

Contract No. 18-042-000
Freese and Nichols, Inc.
Assignment No. 3
Project Number 16-030-8060

**INDEFINITE DELIVERY INDEFINITE QUANTITY
PROFESSIONAL SERVICES AGREEMENT
BETWEEN
THE TEXAS FACILITIES COMMISSION
AND
FREESE AND NICHOLS, INC.**

TFC CONTRACT NO. 18-042-000

ASSIGNMENT NO. 3

THIS INDEFINITE DELIVERY INDEFINITE QUANTITY ASSIGNMENT NO. 3 (hereinafter referred to as "Assignment No. 3" or "Assignment") is entered into by and between the Texas Facilities Commission, located at 1711 San Jacinto Boulevard, Austin, Texas 78701 (hereinafter referred to as "TFC") and Freese and Nichols, Inc., located at 4055 International Plaza, Suite 200, Fort Worth, Texas 76109 (hereinafter referred to as "PSP") (TFC and PSP are hereinafter referred to individually as a "Party" or collectively as "Parties"), to be subject to the terms and conditions that follow:

DESCRIPTION OF PROJECT: The project for which PSP agrees to provide Professional Services is generally described as complete a feasibility study to provide telecommunications fiber connections for the office building and garage at the John H. Winters Complex and the North Austin Complex Buildings and the Disaster Recovery Operations Building (hereinafter referred to as the "Project"), as further described in "Exhibit A-3," PSP's Proposal dated November 21, 2019, attached hereto and incorporated herein for all purposes and consisting of twenty-six (26) pages.

DURATION OF ASSIGNMENT: The scope of services of this Assignment No. 3 shall be completed no later than August 31, 2020, unless terminated earlier as provided in Section 3.2 of the Agreement. The schedule is subject to adjustments for possible time extension; however, any extension of time must be approved by the TFC and shall require an amendment to Assignment No. 3.

SPECIAL TERMS AND CONDITIONS OF ASSIGNMENT: Terms and conditions shall be in accordance with the Agreement, any Special Conditions, and with this Assignment No. 3.

SUB-CONTRACTORS TO BE UTILIZED FOR PROJECT: PSP shall perform the services under this Assignment No. 3 with its own forces unless otherwise specified. If the scope of services is less than \$100,000.00, a HUB Subcontracting Plan (HSP) is not required. If the scope of services will exceed \$100,000.00, PSP shall submit an HSP for approval pursuant to Section 11.2 of the Agreement.

FEE FOR BASIC SERVICES: Fee for the services set forth in this Assignment No. 3 shall not exceed the sum of Two Hundred Eleven Thousand One Hundred Eighty-One and 11/100 Dollars

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(\$211,181.11). No more frequently than once per month, PSP shall submit a Pay Application to TFC for services performed and reasonable and necessary costs and expenses incurred through the last day of the previous month. Any reimbursable expenses, if allowed, shall be in accordance with Section 4.6 of the Agreement.

IDENTIFICATION OF PSP PROJECT MANAGER AND ALL SUBCONTRACTOR: For this Assignment No. 3, PSP shall identify the Project Manager, PSP's employees and all subcontractors assigned to this project on the List of Project Manager and Subcontractors (hereinafter referred to as the "List"), attached hereto and incorporated herein for all purposes as "Exhibit B-3."

TFC reserves the right to approve the appointment of the PSP Project Manager and to demand that the Project Manager, and any of PSP's employees or subcontractors, be removed and replaced if, in the sole opinion of TFC, their performance on this project or any other projects, is and/or was inadequate or their continued involvement with the Project is, will, or has become detrimental to the timely and successful completion of the project.

The Project Manager and Subcontractors identified in the List shall not be replaced by PSP, nor shall any other subcontractors be engaged by PSP, unless prior written consent is obtained from TFC, which consent shall not be unreasonably withheld, conditioned, or delayed.

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ENTIRE AGREEMENT AND MODIFICATION: The Agreement and this Assignment and their integrated attachment(s) constitute the entire agreement of the Parties and such are intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Assignment specifically displays a mutual intent to amend a particular part of this Assignment, general conflicts in language between any such attachment and this Assignment shall be construed consistently with the terms of this Assignment. Unless otherwise expressly authorized by the terms of this Assignment, no modification, renewal, extension, or amendment to this Assignment shall be binding upon the Parties unless the same is in writing and signed by the respective Parties hereto.

This Assignment shall be effective as of the date of the last Party to sign.

TEXAS FACILITIES COMMISSION

FREESE AND NICHOLS, INC.

DocuSigned by:
 By: Mike Novak, Executive Director
 B1C9FC0A8020417...

DocuSigned by:
 By: Alfred Vidaurri, Jr.
 62D06921BC7A4E8...

Mike Novak

Alfred Vidaurri, Jr.

