

ENGINEERING SERVICES AGREEMENT

THIS AGREEMENT is made and entered by and between **COLLIN COUNTY, TEXAS**, a political subdivision of the State of Texas, hereinafter referred to as "County", and, **BIRKHOFF, HENDRICKS & CARTER, L.L.P.**, a Texas Limited Liability Partnership, hereinafter referred to as "Engineer", to be effective from and after the date as provided herein.

WITNESSETH:

WHEREAS, the County desires to engage the services of the Engineer to provide engineering design services for Frontier Parkway Improvements and to perform other related services in Collin County, hereinafter referred to as the "Project"; and

WHEREAS, the Engineer desires to render such engineering services for the County upon the terms and conditions provided herein.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

1. Retention of the Engineer

The County hereby agrees to retain the Engineer to perform general civil engineering consulting services in connection with the Project; Engineer agrees to perform such services in accordance with the terms and conditions of this Agreement, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances.

II. Scope of Services

2.1 The parties agree that Engineer shall perform such services as are set forth herein and described in **Exhibit "A"**, which is attached hereto and thereby made a part of this Agreement. Work for each phase shall be preceded by a Notice to Proceed issued by County. The parties understand and agree that deviations or modifications in the form of written contract amendments may be authorized from time to time by the County.

2.2 The Engineer will serve as the County's professional engineering representative under this Agreement, providing professional engineering, consultation, advice and furnishing customary services incidental thereto. The Engineer agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

2.3 The Engineer shall advise the County with regard to the necessity for subcontract work such as special surveys, tests, test borings, or other subsurface investigations in connection with design and engineering work to be performed hereunder. The Engineer shall also advise the County concerning the results of same. Such survey, test, and investigations shall be furnished to the County.

2.4 The presence or duties of the Engineer's personnel at a construction site, whether as on-site representatives or otherwise, do not make the Engineer or its personnel in

any way responsible for those duties that belong to County's construction contractors or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including but not limited to, all construction methods, means, techniques, sequences and procedures necessary for completing all portions of the construction work in accordance with the Contract Documents and any health or safety precautions required by such construction work. The Engineer and its personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with their work or any health or safety precautions.

2.5 The Engineer will make periodic recommendations for periodic construction progress payments to the construction contractor. Recommendations by the Engineer to the County for periodic construction progress payments to the construction contractor will be based on the Engineer's knowledge, information, and belief from sampling and observation that the work has progressed to the point indicated. Such recommendations do not represent that there are not other matters at issue between the County and the construction contractor that affect the amount that should be paid.

2.6 The Engineer agrees to provide a complete and coordinated set of drawings and specifications for the construction of the Project, exercising the same degree of care, skill, and diligence as is ordinarily possessed and exercised by a member of the same profession, currently practicing, under similar circumstances. Construction drawings, specifications, and other construction documents prepared by the Engineer or its consultants and submitted to the County for approval or contractors for bidding or negotiation purposes shall be complete and capable of construction "as is". While the utility of communications between design professionals and construction contractors for the purpose of clarifying design intent is recognized, the Project should be capable of construction without the necessity of formal revisions or contract modifications to provide missing design information after construction contracts are awarded. Said documents shall comply with all applicable codes, ordinances, statutes, and regulations governing the design of the Project.

2.7 The Engineer shall assist the County in the preparation and filing of documents required for the approval of governmental authorities having jurisdiction over the Project.

III. Schedule of Services

3.1 The Engineer agrees to commence its services immediately upon execution of this Agreement, or as otherwise directed in writing by the County, and to proceed diligently with said services to completion as described in the Completion Schedule attached hereto as **Exhibit "B"** and thereby made a part of this Agreement. Engineer shall not be considered in default of this Agreement for delays in performance caused by circumstances beyond its reasonable control. Should such circumstances occur, the Engineer shall, within a reasonable time of being prevented from performing, give written notice to the County describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

3.2 In the event that the Engineer is delayed in the progress of the work on the Project by an act or neglect of the County, County's employees, or separate contractors employed by the County, or by changes ordered in the Project, fire, adverse weather conditions not reasonably anticipated, unavoidable casualties or other causes beyond the Engineer's control, or delay authorized by the County pending arbitration, or by other causes which the County and Engineer agree may justify delay, then the Contract Time shall be reasonably extended by Contract Amendment. The County shall have the right at any time to delay or

suspend the work or any part thereof for any reasonable time and if this happens, the Engineer's sole remedy for any delays or suspension shall be any extension of time. However, should the delay continue for more than one year past the original completion date in the completion schedule, the Engineer may request to renegotiate their professional fee provided that the fee is reasonable and substantiated by documents showing the need for the requested increase. Any request for a fee increase shall be submitted to Collin County Commissioners' Court for final approval. The County shall not be independently liable to the Engineer for any delay or interference caused by circumstances beyond the County's control or any delay caused by any other person or entity.

IV. Compensation and Method of Payment

The parties agree that Engineer shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the Fee Schedule attached hereto as **Exhibit "C"** and thereby made a part of this Agreement. Engineer further agrees that it will prepare and present such progress reports and itemized statements per the fee schedule described in said Exhibit "C". Payment will be made in accordance with The Texas Government Code, Title 10, Subtitle F, Chapter 2251. Engineer further agrees to the following terms prior to payment being due by County:

A. Invoice and Payment

- (1) The Engineer shall provide the County sufficient documentation to reasonably substantiate the invoices.
- (2) The Engineer will issue monthly invoices for all work performed under the Agreement.
- (3) In the event of disputed or contested billing, only that portion so contested will be withheld from payment, and the undisputed portion will be paid. The County will exercise reasonableness in contesting any portion thereof. NO interest will accrue on any contested portion of the billing until mutually resolved.
- (4) In the event of any conflict between Paragraph IV and Chapter 2251 of the Texas Government Code, The Texas Government Code shall prevail.

V. Information to be provided by the County

5.1 The County agrees to furnish to Engineer, prior to the Engineer's commencement of its services, all that information set forth and described on **Exhibit "D"**, which is attached hereto and thereby made a part of this Agreement.

5.2 The County will make its facilities accessible to the Engineer as required for the Engineer's performance of its services. The Engineer represents that it understands the scope of this Agreement and can fully perform its obligations pursuant to this Agreement. Any failure of the Engineer to acquaint itself with the available information will not relieve the Engineer from its responsibilities pursuant to this Agreement.

5.3 The County shall disclose, to the extent known to the County, the results of prior tests, inspections or investigations conducted for the Project upon request by the Engineer.

VI. Progress Meetings

In addition to providing the monthly progress reports as required under Paragraph IV herein above, Engineer agrees to attend all monthly progress meetings scheduled by County, and at such meetings to outline work accomplished and special problem or delays encountered in connection with the Project during the previous report period, as well as planned work activities and special problems and delays anticipated for the next report period. The Engineer agrees to cooperate and coordinate with other design professionals, the County and its contractors to help facilitate efficient construction of the Project and maintain the Project schedule.

VII. Insurance

Engineer agrees to meet all insurance requirements as set forth on **Exhibit "E"** which is attached hereto and thereby made a part of this Agreement.

VIII. Indemnity

8.1 Engineer agrees to indemnify the County to the fullest extent allowed by section 271.904 of the Texas Local Government Code, including payment of the County's reasonable attorneys' fees to the extent such is allowed under 271.904(b).

