# WORK AUTHORIZATION NO. 3

# WILLIAMSON COUNTY ROAD & BRIDGE PROJECT: Ronald Reagan & Bar W Ranch / Via De Sienna Intersection Improvements

This Work Authorization is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated <u>March 10, 2020</u> and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and <u>Kimley-Horn and Associates, Inc.</u> (the "Engineer").

- Part1. 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 \$96,596.04.
- 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 <u>January 9, 2024</u> and shall terminate on <u>September 30, 2025</u>. 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 Jan 9, 2024

**ENGINEER:** 

Kimley-Horn and Associates, Inc.

By: Signature

Brian C. Boecker

Printed Name

Senior Vice President
Title

COUNTY:

Williamson County, Texas

By: Valerie Covey

Signature

Valerie Covey

Printed Name

**Presiding Officer** 

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

# WORK AUTHORIZATION NO. 3

# PROJECT: Ronald Reagan & Bar W Ranch / Via De Sienna Intersection Improvements

# ATTACHMENT A Services to be provided by the County

**Project Location:** Ronald Reagan Blvd. & Bar W Ranch Blvd. / Via De Sienna Blvd.

Project Description: Traffic Signal Design, Traffic Signal Timings, Preliminary Intersection

Design, Bid and Construction Phase Support

#### **SCOPE OF WORK**

This project will consist of developing traffic signal design plans, traffic signal timing plans, bid phase support, and construction phase support for a new traffic signal at the intersection of Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard in the City of Leander. This project will require coordination with both Williamson County and the City of Leander, as the proposed traffic signal is within the City of Leander's limits and will be owned, operated, and maintained by the City of Leander after construction. The project also consists of preliminary engineering and development of an intersection schematic for a northbound right-turn lane and reconstruction of the westbound approach to the intersection.

# **SERVICES TO BE PROVIDED BY THE COUNTY**

Williamson County (the County) shall provide all information reasonably requested by Kimley-Horn (the Engineer) during the project, including but not limited to the following:

- Topographical survey for at least 500' in all directions from the center of the intersection based on County's 2017 LIDAR data with 1' contours.
- Quality Level D utility survey previously collected for County's Ronald Reagan corridor planning project. County will obtain and provide additional SUE data as requested by Engineer.
- Provide available copies of associated survey, roadway plans, models, studies, and coordination with ongoing related county projects.
- Provide traffic count data and results of any traffic signal warrant studies already performed for the intersection.
- Provide a Registered Accessibility Specialist (RAS) for TDLR review, registration, and inspection.
- Obtain franchise utility records and coordinate with franchise utilities for any necessary relocations.
- Provide current set of Project Manual documents.
- Provide timely responses to requests for information or clarification.
- Provide timely decisions and reviews of submittals.
- Process payment to the Engineer in a timely manner.

# WORK AUTHORIZATION NO. 3

#### PROJECT: Ronald Reagan & Bar W Ranch / Via De Sienna Intersection Improvements

# ATTACHMENT B Services to be provided by the Engineer

**Project Location:** Ronald Reagan Blvd. & Bar W Ranch Blvd. / Via De Sienna Blvd.

Project Description: Traffic Signal Design, Traffic Signal Timings, Preliminary Intersection

Design, Bid and Construction Phase Support

#### **SCOPE OF WORK**

This project will consist of developing traffic signal design plans, traffic signal timing plans, bid phase support, and construction phase support for a new traffic signal at the intersection of Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard in the City of Leander. This project will require coordination with both Williamson County and the City of Leander, as the proposed traffic signal is within the City of Leander's limits and will be owned, operated, and maintained by the City of Leander after construction. The project also consists of preliminary engineering and development of an intersection schematic for a northbound right-turn lane and reconstruction of the westbound approach to the intersection.

#### SERVICES TO BE PROVIDED BY THE ENGINEER

#### Task 1. Project Management

The Engineer will maintain project files throughout all phases of the project consisting of documentation of all correspondence, meeting notes, telephone calls, emails, etc. Invoices and progress reports will be submitted monthly.

The Engineer will attend up to four (4) total kick-off, coordination, and/or design review meetings with County and City staff. The Engineer will prepare a meeting agenda and meeting minutes for each meeting.

Deliverables: Project correspondence, meeting notes, progress reports, invoices, and attendance at meetings as described above.

#### Task 2. Traffic Signal Design

The Engineer will prepare construction documents including plans, specifications, and estimates (PS&E) for the installation of a four-approach traffic control signal at the intersection of Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard.

