

WORK AUTHORIZATION NO. 4

PROJECT: Design Survey & ROW delineation within Durham Park Subdivision

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Surveying Services, being dated May 19, 2020 and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Surveying And Mapping, LLC (the "Surveyor").

Part 1. The Surveyor will provide the following Surveying 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 \$61,901.50.

Part 3. Payment to the Surveyor 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 December 31, 2020. The Surveying 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. Surveyor 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 Surveyor 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 Surveyor.

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

LIST OF ATTACHMENTS

Attachment A - Services to be Provided by County

Attachment B - Services to be Provided by Surveyor

Attachment C - Work Schedule

Attachment D - Fee Schedule

Attachment A - Services to be Provided by County

The County shall:

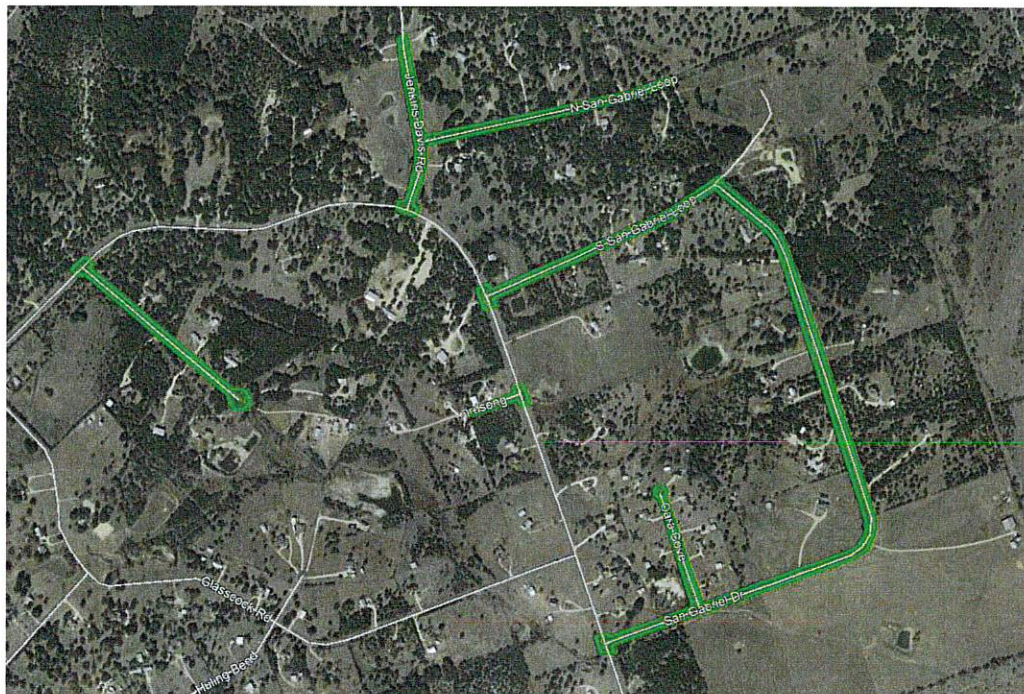
- A. Designate a project manager to serve as the County's point of contact with the Surveyor.
- B. Provide the specification requirements for all surveys.
- C. Provide timely reviews and decisions necessary to enable the Surveyor to maintain an agreed upon project schedule as developed in Attachment C.
- D. The horizontal datum for this project will be NAD83 (2011) Texas Coordinate System, Central zone, with a scale factor of 1.00012 or as provided by the county.
- E. Vertical values for this project will be based on NAVD88, GEOID 12B.
- F. It is assumed that Right-of-Entry (ROE) will not be required during this Work Authorization. If ROE is required, Williamson County will coordinate with the Property Owners prior to the Surveyor entering private property.

Attachment B - Services to be Provided by Surveyor (SAM)

Project Limits –

Throughout Durham Park Subdivision, Cara Cove (~923'), San Gabriel Dr. (~5,146'), Birdsong Cove (~402'), Deer Trail (~1,533'), Jenkins Davis Road (~1,317'), N San Gabriel Loop (~1,952') & S San Gabriel Loop (~1,927'). Approximately 13,200' total. As depicted in Exhibit "A".

Exhibit "A"



Project Control

The Surveyor shall establish horizontal & vertical control including a minimum of 4 points within the survey project limits at Durham Park subdivision. The survey control points (5/8" iron rods with aluminum caps set in concrete) will be set in locations that will likely be undisturbed by construction or maintenance. The project control will be placed on horizontal & vertical datum's [NAD83/2011/NAVD88 values (Texas Coordinate System, Central Zone)] with a scale factor of 1.00012 or as provided by the county. Elevations will be derived from GPS observations using Geoid 2012B model. Secondary control points will be set throughout the project corridors as needed to complete the scope of work.

