EXHIBIT §

STATE OF TEXAS

§

COUNTY OF WILLIAMSON

SUPPLEMENTAL CONTRACT NO. 1 TO CONTRACT FOR ENGINEERING SERVICES

FIRM: HDR ENGINEERING, INC. ("Engineer")

810 Hesters Crossing, Suite 120, Round Rock, TX 78681 **ADDRESS:**

US 79 at Telander Drive Operational Improvements PROJECT:

This Supplemental Contract No. 1 to Contract for Engineering Services is made by and between the City of Round Rock, Texas, hereinafter called the "City" and HDR Engineering, Inc., hereinafter called the "Engineer".

WHEREAS, the City and Engineer executed a Contract for Engineering Services, hereinafter called the "Contract", on the 26th day of May, 2016 for the US 79 at Telander Drive Operational Improvements Project in the amount of \$465,972.95; and

WHEREAS, it has become necessary to amend the Contract to modify the provisions for the scope of services and to increase the compensation by \$423,610.38 to a total of \$889,583.33;

NOW THEREFORE, premises considered, the City and the Engineer agree that said Contract is amended as follows:

I.

Article 2, Engineering Services and Exhibit B, Engineering Services shall be amended as set forth in the attached Addendum to Exhibit B. Exhibit C, Work Schedule shall be amended as set forth in the attached Addendum to Exhibit C.

II.

Article 4, Compensation and Exhibit D, Fee Schedule shall be amended by increasing by \$423,610.38 the lump sum amount payable under the Contract for a total of \$889,583.33, as shown by the attached Addendum to Exhibit D.

IN WITNESS WHEREOF, the City and the Engineer have executed this Supplemental Contract in duplicate.

[signature pages follow]

Supplemental Contract Rev.06/16 0199.1619; 00383267 84275

By:			
Date			

HDR ENGINEERING, INC.

CITY OF ROUND ROCK	APPROVED AS TO FORM:
By:	
Craig Morgan, Mayor	Stephan L. Sheets, City Attorney
Date	

ADDENDUM TO EXHIBIT B Engineering Services

The project for the Telander Dr Extension and Improvements shall consist of the work to be performed by HDR Engineering, Inc. (ENGINEER) for this work shall consist of providing additional engineering services for survey, roadway, drainage, traffic modeling, traffic design, and preparation of one Plan, Specifications, and Estimate (PS&E) package for construction of an at-grade crossing of the Union Pacific Railroad (UPRR) at the Brushy Creek Plant entrance, including related intersection improvements on US 79. The overall project limits for the both sets of PS&E plans are approximately from Kenney Fort Blvd Underpass to the west to the east, and 450 feet south of US 79 along Harrell Pkwy and 1200 feet south of US 79 along the Brushy Creek Plant road including two plant entrances. The project shall be designed according to applicable design criteria including TxDOT's Roadway Design Manual (4R criteria), City of Round Rock Design and Construction Standards (DACS), TxDOT Standards and Specifications, UPRR criteria, and other design standards and specifications as agreed to with the City of Round Rock (CITY). The project will be developed as two separate PS&E plan sets, One to encompass the work within the TxDOT ROW and a second to include the remaining project area.

Project control will be based on, and tied into the CITY's coordinate system and be compatible with the current Geographical Information Systems (GIS) in use by the CITY. The ENGINEER shall collect, review, and evaluate the available existing data pertaining to this project and prepare the PS&E in accordance with applicable requirements and policies of the CITY.

All references to Telander Rd. in the original scope of services shall be Harrell Parkway.

The detailed scope of services for this work is further described below.

I.DESIGN AND ROW SURVEY

- A. Coordinate with adjacent landowners and request right-of-entry (ROE) to adjacent properties, as necessary within the project limits. If right-of-entry is not provided voluntarily by the landowner, the ENGINEER shall notify the CITY, and the CITY shall be responsible for obtaining right-of-entry. ROE's are anticipated from the UPRR and current property owner south of the UPRR ROW.
- B. Furnish temporary signs, traffic control, flags, and safety equipment as needed during field survey operations.
- C. A topographic survey from ROW to ROW along US 79 from Chandler Creek to the east and Kenney Fort Blvd to the west along the US 79. The survey is to include existing utility information based on visible field features correlated to existing utility records.