IX. Independent Contractor

In the performance of services hereunder, the Engineer shall be deemed an independent contractor and shall not, with respect to its acts or omissions, be deemed an agent, subcontractor or employee of the County.

X. Assignment and Subletting

The Engineer agrees that neither this Agreement nor the services to be performed hereunder will be assigned or sublet without the prior written consent of the County. The Engineer further agrees that the assignment or subletting or any portion or feature of the services required in the performance of this Agreement shall not relieve the Engineer from its full obligations to the County as provided by this Agreement. The named sub-consultants anticipated to be utilized by the Engineer on this project are set forth in **Exhibit "F"**.

XI. Audits and Records/Prohibited Interest

11.1 The Engineer agrees that at any time during normal business hours, and as often as County may deem necessary, Engineer shall make available to representatives of the County for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the County to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, all for a period of three (3) years from the date of final settlement of this Agreement or of such other or longer period, if any, as may be required by applicable statute or other lawful requirements.

11.2 The Engineer agrees that it is aware of the conflict of interest requirements of the state law which are applicable to persons entering into contracts with the County and will abide by the same. Further, a lawful representative of Engineer shall execute the Affidavit shown in

Exhibit "G". Engineer understands and agrees that the existence of a conflict of interest during the term of this Agreement will render the agreement voidable.

11.3 The Engineer acknowledges to the County that it has made full disclosure in writing of any existing conflicts of interest or potential conflicts of interest, including personal financial interest, direct or indirect, in property abutting the proposed Project and business relationships with persons or entities with interest in abutting properties.

XII. Contract Termination

The parties agree that County shall have the right to terminate this Agreement without cause upon thirty (30) days written notice to Engineer. In the event of such termination without cause, Engineer shall deliver to County all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by Engineer in connection with this Agreement. Engineer shall have the right to terminate this Agreement upon thirty (30) days written notice to County in the event of the County's breach of any material term of this Agreement, including but not limited to compensation and method of payment. Regardless of which party initiates termination, Engineer shall be entitled to compensation for any and all services completed to the satisfaction of County in accordance with the provisions of this Agreement prior to termination.

XIII. Cost Estimates

The parties recognize and agree that any and all Engineer's estimates of probable construction costs (estimates) prepared by Engineer in connection with the Project represent the best judgment of Engineer as a design professional familiar with the construction industry, but that the Engineer has no control over costs or the price of labor, equipment or materials or over the Contractor's methods of pricing and does not guarantee that any bids solicited or received in connection with the Project will not vary from estimates prepared by Engineer.

XIV. Ownership of Documents

Original drawings and specifications (Instruments of Service) created by Engineer are the property of the Engineer; however, the Project is the property of the County, and Engineer may not use the drawings and specifications for any purpose not relating to the Project without County's consent. County shall be furnished with such reproductions of drawings and specifications as County may reasonably require. Upon completion of the services or any earlier termination of this Agreement under Article XII, and payment in full of all monies due Engineer, Engineer will revise drawings to reflect significant changes made during construction as per the marked-up prints, drawings, and other data furnished to the Engineer by or through the County or Contractor. Engineer will promptly furnish the County with one (1) complete set of reproducible record prints. All such reproductions shall be the property of the County who may use them without the Engineer's permission for any proper purpose relating to the Project, including but not limited to, maintenance of the Project, additions to the Project, or completion of the Project. The aforementioned revisions will be based upon information supplied by the County's construction contractor and will be assumed by Engineer to be complete and accurate. As such, Engineer shall not be responsible for errors or omissions resulting therefrom. Prints shall be furnished, as an additional service, at any other time requested by County. The County may use such drawings in any manner it desires; provided, however, that the Engineer shall not be liable for the use of such drawings for any project other than the Project described herein.

XV. Complete Contract

15.1 This Agreement, including the exhibits hereto lettered "A" through "G", constitute the entire agreement by and between the parties regarding the subject matter hereof and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument, signed by the County and the Engineer.

15.2 Warranties contained in this Agreement are in addition to and not in lieu of, any and all other liability imposed upon the Engineer by law with respect to the Engineer's duties, obligations, and performance hereunder. The Engineer's liability hereunder shall survive the County's final acceptance and payment for the Project. All representations and warranties set forth in this Agreement, including without limitation, this paragraph, shall survive the final completion of the Work or earlier termination of this Agreement. The Engineer acknowledges that the County is relying upon the Engineer's skill and experience in performing the services pursuant to this Agreement.

XVI. Mailing of Notices

Unless instructed otherwise in writing, Engineer agrees that all notices or communications to the County permitted or required under this Agreement shall be addressed to the County at the following address:

Collin County Engineering
Attn: Clarence Daugherty, P.E.
4690 Community Ave., Ste. 200
McKinney, TX 75071

County agrees that all notices or communications to Engineer permitted or required under this Agreement shall be addressed to Engineer at the following address:

Birkhoff, Hendricks & Carter, L.L.P.
Attn: Gary C. Hendricks, P.E., R.P.L.S.
11910 Greenville Ave., Suite 600
Dallas, TX 75243

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the date such notice or communication is posted by the sending party.

XVII. Miscellaneous

A. Paragraph Headings

The paragraph headings contained herein are for convenience only and are not intended to define or limit the scope of any provision in this Agreement.

B. Interpret Contract Fairly

Although this Agreement is drafted by County, should any part be in dispute, the parties agree that the Agreement shall not be construed more favorable for either party.

C. Venue/Governing Law

The parties agree that the laws of the State of Texas shall govern this Agreement, and that it is performable in Collin County, Texas. The venue for any litigation related to this Agreement shall be in Collin County, Texas.

D. Parties Bound

County and Engineer, and their partners, successors, subcontractors, executors, legal representatives, and administrators are hereby bound to the terms and conditions of this Agreement.

E. Severability

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision shall be deleted and the remainder of the Agreement shall remain in full force and effect.

F. Effective Date

This Agreement shall be effective from and after execution by both parties hereto.

G. Term of Agreement

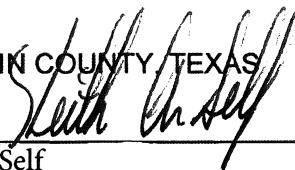
The term of the contract shall be a period of one year commencing on the date of award and continuing through and including project completion.

H. Observe and Comply

Engineer shall at all times observe and comply with all federal and State laws and regulations and with all City ordinances and regulations which in any way affect this Agreement and the work hereunder, and shall observe and comply with all orders, laws, ordinances and regulations which may exist or may be enacted later by governing bodies having jurisdiction or authority for such enactment. No plea of misunderstanding or ignorance thereof shall be considered. Engineer agrees to defend, indemnify and hold harmless County and all of its officers, agents, and employees from and against all claims or liability arising out of the violation or any such order, law, ordinance, or regulation, whether it be by itself or its employees.

WITNESS OUR HANDS AND SEALS on the date indicated below.

Date: 9.13.16

COLLIN COUNTY, TEXAS
By: 
Keith Self
County Judge
Court Order No.

BIRKHOFF, HENDRICKS & CARTER, L.L.P.

Date: 08-04-2016

By: 
Joe R. Carter, P.E., C.F.M.
Title: Partner

ACKNOWLEDGMENT

STATE OF TEXAS }
 }
COUNTY OF DALLAS }

BEFORE ME, Lana K. Howell on this day personally appeared Joe R. Carter, of Birkhoff, Hendricks & Carter, LLP, Texas Limited Liability Partnership, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of the corporation, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 4TH day of AUGUST, 2016.

