Corby Energy Services, Inc.

September 28, 2021

Region 4 Education Service Center (ESC)
7145 West Tidwell Road
Houston, Texas 77092

RE: Solicitation Number 22-04; Request for Proposal
Trenchless Technology Rehabilitation and Related Products and Services

By way of introduction, my name is David Carpenter, Vice President of Corby Energy Services, Inc. (Trenchless Division). In January 2015, our firm acquired the company Utility Services Authority, LLC[1] (previous holder of a TCPN, since March 2012). Utility Services Authority, LLC (USA) continues to perform work under the current TCPN contract.

In addition to that, Corby Energy Services, Inc. (CES) submitted a proposal and was awarded a contract by the National IPA on May 4th, 2017 (providing the same commodity/services as the current RFP). CES continues to perform Trenchless Technology Services utilizing award contract #R170801. In light of the aforementioned, CES has been successfully performing work through TCPN / National IPA, based Region 4 ESC Trenchless Solicitations, for the past 9 years.

The utilization of the National IPA award has increased traction in the industry by local municipalities, Road Commissions, and the Department of Transportation (TSC's). In 2020, we have seen sales of over $5.4 million through the TCPN / National IPA contracts.

In closing, we eagerly hope that we are awarded a contract to continue building client relationships regarding registered members.

Respectfully
David L. Carpenter, Jr.
David L. Carpenter, Jr.
Corby Energy Services, Inc.
Vice President – Trenchless Division
Women's Business Enterprise
dcarpenter@corbyenergy.com

[1] The acquiring of USA by CES has had no effect on performance, quality, capability, or scheduling of projects. USA was already housed at the same location as CES with some common ownership between the two companies (thus the transition was non-apparent and without hindrance to current customers).

TAB 1

DRAFT CONTRACT AND OFFER AND CONTRACT SIGNATURE FORM (APPENDIX A)

6001 Schooner St. • PO Box 970 • Belleville, MI 48112
Phone: 734.547.9237 • Fax: 734.547.0340

APPENDIX A

DRAFT CONTRACT

This Contract ("Contract") is made as of _____, 202X by and between _____ _____ ("Contractor") and Region 4 Education Service Center ("Region 4 ESC") for the purchase of _____ ("the products and services").

RECITALS

WHEREAS, Region 4 ESC issued Request for Proposals Number R_____ for _____ ("RFP"), to which Contractor provided a response ("Proposal"); and

WHEREAS, Region 4 ESC selected Contractor's Proposal and wishes to engage Contractor in providing the services/materials described in the RFP and Proposal;

WHEREAS, both parties agree and understand the following pages will constitute the Contract between the Contractor and Region 4 ESC, having its principal place of business at 7145 West Tidwell Road, Houston, TX 77092.

WHEREAS, Contractor included, in writing, any required exceptions or deviations from these terms, conditions, and specifications; and it is further understood that, if agreed to by Region 4 ESC, said exceptions or deviations are incorporated into the Contract.

WHEREAS, this Contract consists of the provisions set forth below, including provisions of all attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any attachment, the provisions set forth below shall control.

WHEREAS, the Contract will provide that any state and local governmental entities, public and private primary, secondary and higher education entities, non-profit entities, and agencies for the public benefit ("Public Agencies") may purchase products and services at prices indicated in the Contract upon the Public Agency's registration with OMNIA Partners.

1) Term of agreement. The term of the Contract is for a period of three (3) years unless terminated, canceled or extended as otherwise provided herein. Region 4 ESC shall have the right to renew the Contract for two (2) additional one-year periods or portions thereof. Region 4 ESC shall review the Contract prior to the renewal date and notify the Contractor of Region 4 ESC's intent renew the Contract. Contractor may elect not to renew by providing three hundred sixty-five days' (365) notice to Region 4 ESC. Notwithstanding the expiration of the initial term or any subsequent term or all renewal options, Region 4 ESC and Contractor may mutually agree to extend the term of this Agreement. Contractor acknowledges and understands Region 4 ESC is under no obligation whatsoever to extend the term of this Agreement.

   The anticipated full term of the contract is five (5) years. The Contractor shall have the right to enter local "service" agreements with Participating Public Agencies accessing the contract through OMNIA Partners, so long as the effective date of such agreement is prior to the expiration of the Contract. All local agreements may have a full potential term (any combination of initial and renewal periods) not to exceed five years. Any tasks or project

agreements executed against this Master Agreement during the effective term may survive beyond the expiration of the Master Agreement as established and agreed to by both parties.

2) Scope: Contractor shall perform all duties, responsibilities and obligations, set forth in this agreement, and described in the RFP, incorporated herein by reference as though fully set forth herein.

3) Form of Contract. The form of Contract shall be the RFP, the Offeror's proposal and Best and Final Offer(s).

4) Order of Precedence. In the event of a conflict in the provisions of the Contract as accepted by Region 4 ESC, the following order of precedence shall prevail:

   i. This Contract
   ii. Offeror's Best and Final Offer
   iii. Offeror's proposal
   iv. RFP and any addenda

5) Commencement of Work. The Contractor is cautioned not to commence any billable work or provide any material or service under this Contract until Contractor receives a purchase order for such work or is otherwise directed to do so in writing by Region 4 ESC.

6) Entire Agreement (Parol evidence). The Contract, as specified above, represents the final written expression of agreement. All agreements are contained herein and no other agreements or representations that materially alter it are acceptable.

7) Assignment of Contract. No assignment of Contract may be made without the prior written approval of Region 4 ESC. Contractor is required to notify Region 4 ESC when any material change in operations is made (i.e. bankruptcy, change of ownership, merger, etc.).

8) Novation. If Contractor sells or transfers all assets or the entire portion of the assets used to perform this Contract, a successor in interest must guarantee to perform all obligations under this Contract. Region 4 ESC reserves the right to accept or reject any new party. A change of name agreement will not change the contractual obligations of Contractor.

9) Contract Alterations. No alterations to the terms of this Contract shall be valid or binding unless authorized and signed by Region 4 ESC.

10) Adding Authorized Distributors/Dealers. Contractor is prohibited from authorizing additional distributors or dealers, other than those identified at the time of submitting their proposal, to sell under the Contract without notification and prior written approval from Region 4 ESC. Contractor must notify Region 4 ESC each time it wishes to add an authorized distributor or dealer. Purchase orders and payment can only be made to the Contractor unless otherwise approved by Region 4 ESC. Pricing provided to members by added distributors or dealers must also be less than or equal to the Contractor's pricing.

11) TERMINATION OF CONTRACT

   a) Cancellation for Non-Performance or Contractor Deficiency. Region 4 ESC may terminate the Contract if purchase volume is determined to be low volume in any 12-month period. Region 4 ESC reserves the right to cancel the whole or any part of this Contract due to failure by Contractor to carry out any obligation, term or condition of the contract. Region

4 ESC may issue a written deficiency notice to Contractor for acting or failing to act in any of the following:

i. Providing material that does not meet the specifications of the Contract;
ii. Providing work or material was not awarded under the Contract;
iii. Failing to adequately perform the services set forth in the scope of work and specifications;
iv. Failing to complete required work or furnish required materials within a reasonable amount of time;
v. Failing to make progress in performance of the Contract or giving Region 4 ESC reason to believe Contractor will not or cannot perform the requirements of the Contract; or
vi. Performing work or providing services under the Contract prior to receiving an authorized purchase order.

Upon receipt of a written deficiency notice, Contractor shall have ten (10) days to provide a satisfactory response to Region 4 ESC. Failure to adequately address all issues of concern may result in Contract cancellation. Upon cancellation under this paragraph, all goods, materials, work, documents, data and reports prepared by Contractor under the Contract shall immediately become the property of Region 4 ESC.

b) Termination for Cause. If, for any reason, Contractor fails to fulfill its obligation in a timely manner, or Contractor violates any of the covenants, agreements, or stipulations of this Contract Region 4 ESC reserves the right to terminate the Contract immediately and pursue all other applicable remedies afforded by law. Such termination shall be effective by delivery of notice, to the Contractor, specifying the effective date of termination. In such event, all documents, data, studies, surveys, drawings, maps, models and reports prepared by Contractor will become the property of the Region 4 ESC. If such event does occur, Contractor will be entitled to receive just and equitable compensation for the satisfactory work completed on such documents.

c) Delivery/Service Failures. Failure to deliver goods or services within the time specified, or within a reasonable time period as interpreted by the purchasing agent or failure to make replacements or corrections of rejected articles/services when so requested shall constitute grounds for the Contract to be terminated. In the event Region 4 ESC must purchase in an open market, Contractor agrees to reimburse Region 4 ESC, within a reasonable time period, for all expenses incurred.

d) Force Majeure. If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil or military authority; insurrections; riots; epidemics; landslides; lighting; earthquake; fires; hurricanes; storms; floods; washouts; droughts; arrests; restraint of government and people; civil disturbances; explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by

acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty.

e) Standard Cancellation. Region 4 ESC may cancel this Contract in whole or in part by providing written notice. The cancellation will take effect 30 business days after the other party receives the notice of cancellation. After the 30th business day all work will cease following completion of final purchase order.

12) Licenses. Contractor shall maintain in current status all federal, state and local licenses, bonds and permits required for the operation of the business conducted by Contractor. Contractor shall remain fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of services under the Contract. Region 4 ESC reserves the right to stop work and/or cancel the Contract if Contractor's license(s) expire, lapse, are suspended or terminated.

13) Survival Clause. All applicable software license agreements, warranties or service agreements that are entered into between Contractor and Region 4 ESC under the terms and conditions of the Contract shall survive the expiration or termination of the Contract. All Purchase Orders issued and accepted by Contractor shall survive expiration or termination of the Contract.

14) Delivery. Conforming product shall be shipped within 7 days of receipt of Purchase Order. If delivery is not or cannot be made within this time period, the Contractor must receive authorization for the delayed delivery. The order may be canceled if the estimated shipping time is not acceptable. All deliveries shall be freight prepaid, F.O.B. Destination and shall be included in all pricing offered unless otherwise clearly stated in writing.

15) Inspection & Acceptance. If defective or incorrect material is delivered, Region 4 ESC may make the determination to return the material to the Contractor at no cost to Region 4 ESC. The Contractor agrees to pay all shipping costs for the return shipment. Contractor shall be responsible for arranging the return of the defective or incorrect material.

16) Payments. Payment shall be made after satisfactory performance, in accordance with all provisions thereof, and upon receipt of a properly completed invoice.

17) Price Adjustments. Should it become necessary or proper during the term of this Contract to make any change in design or any alterations that will increase price, Region 4 ESC must be notified immediately. Price increases must be approved by Region 4 ESC and no payment for additional materials or services, beyond the amount stipulated in the Contract shall be paid without prior approval. All price increases must be supported by manufacturer documentation, or a formal cost justification letter. Contractor must honor previous prices for thirty (30) days after approval and written notification from Region 4 ESC. It is the Contractor's responsibility to keep all pricing up to date and on file with Region 4 ESC. All price changes must be provided to Region 4 ESC, using the same format as was provided and accepted in the Contractor's proposal.

Price reductions may be offered at any time during Contract. Special, time-limited reductions are permissible under the following conditions: 1) reduction is available to all users equally; 2) reduction is for a specific period, normally not less than thirty (30) days; and 3) original price is not exceeded after the time-limit. Contractor shall offer Region 4 ESC any published price reduction during the Contract term.

18) Audit Rights. Contractor shall, at its sole expense, maintain appropriate due diligence of all purchases made by Region 4 ESC and any entity that utilizes this Contract. Region 4 ESC reserves the right to audit the accounting for a period of three (3) years from the time such purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. Region 4 ESC shall have the authority to conduct random audits of Contractor's pricing at Region 4 ESC's sole cost and expense. Notwithstanding the foregoing, in the event that Region 4 ESC is made aware of any pricing being offered that is materially inconsistent with the pricing under this agreement, Region 4 ESC shall have the ability to conduct an extensive audit of Contractor's pricing at Contractor's sole cost and expense. Region 4 ESC may conduct the audit internally or may engage a third-party auditing firm. In the event of an audit, the requested materials shall be provided in the format and at the location designated by Region 4 ESC.

19) Discontinued Products. If a product or model is discontinued by the manufacturer, Contractor may substitute a new product or model if the replacement product meets or exceeds the specifications and performance of the discontinued model and if the discount is the same or greater than the discontinued model.

20) New Products/Services. New products and/or services that meet the scope of work may be added to the Contract. Pricing shall be equivalent to the percentage discount for other products. Contractor may replace or add product lines if the line is replacing or supplementing products, is equal or superior to the original products, is discounted similarly or greater than the original discount, and if the products meet the requirements of the Contract. No products and/or services may be added to avoid competitive procurement requirements. Region 4 ESC may require additions to be submitted with documentation from Members demonstrating an interest in, or a potential requirement for, the new product or service. Region 4 ESC may reject any additions without cause.

21) Options. Optional equipment for products under Contract may be added to the Contract at the time they become available under the following conditions: 1) the option is priced at a discount similar to other options; 2) the option is an enhancement to the unit that improves performance or reliability.

22) Warranty Conditions. All supplies, equipment and services shall include manufacturer's minimum standard warranty and one (1) year labor warranty unless otherwise agreed to in writing.

23) Site Cleanup. Contractor shall clean up and remove all debris and rubbish resulting from their work as required or directed. Upon completion of the work, the premises shall be left in good repair and an orderly, neat, clean, safe and unobstructed condition.

24) Site Preparation. Contractor shall not begin a project for which the site has not been prepared, unless Contractor does the preparation work at no cost, or until Region 4 ESC includes the cost of site preparation in a purchase order. Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.

25) Registered Sex Offender Restrictions. For work to be performed at schools, Contractor agrees no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are or are reasonably expected to be present. Contractor agrees a violation of this condition shall be considered a

material breach and may result in the cancellation of the purchase order at Region 4 ESC's discretion. Contractor must identify any additional costs associated with compliance of this term. If no costs are specified, compliance with this term will be provided at no additional charge.

26) Safety measures. Contractor shall take all reasonable precautions for the safety of employees on the worksite and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Contractor shall post warning signs against all hazards created by its operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

27) Smoking. Persons working under the Contract shall adhere to local smoking policies. Smoking will only be permitted in posted areas or off premises.

28) Stored materials. Upon prior written agreement between the Contractor and Region 4 ESC, payment may be made for materials not incorporated in the work but delivered and suitably stored at the site or some other location, for installation at a later date. An inventory of the stored materials must be provided to Region 4 ESC prior to payment. Such materials must be stored and protected in a secure location and be insured for their full value by the Contractor against loss and damage. Contractor agrees to provide proof of coverage and additionally insured upon request. Additionally, if stored offsite, the materials must also be clearly identified as property of Region 4 ESC and be separated from other materials. Region 4 ESC must be allowed reasonable opportunity to inspect and take inventory of stored materials, on or offsite, as necessary. Until final acceptance by Region 4 ESC, it shall be the Contractor's responsibility to protect all materials and equipment. Contractor warrants and guarantees that title for all work, materials and equipment shall pass to Region 4 ESC upon final acceptance.

29) Funding Out Clause. A Contract for the acquisition, including lease, of real or personal property is a commitment of Region 4 ESC's current revenue only. Region 4 ESC retains the right to terminate the Contract at the expiration of each budget period during the term of the Contract and is conditioned on a best effort attempt by Region 4 ESC to obtain appropriate funds for payment of the contract.

30) Indemnity. Contractor shall protect, indemnify, and hold harmless both Region 4 ESC and its administrators, employees and agents against all claims, damages, losses and expenses arising out of or resulting from the actions of the Contractor, Contractor employees or subcontractors in the preparation of the solicitation and the later execution of the Contract. Any litigation involving either Region 4 ESC, its administrators and employees and agents will be in Harris County, Texas.

31) Marketing. Contractor agrees to allow Region 4 ESC to use their name and logo within website, marketing materials and advertisement. Any use of Region 4 ESC name and logo or any form of publicity, inclusive of press releases, regarding this Contract by Contractor must have prior approval from Region 4 ESC.

32) Certificates of Insurance. Certificates of insurance shall be delivered to the Region 4 ESC prior to commencement of work. The Contractor shall give Region 4 ESC a minimum of ten (10) days' notice prior to any modifications or cancellation of policies. The Contractor shall require all subcontractors performing any work to maintain coverage as specified.

33) Legal Obligations. It is Contractor's responsibility to be aware of and comply with all local, state, and federal laws governing the sale of products/services and shall comply with all laws while fulfilling the Contract. Applicable laws and regulation must be followed even if not specifically identified herein.

OFFER AND CONTRACT SIGNATURE FORM

The undersigned hereby offers and, if awarded, agrees to furnish goods and/or services in strict compliance with the terms, specifications and conditions at the prices proposed within response unless noted in writing.

Company Name: Corby Energy Services, INC.

Address: 6001 Schooner Drive

City/State/Zip: Belleville, Michigan 48111

Telephone No.: 734-547-9237

Email Address: dcarpenter@corbyenergy.com

Printed Name: David Carpenter

Title: Vice President

Authorized signature: DC

Accepted by Region 4 ESC:

Contract No. _____

Initial Contract Term _____ to _____

_____ _____

Region 4 ESC Authorized Board Member — Date

_____

Print Name

_____ _____

Region 4 ESC Authorized Board Member — Date

_____

Print Name

Corby Energy Services, Inc.

August 16, 2021

RE: Letter of Authorization – David L. Carpenter, Jr.

To whom it may concern:

David L. Carpenter, Jr., serving in his capacity of Vice-President of Trenchless Operations of Corby Energy Services, Inc., does hereby have authority to bind the company in contractual matters related to work performed by the company. This authorization includes the ability to sign bid documents, contractual documents, change orders, etc. related to the business of the company.

This authorization shall extend for one year from the date written above, unless revoked earlier.

Should you have any further questions, please contact me at (734) 547-9237 or jmoskal@corbyenergy.com.

Sincerely,

James A. Moskal
Corporate Secretary
Corby Energy Services, Inc.
A Certified Woman-Owned Business
WBENC 2005119629
jmoskal@corbyenergy.com
office: (734) 547-9237
mobile: (313) 350-4955

Corby Energy Services, Inc.

TAB 1.a

TERMS AND CONDITIONS ACCEPTANCE FORM (APPENDIX B)

6001 Schooner St. • PO Box 970 • Belleville, MI 48112
Phone: 734.547.9237 • Fax: 734.547.0340

Appendix B

TERMS & CONDITIONS ACCEPTANCE FORM

Signature on the Offer and Contract Signature form certifies complete acceptance of the terms and conditions in this solicitation and draft Contract except as noted below with proposed substitute language (additional pages may be attached, if necessary). The provisions of the RFP cannot be modified without the express written approval of Region 4 ESC. If a proposal is returned with modifications to the draft Contract provisions that are not expressly approved in writing by Region 4 ESC, the Contract provisions contained in the RFP shall prevail.

Check one of the following responses:

☒ Offeror takes no exceptions to the terms and conditions of the RFP and draft Contract.

(*Note: If none are listed below, it is understood that no exceptions/deviations are taken.)*

☐ Offeror takes the following exceptions to the RFP and draft Contract. All exceptions must be clearly explained, reference the corresponding term to which Offeror is taking exception and clearly state any proposed modified language, proposed additional terms to the RFP and draft Contract must be included:

(*Note: Unacceptable exceptions may remove Offeror's proposal from consideration for award. Region 4 ESC shall be the sole judge on the acceptance of exceptions and modifications and the decision shall be final.*

If an offer is made with modifications to the contract provisions that are not expressly approved in writing, the contract provisions contained in the RFP shall prevail.)

Section/Page	Term, Condition, or Specification	Exception/Proposed Modification	Accepted (For Region 4 ESC's use)

TAB 2

PRODUCTS / PRICING

6001 Schooner St. • PO Box 970 • Belleville, MI 48112
Phone: 734.547.9237 • Fax: 734.547.0340

i) **Pricing:** See attached product pricing affixed to the end of this tab.

ii) **Discounts from manufacturer's price list:** N/A - prices are not derived from a manufacturer's product list. Projects are priced on site specific circumstances in relationship to the pricing provide herein.

iii) **Is pricing available for all products and services:** We do not utilize a product catalogue. Therefore, we only offer pricing for those products specifically listed in our affixed price list (which is contained within this tab).

iv) **Describe any additional charges or fees:** All charges for our products are listed in our pricing section. For any work type or product type not listed, we can supply those on an agreed upon cost-plus basis as noted in sections "N" & "O" of our pricing list.

v) **Provide any information regarding warranties for products and/or services:** All products and services are backed by a one-year warranty.

vi) **Describe any additional discounts or rebates available:** N/A

vii) **Describe how customers will verify they are receiving contract pricing:** Customers will have access to the pricing listed in this section and will be able to self-verify that they are getting not-to-exceed pricing as submitted in relationship to SN# 22-04.

viii) **Describe payment methods offered:** Payment may be made via check or customers can be set-up with electronic payment. Customers wishing to pay electronically will be set-up in our system through our AP/AR department.

ix) **Propose the frequency of updates to the offerors pricing structure:** Pricing is held for the duration of the award period.

x) **Describe how future product introductions will be priced and align with contract pricing proposed:** Future products and services will be offered based on the current structure of units of one, lump sum, each, square foot, T&M, etc. Prices will always consider the remaining time of the current award period and remain firm during that timeframe.

xi) **Describe any other information relevant to this section:** Below is a snapshot of the general list of **products and services we provide**:

a. Water Cured-in-Place Pipe
b. Ultraviolet Cured-in-Place Pipe
c. Ambient Cured-in-Place Pipe
d. Pipe Bursting
e. Slip Lining
f. Internal pipe repairs
g. Manhole Rehabilitation
h. Clean and CCTV of Pipes
i. Associated appurtenances, miscellaneous work, including excavation, backfill, embankment, restoration, etc.
j. Traffic Maintenance
k. Lateral Renewal

TAB 2 - Pricing

Not to Exceed Pricing

Unlike fixed pricing the awarded vendor can adjust submitted pricing lower if need but, cannot exceed original pricing submitted for solicitation.

Vendor must allow for lower pricing to be available for similar product and service purchases.