Executive Director

Vice President

Date of execution: 01/24/2020 | 6:25 AM CST

Date of execution: 01/23/2020 | 6:12 PM CST

CR GC

mx Dir

m DED

Contract No. 18-042-000
Freese and Nichols, Inc.
Assignment No. 3
Project Number 16-030-8060

EXHIBIT A-3

PSP'S PROPOSAL DATED NOVEMBER 21, 2019



Innovative approaches
Practical results
Outstanding service

10431 Morado Circle, Suite 300 • Austin, Texas 78759 • 512-617-3100 • FAX 817-735-7491

www.freese.com

November 21, 2019

Mark Diaz
Project Manager
Facilities Design & Construction
Texas Facilities Commission
1711 San Jacinto
Austin TX 78701
Re: TFC North Austin Complex Telecomm Fiber Routing Study-Revised

Dear Mr. Diaz:

Pursuant to your request for proposal on September 23, 2019, and subsequent emails on October 9th, October 17th, November 7th, and November 18th 2019, Freese and Nichols, Inc. (FNI) is pleased to submit this revised proposal to the Texas Facilities Commission (Client) for providing professional Architectural and Engineering services required for the North Austin Complex Telecommunications Fiber Routing Study. Jessica Rodriguez, P.E., will be our project manager for this important project which shall be accomplished under our Professional Services Agreement IDIQ No. 18-042-000.

SCOPE OF SERVICES

The Freese and Nichols team will investigate potential solutions to provide telecommunications fiber connections for the new Phase 2 office building and garage at the John H Winters (JHW) complex. There are no existing physical conduit capacities from the JHW complex to the Department of State Health Services (DSHS) complex to the west across Lamar Street. Ultimately the connection needs to be made to the Department of Information Resources (DIR) office in the Disaster Recovery Operations building (DROC) located on North loop drive.

FNI team will render the professional services listed below:

1. Coordinate with DIR and Health Human Services (HHSC) to understand current routing and capacities of underground connections to the DROC building.
2. Confirm and detail the process for crossing N. Lamar Boulevard over or under with fiber. Coordinate license agreement and permitting requirements with the City of Austin (COA). Discuss and coordinate any recurring ROW lease fees that the State would have to pay for utilizing the ROW license agreement.
3. Review DIR/HHSC auditing records, on site surveys, pot holing, as-builts, and any information available.
4. Attend a site visit to walk the site, take photos, and investigate different options on routing fiber from JHW complex to DROC.
5. Investigate the potential for aerial connections from the JHW complex to the DROC building. If this option is agreed to by all parties, (TFC, HHSC and DIR) then there would be a need for locating new power poles to carry the fiber and surveying or pot holing for those locations as appropriate. Refer to Attachment 1 for potential fiber route segments.



North Austin Complex Telecommunications Fiber Routing Study-Draft Proposal
11/21/19
Page 2 of 3

6. Investigate the potential for underground connections from the JHW complex to the DROC building. If this option is agreed to by all parties, TFC, HHSC and DIR then there would be a need for locating new conduit and pull boxes to carry the fiber. Refer to Attachment 1 for potential fiber route segments.
 7. Coordination meetings with DIR and HHSC (3 on-site meetings). Define the exact demark in the existing JHW building.
 8. Coordination meetings with COA (3 onsite meetings)
 9. Coordination meetings with Austin Utility Location and Coordination Committee (AULCC) (3 onsite meetings)
 10. Prepare a report with different options on routing fiber from JHW complex to DROC building. Include a rough order of magnitude construction cost for each option. There will be a maximum of two (2) options evaluated per segment as shown on Attachment 1. The report will contain
 - i. Preliminary schematic layouts,
 - ii. Conceptual design criteria with appropriate exhibits to indicate the considerations involved
 - iii. Summary of FNI's findings and recommendations
 - iv. Rough order opinion of probable construction cost (OPCC) for the different options, (includes estimates of contingencies and allowances for charges of professionals and consultants).
 11. Meeting with TFC to discuss comments on draft report (on-site meeting)
 12. Incorporate comments and issue final report
 13. Subsurface Utility Investigation (See Attachment #3 for Scope of Work and fee)
 14. Datacom Design Subconsultant (See Attachment #4 for Scope of Work and fee)
 15. Geotechnical Engineering (See Attachment #5 for Scope of Work)
- Milestones and Deliverables:
 - Draft Report/OPCC with preliminary layouts for review and comment by TFC
 - 1 PDF
 - 4 hardcopies
 - Final Report/OPCC with final recommended layouts
 - 1 PDF
 - 4 hardcopies

SCHEDULE

FNI is authorized to commence work on the Project upon issuance of a Notice to Proceed (NTP) by the TFC following execution of an Agreement for the proposed services. FNI agrees to complete the study as shown on Attachment #2 Preliminary Schedule. The schedule will be dependent on receiving required documentation from the Client, Completion of SUE Survey, and Completion of Geotechnical Engineering Survey. If FNI services are delayed through no fault of FNI or FNI subconsultants, FNI shall be entitled to equitable adjustment of compensation and FNI shall be entitled to adjust contract schedule consistent with the number of days of delay.

COMPENSATION

FNI proposes to furnish professional services as described herein for a lump sum fee of Two Hundred Eleven Thousand One Hundred Eighty-One Dollars and Eleven Cents (\$211,181.11). The breakdown of this fee is attached.

North Austin Complex Telecommunications Fiber Routing Study-Draft Proposal
11/21/19
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If FNI sees the Scope of Services changing so that additional services are required, FNI will notify the CLIENT for the CLIENT's approval before proceeding. Additional services shall be computed based on effort required for additional tasks.

RESPONSIBILITIES OF CLIENT: Client shall perform the following in a timely manner so as not to delay the services of FNI:

Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.

Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this Agreement.