Lana K. Howell
Notary Public, State of Texas
Lana K. Howell
Printed Name



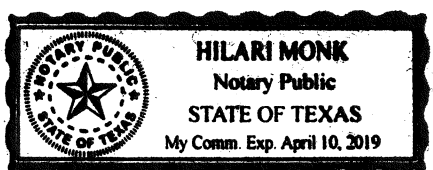
My Commission expires on the 18TH day of DECEMBER, 2018.

STATE OF TEXAS }
 }
COUNTY OF COLLIN }

BEFORE ME, Hilari Monk on this day personally appeared Keith Self, County Judge of COLLIN COUNTY, TEXAS, a political subdivision of the State of Texas, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same as the act and deed of COLLIN COUNTY, TEXAS, for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 13th day of September, 2016.

Hilari Monk
Notary Public, State of Texas
Hilari Monk
Printed Name



My Commission expires on the 10th day of April, 2019.

EXHIBIT "A"

ENGINEERING SERVICES

County Road 5/Frontier Parkway Paving and Drainage Improvements (from the Dallas North Tollway Extension to S.H. 289) INCLUDING A 235 FOOT LONG, 3-LANE UNDIVIDED OVERPASS AT THE BNSF RAILROAD

General Project Description

Prepare plans, specifications and bidding documents for construction of County Road 5/Frontier Parkway Paving and Drainage Improvements (*From the Dallas North Tollway Extension to Preston Road*) including a 4-lanes of a future 6-lane divided overpass at the Burlington Northern Railroad, and provide assistance during the bidding and contract administration phases of the project.

This basic project includes construction of 4 lanes of an ultimate 6 lane divided reinforced roadway with monolithic concrete curbs from the Dallas North Tollway eastern service road to State Highway 289 (Preston Road) with transitions each side of the proposed 4-lane overpass at the Burlington Northern Railroad. The 2 lanes on each side of the divided section shall be 25 ft. back-to-back. The total project length is approximately 10,600 feet (2 miles).

Four (4) lanes of an ultimate 6 lane divided bridge is proposed over the Burlington Northern Santa Fe Railroad (BNSF RR). An earthen embankment with 4:1 side slopes and retaining walls on the south near the dedicated right-of-way limits is planned to support the bridge approach sections.

A 27-foot back to back reinforced concrete undivided access road is planned on the northern side of the BNSF RR Bridge to facilitate the connection of existing County Road 51. The access road is proposed to have an at-grade crossing of the BNSF RR configured to accommodate "quiet zone" requirements.

The project includes underground storm drainage designed to convey the 100-year storm frequency

The roadway will be constructed in a 120-foot wide right-of-way that widens out to accommodate the BNSF RR bridge embankments and the access road to County Road 51. The widened portion of the right of-way is expected to require the removal of possibly four (4) existing buildings.

The following list sub-exhibits are attached to the end of this Exhibit A to assist in defining the project scope:

- Exhibit "A-1": Project Location Map and Conceptual Geometric Layout
- Exhibit "A-2": Typical Roadway Paving Sections
- Exhibit "A-3": Typical BNSF RR Bridge Sections
- Exhibit "A-4": Typical BNSF RR Bridge Embankment Sections
- Exhibit "A-5": Buildings to be Removed

Several "Additive Optional" items have been discussed during our pre-proposal scope meetings. These include project elements Collin County is not funding, but may be included should adjoining cities choose to fund and include them. They are:

1. Traffic Signal Warrant Study for the Frontier Parkway/Prosper High School intersection
2. Street Lighting
3. Median and Parkway Irrigation System(s)
- 3a. Median and Parkway Irrigation Sleeves (In lieu of Item 3 above)
4. 5-foot wide sidewalk parallel to and along both the north and south side of the proposed roadway.
5. Third Party Construction Inspection Services

A. BASIC SERVICES

Part I.A. Schematic Design Phase

- 1) Coordinate and attend a design conference with the COUNTY and other interested parties regarding the project. The purpose of the design conference will be to identify special project requirements, including but not limited to:
 - Paving Geometrics and Typical Paving Section
 - Preliminary Overpass schematic, including plan, profile and access roads
 - Preliminary Right-of-way Requirements
 - Preliminary Paving Sections

- Identify Special Permitting Requirements including Burlington Northern Railroad, Nationwide 404 Permit, Building Demolition and others
 - Identify Existing Water and Sewer Line Relocations
 - Identify Utility Coordination and/or Relocations
 - Coordination with the Town of Prosper
 - Coordination with the City of Celina
 - Coordination with the North Texas Tollway Authority
 - Coordination with the Texas Department of Transportation
 - Coordination with the Burlington Northern Railroad
 - Coordination with the Prosper Independent School District
 - Coordination with the Light Farms Ranch Development and other major property owners/developers
- 2) Determine if design to include location of sidewalks and barrier free ramps.
 - 3) Develop Overpass Schematic with proposed geometry, grades and bypass road.
 - 4) Determine drainage areas and evaluate the 100-year water surface for the major creek crossing. Underground storm drainage system will be based on a 100-year storm frequency.
 - 5) Develop preliminary storm sewer layout and determine primary points of storm sewer discharge along with offsite drainage improvements necessary, if any.
 - 6) Develop schematic phase opinion of probable project cost

Part I. B. Final Design Phase

Prepare plans and specifications for construction of the County Road 5/Frontier Parkway Paving and Drainage Improvements. Five (5) sets of construction plans and specifications will be submitted for review at the 30% complete (construction plans only), 60% complete, 90% complete and final stages. An Engineer's Opinion of Probable Construction Cost will be included with each submittal.

The plan sections to be included with each submittal are listed below:

30% Submittal

- 1) Preliminary Cover Sheet and Location Map
- 2) Preliminary Typical Sections
- 3) Preliminary Construction Sequence
- 4) Preliminary Paving Plan and Profile
- 5) Preliminary Driveway and Side Street Profiles
- 6) Preliminary Paving and Construction Phasing Cross Sections
- 7) Preliminary Drainage Area Maps
- 8) Preliminary Runoff Calculations and Preliminary Flood Study
- 9) Preliminary Culvert Layout and Channel Grading
- 10) Preliminary Water Line and Sewer Line Relocation Plan and Profile
- 11) Preliminary Bridge Layout Sheet

60%, 90% and Final design phases:

- 1) Cover Sheet, Location Map and Sheet Index
- 2) Project General Notes
- 3) Project Typical Sections for Roadway, Bridge and Bypass Road
- 4) Coordinate and Survey Control Sheets for Contractor's Construction Surveying
- 5) Pavement and Structure Removal Plan
- 6) Suggested Sequence of Construction and Traffic Control Plan
- 7) Roadway Plan-Profile Sheets prepared at a Scale of Not Less Than 1" = 20'
- 8) BNSF Railroad Overpass structural plans
- 9) Drainage Area Map, Drainage Design Computations and Flood Study Summary
- 10) Storm Sewer Plan Sheets and Profile Sheets prepared at a Scale of Not Less Than 1" = 20', including Culverts, Offsite Storm Sewers or Channels
- 11) Contour Grading Plan for Culverts and Offsite Channels
- 12) Contour Grading Plan for Street Intersections
- 13) Side Street Tie-In and Driveway Profiles