SN#: 22-04 10/5/2021
Corby Energy Services, Inc.
"Trenchless Technology Rehabilitation & Related Products & Services"

TCPN - Trenchless Technology Rehabilitation
Section A-1: Water Cured-in-place pipe (CIPP) reconstruction of gravity sewers (clean&CCTV in section J) **100/LF minimum**

	Quantity	Unit	Unit Price
6" x 4.5mm	1	LF	$ 65.00
8" x 6.0mm	1	LF	$ 70.00
10" x 6.0mm	1	LF	$ 75.00
12" x 6.0mm	1	LF	$ 85.00
15" x 7.5mm	1	LF	$ 110.00
18" x 9.0mm	1	LF	$ 125.00
21" x 9.0mm	1	LF	$ 140.00
24" x 10.5mm	1	LF	$ 175.00
27"x 10.5mm	1	LF	$ 225.00
30" x 12.0mm	1	LF	$ 250.00
33" x 12.0mm	1	LF	$ 325.00
36" x 12.0mm	1	LF	$ 375.00
42" x 13.5mm	1	LF	$ 450.00
48" x 15.0mm	1	LF	$ 550.00
54" x 18.0mm	1	LF	$ 1,000.00
6" & 8" Additional 1.5mm	1	LF	$ 5.00
10" & 12" Additional 1.5mm	1	LF	$ 10.00
15" & 18" Additional 1.5mm	1	LF	$ 15.00
21" & 24" Additional 1.5mm	1	LF	$ 20.00
27" Additional 1.5mm	1	LF	$ 25.00
30" Additional 1.5mm	1	LF	$ 30.00
33" Additional 1.5mm	1	LF	$ 35.00
36" Additional 1.5mm	1	LF	$ 40.00
42" Additional 1.5mm	1	LF	$ 45.00
48" Additional 1.5mm	1	LF	$ 50.00
54" Additional 1.5mm	1	LF	$ 55.00
6" - 10" Backyard Easement Setup Per Install Length	1	LF	$ 15.00
12" - 18" Backyard Easement Setup Per Install Length	1	LF	$ 20.00
Timber / Matting for Large Diameter Setup	1	SY	$ 225.00
Internal Reconnection of service connection by robotic cutter	1	EA	$ 375.00
Sealing of service connection w/chemical grouting after internal reconnection, minimum quantity of 15 to be completed per mobilization.	1	EA	$ 750.00

Note: Any CIPP over 54" will be on an individual quote basis.

TCPN - Trenchless Technology Rehabilitation **100/LF minimum**
Section A-2: Ultraviolet Cured-in-place pipe (CIPP) reconstruction of gravity sewers (clean&CCTV in section J)

	Quantity	Unit	Unit Price
6" x 4.5mm	1	LF	$ 100.00
8" x 6.0mm	1	LF	$ 100.00
10" x 6.0mm	1	LF	$ 125.00
12" x 6.0mm	1	LF	$ 150.00
15" x 7.5mm	1	LF	$ 165.00
18" x 9.0mm	1	LF	$ 170.00
21" x 9.0mm	1	LF	$ 200.00
24" x 10.5mm	1	LF	$ 200.00

27"x 10.5mm	1	LF	$ 225.00
30" x 12.0mm	1	LF	$ 250.00
33" x 12.0mm	1	LF	$ 300.00
36" x 12.0mm	1	LF	$ 325.00
42" x 13.5mm	1	LF	$ 400.00
48" x 15.0mm	1	LF	$ 475.00
54" x 18.0mm	1	LF	$ 800.00
6" & 8" Additional 1.5mm	1	LF	$ 5.00
10" & 12" Additional 1.5mm	1	LF	$ 10.00
15" & 18" Additional 1.5mm	1	LF	$ 15.00
21" & 24" Additional 1.5mm	1	LF	$ 20.00
27" Additional 1.5mm	1	LF	$ 25.00
30" Additional 1.5mm	1	LF	$ 30.00
33" Additional 1.5mm	1	LF	$ 35.00
36" Additional 1.5mm	1	LF	$ 40.00
42" Additional 1.5mm	1	LF	$ 45.00
48" Additional 1.5mm	1	LF	$ 50.00
54" Additional 1.5mm	1	LF	$ 55.00
6" - 10" Backyard Easement Setup Per Install Length	1	LF	$ 15.00
12" - 18" Backyard Easement Setup Per Install Length	1	LF	$ 20.00
Timber / Matting for Large Diameter Setup	1	SY	$ 225.00
Internal Reconnection of service connection by robotic cutter	1	EA	$ 375.00
Sealing of service connection w/chemical grouting after internal reconnection, minimum quantity of 15 to be completed per mobilization.	1	EA	$ 750.00

Note: Any CIPP over 54" will be on an individual quote basis.

Section B: CIPP renewal of potable water mains - Inser name of NSF certified product (clean &CCTV section J)
proposed:_____ PROPRIETARY Licensed products at owners direction

(Proposer must include copy of NSF certification of product in proposal, and include a letter from manufacturer of product stating that proposer is a licensed and approved installer of the product.)

	Quantity	Unit	Unit Price
6" diameter liner	1	LF	$240.00
8" diameter liner	1	LF	$300.00
10" diameter liner	1	LF	$345.00
12" diameter liner	1	LF	$440.00
Re-opening of service connections internally	1	EA	$500.00
Setup fee per liner installation	1	EA	$7,500.00
14" and greater priced based on design needs per section N			
For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M			

Section C: Pipe Bursting labor only with HDPE/FPVC for Sewer Lines (clean &CCTV section J). Material Sec. N & M

100/LF minimum

HDPE	Quantity	Unit	Unit Price
6-inch diameter	1	LF	$ 50.00
8-inch diameter	1	LF	$ 55.00
10-inch diameter	1	LF	$ 60.00
12-inch diameter	1	LF	$ 65.00
14-inch diameter	1	LF	$ 75.00
16-inch diameter	1	LF	$ 80.00
18-inch diameter	1	LF	$ 85.00
20-inch diameter	1	LF	$ 90.00
24-inch diameter	1	LF	$ 95.00
30-inch diameter	1	LF	$ 100.00
36-inch diameter	1	LF	$ 110.00
Over 36" diameter priced on design needs per section N			

Setup fee per Pipe Bursting segment	1	EA	$ 7,500.00

Manhole Connections	Quantity	Unit	Unit Price
6-inch	1	EA	$ 250.00
8-inch	1	EA	$ 300.00
10-inch	1	EA	$ 325.00
12-inch	1	EA	$ 375.00
14-inch	1	EA	$ 400.00
16-inch	1	EA	$ 450.00
18-inch	1	EA	$ 500.00
20-inch	1	EA	$ 600.00

24-inch and above per section N

Installation and Valve, Hydrant or Service Connection Pits (**add Fittings, exc., etc., from other sections**)

6 - 12 inch pipe connection	Quantity	Unit	Unit Price
a) 0-4 feet deep	1	EA	$ 1,500.00
b) 4-6 feet deep	1	EA	$ 2,000.00
c) 6-10 feet deep	1	EA	$ 7,500.00

Clean-out Installation			
4-inch	1	EA	$ 750.00
6-inch	1	EA	$ 1,000.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M
100' minumum

Sewer Lateral Pipe Bursting	Quantity	Unit	Unit Price
4-inch	1	LF	$ 100.00
6-inch	1	LF	$ 110.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Section D: Pipe Bursting (labor only) Pre-Chlorinated Water Main (sec M, material sec. N, clean &CCTV sec. J)

HDPE/FPVC (DR determined per job basis)

	Quantity	Unit	Unit Price
3-inch diameter	1	LF	$ 55.00
4-inch diameter	1	LF	$ 60.00
6-inch diameter	1	LF	$ 65.00
8-inch diameter	1	LF	$ 70.00
10-inch diameter	1	LF	$ 75.00
12-inch diameter	1	LF	$ 80.00
14-inch diameter	1	LF	$ 90.00
16-inch diameter	1	LF	$ 95.00
18-inch diameter	1	LF	$ 100.00
20-inch diameter	1	LF	$ 105.00
24-inch diameter	1	LF	$ 110.00
30-inch diameter	1	LF	$ 115.00
36-inch diameter	1	LF	$ 120.00

Over 36" diameter see section N

Setup fee per Pipe Bursting segment	1	EA	$ 7,500.00

For any pits required refer to "Installation and Valve, Hydrant or
or Service Connection Pits" in Section M
*Pipe fusing not included, reference **Pipe Fusing** section below

Fittings (applies to all Polyethylene/FPC processes)

a) Bends and sleeves

	Quantity	Unit	Unit Price
6-inch	1	EA	$ 275.00

8-inch	1	EA	$ 350.00
10-inch	1	EA	$ 450.00
12-inch	1	EA	$ 500.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

b) Tees (applies to all Polyethylene/FPVC processes)

	Quantity	Unit	Unit Price
6x6x4	1	EA	$ 1,000.00
6x6x6	1	EA	$ 1,100.00
8x8x4	1	EA	$ 1,200.00
8x8x6	1	EA	$ 1,200.00
8x8x8	1	EA	$ 1,200.00
10x10x4	1	EA	$ 1,400.00
10x10x6	1	EA	$ 1,400.00
10x10x8	1	EA	$ 1,400.00
10x10x10	1	EA	$ 1,400.00
	Quantity	**Unit**	**Unit Price**
12x12x6	1	EA	$ 1,500.00
12x12x8	1	EA	$ 1,500.00
12x12x10	1	EA	$ 1,500.00
12x12x12	1	EA	$ 1,500.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Gate Valves

	Quantity	Unit	Unit Price
4-inch	1	EA	$ 1,250.00
6-inch	1	EA	$ 1,750.00
8-inch	1	EA	$ 2,750.00
10-inch	1	EA	$ 3,000.00
12-inch	1	EA	$ 3,500.00

Note: For any Fittings/Gate Valves 14-inch & larger pricing will be based on Section M & N.

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

	Quantity	Unit	Unit Price
Fire Hydrants	1	EA	$ 4,250.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Connection at Services

	Quantity	Unit	Unit Price
a) Up to 1" service, short side up to 5-feet			
6-inch main	1	EA	$ 750.00
8-inch main	1	EA	$ 800.00
10-inch main	1	EA	$ 850.00
12-inch main	1	EA	$ 900.00
b) Up to 2" service, short side up to 5-feet			$ -
6-inch main	1	EA	$ 800.00
8-inch main	1	EA	$ 850.00
10-inch main	1	EA	$ 900.00
12-inch main	1	EA	$ 950.00
c) Up to 1" service, long side up to 30-feet			$ -
6-inch main	1	EA	$ 1,000.00
8-inch main	1	EA	$ 1,050.00
10-inch main	1	EA	$ 1,100.00
12-inch main	1	EA	$ 1,150.00

d) Up to 2" service, long side up to 30-feet			$ -
6-inch main	1	EA	$ 1,200.00
8-inch main	1	EA	$ 1,250.00
10-inch main	1	EA	$ 1,300.00
12-inch main	1	EA	$ 1,350.00
e) Additional service length			$ -
Over 30-feet x 1"	1	LF	$ 20.00
Over 30-feet x 2"	1	LF	$ 25.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

	Quantity	Unit	Unit Price
Line Stops			
4-inch	1	EA	$ 8,000.00
6-inch	1	EA	$ 8,500.00
8-inch	1	EA	$ 10,000.00
10-inch	1	EA	$ 12,500.00
12-inch	1	EA	$ 15,000.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Bypass for water main pipe bursting or water main CIPP lining

	Quantity	Unit	Unit Price
2-inch temporary	1	LF	$ 30.00
4-inch temporary	1	LF	$ 35.00

over 4" temporary see section N

Temporary service connections for water main bypass (above ground)

	Quantity	Unit	Unit Price
2-inch short side	1	EA	$ 500.00
2-inch long side	1	EA	$ 750.00
4-inch short side	1	EA	$ 750.00
4-inch long side	1	EA	$ 1,000.00

Section E: Polyethylene (PE) Sewer Pipe Sliplining/Culverts. Labor only. Material sec. M, clean/CCTV sec. J

			100/LF minimum
PE Pipe (DR determined per job basis)	Quantity	Unit	Unit Price
4-inch	1	LF	$ 50.00
6-inch	1	LF	$ 55.00
8-inch	1	LF	$ 60.00
10-inch	1	LF	$ 60.00
12-inch	1	LF	$ 65.00
18-inch	1	LF	$ 75.00
24-inch	1	LF	$ 85.00
30-inch	1	LF	$ 95.00
36-inch	1	LF	$ 125.00
42-inch	1	LF	$ 200.00
48-inch	1	LF	$ 300.00
54-inch	1	LF	$ 375.00
63-inch	1	LF	$ 450.00
Annular Space - Grouting	1	CY	$ 400.00
Bulkheads	1	EA	$ 1,000.00

Fusion not included - see fusion/jpoining per sect. L section below

Section F: Pre-Chlorination Procedure for Rehabilitation of Existing Water Lines.

			100/LF minimum
Pipe material	Quantity	Unit	Unit Price
4-inch	1	LF	$ 35.00
6-inch	1	LF	$ 45.00
8-inch	1	LF	$ 55.00
10-inch	1	LF	$ 60.00

12-inch	1	LF	$ 65.00

Pressure Testing (2 hour test)	**Quantity**	**Unit**	**Unit Price**
4-12 inch	1	LF	$ 3.00
15-18 inch	1	LF	$ 5.00
21-24 inch	1	LF	$ 10.00
Larger than 24-inch price based on Section N time and material cost plus basis			
Setup fee per Pressure Tested pipe segment	1	EA Setup	$ 950.00
Charge Water	1	K-Gals	$ 75.00

Chlorination	**Quantity**	**Unit**	**Unit Price**
4-inch	1	LF	$ 2.00
6-inch	1	LF	$ 2.00
8-inch	1	LF	$ 2.00
10-inch	1	LF	$ 3.00
12-inch	1	LF	$ 4.00
15-inch	1	LF	$ 5.00
18-inch	1	LF	$ 6.00
20-inch	1	LF	$ 7.00
24-inch and larger price based on Section N time and material cost plus basis			
Setup fee per Chlorination pipe segment		EA Setup	$ 950.00

	Quantity	**Unit**	**Unit Price**
BT Test	1	EA	$ 500.00
Flushing			
4-20 inch	1	LF	$ 0.52
Charge Water	1	K-Gals	$ 0.52
Disposal in sanitary			
All sizes	1	K-Gals	$ 75.00

Section G: Smoke & Dye testing

	Quantity	**Unit**	**Unit Price**
Smoke Testing	1	HR	$ 240.00
Dye testing	1	HR	$ 240.00
Incidentals	1	Per 100/LF	$ 150.00

Section H: Manhole Rehabilitation **100/LF minimum**	**Quantity**	**Unit**	**Unit Price**
installation of 24" diameter chimney seals	1	EA	$ 750.00
Installation of manhole frame rain insert	1	EA	$ 300.00
Grouting of heavy infiltration to facilitate manhole rehab	1	Gallon	$ 20.00
Manhole rehabilitation - cementitious	1	SQFT	$ 25.00
Manhole rehabilitation - epoxy	1	SQFT	$ 35.00
Manhole rehabilitation - polyurethane	1	SQFT	$ 45.00
set-up for grouting	1	EA	$ 750.00

Section I: Gravity Sewer CIPP Lateral Renewal Systems, sec, J and M applies

4"-6" Internal installation and cure of lateral connection at main up to 1' from main <15"dia - No cleanout required	1	EA	$ 5,500.00
4"-6" Internal installation and cure up to 20' main <15"dia - Cleanout required	1	EA	$ 7,500.00

4"-6" Installation and cure of structural lateral liner from main beyond 20' from

main <15" dia	1	LF	$ 150.00
4"-6" Installation and cure of structural lateral liner from surface clean out to main	1	LF	$ 155.00
4"-6" Set-up charge per line section for installations of <20 total laterals per project	1	EA	$ 1,750.00
4"-6" installation of a surface cleanout or access pit for Items #2 & #4	1	EA	$ 4,750.00

Section J: Clean/TV & Evaluation of Culverts, Sewer &Water Lines

Other sections for by-pass, disposal, traffic, etc may apply	Quantity	Unit	Unit Price
6" - 12" Light Clean & TV sewer	1	LF	$ 20.00
15" - 21" Light Clean & TV sewer	1	LF	$ 25.00
24" - 33" Light Clean & TV sewer	1	LF	$ 30.00
36" & 42" Light Clean & TV sewer	1	LF	$ 40.00
48" & 54" Light Clean & TV sewer	1	LF	$ 50.00
6" - 15" Post TV Inspection after Rehabilitation	1	LF	$ 2.00
18" - 27" Post TV Inspection after Rehabilitation	1	LF	$ 3.00
30" or Larger Post TV Inspection after Rehabilitation	1	LF	$ 4.00
Re-setup for clean & TV Inspection Due to Point Repairs	1	EA	$ 500.00
Heavy Clean 6" - 54" sewers	1	HR	$ 450.00
Root Removal	1	HR	$ 450.00
Grease Removal	1	HR	$ 450.00
Other Remote Obstruction Removal (max. 10 LF)	1	HR	$ 450.00
Above Ground Physical Inspection	1	HR	$ 450.00

Section K: Bypass for gravity Sewers and associated items

	Quantity	Unit	Unit Price
Set Up 4" Pump (Per Pump)	1	EA	$ 750.00
Set Up 6" Pump (Per Pump)	1	EA	$ 1,500.00
Set Up 8" Pump (Per Pump)	1	EA	$ 3,000.00
Set Up 12" Pump (Per Pump)	1	EA	$ 5,000.00
Set Up 4" Piping	1	LF	$ 50.00
Set Up 6" Piping	1	LF	$ 75.00
Set Up 8" Piping	1	LF	$ 100.00
Set up 12" Piping	1	LF	$ 150.00
Operate 4" Pumping System	1	DAY	$ 1,750.00
Operate 6" Pumping System	1	DAY	$ 2,500.00
Operate 8" Pumping System	1	DAY	$ 3,000.00
Operate 12" Pumping System	1	DAY	$ 5,000.00
Bypass - Driveway Ramp (Setup, Operate, Maintain)	1	EA	$ 1,000.00
Bypass - Street Ramp (Setup, Operate, Maintain)	1	EA	$ 2,500.00
Bypass Plan (3rd Party Certified)	1	EA	$ 5,000.00

Section L: Pipe fusing/joining-applicable to all Polyethylene/FPVC processes listed on this contract

i) Stick Pipe	Quantity	Unit	Unit Price
Setup fee per pull segment	1	Per Segment	$ 2,000.00
6 thru 12 inch	1	Per foot	$ 20.00

13 thru 18 inch	1	Per foot	$ 25.00
20 thru 24 inch	1	Per foot	$ 50.00
30 thru 42 inch	1	Per foot	$ 75.00
43 thru 48 inch	1	Per foot	$ 100.00

ii) Electrofuse Couplings	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 275.00
12-inch	1	EA	$ 375.00
14-inch	1	EA	$ 575.00
18-inch	1	EA	$ 825.00
20-inch	1	EA	$ 1,150.00
24-inch and larger price based on Section M & N			

iii) Poly flanges with Backup rings (bolts not included)	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 275.00
12-inch	1	EA	$ 325.00
14-inch	1	EA	$ 600.00
18-inch	1	EA	$ 900.00
20-inch	1	EA	$ 1,300.00
24-inch and larger price based on Section M & N			

iv) Poly MJ Adapters with Backup rings (bolts not included)	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 300.00
12-inch	1	EA	$ 350.00
14-inch	1	EA	$ 500.00
18-inch	1	EA	$ 750.00
20-inch	1	EA	$ 1,250.00
24-inch and larger price based on Section M & N			

v) S.S. HDPE pipe stiffeners	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 200.00
12-inch	1	EA	$ 225.00
14-inch	1	EA	$ 250.00
18-inch	1	EA	$ 275.00
20-inch	1	EA	$ 300.00
24-inch and larger price based on Section M & N			

vi) Ductile Iron 90/45/22.5 degree elbows (bolts not included)	**Quantity**	**Unit**	**Unit Price**
12"	1	EA	$ 750.00
14"	1	EA	$ 900.00
18"	1	EA	$ 1,750.00
20"	1	EA	$ 2,250.00
24-inch and larger price based on Section M & N			

vii) Mega Lugs			
12"	1	EA	$ 175.00
14"	1	EA	$ 350.00
18"	1	EA	$ 550.00
20"	1	EA	$ 750.00
24-inch and larger price based on Section M &N			

viii) Sleeves	**Quantity**	**Unit**	**Unit Price**
12"	1	EA	$ 400.00
14"	1	EA	$ 500.00
18"	1	EA	$ 1,000.00
20"	1	EA	$ 1,500.00
24-inch and larger price based on section M & N			

Section M: Additional Items which may apply to each section of the contract

	Quantity	Unit	Unit Price
Mobilization	1	EA	$ 25,000.00
Mobilization for certain projects fall under section N			
Erosion Control Barrier	1	LF	$ 20.00

Maintenance Of Traffic (Residential/Non-DOT Regulated)	Quantity	Unit	Unit Price
a) Signage	1	EA/Day	$ 50.00
b) Flag person (1)	1	HR	$ 150.00
c) Arrow Board	1	Day/EA	$ 125.00
d) Attenuator	1	Day/EA	$ 2,500.00
e) Lane or shoulder closure	1	Day/EA	$ 2,000.00
d) Traffic Control Plan (certified)	1	EA	$ 5,000.00
e) Detours and specials performed are billed under section N			

Excavation/Backfill	Quantity	Unit	Unit Price
a) 0-4 feet deep	1	Cubic Ft	$ 10.00
b) 4-6 feet deep	1	Cubic Ft	$ 15.00
c) 6-10 feet deep	1	Cubic Ft	$ 20.00
d) Vacuum Excavation	1	HR	$ 350.00
e) over 10 feet deep refer to Section N			

Trench Shoring	Quantity	Unit	Unit Price
a) 4-6 feet deep	1	LF Trench/Day	$ 100.00
b) 6-10 feet deep	1	LF Trench/Day	$ 200.00
c) Temporary steel sheeting	1	SF	$ 50.00
d) over 10 feet deep refer to section N			

Surface Restoration	Quantity	Unit	Unit Price
a) Sod	1	SF	$ 10.00
b) Seed / Mulch	1	SF	$ 1.00
c) Netting	1	SF	$ 1.00
d) 4-inch concrete	1	SF	$ 25.00
e) 6-inch concrete	1	SF	$ 35.00
f) 8-inch concrete	1	SF	$ 45.00
g) 10-inch concrete	1	SF	$ 55.00
h) Up to 4-inch asphalt	1	SF	$ 30.00
i) Up to 6-inch asphalt	1	SF	$ 40.00
j) Up to 8-inch asphalt	1	SF	$ 50.00
k) Curb	1	LF	$ 75.00
l) Saw cut	1	LF	$ 10.00
m) Milling mobilization	1	EA	$ 10,000.00
n) Milling (500 SF minimum)	1	SF	$ 5.00
0) Flexamat	1	SF	$ 20.00

Material & service extras	Quantity	Unit	Unit Price
a) Crushed aggregate or concrete	1	Ton	$ 75.00
b) Washed aggregate	1	Ton	$ 75.00
c) Imported Sand	1	Ton	$ 75.00
d) Gravel	1	Ton	$ 75.00
e) Flowable fill	1	CY	$ 300.00
f) Injecteds soil stabilization	1	Pound	$ 15.00
g) Clear and grub of vegetation (not including trees)	1	ACRE	$ 7,500.00
h) Slope restoration	1	SF	$ 10.00
i) Concrete cloth to repair pipe inverts	1	SF	$ 20.00
j) Rip rap	1	TON	$ 150.00

Section N: Time and Material Unit Rates for Change Orders or other services

Materials, Subcontractors and Rentals, cost plus 15%
Corby Energy Services, Inc. Labor, Equipment, & per diem cost plus 15%
Sales Taxes = Per Jurisdiction
Labor including burdens, per diems, and lodging (may vary by area). Prevailing wage rates if applicable.