The Engineer will complete the following tasks as part of the design phase:

1. Assemble applicable design standards and specifications from the City of Leander, Williamson County, and TxDOT.

- 2. Obtain available existing record drawings and copies of all relevant design files from the County and/or City.
- 3. Obtain Topographic and Level D SUE information from the County. The Engineer shall be entitled to rely on the completeness and accuracy of the data provided.
- 4. Submit 811/"One Call" request for utility locates at the intersection. Perform field reconnaissance of the intersection to determine existing pavement widths, lane configurations, traffic control devices, speed limits, and utility locations.
- 5. Develop plans to construct a new traffic signal at the intersection. The signal plans will be prepared at a scale of 1" = 40' on 11" x 17" plan sheets and will include the following components:
  - a. Title Sheet (to include signature line for City of Leander) and Index of Sheets
  - b. General Notes (based on standard notes for Williamson County Road Bond Program and modified as appropriate for this project).
  - c. Existing Conditions sheet to show locations of existing traffic control devices, and both underground/overhead utilities at the intersection.
  - d. Proposed Signal Layout sheet to show the locations of proposed signal poles, pedestrian poles, signal heads, signal cabinet, detection equipment, communication equipment, push buttons, electrical conduits, ground boxes, and electrical service.
  - e. Signal Elevation sheet to show placement of signal heads on mast arms and required vertical clearance.
  - f. Pedestrian Ramp Layout sheet to show the locations and types of proposed curb ramps, sidewalks, and railing.
  - g. Conduit Chart and Electrical Wiring sheet to show the type and number of electrical wires in each conduit run and inside poles and mast arms. A new electrical service will be designed to support total electrical load due to the new traffic signal and safety lighting at the intersection. The electrical service will include two separate circuits for the traffic signal and illumination. Kimley-Horn will coordinate with the City of Leander as required to establish the location of the new electrical service.
  - h. Signing & Pavement Marking sheet to show modifications to existing signs & pavement markings that are required to change the intersection from unsignalized to signalized operation (ex; stop bars, crosswalks).
- 6. Review and select appropriate standard details and incorporate those details into the plans (including traffic control, traffic signal, sign, and pavement marking standard details).
- 7. Prepare a list of pay items, specifications, and construction quantities required to build the proposed traffic signal infrastructure.
- 8. Prepare an opinion of probable construction costs (OPCC) to accompany each plan submittal in Microsoft Excel format based on Williamson County provided template.

- a. Kimley-Horn has no control over the cost of labor, materials, equipment, or over the construction Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Kimley-Horn at this time and represent only Kimley-Horn's judgement as a design professional familiar with the construction industry. Kimley-Horn cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.
- 9. Perform internal quality control reviews prior to each submittal.
- 10. Submit milestone deliverables for County and/or City review at the 60%, 90%, and 100% stages of completeness. All deliverables will be provided in electronic PDF format only. The Engineer will submit deliverables to City of Leander via HUB online portal but will not be responsible for payment of review, permitting, or similar fees.
- 11. Address one round of comments each for the 60% and 90% submittals and incorporate those comments into the plans as appropriate.

# Task 3. Bid Phase Support

The Engineer will complete the following tasks as required during the bid phase:

- 1. Prepare contract bid documents (Project Manual), including bid form, standard specifications, special specifications, and special provisions. City of Leander, Williamson County, and TxDOT specifications will be utilized as applicable and agreed upon between the parties.
- 2. Attend one (1) pre-bid meeting with County and/or City staff and prospective bidders.
- 3. Respond to bidder questions during the bidding period.
- 4. Attend one (1) bid opening meeting with County and/or City staff and bidders.
- 5. Review and tabulate bids and provide award recommendation letter.

# Task 4. Construction Phase Support

The Engineer will complete the following tasks as required during the construction phase:

- 1. Attend one (1) pre-construction meeting with County and/or City staff and the selected contractor.
- 2. Attend one (1) field review meeting with County and/or City staff and the contractor to review the locations of staked pole locations.
- 3. Attend one (1) field review meeting with County and/or City staff and the contractor to develop a final punch list to be addressed by the contractor prior to completion.