- 14) Water Line Relocation and Sewer Line Relocation Plans
- 15) Roadway and Structural Cross Sections and Earthwork Calculations
- 16) Permanent Signing and Pavement Marking Plan and Summary
- 17) Erosion Control Plan
- 18) Incorporate Standard Details and Design Standards
- 19) Special Details, as Required

Other Services Included During Final Design Phase:

- 1) Preparation of routine submittals to State Regulatory Agencies, as required
- 2) Assistance in preparation of Highway, Railroad and Utility Permits, as required
- 3) Coordination with Utility Companies, Burlington Northern Railroad, the City of Celina, the Town of Prosper, the Prosper Independent School District, North Texas Tollway Authority, Texas Department of Transportation, the Light Farms Ranch Development and other major property owners. This includes delivery of the appropriate electronic drawing files to the affected Utilities and Agencies, if requested.
- 4) Attend one (1) Review Meetings after each submittal.
- 5) Complete a Quantity Takeoff and develop Opinion of Probable Construction Cost for each submittal
- 6) Preparation of Specifications, Contract and Bidding Documents. This document will be based on the most recent publication of the North Central Texas Council of Governments, Standard Specifications for Public Works Construction (NCTCOG Specs). Amendments to the NCTCOG Specs will be made to meet the City's special requirements of this project.
- 7) Print Preliminary Plans (11" x 17") for review by the County and Utility Companies at the 60% complete stage, and Preliminary Plans and Specifications for the 90% complete stage and final design. Roadway cross sections will be submitted at each stage of submittal.

8) Print Final Plans (11"x 17") and Specifications for Bidding Purposes. During the bidding phase, plans and specifications will be provided to the County in electronic (pdf) file format. Final Conformed Plans and Specifications will be delivered to the following distribution list as part of the Basic Design Services:

• Successful Contractor	5 sets
• City of Celina	2 sets
• Town of Prosper	2 sets
• Prosper ISD	1 set
• Collin County	2 sets
• Light Farms Development	1 set
• Materials Testing Lab	2 sets
• BHC	3 sets
• Extra Sets	<u>2 sets</u>
Total Sets	20 sets

Part II. Bidding Phase (Scope from Collin County)

- a) Assist the County staff in advertising for bids. This will include e-mailing "Notice to Contractors" to contractors experienced in this type of construction. County will make arrangements to publish Notice in local newspaper as required.
- b) Provide electronic (pdf) files of bidding documents to Collin County. County will post electronic files to their website for download by contractors and suppliers.
- c) Prepare and Publish routine addenda to the plans and specifications as may be required based on questions collected and provided by the County.
- d) Review the Tabulation of Bids prepared by the County.
- f) Obtain the following information from the lowest bidder:
 - 1. Past work history and relevant experience
 - 2. Physical resources to produce the project.
- g) Formulate opinion from bidders information received and provide the County a summary of the opinion for their use in selection and award of the construction contract.

Part III. Construction Phase

- a) Revise the construction plans and specifications to conform to any changes required as a result of published addendum during the bidding phase.
- b) Conduct pre-construction conference, including preparing an agenda.
- c) Attend bi-monthly coordination meetings with contractor, quality control personnel, and County representatives to discuss problem areas, progress, and required coordination. Twelve (12) meetings are included in this scope item.
- d) Review shop drawings and other submittal information, submitted by the Contractor. This review is for the benefit of the Owner and covers only general conformance with information given by the Contract Documents. The contractor is to review and stamp their approval on submittals prior to submitting to the Engineer. Review by the Engineer does not relieve the Contractor of any responsibilities, safety measures or the necessity to construct a complete and workable facility in accordance with the Contract Documents.

- e) Provide written responses to requests for information to the County and/or Contractor.
- f) Prepare and process routine change orders for this project as they pertain to the original scope of work.
- g) Assist in evaluation of monthly pay requests prepared by the Contractor.
- h) Accompany the County during their final inspection of the project.
- i) Recommend final acceptance of work based on information from the County or their designated on-site representative.
- j) Revise contract drawings, with the assistance of the Resident Project Representative to reflect available information as to how the work was constructed. Furnish one (1) set of 11" x17" hard copy and an electronic file in pdf file format of the revised drawings to the County.

B. ADDITIONAL SERVICES

Additional Services are not included in the Basic Services described previously. Below is a description of the Additional Services that are included in this Agreement.

1. Field Surveys for Design and Construction Layout based on the Texas State Plane Grid Coordinate System. Field Surveys for Locating Property Corners for use in development of right-of-way and easement field note descriptions and exhibits.
2. Perform Deed Research and develop a Right-of-Way Strip Map showing existing rights-of-way, proposed rights-of-way, proposed easements, and expected future right-of-way requirements, if any. The adjacent property boundaries will be based on Field Surveys, available Deed Information, TxDOT Right-of-Way Maps, North Texas Tollway Authority Right-of-Way Maps and Plats supplied by the Town of Prosper and the City of Celina.
3. Prepare field note descriptions and exhibits as requested by for use in acquisition of street right-of-way and drainage, slope or utility easements. The budget in Exhibit "C" is based on preparation of field note descriptions and exhibits for sixteen (16) properties on this project.
4. Geotechnical Engineering Investigation, Pavement Design, embankment design and overpass foundation recommendations Report. The Geotechnical Investigation to

include six sample borings to a depth of 20 feet for the roadway and the box culvert crossing and four sample borings to a depth of 40 to 50 feet for the BNSF Overpass. The Report to include logs of the samples, results of sample testing and engineering analysis and recommendations for pavement and subgrade and culvert bearing support values.

5. County Road 5 crosses over Doe Branch Tributary C, FEMA designated flood zone "A" (See FEMA Map Panel 48085C0120J, dated June 2, 2009 attached hereto). In order to meet the minimum floodplain ordinance requirements of the City of Celina and the Town of Prosper, a Flood Study is required. This additional service includes preparation of the flood study, including hydrologic and hydraulic models of Doe Branch Tributary C from approximately 600 feet downstream of the proposed box culvert crossing to approximately 1000 feet upstream of the box culvert crossing of County Road 5/Frontier Parkway. The flood study will incorporate hydrologic models from existing flood studies for this reach of Doe Branch Tributary C. This data will be utilized to establish minimum storm drain facility sizes and roadway grades on County Road 5/Frontier Parkway.
6. Complete the Standard North Central Texas Council of Governments (NCTCOG) Environmental Form for the project.
7. Provide services to assist in obtaining a 404 Permit (Individual Permit) as required for the relocation of an existing 600-foot channel parallel to County Road 5/Frontier Parkway just north of the Prosper High School and for constructing a box culvert drainage system for an existing 2,500-foot channel parallel to County Road 5/Frontier Parkway east of the Dallas North Tollway.
8. Provide Asbestos Survey and Report on four existing buildings identified on Exhibit A-5.
9. Attend up to a total of eight (8) coordination meetings with the City of Celina, the Town of Prosper, the Prosper Independent School District, the North Texas Tollway Authority, Developers and Property Owners).
10. Attend up to a total of twenty (20) progress meetings during the design phase, bid phase and/or the construction phase in addition to those described in the Basic Services of this agreement.
11. Printing of Plans and Specifications in addition to those identified above in the Basic Services of this agreement.

