	6	6	-	2,000
	Total Hours	227	450	450	912	1254	136	
	Hourly Rate	\$115.00	\$105.00	\$90.00	\$80.00	\$70.00	\$45.00	
	Labor Cost	\$26,105.00	\$47,250.00	\$40,500.00	\$72,960.00	\$87,780.00	\$6,120.00	\$23,900.00
	Total Cost	\$304,615.00						
	Reimbursables (estimate) \$9,000							

**ENGINEERING/SURVEYING COST
WILLIAMSON COUNTY ROAD BOND PROGRAM
CR 276 DESIGN PS & E PHASE
(STA.102 - 00 to STA. 114 + 00)**

Project		Design	Survey	QA/QC	Stakeholder	Other	Subtotal
Task Description		Hours	Days	Weeks	Months	Years	Cost
2.2.1	Design Survey	2	2	2	3	8	2,500
2.2.2	Title Sheet/Project Layout	2	2	3	6	10	-
2.2.3	Typical Sections	2	2	4	6	10	-
2.2.4	Note Sheet	2	2	-	2	8	6
2.2.5	Survey Data	2	2	2	2	6	2
2.2.6	Quantity Sheets	4	4	8	8	12	6
2.2.7	Traffic Control/Const. Sequencing	4	4	8	24	12	4
2.2.8	Roadway Plan/Profile	8	14	30	36	72	-
2.2.9	Roadway Details	2	2	2	4	12	-
2.2.10	Drainage Area Map	2	2	4	22	12	-
2.2.11	Culvert Layouts	2	-	2	10	22	-
2.2.12	Drainage Details	1	2	-	4	12	-
2.2.13	Utilities	2	-	2	1	4	-
2.2.14	Utility Details	2	-	2	2	4	-
2.2.15	Traffic Signals & Illumination	2	4	-	4	4	2,000
2.2.16	Traffic Signal/Illumination Details	1	-	1	2	2	-
2.2.17	Pavement Markings & Signs	3	12	8	22	16	-
2.2.18	Pavement Markings & Signs Details	1	2	2	8	8	-
2.2.19	Erosion Control	8	16	20	22	20	-
2.2.20	Erosion Control Details	2	4	2	4	12	-
2.2.21	Cross Sections	1	4	4	4	16	-
2.2.22	Cost Estimate	4	4	1	4	6	-
2.2.23	Project Manual & Contract Documents	5	16	8	2	4	40
2.2.24	Geotech Coordination	2	-	-	2	2	600
Total Hours		66	111	115	204	294	58
Hourly Rate		\$115.00	\$105.00	\$90.00	\$80.00	\$70.00	\$45.00
Labor Cost		\$7,590.00	\$11,655.00	\$10,350.00	\$16,320.00	\$20,580.00	\$2,610.00
Total Cost		\$74,955.00	Reimbursables (estimate) \$9,000				

ENGINEERING/SURVEYING COST
WILLIAMSON COUNTY ROAD BOND PROGRAM
CR 276 DESIGN PS & E PHASE
(STA. 230 - 00 to STA. 240 + 00)

Task Description		Project Number	Survey Equipment	Station Equipment	Station Equipment	Station Equipment	Station Equipment	Station Equipment	Station Equipment
2.2.1	Design Survey	2	-	2	2	2	4	-	3,000
2.2.2	Title Sheet/Project Layout	-	2	2	2	4	30	-	-
2.2.3	Typical Sections	2	-	2	2	4	20	-	-
2.2.4	Note Sheet	-	2	-	-	-	20	10	-
2.2.5	Survey Data	-	2	2	-	2	10	4	2,000
2.2.6	Quantity Sheets	2	10	6	6	6	16	8	-
2.2.7	Traffic Control/Const. Sequencing	2	10	10	10	30	10	2	-
2.2.8	Roadway Plan/Profile	2	6	24	40	60	-	-	-
2.2.9	Roadway Details	1	2	-	2	10	-	-	-
2.2.10	Drainage Area Map	2	-	2	20	10	-	-	-
2.2.11	Culvert Layouts	2	-	-	4	12	-	-	-
2.2.12	Drainage Details	-	2	-	4	12	-	-	-
2.2.13	Utilities	4	-	2	4	20	-	-	8,800
2.2.14	Utility Details	1	-	2	2	8	-	-	-
2.2.15	Traffic Signals & Illumination	-	-	-	-	-	-	-	-
2.2.16	Traffic Signal/Illumination Details	-	-	-	-	-	-	-	-
2.2.17	Pavement Markings & Signs	2	16	6	20	20	-	-	-
2.2.18	Pavement Markings & Signs Details	-	4	2	6	20	-	-	-
2.2.19	Erosion Control	8	12	20	40	40	-	-	-
2.2.20	Erosion Control Details	-	2	2	2	10	-	-	-
2.2.21	Cross Sections	-	2	2	2	20	-	-	-
2.2.22	Cost Estimate	4	6	-	6	6	-	-	-
2.2.23	Project Manual & Contract Documents	8	40	10	4	6	-	-	-
2.2.24	Geotech Coordination	2	-	-	2	2	-	-	600
Total Hours		44	118	94	206	366	64	-	-
Hourly Rate		\$115.00	\$105.00	\$90.00	\$80.00	\$70.00	\$45.00	-	-
Labor Cost		\$5,060.00	\$12,390.00	\$8,460.00	\$16,480.00	\$25,620.00	\$2,880.00	-	\$14,400.00
Total Cost		\$85,290.00							
Reimbursables (estimate) \$6000									