TERMS AND CONDITIONS OF AGREEMENT

We propose to furnish our services as described herein in accordance with Professional Services Agreement IDIQ No. 18-042-000.

We appreciate this opportunity to submit this proposal. If additional information or clarification is desired, please do not hesitate to contact us. If you agree with the services described above and wish for us to proceed with this assignment, please initiate contract proceedings as an assignment under our Professional Services Agreement IDIQ No. 18-042-000. Please refer to this letter, with attachments, on the face of the Assignment.

Sincerely,

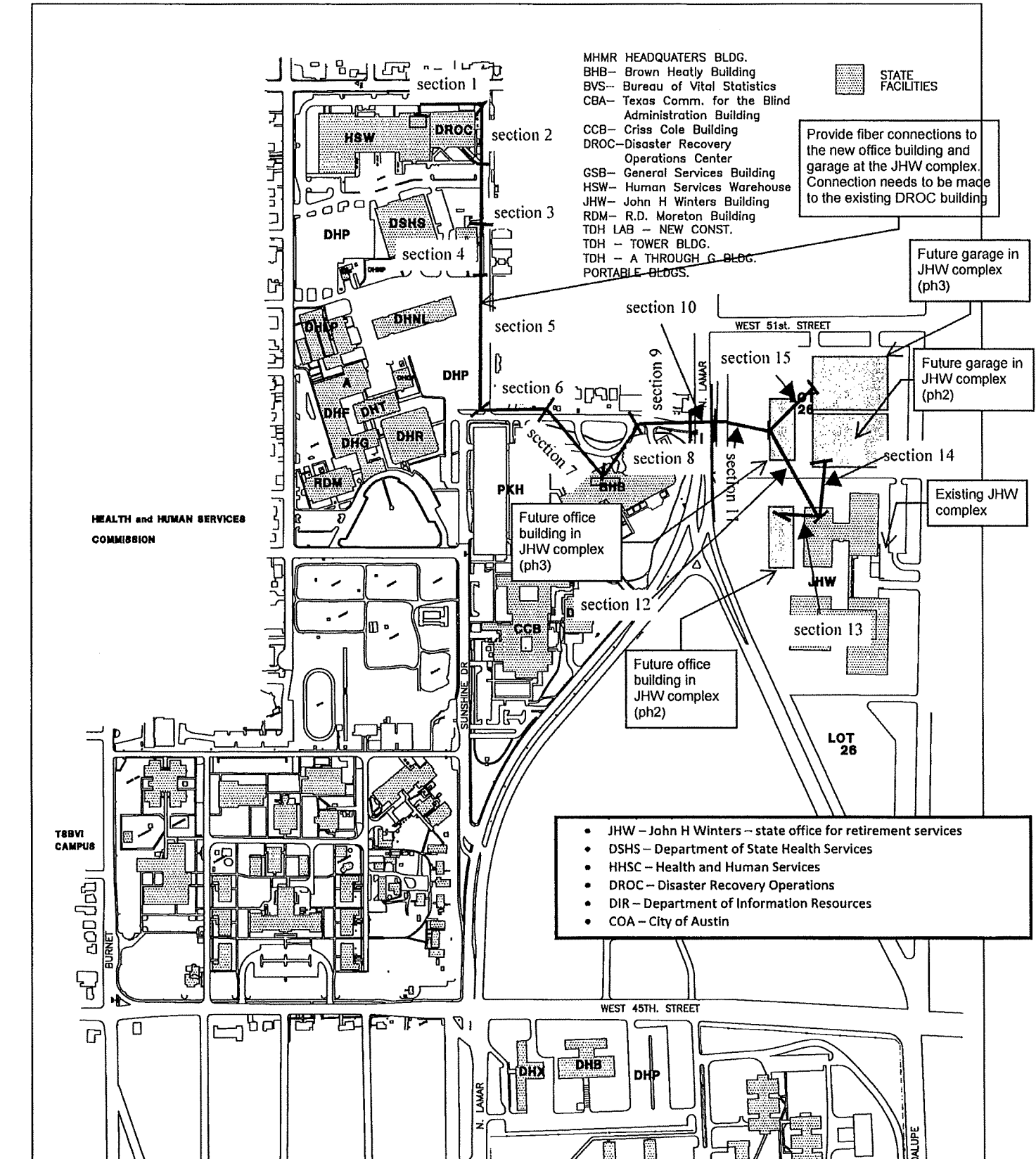
FREESE AND NICHOLS, INC.

Vimal Nair, P.E.
Vice President

Attachments:

- Attachment 1: Map of Potential Fiber Route Segments
- Attachment 2: Preliminary Schedule
- Attachment 3: The Rios Group Proposal
- Attachment 4: Datacom Engineering Proposal
- Attachment 5: Geotechnical Engineering Scope of Work
- Attachment 6: AE Exhibit List of Team Members
- Attachment 7: HUB Subcontracting Plan Form

ATTACHMENT 1



ATTACHMENT 2

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Task	Task Name	Duration	Start	Finish	Predecessors
43	QC Final Report & OGC	3 days	Fri 4/26/20	Thu 4/30/20	23
24	Pick up Final OGC comments	3 days	Fri 4/24/20	Thu 4/23/20	23
25	Prepare and Submit Final Report	1 day	Fri 4/24/20	Fri 4/24/20	24