C. OPTIONAL SERVICES

Optional Services are not included in the Basic Services nor Additional Services described previously. A description of each Optional Service that may be included in this Agreement follows together with the proposed sub-consultant (if applicable)

1. Review available traffic volume data for the intersection of County Road 5/Frontier Parkway at the Prosper High School. Conduct a 24-hour traffic count for each approach to the intersection. Collect available crash data from the City of Celina and Prosper Police Departments. Evaluate the warrants for installation of a traffic signal based on the latest edition of the Texas Manual of Uniform Traffic Control Devices. The results of the evaluation will be presented in the form of a technical memorandum.
2. Preparation of Street Lighting plans and specifications for County Road 5/Frontier Parkway. Contact the electric utility and coordinate the Street Lighting design. Streetlights will be designed to be located in the median for the divided portion of the project and in the parkway or on The BNSF Overpass where practical in the undivided portion of the project. Review of shop drawings and assistance during contract administration is included.
3. Preparation of Irrigation plans and specifications for County Road 5/Frontier Parkway. Irrigation System will be design for areas where sufficient right-of-way will allow for construction and maintenance of plantings and irrigation system. Review of shop drawings and assistance during contract administration is included.
4. Preparation of plans and specifications for construction of sleeves for a future irrigation system of street lighting system based on the previous assumptions for the location of these facilities.
5. Preparation of construction plans and specifications for reinforced concrete sidewalks within the north and south parkway of County Road 5/Frontier Parkway, including barrier free ramps at all improved driveways and intersections. Sidewalks will be designed to meet the current Texas Accessibility Standards (TAS). Plans will be submitted to the Texas Department of Licensing and Regulation (TDLR) for review as required. Upon completion of the project, coordinate the services of a licensed TAS inspector to inspect and comment on the project.

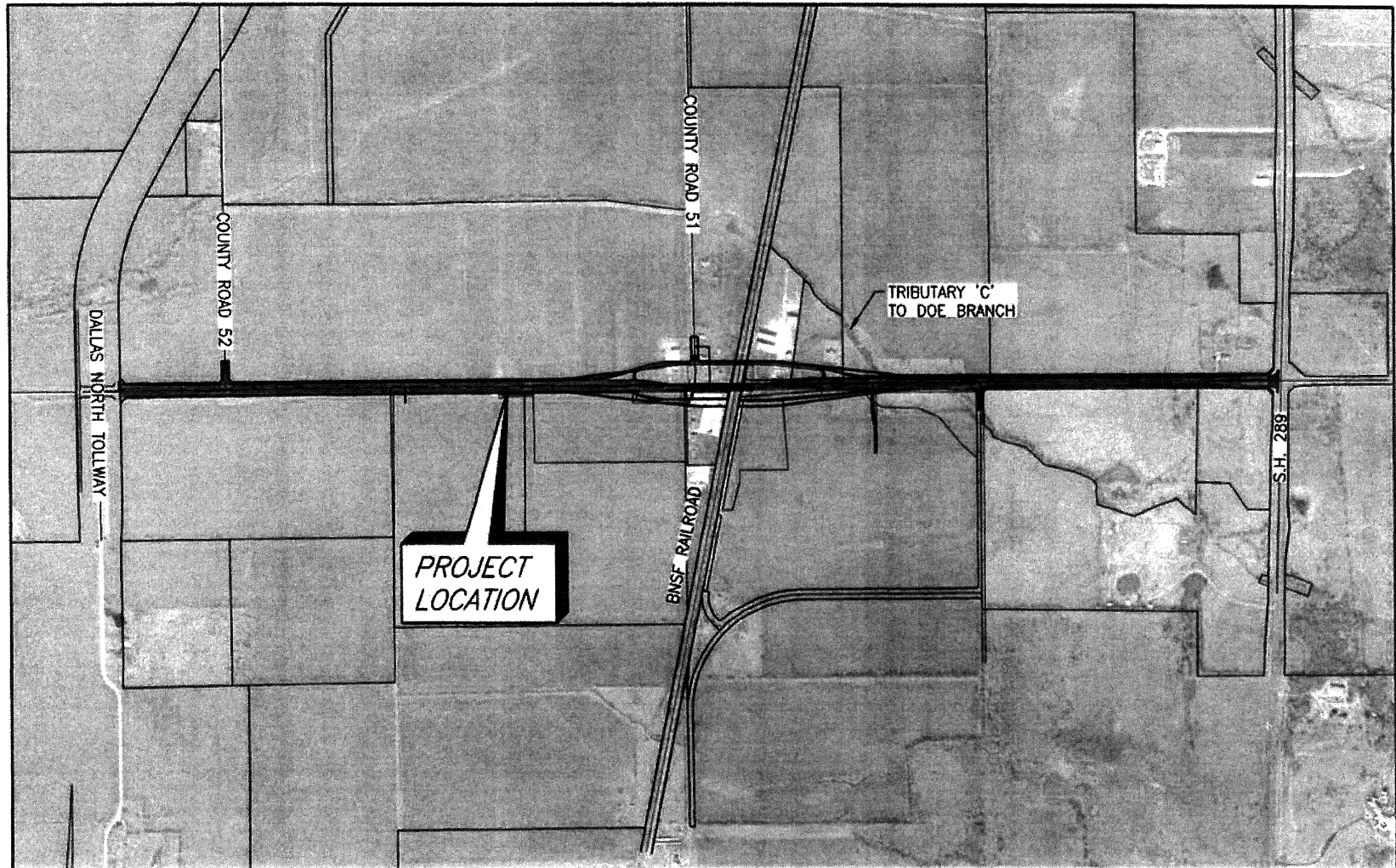
D. EXCLUSIONS

The intent of this scope of services is to include only the services specifically listed herein and none others. Services specifically excluded from this scope of services include, but are not necessarily limited to the following:

1. Environmental impact statements and assessments and Categorical Exclusions.
2. Texas Department of Transportation reviews and design process.
3. Fees for permits or advertising.
4. Certification that work is in accordance with plans and specifications.
5. Trench safety designs.
6. Quality control and testing services during construction.
7. Services in connection with condemnation hearings.
8. Phasing of Contractor's work.
9. On-site safety precautions, programs and responsibility.
10. Consulting services by others not included in proposal.
11. Revisions and/or change orders as a result of revisions after completion of original design (unless to correct error on plans).
12. Title searches for preparation of right-of-way dedication or easement documents.
13. Preparation of the Contractor's Storm Water Prevention Pollution Plan (SW3P).
14. Preparation of Plans or Specifications for Burlington Northern Railroad Improvements.
15. Fiduciary responsibility to the Client.

E. TEXAS BOARD OF PROFESSIONAL LAND SURVEYING CONTACT INFORMATION

Recipients of professional land surveying services under this agreement may direct complaints regarding such services to the Texas Board of Professional Land Surveying, 12100 Park 35 Circle, Building A, Suite 156, MC 230, Austin, TX 78753, Phone (512) 239-5263, Fax (512) 239-5253.



