



## WORK AUTHORIZATION NO. 1

### PROJECT E: (P551) Brushy Creek Trail Extension Along Hairy Man Rd.

This Work Authorization is made pursuant to the terms and conditions of the **Agreement for Planning, Design and Engineering Services**, being dated **08/04/2020** and entered into by and between **Williamson County** a political subdivision of the State of Texas, ("County"), and **RVE, Inc. dba RVi Planning + Landscape Architecture**, ("A/E").

**PART 1.** A/E shall provide Planning, Design and Engineering Services set forth in **Attachment A** of this Work Authorization.

**PART 2.** The maximum amount payable for Basic Services under this Work Authorization without modification is **Five Hundred Thirty-Nine Thousand, One Hundred Eighty-Four Dollars (\$ 539,184)**, as set forth in **Attachment B** of this Work Authorization.

**PART 3.** Payment to A/E 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 and full execution of the parties hereto and shall terminate on **11/03/2021**, as set forth in **Attachment C** of this Work Authorization. The Planning, Design and Engineering Services set forth in **Attachment A** 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 Agreement.

**PART 6.** County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Work Authorization. A/E understands and agrees that County's payment of amounts under this Work Authorization is contingent on County receiving appropriations or other expenditure authority sufficient to allow County, in the exercise of reasonable administrative discretion, to continue to make payments under this Agreement. It is further understood and agreed by A/E that County shall have the right to terminate this Agreement 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 affect such termination by giving written notice of termination to A/E.

**PART 7.** This Work Authorization is hereby accepted and acknowledged below.

EXECUTED this 28th day of July, 2020.

**A/E:**

**COUNTY:**

RVE, Inc.  
dba RVi Planning + Landscape Architecture

Williamson County, Texas

By: Barbara Austin  
Signature

By: \_\_\_\_\_  
Signature

Barbara Austin  
Printed Name

\_\_\_\_\_  
Printed Name

Senior Vice President  
Title

\_\_\_\_\_  
Title

## ATTACHMENT A

### BASIC SCOPE OF SERVICES

THE FOLLOWING SCOPE OF SERVICES IS INTENDED TO BE CONSISTENT WITH THE AGREEMENT. TO THE EXTENT THIS SCOPE OF SERVICES IS INCONSISTENT WITH THE AGREEMENT, THE AGREEMENT WILL SUPERSEDE THE SCOPE OF SERVICES AND WILL BE CONTROLLING.

#### SCOPE OF WORK:

Brushy Creek Trail  
Hairy Man Rd. near Sea Ash Cir., Round Rock, TX  
Precinct 1  
Program 2020-E

#### BRUSHY CREEK TRAIL along HAIRY MAN RD.

PARKS BOND PROGRAM 2020-E (4/23/20)



#### SCOPE OF WORK

1. DETERMINE CONNECTION FROM EXIST EAST TRAIL END TO NEW TRAIL CONSTRUCTION  
- (APPX. 1.5-MI.)

#### DESIGN CHALLENGES

- A. SAULS RANCH SUBDIVISION
  - 1/4-1/2 MI. EASEMENT ON EAST SIDE OF HAIRY MAN RD.
  - \$100,000 MATCHING FUNDS FOR CONSTRUCTION OF TRAIL
  - HAIRY MAN RD. CROSSINGS @ NORTH & SOUTH NEIGHBORHOOD ENTRANCES
- B. FUTURE TRAIL PARKING AREA @ INTERSECTION OF HAIRY MAN RD. & CREEK BEND BLVD.
- C. SAULS RANCH SUBDIVISION HAS FIRST RIGHT OF DEVELOPMENT FOR SAULS PROPERTY
- D. NATURAL SPRING NEAR POSSIBLE CREEK CROSSING
- E. FAITH MISSIONARY BAPTIST CHURCH NEGOTIATION FOR TRAILHEAD
  - ACQUIRE OR LEASE PROPERTY
- F. IDENTIFY & COORDINATE KEY STAKEHOLDERS / PARTNERS
  - COUNTY REALESTATE ATTORNEY = CHARLIE CROSSFIELD
  - WILCO ROAD & BRIDGE DIVISION
  - SAULS RANCH SUBDIVISION DEVELOPER
  - SAULS FAMILY TRUST
  - FAITH MISSIONARY BAPTIST CHURCH

