

**SUPPLEMENTAL WORK AUTHORIZATION NO.   1**  
**TO**  
**WORK AUTHORIZATION NO.   7**

**WILLIAMSON COUNTY ROAD AND BRIDGE PROJECT:**  
**O'Connor Dr. at Great Oaks Dr., O'Connor Dr. at Liberty Walk Dr., and O'Connor Dr. at**  
**Morgan Hill Trail – Traffic Signal Designs**

This Supplemental Work Authorization No.   1   to Work Authorization No.   7   is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated **September 3, 2015** ("Contract") and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and **Kimley-Horn and Associates, Inc.** (the "Firm").

WHEREAS, the County and the Firm executed Work Authorization No.   7   dated effective **August 21, 2018** (the "Work Authorization");

WHEREAS, pursuant to 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 Firm agree that the Work Authorization shall be amended, changed and modified as follows:

- I. The above referenced Work Authorization termination date shall be modified to May 31, 2020. The Services to be Provided by the Firm 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).
- II. The maximum amount payable for services under the Work Authorization is hereby increased from **\$60,000.00** to **\$73,530.00**. The revised Work Schedule is attached hereto as Attachment "C" (must be attached).

County believes it has sufficient funds currently available and authorized for expenditure to finance the costs of this Supplemental Work Authorization. Firm understands and agrees that County's payment of amounts under this Supplemental 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 the Supplemental Work Authorization. It is further understood and agreed by Firm that County shall have the right to terminate this Supplemental Work Authorization at the end of any County fiscal year if the governing body of County does not appropriate sufficient funds as determined by

EXECUTED this \_\_\_\_ day of \_\_\_\_\_, 2019.

ENGINEER:

Kimley-Horn and Associates

COUNTY:

Williamson County, Texas

By:   
Signature

Brian Boecker, P.E.  
Printed Name

Vice President  
Title

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

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

\_\_\_\_\_  
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. 7**  
**SUPPLEMENTAL NO. 1**

**PROJECT: O'Connor Dr. at Great Oaks Dr., O'Connor Dr. at Liberty Walk Dr., and  
O'Connor Dr. at Morgan Hill Trail – Traffic Signal Designs**

**ATTACHMENT A**  
**Services to be provided by the Engineer**

**Project Location:** O'Connor Dr. at Great Oaks Dr.  
O'Connor Dr. at Liberty Walk  
O'Connor Dr. at Morgan Hill Trail

**Project Description:** Bidding Phase Services & Coordinated Signal Timing

**SCOPE OF WORK**

The Supplemental #1 will supplement work completed as part of Work Authorization #7 and will include bidding phase services for the proposed signals and developing and implementing optimized signal timing plans along O'Connor Dr. at the future traffic signals at Great Oaks Dr., Liberty Walk, and Morgan Hill Trail in Williamson County.

**SERVICES TO BE PROVIDED BY THE COUNTY**

The County shall provide all information requested by K-H during the project, including but not limited to the following:

- Timely responses to requests for information or clarification; and
- Timely review of all submittals.
- Provide decisions in a timely manner.
- Process payment to the Engineer in a timely manner.

**WORK AUTHORIZATION NO. 7**  
**SUPPLEMENTAL NO. 1**

**PROJECT: O'Connor Dr. at Great Oaks Dr., O'Connor Dr. at Liberty Walk Dr., and  
O'Connor Dr. at Morgan Hill Trail – Traffic Signal Designs**

**ATTACHMENT B**  
**Services to be provided by the Engineer**

**Project Location:** O'Connor Dr. at Great Oaks Dr.  
O'Connor Dr. at Liberty Walk  
O'Connor Dr. at Morgan Hill Trail

**Project Description:** Bidding Phase Services & Coordinated Signal Timing

**SCOPE OF WORK**

The Supplemental #1 will supplement work completed as part of Work Authorization #7 and will include bidding phase services for the proposed signals and developing and implementing optimized signal timing plans along O'Connor Dr. at the future traffic signals at Great Oaks Dr., Liberty Walk, and Morgan Hill Trail in Williamson County.

**SERVICES TO BE PROVIDED BY THE ENGINEER**

**Task 1. Bidding Phase Services**

The Engineer will assist the County with the bidding phase service and will perform the following tasks:

- Attend up to two (2) meetings – 1) Pre-Bid meeting and 2) Bid Opening meeting;
- Develop bid forms for the signal design project;
- Develop construction schedule for the project;
- Develop specifications and special specifications list for the project;
- Review contractor bids and provide Engineer's recommendation for awarding the bid.