Project: DCE Template Pre-Work

Order: Full L1/L1/L1

Task	Summary	Initiative Milestone	Duration only	Start-only	End-only Milestone	Milestone Progress
Task	Project Summary	Initiative Milestone	Manual Summary Roll-up	Roll-up only	Roll-up	
Milestone	Initiative Task	Manual Task	Manual Summary	Manual Task	Progress	

Page 1

ATTACHMENT 3

D A T A C O M D E S I G N G R O U P

Technology Solutions :: Building for the Future™

November 18, 2019

Teresa Castellón, P.E.
Electrical Engineer
Freese and Nichols, Inc.
4055 International Plaza, Ste. 200
Fort Worth, TX 76109

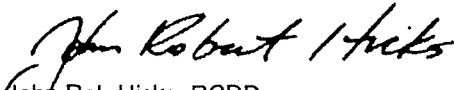
RE: **Technology Design and Consulting Services – NAC Telecom OSP Service**

Dear Teresa:

- a. Part 1-Study/Report: Investigate the solutions to enable telecom, fiber connections to the new office building and garage.
- Review DIR/HHSC auditing records, site surveys, pot holing, as-builts, record drawings, etc. Incorporate findings acquired from the NAC project relative to connectivity across Lamar/Guadalupe.
 - 16 hours
 - Attend a site visit to walk the site, take photos, and investigate different options on routing fiber from JHW complex to DROC. Meet with client to discuss.
 - 8 hours (site walk, meeting, mtg notes)
 - Look at DROC building for existing network room where connection will be made. Figure out how fiber will get from outside into the room.
 - 4 hours
 - Coordinate with DIR and HHSC to understand current routing and capacities of underground connections to the DROC building.
 - 4 hours
 - Provide a report with different options on routing fiber from JHW complex to DROC building. Include a rough order of magnitude construction cost for each option. Underground? Overhead? Etc.
 - 24 hours
 - Coordinate , meet with the City Of Austin on how to cross Lamar Street
 - 16 hours
 - Investigate and document permit application process and requirements
 - TFC, HHSC and DIR to review report and give feedback and meet with FNI team to discuss options.
 - (6) separate meetings, each being 4 hours (meeting plus mtg notes documentation)
 - 24 hours total
 - Subsurface Utility Investigation
 - After all parties agree on what would be the best option, we can put together a proposal for part 2, design.

Compensation: 96 hours / \$160 per hour = **\$15,360**

Sincerely,


John Rob Hicks, RCDD
Principal / President

ATTACHMENT 4



November 20, 2019

Teresa Castillon, P.E.
Electrical Engineer
Freese and Nichols, Inc.
4055 International Plaza, Ste. 200
Fort Worth, TX 76109
O: 817.735.7322
mtc@freese.com

**RE: Subsurface Utility Engineering
Texas Facilities Commission North Austin Complex – Fiber Route**

Dear Ms. Castillon:

The Rios Group, Inc. (TRG) is pleased to submit a cost proposal for Subsurface Utility Engineering (SUE) for the above referenced project. This proposal is based on information provided via email on October 25, 2019.

Introduction

TRG will perform SUE services for this project in general accordance with the recommended practices and procedures described in ASCE publication CI/ASCE 38-02 "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data." As described in the publication, four levels have been established to describe and depict the quality of subsurface utility information. The four quality levels are as follows:

- Quality Level D (QL"D") – Information obtained from existing utility records.
- Quality Level C (QL"C") – Surveyed data depicting visible above-ground features supplemented with QL"D" information.
- Quality Level B (QL"B") – Two-dimensional horizontal information obtained through the application and interpretation of non-destructive surface geophysical methods. Also known as "designating," this level incorporates QL"C" information and provides horizontal positioning of subsurface utilities to within approximately 1.0 foot.
- Quality Level A (QL"A") – Three-dimensional horizontal and vertical information obtained through non-destructive vacuum excavation equipment to expose utilities at critical points. Also known as "locating," this level incorporates QL"B" information and provides horizontal and vertical positioning of subsurface utilities to within approximately 0.05 feet.

Scope of Work

Based on information provided by Freese and Nichols, Inc. (Client), TRG has developed a proposed scope for SUE services on this project. This scope may be modified, with Client and TRG concurrence, during the performance of work if warranted by changing or unexpected field conditions.

575 Round Rock West Drive, Building K, Suite 400 | Round Rock, TX 78681 | Phone: 512.580.5440

Subsurface Utility Engineering | Utility Coordination

Texas Facilities Commission North Austin Complex – Fiber Route
November 20, 2019
Page 2 of 4

The scope of this proposal includes QL“A” and QL“B” SUE services for the Texas Facilities Commission (TFC) North Austin Complex Fiber Route project. The proposed fiber alignment is shown in Exhibit B. The QL“B” SUE limits include a 20-foot corridor centered on the proposed alignment (approximately 3,500 LF of alignment). TRG will attempt to designate the following utilities within this area: potable water, reclaimed water, chilled water, natural gas/crude oil/refined product pipelines, communication duct banks, fiber optic, cable television, telephone, and electric. Wastewater and storm drain facilities will be inverted at manholes, and will be depicted as QL“C” information. TRG will attempt to designate utility service lines. However, because service lines are often non-conductive, and often not shown on record information, service lines may not be depicted in the final deliverable. Irrigation lines and an inventory of overhead utilities are not included in this scope of work.