#### ALLOCATED FUNDS

- ITEM 1 = \$2,505,000 (INCLUDING "SOFT COSTS")

Design services shall be conducted in phases as outlined herein. Phases may be combined to expedite design process when defined in Attachment C – Production Schedule. Individual phases or groups of phases shall be authorized herein or by fully executed Supplemental Agreement, Work Authorization, or Supplemental Work Authorization thereto.

### **Phase I+II+III - INVENTORY, PRE-DESIGN, AND TRAIL ALIGNMENT PLAN**

Upon receipt of written Notice to Proceed, A/E shall accomplish the following:

- A. Conduct a project initiation meeting and obtain data.
- B. Assemble existing data and information into a base map of the proposed trail corridor area and identify property ownership from current appraisal district data.
- C. Conduct on-site inventory with team members and County to determine surrounding influences, site conditions, environmental and hydrologic/floodplain constraints, erosion, and access.
- D. Assess all relevant data including applicable regulatory requirements, development standards, property limits, and identify opportunities and constraints.
- E. Identify property ownership and acquisition or access easement requirements necessary to develop the trail.
- F. Identify anticipated permitting requirements (FEMA, US Army Corp of Engineers, US Fish and Wildlife/Texas Parks and Wildlife, Texas Historic Commission, Texas Commission on Environmental Quality, Brazos River Authority, Williamson County, County Floodplain and TxDOT).
- G. Prepare a Preliminary Trail Alignment (PTA) exhibit showing preliminary alignment, property ownership, and easement map for the entire trail corridor.
- H. Provide PTA exhibit for review and comment by County.
- I. Finalize PTA exhibit per County comments.
- J. Conduct Presence / Absence Survey (per U.S. Fish and Wildlife Service protocols for the Northern Edwards Aquifer Salamanders, release 10/2014) within the spring runs.
  - 1. Minimum 15 active surveys of surface habitat
  - 2. Passive bottle trapping for subsurface habitat usage
  - 3. Attain absence finding (with a 95% confidence interval

*Deliverables: Digital Preliminary Trail Alignment Package*

#### **Phase IV - SCHEMATIC DESIGN - 30%**

Upon County acceptance of previous phase, A/E shall proceed with the following work:

- A. Prepare and submit schematic design for the Project (of approximately 7,400 LF) including:
  - 1. Coordinate the trail alignment assessment with the design team and County, including
    - a. Walk the site and mark/flag proposed trail route and up to four (4) possible connections.
    - b. Create a digital photographic inventory as a resource of existing conditions.
    - c. Identify opportunities and constraints
    - d. Initiate habitat and geologic assessments
  - 2. Conduct preliminary meeting(s) and/or research with regulatory entities to determine permit requirements including Pre-development meeting with City of Round Rock Planning Development Services and Floodplain Administrator.
    - a. Site Plan Development permit through the City of Round Rock for the trailhead parking or restroom is not included in the basic services of this Work Authorization.
  - 3. Prepare and submit schematic design studies including initial plan illustrating:
    - a. One (1) Trail alignment revision of existing schematic alignment including one (1) alternative, if applicable.
    - b. Up to five (5) retaining walls
    - c. Trail access points
    - d. Faith Missionary Baptist Church trailhead:
      - i. Parking, circulation
      - ii. Prefabricated restroom building Trail Connection
      - iii. Drainage
      - iv. Security gate, fencing, and/or bollards