**Task 2. Develop Optimized Signal Timing Plans**

As part of this task, the Engineer will:

- Update and verify Synchro models developed as part of Work Authorization #6 to develop coordinated signal timing plans at the following signals:
  - a. O'Connor Dr. / Liberty Walk Dr.
  - b. O'Connor Dr. / Great Oaks Dr.
  - c. O'Connor Dr / Morgan Hill Trail
- Coordinate with the County to identify appropriate AM, Lunch, PM, and Off-Peak periods during the day.
- Develop AM, Lunch, PM, and Off-peak period timing plans consisting of appropriate cycle lengths, splits, offsets, and sequence of movements. The Engineer will utilize Off-Peak period plans for the weekend as well.
- Review the proposed timing plans with the County.

### **Task 3. Signal Timing Field Implementation**

The Engineer will:

- Provide proposed time of day (TOD) signal timing plans to the Contractor (during signal turn-on) to program into the signal controllers at locations mentioned in Task 2.
- Observe signal operations at each of the three (3) intersections during AM, Lunch, PM, and Off-peak plans and make appropriate adjustments to the splits.
- Drive through the corridor during all periods and adjust offsets for each timing plan.

#### **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.

**ATTACHMENT C: PROJECT SCHEDULE**



**Project Name:** O'Connor Dr. at Great Oaks Dr., O'Connor Dr. at Liberty Walk Dr. and O'Connor Dr. at Morgan Hill Trail – Traffic Signal Designs

**Project Description:** Bidding Phase Services & Coordinated Signal Timing Plans

**Prepared By:** Kimley-Horn and Associates, Inc.

Task #	Task Name	Schedule															
		Jul 2019	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020								
1	Bidding Phase Services	█	█	█													
2	Develop Optimized Signal Timing Plans	█															
3	Signal Timing Field Implementation																

# Work Authorization 7 Supplemental 1 - Attachment EXHIBIT D Man Hours and Fee Estimate



Bidding Phase Services & Coordinated Signal Timings At: O'Connor at Great Oaks Dr; O'Connor at Liberty Walk Dr; and O'Connor at Morgan Hill Trail

DESCRIPTION OF WORK TASK	PM / Sr. Engineer II \$215.00	Engineer/ Professional \$145.00	Analyst \$115.00	Total Labor Hours	Direct Labor Cost	Printing Plotting	Mileage	Total Cost
<b>1. BIDDING PHASE SERVICES</b>								
a Attend up to 2 meetings	4.0			4.0	\$860.00		\$44.00	\$904.00
b Develop bid forms	1.0	1.0	4.0	6.0	\$820.00			\$820.00
c Develop construction schedule	1.0	1.0		2.0	\$360.00			\$360.00
d Develop Specs & Special Specs list		1.0	3.0	4.0	\$490.00			\$490.00
e Review Contractor bids & prepare engineers recommendation of award	2.0			2.0	\$430.00			\$430.00
<b>Subtotal</b>	<b>8.0</b>	<b>3.0</b>	<b>7.0</b>	<b>18.0</b>	<b>\$2,960.00</b>		<b>\$44.00</b>	<b>\$3,004.00</b>
<b>2. DEVELOP OPTIMIZED SIGNAL TIMING PLANS</b>								
a Update & verify Synchro models for the corridor		2.0	4.0	6.0	\$750.00			\$750.00
b Identify TOD periods	2.0			2.0	\$430.00			\$430.00
c Develop optimized timing plans for AM, Lunch, PM, Off-Peak periods	6.0	10.0	12.0	28.0	\$4,120.00			\$4,120.00
<b>Subtotal</b>	<b>8.0</b>	<b>12.0</b>	<b>16.0</b>	<b>36.0</b>	<b>\$5,300.00</b>			<b>\$5,300.00</b>
<b>3. SIGNAL TIMING FIELD IMPLEMENTATION</b>								
a Coordinate with the Contractor in the field to program controllers	6.0			6.0	\$1,290.00			\$1,290.00
b Field fine tuning of signal timings	18.0			18.0	\$3,870.00		\$66.00	\$3,936.00
<b>Subtotal</b>	<b>24.0</b>			<b>24.0</b>	<b>\$5,160.00</b>		<b>\$66.00</b>	<b>\$5,226.00</b>
<b>HOURS TOTALS</b>								
				<b>40.0</b>	<b>15.0</b>	<b>23.0</b>		
<b>FEE TOTALS</b>								
					<b>\$13,420.00</b>		<b>\$110.00</b>	<b>\$13,530.00</b>