This proposal also includes fifteen (15) QL“A” SUE test holes at locations that will be provided by the Client following review of the QL“B” SUE data.

The survey of SUE field markings is also included in this scope of work. It is assumed that the Client will provide the necessary survey control information.

Any necessary Right-Of-Entry (ROE) permits, including railroad ROE, will be provided by the Client prior to the start of field work.

TRG Procedures

QL“D” and “C” – Records Research and Surface Feature Survey

It is the responsibility of the SUE provider to perform due-diligence with regard to records research and the acquisition of available utility records. The due-diligence provided for this project will consist of contacting the applicable One Call agency and associated utility owners/municipalities, visually inspecting the work area for evidence of utilities, and reviewing available utility record information. Additional utilities not identified through these efforts will be referred to as Unknown utilities.

QL“B” – Designating

Following a review of the project scope and available utility records with the project manager, TRG field personnel will begin designating the approximate horizontal position of known subsurface utilities within the project area. A suite of geophysical equipment that includes magnetic and electromagnetic induction will be used to designate conductive utilities. Where access is available, a sonde will be inserted into non-conductive utilities to provide a medium for transmission which can then be designated using geophysical equipment. Non-conductive utilities can also be designated using other proven methods, such as rodding and probing. TRG will make a reasonable attempt to designate Unknown utilities identified during field work; however, no guarantee is made that all Unknown utilities will be designated. Utilities will be marked and labeled to distinguish type and ownership. Field data depicting the designated utilities, as well as relevant surface features, will be produced to ensure accuracy and completeness of subsequent survey data. The TRG project manager will review the collected survey data, field data, and utility records for accuracy and completeness.

Texas Facilities Commission North Austin Complex – Fiber Route
November 20, 2019
Page 3 of 4

QL "A" – Locating

TRG will utilize non-destructive vacuum excavation equipment to excavate test holes at the requested locations. To layout the test holes, TRG will follow the QL "B" – Designating procedures described above. Once each utility is located, TRG will record the size, type, material, and depth. Test holes will be uniquely marked. Excavations will be backfilled by mechanical means with the appropriate material, and the original surface will be restored. If necessary, TRG can core pavement up to a depth of 12 inches. Asphalt surfaces will be repaired with an asphalt cold patch, and concrete cores will be epoxied in place, flush with the surrounding surface. TRG assumes that flowable fill will not be required when backfilling test holes and that full-section pavement repair (including sidewalks) will not be required to restore the original pavement surface. If requested, these services can be provided at an additional cost.

TRG will establish any necessary routine traffic control measures at no additional cost. However, if non-routine traffic control measures (lane closures, traffic detours, flagpersons, etc.) are required, this service will be invoiced as a direct expense. Due to the risk of damage, TRG will not attempt to probe or excavate test holes on AC water lines unless approval is obtained from the owner in advance. Additionally, excavation in rock, or to a depth greater than 18 feet, is considered beyond the scope of this proposal.

TRG has made the following assumptions with regard to the test holes on this project:

- All test holes will be accessible to truck-mounted vacuum excavation equipment.
- Right-Of-Way (ROW) permits from the City of Austin (COA) will be required. TRG will obtain all required City permits and ensure that coordination and compliance with the City is provided.
- Designed traffic control plans will be required. TRG will acquire the services of a qualified temporary traffic control engineering subcontractor, and ensure that all traffic control plans meet required standards.
- Non-routine traffic control measures will be required. TRG will acquire the services of a qualified Maintenance-Of-Traffic (MOT) Subcontractor, and ensure that adequate traffic control is provided.
- The coring of pavement will be required at eight locations.

Deliverables

TRG will provide the following as a final deliverable to the Client:

- A utility file in CAD format depicting all designated and located utilities. The Client will provide TRG with any necessary background files for use in completing the final deliverables.
- A summary sheet of all test hole coordinate data and depth information.
- 8.5" x 11" Test Hole Data Forms for all test hole locations completed. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

Texas Facilities Commission North Austin Complex – Fiber Route
November 20, 2019
Page 4 of 4

- 11" x 17" SUE Plan Sheets depicting all designated and located utilities. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

Schedule

TRG can mobilize within three (3) weeks of receiving Notice-To-Proceed (NTP). TRG estimates that the QL"B" SUE work can be completed in twenty-four (24) working days, broken down as follows:

- QL"B" field work – 7 days
- QL"B" survey and preparation of data – 7 days
- QL"B" deliverable preparation – 10 days

TRG estimates that the QL"A" SUE work can be completed in twenty-three working days following approval of the ROW permits, broken down as follows:

- QL"A" field work – 8 days
- QL"A" survey and preparation of data – 5 days
- QL"A" deliverable preparation – 10 days

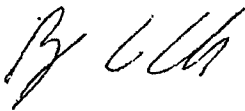
Estimated Fee

The total estimated cost to complete the work described herein is **Sixty-Four Thousand Two Hundred Forty-One Dollars and 74/100 (\$64,241.74)**. An itemized breakdown of cost is provided in Exhibit A. Please note that these pricings are based on an assumption of quantities, and that only actual quantities will be invoiced – up to the total Contract amount.

We look forward to working with you on this project. If there are any questions, please do not hesitate to call at 512.580.5440.

Respectfully,

The Rios Group, Inc.