- e. Up to one (1) Low Water Crossing on Brushy Creek
  - f. Up to five (5) Drainage Crossings
  - g. Seating areas
  - h. Interpretive signage locations
- 4. Review schematic plan design studies, including preliminary trails alignment alternatives, with Registered Accessibility specialist and County maintenance and operations staff.
  - 5. Prepare and submit opinion of probable cost in sufficient detail to allow County to make informed decisions about the budget and scope of the project.
    - a. Opinions of probable costs are based on experience and judgment of A/E and are merely opinions. A/E does not warrant that actual costs will not vary from those opinions because among other things, A/E has no control over market conditions.
  - 6. Prepare and submit complete Schematic Plan Design Package including design studies, Schematic Alignment Roll Plot (with a horizontal scale of 100-ft, and vertical scale of 10-ft) and opinion of probable costs for County review.
  - 7. Meet with representatives of stakeholder groups, which may include Faith Missionary Baptist Church, Fern Bluff MUD, as arranged by the County, to discuss possible design criteria and general needs, up to (4) meetings.
  - 8. Geotechnical and Structural Engineering are not included in the Basic Services of this Work Authorization.
- B. Prepare and submit a topographic survey along proposed route (approximately 7,400-ft by 75-ft wide minimum). AutoCAD file in surface coordinates shall utilize NAD 1983 (HARN 1993) as the datum.
- 1. Locate all visible utility features and overhead obstructions along the route.
  - 2. Locate and tag hardwood trees 8-in or greater.
  - 3. Graphically locate property lines within the limits of the survey.
  - 4. Provide up to four (4) metes & bounds descriptions with sketch for the use by County to acquire easements and/or simple acquisition of properties along route.

5. Flowlines and inverts of utilities will not be obtained.
  6. County will secure right-of-entries for surveys.
- C. Conduct a Texas Commission on Environmental Quality (TCEQ) Geologic Assessment investigation and compile a report for inclusion in the project Water Pollution Abatement Plan as required under the Edwards Aquifer Rules (TAC Chapter 213).
1. The report will include a separate cover letter addressing the potential for any geologic features identified to be associated with habitat for endangered karst invertebrate species known from the area.
  2. County will determine map scale at which the WPAP site maps will be submitted to the TCEQ.
  3. County will secure rights-of-entry for field surveys.
- D. Produce Cultural Background Review using previously prepared Hicks & Co. review as basis.

*Deliverables: Digital Schematic Design Package*

#### **Phase V - DESIGN DEVELOPMENT – 60%**

Upon County acceptance of previous phase, A/E shall proceed with the following work:

- A. Consult freely with County concerning the principal phases of the work and immediately advise County of any unusual requirements or features not apparent during execution of the Schematic Design Phase.
- B. Prepare and submit Design Development Documents to fix and describe the size and character of the project, including civil, structural, and any specialty systems and materials that are necessary.
- C. Provide up to five (5) property appraisal exhibits that depict easement or acquisition areas needed for Trail and Trail Construction. This may include one (1) appraisal exhibit for a temporary construction easement.
- D. Review design for conformance with the Americans with Disabilities Act and Texas Accessibility Standards.
- E. Prepare and submit 60% drawings (11x17 plans), cost estimates and meet with County staff to review 1 submittal. Including:
  1. Title Sheet
  2. Index

