

# SUPPLEMENTAL WORK AUTHORIZATION NO. 3 TO WORK AUTHORIZATION NO. 1

## WILLIAMSON COUNTY ROAD BOND PROJECT: <u>CR 176 at RM 2243</u>

This Supplemental Work Authorization No. 3 to Work Authorization No. 1 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated February 23, 2016 ("Contract") 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").

WHEREAS, the County and the Engineer executed Work Authorization No. 1 dated effective February 23, 2016 (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" (must be attached).
- II. The Work Authorization shall terminate on <u>August 10</u>, 2019. 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 Work Authorization is hereby increased from \$509,026 to \$641,875. The revised Work Schedule is attached hereto as Attachment "D" (must be attached).

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: WSB & Associates

By: Signature

Signature

Printed Name

Principal VICE PRES.

Title

Title

Oq. 11 July

Title

Date

COUNTY:

By: Signature

Av A GA TT:

Printed Name

Oq. 11 July

Date

Date

LIST OF ATTACHMENTS

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

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: WSB & Associates	COUNTY:	
By: Signature	By:Signature	
Printed Name	Printed Name	
Principal VICE PAGE.  Title	Title	
9-19-18 Date	Date	X 9 19 201
LIST OF ATTACHMENTS		19/11
Attachment B - Services to be Provided by Enginee	er	١
Attachment C - Work Schedule		

Attachment D - Fee Schedule

County Road 176 Limits: RM 2243 to Parkside Parkway Williamson County, Texas

> Supplemental Agreement No.3 to Work Authorization No. 1 County Road 176 RM 2243 to Parkside Parkway Williamson County, TX

#### **ATTACHMENT B**

#### SERVICES TO BE PROVIDED BY ENGINEER

### MODIFIED SCOPE OF SERVICES

## **GENERAL**

The project Scope of services identified in WA#1 scope of services have been revised. The limit revision undertaken by SA#2 required additional data acquisition, design services, and analysis. These need for these additional efforts was not apparent when SA#2 was executed; the following additional services will be provided.

## I. PROJECT MANAGEMENT

The ENGINEER will provide project management services based on increased project limits, and the related extended project duration including the following:

- A. Provide Project Administration and Controls.
  - Prepare and submit a monthly invoice package, which shall include the Engineer's invoice, subconsultant invoices, and a project development status report. All subconsultant invoices will be reviewed for accuracy prior to submission. The Engineer will submit monthly progress status reports to the GEC. Progress reports will include: tasks completed, tasks/objectives that are planned for upcoming periods, lists or descriptions of items or decisions needed from the County and its representatives. A copy of the monthly progress report will be uploaded to Projectwise.
  - 2. The engineer will 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, correspond with County and its representatives, and assist the County and its representatives in preparing responses to Project-related inquiries.
  - 3. Coordinate and communicate with Client
  - 4. Coordinate and communicate with project team and subconsultants. This task will include reviewing drainage design alternatives with drainage subconsultant and communicating recommendations to the County for review and approval.

WSB & Associates, Inc. Work Authorization No. 1

County Road 176
Limits: RM 2243 to Parkside Parkway

Williamson County, Texas

5. Coordinate and communicate with project stakeholders including Williamson County, TxDOT, affected landowners, local neighborhoods, utility providers, project team and other stakeholders

- 6. Develop and maintain project development schedule.
- B. Attend meeting with Williamson County to discuss project issues and review alternative solutions.

#### II. SURVEY

- 1) Cave Survey:
- Prepare a topographic survey of an area approximately 300' by 300' centered on the opening of a cave located at the east side of C.R. 176.
- Extend existing topographic survey south of cave limits to a curb inlet at east side Park Valley Drive.
- 2) Water Oak Tract:
- Run a profile line on the Water Oak property north of F.M. 2243. Profile line to begin at the northern end of the previously cross sectioned portion of proposed right-of-way in future development across Water Oak tract and extend northerly to the flowline of a creek. Profile line approximately 900 feet in length.
- 3) Parcel Staking:
- Stake proposed right-of-way lines of approximately five (5) parcels. 100d nails with wooden laths to be staked at +/-50' intervals along proposed right-of-way.
- 4) Parcel Exhibit Revisions/Addition:
- Make revisions to approximately 4 Parcel exhibits as a result of proposed right-of-way changes and land transaction(s) that have occurred subsequent to initial Parcel submittals.
- Additional parcel for right-of-way along north side of F.M. 2243.
- Set/reset property corners as required by revisions.
- 5) Drainage & Slope Easements:
- Prepare exhibits with accompanying metes and bounds descriptions for proposed drainage and slope easements.