II.TRAFFIC ANALYSIS AND MODELING

- A. Forecast traffic volumes for Phase 1 and Phase 2 (ultimate) site development for the following intersections:
 - US 79 at Joe DiMaggio Blvd.
 - US 79 at Harrell Parkway
 - US 79 at Dell Diamond Driveway
 - US 79 at Hat Creek Burger Company/Water Plant Driveway
 - Joe DiMaggio Blvd at Kenny Fort Blvd
 - Kenney Fort Blvd at Forest Creek
 - Merge VISSIM model with Kenny Fort Blvd Traffic Model
- B. Perform traffic analysis for Phase 1 and Phase 2 (ultimate) site development at above intersections to determine capacity improvements (turn lanes, storage lengths, acceleration/deceleration lengths, etc.). The analysis shall be performed using VISSIM for AM and PM peaks only. The MOE's shall include intersection delay and level of service.
- C. The results of the analysis will be documented in a technical memorandum.

III.ENVIRONMENTAL DOCUMENTATION (provided by CP&Y, Inc.)

DUE DILIGENCE DOCUMENTATION FOR HARRELL PARKWAY PROJECT

The following scope of services will be conducted to satisfy environmental due diligence requirements for the City of Round Rock's proposed Harrell Parkway Project in the City of Round Rock, Williamson County, Texas.

- A. Environmental Due Diligence Data Collection and Site Visit
- B. The Engineer shall collect desktop data and conduct a site visit to document the potential presence of federal candidate, threatened, and endangered species habitat, waters of the U.S., cultural resources, and hazardous materials. The following specific tasks will be conducted:
- C. Federal Candidate, Threatened, and Endangered Species
 - Review desktop data and perform a field investigation in the project area to identify potentially suitable habitat for federal listed species.
 - Document potential project effects and associated Endangered Species Act Section 10 consultation requirements for federal listed species.
- D. Waters of the U.S.
 - Review desktop data and perform a wetland delineation and waters of the U.S. determination in the project area.
 - Document potential project impacts to waters of the U.S. and associated Clean Water Act Section 404 permitting requirements.

E. Cultural Resources

- Review desktop data and prepare a State Historic Preservation Officer (SHPO) Consultation Letter to determine if surveys would be required.
- If determined necessary by the SHPO, prepare an Antiquities Permit application, conduct archeological surveys, prepare an Archeological Survey Report, and coordinate with the SHPO to determine next steps (i.e. curation, backhoe trenching).

F. Hazardous Materials

- Conduct a hazardous materials initial site assessment, which would consist of obtaining a regulatory records radius report and performing a field reconnaissance to identify potential hazardous materials sites in the project area.
- Document potential project impacts to hazardous materials associated with construction and right-of-way acquisition activities.

G. Environmental Due Diligence Report

- The Engineer shall prepare an Environmental Due Diligence Report that summarizes the results of the data collection, site visits and associated agency coordination/permitting requirements for federal listed species, waters of the U.S., cultural resources, and hazardous materials.
- The draft Environmental Due Diligence Report will be submitted to the City for review. The Engineer will address up to two (2) rounds of comments from the City or its representatives. After addressing City review comments, the Engineer will submit the final Environmental Due Diligence Report to the City.

H. Scope Exceptions

- The following tasks are not included in this scope of work, and if required, could be completed under a supplemental work authorization:
- Preparation of a Biological Assessment or Biological Evaluation, species presence/absence surveys, and Section 10 consultation with the U.S. Fish and Wildlife Service
- Preparation of a Section 404 Individual Permit or Pre-Construction Notification and coordination with the U.S. Army Corps of Engineers
- Intensive historical surveys, archival research, architectural evaluations, archeological backhoe trenching or site recording
- Preparation of a Phase I or Phase II Environmental Site Assessment, and interviews with property owners

IV. PREPARE PS&E PACKAGE FOR US 79 AT Brushy Creek Plant Road

- A. Prepare Title Sheet and Project Layout Sheet.
- B. Develop horizontal and vertical geometry consistent with the project design criteria. Use Geopak Open Roads roadway design software package to develop the geometry and roadway cross sections.
- C. Develop roadway design cross sections at 50-foot intervals.
- D. Prepare existing and proposed typical sections.

E. Prepare a sequence of construction/traffic control plan for maintenance of traffic during construction which shall include temporary signal design at the intersections of US 79 with Brushy Creek Plant Road, Harrell Parkway and Joe DiMaggio Blvd.

Particular attention shall be given to location of construction signs and barricades, lane widths, protection of drop-offs, etc. As a reference, the Texas Manual of Uniform Traffic Control Devices (TMUTCD) shall be used. The usual scale is 1 inch = 50 feet. A narrative of each sequence shall be included on the plan sheets. Staging of major drainage structures and utilities shall be considered. Provisions for temporary drainage shall be considered and included during the stages of construction operations.