3. Estimate and Quantity Sheets – (4 sheets)
  4. Project Layout and Survey Control Sheet – (4 sheets)
  5. General Notes Sheets – (15 Sheets)
  6. Typical Sections – (2 sheets)
  7. Shared Use Path Plan and Profile Sheets (1-in = 50-ft scale) – (15 sheets)
  8. Miscellaneous Path Details – (2 sheets)
  9. Parking design sheets for trail head parking at Faith Missionary Baptist Church
  10. Water and Wastewater plans for prefabricated restroom connections per manufacturer or 6-ft from connection point.
  11. Utility (power and communication) coordination and plans including: site lighting for parking lot, FC study, new electrical service, power/comm. connection to prefab restroom, exterior com-check.
  12. Drainage area and calculations – for cross culverts only (7 sheets)
  13. Drainage plan and profiles – for cross culverts (6 culverts/sheets)
  14. WPAP (includes only vegetative filter strips)
  15. HEC-RAS & HEC-HMS evaluation of the proposed river crossing
  16. Drainage Memo
  17. Prepare Floodplain Permit
  18. SW3P with TCP – (8 sheets double banked)
  19. Standard Details – (28 sheets)
  20. Retaining wall plans and profiles
- F. Prepare and submit a Design Development level cost estimate in a form acceptable to County.
- G. Meet with County up to three (3) times.
- H. Coordinate Utility and conflict matrix.
- I. Provide up to (4) metes & bounds descriptions with sketch for use by County to acquire easements and/or simple acquisition of properties along route.
- J. Additional Services include Geotechnical testing and reporting (for low water crossing, structural retaining walls, parking areas, trail, and any other architectural elements) which need to be initiated during this Phase.
- K. Additional Services include Structural Engineering (for retaining walls and other structural elements) which needs to be initiated during this Phase
- L. Conduct a Species Impact Assessment
1. Assess the potential for the Project to cause harm to biological resources including the JPS and other rare or endangered species.
  2. Consider the following:



- i. nature of the Project
    - ii. required water quality BMPs
    - iii. results of available due-diligence reports
    - iv. hydrology of the local portion of the northern segment of the Edwards Aquifer
    - v. ecology of the JPS
    - vi. available compliance options under the Endangered Species Act
  3. Provide a Report of findings
- M. Attend meetings and produce supporting materials for coordination with various agencies and/or stakeholders including the US Fish and Wildlife Service, TCEQ, TPWD and others.
  1. Additional Services include formal agency consultation.
- N. Coordinate design plans with City of Round Rock.
  1. Additional Services include any permitting beyond initial coordination.
- O. Coordinate with Williamson County Floodplain Administrator.
  1. Additional Services include any additional permitting.
- P. Apply of a U.S. Army Corps of Engineers Nationwide Permit (NWP)
  1. Create a water of U.S. Delineation Report.
  2. Complete resources assessment for the General Conditions of the Nationwide Permit.
  3. Complete a Pre-Construction (PCN) Form (if required for impacting waters of the U.S. in potential endangered species habitat).
    - i. This task assumes the Georgetown Salamander 4D rule BMPs will be applied and the USFWS agrees that there would be no adverse impacts to salamanders or karst invertebrates
    - ii. Submit background review for proposed project limits as Attachment to PCN for USACE archeologist review and coordination of Section 106 requirements.
    - iii. Additional Services include functional assessment of stream impacts, Section 7 informal or formal consultation, and Section 106 consultation under the NHPA.
- Q. Obtain Antiquities Permit from Texas Historical Commission (THC).

1. Conduct Pedestrian Survey and Shovel Testing/Trenching
    - i. Provide test pits for positive Shovel Tests
    - ii. Additional Services include expenses associated with backhoe trenching and curation fees not included in Permit fee.
  2. Investigate previously recorded sites
  3. Additional Services include changes to report or permit amendments because of design changes resulting responses to comments from County or THC.
- R. Prepare and submit TCEQ WPAP submittal package outlining Project development and describing treatment of storm water runoff.
1. Prepare report on forms and in format required by TCEQ
  2. Escort TCEQ representatives on one (1) site reconnaissance.
  3. Review fees will be paid by County.

*Deliverables: Digital Design Development Package.*

#### **Phase VI - CONSTRUCTION DOCUMENTS – 90% & 100%**

Upon County acceptance of previous phase, A/E shall proceed with the following work:

- A. Consult freely with County concerning the principal phases of the work immediately advise County of any unusual requirements or features not apparent during execution of the Schematic Design or Design Development Phases.
- B. Prepare and submit 90% plans, specifications and engineering calculations (without professional seals) setting forth in detail the work including:
  1. Plan, section, elevation, and typical detail drawings, that set forth in reasonable detail the requirements for construction of the Project components, including depiction of their size, shape, dimensions, and locations.
  2. Specifications that identify the materials, equipment, workmanship and quality standards (or performance criteria), for project components.
- C. Prepare and submit a detailed cost estimate of the project on a form acceptable to County.
- D. Prepare and submit a construction schedule with a Gantt chart or other County

approved format which lists the anticipated major activities required to complete the project.