#### III.PLANS, SPECIFICATIONS & ESTIMATES (PS&E)

- A. Revise existing design files to reflect updated drainage designs and cave related plan sheets
  - 1. Revise ROW
  - 2. Coordinate with Developer's engineers
  - 3. Revise pond locations
  - 4. Develop ROW exhibits showing various details including driveways, trees, etc.
  - 5. Develop plan sheet with details for cave remediation

County Road 176 Limits: RM 2243 to Parkside Parkway Williamson County, Texas

- 6. Develop driveway details and exhibits
- 7. Update cross sections
- 8. Revise TCP to construct from Deer Draw to Parkside Parkway in a two phase TCP instead of a three phase TCP.
- 9. Additional design and coordination efforts related to the pond on the north side and the culvert under RM 2243. Development of design details for three alternative design approaches and related preliminary cost estimates. Coordination of alternative design approaches through multiple meetings and reviews with the GEC. Coordination related to incorporating data from the snowmelt cave. Multiple site visits to confirm assumptions.

### IV. Preliminary WQ/Detention Analysis

a. South Project Watershed WQ/Detention

Develop preliminary design of future pond

- 1. Determine water quality volume required for the ultimate CR 176 cross section based upon TCEQ criteria
- 2. Create HEC-HMS hydrology model to assess detention volume requirements
- 3. Develop preliminary WQ/detention pond geometry based upon volume requirements and site constraints including:
  - a. Ensuring positive roadway drainage from profile lows into pond
  - b. Minimizing conflicts with existing water lines
- 4. Recommend ROW requirements based on pond geometry including accessibility and downstream grading for positive outfall.
- 5. Prepare Report with exhibits and recommendations.
- b. North Project Watershed WQ/Detention

Utilize previous preliminary pond design analyses and parameters to analyze and develop preliminary design of future pond at 2 alternative locations near north end of Project

- 1. Identify needed revisions to Culvert 1 design to accommodate gravity outfall from each alternative pond location
- 2. Prepare email report of findings and recommendations.

## V. <u>Drainage Design (PS&E)</u>

- a. Southward Project Extension Revisions Based on Cave Survey
  - 1. Modify hydrology to incorporate drainage to cave
    - (a) Update Drainage Area Map
    - (b) Update HMS model and summary tables
  - 2. Off-Site Drainage Improvements to incorporate design to Parkside at Mayfield Ranch Subdivision conveyance system
    - (a) Finalize storm drain design based on the additional survey data
    - (b) Finalize storm drain plan & profile and details (Estimated at 1 Sheet)
- b. Culvert 1 revisions based upon alternative future north project watershed WQ/Detention pond locations

County Road 176 Limits: RM 2243 to Parkside Parkway

Williamson County, Texas

- 1. Develop redesign of culvert based upon gravity outfall parameters of each pond location
- 2. Revise design establishing new flowlines and downstream grading
- 3. Revise plans and details
- IV. Update quantities table (Estimated at 1 Summary Sheet).
- V. Assemble additional pertinent standard sheets and details

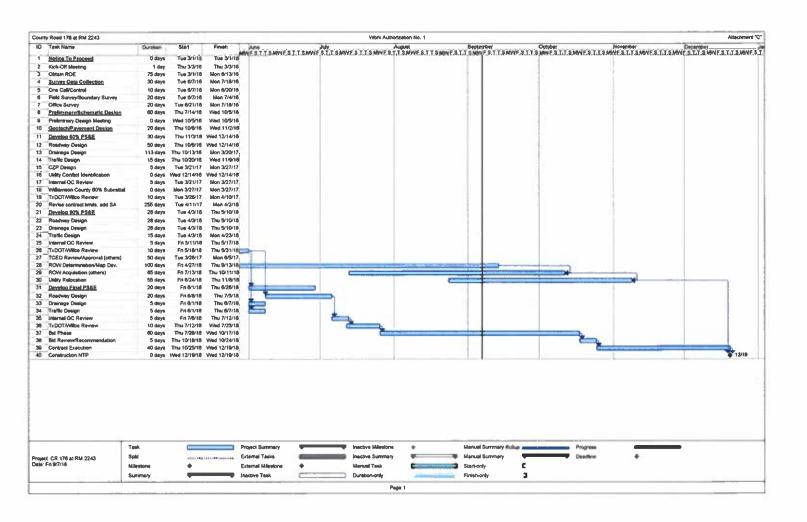
#### VI. WPAP

a. Revise WPAP report to insert and add permit documents to address Snowmelt Cave