Section O: Additional charges tht may apply per project

Bonds
OCP
Permits
Inspection fees
Water charges
Disposal fees
Special access reuirements
Tree removal

Section P: Cured In Place Point Repairs. Section J applies

Main Pipeline size	Thickness	Length	Price
6"	4.5 mm	1 foot	$ 800.00
8"	4.5 mm	1 foot	$ 975.00
10"	4.5 mm	1 foot	$ 1,000.00
12"	6.0 mm	1 foot	$ 1,050.00
14"	6.0 mm	1 foot	$ 1,125.00
15"	6.0 mm	1 foot	$ 1,125.00
18"	6.0 mm	1 foot	$ 1,235.00
21"	7.5 mm	1 foot	$ 1,375.00
24"	7.5 mm	1 foot	$ 1,400.00
27"	7.5 mm	1 foot	$ 1,450.00
30"	7.5 mm	1 foot	$ 1,550.00
36"	7.5 mm	1 foot	$ 1,775.00
42"	9.0 mm	1 foot	$ 2,250.00
48"	12.0 mm	1 foot	$ 2,500.00

Section Q: Mechanical Internal Joint Seals. Section J applies

	Quantity	Unit	Unit Price
a) 24" Seals	1	Each	$ 3,400.00
b) 27" Seals	1	Each	$ 3,500.00
c) 30" Seals	1	Each	$ 3,600.00
d) 33" Seals	1	Each	$ 3,750.00
e) 36" Seals	1	Each	$ 3,800.00
f) 42" Seals	1	Each	$ 4,000.00
g) 48" Seals	1	Each	$ 4,300.00
h) 54" Seals	1	Each	$ 4,800.00
i) 60" Seals	1	Each	$ 5,400.00
j) 66" Seals	1	Each	$ 7,900.00
k) 72" Seals	1	Each	$ 8,750.00
l) Seals larger than 72" - see section N			

Section R: Drainage Structures. Other Sections May Apply

	Quantity	Unit	Unit Price
a) 24" diameter	1	Each	$ 5,000.00
b) 36" diameter	1	Each	$ 7,000.00

c) 48" diameter	1	Each	$ 9,500.00
d) 60" diameter	1	Each	$ 12,500.00
e) 72" diameter	1	Each	$ 16,000.00
f) Adjust Structures to grade	1	Each	$ 2,500.00
h) End sections R/R or reset up to 30"	1	Each	$ 5,500.00
i) End sections R/R or reset up to 48"	1	Each	$ 9,500.00
j) End sections R/R or reset up to 72"	1	Each	$ 14,500.00
k) Structure Reconstruct (top 36")	1	Each	$ 4,000.00
l) Structures/end sections larger than 72" - see section N			

All material pricing listed above is based upon market price at the time of original contract award. Pricing may be increased or decreased depending on significant changes in market indicators as compared to the date of the award.

TAB 2 - Pricing

Not to Exceed Pricing

Unlike fixed pricing the awarded vendor can adjust submitted pricing lower if need but, cannot exceed original pricing submitted for solicitation.

Vendor must allow for lower pricing to be available for similar product and service purchases.

SN#: 22-04 10/5/2021
Corby Energy Services, Inc.
"Trenchless Technology Rehabilitation & Related Products & Services"

TCPN - Trenchless Technology Rehabilitation
Section A-1: Water Cured-in-place pipe (CIPP) reconstruction of gravity sewers (clean&CCTV in section J) **100/LF minimum**

	Quantity	Unit	Unit Price
6" x 4.5mm	1	LF	$ 65.00
8" x 6.0mm	1	LF	$ 70.00
10" x 6.0mm	1	LF	$ 75.00
12" x 6.0mm	1	LF	$ 85.00
15" x 7.5mm	1	LF	$ 110.00
18" x 9.0mm	1	LF	$ 125.00
21" x 9.0mm	1	LF	$ 140.00
24" x 10.5mm	1	LF	$ 175.00
27"x 10.5mm	1	LF	$ 225.00
30" x 12.0mm	1	LF	$ 250.00
33" x 12.0mm	1	LF	$ 325.00
36" x 12.0mm	1	LF	$ 375.00
42" x 13.5mm	1	LF	$ 450.00
48" x 15.0mm	1	LF	$ 550.00
54" x 18.0mm	1	LF	$ 1,000.00
6" & 8" Additional 1.5mm	1	LF	$ 5.00
10" & 12" Additional 1.5mm	1	LF	$ 10.00
15" & 18" Additional 1.5mm	1	LF	$ 15.00
21" & 24" Additional 1.5mm	1	LF	$ 20.00
27" Additional 1.5mm	1	LF	$ 25.00
30" Additional 1.5mm	1	LF	$ 30.00
33" Additional 1.5mm	1	LF	$ 35.00
36" Additional 1.5mm	1	LF	$ 40.00
42" Additional 1.5mm	1	LF	$ 45.00
48" Additional 1.5mm	1	LF	$ 50.00
54" Additional 1.5mm	1	LF	$ 55.00
6" - 10" Backyard Easement Setup Per Install Length	1	LF	$ 15.00
12" - 18" Backyard Easement Setup Per Install Length	1	LF	$ 20.00
Timber / Matting for Large Diameter Setup	1	SY	$ 225.00
Internal Reconnection of service connection by robotic cutter	1	EA	$ 375.00
Sealing of service connection w/chemical grouting after internal reconnection, minimum quantity of 15 to be completed per mobilization.	1	EA	$ 750.00

Note: Any CIPP over 54" will be on an individual quote basis.

TCPN - Trenchless Technology Rehabilitation **100/LF minimum**
Section A-2: Ultraviolet Cured-in-place pipe (CIPP) reconstruction of gravity sewers (clean&CCTV in section J)

	Quantity	Unit	Unit Price
6" x 4.5mm	1	LF	$ 100.00
8" x 6.0mm	1	LF	$ 100.00
10" x 6.0mm	1	LF	$ 125.00
12" x 6.0mm	1	LF	$ 150.00
15" x 7.5mm	1	LF	$ 165.00
18" x 9.0mm	1	LF	$ 170.00
21" x 9.0mm	1	LF	$ 200.00
24" x 10.5mm	1	LF	$ 200.00

27"x 10.5mm	1	LF	$ 225.00
30" x 12.0mm	1	LF	$ 250.00
33" x 12.0mm	1	LF	$ 300.00
36" x 12.0mm	1	LF	$ 325.00
42" x 13.5mm	1	LF	$ 400.00
48" x 15.0mm	1	LF	$ 475.00
54" x 18.0mm	1	LF	$ 800.00
6" & 8" Additional 1.5mm	1	LF	$ 5.00
10" & 12" Additional 1.5mm	1	LF	$ 10.00
15" & 18" Additional 1.5mm	1	LF	$ 15.00
21" & 24" Additional 1.5mm	1	LF	$ 20.00
27" Additional 1.5mm	1	LF	$ 25.00
30" Additional 1.5mm	1	LF	$ 30.00
33" Additional 1.5mm	1	LF	$ 35.00
36" Additional 1.5mm	1	LF	$ 40.00
42" Additional 1.5mm	1	LF	$ 45.00
48" Additional 1.5mm	1	LF	$ 50.00
54" Additional 1.5mm	1	LF	$ 55.00
6" - 10" Backyard Easement Setup Per Install Length	1	LF	$ 15.00
12" - 18" Backyard Easement Setup Per Install Length	1	LF	$ 20.00
Timber / Matting for Large Diameter Setup	1	SY	$ 225.00
Internal Reconnection of service connection by robotic cutter	1	EA	$ 375.00
Sealing of service connection w/chemical grouting after internal reconnection, minimum quantity of 15 to be completed per mobilization.	1	EA	$ 750.00

Note: Any CIPP over 54" will be on an individual quote basis.

Section B: CIPP renewal of potable water mains - Inser name of NSF certified product (clean &CCTV section J)
proposed:_____ PROPRIETARY Licensed products at owners direction

(Proposer must include copy of NSF certification of product in proposal, and include a letter from manufacturer of product stating that proposer is a licensed and approved installer of the product.)

	Quantity	Unit	Unit Price
6" diameter liner	1	LF	$240.00
8" diameter liner	1	LF	$300.00
10" diameter liner	1	LF	$345.00
12" diameter liner	1	LF	$440.00
Re-opening of service connections internally	1	EA	$500.00
Setup fee per liner installation	1	EA	$7,500.00
14" and greater priced based on design needs per section N			
For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M			

Section C: Pipe Bursting labor only with HDPE/FPVC for Sewer Lines (clean &CCTV section J). Material Sec. N & M

100/LF minimum

HDPE	Quantity	Unit	Unit Price
6-inch diameter	1	LF	$ 50.00
8-inch diameter	1	LF	$ 55.00
10-inch diameter	1	LF	$ 60.00
12-inch diameter	1	LF	$ 65.00
14-inch diameter	1	LF	$ 75.00
16-inch diameter	1	LF	$ 80.00
18-inch diameter	1	LF	$ 85.00
20-inch diameter	1	LF	$ 90.00
24-inch diameter	1	LF	$ 95.00
30-inch diameter	1	LF	$ 100.00
36-inch diameter	1	LF	$ 110.00
Over 36" diameter priced on design needs per section N			

Setup fee per Pipe Bursting segment	1	EA	$ 7,500.00

Manhole Connections	Quantity	Unit	Unit Price
6-inch	1	EA	$ 250.00
8-inch	1	EA	$ 300.00
10-inch	1	EA	$ 325.00
12-inch	1	EA	$ 375.00
14-inch	1	EA	$ 400.00
16-inch	1	EA	$ 450.00
18-inch	1	EA	$ 500.00
20-inch	1	EA	$ 600.00

24-inch and above per section N

Installation and Valve, Hydrant or Service Connection Pits (**add Fittings, exc., etc., from other sections**)

6 - 12 inch pipe connection	Quantity	Unit	Unit Price
a) 0-4 feet deep	1	EA	$ 1,500.00
b) 4-6 feet deep	1	EA	$ 2,000.00
c) 6-10 feet deep	1	EA	$ 7,500.00

Clean-out Installation

4-inch	1	EA	$ 750.00
6-inch	1	EA	$ 1,000.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

100' minumum

Sewer Lateral Pipe Bursting	Quantity	Unit	Unit Price
4-inch	1	LF	$ 100.00
6-inch	1	LF	$ 110.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Section D: Pipe Bursting (labor only) Pre-Chlorinated Water Main (sec M, material sec. N, clean &CCTV sec. J)

HDPE/FPVC (DR determined per job basis)

	Quantity	Unit	Unit Price
3-inch diameter	1	LF	$ 55.00
4-inch diameter	1	LF	$ 60.00
6-inch diameter	1	LF	$ 65.00
8-inch diameter	1	LF	$ 70.00
10-inch diameter	1	LF	$ 75.00
12-inch diameter	1	LF	$ 80.00
14-inch diameter	1	LF	$ 90.00
16-inch diameter	1	LF	$ 95.00
18-inch diameter	1	LF	$ 100.00
20-inch diameter	1	LF	$ 105.00
24-inch diameter	1	LF	$ 110.00
30-inch diameter	1	LF	$ 115.00
36-inch diameter	1	LF	$ 120.00

Over 36" diameter see section N

Setup fee per Pipe Bursting segment	1	EA	$ 7,500.00

For any pits required refer to "Installation and Valve, Hydrant or or Service Connection Pits" in Section M

*Pipe fusing not included, reference **Pipe Fusing** section below

Fittings (applies to all Polyethylene/FPC processes)

a) Bends and sleeves

	Quantity	Unit	Unit Price
6-inch	1	EA	$ 275.00

8-inch	1	EA	$ 350.00
10-inch	1	EA	$ 450.00
12-inch	1	EA	$ 500.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

b) Tees (applies to all Polyethylene/FPVC processes)

	Quantity	Unit	Unit Price
6x6x4	1	EA	$ 1,000.00
6x6x6	1	EA	$ 1,100.00
8x8x4	1	EA	$ 1,200.00
8x8x6	1	EA	$ 1,200.00
8x8x8	1	EA	$ 1,200.00
10x10x4	1	EA	$ 1,400.00
10x10x6	1	EA	$ 1,400.00
10x10x8	1	EA	$ 1,400.00
10x10x10	1	EA	$ 1,400.00
	Quantity	**Unit**	**Unit Price**
12x12x6	1	EA	$ 1,500.00
12x12x8	1	EA	$ 1,500.00
12x12x10	1	EA	$ 1,500.00
12x12x12	1	EA	$ 1,500.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Gate Valves

	Quantity	Unit	Unit Price
4-inch	1	EA	$ 1,250.00
6-inch	1	EA	$ 1,750.00
8-inch	1	EA	$ 2,750.00
10-inch	1	EA	$ 3,000.00
12-inch	1	EA	$ 3,500.00

Note: For any Fittings/Gate Valves 14-inch & larger pricing will be based on Section M & N.

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

	Quantity	Unit	Unit Price
Fire Hydrants	1	EA	$ 4,250.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Connection at Services

	Quantity	Unit	Unit Price
a) Up to 1" service, short side up to 5-feet			
6-inch main	1	EA	$ 750.00
8-inch main	1	EA	$ 800.00
10-inch main	1	EA	$ 850.00
12-inch main	1	EA	$ 900.00
b) Up to 2" service, short side up to 5-feet			$ -
6-inch main	1	EA	$ 800.00
8-inch main	1	EA	$ 850.00
10-inch main	1	EA	$ 900.00
12-inch main	1	EA	$ 950.00
c) Up to 1" service, long side up to 30-feet			$ -
6-inch main	1	EA	$ 1,000.00
8-inch main	1	EA	$ 1,050.00
10-inch main	1	EA	$ 1,100.00
12-inch main	1	EA	$ 1,150.00

d) Up to 2" service, long side up to 30-feet			$ -
6-inch main	1	EA	$ 1,200.00
8-inch main	1	EA	$ 1,250.00
10-inch main	1	EA	$ 1,300.00
12-inch main	1	EA	$ 1,350.00
e) Additional service length			$ -
Over 30-feet x 1"	1	LF	$ 20.00
Over 30-feet x 2"	1	LF	$ 25.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

	Quantity	Unit	Unit Price
Line Stops			
4-inch	1	EA	$ 8,000.00
6-inch	1	EA	$ 8,500.00
8-inch	1	EA	$ 10,000.00
10-inch	1	EA	$ 12,500.00
12-inch	1	EA	$ 15,000.00

For any pits required refer to "Installation and Valve, Hydrant or Service Connection Pits" in Section M

Bypass for water main pipe bursting or water main CIPP lining

	Quantity	Unit	Unit Price
2-inch temporary	1	LF	$ 30.00
4-inch temporary	1	LF	$ 35.00

over 4" temporary see section N

Temporary service connections for water main bypass (above ground)

	Quantity	Unit	Unit Price
2-inch short side	1	EA	$ 500.00
2-inch long side	1	EA	$ 750.00
4-inch short side	1	EA	$ 750.00
4-inch long side	1	EA	$ 1,000.00

Section E: Polyethylene (PE) Sewer Pipe Sliplining/Culverts. Labor only. Material sec. M, clean/CCTV sec. J

			100/LF minimum
PE Pipe (DR determined per job basis)	Quantity	Unit	Unit Price
4-inch	1	LF	$ 50.00
6-inch	1	LF	$ 55.00
8-inch	1	LF	$ 60.00
10-inch	1	LF	$ 60.00
12-inch	1	LF	$ 65.00
18-inch	1	LF	$ 75.00
24-inch	1	LF	$ 85.00
30-inch	1	LF	$ 95.00
36-inch	1	LF	$ 125.00
42-inch	1	LF	$ 200.00
48-inch	1	LF	$ 300.00
54-inch	1	LF	$ 375.00
63-inch	1	LF	$ 450.00
Annular Space - Grouting	1	CY	$ 400.00
Bulkheads	1	EA	$ 1,000.00

Fusion not included - see fusion/jpoining per sect. L section below

Section F: Pre-Chlorination Procedure for Rehabilitation of Existing Water Lines.

			100/LF minimum
Pipe material	Quantity	Unit	Unit Price
4-inch	1	LF	$ 35.00
6-inch	1	LF	$ 45.00
8-inch	1	LF	$ 55.00
10-inch	1	LF	$ 60.00

12-inch	1	LF	$ 65.00

Pressure Testing (2 hour test)	**Quantity**	**Unit**	**Unit Price**
4-12 inch	1	LF	$ 3.00
15-18 inch	1	LF	$ 5.00
21-24 inch	1	LF	$ 10.00
Larger than 24-inch price based on Section N time and material cost plus basis			
Setup fee per Pressure Tested pipe segment	1	EA Setup	$ 950.00
Charge Water	1	K-Gals	$ 75.00

Chlorination	**Quantity**	**Unit**	**Unit Price**
4-inch	1	LF	$ 2.00
6-inch	1	LF	$ 2.00
8-inch	1	LF	$ 2.00
10-inch	1	LF	$ 3.00
12-inch	1	LF	$ 4.00
15-inch	1	LF	$ 5.00
18-inch	1	LF	$ 6.00
20-inch	1	LF	$ 7.00
24-inch and larger price based on Section N time and material cost plus basis			
Setup fee per Chlorination pipe segment		EA Setup	$ 950.00

	Quantity	**Unit**	**Unit Price**
BT Test	1	EA	$ 500.00
Flushing			
4-20 inch	1	LF	$ 0.52
Charge Water	1	K-Gals	$ 0.52
Disposal in sanitary			
All sizes	1	K-Gals	$ 75.00

Section G: Smoke & Dye testing

	Quantity	**Unit**	**Unit Price**
Smoke Testing	1	HR	$ 240.00
Dye testing	1	HR	$ 240.00
Incidentals	1	Per 100/LF	$ 150.00

Section H: Manhole Rehabilitation **100/LF minimum**	**Quantity**	**Unit**	**Unit Price**
installation of 24" diameter chimney seals	1	EA	$ 750.00
Installation of manhole frame rain insert	1	EA	$ 300.00
Grouting of heavy infiltration to facilitate manhole rehab	1	Gallon	$ 20.00
Manhole rehabilitation - cementitious	1	SQFT	$ 25.00
Manhole rehabilitation - epoxy	1	SQFT	$ 35.00
Manhole rehabilitation - polyurethane	1	SQFT	$ 45.00
set-up for grouting	1	EA	$ 750.00

Section I: Gravity Sewer CIPP Lateral Renewal Systems, sec, J and M applies

4"-6" Internal installation and cure of lateral connection at main up to 1' from main <15"dia - No cleanout required	1	EA	$ 5,500.00
4"-6" Internal installation and cure up to 20' main <15"dia - Cleanout required	1	EA	$ 7,500.00

4"-6" Installation and cure of structural lateral liner from main beyond 20' from

main <15" dia	1	LF	$ 150.00
4"-6" Installation and cure of structural lateral liner from surface clean out to main	1	LF	$ 155.00
4"-6" Set-up charge per line section for installations of <20 total laterals per project	1	EA	$ 1,750.00
4"-6" installation of a surface cleanout or access pit for Items #2 & #4	1	EA	$ 4,750.00

Section J: Clean/TV & Evaluation of Culverts, Sewer &Water Lines

Other sections for by-pass, disposal, traffic, etc may apply	Quantity	Unit	Unit Price
6" - 12" Light Clean & TV sewer	1	LF	$ 20.00
15" - 21" Light Clean & TV sewer	1	LF	$ 25.00
24" - 33" Light Clean & TV sewer	1	LF	$ 30.00
36" & 42" Light Clean & TV sewer	1	LF	$ 40.00
48" & 54" Light Clean & TV sewer	1	LF	$ 50.00
6" - 15" Post TV Inspection after Rehabilitation	1	LF	$ 2.00
18" - 27" Post TV Inspection after Rehabilitation	1	LF	$ 3.00
30" or Larger Post TV Inspection after Rehabilitation	1	LF	$ 4.00
Re-setup for clean & TV Inspection Due to Point Repairs	1	EA	$ 500.00
Heavy Clean 6" - 54" sewers	1	HR	$ 450.00
Root Removal	1	HR	$ 450.00
Grease Removal	1	HR	$ 450.00
Other Remote Obstruction Removal (max. 10 LF)	1	HR	$ 450.00
Above Ground Physical Inspection	1	HR	$ 450.00

Section K: Bypass for gravity Sewers and associated items

	Quantity	Unit	Unit Price
Set Up 4" Pump (Per Pump)	1	EA	$ 750.00
Set Up 6" Pump (Per Pump)	1	EA	$ 1,500.00
Set Up 8" Pump (Per Pump)	1	EA	$ 3,000.00
Set Up 12" Pump (Per Pump)	1	EA	$ 5,000.00
Set Up 4" Piping	1	LF	$ 50.00
Set Up 6" Piping	1	LF	$ 75.00
Set Up 8" Piping	1	LF	$ 100.00
Set up 12" Piping	1	LF	$ 150.00
Operate 4" Pumping System	1	DAY	$ 1,750.00
Operate 6" Pumping System	1	DAY	$ 2,500.00
Operate 8" Pumping System	1	DAY	$ 3,000.00
Operate 12" Pumping System	1	DAY	$ 5,000.00
Bypass - Driveway Ramp (Setup, Operate, Maintain)	1	EA	$ 1,000.00
Bypass - Street Ramp (Setup, Operate, Maintain)	1	EA	$ 2,500.00
Bypass Plan (3rd Party Certified)	1	EA	$ 5,000.00

Section L: Pipe fusing/joining-applicable to all Polyethylene/FPVC processes listed on this contract

i) Stick Pipe	Quantity	Unit	Unit Price
Setup fee per pull segment	1	Per Segment	$ 2,000.00
6 thru 12 inch	1	Per foot	$ 20.00