F. Prepare Plan and Profile Sheets:

The usual scale is 1 inch = 100 feet. The plan view shall include but not be limited to: Roadway Alignment; Pavement Markings; Edge of Pavement and ROW Break Points. The profile view shall include but not be limited to: Design Profile Grade at the centerline (Gradient & Vertical Curve Data); Existing Profile Grade Line at the centerline and at each; ROW line; Existing and Proposed Elevations; and Location and description of culverts.

- G. Prepare intersection grading and detail sheets as required for this work.
- H. Prepare Drainage Computation Sheets:

These sheets shall include drainage area maps, runoff calculations, and hydraulic data for storm sewers and culverts to be modified or constructed within the project area. Obtain and review data regarding existing drainage patterns and structures based on readily available information and field visits.

- I. Prepare drainage plan and profile sheets for the culverts and pipes along the project being impacted, culvert layouts, and associated details for the drainage structures within the project area.
- J. Prepare small signing, pavement marking, and delineation sheets for the project limits.
- K. Prepare SW3P Narrative Sheet.
- L. Prepare EPIC Sheet.
- M. Prepare SW3P and Erosion Control to include temporary and permanent erosion control measures.
- N. Develop miscellaneous detail sheets for roadway, drainage, and traffic items as necessary.
- O. Compile TxDOT Standards as appropriate for the final design.
- P. Summary of Quantities Sheets.

- Q. Prepare Final Engineer's Opinion of Probable Construction Cost based on readily available bidding data.
- R. Prepare a submittal at the 60%, 90% & 100% design level.
- S. Compile necessary special provisions and special specifications.
- T. Prepare and submit the draft and final PSE Package including supporting documents as necessary for the City to advertise for bidding.

V. TRAFFIC SIGNAL DESIGN

Signal Design plans shall be prepared for three (3) intersections: US 79 at Joe DiMaggio Blvd., Telander Rd., Brushy Creek Plant Road.

- A. Conduct a field review of the existing intersection to note and verify existing traffic signal equipment, existing intersection geometrics, physical constraints, power connection, utility placement, and other details necessary for signal plan preparation.
- B. Meet with TxDOT and the CITY to discuss signal design requirements specific to this project. One (1) meeting is assumed for budget purposes.
- C. Obtain existing signal plans for the intersections. This information will be provided by TxDOT.
- D. Coordinate with "Texas One-Call" System and the CITY to have utilities located in the field by the utility owners.
- E. Attend meeting in the field with TxDOT and the CITY locate and confirm locations of proposed controller and signal poles.
- F. Draft plans will include complete traffic signal plan sets for the intersection, including pavement markings, signage, signal phasing, conductor conduit schedules, elevation sheets, vehicle detection, foundation details, quantities, and communication equipment details necessary to facilitate traffic signal operations.
- G. Prepare final set of plans, which incorporate all previous comments and submit to TxDOT and the CITY as a part of the PS&E package.
- H. The ENGINEER shall coordinate the signal design with the UPRR in order to incorporate signal preemption for traffic signals adjacent to RR ROW.
- I. Traffic signal poles will include luminaires. No other roadway illumination design is included in this scope of work.
- J. Prepare temporary signal plans for two (3) intersections: US 79 at Joe DiMaggio Blvd., Harrell Pkwy and Telander Rd.

VI. TXDOT PLAN REVIEW

A. Attend TxDOT District review meetings for 30%, 60%, 90% and 100% design submittal packages.

VII. PROJECT MANAGEMENT

- A. Perform general Project Management during the course of the project to include coordination with the CITY, preparing invoices, and management of subconsultants.
- B. Preparation of project correspondence including reports, record keeping, and letters as necessary.
- C. Perform QA/QC of deliverables prior to submittal to the CITY. Implement a documented QA/QC program in accordance with the ENGINEER's established procedures.
- D. Attend monthly project progress and coordination meetings with the CITY as required during project development.