Ryan C. Chapin, P.E.
Project Manager



THE RIOS GROUP

Estimate for Subsurface Utility Engineering
Texas Facilities Commission North Austin Complex
Fiber Route

EXHIBIT A

Hourly Office Labor	Rate	Assumed Quantity	Unit of Measure	Sub-Total
Key Personnel - Travis Isaacson	\$ 252.40	2	HR	\$ 504.80
Professional Engineer I (4-8)	\$ 136.84	20	HR	\$ 2,736.80
Engineer in Training I (0-5)	\$ 91.23	8	HR	\$ 729.84
CADD Technician IV (15-20)	\$ 79.07	20	HR	\$ 1,581.40
Field Manager	\$ 103.39	8	HR	\$ 827.12
Administrative Specialist V (20-25)	\$ 83.63	6	HR	\$ 501.78
Sub-Total				\$ 6,881.74
Direct Expenses	Rate	Assumed Quantity	Unit of Measure	Sub-Total
ROW Permit	\$ 550.00	4	EA	\$ 2,200.00
Designed Traffic Control Plan	\$ 3,500.00	1	LS	\$ 3,500.00
Traffic Control (Standard)	\$ 800.00	4	DAY	\$ 3,200.00
Survey (RPLS)	\$ 2,250.00	4	DAY	\$ 9,000.00
Sub-Total				\$ 17,900.00
QL"B" SUE Designating	Rate	Assumed Quantity	Unit of Measure	Sub-Total
One Person Crew	\$ 136.50	20	HR	\$ 2,730.00
Two Person Crew	\$ 210.00	70	HR	\$ 14,700.00
Sub-Total				\$ 14,700.00
QL"A" SUE Test Holes				
Unit Rate - Depth	Outside Pavement Rate	Assumed Quantity	Unit Of Measure	Sub-Total
0 - 5 feet	\$ 1,155.00	5	EA	\$ 5,775.00
5 - 8 feet	\$ 1,420.00	6	EA	\$ 8,520.00
8 - 13 feet	\$ 1,785.00	3	EA	\$ 5,355.00
13 - 20 feet	\$ 2,310.00	1	EA	\$ 2,310.00
Over 20 feet	\$ 2,875.00	0	EA	\$ -
Pavement Coring	\$ 350.00	8	EA	\$ 2,800.00
Test Hole Total		15		
Sub-Total				\$ 24,760.00
Total Estimated Cost				\$ 64,241.74

section 1

section 2

section 3

section 4

section 5

section 6

section 7

section 8

section 9

section 10

section 11

section 12

section 13

section 14

section 15

WEST 51st STREET

WEST 45TH. STREET

N. LAMAR

BURNET

LOT 26

HEALTH and HUMAN SERVICES COMMISSION

T88VI CAMPUS

MHMR HEADQUARTERS BLDG.
BHB - Brown Heatly Building
BVS - Bureau of Vital Statistics
CBA - Texas Comm. for the Blind Administration Building
CCB - Criss Cole Building
DROC - Disaster Recovery Operations Center
GSB - General Services Building
HSW - Human Services Warehouse
JHW - John H Winters Building
RDM - R.D. Moreton Building
TDH LAB - NEW CONST.
TDH - TOWER BLDG.
TDH - A THROUGH G BLDG.
PORTABLE BLDGS.

STATE FACILITIES

Provide fiber connections to the new office building and garage at the JHW complex. Connection needs to be made to the existing DROC building

Future garage in JHW complex (ph3)

Future garage in JHW complex (ph2)

Existing JHW complex

Future office building in JHW complex (ph3)

Future office building in JHW complex (ph2)

- JHW - John H Winters - state office for retirement services
- DSHS - Department of State Health Services
- HHSC - Health and Human Services
- DROC - Disaster Recovery Operations
- DIR - Department of Information Resources
- COA - City of Austin

ATTACHMENT 5

GEOTECHNICAL SCOPE OF WORK

CLIENT: Texas Facilities Commission

PROJECT: North Austin Complex Telecommunications Project - Proposed Electrical Line Improvements

PREPARED FOR: Teresa Castillon (1122)

October 29, 2019

This document provides details for the recommended geotechnical investigation for the design of the Electrical Line Improvements (telecommunications fiber connections) for the North Austin Complex Telecommunications Project for the Texas Facilities Commission. A summary of the various improvements is provided below.

- Up to 3,400 linear feet of either underground or overhead telecommunications fiber connections
- Includes a few road crossings. One major road crossing occurs at North Lamar Street.

The proposed geotechnical scope of work will consist of field exploration, laboratory testing, engineering analysis, and reporting as presented below.