#### VII. DELIVERABLES

All Deliverables will comply with checklists provided by current version of Williamson County Design Criteria Manuals

Final Submittal - the final submittal will be updated to reflect revisions related to this



ATTACHMENT D SA #3	CR 176 From Parkside Parkway to RM 2243 DATE: Sept. 19, 2018								
CR 176 WA#1 Attachment D Summary									
Firm / Role	Labor Direct Expense Tota								
WSB / PM, Roadway Design	\$76,575	\$0	\$76,575						
OBES / Drainage,TCEQ,QC/QA	\$16,774		\$16,774						
Pape Dawson / Survey, ROW Mapping	\$39,500	\$0	\$39,500						
Project total			\$132,849						

ATTACHMENT D			,			<u> </u>	
SA #3		CR 176				17	
		From Parkside Pa	rkway to RM 2243	•		DATE:	Sept. 19, 2018
WSB & Associates, Inc							
PROJECT: Preparation of PS&E							
							Sheet 1/2
FASK AND DESCRIPTION		PROJECT	SENIOR	SENIOR	CADD		TOTAL
		MANAGER	ENGINEER	TECH	TECH		
	HOURLY RATE	\$175.00	\$160.00	\$125.00	\$50.00		
I. PROJECT MANAGEMENT	TOTAL HOURS	139	0	0	0		139
	TOTALS	\$24,325	\$0	\$0	\$0		\$24,32
II. SURVEY COORDINATION	TOTAL HOURS		34	10	0		4
	TOTALS		\$5,440	\$1,250	\$0		\$6,69
III. PS&E PREPARATION	TOTAL HOURS		161	158	1	<del>                                     </del>	32
	TOTALS		\$25,760	\$19,750	\$50		\$45,58
TOTAL PROJECT LABOR	TOTAL HOURS	139	195	168	1		50:
	TOTAL LABOR COST	\$24,325	\$31,200	\$21,000	\$50		\$76,57

ATTACHMENT D		1	CR 176	1						T	Williamson
SA 83			011.11								County
SR 84			From Parkside	Darlmany to DM	1243					1	- County
WSB & Associates, Inc		-	P FORII P GI LZPGG	I WHEN THE	1	-				DATE:	Sept. 19, 2018
								-		DATE.	Sheet 2/2
PROJECT: Preparation of PS&E					_					-	SIMIL DZ
	l										
TASK AND DESCRIPTION	No.	Hours	PROJECT	Hours	SEMOR	Houns	SENIOR	Hours	CADD		TOTAL
	Sheets	/Sheet	MANAGER	/\$heat	ENGINEER	/Sheet	TECH	/Sheet	TECH		1
			HOURS				HOURS		HOURS		HOURS
L PROJECT MANAGEMENT		l									
Prepare monthly invoice package			12								12
2. Manage Project Activities			40								40
3. Coordinate With Client		i	18								18
Coordinate with drainage subconsultant			60				ì		1		60
5. Coordinate with stakeholders			6								6
6. Update project schedule			3								3
6. Opdate project echicons	-									1	1
SUSTOTAL	-		139		0		0		0	î T	139
IL SURVEY											
Review new survey data/append into existing files		-			2		6			1	8
2. Coord, on parcel revisions, ROW staking, etc., review parcels					32	-	4			1	
S. COOK S. ST PER COL 18 TOUR STATE OF				$\overline{}$			·····			<del>                                     </del>	
					34		10		0		44
SUSTOTAL					34		10		,		+ **
III. PS&E PREPARATION											16
1. Revise ROW limits					8		8		-		4
Coordinate with stakeholders' Engineer     Revise Estration Pond locations					8		. O		0		16
Nevelop ROW exhibits				-	40		40		ŏ		80
5. Develop Cave detail plan sheet	1			5	5	6	6	1	1		12
6, Develop driveway exhibits	3		-	2	6	4	12	-			18
7. Update cross sections north and west of Parkside Parkway	8	1		0.5	4	1.5	12		0		18
8. Revise TCP	3			2	6	4	12		0		18
9. Additional efforts related to the pond on the north side and the					80	1	60				
culvert under RM 2243									0		140
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SUBTOTAL					161	<del>                                     </del>	158		1	<del>1                                    </del>	320
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PROJECT TOTALS		i e	138		195	i	168		1		603
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