13 thru 18 inch	1	Per foot	$ 25.00
20 thru 24 inch	1	Per foot	$ 50.00
30 thru 42 inch	1	Per foot	$ 75.00
43 thru 48 inch	1	Per foot	$ 100.00

ii) Electrofuse Couplings	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 275.00
12-inch	1	EA	$ 375.00
14-inch	1	EA	$ 575.00
18-inch	1	EA	$ 825.00
20-inch	1	EA	$ 1,150.00
24-inch and larger price based on Section M & N			

iii) Poly flanges with Backup rings (bolts not included)	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 275.00
12-inch	1	EA	$ 325.00
14-inch	1	EA	$ 600.00
18-inch	1	EA	$ 900.00
20-inch	1	EA	$ 1,300.00
24-inch and larger price based on Section M & N			

iv) Poly MJ Adapters with Backup rings (bolts not included)	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 300.00
12-inch	1	EA	$ 350.00
14-inch	1	EA	$ 500.00
18-inch	1	EA	$ 750.00
20-inch	1	EA	$ 1,250.00
24-inch and larger price based on Section M & N			

v) S.S. HDPE pipe stiffeners	**Quantity**	**Unit**	**Unit Price**
10-inch	1	EA	$ 200.00
12-inch	1	EA	$ 225.00
14-inch	1	EA	$ 250.00
18-inch	1	EA	$ 275.00
20-inch	1	EA	$ 300.00
24-inch and larger price based on Section M & N			

vi) Ductile Iron 90/45/22.5 degree elbows (bolts not included)	**Quantity**	**Unit**	**Unit Price**
12"	1	EA	$ 750.00
14"	1	EA	$ 900.00
18"	1	EA	$ 1,750.00
20"	1	EA	$ 2,250.00
24-inch and larger price based on Section M & N			

vii) Mega Lugs			
12"	1	EA	$ 175.00
14"	1	EA	$ 350.00
18"	1	EA	$ 550.00
20"	1	EA	$ 750.00
24-inch and larger price based on Section M &N			

viii) Sleeves	**Quantity**	**Unit**	**Unit Price**
12"	1	EA	$ 400.00
14"	1	EA	$ 500.00
18"	1	EA	$ 1,000.00
20"	1	EA	$ 1,500.00
24-inch and larger price based on section M & N			

Section M: Additional Items which may apply to each section of the contract

	Quantity	Unit	Unit Price
Mobilization	1	EA	$ 25,000.00
Mobilization for certain projects fall under section N			
Erosion Control Barrier	1	LF	$ 20.00

Maintenance Of Traffic (Residential/Non-DOT Regulated)	Quantity	Unit	Unit Price
a) Signage	1	EA/Day	$ 50.00
b) Flag person (1)	1	HR	$ 150.00
c) Arrow Board	1	Day/EA	$ 125.00
d) Attenuator	1	Day/EA	$ 2,500.00
e) Lane or shoulder closure	1	Day/EA	$ 2,000.00
d) Traffic Control Plan (certified)	1	EA	$ 5,000.00
e) Detours and specials performed are billed under section N			

Excavation/Backfill	Quantity	Unit	Unit Price
a) 0-4 feet deep	1	Cubic Ft	$ 10.00
b) 4-6 feet deep	1	Cubic Ft	$ 15.00
c) 6-10 feet deep	1	Cubic Ft	$ 20.00
d) Vacuum Excavation	1	HR	$ 350.00
e) over 10 feet deep refer to Section N			

	Quantity	Unit	Unit Price
Trench Shoring			
		LF	
a) 4-6 feet deep	1	Trench/Day	$ 100.00
		LF	
b) 6-10 feet deep	1	Trench/Day	$ 200.00
c) Temporary steel sheeting	1	SF	$ 50.00
d) over 10 feet deep refer to section N			

Surface Restoration	Quantity	Unit	Unit Price
a) Sod	1	SF	$ 10.00
b) Seed / Mulch	1	SF	$ 1.00
c) Netting	1	SF	$ 1.00
d) 4-inch concrete	1	SF	$ 25.00
e) 6-inch concrete	1	SF	$ 35.00
f) 8-inch concrete	1	SF	$ 45.00
g) 10-inch concrete	1	SF	$ 55.00
h) Up to 4-inch asphalt	1	SF	$ 30.00
i) Up to 6-inch asphalt	1	SF	$ 40.00
j) Up to 8-inch asphalt	1	SF	$ 50.00
k) Curb	1	LF	$ 75.00
l) Saw cut	1	LF	$ 10.00
m) Milling mobilization	1	EA	$ 10,000.00
n) Milling (500 SF minimum)	1	SF	$ 5.00
0) Flexamat	1	SF	$ 20.00

Material & service extras	Quantity	Unit	Unit Price
a) Crushed aggregate or concrete	1	Ton	$ 75.00
b) Washed aggregate	1	Ton	$ 75.00
c) Imported Sand	1	Ton	$ 75.00
d) Gravel	1	Ton	$ 75.00
e) Flowable fill	1	CY	$ 300.00
f) Injecteds soil stabilization	1	Pound	$ 15.00
g) Clear and grub of vegetation (not including trees)	1	ACRE	$ 7,500.00
h) Slope restoration	1	SF	$ 10.00
i) Concrete cloth to repair pipe inverts	1	SF	$ 20.00
j) Rip rap	1	TON	$ 150.00

Section N: Time and Material Unit Rates for Change Orders or other services

Materials, Subcontractors and Rentals, cost plus 15%
Corby Energy Services, Inc. Labor, Equipment, & per diem cost plus 15%
Sales Taxes = Per Jurisdiction
Labor including burdens, per diems, and lodging (may vary by area). Prevailing wage rates if applicable.

Section O: Additional charges tht may apply per project

Bonds
OCP
Permits
Inspection fees
Water charges
Disposal fees
Special access reuirements
Tree removal

Section P: Cured In Place Point Repairs. Section J applies

Main Pipeline size	Thickness	Length	Price
6"	4.5 mm	1 foot	$ 800.00
8"	4.5 mm	1 foot	$ 975.00
10"	4.5 mm	1 foot	$ 1,000.00
12"	6.0 mm	1 foot	$ 1,050.00
14"	6.0 mm	1 foot	$ 1,125.00
15"	6.0 mm	1 foot	$ 1,125.00
18"	6.0 mm	1 foot	$ 1,235.00
21"	7.5 mm	1 foot	$ 1,375.00
24"	7.5 mm	1 foot	$ 1,400.00
27"	7.5 mm	1 foot	$ 1,450.00
30"	7.5 mm	1 foot	$ 1,550.00
36"	7.5 mm	1 foot	$ 1,775.00
42"	9.0 mm	1 foot	$ 2,250.00
48"	12.0 mm	1 foot	$ 2,500.00

Section Q: Mechanical Internal Joint Seals. Section J applies

	Quantity	Unit	Unit Price
a) 24" Seals	1	Each	$ 3,400.00
b) 27" Seals	1	Each	$ 3,500.00
c) 30" Seals	1	Each	$ 3,600.00
d) 33" Seals	1	Each	$ 3,750.00
e) 36" Seals	1	Each	$ 3,800.00
f) 42" Seals	1	Each	$ 4,000.00
g) 48" Seals	1	Each	$ 4,300.00
h) 54" Seals	1	Each	$ 4,800.00
i) 60" Seals	1	Each	$ 5,400.00
j) 66" Seals	1	Each	$ 7,900.00
k) 72" Seals	1	Each	$ 8,750.00
l) Seals larger than 72" - see section N			

Section R: Drainage Structures. Other Sections May Apply

	Quantity	Unit	Unit Price
a) 24" diameter	1	Each	$ 5,000.00
b) 36" diameter	1	Each	$ 7,000.00

c) 48" diameter	1	Each	$ 9,500.00
d) 60" diameter	1	Each	$ 12,500.00
e) 72" diameter	1	Each	$ 16,000.00
f) Adjust Structures to grade	1	Each	$ 2,500.00
h) End sections R/R or reset up to 30"	1	Each	$ 5,500.00
i) End sections R/R or reset up to 48"	1	Each	$ 9,500.00
j) End sections R/R or reset up to 72"	1	Each	$ 14,500.00
k) Structure Reconstruct (top 36")	1	Each	$ 4,000.00
l) Structures/end sections larger than 72" - see section N			

All material pricing listed above is based upon market price at the time of original contract award. Pricing may be increased or decreased depending on significant changes in market indicators as compared to the date of the award.

Appendix D

OMNIA®
PARTNERS

Requirements for National Cooperative Contract To Be Administered by OMNIA Partners

The following documents are used in evaluating and administering national cooperative contracts and are included for Supplier's review and response.

Exhibit A – Response for National Cooperative Contract

Exhibit B – Administration Agreement, Example

Exhibit C – Master Intergovernmental Cooperative Purchasing Agreement, Example

Exhibit D – Principal Procurement Agency Certificate, Example

Exhibit E – Contract Sales Reporting Template

Exhibit F – Federal Funds Certifications

Exhibit G – New Jersey Business Compliance

Exhibit H – Advertising Compliance Requirement

Exhibit A
Response for National Cooperative Contract

1.0 Scope of National Cooperative Contract

Capitalized terms not otherwise defined herein shall have the meanings given to them in the Master Agreement or in the Administration Agreement between Supplier and OMNIA Partners.

1.1 Requirement

Region 4 ESC (hereinafter defined and referred to as "Principal Procurement Agency"), on behalf of itself and the National Intergovernmental Purchasing Alliance Company, a Delaware corporation d/b/a OMNIA Partners, Public Sector ("OMNIA Partners"), is requesting proposals for Sport Surfaces, Installation, and Related Material. The intent of this Request for Proposal is any contract between Principal Procurement Agency and Supplier resulting from this Request for Proposal ("Master Agreement") be made available to other public agencies nationally, including state and local governmental entities, public and private primary, secondary and higher education entities, non-profit entities, and agencies for the public benefit ("Public Agencies"), through OMNIA Partners' cooperative purchasing program. The Principal Procurement Agency has executed a Principal Procurement Agency Certificate with OMNIA Partners, an example of which is included as Exhibit D, and has agreed to pursue the Master Agreement. Use of the Master Agreement by any Public Agency is preceded by their registration with OMNIA Partners as a Participating Public Agency in OMNIA Partners' cooperative purchasing program. Registration with OMNIA Partners as a Participating Public Agency is accomplished by Public Agencies entering into a Master Intergovernmental Cooperative Purchasing Agreement, an example of which is attached as Exhibit C, and by using the Master Agreement, any such Participating Public Agency agrees that it is registered with OMNIA Partners, whether pursuant to the terms of the Master Intergovernmental Purchasing Cooperative Agreement or as otherwise agreed to. The terms and pricing established in the resulting Master Agreement between the Supplier and the Principal Procurement Agency will be the same as that available to Participating Public Agencies through OMNIA Partners.

All transactions, purchase orders, invoices, payments etc., will occur directly between the Supplier and each Participating Public Agency individually, and neither OMNIA Partners, any Principal Procurement Agency nor any Participating Public Agency, including their respective agents, directors, employees or representatives, shall be liable to Supplier for any acts, liabilities, damages, etc., incurred by any other Participating Public Agency. Supplier is responsible for knowing the tax laws in each state.

This Exhibit A defines the expectations for qualifying Suppliers based on OMNIA Partners' requirements to market the resulting Master Agreement nationally to Public Agencies. Each section in this Exhibit A refers to the capabilities, requirements, obligations, and prohibitions of competing Suppliers on a national level in order to serve Participating Public Agencies through OMNIA Partners.

These requirements are incorporated into and are considered an integral part of this RFP. OMNIA Partners reserves the right to determine whether to make the Master Agreement awarded by the Principal Procurement Agency available to Participating Public Agencies, in its sole and absolute discretion, and any party submitting a response to this RFP acknowledges that any award by the Principal Procurement Agency does not obligate OMNIA Partners to make the Master Agreement available to Participating Procurement Agencies.

1.2 Marketing, Sales and Administrative Support

During the term of the Master Agreement OMNIA Partners intends to provide marketing, sales, partnership development and administrative support for Supplier pursuant to this section that directly promotes the Supplier's products and services to Participating Public Agencies through multiple channels, each designed to promote specific products and services to Public Agencies on a national basis.

OMNIA Partners will assign the Supplier a Director of Partner Development who will serve as the main point of contact for the Supplier and will be responsible for managing the overall relationship between the Supplier and OMNIA Partners. The Director of Partner Development will work with the Supplier to develop a comprehensive strategy to promote the Master Agreement and will connect the Supplier with appropriate stakeholders within OMNIA Partners including, Sales, Marketing, Contracting, Training, and Operations & Support.

The OMNIA Partners marketing team will work in conjunction with Supplier to promote the Master Agreement to both existing Participating Public Agencies and prospective Public Agencies through channels that may include:

A. Marketing collateral (print, electronic, email, presentations)

B. Website

C. Trade shows/conferences/meetings

D. Advertising

E. Social Media

The OMNIA Partners sales teams will work in conjunction with Supplier to promote the Master Agreement to both existing Participating Public Agencies and prospective Public Agencies through initiatives that may include:

A. Individual sales calls

B. Joint sales calls

C. Communications/customer service

D. Training sessions for Public Agency teams

E. Training sessions for Supplier teams

The OMNIA Partners contracting teams will work in conjunction with Supplier to promote the Master Agreement to both existing Participating Public Agencies and prospective Public Agencies through:

A. Serving as the subject matter expert for questions regarding joint powers authority and state statutes and regulations for cooperative purchasing
B. Training sessions for Public Agency teams
C. Training sessions for Supplier teams
D. Regular business reviews to monitor program success
E. General contract administration

Suppliers are required to pay an Administrative Fee of 3% of the greater of the Contract Sales under the Master Agreement and Guaranteed Contract Sales under this Request for Proposal. Supplier will be required to execute the OMNIA Partners Administration Agreement (Exhibit B).

1.3 Estimated Volume

The dollar volume purchased under the Master Agreement is estimated to be approximately $80M annually. While no minimum volume is guaranteed to Supplier, the estimated annual volume is projected based on the current annual volumes among the Principal Procurement Agency, other Participating Public Agencies that are anticipated to utilize the resulting Master Agreement to be made available to them through OMNIA Partners, and volume growth into other Public Agencies through a coordinated marketing approach between Supplier and OMNIA Partners.

1.4 Award Basis

The basis of any contract award resulting from this RFP made by Principal Procurement Agency will, at OMNIA Partners' option, be the basis of award on a national level through OMNIA Partners. If multiple Suppliers are awarded by Principal Procurement Agency under the Master Agreement, those same Suppliers will be required to extend the Master Agreement to Participating Public Agencies through OMNIA Partners. Utilization of the Master Agreement by Participating Public Agencies will be at the discretion of the individual Participating Public Agency. Certain terms of the Master Agreement specifically applicable to the Principal Procurement Agency (e.g. governing law) are subject to modification for each Participating Public Agency as Supplier, such Participating Public Agency and OMNIA Partners shall agree without being in conflict with the Master Agreement as a condition of the Participating Agency's purchase and not a modification of the Master Agreement applicable to all Participating Agencies. Participating Agencies may request to enter into a separate supplemental agreement to further define the level of service requirements over and above the minimum defined in the Master Agreement (i.e. invoice requirements, order requirements, specialized delivery, diversity requirements such as minority and woman owned businesses, historically underutilized business, governing law, etc.) ("Supplemental Agreement"). It shall be the responsibility of the Supplier to comply, when applicable, with the prevailing wage

legislation in effect in the jurisdiction of the Participating Agency. It shall further be the responsibility of the Supplier to monitor the prevailing wage rates as established by the appropriate department of labor for any increase in rates during the term of the Master Agreement and adjust wage rates accordingly. In instances where supplemental terms and conditions create additional risk and cost for Supplier, Supplier and Participating Public Agency may negotiate additional pricing above and beyond the stated contract not-to-exceed pricing so long as the added price is commensurate with the additional cost incurred by the Supplier. Any supplemental agreement developed as a result of the Master Agreement is exclusively between the Participating Agency and the Supplier (Contract Sales are reported to OMNIA Partners).

All signed Supplemental Agreements and purchase orders issued and accepted by the Supplier may survive expiration or termination of the Master Agreement. Participating Agencies' purchase orders may exceed the term of the Master Agreement if the purchase order is issued prior to the expiration of the Master Agreement. Supplier is responsible for reporting all sales and paying the applicable Administrative Fee for sales that use the Master Agreement as the basis for the purchase order, even though Master Agreement may have expired.

1.5 Objectives of Cooperative Program

This RFP is intended to achieve the following objectives regarding availability through OMNIA Partners' cooperative program:

A. Provide a comprehensive competitively solicited and awarded national agreement offering the Products covered by this solicitation to Participating Public Agencies;

B. Establish the Master Agreement as the Supplier's primary go to market strategy to Public Agencies nationwide;

C. Achieve cost savings for Supplier and Public Agencies through a single solicitation process that will reduce the Supplier's need to respond to multiple solicitations and Public Agencies need to conduct their own solicitation process;

D. Combine the aggregate purchasing volumes of Participating Public Agencies to achieve cost effective pricing.

2.0 REPRESENTATIONS AND COVENANTS

As a condition to Supplier entering into the Master Agreement, which would be available to all Public Agencies, Supplier must make certain representations, warranties and covenants to both the Principal Procurement Agency and OMNIA Partners designed to ensure the success of the Master Agreement for all Participating Public Agencies as well as the Supplier.

2.1 Corporate Commitment

Supplier commits that (1) the Master Agreement has received all necessary corporate authorizations and support of the Supplier's executive management, (2) the Master Agreement is Supplier's primary "go to market" strategy for Public Agencies, (3) the Master Agreement will be promoted to all Public Agencies, including any existing

customers, and Supplier will transition existing customers, upon their request, to the Master Agreement, and (4) that the Supplier has read and agrees to the terms and conditions of the Administration Agreement with OMNIA Partners and will execute such agreement concurrent with and as a condition of its execution of the Master Agreement with the Principal Procurement Agency. Supplier will identify an executive corporate sponsor and a separate national account manager within the RFP response that will be responsible for the overall management of the Master Agreement.

2.2 Pricing Commitment

Supplier commits the not-to-exceed pricing provided under the Master Agreement pricing is its lowest available (net to buyer) to Public Agencies nationwide and further commits that if a Participating Public Agency is eligible for lower pricing through a national, state, regional or local or cooperative contract, the Supplier will match such lower pricing to that Participating Public Agency under the Master Agreement.

2.3 Sales Commitment

Supplier commits to aggressively market the Master Agreement as its go to market strategy in this defined sector and that its sales force will be trained, engaged and committed to offering the Master Agreement to Public Agencies through OMNIA Partners nationwide. Supplier commits that all Master Agreement sales will be accurately and timely reported to OMNIA Partners in accordance with the OMNIA Partners Administration Agreement. Supplier also commits its sales force will be compensated, including sales incentives, for sales to Public Agencies under the Master Agreement in a consistent or better manner compared to sales to Public Agencies if the Supplier were not awarded the Master Agreement.

3.0 SUPPLIER RESPONSE

Supplier must supply the following information for the Principal Procurement Agency to determine Supplier's qualifications to extend the resulting Master Agreement to Participating Public Agencies through OMNIA Partners.

3.1 Company

A. Brief history and description of Supplier to include experience providing similar products and services.

B. Total number and location of salespersons employed by Supplier.

C. Number and location of support centers (if applicable) and location of corporate office.

D. Annual sales for the three previous fiscal years.

   a. Submit FEIN and Dunn & Bradstreet report.

E. Describe any green or environmental initiatives or policies.

F. Describe any diversity programs or partners supplier does business with and how Participating Agencies may use diverse partners through the Master Agreement. Indicate how, if at all, pricing changes when using the diversity program. If there

are any diversity programs, provide a list of diversity alliances and a copy of their certifications.

G. Indicate if supplier holds any of the below certifications in any classified areas and include proof of such certification in the response:

a. Minority Women Business Enterprise

☐ Yes ☐ No

If yes, list certifying agency: _____

b. Small Business Enterprise (SBE) or Disadvantaged Business Enterprise (DBE)

☐ Yes ☐ No

If yes, list certifying agency: _____

c. Historically Underutilized Business (HUB)

☐ Yes ☐ No

If yes, list certifying agency: _____

d. Historically Underutilized Business Zone Enterprise (HUBZone)

☐ Yes ☐ No

If yes, list certifying agency: _____

e. Other recognized diversity certificate holder

☐ Yes ☐ No

If yes, list certifying agency: _____

H. List any relationships with subcontractors or affiliates intended to be used when providing services and identify if subcontractors meet minority-owned standards. If any, list which certifications subcontractors hold and certifying agency.

I. Describe how supplier differentiates itself from its competitors.

J. Describe any present or past litigation, bankruptcy or reorganization involving supplier.

K. Felony Conviction Notice: Indicate if the supplier

a. is a publicly held corporation and this reporting requirement is not applicable;

b. is not owned or operated by anyone who has been convicted of a felony; or

c. is owned or operated by and individual(s) who has been convicted of a felony and provide the names and convictions.

L. Describe any debarment or suspension actions taken against supplier

3.2 Distribution, Logistics

A. Each offeror awarded an item under this solicitation may offer their complete product and service offering/a balance of line. Describe the full line of products and services offered by supplier.

B. Describe how supplier proposes to distribute the products/service nationwide. Include any states where products and services will not be offered under the Master Agreement, including U.S. Territories and Outlying Areas.

C. Describe how Participating Agencies are ensured they will receive the Master Agreement pricing; include all distribution channels such as direct ordering, retail or in-store locations, through distributors, etc. Describe how Participating Agencies verify and audit pricing to ensure its compliance with the Master Agreement.

D. Identify all other companies that will be involved in processing, handling or shipping the products/service to the end user.

E. Provide the number, size and location of Supplier's distribution facilities, warehouses and retail network as applicable.