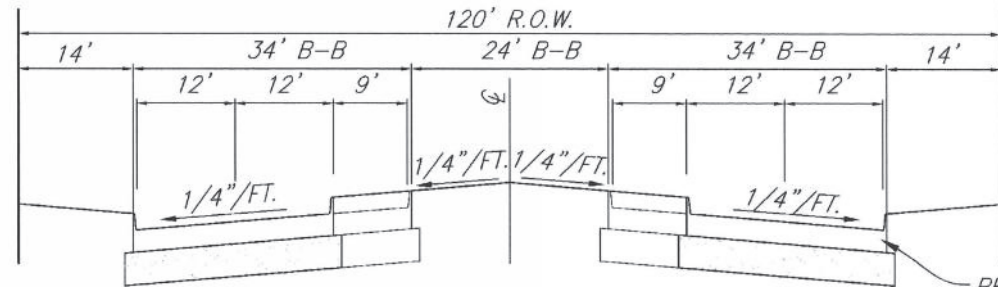
NO SCALE

BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS TEXAS FIRM 526
11910 GREENVILLE AVE., SUITE 600
DALLAS, TEXAS 75243 214-361-7900

COLLIN COUNTY, TEXAS

C.R. 5/FRONTIER PARKWAY
EXHIBIT A-1

July, 2016

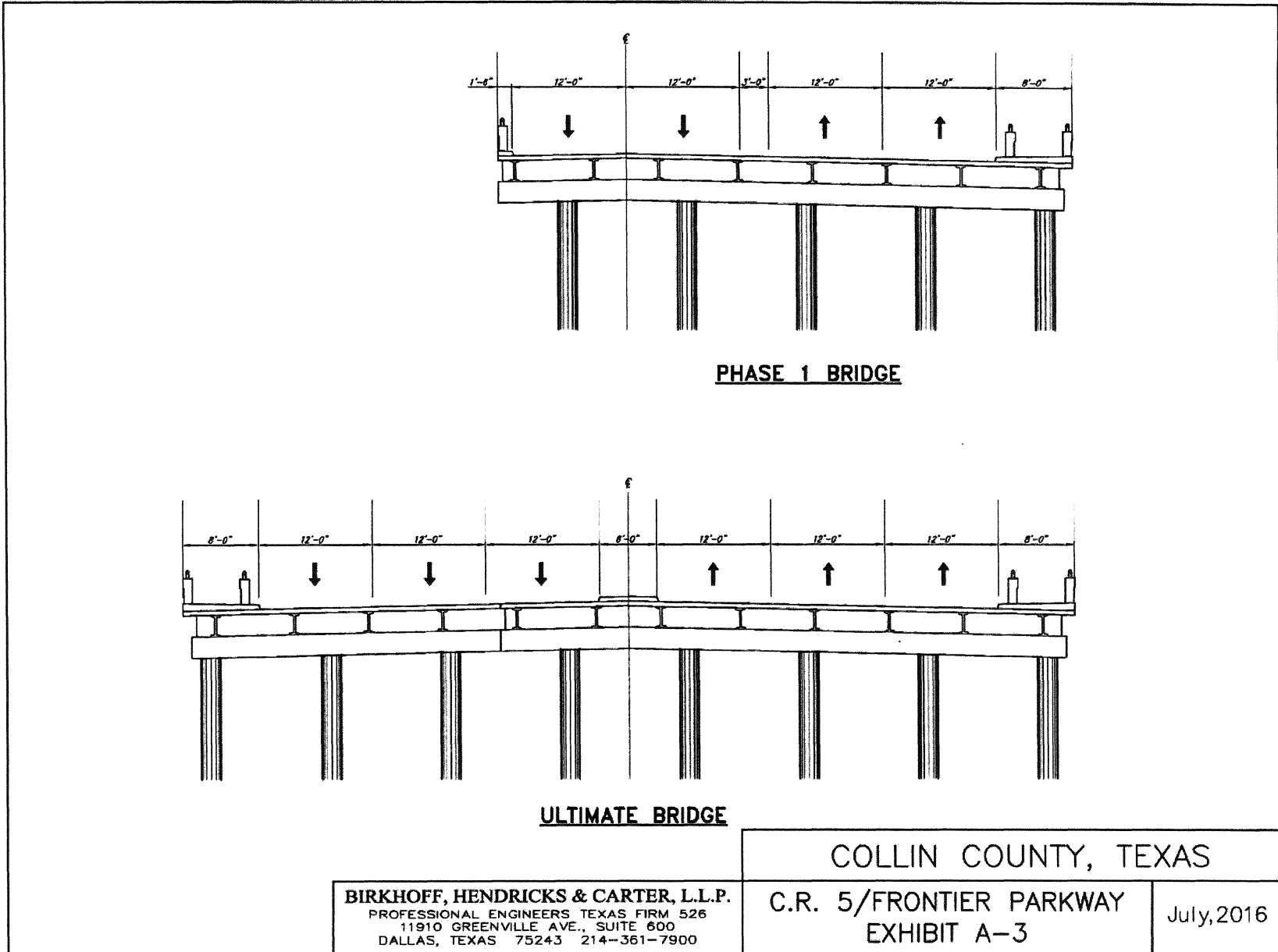


PROPOSED 8" REINFORCED
CONC. PAVEMENT ON 12"
STABILIZED SUBGRADE

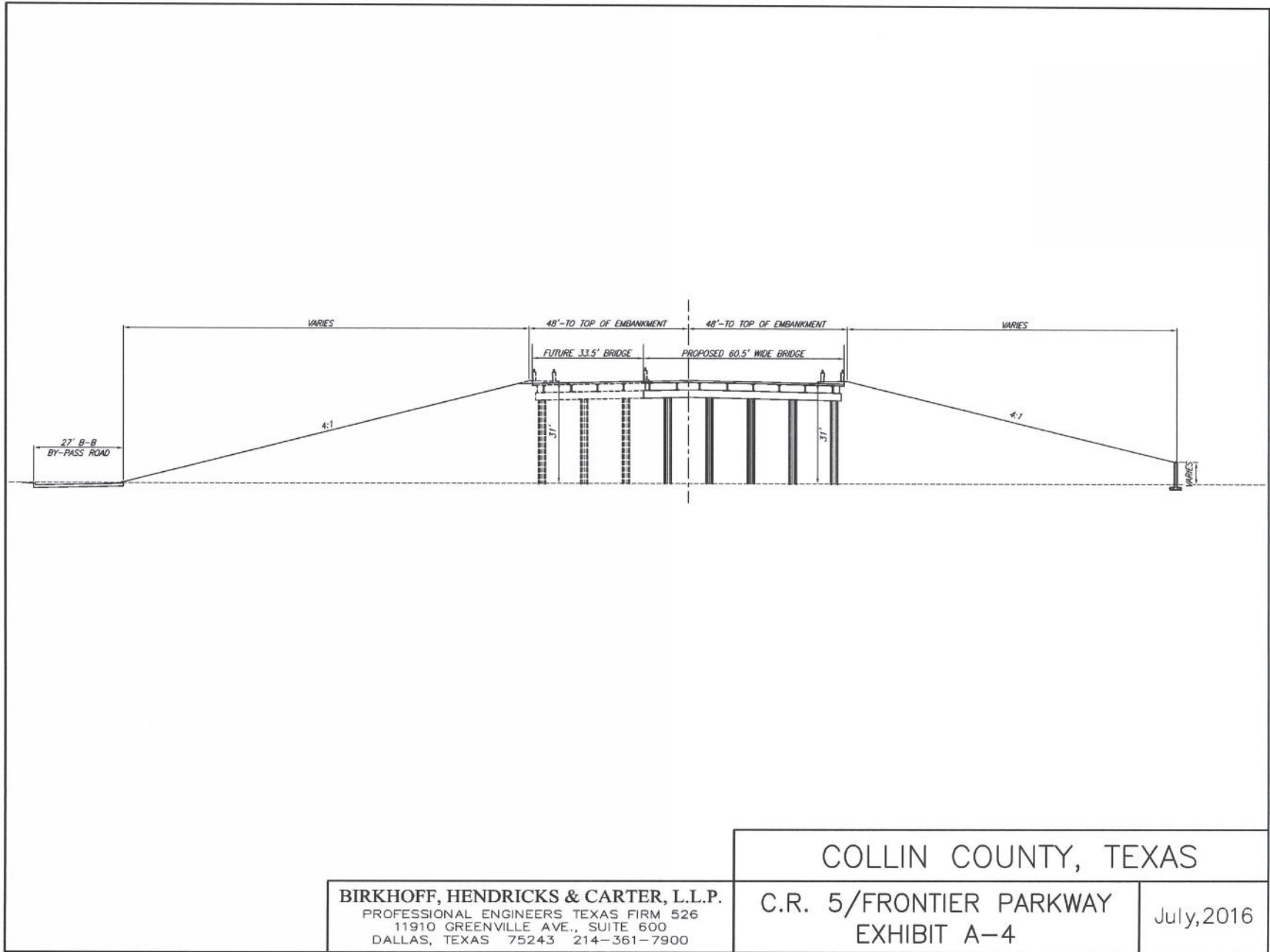
TYPICAL ROADWAY SECTION
(4 LANE SECTION)