ADDENDUM TO EXHIBIT C

Work Schedule

Attached Behind This Page

TELANDER DR. EXTENSION & IMPROVEMENTS **EXHIBIT C DESIGN SCHEDULE** WBS 2018 2019 17 Sep '17 Oct '17 Nov '17 Dec '17 Jan '18 Feb '18 Mar '18 Apr '18 May '18 Jun '18 Jul '18 Aug '18 Sep '18 Oct '18 Nov '18 Dec '18 Jan 2027 3 101724 1 8 152229 5 121926 3 10172431 7 142128 4 111825 4 111825 1 8 152229 6 132027 3 101724 1 8 152229 5 121926 2 9 162330 7 142128 4 111825 2 9 162330 6 1 ID Task Name Duration Start Finish NOTICE TO PROCEED Thu 8/31/17 Thu 8/31/17 0 days 2 PLAN DEVELOPMENT Thu 8/31/17 Wed 11/29/17 TASK 65 days 3 2.1 DESIGN AND ROW SURVEY 15 days Thu 8/31/17 Wed 9/20/17 4 2.2 UPDATE SCHEMATIC DESIGN 10 days Thu 9/21/17 Wed 10/4/17 5 2.3 TRAFFIC ANALYSIS AND MODELING Thu 8/31/17 Wed 9/27/17 20 days 6 2.4 **ENVIRONMENTAL DOCUMENTATION** 60 days Thu 8/31/17 Wed 11/22/17 2.5 PREPARE PS&E PACKAGES 45 days Thu 9/21/17 Wed 11/22/17 8 2.6 TRAFFIC SIGNAL DESIGNTS Thu 8/31/17 Wed 11/29/17 UPRR COORDINATION & ADDRESS COMMENTS 9 2.7 65 days Thu 8/31/17 Wed 11/29/17 10 2.8 TXDOT COORDINATION & ADDRESS 25 days Thu 8/31/17 Wed 10/4/17 UTILITY COORDINATION Thu 8/31/17 Wed 11/22/17 11 2.9 60 days 12 BID PHASE SERVICES Thu 11/23/17 Wed 12/13/17 15 days 13 CONSTRUCTION PHASE SERVICES 260 days Thu 1/25/18 Wed 1/23/19

Task Progress Rolled Up Progress Inactive Task Duration-only Milestone Split Inactive Task Manual Summary Rollup ____ Deadline Project: fINAL gATTIS sCHEDULE Date: Wed 7/26/17 Summary External Tasks Inactive Milestone **\limits** Manual Summary Rolled Up Task Project Summary Inactive Summary Start-only Rolled Up Milestone Manual Task Group By Summary Finish-only 3

ADDENDUM TO EXHIBIT D Fee Schedule

Attached Behind This Page

Project Name: Telander Dr. Extension & Improvements

		Total	Total	Other		TOTALS
	Task	Labor Hours	Loaded Labor Cost	Direct Costs	Subconsultants	TOTALS
TASK I	Design and ROW Survey	108	\$19,116.00	\$0.00	\$41,422.00	\$60,538.00
TASK II	Traffic Analysis and Modeling	414	\$66,582.00	\$0.00	\$10,125.00	\$76,707.00
TASK III	Environmental Documentation	8	\$2,048.00	\$0.00	\$14,787.65	\$16,835.65
TASK IV	PS&E Package and Storm Sewer	1006	\$147,798.00	\$0.00	\$12,148.73	\$159,946.73
TASK V	Traffic Signal Design	521	\$70,855.00	\$0.00	\$0.00	\$70,855.00
TASK VI	TxDOT Plan Review	48	\$11,304.00	\$0.00	\$0.00	\$11,304.00
TASK VII	Project Management	104	\$26,624.00	\$800.00	\$0.00	\$27,424.00
	GRAND TOTAL:	2209	\$344,327.00	\$800.00	\$78,483.38	\$423,610.38

Exhibit D

Project Name:

Telander Dr. Extension & Improvements

Consultant:

HDR Engineering, Inc.

Cost Component, Hours	Total Hours
Project Principal	0
Project Manager	256
Senior Engineer.	301
Design Engineer	836
Engineer-in-Training	206
Sr. Design Technician	100
CADD Technician	506
Clerical/Steno	4
Total Hours	2209

Cost Component, Dollars	Billing Rate	Totals
Project Principal	\$280	\$0.00
Project Manager	\$256	\$65,536.00
Senior Engineer	\$215	\$64,715.00
Design Engineer	\$155	\$129,580.00
Engineer-in-Training	\$110	\$22,660.00
Sr. Design Technician	\$120	\$12,000.00
CADD Technician	\$98	\$49,588.00
Clerical/Steno	\$62	\$248.00
Labor Dollars		\$344.327.00

Cost Component, Direct Expenses	<u>Total</u>
Travel Expenses (Mileage billed at IRS Standard Rate)	\$200
Printing	\$600
TOTAL DIRECT EXPENSES	\$800.00

PROJ	PROJECT FEE SUMMARY			
HDR	Direct Labor Costs		\$119,717.61	
HDR	Indirect Labor Costs		\$187,717.21	
HDR	Direct Expenses		\$800.00	
HDR	Profit @12%	12%	\$36,892.18	
Subco	nsultants:			
	Inland Geodetics	Survey & Row	\$41,422.00	
	Raba Kistner	Pavement Testing & Design	\$12,148.73	
	CJ Hensch & Assoc. Inc.	Traffic Counts	\$10,125.00	
	CP&Y	Environmental Documentation	\$14,787.65	
тота	L FEE		\$423,610.38	