3.3 Marketing and Sales

A. Provide a detailed ninety-day plan beginning from award date of the Master Agreement describing the strategy to immediately implement the Master Agreement as supplier's primary go to market strategy for Public Agencies to supplier's teams nationwide, to include, but not limited to:

   i. Executive leadership endorsement and sponsorship of the award as the public sector go-to-market strategy within first 10 days

   ii. Training and education of Supplier's national sales force with participation from the Supplier's executive leadership, along with the OMNIA Partners team within first 90 days

B. Provide a detailed ninety-day plan beginning from award date of the Master Agreement describing the strategy to market the Master Agreement to current Participating Public Agencies, existing Public Agency customers of Supplier, as well as to prospective Public Agencies nationwide immediately upon award, to include, but not limited to:

   i. Creation and distribution of a co-branded press release to trade publications

   ii. Announcement, Master Agreement details and contact information published on the Supplier's website within first 90 days

   iii. Design, publication and distribution of co-branded marketing materials within first 90 days

   iv. Commitment to attendance and participation with OMNIA Partners at national (i.e. NIGP Annual Forum, NPI Conference, etc.), regional (i.e. Regional NIGP Chapter Meetings, Regional Cooperative Summits, etc.) and supplier-specific trade shows, conferences and meetings throughout the term of the Master Agreement

   v. Commitment to attend, exhibit and participate at the NIGP Annual Forum in an area reserved by OMNIA Partners for partner suppliers. Booth space

will be purchased and staffed by Supplier. In addition, Supplier commits to provide reasonable assistance to the overall promotion and marketing efforts for the NIGP Annual Forum, as directed by OMNIA Partners.

vi. Design and publication of national and regional advertising in trade publications throughout the term of the Master Agreement

vii. Ongoing marketing and promotion of the Master Agreement throughout its term (case studies, collateral pieces, presentations, promotions, etc.)

viii. Dedicated OMNIA Partners internet web-based homepage on Supplier's website with:

- OMNIA Partners standard logo;
- Copy of original Request for Proposal;
- Copy of Master Agreement and amendments between Principal Procurement Agency and Supplier;
- Summary of Products and pricing;
- Marketing Materials
- Electronic link to OMNIA Partners' website including the online registration page;
- A dedicated toll-free number and email address for OMNIA Partners

C. Describe how Supplier will transition any existing Public Agency customers' accounts to the Master Agreement available nationally through OMNIA Partners. Include a list of current cooperative contracts (regional and national) Supplier holds and describe how the Master Agreement will be positioned among the other cooperative agreements.

D. Acknowledge Supplier agrees to provide its logo(s) to OMNIA Partners and agrees to provide permission for reproduction of such logo in marketing communications and promotions. Acknowledge that use of OMNIA Partners logo will require permission for reproduction, as well.

E. Confirm Supplier will be proactive in direct sales of Supplier's goods and services to Public Agencies nationwide and the timely follow up to leads established by OMNIA Partners. All sales materials are to use the OMNIA Partners logo. At a minimum, the Supplier's sales initiatives should communicate:

i. Master Agreement was competitively solicited and publicly awarded by a Principal Procurement Agency

ii. Best government pricing

iii. No cost to participate

iv. Non-exclusive

F. Confirm Supplier will train its national sales force on the Master Agreement. At a minimum, sales training should include:

i. Key features of Master Agreement

ii. Working knowledge of the solicitation process

iii. Awareness of the range of Public Agencies that can utilize the Master Agreement through OMNIA Partners

iv. Knowledge of benefits of the use of cooperative contracts

G. Provide the name, title, email and phone number for the person(s), who will be responsible for:

i. Executive Support
ii. Marketing
iii. Sales
iv. Sales Support
v. Financial Reporting
vi. Accounts Payable
vii. Contracts

H. Describe in detail how Supplier's national sales force is structured, including contact information for the highest-level executive in charge of the sales team.

I. Explain in detail how the sales teams will work with the OMNIA Partners team to implement, grow and service the national program.

I. Explain in detail how Supplier will manage the overall national program throughout the term of the Master Agreement, including ongoing coordination of marketing and sales efforts, timely new Participating Public Agency account set-up, timely contract administration, etc.

J. State the amount of Supplier's Public Agency sales for the previous fiscal year. Provide a list of Supplier's top 10 Public Agency customers, the total purchases for each for the previous fiscal year along with a key contact for each.

K. Describe Supplier's information systems capabilities and limitations regarding order management through receipt of payment, including description of multiple platforms that may be used for any of these functions.

L. Provide the Contract Sales (as defined in Section 10 of the OMNIA Partners Administration Agreement) that Supplier will guarantee each year under the Master Agreement for the initial three years of the Master Agreement ("Guaranteed Contract Sales").

$_____.00 in year one
$_____.00 in year two
$_____.00 in year three

To the extent Supplier guarantees minimum Contract Sales, the Administrative Fee shall be calculated based on the greater of the actual Contract Sales and the Guaranteed Contract Sales.

M. Even though it is anticipated many Public Agencies will be able to utilize the Master Agreement without further formal solicitation, there may be circumstances where Public Agencies will issue their own solicitations. The following options are available when responding to a solicitation for Products covered under the Master Agreement.

i. Respond with Master Agreement pricing (Contract Sales reported to OMNIA Partners).

ii. If competitive conditions require pricing lower than the standard Master Agreement not-to-exceed pricing, Supplier may respond with lower pricing through the Master Agreement. If Supplier is awarded the contract, the sales are reported as Contract Sales to OMNIA Partners under the Master Agreement.

iii. Respond with pricing higher than Master Agreement only in the unlikely event that the Public Agency refuses to utilize Master Agreement (Contract Sales are not reported to OMNIA Partners).

iv. If alternative or multiple proposals are permitted, respond with pricing higher than Master Agreement, and include Master Agreement as the alternate or additional proposal.

Detail Supplier's strategies under these options when responding to a solicitation.

TAB 3

PERFORMANCE CAPABILITY

6001 Schooner St. • PO Box 970 • Belleville, MI 48112
Phone: 734.547.9237 • Fax: 734.547.0340

TAB 3.a

OMNIA PARTNERS DOCUMENTS

b) Performance Capability

i. Detailed Response to Appendix D
Exhibit A: Response for National Cooperative Contract

3.0 Supplier Response

3.1 Company

3.1a Brief History and Description of Supplier

Established in 1982, Corby Energy Services, Inc. (CES) has installed thousands of miles of underground fiber optic, conventional power and communication cable. CES's beginnings are rooted in underground construction including duct runs, manholes, and vaults and use all construction methods including horizontal directional drilling, tunneling, plowing, and trenching.

CES is a pioneering partner in joint trench construction combining electric, gas, communications, and CATV in a single trench. CES finds solutions to the most difficult construction problems in the densest urban to rural areas. CES has a proven record of quality, workmanship and assigns the highest priority to the satisfaction of clients, their customers and property owners.

CES expanded in February of 2000 with experienced and successful construction / utility professionals. They recognized the increased demand for methods of utility / infrastructure installation and repairs that offered minimal surface and subsurface disruption. They also recognized the confusion caused with emerging new markets and new products and technologies often introduced by marketing firms and manufacturers. Their interest was in providing customers multiple trenchless

solutions for varying pipeline concerns all performed through a singular and reputable provider.

CES has quickly grown due to providing reliable and quality product solutions supported by recognized industry leaders and professionals. This has provided CES the platform to offer a number of competing trenchless products including: pipe-bursting, CIPP and slip-lining as well as conventional excavation needs. In addition, CES has developed strategic alliances with several key firms to provide additional services on its projects such as engineering services, gas and electric work as well as telecom and line work.

CES is dedicated to maintaining a safe and healthy work environment for our employees, our customers, and the general public. We consistently monitor and implement new methods of construction to improve jobsite safety, and we actively promote health and safety awareness. Through years of experience and continual training, our employees are up-to-date on the latest standards in workplace safety. We have dedicated Health and Safety and Quality Control representatives who provide self-inspection services and enforce company and regulatory standards and procedures on every job site. Over the past several years, CES has grown, measuring success in the continuing acceptance of our services by satisfied customers. It is our commitment to excellence that drives us beyond the competition. Through building enduring and profitable relationships with our customers, we have become a rapidly growing leader in providing affordable and innovative pipeline solutions.

3.1b Total Number and Location of Salespersons

CES has a team of 5 sales professionals specifically engaged in the promotion of our products and services. Our firm utilizes recognized marketing / sales tools readily available to construction professionals as well as specialized corporate sales initiatives which are specifically directed by market. Our markets include: federal, state, municipal as well as industrial, institutional and private entities. This

requires specific sales focus based upon market. Our firm prides itself upon maintaining sales professionals with specialized product focus in varying markets. In addition, our firm also maintains specific market focus with varying product capabilities by utilizing our network of industry and market professionals. This requires our firm to effectively communicate internally as well as network with other trade professionals

3.1c Number and Location of Support Centers

Due to the varying location of our project work sites, CES often maintains multiple temporary offices adjacent to its larger projects. We maintain 3 extended office locations. In addition, we maintain strategic alliances with other firms which allows rapid deployment to other areas. This ensures our organization is always available to its customer base with the appropriate resources and personnel. Other office locations:

Detroit, MI – David Carpenter 734-547-9237

Plymouth, MI – David Carpenter 734-547-9237

Hamburg, MI – David Carpenter 734-547-9237

Belleville, MI (Corporate) – David Carpenter 734-547-9237

3.1d Annual Sales for the Previous Three Fiscal Years

3.1e Describe any Green or Environmental Initiatives

None

3.1f Describe any Diversity Programs or Partners Supplier Does…

None

3.1g Indicate if Supplier holds the Certifications:

a. WBE: Yes - see attached to end of document; issued by "Women's Business Enterprise National Council"
b. SBE or DBE: No
c. HUB: No
d. HUBZone: No
e. Other: No

3.1h List any Relationships With Subcontractors or Affiliates Intended to be Used When Providing Services and Identify if Subcontractor Meets Minority-Owned standards:

a. Metro Consulting Associates – no certifications
Working partner for engineering, CAD, GIS, and other services
b. Metro Engineering Services – no certifications
Working partner for engineering, CAD, GIS, and other services
c. Metro Asphalt & Concrete – no certifications
Working partner for hard surface restoration
d. Overhead Lines – no certifications
Working partner for overhead powerline installation and repair
e. Major Cement Company – no certifications

Working partner for hard surface restoration, underground utilities, and earthwork

f. Prism Contractors & Engineers – SWaM (Small Women owned and Minority Business)
Working partner for trenchless technologies and engineering services

g. Midwest Trenchless Services – no certifications
Working partner for underground utilities and trenchless technologies

h. City Sewers – no certification
Working partner for trenchless technologies

i. Compton – no certifications
Working partner for underground utilities and road work

j. B and Z Company – no certifications
Working partner for underground utilities and road work

k. Rogue Industrial Services – no certification
Working partner for trenchless technologies

l. Advanced Rehabilitation Technologies – no certifications
Working partner for manhole rehabilitation and trenchless technologies

3.1i Describe How Supplier Differentiates Itself From its Competitors

CES will take full responsibility for the successful completion of your project. In addition, CES offers a variety of pipeline solutions assuring the customer of the right solution / product for a variety of infrastructure concerns. Our firm is different from any other pipeline provider in that we have a multitude of product offerings, each with specific advantages. We can offer a wider variety of trenchless solutions that most of our competitors cannot. We look at our projects through the eyes and needs of our customer. Therefore, we are able to provide the right

solution for the problem. With single source accountability, proven performance as well as versatile solutions and industry leadership CES is like no other provider.

Very few firms offer the diverse portfolio of products and services provided by CES. Our firm focuses on solutions and products. There are several national rehabilitation contractors and multiple smaller, local providers. Most of these firms are specific to a single or few product technologies. We feel our ability to review / recommend multiple products and deliver multiple solutions is what separates our firm from our competitors.

3.1j Describe Any Present or Past Litigation, Bankruptcy, or Reorganizing Involving Supplier

No past litigation. Currently, we have three auto accidents that have resulted in litigation. We also have one additional claim recently filed against our firm, DTE Energy, and Olympia Entertainment alleging flooding of the Plaintiff's parking lot occurs due to construction activities related to the construction of Little Caesar's Arena in Detroit. The claim is for $6k and flooding was documented to have occurred prior to our construction activities. No bankruptcy or reorganization.

3.1k Felony Conviction Notice:

B. Is not owned or operated by anyone who has been convicted of a felony

3.1l Describe any Debarment or Suspension Actions taken against Supplier:

None

3.2 Distribution Logistics

a. We are offering our full line of services provided in Tab 2 / Tab 5 (pricing). The includes, but not limited to, Cured-in-place pipe, Clean and CCTV services, Slip-line, Pipe-bursting, Engineering, Excavation, Horizontal directional Drilling, and associated work types. Since all projects are site-specific, actual product or service needed may not be known until an initial investigation has determined the reason for the repair / replacement. Our full line of products and services are listed in Tabs 2 and 5.

b. Due to logistics and market-place cost advantages and disadvantages, all products and services will be offered in the United States (east of the Mississippi River). The reason for this regional carve-out, is to ensure the best response time and value. However, we will consider projects outside this carve-out (on a case by case basis).

c. Participating agencies will contact us to discuss their potential service needs. Contact can be made through our website or via telephone. Since all projects are site-specific, it is imperative that we visit their site, evaluate the issue, and respond with a product or service that fits their expected outcome. All clients will receive a copy of the master pricing list submitted vis this RFP so that they can see that service pricing does not exceed those listed in Tabs 2 and 5. At any time, the client can audit the cost of services by request.

d. Corby Energy services, Inc. (CES), will be responsible for the delivery of all products or services. Some products or services may be delivered through the subcontractors listed in section 3.1h.

However, CES will be the company that is ultimately responsible for correctness and completeness.

e. Supplier does not utilize warehouse space or distribution facilities as all projects are site specific. Therefore, actual products, needed for services, are acquired at the time the work is agreed to by supplier and client.

3.3 Marketing and Sales

A.

i. Within 10-days of award, our firm will draft a public sector market strategy in partnership with OMNIA Partners. The strategy will develop the best practice for communicating and sharing the award. This will be a high-level market strategy in order to reach the public sector market. The strategy will list how we will reach said sector and what message will be conveyed.

ii. After award: Meet with OMNIA Partners to finalize award / marketing goals

Sales Meeting within 45 days after award

Sales Team actively promoting OMNIA Partners to customers within 90 days after award

Evaluation / Plan adjustments within 120 days after award

B.

i. The creation and distribution of a co-branded press release to trade publications will be determined based on the decisions made in the Executive leadership endorsement meeting to be held within the first 10-days after award (as noted in item 3.3.A.i).

ii. CES has historically held a Trenchless award from OMNIA Partners. Therefore, we have previously developed an announcement from past award. We will re-imagine the previous announcement, and, with the help of OMNIA Partners, we will implement on our website within 15 days after award.

iii. As mentioned above, CES has previously produced materials (co-branded) for distribution. These also will be re-imagined, edited, and reproduced within 90 days after award.

iv. Due to proximity of offices and a pandemic, CES commits to virtual attendance of meetings that are established by OMNIA Partners.

v. We agree to attend and take part in the annual forum (as long as health and safety are not a concern – due to pandemic) as well as promote via our website.

vi. We commit to advertising in regional publication throughout the term of the master agreement. Our marketing strategy will determine the type of publication to target. For example, engineers, DPW director, etc.

vii. Publishing work performed in specific municipalities will require approval individual entities. CES will, for those municipalities willing to participate, develop presentations highlighting various projects.

viii. This will be done within the 90 days after award.

C. The supplier functions in a world of bid work. Therefore, our existing customers are either ones that we have bid work with or ones that we have gained by using our current OMNIA Partners award. Historically, we have had success in getting bid customers

to take part in the OMNIA Partners award (City of Saginaw, MI / City of Kalamazoo, MI / City of Franklin, VA, to name a few). As we did with these, we will continue to work toward growing the OMNIA Partners participation base through networking with current and new clients.

D. Agreed

E.

- **i.** Agreed
- **ii.** Agreed
- iii. Agreed
- iv. Agreed

F.

- **i.** Agreed
- **ii.** Agreed
- **iii.** Agreed
- iv. Agreed

G.

- **i.** **David Carpenter, Vice President, dcarpenter@corbyenergy.com, 813-410-4360**
- **ii.** **Troy Freed, Business Development, tfreed@corbyenergy.com, 989-213-4408**
- **iii.** **Troy Feed, Business Development, tfreed@corbyenergy.com, 989-213-4408**
- **iv.** **Josh Freeman, Project Manager, jfreeman@corbyenergy.com, 734-604-5109**
  Jacob Martin, Project Manager, jmartin@corbyenergy.com, 734-309-2665

v. **David Carpenter, Vice President, dcarpenter@corbyenergy.com, 813-410-4360**

vi. **Amy Sutzer, Accounts Payable, ap@corbyenergy.com, 734-547-9237**

vii. **David Carpenter, Vice President, dcarpenter@corbyenergy.com, 813-410-4360**

H. Trenchless Technologies is not driven by direct sales in the same way that computers, paper, and desks are. These are consumables that are constantly renewed on a predictable basis. Therefore, our sales force is not a "sales force" in the traditional sense. Our team is structured to target clients as they have need (since many of the municipal assets, that could involve trenchless technologies, have a life span of 50 years or more). Because of this, our team seeks strategic partnerships with clients that are looking for our services (rather than the other way around). We have been very successful with this approach. We will make contact with municipal agencies to share our capabilities and foster a relationship. It is through these relationships that sales develop. Executive contact is David Carpenter, Vice President, **dcarpenter@corbyenergy.com, 813-410-4360**

I. As an existing supplier of OMNIA Partners, we are currently facilitating all the administrative needs of the existing award. We have worked closely with members of OMNIA Partners to help grow our market share. In 2017,

we had OMNIA Partners come into Michigan to help us create a partnership with the Michigan Department of Transportation. We will use this same type of relationship to continue to grow the market share by utilizing the future award. As the first level of sales, we will do what we can to secure sales. However, we will call on OMNIA Partners to support us during those times where we need added collaboration.

J. 2020 Sales $5,466,217.00

a. Michigan Department of Transportation $3,757,942.00 James Roath 517-230-5361
b. City of Saginaw, MI $624,513.00 Josh Hoffman 989-233-1507
c. City of Franklin, VA $314,614.00 Steve Watson 757-562-8542
d. City of Kalamazoo, MI $304,000.00 Sohil 269-216-1794
e. City of Tawas, Mi $275,272.00 Gus Oliver 989-820-4121
f. City of Danville, VA $137,205.00 Chris Goss 434-799-5245

K. We use a propriety platform to log RFP's and projects. We have no limitations as to tracking from initiation to invoicing, and collection of payment.

L. $1,500,000.00 – year one, $1,500,000.00 – year two, $1,500,000.00 – year three

M.

Most often, the bid item solicitations from public agencies, for trenchless technologies, do not match the available bid items in the master service agreement. Generally speaking, the public agencies items are usually inclusive of incidental items not found in the master agreement. However, in situations where applicable:

i. We will respond with master agreement pricing
ii. If applicable, we will respond with master agreement pricing
iii. If applicable, we will respond accordingly
iv. If applicable, we will respond accordingly

b) Performance and Capability

ii. Exhibit B signed Terms and Conditions Acceptance – affixed to end of this document

iii. Completed Exhibit F – affixed to end of this document
iv. Describe how offeror responds to emergency requests: We experience emergency requests on a monthly basis. As with all of our work, we take the call, develop a response plan to meet the client, we formulate a working plan to mitigate the emergency, we submit pricing based on those included in Tab 2

and Tab 5, and repair the emergency after pricing agreement (based on customers needs). Historically, as you will find out from our references, we respond efficiently and effectively to emergency work.

v. What is offeror's average on time delivery for services: Delivery is usually within two weeks. However, based on client need and product and service availability, this can be pushed up or back to meet specific deadlines.

vi. Describe offeror's ability to meet service and warranty needs: We are able to meet customer warranty needs. Once we receive a warranty related issue, we will respond according to the clients availability to meet and address the specific warranty related issue.

vii. Describe offeror's customer service/problem solving process: Because we sell services, problems/issues arising from completed work will be handled by the specific project manager assigned to the work. At the onset of the work, a project manager will be assigned to see the work through (start – finish, including any post-related issues)

viii. Describe offeror's invoicing process: Invoices are sent, usually within 15 days of delivery of services or products. Invoice is delivered via email. Terms are net

30 days. We accept mail in check, electronic transfer, and credit cards for a 5% fee.

ix. Describe offeror's contract implementation / customer transition plan:

x. Describe the financial condition of offeror:

xi. Provide website link: www.corbyenergy.com we do not have a products catalogue on our website as we sell services.

xii. Describe the offeror's safety record:

xiii. Provide copy of proposed agreements: N/A

xiv. Provide additional, relevant information: N/A

6001 Schooner St. • PO Box 970 • Belleville, MI 48112
Phone: 734.547.9237 • Fax: 734.547.0340

Exhibit B
Administration Agreement, Example

ADMINISTRATION AGREEMENT

THIS ADMINISTRATION AGREEMENT (this "**Agreement**") is made this ___ day of _____ 20__, between National Intergovernmental Purchasing Alliance Company, a Delaware corporation d/b/a OMNIA Partners, Public Sector ("**OMNIA Partners**"), and _____ ("**Supplier**").

RECITALS

WHEREAS, the _____ (the "**Principal Procurement Agency**") has entered into a Master Agreement effective _____, Agreement No_____, by and between the Principal Procurement Agency and Supplier, (as may be amended from time to time in accordance with the terms thereof, the "**Master Agreement**"), as attached hereto as Exhibit A and incorporated herein by reference as though fully set forth herein, for the purchase of _____ (the "**Product**");

WHEREAS, said Master Agreement provides that any or all public agencies, including state and local governmental entities, public and private primary, secondary and higher education entities, non-profit entities, and agencies for the public benefit (collectively, "**Public Agencies**"), that register (either via registration on the OMNIA Partners website or execution of a Master Intergovernmental Cooperative Purchasing Agreement, attached hereto as Exhibit B) (each, hereinafter referred to as a "**Participating Public Agency**") may purchase Product at prices stated in the Master Agreement;

WHEREAS, Participating Public Agencies may access the Master Agreement which is offered through OMNIA Partners to Public Agencies;

WHEREAS, OMNIA Partners serves as the cooperative contract administrator of the Master Agreement on behalf of Principal Procurement Agency;

WHEREAS, Principal Procurement Agency desires OMNIA Partners to proceed with administration of the Master Agreement; and

WHEREAS, OMNIA Partners and Supplier desire to enter into this Agreement to make available the Master Agreement to Participating Public Agencies and to set forth certain terms and conditions governing the relationship between OMNIA Partners and Supplier.

NOW, THEREFORE, in consideration of the payments to be made hereunder and the mutual covenants contained in this Agreement, OMNIA Partners and Supplier hereby agree as follows:

DEFINITIONS

1. Capitalized terms used in this Agreement and not otherwise defined herein shall have the meanings given to them in the Master Agreement.

TERMS AND CONDITIONS

2. The Master Agreement and the terms and conditions contained therein shall apply to this Agreement except as expressly changed or modified by this Agreement. Supplier acknowledges and agrees that the covenants and agreements of Supplier set forth in the solicitation and Supplier's response thereto resulting in the Master Agreement are incorporated herein and are an integral part hereof.