BIRKHOFF, HENDRICKS & CARTER, L.L.P.
PROFESSIONAL ENGINEERS TEXAS FIRM 526
11910 GREENVILLE AVE., SUITE 600
DALLAS, TEXAS 75243 214-361-7900

COLLIN COUNTY, TEXAS	
C.R. 5/FRONTIER PARKWAY EXHIBIT A-2	July, 2016



H:\Projects\Collin\CR5-Frontier\EXHIBIT A-3-jrc.dwg PLOT SCALE: 1:1 PLOT STYLE: 11x17.ctb PLOTTED BY: KBURKS ON 7/18/2016



BIRKHOFF, HENDRICKS & CARTER, L.L.P.
 PROFESSIONAL ENGINEERS TEXAS FIRM 526
 11910 GREENVILLE AVE., SUITE 600
 DALLAS, TEXAS 75243 214-361-7900

COLLIN COUNTY, TEXAS	
C.R. 5/FRONTIER PARKWAY EXHIBIT A-4	July, 2016

EXHIBIT A-5

BUILDINGS TO BE REMOVED

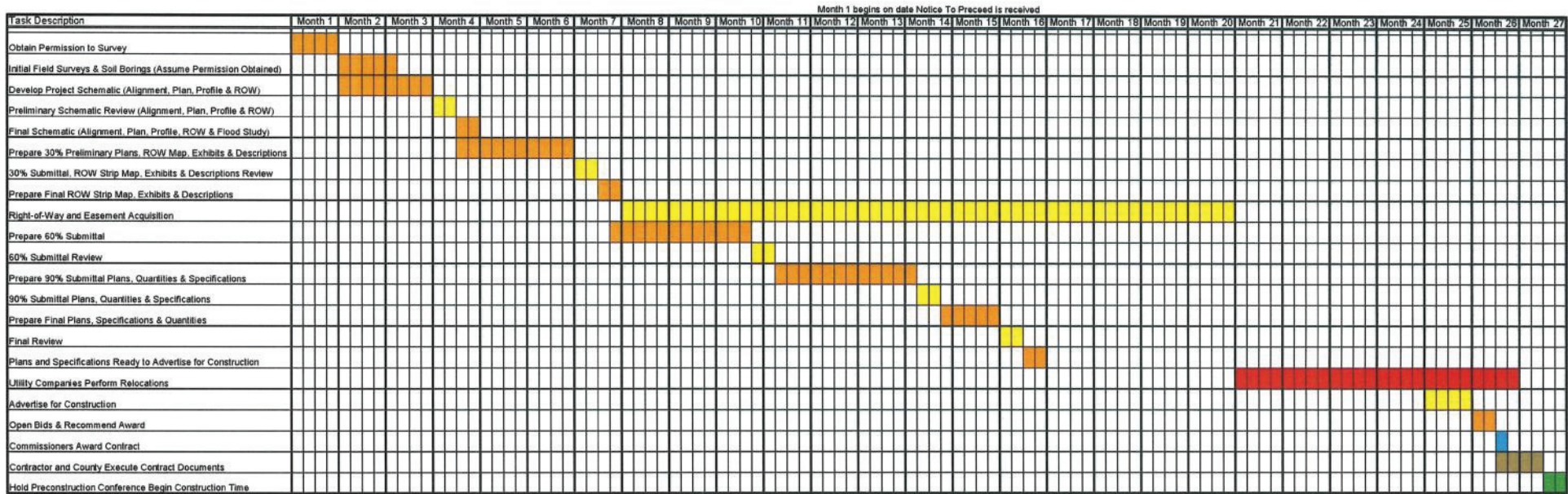
County Road 5/Frontier Parkway Paving and Drainage Improvements



EXHIBIT "B"

PROJECTED COMPLETION SCHEDULE

County Road 5/Frontier Parkway Paving & Drainage Improvements
 (from the Dallas North Tollway Extension to State Highway 289)
 INCLUDING AN OVERPASS AT THE BNSF RAILROAD



Potential Schedule Delaying Factors (Outside Consultant Control)

Time to obtain permission to survey is shown as 1 month. Delays in obtaining permission to enter for survey purposes will extend the schedule accordingly.
 Interim reviews are shown for a duration of 2 weeks and longer review time will extend the schedule accordingly.
 Time to obtain right-of-way and easements is shown as 12 months. Additional time required to obtain land rights will extend the schedule accordingly.
 Utility Company Relocations could take more than 6 months shown & usually will not begin until all right-of-way and easements have been acquired.



It should take approximately 24 months to complete construction of this project.

EXHIBIT "C"
ENGINEERING SERVICES FEE SCHEDULE

The compensation included in this Exhibit "C" is based on full execution of this Agreement and written notice to proceed by January 31, 2017. The Engineer reserves the right to adjust the compensation amounts shown herein if this Agreement is not accepted by the County on or before January 31, 2017.

A. Basic Services

Payment for the Basic Services described under A. Part I.A, Part I.B, Part II and Part III, , shall be on a Lump Sum Basis in the following Amounts:

Part I. A. Schematic Design	\$150,000
Part I. B. Final Design	\$1,162,000
Part II. Bidding Phase	\$9,000
Part III. Construction Administration	\$180,000
Total	\$1,501,000

For the Additional Services (Part B) and Optional Services (Part C) we propose to be compensated on a salary cost basis times a multiplier of 2.35, with expenses at actual invoice cost. Automobile mileage for special services will be invoiced at \$0.54 per mile.