- E. Consult with County on construction sequencing path and timeline based on 90% Construction Document submittal, available funding, and property acquisitions.
  - 1. Prepare scope(s) for Additional Services or Work Authorization.
- F. Coordinate with the Texas Department of Licensing and Regulation (TDLR).
  - 1. Register Project with TDLR
  - 2. Submit Forms to act as "Owner's Agent"
  - 3. Submit Plans to Registered Accessibility Specialist (RAS)
  - 4. Address comments and modify plans to comply with the Texas Accessibility Standards (TAS) and Americans with Disabilities Act.
  - 5. Registration, Review and Inspection fees will be paid by County.
- G. After regulatory clearances confirmed and approval by County of 90% Construction Document deliverables, prepare final signed and sealed 100% PS&E documents for the entire Project and its component parts to be included in County Bid Package.
  - 1. The Project detailed cost estimate shall not exceed the project construction budget as approved in writing by County.
- H. Present plans to County Commissioners' Court as necessary to answer any relevant questions.

*Deliverables: Digital Unsealed Construction Document Package.  
Digital Sealed Construction Document Package.*

### **Additional Services**

Additional Services may include, but not be limited to, the following:

- A. Preparation of Phased bid package(s) with reduced scope of items defined herein, including construction drawings and specifications.
- B. It is anticipated that the project will be broken into Base Bid and one add alternate. Phasing, multiple add alternates or multiple bid packages not outlined in the scope of services will be additional services.
- C. Detailed Flood Plain Analysis
- D. TCEQ Fee
- E. FEMA Conditional Letter of Map Revision (CLOMR) and/or Letter of Map Revision (LOMR)
- F. Land Acquisition services and services related to ROW acquisition not described in the Scope of Services
- G. Design Plans for the relocation of utilities.
- H. Plumbing, mechanical, or structural engineering services for the Prefabricated Restroom.
- I. Easement acquisition or vacation including preparation of easement documents other than those described in Scope of Services
- J. Legal Lot Determinations
- K. Preparation of multi-use agreement(s) and exhibits
- L. Assistance or representation in litigation concerning the property of proposed project
- M. Traffic Impact Analysis
- N. TxDOT Standards and Specification will be used to supplement Williamson Co. Standards and Specifications.
- O. Drainage models will be designed to FEMA 500-year storm. Upgrading to ATLAS 14 is not included.
- P. TxDOT roadway modifications
- Q. Traffic Control will be shown on SW3P sheets
- R. Cross Sections for full trail not included
- S. Construction Staking

- T. Conflict Resolution
- U. Preparation and processing of Waivers, Variances or Exceptions
- V. Services required after final acceptance of construction work
- W. Revisions to drawings previously approved by the County and regulatory entities due to changes in: Project scope, budget, schedule, unforeseen subsurface construction conditions or when such revisions are inconsistent with written approvals or instructions previously given; enactment or revision codes, laws, or regulations subsequent to the preparation of such documents.
- X. Preparation of presentation materials for marketing or purposes other than those described in Scope of Services
- Y. Public or other presentations beyond those described in Scope of Services
- Z. Provide consultation, drawings, reports, and other work products related to permits, approvals and ordinances not described in the Scope of Services
- AA. Coordination with the utility companies for the design and construction of telephone and gas service will be provided by County.
- BB. Preparation of record documents from contractor's construction record drawings
- CC. Providing services other than those outlined in the Scope of Services.
- DD. Utility relocation design
- EE. Backhoe trenching is not expected and therefore not included.