Field Exploration

1. Select appropriate locations for exploratory borings along the proposed electrical line alignment.
2. The Engineer will coordinate with the Owner, City, TxDOT and Texas 811 regarding underground utilities within the vicinity of the planned boring locations and obtain relevant right-of-way permits prior to commencement of the field exploration activities.
3. Subcontract with a drilling contractor to drill exploratory borings for the proposed improvements according to the schedule provided below.
 - a. Up to a total of 12 borings along the proposed route. The borings will be about 30 feet in depth.
 - b. The borings will be advanced using standard rotary drilling equipment with continuous-flight augers (solid or hollow stem) or rotary wash methods. Subsurface samples will be collected using 3-inch diameter Shelby tubes for cohesive soils and a 2-inch diameter split-spoon sampler in conjunction with the Standard Penetration Test (SPT) for intermediate and non-cohesive soils. Rock and rock-like materials will be tested *in situ* using the Texas Cone Penetration (TCP) Test or the SPT, as appropriate for the material.
 - c. Groundwater observations within the borings will be recorded at the time of drilling and at the completion of drilling and sampling.
 - d. The borings will be backfilled with auger cuttings upon completion of drilling and sampling. Pavement sections will be patched to match the existing pavement surface.
 - e. It is possible that some of the borings will be drilled in a street. For budgeting purposes, one day of traffic control has been included with this scope. The traffic control is anticipated for the borings along Sunshine Drive. Traffic control consisting of flagmen, cones, and signs will be provided where necessary. Temporary and partial lane closures may be required during drilling. It has been assumed the borings along State Health Department Byway will be drilled in the parking lots just west of State Health Department Byway.
4. An Engineer or Geologist experienced in logging borings will direct the drilling, log the borings, and handle and transport the samples. Visual classification of the subsurface stratigraphy shall be

GEOTECHNICAL SCOPE OF WORK

provided according to ASTM D2488 and the Unified Soil Classification System (USCS) during drilling and sampling.

Laboratory Testing

1. Testing shall be performed on samples obtained from the borings to determine soil classification and pertinent engineering properties of the subsurface materials.
2. The Engineer will select samples for laboratory testing, assign tests, and review the test results.
3. Laboratory tests will be appropriately assigned for the specific subsurface materials encountered during exploration, but are expected to include:
 - a. Classification tests (liquid and plastic limits and percent passing the no. 200 sieve or gradation)
 - b. Moisture content
 - c. Unit dry weight
 - d. Unconfined compressive strength of soil

Engineering Analysis and Reporting

1. The Engineer will perform the geotechnical engineering analysis and prepare a technical memorandum summarizing the geotechnical investigation. The technical memorandum will include the following:
 - a. Appendix with the boring locations, boring logs, laboratory test results, and a key to the symbols used.
 - b. Discussion of subsurface conditions and soil properties indicated by the field and laboratory work and the implications for design.
 - c. Foundation design recommendations for power poles.
 - d. General discussion of expected construction related issues.
 - e. Earthwork related recommendations for use during development of plans and specifications.
2. Submittals will include an electronic PDF copy of the technical memorandum.

Additional Services

1. Site clearing required for access relating to geotechnical drilling and exploration.
2. Traffic control in excess of one day.

Texas Facilities Commission North Austin Complex Task	Texas Facilities Commission Telecomm for North Austin Complex 11/18/2019		Project Fee Summary	
	Detailed Cost Breakdown		Basic Services	\$ 37,361
			Special Services	\$ -
			Total Project	\$ 37,361

Phase	Task	Basic or Special	Task Description	Labor					Total Hours	Total Labor Effort
				Mike Smith	Hande Orlan	Margi Klupp	Aaron Brewer	Mark Thomas		
				Electrical PE/AFM	\$155	\$114	Chd PE	ETPE		
			Geotechnical Investigation							\$ -
			Project Setup/Kickoff and Project Meetings	2	2	1	1		6	\$ 1,047
			Field Exploration							\$ -
			Boring Layout/Location	1	1		4	2	8	\$ 1,361
			Site Reconnaissance/Slope Borings (1 mile Vial)		6				6	\$ 930
			Coordination with utilities, subs, property owners, City and ROW Permits		4	4	6		16	\$ 2,316
			Field Log Borings, Delivery of Samples to Lab and Travel							\$ -
			Laboratory Testing							\$ -
			Analysis and Review Lab Testing		2	2			4	\$ 538
			Draft and Review Logs		2	8	2		12	\$ 1,532
			Engineering Analysis and Reporting							\$ -
			Analysis and Calculations	2	4				6	\$ 1,058
			Geotechnical Investigation Memorandum	4	12	2			18	\$ 3,024
			Task Management	2	8		2		12	\$ 2,016
			Total Hours / Quantity	11	41	17	17	2	88	\$ -
			Total Effort	\$ 2,874	\$ 6,355	\$ 1,834	\$ 2,835	\$ 252		\$ 13,754

Texas Facilities Commission North Austin Complex Tele	Texas Facilities Commission Telecomm for North Austin Complex 11/18/2019 Detailed Cost Breakdown	Project Fee Summary
		Basic Services
		Special Services
		Total Project

Tasks			Expenses		
Phase	Task	Basic or Special	Task Description	Tech Charge	Total Expense
			Geotechnical Investigation		\$ -
			Project Setup/Kickoff and Project Meetings	6	\$ 51
			Field Exploration		\$ -
			Boring Layout/Location	6	\$ 68
			Site Reconnaissance/Strike Borings (1 site visit)	6	\$ 68
			Coordination with utilities, subs, property owners, City and ROW Permits	16	\$ 153
			Field Log Borings, Delivery of Samples to Lab and travel		\$ -
			Laboratory Testing		\$ -
			Assign and Review Lab Testing	4	\$ 34
			Draft and Review Logs	12	\$ 102
			Engineering Analysis and Reporting		\$ -
			Analysis and Calculations	6	\$ 51
			Geotechnical Investigation Memorandum	16	\$ 153
			Task Management	12	\$ 102
					\$ -
Total Hours / Quantity				88	60
Total Effort				716	35
					\$ 783