Design/Topographic Survey

- I. SAM will obtain design survey data within the project limits at approximate 50' intervals and major grade breaks necessary to produce a one-foot interval contour DTM. This data will typically include as follows: edge of pavement/gutter & back of curb, crown (physical centerline), roadway striping, top and bottom of drainage ditches, sidewalk, fences, guardrails, signs (with text), mailboxes, retaining walls, paved areas, buildings, driveways (with type noted), driveway pipes, visible utilities and visible evidence of underground utilities only. Design survey limits will be from fence line to fence line within the existing right-of-way. No trees will be located during this work authorization.

Right-of-Way Delineation Survey

- I. Upon notice to proceed, the Surveyor will conduct research at the Williamson County Appraisal District/County Clerk's Office in order to obtain the most recent plat & right-of-way information. The Surveyor will recover monuments/front property corners marking the existing ROW lines (if any). This shall be done in conjunction with the design survey. Utilizing the records research and data collected from the field survey, the Surveyor shall determine locations of the existing ROW lines.

Project Deliverables (same deliverables for each site)

- a. 2D planimetrics & 3D DTM (Microstation V8i)
- b. GPK & TIN file
- c. 1-Foot Contour map in Microstation V8i DGN format
- d. 2D DGN of existing ROW delineation
- e. PDF Field Book copies
- f. ASCII file of points

ADDITIONAL SERVICES - In addition to the services described in the foregoing Scope of Services, the SURVEYOR can provide additional services if requested by Williamson County, on a time and materials basis, after submittal of an estimated budget and receipt of written authorization. These additional services could include, but are not limited to, the following:

- ROW surveying and mapping services beyond that scoped herein
- Replacement of any missing control monumentation
- Subsurface Utility Engineering services.
- Additional surveying to support engineering and or architectural design, beyond the scope described herein.
- Obtaining permission to access adjoining properties.
- Providing construction surveying or layout services
- Safeguarding or maintenance of control or benchmarks during construction.

Wilco WA 4 Road Topo/ROW Delineation
 (Durham Park Subdivision)

ATTACHMENT C - WORK SCHEDULE

Surveying and Mapping, LLC	Week 1 (10/5)	Week 2 (10/12)	Week 3 (10/19)	Week 4 (10/26)	Week 5 (11/2)	Week 6 (11/9)	Week 7 (11/16)
Verify/Establish Project Control							
Collect Design Survey							
Locate Existing Right of Way							
QA/QC & Prepare Final Deliverables							
Williamson County Review							

* Dependant upon weather
 SAM, LLC has sufficient office & field staff available to accommodate accelerated work schedules that may become necessary during the course of the project. Please contact us immediately upon becoming aware of this situation to discuss compressing the schedule, along with associated fees, to deliver the final product to meet the new deadline.

**ATTACHMENT D
TIME & MATERIALS PAYMENT BASIS
SURVEY SERVICES**

Project: WA # 4 Durham Park Subdivision Phase 1 Topo & ROW Delineation
Proposal Number: 1016062774D

TASK DESCRIPTION	SENIOR PROJECT MANAGER	PROJECT MANAGER	STAFF SURVEYOR	SENIOR SURVEY TECHNICIAN	SURVEY TECHNICIAN	2-PERSON SURVEY CREW	3-PERSON SURVEY CREW	FIELD COORDINATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS
Control Survey	1	4		2	8	20		2		\$5,134.00
Topo/ROW Survey	1	8		20	40	200	20	2		\$42,890.00
Abstract Map	1		10	30	10					\$7,568.00
Final Deliverables	2	4		4	4					\$1,632.00
SUB-TOTALS	5	16	10	62	68	220	25	4	0	\$58,714.00
HOURS SUB-TOTALS	6	16	10	62	68	220	20	4	0	405
CONTRACT RATE PER HOUR	\$180.00	\$160.00	\$135.00	\$110.00	\$88.00	\$155.00	\$195.00	\$105.00	\$75.00	
TOTAL LABOR COSTS	\$900.00	\$2,560.00	\$1,350.00	\$6,820.00	\$6,664.00	\$34,100.00	\$3,800.00	\$420.00	\$0.00	\$58,714.00
OTHER DIRECT EXPENSES				# OF UNITS	COST/UNIT					
Messages (number x current state rate)				2600	\$0.675					\$1,437.50
GPS Receiver				150	\$26.00					\$3,760.00
										\$0.00
										\$0.00
SUBTOTAL DIRECT EXPENSES										\$5,197.50
SUMMARY										
										LABOR COSTS
										\$58,714.00
										NON-SALARY (OTHER DIRECT EXPENSES)
										\$5,197.50
										TOTAL SAM SURVEY
										\$61,901.50