## ATTACHMENT B

### FEE SCHEDULE

This schedule indicates fees by Phase of the Basic Fee:

<b>\$ 539,184</b>	100%
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23%	<b>RVi Planning + Landscape Architecture</b>	<b>\$ 123,280</b>
54%	<b>Pape-Dawson Engineers (Civil)</b>	<b>\$ 288,700</b>
13%	<b>Inland Geodetics (Surveyor)</b>	<b>\$ 72,754</b>
2%	<b>Bay Electrical Engineers (MEP)</b>	<b>\$ 8,500</b>
8%	<b>Cambrian Environmental</b>	<b>\$ 40,450</b>
1%	<b>Jim Rodgers (Park Consultant)</b>	<b>\$ 3,000</b>
0%	<b>Altura (RAS)</b>	<b>\$ 2,500</b>

<b>Phase I+II+III - INVENTORY, ENGAGEMENT, AND TRAIL PLAN</b>	<b>\$ 18,350</b>	3%
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RVi Planning + Landscape Architecture	\$ 15,450
Pape-Dawson Engineers (Civil)	\$ 2,900
Inland Geodetics (Surveyor)	N/A
Bay Electrical Engineers (MEP)	N/A
Cambrian Environmental	N/A
Jim Rodgers (Park Consultant)	N/A
Altura (RAS)	N/A

<b>Phase IV - SCHEMATIC DESIGN (30%)</b>	<b>\$ 213,554</b>	40%
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RVi Planning + Landscape Architecture	\$ 38,500
Pape-Dawson Engineers (Civil)	\$ 65,650
Inland Geodetics (Surveyor)	\$ 72,754
Bay Electrical Engineers (MEP)	\$ 1,200
Cambrian Environmental	\$ 32,450
Jim Rodgers (Park Consultant)	\$ 3,000
Altura (RAS)	N/A

<b>Phase V - DESIGN DEVELOPMENT (60%)</b>	<b>\$ 171,040</b>	32%
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RVi Planning + Landscape Architecture	\$ 37,040
Pape-Dawson Engineers (Civil)	\$ 123,600
Inland Geodetics (Surveyor)	N/A
Bay Electrical Engineers (MEP)	\$ 2,400

Cambrian Environmental	\$ 8,000
Jim Rodgers (Park Consultant)	N/A
Altura (RAS)	N/A

<b>Phase VI - CONSTRUCTION DOCUMENTS (90% &amp; 100%)</b>	<b>\$ 136,240</b>	25%
RVi Planning + Landscape Architecture	\$ 32,290	
Pape-Dawson Engineers (Civil)	\$ 96,550	
Inland Geodetics (Surveyor)	N/A	
Bay Electrical Engineers (MEP)	\$ 4,900	
Cambrian Environmental	N/A	
Jim Rodgers (Park Consultant)	N/A	
Altura (RAS)	\$ 2,500	

## ATTACHMENT C

### PRODUCTION SCHEDULE

A/E agrees to complete the professional design services called for in **Attachment A** of this Work Authorization within **Four Hundred Fifty-Six (456)** calendar days from the date of this Work Authorization.

The above time limits may, for good cause, be extended, in writing, by County as the Project proceeds.

The schedule below indicates various project milestones and target dates.  
Standard end-of-phase review periods for County shall be (10) business days minimum.

Work Authorization Execution Date	08/04/20
<b>Phase I+II+III - INVENTORY, ENGAGEMENT, AND TRAIL ROUTE PLAN</b>	
Notice to Proceed	08/11/20
Preliminary Design Report deliverables	09/10/20
County written authorization to proceed to next phase	09/22/20
<b>Phase IV - SCHEMATIC DESIGN</b>	
Prepare appraisal Exhibits for County	11/06/20
30% Plans, Specifications and Estimate deliverables	11/20/20
County written authorization to proceed to next phase	12/02/20
<b>Phase V - DESIGN DEVELOPMENT</b>	
60% Plans, Specifications and Estimate deliverables	02/01/21
County written authorization to proceed to next phase	02/12/21
<b>Phase VI - CONSTRUCTION DOCUMENTS</b>	
90% Plans, Specifications and Estimate deliverables	04/13/21
County written authorization to proceed to 100% CDs	04/26/21
100% Plans, Specifications and Estimate deliverables	05/26/21
Work Authorization Termination Date	11/03/21