Texas Facilities Commission Austin Complex Telecomm	Texas Facilities Commission Telecomm for North Austin Complex 11/18/2019		Project Fee Summary	
	Detailed Cost Breakdown		Basic Services	37,381
			Special Services	-
			Total Project	37,381

Phase	Task	Basic or Special	Tasks		Subconsultants			Total	
			Task Description	Austin Geo	Beyond	Geoscience	Total Sub Effort	Total Effort	
			Geotechnical Investigation				\$ -	\$ -	
			Project Setup/Kickoff and Project Meetings				\$ -	\$ 1,098	
			Field Exploration	11,693		4,137	\$ 17,412	\$ 17,412	
			Boring Layout/Location				\$ -	\$ 1,328	
			Site Reconnaissance/Slake Borings (1 site visit)				\$ -	\$ 996	
			Coordination with utilities, subs, property owners, City and ROW Permits				\$ -	\$ 2,469	
			Field Log Borings, Delivery of Samples to Lab and Travel				\$ -	\$ -	
			Laboratory Testing		4,938		\$ 5,432	\$ 5,432	
			Assign and Review Lab Testing				\$ -	\$ 572	
			Draft and Review Logs				\$ -	\$ 1,634	
			Engineering Analysis and Reporting				\$ -	\$ -	
			Analysis and Calculations				\$ -	\$ 1,139	
			Geotechnical Investigation Memorandum				\$ -	\$ 3,177	
			Task Management				\$ -	\$ 2,120	
							\$ -	\$ -	
			Total Hours / Quantity	\$ 11,693	\$ 4,938	\$ 4,137			
			Total Effort	\$ 12,842	\$ 5,432	\$ 4,951	\$ 22,844	\$ 37,381	

BET (Laboratory Testing)

Task Descriptions	Quant.	Unit	Total
Atterberg Limits	24	\$	75.00 \$ 1,800.00
#200 Sieve	20	\$	40.00 \$ 800.00
Particle Size Gradation	4	\$	80.00 \$ 320.00
Moisture Content	12	\$	9.00 \$ 108.00
Moisture Content w/UDW			\$ -
Unconfined Compression	24	\$	65.00 \$ 1,560.00
Triaxial Test (UU)			\$ -
Direct Shear (CD)			\$ -
Triaxial Test (CU)			\$ -
Engineering Reporting Time	1	\$	200.00 \$ 200.00
			\$ -
Contingency	1	\$	150.00 \$ 150.00
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal Testing			\$ 4,938.00

[illegible]

Task Descriptions	Quant.	Unit	Total
Mobilization (Truck-mount)	150	\$	3.75 \$ 562.50
Drilling/Sampling (CFA in Soil)	180	\$	14.00 \$ 2,520.00
Rock Drilling	180	\$	16.00 \$ 2,880.00
Sample Boxes	15	\$	12.00 \$ 180.00
ROW Permits	4	\$	350.00 \$ 1,400.00
Traffic Control w/ Flaggers and Lane Closure	1	\$	3,000.00 \$ 3,000.00
Pavement Patch	11	\$	50.00 \$ 550.00
Per Diem	0	\$	300.00 \$ -
Stand-by (Contingency)	4	\$	150.00 \$ 600.00
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal Drilling			\$ 11,692.50

Describe Type (Structure, Pavement, etc.)	No. of Bore	Depth	Footage
Borings Along Electrical Line	12	30	360
			0
			0
			0
			0
			0
			0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
	0	0	0
Total:	12	---	360

Task Descriptions	Quant.	Unit	Total
Field Logging	30	\$ 85.00	\$ 2,550.00
Travel time to site	8	\$ 85.00	\$ 680.00
Per diem	3	\$ 225.00	\$ 675.00
Mileage	400	\$ 0.58	\$ 232.00
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal Drilling			\$ 4,137.00

[illegible]

ATTACHMENT 6

LIST OF PROJECT STAFF

A. Project Manager	Firm Freese and Nichols, Inc. Name Teresa Castillon, PE Address 4055 International Plaza Suite 200 Address Fort Worth, TX 76109 Phone 817-735-7322 (o) 817-739-8365 (cell) Teresa.Castillon@freese.com
B. (Sub-Consultant)	Firm Datacom Design Group Name John Robb Hicks, RCDD Address 7600 Burnet Road, Suite 350 Address Austin, Texas 78757 Phone 512-478-6001 JHicks@datacomdesign.com
C. (Sub-Consultant)	Firm The Rios Group Name Ryan Chapin, PE Address 575 Round Rock West Drive, Bldg K, Ste 400 Address Round Rock, TX 78681 Phone 512-580-5440 (o) 817-917-0374 (cell) rchapin@rios-group.com

Contract No. 18-042-000
Freese and Nichols, Inc.
Assignment No. 3
Project Number 16-030-8060

EXHIBIT B-3

LIST OF PSP'S PROJECT MANAGER AND SUBCONTRACTORS

LIST OF PROJECT STAFF

A. Project Manager	Firm Freese and Nichols, Inc. Name Teresa Castillon, PE Address 4055 International Plaza Suite 200 Address Fort Worth, TX 76109 Phone 817-735-7322 (o) 817-739-8365 (cell) Teresa.Castillon@freese.com
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