- 4. Review and approve or take other appropriate action in respect to shop drawings and samples and other data which contractor is required to submit, but only for conformance with the information given in the contract documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs. The Engineer will review up to eight (8) contractor submittals.
- 5. Respond to reasonable and appropriate contractor requests for information (RFIs) and issue necessary clarifications and interpretations of the contract documents as appropriate. Any orders authorizing variations from the contract documents will be made by County and/or City. The Engineer will respond to up to four (4) RFIs.
- 6. Provide minor revisions to plans to address differing site conditions, third party accommodation, or other owner directed changes. Revisions to plans will include revision clouds around any changes, will include descriptions and quantities of changes, and CAD files. The Engineer will provide up to two (2) minor plan revisions.
- 7. Prepare record drawings based on redlines from County, City, and/or contractor.

The Engineer shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the contractor or the safety precautions and programs incidental to the work of the contractor. The Engineer shall not guarantee the performance of the contractor nor be responsible for the acts, errors, omissions, or the failure of the contractor to perform the construction work in accordance with the contract documents.

County agrees to include in all construction contract provisions the indemnification of both County and the Engineer for contractor's negligence and to name both County and the Engineer as additional insured on the applicable contractor's insurance policies.

#### Task 5. Traffic Signal Timings

The Engineer will complete the following tasks as part of the traffic signal timing phase:

- 1. Prepare up to four (4) signal timing plans (AM peak period, mid-day, PM peak period, and overnight) for the intersection. These timing plans will include coordination with adjacent signals as feasible and appropriate. The plans will include the time of day (TOD) schedule, minimum and maximum green times, yellow/all-red clearance times, and pedestrian crossing times.
- 2. Provide one (1) day of field fine-tuning of the traffic signal operations after implementation of the timing plans.

# Task 6. Preliminary Intersection Design

The Engineer will prepare one (1) preliminary intersection schematic, preliminary OPCC, and preliminary utility conflict matrix for the re-profiling of the eastern leg/westbound approach and

additional northbound right-turn lane at the intersection of Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard.

The Engineer will complete the following tasks as part of the geometric layout:

- 1. Obtain existing roadway and utility record drawings, topographic and Level D SUE information from the County. The Engineer shall be entitled to rely on the completeness and accuracy of the data provided.
- 2. Conduct a site visit.
- 3. Pull Nearmap aerial imagery for project limits.
- 4. Prepare a Design Summary Report (DSR) using applicable design standards from the City of Leander, Williamson County, and TxDOT.
- 5. Develop intersection schematic at a scale of 1" = 100' that will include the following components:
  - a. Project location map and project information.
  - b. Existing horizontal alignments and horizontal alignment data (HAD) for Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard.
  - c. Existing and proposed typical sections for Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard.
  - d. Existing and proposed profiles for Ronald Reagan Boulevard & Bar W Ranch Boulevard / Via De Sienna Boulevard.
  - e. Northbound right-turn lane (RTL).
  - f. Incorporate and coordinate proposed signal and pedestrian improvements.
  - g. Drainage infrastructure impacts.
  - h. Verify intersection sight distance requirements.
  - i. Create 36" roll plot.
- 6. Develop a 3D model and cross sections.
- 7. Prepare an opinion of probable construction costs (OPCC) in Microsoft Excel format based on Williamson County provided template.
  - a. Kimley-Horn has no control over the cost of labor, materials, equipment, or over the construction Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Kimley-Horn at this time and represent only Kimley-Horn's judgement as a design professional familiar with the construction industry. Kimley-Horn cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.
- 8. Prepare a preliminary utility conflict matrix (UCM) listing utility type, location of potential conflict, and utility provider.

- 9. Preform internal quality control reviews prior to each submittal.
- 10. Address one (1) round of comments and incorporate those comments into the preliminary intersection schematic as appropriate.

#### **Additional Services**

Any services not specifically provided for in the above scope will be considered additional services and may be performed at current contracted hourly rates upon mutual agreement of the parties. Items that are not provided as a part of this project and would be additional services consist of but are not limited to:

- Preparation of plans for a temporary/interim traffic signal.
- Illumination design except for intersection safety lighting mounted on top of signal poles.
- Intersection traffic analysis and/or traffic signal warrant studies.
- Collection of traffic count data.
- Collecting topographic survey and subsurface utility data.
- Preparation of ROW or easement exhibits.
- Environmental analysis.
- Preparation of plans (PS&E) for construction of right-turn lane or reconstructing east leg of intersection.
- Driveway design.
- Hydrology and hydraulics pertaining to existing and proposed storm sewer system, parallel drainage culverts, and ditch capacity analysis.
- Structural wall design.
- Utility relocation design.
- Coordination with utility providers for purposes of utility relocation.
- Geotechnical engineering.
- Attendance at public hearings or meetings beyond those listed in the scope.
- Additional analyses or major re-work required because of County and/or City comments that are inconsistent with Kimley-Horn's original direction.
- Payment of permit or plan review fees.