ENGINEERING/SURVEYING COST
WILLIAMSON COUNTY ROAD BOND PROGRAM
CR 276 PROJECT MANAGEMENT

	Task Description	Project Manager	Senior Engineer	Staff Engineer	Senior Technician	CADD Technician	Clerical	Subconsultant
3.1	General Project Coordination	60	20	-	10	-	20	-
3.2	Project Administration	120	20	20	10	-	40	-
	Total Hours	180	40	20	20	-	60	-
	Hourly Rate	\$115.00	\$105.00	\$90.00	\$80.00	\$70.00	\$45.00	-
	Total Cost	\$20,700.00	\$4,200.00	\$1,800.00	\$1,600.00	-	\$2,700.00	-
	Total Cost	\$31,000						

AGENDA ITEM 37

Consider and approve Change Order No. 5 for Capital Excavation Company on Parmer Lane (02WC433) for \$50,137.60.

Moved: **Commissioner Boatright**

Seconded: **Commissioner Limmer**

Motion: To approve Change Order No. 5 for Capital Excavation Company on Parmer Lane (02WC433) for \$50,137.60

< Attachment >

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 5

1. CONTRACTOR: Capital Excavation Company
2. Change Order Work Limits: Sta. 149+75 to Sta. 155+45
3. Type of Change (on federal-aid non-exempt projects): Minor (Major/Minor)
4. Reasons: 4B, 3B (3 Max. - In order of Importance - Primary first)

Project:	<u>02WC433</u>
Roadway:	<u>Parmer Lane</u>
Purchase Order Number:	<u>02WC433</u>

5. Describe the work being revised:

Addition of waterline services for the City of Leander and developer, Premier Homes.

6. Work to be performed in accordance with items: See attached.
7. New or revised plan sheet(s) are attached and numbered: Yes
8. New general notes to the contract are attached: ☐ Yes ☐ No
9. New Special Provisions to Item N/A No. N/A Special Specification Item N/A are attached.

Each signatory hereby warrants that each has the authority to execute this Change Order (CO).

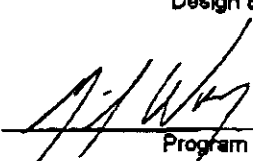
<p><i>The contractor must sign the Change Order and, by doing so, agrees to waive any and all claims for additional compensation due to any and all other expenses; additional charges for time, overhead and profit; or loss of compensation as a result of this change.</i></p> <p>THE CONTRACTOR _____ Date _____</p> <p>By _____</p> <p>Typed/Printed Name _____</p> <p>Typed/Printed Title _____</p>	<p>The following information must be provided</p> <p>Time Ext. #: <u>2</u> Days added on this CO: <u>6</u></p> <p>Amount added by this change order: <u>\$50,137.60</u></p>
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RECOMMENDED FOR EXECUTION:

Project Manager Date _____

Construction Observer

Design Engineer Date _____

 5-5-03
Program Manager Date _____

Design Engineer's Seal: _____

County Commissioner Precinct 1 Date _____

☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 2 Date _____

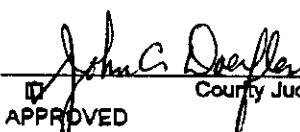
☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 3 Date _____

☐ APPROVED ☐ REQUEST APPROVAL

County Commissioner Precinct 4 Date _____

☐ APPROVED ☐ REQUEST APPROVAL

 5-13-03
County Judge Date _____

APPROVED