3. OMNIA Partners shall be afforded all of the rights, privileges and indemnifications afforded to Principal Procurement Agency by or from Supplier under the Master Agreement, and such rights, privileges and indemnifications shall accrue and apply with equal effect to OMNIA Partners, its agents, employees, directors, and representatives under this Agreement including, but not limited to, Supplier's obligation to obtain appropriate insurance.

4. OMNIA Partners shall perform all of its duties, responsibilities and obligations as the cooperative contract administrator of the Master Agreement on behalf of Principal Procurement Agency as set forth herein, and Supplier hereby acknowledges and agrees that all duties, responsibilities and obligations will be undertaken by OMNIA Partners solely in its capacity as the cooperative contract administrator under the Master Agreement.

5. With respect to any purchases by Principal Procurement Agency or any Participating Public Agency pursuant to the Master Agreement, OMNIA Partners shall not be: (i) construed as a dealer, re-marketer, representative, partner or agent of any type of the Supplier, Principal Procurement Agency or any Participating Public Agency; (ii) obligated, liable or responsible for any order for Product made by Principal Procurement Agency or any Participating Public Agency or any employee thereof under the Master Agreement or for any payment required to be made with respect to such order for Product; and (iii) obligated, liable or responsible for any failure by Principal Procurement Agency or any Participating Public Agency to comply with procedures or requirements of applicable law or the Master Agreement or to obtain the due authorization and approval necessary to purchase under the Master Agreement. OMNIA Partners makes no representation or guaranty with respect to any minimum purchases by Principal Procurement Agency or any Participating Public Agency or any employee thereof under this Agreement or the Master Agreement.

6. OMNIA Partners shall not be responsible for Supplier's performance under the Master Agreement, and Supplier shall hold OMNIA Partners harmless from any liability that may arise from the acts or omissions of Supplier in connection with the Master Agreement.

7. Supplier acknowledges that, in connection with its access to OMNIA Partners confidential information and/or supply of data to OMNIA Partners, it has complied with and shall continue to comply with all laws, regulations and standards that may apply to Supplier, including, without limitation: (a) United States federal and state information security and privacy statutes, regulations and/or best practices, including, without limitation, the Gramm-Leach-Bliley Act, the Massachusetts Data Security Regulations (201 C.M.R. 17.00 et. seq.), the Nevada encryption statute (N.R.S. § 603A), the California data security law (Cal. Civil Code § 1798.80 et. seq.) and California Consumer Privacy Act (Cal. Civil Code § 1798.100 et. seq.); and (b) applicable industry and regulatory standards and best practices (collectively, "**Data Regulations**").

With regard to Personal Information that Supplier collects, receives, or otherwise processes under the Agreement or otherwise in connection with performance of the Agreement, Supplier agrees that it will not: (i) sell, rent, release, disclose, disseminate, make available, transfer, or otherwise

communicate orally, in writing, or by electronic or other means, such Personal Information to another business or third party for monetary or other valuable consideration; or (ii) retain, use, or disclose such Personal Information outside of the direct business relationship between Supplier and OMNIA Partners or for any purpose other than for the specific purpose of performance of the Agreement, including retaining, using, or disclosing such Personal Information for a commercial purpose other than for performance of the Agreement. By entering into the Agreement, Supplier certifies that it understands the specific restrictions contained in this Section 7 and will comply with them. For purposes hereof, "**Personal Information**" means information that identifies, relates to, describes, is reasonably capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer or household, and includes the specific elements of "personal information" as defined under Data Regulations, as defined herein. Supplier will reasonably assist OMNIA Partners in timely responding to any third party "request to know" or "request to delete" (as defined pursuant to Data Regulations) and will promptly provide OMNIA Partners with information reasonably necessary for OMNIA Partners to respond to such requests. Where Supplier collects Personal Information directly from Public Agencies or others on OMNIA Partners' behalf, Supplier will maintain records and the means necessary to enable OMNIA Partners to respond to such requests to know and requests to delete.

8. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, OMNIA PARTNERS EXPRESSLY DISCLAIMS ALL EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES REGARDING OMNIA PARTNERS' PERFORMANCE AS A CONTRACT ADMINISTRATOR OF THE MASTER AGREEMENT. OMNIA PARTNERS SHALL NOT BE LIABLE IN ANY WAY FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL, EXEMPLARY, PUNITIVE, OR RELIANCE DAMAGES, EVEN IF OMNIA PARTNERS IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TERM OF AGREEMENT; TERMINATION

9. This Agreement shall be in effect so long as the Master Agreement remains in effect, provided, however, that the provisions of Sections 3 – 8 and 11 – 22, hereof and the indemnifications afforded by the Supplier to OMNIA Partners in the Master Agreement, to the extent such provisions survive any expiration or termination of the Master Agreement, shall survive the expiration or termination of this Agreement.

NATIONAL PROMOTION

10. OMNIA Partners and Supplier shall publicize and promote the availability of the Master Agreement's products and services to Public Agencies and such agencies' employees. Supplier shall require each Public Agency to register its participation in the OMNIA Partners program by either registering on the OMNIA Partners website (www.omniapartners.com/publicsector) or executing a Master Intergovernmental Cooperative Purchasing Agreement prior to processing the Participating Public Agency's first sales order. Upon request, Supplier shall make available to interested Public Agencies a copy of the Master Agreement and such price lists or quotes as may be necessary for such Public Agencies to evaluate potential purchases.

11. Supplier shall provide such marketing and administrative support as set forth in the solicitation resulting in the Master Agreement, including assisting in development of marketing materials as reasonably requested by Principal Procurement Agency and OMNIA Partners. Supplier shall be responsible for obtaining permission or license of use and payment of any license fees for all content and images Supplier provides to OMNIA Partners or posts on the OMNIA Partners website.

Supplier shall indemnify, defend and hold harmless OMNIA Partners for use of all such content and images including copyright infringement claims. Supplier and OMNIA Partners each hereby grant to the other party a limited, revocable, non-transferable, non-sublicensable right to use such party's logo (each, the "**Logo**") solely for use in marketing the Master Agreement. Each party shall provide the other party with the standard terms of use of such party's Logo, and such party shall comply with such terms in all material respects. Both parties shall obtain approval from the other party prior to use of such party's Logo. Notwithstanding the foregoing, the parties understand and agree that except as provided herein neither party shall have any right, title or interest in the other party's Logo. Upon termination of this Agreement, each party shall immediately cease use of the other party's Logo.

ADMINISTRATIVE FEE, REPORTING & PAYMENT

12. An "Administrative Fee" shall be defined and due to OMNIA Partners from Supplier in the amount of __ percent (__%) ("**Administrative Fee Percentage**") multiplied by the total purchase amount paid to Supplier, less refunds, credits on returns, rebates and discounts, for the sale of products and/or services to Principal Procurement Agency and Participating Public Agencies pursuant to the Master Agreement (as amended from time to time and including any renewal thereof) ("**Contract Sales**"). From time to time the parties may mutually agree in writing to a lower Administrative Fee Percentage for a specifically identified Participating Public Agency's Contract Sales.

13. Supplier shall provide OMNIA Partners with an electronic accounting report monthly, in the format prescribed by OMNIA Partners, summarizing all Contract Sales for each calendar month. The Contract Sales reporting format is provided as Exhibit C ("**Contract Sales Report**"), attached hereto and incorporated herein by reference. Contract Sales Reports for each calendar month shall be provided by Supplier to OMNIA Partners by the 10th day of the following month. Failure to provide a Contract Sales Report within the time and manner specified herein shall constitute a material breach of this Agreement and if not cured within thirty (30) days of written notice to Supplier shall be deemed a cause for termination of the Master Agreement, at Principal Procurement Agency's sole discretion, and/or this Agreement, at OMNIA Partners' sole discretion.

14. Administrative Fee payments are to be paid by Supplier to OMNIA Partners at the frequency and on the due date stated in Section 13, above, for Supplier's submission of corresponding Contract Sales Reports. Administrative Fee payments are to be made via Automated Clearing House (ACH) to the OMNIA Partners designated financial institution identified in Exhibit D. Failure to provide a payment of the Administrative Fee within the time and manner specified herein shall constitute a material breach of this Agreement and if not cured within thirty (30) days of written notice to Supplier shall be deemed a cause for termination of the Master Agreement, at Principal Procurement Agency's sole discretion, and/or this Agreement, at OMNIA Partners' sole discretion. All Administrative Fees not paid when due shall bear interest at a rate equal to the lesser of one and one-half percent (1 1/2%) per month or the maximum rate permitted by law until paid in full.

15. Supplier shall maintain an accounting of all purchases made by Participating Public Agencies under the Master Agreement. OMNIA Partners, or its designee, in OMNIA Partners' sole discretion, reserves the right to compare Participating Public Agency records with Contract Sales Reports submitted by Supplier for a period of four (4) years from the date OMNIA Partners receives such report. In addition, OMNIA Partners may engage a third party to conduct an independent audit of Supplier's monthly reports. In the event of such an audit, Supplier shall provide all materials reasonably requested relating to such audit by OMNIA Partners at the location designated by OMNIA Partners. In the event an underreporting of Contract Sales and a resulting underpayment of

Administrative Fees is revealed, OMNIA Partners will notify the Supplier in writing. Supplier will have thirty (30) days from the date of such notice to resolve the discrepancy to OMNIA Partners' reasonable satisfaction, including payment of any Administrative Fees due and owing, together with interest thereon in accordance with Section 13, and reimbursement of OMNIA Partners' costs and expenses related to such audit.

GENERAL PROVISIONS

16. This Agreement, the Master Agreement and the exhibits referenced herein supersede any and all other agreements, either oral or in writing, between the parties hereto with respect to the subject matter hereto and no other agreement, statement, or promise relating to the subject matter of this Agreement which is not contained or incorporated herein shall be valid or binding. In the event of any conflict between the provisions of this Agreement and the Master Agreement, as between OMNIA Partners and Supplier, the provisions of this Agreement shall prevail.

17. If any action at law or in equity is brought to enforce or interpret the provisions of this Agreement or to recover any Administrative Fee and accrued interest, the prevailing party shall be entitled to reasonable attorney's fees and costs in addition to any other relief to which it may be entitled.

18. This Agreement and OMNIA Partners' rights and obligations hereunder may be assigned at OMNIA Partners' sole discretion to an affiliate of OMNIA Partners, any purchaser of any or all or substantially all of the assets of OMNIA Partners, or the successor entity as a result of a merger, reorganization, consolidation, conversion or change of control, whether by operation of law or otherwise. Supplier may not assign its obligations hereunder without the prior written consent of OMNIA Partners.

19. All written communications given hereunder shall be delivered by first-class mail, postage prepaid, or overnight delivery on receipt to the addresses as set forth below.

A. OMNIA Partners:

OMNIA Partners
Attn: President
840 Crescent Centre Drive
Suite 600
Franklin, TN 37067

B. Supplier: Corby Energy Services, INC.
David Carpenter
6001 Schooner Dr.
Belleville, MI 48111
dcarpenter@corbyenergy.com

20. If any provision of this Agreement shall be deemed to be, or shall in fact be, illegal, inoperative or unenforceable, the same shall not affect any other provision or provisions herein contained or render the same invalid, inoperative or unenforceable to any extent whatever, and this Agreement will be construed by limiting or invalidating such provision to the minimum extent necessary to make such provision valid, legal and enforceable.

21. This Agreement may not be amended, changed, modified, or altered without the prior written consent of the parties hereto, and no provision of this Agreement may be discharged or waived, except by a writing signed by the parties. A waiver of any particular provision will not be deemed a waiver of any other provision, nor will a waiver given on one occasion be deemed to apply to any other occasion.

22. This Agreement shall inure to the benefit of and shall be binding upon OMNIA Partners, the Supplier and any respective successor and assign thereto; subject, however, to the limitations contained herein.

23. This Agreement will be construed under and governed by the laws of the State of Delaware, excluding its conflicts of law provisions and any action arising out of or related to this Agreement shall be commenced solely and exclusively in the state or federal courts in Williamson County Tennessee.

24. This Agreement may be executed in counterparts, each of which is an original but all of which, together, shall constitute but one and the same instrument. The exchange of copies of this Agreement and of signature pages by facsimile, or by .pdf or similar electronic transmission, will constitute effective execution and delivery of this Agreement as to the parties and may be used in lieu of the original Agreement for all purposes. Signatures of the parties transmitted by facsimile, or by .pdf or similar electronic transmission, will be deemed to be their original signatures for any purpose whatsoever.

[INSERT SUPPLIER ENTITY NAME]	**NATIONAL INTERGOVERNMENTAL PURCHASING ALLIANCE COMPANY, A DELAWARE CORPORATION D/B/A OMNIA PARTNERS, PUBLIC SECTOR**
Signature	Signature
David Carpenter Name	Sarah Vavra Name
Vice President Title	Sr. Vice President, Public Sector Contracting Title
9/28/2021 Date	Date

Exhibit C
Master Intergovernmental Cooperative Purchasing Agreement, Example

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MASTER INTERGOVERNMENTAL COOPERATIVE PURCHASING AGREEMENT

This Master Intergovernmental Cooperative Purchasing Agreement (this "**Agreement**") is entered into by and between those certain government agencies that execute a Principal Procurement Agency Certificate ("**Principal Procurement Agencies**") with National Intergovernmental Purchasing Alliance Company, a Delaware corporation d/b/a OMNIA Partners, Public Sector and/or Communities Program Management, LLC, a California limited liability company d/b/a U.S. Communities (collectively, "**OMNIA Partners**"), in its capacity as the cooperative administrator, to be appended and made a part hereof and such other public agencies ("**Participating Public Agencies**") who register to participate in the cooperative purchasing programs administered by OMNIA Partners and its affiliates and subsidiaries (collectively, the "**OMNIA Partners Parties**") by either registering on the OMNIA Partners website (www.omniapartners.com/publicsector or any successor website), or by executing a copy of this Agreement.

RECITALS

WHEREAS, after a competitive solicitation and selection process by Principal Procurement Agencies, in compliance with their own policies, procedures, rules and regulations, a number of suppliers have entered into "**Master Agreements**" (herein so called) to provide a variety of goods, products and services ("**Products**") to the applicable Principal Procurement Agency and the Participating Public Agencies;

WHEREAS, Master Agreements are made available by Principal Procurement Agencies through the OMNIA Partners Parties and provide that Participating Public Agencies may purchase Products on the same terms, conditions and pricing as the Principal Procurement Agency, subject to any applicable federal and/or local purchasing ordinances and the laws of the State of purchase; and

WHEREAS, in addition to Master Agreements, the OMNIA Partners Parties may from time to time offer Participating Public Agencies the opportunity to acquire Products through other group purchasing agreements.

NOW, THEREFORE, in consideration of the mutual promises contained in this Agreement, and of the mutual benefits to result, the parties hereby agree as follows:

1. Each party will facilitate the cooperative procurement of Products.

2. The Participating Public Agencies shall procure Products in accordance with and subject to the relevant federal, state and local statutes, ordinances, rules and regulations that govern Participating Public Agency's procurement practices. The Participating Public Agencies hereby acknowledge and agree that it is the intent of the parties that all provisions of this Agreement and that Principal Procurement Agencies' participation in the program described herein comply with all applicable laws, including but not limited to the requirements of 42 C.F.R. § 1001.952(j), as may be amended from time to time. The Participating Public Agencies further acknowledge and agree that they are solely responsible for their compliance with all applicable "safe harbor" regulations, including but not limited to any and all obligations to fully and accurately report discounts and incentives.

3. The Participating Public Agency represents and warrants that the Participating Public Agency is not a hospital or other healthcare provider and is not purchasing Products on behalf of a hospital or healthcare provider; provided that the foregoing shall not prohibit Participating Public Agency from furnishing health care services so long as the furnishing of healthcare services is not in furtherance of a primary purpose of the Participating Public Agency.

4. The cooperative use of Master Agreements shall be in accordance with the terms and conditions of the Master Agreements, except as modification of those terms and conditions is otherwise required by applicable federal, state or local law, policies or procedures.

5. The Principal Procurement Agencies will make available, upon reasonable request, Master Agreement information which may assist in improving the procurement of Products by the Participating Public Agencies.

6. The Participating Public Agency agrees the OMNIA Partners Parties may provide access to group purchasing organization ("**GPO**") agreements directly or indirectly by enrolling the Participating Public Agency in another GPO's purchasing program, provided that the purchase of Products through the OMNIA Partners Parties or any other GPO shall be at the Participating Public Agency's sole discretion.

7. The Participating Public Agencies (each a "**Procuring Party**") that procure Products through any Master Agreement or GPO Product supply agreement (each a "**GPO Contract**") will make timely payments to the distributor, manufacturer or other vendor (collectively, "**Supplier**") for Products received in accordance with the terms and conditions of the Master Agreement or GPO Contract, as applicable. Payment for Products and inspections and acceptance of Products ordered by the Procuring Party shall be the exclusive obligation of such Procuring Party. Disputes between Procuring Party and any Supplier shall be resolved in accordance with the law and venue rules of the State of purchase unless otherwise agreed to by the Procuring Party and Supplier.

8. The Procuring Party shall not use this Agreement as a method for obtaining additional concessions or reduced prices for purchase of similar products or services outside of the Master Agreement. Master Agreements may be structured with not-to-exceed pricing, in which cases the Supplier may offer the Procuring Party and the Procuring Party may accept lower pricing or additional concessions for purchase of Products through a Master Agreement.

9. The Procuring Party shall be responsible for the ordering of Products under this Agreement. A non-procuring party shall not be liable in any fashion for any violation by a Procuring Party, and, to the extent permitted by applicable law, the Procuring Party shall hold non-procuring party harmless from any liability that may arise from the acts or omissions of the Procuring Party.

10. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE OMNIA PARTNERS PARTIES EXPRESSLY DISCLAIM ALL EXPRESS OR IMPLIED REPRESENTATIONS AND WARRANTIES REGARDING ANY PRODUCT, MASTER AGREEMENT AND GPO CONTRACT. THE OMNIA PARTNERS PARTIES SHALL NOT BE LIABLE IN ANY WAY FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL, EXEMPLARY, PUNITIVE, OR RELIANCE DAMAGES, EVEN IF THE OMNIA PARTNERS PARTIES ARE ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. FURTHER, THE PROCURING PARTY ACKNOWLEDGES AND AGREES THAT THE OMNIA PARTNERS PARTIES SHALL HAVE NO LIABILITY FOR ANY ACT OR OMISSION BY A SUPPLIER OR

OTHER PARTY UNDER A MASTER AGREEMENT OR GPO CONTRACT.

11. This Agreement shall remain in effect until termination by either party giving thirty (30) days' written notice to the other party. The provisions of Paragraphs 6 - 10 hereof shall survive any such termination.

12. This Agreement shall take effect upon (i) execution of the Principal Procurement Agency Certificate, or (ii) registration on the OMNIA Partners website or the execution of this Agreement by a Participating Public Agency, as applicable.

Participating Public Agency:	**OMNIA Partners, as the cooperative administrator on behalf of Principal Procurement Agencies:** **NATIONAL INTERGOVERNMENTAL PURCHASING ALLIANCE COMPANY COMMUNITIES PROGRAM MANAGEMENT, LLC**
Authorized Signature	Signature
David Carpenter Name	Sarah E. Vavra Name
Vice President, Trenchless Division Title and Agency Name	Sr. Vice President, Public Sector Contracting Title
9/28/2021 Date	Date

Exhibit D
Principal Procurement Agency Certificate, Example

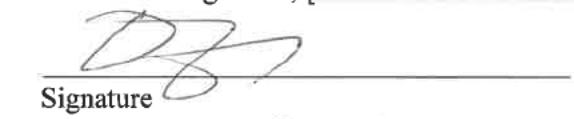
PRINCIPAL PROCUREMENT AGENCY CERTIFICATE

In its capacity as a Principal Procurement Agency (as defined below) for National Intergovernmental Purchasing Alliance Company, a Delaware corporation d/b/a OMNIA Partners, Public Sector ("**OMNIA Partners**"), [NAME OF PPA] agrees to pursue Master Agreements for Products as specified in the attached Exhibits to this Principal Procurement Agency Certificate.

I hereby acknowledge, in my capacity as _____ of and on behalf of [NAME OF PPA] ("**Principal Procurement Agency**"), that I have read and hereby agree to the general terms and conditions set forth in the attached Master Intergovernmental Cooperative Purchasing Agreement regulating the use of the Master Agreements and purchase of Products that from time to time are made available by Principal Procurement Agencies to Participating Public Agencies nationwide through OMNIA Partners.

I understand that the purchase of one or more Products under the provisions of the Master Intergovernmental Cooperative Purchasing Agreement is at the sole and complete discretion of the Participating Public Agency.

Authorized Signature, [PRINCIPAL PROCUREMENT AGENCY]



Signature

David Carpenter

Name

Vice President

Title

9/28/2021

Date

OMNIA PARTNERS

Supplier Name:	Corby Energy Servcies, Inc.	Total Sales	$0.00
Contract Number:	TC141617	Admin Fee %	
Reporting Period:	9/1/2021	Total Admin Fee	$0.00

													FOR OMNIA USE ONLY			
Supplier Internal ID	**ID**	**Name**	**Street Address**	**Street Address 2**	**City**	**State**	**Postal Code**	**Transaction Date**	**Sales Amount**	**Admin Fee %**	**Admin Fee**	**Notes**	**Wildcard**	**UniqueId**	**Rebate Due**	**Rebate Name**

Exhibit F
Federal Funds Certifications

FEDERAL CERTIFICATIONS
ADDENDUM FOR AGREEMENT FUNDED BY U.S. FEDERAL GRANT

TO WHOM IT MAY CONCERN:

Participating Agencies may elect to use federal funds to purchase under the Master Agreement. This form should be completed and returned.

DEFINITIONS

Contract means a legal instrument by which a non–Federal entity purchases property or services needed to carry out the project or program under a Federal award. The term as used in this part does not include a legal instrument, even if the non–Federal entity considers it a contract, when the substance of the transaction meets the definition of a Federal award or subaward

Contractor means an entity that receives a contract as defined in Contract.

Cooperative agreement means a legal instrument of financial assistance between a Federal awarding agency or pass-through entity and a non–Federal entity that, consistent with 31 U.S.C. 6302–6305:

(a) Is used to enter into a relationship the principal purpose of which is to transfer anything of value from the Federal awarding agency or pass-through entity to the non–Federal entity to carry out a public purpose authorized by a law of the United States (see 31 U.S.C. 6101(3)); and not to acquire property or services for the Federal government or pass-through entity's direct benefit or use;

(b) Is distinguished from a grant in that it provides for substantial involvement between the Federal awarding agency or pass-through entity and the non–Federal entity in carrying out the activity contemplated by the Federal award.