Kimley-Horn will not provide construction engineering, inspection, or material testing services as part of this project.

ATTACHMENT C: WORK SCHEDULE Kimley »Horn

Project Name: Ronald Reagan & Bar W Ranch / Via De Sienna Intersection Improvements

Project Description: Traffic Signal Design, Traffic Signal Timings, Preliminary Intersection Design, Bid and Construction Phase Support

Prepared By: Kimley-Horn and Associates, Inc.

		JAN 2024	FEE	3 2024	MAR 2	024	APR 2024	MAY 2024	JU	JN 2024	JUL 20	024	AUG 2024	SEP	2024	OCT 2024	NOV	2024	DEC 2024	JAN 2025	FEB 2025	MAR 2025	AP	PR 2025	MAY 2025	JUN 202	JU	L 2025	AUG 2025	SEP 202
Task#	Task Name	Week 1	Week 4	Week 4	Week 1	Week 4	Week 1	Week 1	Week 1	Week 4	Week 1	Week 4		Week 4	Week 4	Week 1	Week 1	Week 4	Week 1	Week 1	Week 1	Week 1	Week 1	Week 4	Week 1	Week 1	Week 4 Week 1	Week 4	Week 1	Week 1
1	Project Management			T								T						П												
2	Traffic Signal Design																													
	Data Collection, 60% Design																													
	City Review																													
	90% Design																													
	City Review																													
	100% Design																													
	City Review, Processing																													
3	Bid Phase Support																													
4	Construction Phase Support																													
5	Traffic Signal Timings																													
6	Preliminary Intersection Design																													
	Data Collection & DSR																													
	Prelim Intersection Schematic																													
	City Review																													
	Final Intersection Schematic																													

#### Work Authorization 3 - Attachment D Fee Schedule



PS&E for Traffic Signal Design at:

Ronald Reagan & Bar W Ranch / Via De Sienna

	Sr. Engineer I	Professional	Analyst	Support Staff	Total Labor	Direct Labor	Direct	Total
					Hours	Cost	Expenses	Cost
	\$247.36	\$194.36	\$170.80	\$111.90				
1. PROJECT MANAGEMENT		10		4.0	0.0	64 005 04		64 005 04
a   Project Setup	12.0	4.0 16.0		4.0	8.0 28.0	\$1,225.04 \$6,078.08		\$1,225.04 \$6,078.08
c Monthly Reporting / Invoicing	12.0	10.0		18.0	28.0	\$3,957.80		\$3,957.80
, , , ,								
Subtotal	12.0	30.0		22.0	64.0	\$11,260.92		\$11,260.92
2. TRAFFIC SIGNAL DESIGN								
a Review Topographic and Utility Survey Data		2.0	4.0		6.0	\$1,071.92		\$1,071.92
b Site Reconnaissance and Inspection c Existing Conditions and Removals Plan Sheet	1.0	3.0 2.0	4.0 10.0		7.0 13.0	\$1,266.28 \$2,344.08		\$1,266.28 \$2,344.08
d Proposed Signal Layout Plan Sheet	4.0	10.0	24.0		38.0	\$7,032.24		\$7,032.24
e Signal Elevation Views Plan Sheet	1.0	2.0	8.0		11.0	\$2,002.48		\$2,002.48
f ADA Ramp and Intersection Details Plan Sheet	2.0	4.0	12.0		18.0	\$3,321.76		\$3,321.76
g Conduit and Electrical Details Plan Sheet	2.0	4.0	12.0		18.0	\$3,321.76		\$3,321.76
h Signing and Pavement Markings Plan Sheet i Standard Details	2.0	4.0 1.0	12.0 2.0		18.0 3.0	\$3,321.76 \$535.96		\$3,321.76 \$535.96
j General Notes		2.0	2.0		4.0	\$730.32		\$730.32
k Quantity Estimates		2.0	4.0		6.0	\$1,071.92		\$1,071.92
I Opinion of Probable Construction Costs		1.0	2.0		3.0	\$535.96		\$535.96
m Title Sheet, Index Sheet, PS&E Package Preparation	4.0	1.0	4.0		5.0	\$877.56		\$877.56
n Quality Control and Assurance Reviews	4.0	4.0			8.0	\$1,766.88		\$1,766.88
Subtotal	16.0	42.0	100.0		158.0	\$29,200.88		\$29,200.88
3. BID PHASE SUPPORT								
a Prepare Bid Documents	2.0	4.0	6.0		12.0	\$2,296.96		\$2,296.96
b Pre-Bid Meeting		2.0			2.0	\$388.72		\$388.72
c Respond to Bidder Questions		4.0	4.0		8.0	\$1,460.64		\$1,460.64
d Bid Opening Meeting		2.0	0.0		2.0	\$388.72		\$388.72 \$1,413.52
e Review / Tabulate Bids and Provide Award Letter		2.0	6.0		8.0	\$1,413.52		\$1,413.52
Subtotal	2.0	14.0	16.0		32.0	\$5,948.56		\$5,948.56
4. CONSTRUCTION PHASE SUPPORT		!	!	-				
a Pre-Construction Meeting		2.0			2.0	\$388.72		\$388.72
b Field Review Meeting (Staked Pole Locations)		3.0	3.0		6.0	\$1,095.48		\$1,095.48
c Punch List Walk-Through		3.0	3.0		6.0	\$1,095.48		\$1,095.48
d Review Submittals e Respond to RFIs	2.0	8.0 8.0	4.0		10.0 14.0	\$2,049.60 \$2,732.80		\$2,049.60 \$2,732.80
f Minor Plan Revisions	2.0	4.0	8.0		12.0	\$2,732.80		\$2,143.84
g Record Drawings		4.0	8.0		12.0	\$2,143.84		\$2,143.84
Subtotal	4.0	32.0	26.0		62.0	\$11,649.76		\$11,649.76
5. TRAFFIC SIGNAL TIMINGS			Т	T T				
a Prepare Timing Plans b Controller Programming	4.0 2.0	8.0 4.0			12.0 6.0	\$2,544.32 \$1,272.16		\$2,544.32 \$1,272.16
c Field Fine-Tuning	8.0	8.0			16.0	\$3,533.76		\$3,533.76
Subtotal	14.0	20.0			34.0	\$7,350.24		\$7,350.24
6. PRELIMINARY INTERSECTION DESIGN								
a Review existing roadway & utility record drawings, topographic & utility survey data		1.0	3.0		4.0	\$706.76		\$706.76
b Conduct site visit		3.0	3.0 1.0		1.0	\$1,095.48		\$1,095.48
t Pull Nearmap aerial imagery d Prepare Design Summary Report (DSR)	<del>                                     </del>	1.0	2.0		3.0	\$170.80 \$535.96		\$170.80 \$535.96
Preliminary Intersection Schematic	<u> </u>		2.0		0.0	ψ000.00		φοσο.σο
Project location map and project information		1.0	1.0		2.0	\$365.16		\$365.16
2 Recreate horizontal alignments and horizontal alignment data	0.5	2.0	4.0		6.5	\$1,195.60		\$1,195.60
3 Existing and proposed typical sections 4 Existing and proposed profile design	0.5 1.0	1.0 2.0	4.0 6.0	+	5.5 9.0	\$1,001.24 \$1,660.88		\$1,001.24 \$1,660.88
Existing and proposed profile design     Northbound right-turn lane design	1.0	1.0	3.0		4.0	\$1,660.88		\$7,660.88
6 Incorporate and coordinate signal and pedestrian improvements	1.0	2.0	4.0		7.0	\$1,319.28		\$1,319.28
7 Drainage infrastructure impacts	1.0	3.0	6.0		10.0	\$1,855.24		\$1,855.24
8 Intersection Sight Distance Requirements	1.0	1.0	2.0		4.0	\$783.32		\$783.32
Greate 36" roll plot     Develop 3D Model and Cross-Sections	1.0 2.0	2.0 4.0	20.0		23.0 30.0	\$4,052.08 \$5,371.36		\$4,052.08 \$5,371.36
g Prepare OPCC	1.0	2.0	6.0		9.0	\$1,660.88		\$1,660.88
h Prepare preliminary utility conflict matrix (UCM)	1.0	2.0	6.0		9.0	\$1,660.88		\$1,660.88
i Quality control and assurance reviews	4.0	4.0			8.0	\$1,766.88		\$1,766.88
j Address one (1) round of comments	4.0	8.0	16.0	+	28.0	\$5,277.12		\$5,277.12
Subtotal	18.0	40.0	111.0		169.0	\$31,185.68		\$31,185.68
-						,		, ,
HOURS TOTALS	66.0	178.0	253.0	22.0	519.0			
FEE TOTALS						\$96,596.04		\$96,596.04