B. Additional Services

We suggest a budget of approximately **\$313,790** in the following not to exceed amounts for Additional Services on this project:

1. Field Surveys (Design, Property and Construction Support): \$39,840
2. R-O-W Map, Plats and Field Notes Descriptions (16 each): \$29,600
3. Geotechnical Investigation and Report: \$40,700
4. Flood Study: \$24,800
5. NCTCOG Environmental Form: \$27,200
6. 404 Permit Application (Nationwide Permit 14): \$79,250
7. Permits (TxDOT, BNSF) and Utility Relocation Coordination: \$28,000

8. Asbestos Evaluation (4 Buildings):	\$11,000
9. Eight (8) Meetings with Celina, Prosper, PISD & Property Owners:	\$8,400
10. Attend Twenty(20) Additional Progress Meetings:	\$21,000
11. Additional Printing of Construction Plans and Specifications:	<u>\$4,000</u>
Total Amount, Additional Services (Part IV):	\$313,790

C. Optional Services

We suggest a budget of approximately **\$143,500** in the following amounts for Optional Services on this project. Please initial next to each Optional Services that is approved:

1. Traffic Signal Warrant Study	\$5,500
2. Street Lighting Design	\$46,000
3. Full Irrigation Design Plans and Specifications	\$50,000
3a. Irrigation and Lighting Conduit Sleeves Only	\$5,000
4. Sidewalks and Barrier Free Ramps (TDLR \$2,085 fee Included)	\$42,000
5. On-site Observation of Construction Activity	<u>TBD</u>

Maximum Total Amount, Optional Services (Part IV): **\$143,500**
(No On-site Observation)

Payments are to be made monthly based on the percent complete of the design or construction phase for the Basic Services, and based on the actual hourly expenditures for the Special Services. The maximum overall fee established herein shall not be exceeded without written authorization from the County.

EXHIBIT "D"

INFORMATION TO BE PROVIDED BY THE COUNTY

1. The County will make available to Engineer any and all information, data, etc., as it may have in its possession relating to the project described herein.
2. The County will assist the Engineer as necessary in obtaining information related to this project from:
 - a. Town of Prosper
 - b. City of Celina
 - c. North Texas Tollway Authority
 - d. Texas Department of Transportation
 - e. Burlington Northern and Santa Fe Railroad

EXHIBIT "E"

INSURANCE REQUIREMENTS

1.1 Before commencing work, the vendor shall be required, at its own expense, to furnish the Collin County Purchasing Agent with certified copies of all insurance certificate(s) indicating the coverage to remain in force throughout the term of this contract.

1.1.1 Commercial General Liability insurance at minimum combined single limits of (\$1,000,000 per-occurrence and \$2,000,000 general aggregate) for bodily injury and property damage, which coverage shall include products/completed operations at \$2,000,000 per occurrence. Coverage must be written on an occurrence form.

1.1.2 Workers Compensation insurance at statutory limits, including employers liability coverage at \$500,000. In addition to these, the contractor must meet each stipulation below as required by the Texas Department of Insurance, Division of Workers' Compensation. (Note: If you have questions concerning these requirements, you are instructed to contact the DWC at (512)440-3789).

1.1.2.1 Definitions: Certificate of coverage ("certificate"); A copy of a certificate of authority of self-insure issued by the commission, or a coverage agreement (DWC-81, DWC-82, DWC-83, OR DWC-84), showing statutory workers compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

Duration of the project includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in 406.096) includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

1.1.2.2 The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

1.1.2.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

1.1.2.4 If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

1.1.2.5 The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

1.1.2.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

1.1.2.5.2 no later than seven (7) days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

1.1.2.6 The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

1.1.2.7 The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

1.1.2.8 The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

1.1.2.9 The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

1.1.2.9.1 provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;

1.1.2.9.2 provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

1.1.2.9.3 provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

1.1.2.9.4 obtain from each other person with whom it contracts, and provide to the contractor:

1.1.2.9.4.1 a certificate of coverage, prior to the other person beginning work on the project; and

1.1.2.9.4.2 a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

1.1.2.9.5 retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

1.1.2.9.6 notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

1.1.2.9.7 contractually require each person with whom it contracts, to perform as required by paragraphs 1.1.2.1 through 1.1.2.7, with the certificates of coverage to be provided to the person for whom they are providing services.

1.1.2.10 By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

1.1.2.11 The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

1.1.3 Commercial Automobile Liability insurance shall be no less than \$1,000,000 combined single limits per accident for bodily injury and property damage, including owned, non-owned, and hired vehicle coverage.

1.1.4 Professional Liability Insurance at minimum limits of \$1,000,000. This policy must have a two (2) year extended period of coverage, (i.e. tail coverage). If you choose to have project coverage endorsed onto your base policy, this would be acceptable.

1.2 The required limits may be satisfied by any combination of primary, excess or umbrella liability insurances, provided the primary policy complies with the above requirements and the excess umbrella is following form. The vendor may maintain reasonable and customary deductibles, subject to approval by Collin County.

1.3 With reference to the foregoing insurance requirement, the vendor shall endorse applicable insurance policies as follows:

1.3.1 A waiver of subrogation in favor of Collin County, its officials, employees, volunteers and officers shall be contained in all policies.

1.3.2 The vendor's insurance coverage shall name Collin County as additional insured under the General Liability policy.

1.3.3 All insurance policies shall be endorsed to the effect that Collin County will receive at least thirty (30) days' notice prior to cancellation, non-renewal or termination of the policy.

1.3.4 All copies of Certificates of Insurance shall reference the project/contract number.

1.4 All insurance shall be purchased from an insurance company that meets the following requirements:

1.4.1 A financial rating of A-VII or better as assigned by the BEST Rating Company or equivalent.

1.5 Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent, and shall contain provisions representing and warranting the following:

1.5.1 Sets forth all endorsements and insurance coverages according to requirements and instructions contained herein.

1.5.2 Sets forth the notice of cancellation or termination to Collin County.

EXHIBIT "F"

NAMED SUB-CONSULTANTS

**County Road 5/Frontier Parkway Paving and Drainage Improvements
(from the Dallas North Tollway Extension to S.H. 289)
INCLUDING A 235 FOOT LONG, 3-LANE UNDIVIDED OVERPASS AT THE BNSF
RAILROAD**

Structural Engineer:	Ronald R. Roberts & Associates, Inc 2948 N. Stemmons Frwy Dallas, Texas 75247
Environmental Engineering Consultant:	Civil Associates, Inc. 9330 LBJ Freeway, Suite 1150 Dallas, Texas 75243
Geotechnical Engineering:	Henley Johnston & Associates, Inc. 235 Morgan Ave. Dallas, Texas 75203-1025
Traffic Engineering:	Lee Engineering 3030 LBJ Freeway, Suite 1660 Dallas, Texas 75234
Irrigation Designer:	Dunkin-Sims-Stoffels, Inc. 622 W. State Street Garland, Texas 75040
Electrical Engineer (Street Lighting):	TBD
Asbestos Investigations and Report:	TBD
Third Party Construction Inspection Services:	TBD

TBD = To Be Determined

EXHIBIT "G"

AFFIDAVIT OF REGULATION OF CONFLICTS OF INTEREST

The undersigned declares and affirms that during the term of this contract they will maintain compliance as defined in Vernon's Texas Codes Annotated, Local Government Code Title 5, Section C, Chapter 171.

I further understand and acknowledge that the existence of a conflict of interest at any time during the term of this contract will render the contract voidable.

Name of Engineer: Joe R. Carter P.E., C.F.M.
Title of Officer: Partner
Signature of Officer: [Handwritten Signature]
Date: 08-04-2016

ACKNOWLEDGMENT

STATE OF TEXAS }
COUNTY OF DALLAS }

BEFORE ME, on this day personally appeared Joe R. Carter, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this, the 4th day of AUGUST, 2016.

[Handwritten Signature]
Notary Public, State of Texas
LANA K. HOWELL
Printed Name



My Commission expires on the 18th day of DECEMBER, 2018.