(c) The term does not include:

(1) A cooperative research and development agreement as defined in 15 U.S.C. 3710a; or

(2) An agreement that provides only:

(i) Direct United States Government cash assistance to an individual;

(ii) A subsidy;

(iii) A loan;

(iv) A loan guarantee; or

(v) Insurance.

Federal awarding agency means the Federal agency that provides a Federal award directly to a non–Federal entity

Federal award has the meaning, depending on the context, in either paragraph (a) or (b) of this section:

(a)(1) The Federal financial assistance that a non–Federal entity receives directly from a Federal awarding agency or indirectly from a pass-through entity, as described in § 200.101 Applicability; or

(2) The cost-reimbursement contract under the Federal Acquisition Regulations that a non–Federal entity receives directly from a Federal awarding agency or indirectly from a pass-through entity, as described in § 200.101 Applicability.

(b) The instrument setting forth the terms and conditions. The instrument is the grant agreement, cooperative agreement, other agreement for assistance covered in paragraph (b) of § 200.40 Federal financial assistance, or the cost-reimbursement contract awarded under the Federal Acquisition Regulations.

(c) Federal award does not include other contracts that a Federal agency uses to buy goods or services from a contractor or a contract to operate Federal government owned, contractor operated facilities (GOCOs).

(d) See also definitions of Federal financial assistance, grant agreement, and cooperative agreement.

Non–Federal entity means a state, local government, Indian tribe, institution of higher education (IHE), or nonprofit organization that carries out a Federal award as a recipient or subrecipient.

Nonprofit organization means any corporation, trust, association, cooperative, or other organization, not including IHEs, that:

(a) Is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;
(b) Is not organized primarily for profit; and
(c) Uses net proceeds to maintain, improve, or expand the operations of the organization.

Obligations means, when used in connection with a non–Federal entity's utilization of funds under a Federal award, orders placed for property and services, contracts and subawards made, and similar transactions during a given period that require payment by the non–Federal entity during the same or a future period.

Pass-through entity means a non–Federal entity that provides a subaward to a subrecipient to carry out part of a Federal program.

Recipient means a non–Federal entity that receives a Federal award directly from a Federal awarding agency to carry out an activity under a Federal program. The term recipient does not include subrecipients.

Simplified acquisition threshold means the dollar amount below which a non–Federal entity may purchase property or services using small purchase methods. Non–Federal entities adopt small purchase procedures in order to expedite the purchase of items costing less than the simplified acquisition threshold. The simplified acquisition threshold is set by the Federal Acquisition Regulation at 48 CFR Subpart 2.1 (Definitions) and in accordance with 41 U.S.C. 1908. As of the publication of this part, the simplified acquisition threshold is $250,000, but this threshold is periodically adjusted for inflation. (Also see definition of § 200.67 Micro-purchase.)

Subaward means an award provided by a pass-through entity to a subrecipient for the subrecipient to carry out part of a Federal award received by the pass-through entity. It does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program. A subaward may be provided through any form of legal agreement, including an agreement that the pass-through entity considers a contract.

Subrecipient means a non–Federal entity that receives a subaward from a pass-through entity to carry out part of a Federal program; but does not include an individual that is a beneficiary of such program. A subrecipient may also be a recipient of other Federal awards directly from a Federal awarding agency.

Termination means the ending of a Federal award, in whole or in part at any time prior to the planned end of period of performance.

The following certifications and provisions may be required and apply when Participating Agency expends federal funds for any purchase resulting from this procurement process. Pursuant to 2 C.F.R. § 200.326, all contracts, including small purchases, awarded by the Participating Agency and the Participating Agency's subcontractors shall contain the procurement provisions of Appendix II to Part 200, as applicable.

APPENDIX II TO 2 CFR PART 200

(A) Contracts for more than the simplified acquisition threshold currently set at $250,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Pursuant to Federal Rule (A) above, when a Participating Agency expends federal funds, the Participating Agency reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party.

Does offeror agree? YES DLG Initials of Authorized Representative of offeror

(B) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of $10,000)

Pursuant to Federal Rule (B) above, when a Participating Agency expends federal funds, the Participating Agency reserves the right to immediately terminate any agreement in excess of $10,000 resulting from this procurement process in the event of a breach or default of the agreement by Offeror as detailed in the terms of the contract.

Does offeror agree? YES DLS Initials of Authorized Representative of offeror

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 CFR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

Pursuant to Federal Rule (C) above, when a Participating Agency expends federal funds on any federally assisted construction contract, the equal opportunity clause is incorporated by reference herein.

Does offeror agree to abide by the above? YES DLS Initials of Authorized Representative of offeror

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non - Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Pursuant to Federal Rule (D) above, when a Participating Agency expends federal funds during the term of an award for all contracts and subgrants for construction or repair, offeror will be in compliance with all applicable Davis-Bacon Act provisions.

Does offeror agree? YES DLS Initials of Authorized Representative of offeror

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Pursuant to Federal Rule (E) above, when a Participating Agency expends federal funds, offeror certifies that offeror will be in compliance with all applicable provisions of the Contract Work Hours and Safety Standards Act during the term of an award for all contracts by Participating Agency resulting from this procurement process.

Does offeror agree? YES DLC Initials of Authorized Representative of offeror

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

Pursuant to Federal Rule (F) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency resulting from this procurement process, the offeror agrees to comply with all applicable requirements as referenced in Federal Rule (F) above.

Does offeror agree? YES DLC Initials of Authorized Representative of offeror

(G) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA)

Pursuant to Federal Rule (G) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency member resulting from this procurement process, the offeror agrees to comply with all applicable requirements as referenced in Federal Rule (G) above.

Does offeror agree? YES DLC Initials of Authorized Representative of offeror

(H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the Executive Office of the President Office of Management and Budget (OMB) guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Pursuant to Federal Rule (H) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency resulting from this procurement process, the offeror certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency. If at any time during the term of an award the offeror or its principals becomes debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency, the offeror will notify the Participating Agency.

Does offeror agree? YES DLC Initials of Authorized Representative of offeror

(I) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award.

Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (I) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term and after the awarded term of an award for all contracts by Participating Agency resulting from this procurement process, the offeror certifies that it is in compliance with all applicable provisions of the Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). The undersigned further certifies that:

(1) No Federal appropriated funds have been paid or will be paid for on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all covered sub-awards exceeding $100,000 in Federal funds at all appropriate tiers and that all subrecipients shall certify and disclose accordingly.

Does offeror agree? YES DLCT Initials of Authorized Representative of offeror

(K) Prohibition on certain telecommunications and video surveillance services or equipment – Contracts and subgrants expending Federal loan or grant funds shall not: (i) procure or obtain; (ii) extend or renew a contract to procure or obtain; or (iii) enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

As described in Public Law 115-232, section 889, covered telecommunications equipment under Federal Rule (K) include:

(i) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

(ii) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(iii) Telecommunications or video surveillance services provided by such entities or using such equipment. \

(iv) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Pursuant to Federal Rule (K) above, when a Participating Agency expends federal funds, offeror certifies that offeror will be in compliance with all applicable provisions of Federal Rule (K) during the term of an award for all contracts by Participating Agency resulting from this procurement process.

Does offeror agree? YES DLCT Initials of Authorized Representative of offeror

(L) Domestic preferences for procurements – Contracts and purchase orders for work or products under a subaward must include a provision that requires the non- Federal entity to provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products).

For the purposes of Federal Rule (L), "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States. "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Pursuant to Federal Rule (L) above, when federal funds are expended by Participating Agency, the offeror certifies that during the term of an award for all contracts by Participating Agency member resulting from this procurement process, the offeror agrees to comply with all applicable requirements as referenced in Federal Rule (L) above.

Does offeror agree? YES DLCJ Initials of Authorized Representative of offeror

RECORD RETENTION REQUIREMENTS FOR CONTRACTS INVOLVING FEDERAL FUNDS

When federal funds are expended by Participating Agency for any contract resulting from this procurement process, offeror certifies that it will comply with the record retention requirements detailed in 2 CFR § 200.333. The offeror further certifies that offeror will retain all records as required by 2 CFR § 200.333 for a period of three years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

Does offeror agree? YES DLCJ Initials of Authorized Representative of offeror

CERTIFICATION OF COMPLIANCE WITH THE ENERGY POLICY AND CONSERVATION ACT

When Participating Agency expends federal funds for any contract resulting from this procurement process, offeror certifies that it will comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6321 et seq.; 49 C.F.R. Part 18).

Does offeror agree? YES DLCJ Initials of Authorized Representative of offeror

CERTIFICATION OF COMPLIANCE WITH BUY AMERICA PROVISIONS

To the extent purchases are made with Federal Highway Administration, Federal Railroad Administration, or Federal Transit Administration funds, offeror certifies that its products comply with all applicable provisions of the Buy America Act and agrees to provide such certification or applicable waiver with respect to specific products to any Participating Agency upon request. Purchases made in accordance with the Buy America Act must still follow the applicable procurement rules calling for free and open competition.

Does offeror agree? YES DLCJ Initials of Authorized Representative of offeror

CERTIFICATION OF ACCESS TO RECORDS – 2 C.F.R. § 200.336

Offeror agrees that the Inspector General of the Agency or any of their duly authorized representatives shall have access to any documents, papers, or other records of offeror that are pertinent to offeror's discharge of its obligations under the Contract for the purpose of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to offeror's personnel for the purpose of interview and discussion relating to such documents.

Does offeror agree? YES DLCJ Initials of Authorized Representative of offeror

CERTIFICATION OF APPLICABILITY TO SUBCONTRACTORS

Offeror agrees that all contracts it awards pursuant to the Contract shall be bound by the foregoing terms and conditions.

Does offeror agree? YES DLCJ Initials of Authorized Representative of offeror

Offeror agrees to comply with all federal, state, and local laws, rules, regulations and ordinances, as applicable. It is further acknowledged that offeror certifies compliance with all provisions, laws, acts, regulations, etc. as specifically noted above.

Offeror's Name:

Corby Energy Services, INC.

Address, City, State, and Zip Code:
6001 Schooner Dr. Belleville, MI 48111

Phone Number: 734-549-9237 Fax Number: 734-482-1505

Printed Name and Title of Authorized Representative:
David Carpenter, Vice President

Email Address:
dcarpenter@corbyenergy.com

Signature of Authorized Representative: _____ Date: 9/28/2021

FEMA SPECIAL CONDITIONS

Awarded Supplier(s) may need to respond to events and losses where products and services are needed for the immediate and initial response to emergency situations such as, but not limited to, water damage, fire damage, vandalism cleanup, biohazard cleanup, sewage decontamination, deodorization, and/or wind damage during a disaster or emergency situation. By submitting a proposal, the Supplier is accepted these FEMA Special Conditions required by the Federal Emergency Management Agency (FEMA).

"Contract" in the below pages under FEMA SPECIAL CONDITIONS is also referred to and defined as the "Master Agreement".

"Contractor" in the below pages under FEMA SPECIAL CONDITIONS is also referred to and defined as "Supplier" or "Awarded Supplier".

Conflicts of Interest

No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a FEMA award if he or she has a real or apparent conflict of interest. Such a conflict would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of these parties, has a financial or other interest in or a tangible personal benefit from a firm considered for award. 2 C.F.R. § 200.318(c)(1); See also Standard Form 424D, ¶ 7; Standard Form 424B, ¶ 3. i. FEMA considers a "financial interest" to be the potential for gain or loss to the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of these parties as a result of the particular procurement. The prohibited financial interest may arise from ownership of certain financial instruments or investments such as stock, bonds, or real estate, or from a salary, indebtedness, job offer, or similar interest that might be affected by the particular procurement. ii. FEMA considers an "apparent" conflict of interest to exist where an actual conflict does not exist, but where a reasonable person with knowledge of the relevant facts would question the impartiality of the employee, officer, or agent participating in the procurement. c. Gifts. The officers, employees, and agents of the Participating Public Agency nor the Participating Public Agency ("NFE") must neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, NFE's may set standards for situations in which the financial interest is de minimus, not substantial, or the gift is an unsolicited item of nominal value. 2 C.F.R. § 200.318(c)(1). d. Violations. The NFE's written standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the NFE. 2 C.F.R. § 200.318(c)(1). For example, the penalty for a NFE's employee may be dismissal, and the penalty for a contractor might be the termination of the contract.

Contractor Integrity

A contractor must have a satisfactory record of integrity and business ethics. Contractors that are debarred or suspended, as described in and subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security's regulations at 2 C.F.R. Part 3000 (Non-procurement Debarment and Suspension), must be rejected and cannot receive contract awards at any level.

Public Policy

A contractor must comply with the public policies of the Federal Government and state, local government, or tribal government. This includes, among other things, past and current compliance with the:

a. Equal opportunity and nondiscrimination laws

b. Five affirmative steps described at 2 C.F.R. § 200.321(b) for all subcontracting under contracts supported by FEMA financial assistance; and FEMA Procurement Guidance June 21, 2016 Page IV- 7

c. Applicable prevailing wage laws, regulations, and executive orders

Affirmative Steps
For any subcontracting opportunities, Contractor must take the following Affirmative steps:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
4. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and
5. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

Prevailing Wage Requirements
When applicable, the awarded Contractor (s) and any and all subcontractor(s) agree to comply with all laws regarding prevailing wage rates including the Davis-Bacon Act, applicable to this solicitation and/or Participating Public Agencies. The Participating Public Agency shall notify the Contractor of the applicable pricing/prevailing wage rates and must apply any local wage rates requested. The Contractor and any subcontractor(s) shall comply with the prevailing wage rates set by the Participating Public Agency.

Federal Requirements
If products and services are issued in response to an emergency or disaster recovery the items below, located in this FEMA Special Conditions section of the Federal Funds Certifications, are activated and required when federal funding may be utilized.

2 C.F.R. § 200.326 and 2 C.F.R. Part 200, Appendix II, Required Contract Clauses

1. REMEDIES

a. Standard. Contracts for more than the simplified acquisition threshold, currently set at $250,000, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate. See 2 C.F.R. Part 200, Appendix II(A).

b. Applicability. This requirement applies to all FEMA grant and cooperative agreement programs.

2. TERMINATION FOR CAUSE AND CONVENIENCE

a. Standard. All contracts in excess of $10,000 must address termination for cause and for convenience by the non-Federal entity, including the manner by which it will be effected and the basis for settlement. See 2 C.F.R. Part 200, Appendix II(B).

b. Applicability. This requirement applies to all FEMA grant and cooperative agreement programs.

3. EQUAL EMPLOYMENT OPPORTUNITY

When applicable:

a. Standard. Except as otherwise provided under 41 C.F.R. Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. § 60- 1.4(b), in accordance with Executive Order 11246, *Equal Employment Opportunity* (30 Fed. Reg. 12319, 12935, 3 C.F.R. Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, *Amending Executive Order 11246 Relating to Equal Employment Opportunity*, and implementing regulations at 41 C.F.R. Part 60 (Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor). See 2 C.F.R. Part 200, Appendix II(C).

b. Key Definitions.

i. Federally Assisted Construction Contract. The regulation at 41 C.F.R. § 60-1.3 defines a "federally assisted construction contract" as any agreement or modification thereof between any applicant and a person for construction work which is paid for in whole or in part with funds obtained from the Government or borrowed on the credit of the Government pursuant to any Federal program involving a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, or any application or modification thereof approved by the Government for a grant, contract, loan, insurance, or guarantee under which the applicant itself participates in the construction work.

ii. Construction Work. The regulation at 41 C.F.R. § 60-1.3 defines "construction work" as the construction, rehabilitation, alteration, conversion, extension, demolition or repair of buildings, highways, or other changes or improvements to real property, including facilities providing utility services. The term also includes the supervision, inspection, and other onsite functions incidental to the actual construction.

c. Applicability. This requirement applies to all FEMA grant and cooperative agreement programs.

d. Required Language. The regulation at 41 C.F.R. Part 60-1.4(b) requires the insertion of the following contract clause.

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places,

available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

(4) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the

administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided,* That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

4. DAVIS-BACON ACT

a. Standard. All prime construction contracts in excess of $2,000 awarded by non- Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction). See 2 C.F.R. Part 200, Appendix II(D). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

b. Applicability. The Davis-Bacon Act applies to the Emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program.

c. Requirements. If applicable, the non-federal entity must do thefollowing:

i. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of

the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

ii. Additionally, pursuant 2 C.F.R. Part 200, Appendix II(D), contracts subject to the Davis-Bacon Act, must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations at 29 C.F.R. Part 3 (Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States). The Copeland Anti- Kickback Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA.

iii. Include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction").

Suggested Language. The following provides a sample contract clause:

Compliance with the Davis-Bacon Act.

a. All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.

b. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.

c. Additionally, contractors are required to pay wages not less than once a week.

5. COPELAND ANTI-KICKBACK ACT

a. Standard. Recipient and subrecipient contracts must include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").

b. Applicability. This requirement applies to all contracts for construction or repair work above $2,000 in situations where the Davis-Bacon Act also applies. It DOES NOT apply to the FEMA Public Assistance Program.

c. Requirements. If applicable, the non-federal entity must include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations at 29 C.F.R. Part 3 (Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States). Each contractor or subrecipient must be prohibited from inducing, by any means, any person

employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to FEMA. Additionally, in accordance with the regulation, each contractor and subcontractor must furnish each week a statement with respect to the wages paid each of its employees engaged in work covered by the Copeland Anti-Kickback Act and the Davis Bacon Act during the preceding weekly payroll period. The report shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work.

Sample Language. The following provides a sample contract clause:

Compliance with the Copeland "Anti-Kickback" Act.

a. Contractor. The contractor shall comply with 18 U.S.C. §874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

b. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

c. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. §5.12."

6. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

a. Standard. Where applicable (see 40 U.S.C. §§ 3701-3708), all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations at 29 C.F.R. Part 5. See 2 C.F.R. Part 200, Appendix II(E). Under 40 U.S.C. § 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Further, no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous.

b. Applicability. This requirement applies to all FEMA contracts awarded by the non- federal entity in excess of $100,000 under grant and cooperative agreement programs that involve the employment of mechanics or laborers. It is applicable to construction work. These requirements do not apply to the purchase of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

c. Suggested Language. The regulation at 29 C.F.R. § 5.5(b) provides contract clause language concerning compliance with the Contract Work Hours and Safety Standards

Act. FEMA suggests including the following contract clause:

Compliance with the Contract Work Hours and Safety Standards Act.

(1) *Overtime requirements.* No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) *Violation; liability for unpaid wages; liquidated damages.* In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of
$27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) *Withholding for unpaid wages and liquidated damages.* The Federal agency or loan/grant recipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) *Subcontracts.* The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

7. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

a. Standard. If the FEMA award meets the definition of "funding agreement" under 37C.F.R. § 401.2(a) and the non-Federal entity wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the non- Federal entity must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by FEMA. See 2 C.F.R. Part 200, Appendix II(F).

b. Applicability. This requirement applies to "*funding agreements*," but it DOES NOT apply

to the Public Assistance, Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program, as FEMA awards under these programs do not meet the definition of "funding agreement."

c. Funding Agreements Definition. The regulation at 37 C.F.R. § 401.2(a) defines "funding agreement" as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

8. CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION CONTROL ACT

a. Standard. If applicable, contracts must contain a provision that requires the contractor to agree to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C. §§ 7401-7671q.) and the Federal Water Pollution Control Act as amended (33 U.S.C. §§ 1251-1387). Violations must be reported to FEMA and the Regional Office of the Environmental Protection Agency. See 2 C.F.R. Part 200, Appendix II(G).

b. Applicability. This requirement applies to contracts awarded by a non-federal entity of amounts in excess of $150,000 under a federal grant.

c. Suggested Language. The following provides a sample contract clause.

Clean Air Act

1. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

2. The contractor agrees to report each violation to the Participating Public Agency and understands and agrees that the Participating Public Agency will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

3. The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

Federal Water Pollution Control Act

1. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.

2. The contractor agrees to report each violation to the Participating Public Agency and understands and agrees that the Participating Public Agency will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

3. The contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

9. DEBARMENT AND SUSPENSION

a. Standard. Non-Federal entities and contractors are subject to the debarment and suspension regulations implementing Executive Order 12549, *Debarment and Suspension* (1986) and Executive Order 12689, *Debarment and Suspension* (1989) at 2 C.F.R. Part 180 and the Department of Homeland Security's regulations at 2 C.F.R. Part 3000 (Non-procurement Debarment and Suspension).

b. Applicability. This requirement applies to all FEMA grant and cooperative agreement programs.

c. Requirements.

i. These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities. See 2 C.F.R. Part 200, Appendix II(H); and 2 C.F.R. § 200.213. A contract award must not be made to parties listed in the SAM Exclusions. SAM Exclusions is the list maintained by the General Services Administration that contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. SAM exclusions can be accessed at www.sam.gov. See 2 C.F.R. § 180.530.

ii. In general, an "excluded" party cannot receive a Federal grant award or a contract within the meaning of a "covered transaction," to include subawards and subcontracts. This includes parties that receive Federal funding indirectly, such as contractors to recipients and subrecipients. The key to the exclusion is whether there is a "covered transaction," which is any non-procurement transaction (unless excepted) at either a "primary" or "secondary" tier. Although "covered transactions" do not include contracts awarded by the Federal Government for purposes of the non-procurement common rule and DHS's implementing regulations, it does include some contracts awarded by recipients and subrecipients.

iii. Specifically, a covered transaction includes the following contracts for goods or services:

1. The contract is awarded by a recipient or subrecipient in the amount of at least $25,000.

2. The contract requires the approval of FEMA, regardless of amount.

3. The contract is for federally-required audit services.

4. A subcontract is also a covered transaction if it is awarded by the contractor of a recipient or subrecipient and requires either the approval of FEMA or is in excess of $25,000.

d. Suggested Language. The following provides a debarment and suspension clause. It incorporates an optional method of verifying that contractors are not excluded or disqualified.

Suspension and Debarment

(1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by the Participating Public Agency. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the Participating Public Agency, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

10. BYRD ANTI-LOBBYING AMENDMENT

a. Standard. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. § 1352. FEMA's regulation at 44 C.F.R. Part 18 implements the requirements of 31 U.S.C. § 1352 and provides, in Appendix A to Part 18, a copy of the certification that is required to be completed by each entity as described in 31 U.S.C. § 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the Federal awarding agency.

b. Applicability. This requirement applies to all FEMA grant and cooperative agreement programs. Contractors that apply or bid for a contract of $100,000 or more under a federal grant must file the required certification. See 2 C.F.R. Part 200, Appendix II(I); 31 U.S.C. § 1352; and 44 C.F.R. Part 18.

c. Suggested Language.

Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)

Contractors who apply or bid for an award of $100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

d. Required Certification. If applicable, contractors must sign and submit to the non-federal entity the following certification.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Corby Energy Services, INC

The Contractor, David Carpenter, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Official

David Carpenter Vice President

Name and Title of Contractor's Authorized Official

9/28/2021

Date

11. PROCUREMENT OF RECOVERED MATERIALS

a. Standard. A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. See 2 C.F.R. Part 200, Appendix II(J); and 2 C.F.R. §200.322.

b. Applicability. This requirement applies to all contracts awarded by a non- federal entity under FEMA grant and cooperative agreement programs.

c. Requirements. The requirements of Section 6002 include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired by the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

d. Suggested Language.

i. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—

1. Competitively within a timeframe providing for compliance with the contract performance schedule;
2. Meeting contract performance requirements; or
3. At a reasonable price.

ii. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

iii. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

12. ACCESS TO RECORDS

a. Standard. All recipients, subrecipients, successors, transferees, and assignees must acknowledge and agree to comply with applicable provisions governing DHS access to records, accounts, documents, information, facilities, and staff. Recipients must give DHS/FEMA access to, and the right to examine and copy, records, accounts, and other documents and sources of information related to the federal financial assistance award and permit access to facilities, personnel, and other individuals and information as may be necessary, as required by DHS regulations *and* other applicable laws or program guidance. See DHS Standard Terms and Conditions: Version 8.1 (2018). Additionally, Section 1225 of the Disaster Recovery Reform Act of 2018 prohibits FEMA from providing reimbursement to any state, local, tribal, or territorial government, or private non-profit for activities made pursuant to a contract that purports to prohibit audits or internal reviews by the FEMA administrator or Comptroller General.

Access to Records. The following access to records requirements apply to this contract:

i. The Contractor agrees to provide Participating Public Agency, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

ii. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

iii. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

iv. In compliance with the Disaster Recovery Act of 2018, the Participating Public Agency and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

13. CHANGES

a. Standard. To be eligible for FEMA assistance under the non-Federal entity's FEMA grant or cooperative agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope.

b. Applicability. FEMA recommends, therefore, that a non-Federal entity include a changes clause in its contract that describes how, if at all, changes can be made by either party to alter the method, price, or schedule of the work without breaching the contract. The language of the clause may differ depending on the nature of the contract and the end-item procured.

14. DHS SEAL, LOGO, AND FLAGS

a. Standard. Recipients must obtain permission prior to using the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials. See DHS Standard Terms and Conditions: Version 8.1 (2018).

b. Applicability. FEMA recommends that all non-Federal entities place in their contracts a provision that a contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

c. "The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

15. COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS

a. Standard. The recipient and its contractors are required to comply with all Federal laws, regulations, and executive orders.

b. Applicability. FEMA recommends that all non-Federal entities place into their contracts an acknowledgement that FEMA financial assistance will be used to fund the contract along with the requirement that the contractor will comply with all applicable Federal law, regulations, executive orders, and FEMA policies, procedures, and directives.

c. "This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives."

16. NO OBLIGATION BY FEDERAL GOVERNMENT

a. Standard. FEMA is not a party to any transaction between the recipient and its contractor. FEMA is not subject to any obligations or liable to any party for any matter relating to the contract.

b. Applicability. FEMA recommends that the non-Federal entity include a provision in its contract that states that the Federal Government is not a party to the contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

c. "The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract."

17. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

a. Standard. Recipients must comply with the requirements of The False Claims Act (31 U.S.C. §§ 3729-3733) which prohibits the submission of false or

fraudulent claims for payment to the federal government. See DHS Standard Terms and Conditions: Version 8.1 (2018); and 31 U.S.C. §§ 3801-3812, which details the administrative remedies for false claims and statements made. The non-Federal entity must include a provision in its contract that the contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to its actions pertaining to the contract.

b. Applicability. FEMA recommends that the non-Federal entity include a provision in its contract that the contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to its actions pertaining to the contract.

c. "The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract."

18. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

a. Applicability: This requirement applies to all FEMA grant and cooperative agreement programs.

b. Contracts and subgrants expending Federal loan or grant funds shall not: (i) procure or obtain; (ii) extend or renew a contract to procure or obtain; or (iii) enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any

system, or as critical technology as part of any system. See 2 C.F.R. Part 200, Appendix II, ¶ K.

c. As described in Public Law 115-232, section 889, covered telecommunications equipment under 2 C.F.R. § 200.216 include:
   i. Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
   ii. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
   iii. Telecommunications or video surveillance services provided by such entities or using such equipment.
   iv. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

19. DOMESTIC PREFERENCES FOR PROCUREMENTS

a. Applicability: This requirement applies to all FEMA grant and cooperative agreement programs.

b. Contracts and purchase orders for work or products under a subaward must include a provision that requires the non- Federal entity to provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). See 2 C.F.R. Part 200, Appendix II, ¶ L.
   i. "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
   ii. "Manufactured products" means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

Offeror agrees to comply with all terms and conditions outlined in the FEMA Special Conditions section of this solicitation.

Offeror's Name: Corby Energy Services, Inc.

Address, City, State, and Zip Code:
6001 Schooner Dr. Belleville, MI 48111

Phone Number: 734-547-9239 Fax Number: 734-482-1505

Printed Name and Title of Authorized Representative:
David Carpenter Vice President

Email Address: dcarpenter@corbyenergy.com

Signature of Authorized Representative: [signature]

Date: 9/28/2021

Exhibit G
New Jersey Business Compliance

NEW JERSEY BUSINESS COMPLIANCE

Suppliers intending to do business in the State of New Jersey must comply with policies and procedures required under New Jersey statues. All offerors submitting proposals must complete the following forms specific to the State of New Jersey. Completed forms should be submitted with the offeror's response to the RFP. Failure to complete the New Jersey packet will impact OMNIA Partners' ability to promote the Master Agreement in the State of New Jersey.

DOC #1	Ownership Disclosure Form
DOC #2	Non-Collusion Affidavit
DOC #3	Affirmative Action Affidavit
DOC #4	Political Contribution Disclosure Form
DOC #5	Stockholder Disclosure Certification
DOC #6	Certification of Non-Involvement in Prohibited Activities in Iran
DOC #7	New Jersey Business Registration Certificate

New Jersey suppliers are required to comply with the following New Jersey statutes when applicable:

- all anti-discrimination laws, including those contained in N.J.S.A. 10:2-1 through N.J.S.A. 10:2-14, N.J.S.A. 10:5-1, and N.J.S.A. 10:5-31 through 10:5-38;
- Prevailing Wage Act, N.J.S.A. 34:11-56.26, for all contracts within the contemplation of the Act;
- Public Works Contractor Registration Act, N.J.S.A. 34:11-56.26; and
- Bid and Performance Security, as required by the applicable municipal or state statutes.

DOC #1

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization: Corby Energy Services, Inc.

Organization Address: 2021 S. Schaefer Hwy., Detroit, MI 48217

Part I Check the box that represents the type of business organization:

☐ Sole Proprietorship (skip Parts II and III, execute certification in Part IV)

☐ Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)

☒ For-Profit Corporation (any type) ☐ Limited Liability Company (LLC)

☐ Partnership ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)

☐ Other (be specific): _____

Part II

☒ The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. (**COMPLETE THE LIST BELOW IN THIS SECTION**)

OR

☐ No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. (**SKIP TO PART IV**)

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Home Address (for Individuals) or Business Address
Mark S. Helsel, Jr.	6338 Cobblestone Lane Dexter, MI 48130
Cheryl A. Helsel	10826 Rustic Dr. Pinckney, MI 48169

Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed**.

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s
N/A	

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above**. The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.**

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address
N/A	

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the ***<name of contracting unit>*** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with ***<type of contracting unit>*** to notify the ***<type of contracting unit>*** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the ***<type of contracting unit>*** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):	James A. Moskal	Title:	Corporate Secretary
Signature:	James A. Mo	Date:	9/23/2021

DOC #2

NON-COLLUSION AFFIDAVIT

STANDARD BID DOCUMENT REFERENCE	
	Reference: VII-H
Name of Form:	**NON-COLLUSION AFFIDAVIT**
Statutory Reference:	No specific statutory reference State Statutory Reference N.J.S.A. 52:34-15
Instructions Reference:	Statutory and Other Requirements VII-H
Description:	The Owner's use of this form is optional. It is used to ensure that the bidder has not participated in any collusion with any other bidder or Owner representative or otherwise taken any action in restraint of free and competitive bidding.

NON-COLLUSION AFFIDAVIT

State of New Jersey
County of _____ ss:

I, James A. Moskal (name of affiant) residing in the City of Howell (name of municipality)
in the County of Livingston and State of Michigan of full age, being duly sworn according to law on my oath depose and say that:

I am Corporate Secretary (title or position) of the firm of Corby Energy Services, Inc. (name of firm)

_____ the bidder making this Proposal for the bid
Trenchless technology Rehabilitation
entitled products + services SN 22-024 (title of bid proposal), and that I executed the said proposal with full authority to do so that said bidder has not, directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said proposal and in this affidavit are true and correct, and made with full knowledge that the _____ (name of contracting unit) relies upon the truth of the statements contained in said Proposal and in the statements contained in this affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by _____.

Subscribed and sworn to

before me this day

James A. Moskal
Signature

_____, 2____

James A. Moskal
(Type or print name of affiant under signature)

_____
Notary public of

My Commission expires _____

(Seal)

DOC #3

AFFIRMATIVE ACTION AFFIDAVIT
(P.L. 1975, C.127)

Company Name: Corby Energy Services, Inc.
Street: 6001 Schooner St., Belleville, MI 48111
City, State, Zip Code: Belleville, MI 48111

Proposal Certification:

Indicate below company's compliance with New Jersey Affirmative Action regulations. Company's proposal will be accepted even if company is not in compliance at this time. No contract and/or purchase order may be issued, however, until all Affirmative Action requirements are met.

Required Affirmative Action Evidence:

Procurement, Professional & Service Contracts (Exhibit A)
Vendors must submit with proposal:

1. A photo copy of their Federal Letter of Affirmative Action Plan Approval

   OR

2. A photo copy of their Certificate of Employee Information Report

   OR

3. A complete Affirmative Action Employee Information Report (AA302) _____

Public Work – Over $50,000 Total Project Cost:

A. No approved Federal or New Jersey Affirmative Action Plan. We will complete Report Form AA201-A upon receipt from the

B. Approved Federal or New Jersey Plan – certificate enclosed

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

09/23/2021
Date

Dana A. Mack Corp. Secretary
Authorized Signature and Title

P.L. 1995, c. 127 (N.J.A.C. 17:27)
MANDATORY AFFIRMATIVE ACTION LANGUAGE

PROCUREMENT, PROFESSIONAL AND SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. The contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this non-discrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisement for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation.

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to attempt in good faith to employ minority and female workers trade consistent with the applicable county employment goal prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the Affirmative Action Office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time.

The contractor or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of it testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the state of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

The contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and lay-off to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and conform with the applicable employment goals, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor and its subcontractors shall furnish such reports or other documents to the Affirmative Action Office as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Affirmative Action Office for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code (NJAC 17:27).

_____

Signature of Procurement Agent

DOC #4

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Public Agency Instructions

This page provides guidance to public agencies entering into contracts with business entities that are required to file Political Contribution Disclosure forms with the agency. **It is not intended to be provided to contractors.** What follows are instructions on the use of form local units can provide to contractors that are required to disclose political contributions pursuant to N.J.S.A. 19:44A-20.26 (P.L. 2005, c. 271, s.2). Additional information on the process is available in Local Finance Notice 2006-1 (http://www.nj.gov/dca/divisions/dlgs/resources/lfns_2006.html). Please refer back to these instructions for the appropriate links, as the Local Finance Notices include links that are no longer operational.

1. The disclosure is required for all contracts in excess of $17,500 that are **not awarded** pursuant to a "fair and open" process (N.J.S.A. 19:44A-20.7).

2. Due to the potential length of some contractor submissions, the public agency should consider allowing data to be submitted in electronic form (i.e., spreadsheet, pdf file, etc.). Submissions must be kept with the contract documents or in an appropriate computer file and be available for public access. **The form is worded to accept this alternate submission.** The text should be amended if electronic submission will not be allowed.

3. The submission must be **received from the contractor and** on file at least 10 days prior to award of the contract. Resolutions of award should reflect that the disclosure has been received and is on file.

4. The contractor must disclose contributions made to candidate and party committees covering a wide range of public agencies, including all public agencies that have elected officials in the county of the public agency, state legislative positions, and various state entities. The Division of Local Government Services recommends that contractors be provided a list of the affected agencies. This will assist contractors in determining the campaign and political committees of the officials and candidates affected by the disclosure.

    a. The Division has prepared model disclosure forms for each county. They can be downloaded from the "County PCD Forms" link on the Pay-to-Play web site at http://www.nj.gov/dca/divisions/dlgs/programs/lpcl.html#12. They will be updated from time-to-time as necessary.
    b. A public agency using these forms **should edit them to properly reflect the correct legislative district**(s). As the forms are county-based, **they list all legislative districts** in each county. **Districts that do not represent the public agency should be removed from the lists.**
    c. Some contractors may find it easier to provide a single list that covers all contributions, regardless of the county. These submissions are appropriate and should be accepted.
    d. The form may be used "as-is", subject to edits as described herein.
    e. The "Contractor Instructions" sheet is intended to be provided with the form. It is recommended that the Instructions and the form be printed on the same piece of paper. The form notes that the Instructions are printed on the back of the form; where that is not the case, the text should be edited accordingly.
    f. The form is a Word document and can be edited to meet local needs, and posted for download on web sites, used as an e-mail attachment, or provided as a printed document.

5. It is recommended that the contractor also complete a "Stockholder Disclosure Certification." This will assist the local unit in its obligation to ensure that contractor did not make any prohibited contributions to the committees listed on the Business Entity Disclosure Certification in the 12 months prior to the contract (See Local Finance Notice 2006-7 for additional information on this obligation at http://www.nj.gov/dca/divisions/dlgs/resources/lfns_2006.html). A sample Certification form is part of this package and the instruction to complete it is included in the Contractor Instructions. NOTE: This section is not applicable to Boards of Education.

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Contractor Instructions

Business entities (contractors) receiving contracts from a public agency that are NOT awarded pursuant to a "fair and open" process (defined at N.J.S.A. 19:44A-20.7) are subject to the provisions of P.L. 2005, c. 271, s.2 (N.J.S.A. 19:44A-20.26). This law provides that 10 days prior to the award of such a contract, the contractor shall disclose contributions to:

- any State, county, or municipal committee of a political party
- any legislative leadership committee*
- any continuing political committee (a.k.a., political action committee)
- any candidate committee of a candidate for, or holder of, an elective office:
    - of the public entity awarding the contract
    - of that county in which that public entity is located
    - of another public entity within that county
    - or of a legislative district in which that public entity is located or, when the public entity is a county, of any legislative district which includes all or part of the county

The disclosure must list reportable contributions to any of the committees that exceed $300 per election cycle that were made during the 12 months prior to award of the contract. See N.J.S.A. 19:44A-8 and 19:44A-16 for more details on reportable contributions.

N.J.S.A. 19:44A-20.26 itemizes the parties from whom contributions must be disclosed when a business entity is not a natural person. This includes the following:

- individuals with an "interest" ownership or control of more than 10% of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit
- all principals, partners, officers, or directors of the business entity or their spouses
- any subsidiaries directly or indirectly controlled by the business entity
- IRS Code Section 527 New Jersey based organizations, directly or indirectly controlled by the business entity and filing as continuing political committees, (PACs).

When the business entity is a natural person, "a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity." [N.J.S.A. 19:44A-20.26(b)] The contributor must be listed on the disclosure.

Any business entity that fails to comply with the disclosure provisions shall be subject to a fine imposed by ELEC in an amount to be determined by the Commission which may be based upon the amount that the business entity failed to report.

The enclosed list of agencies is provided to assist the contractor in identifying those public agencies whose elected official and/or candidate campaign committees are affected by the disclosure requirement. It is the contractor's responsibility to identify the specific committees to which contributions may have been made and need to be disclosed. The disclosed information may exceed the minimum requirement.

The enclosed form, a content-consistent facsimile, or an electronic data file containing the required details (along with a signed cover sheet) may be used as the contractor's submission and is disclosable to the public under the Open Public Records Act.

The contractor must also complete the attached Stockholder Disclosure Certification. This will assist the agency in meeting its obligations under the law. **NOTE: This section does not apply to Board of Education contracts.**

* N.J.S.A. 19:44A-3(s): "The term "legislative leadership committee" means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly or the Minority Leader of the General Assembly pursuant to section 16 of P.L.1993, c.65 (C.19:44A-10.1) for the purpose of receiving contributions and making expenditures."

DOC #4, continued

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Required Pursuant to N.J.S.A. 19:44A-20.26

This form or its permitted facsimile must be submitted to the local unit no later than 10 days prior to the award of the contract.

Part I – Vendor Information

Vendor Name:	Corby Energy Services, Inc.		
Address:	6001 Schooner St.		
City:	Belleville	State: MI	Zip: 48111

The undersigned being authorized to certify, hereby certifies that the submission provided herein represents compliance with the provisions of N.J.S.A. 19:44A-20.26 and as represented by the Instructions accompanying this form.

Signature	Printed Name	Title
	James A. Moskal	Corporate Secretary

Part II – Contribution Disclosure

Disclosure requirement: Pursuant to N.J.S.A. 19:44A-20.26 this disclosure must include all reportable political contributions (more than $300 per election cycle) over the 12 months prior to submission to the committees of the government entities listed on the form provided by the local unit.

☐ Check here if disclosure is provided in electronic form

Contributor Name	Recipient Name	Date	Dollar Amount
			$

☐ Check here if the information is continued on subsequent page(s)

List of Agencies with Elected Officials Required for Political Contribution Disclosure
N.J.S.A. 19:44A-20.26

County Name:
State: Governor, and Legislative Leadership Committees
Legislative District #s:
State Senator and two members of the General Assembly per district.

County:

Freeholders	County Clerk	Sheriff
{County Executive}	Surrogate	

Municipalities (Mayor and members of governing body, regardless of title):

USERS SHOULD CREATE THEIR OWN FORM, OR DOWNLOAD FROM THE PAY TO PLAY SECTION OF THE DLGS WEBSITE A COUNTY-BASED, CUSTOMIZABLE FORM.

DOC #5

STOCKHOLDER DISCLOSURE CERTIFICATION

Name of Business:

☒ I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned.

OR

☐ I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersigned.

Check the box that represents the type of business organization:

☐ Partnership ☐ Corporation ☐ Sole Proprietorship

☐ Limited Partnership ☐ Limited Liability Corporation ☐ Limited Liability Partnership

☒ Subchapter S Corporation

Sign and notarize the form below, and, if necessary, complete the stockholder list below.

Stockholders:

Name: Cheryl A. Helsel Home Address: 10826 Rustic Dr. Pinckney, MI 48169	Name: Mark S. Helsel, Jr. Home Address: 6338 Cobblestone Lane Dexter, MI 48130
Name: Home Address:	Name: Home Address:
Name: Home Address:	Name: Home Address:

Subscribed and sworn before me this ___ day of _____, 2__.

(Notary Public)

My Commission expires:

(Affiant)

James A. Moika / Corp. Secretary
(Print name & title of affiant)

(Corporate Seal)

DOC #6

Certification of Non-Involvement in Prohibited Activities in Iran

Pursuant to N.J.S.A. 52:32-58, Offerors must certify that neither the Offeror, nor any of its parents, subsidiaries, and/or affiliates (as defined in N.J.S.A. 52:32 – 56(e) (3)), is listed on the Department of the Treasury's List of Persons or Entities Engaging in Prohibited Investment Activities in Iran and that neither is involved in any of the investment activities set forth in N.J.S.A. 52:32 – 56(f).

Offerors wishing to do business in New Jersey through this contract must fill out the Certification of Non-Involvement in Prohibited Activities in Iran here: http://www.state.nj.us/humanservices/dfd/info/standard/fdc/disclosure_investmentact.pdf.

Offerors should submit the above form completed with their proposal.

DOC #7

NEW JERSEY BUSINESS REGISTRATION CERTIFICATE
(N.J.S.A. 52:32-44)

Offerors wishing to do business in New Jersey must submit their State Division of Revenue issued Business Registration Certificate with their proposal here. Failure to do so will disqualify the Offeror from offering products or services in New Jersey through any resulting contract.

https://www.njportal.com/DOR/BusinessRegistration/

STATE OF NEW JERSEY -- DIVISION OF PURCHASE AND PROPERTY
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

Quote Number: _____ **Bidder/Offeror:** Corby Energy Services, Inc.

PART 1: CERTIFICATION
BIDDERS MUST COMPLETE PART 1 BY CHECKING EITHER BOX.
FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE.

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found on the Division's website at http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf. Bidders **must** review this list prior to completing the below certification. **Failure to complete the certification will render a bidder's proposal non-responsive**. If the Director finds a person or entity to be in violation of law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party

PLEASE CHECK THE APPROPRIATE BOX:

☑ **I certify, pursuant to Public Law 2012, c. 25, that neither the bidder listed above nor any of the bidder's parents, subsidiaries, or affiliates is listed** on the N.J. Department of the Treasury"s list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. **I will skip Part 2 and sign and complete the Certification below.**

OR

☐ **I am unable to certify as above because the bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below.** Failure to provide such will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN
You must provide a detailed, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.

EACH BOX WILL PROMPT YOU TO PROVIDE INFORMATION RELATIVE TO THE ABOVE QUESTIONS. PLEASE PROVIDE THOROUGH ANSWERS TO EACH QUESTION. IF YOU NEED TO MAKE ADDITIONAL ENTRIES, CLICK THE "ADD AN ADDITIONAL ACTIVITIES ENTRY" BUTTON.

Name _____ Relationship to Bidder/Offeror _____

Description of Activities _____

_____

Duration of Engagement _____ Anticipated Cessation Date _____

Bidder/Offeror Contact Name _____ Contact Phone Number _____

ADD AN ADDITIONAL ACTIVITIES ENTRY

Certification: I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity. I acknowledge that the State of New Jersey is relying on the information contained herein and thereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the State to notify the State in writing of any changes to the answers of information contained herein. I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with the State of New Jersey and that the State at its option may declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print): James A. Moskal Signature: _____

Title: Corporate Secretary Date: 09/23/2021

Confirmation

Congratulations! You have completed the Business Registration process and are now an active business in New Jersey. If you have any tax eligibility questions, please wait two business days before calling the Division of Taxation Customer Service Center at 609.943.5000. For more information or additional questions go to Help (https://appengine.egov.com/apps/nj/dor/registrationhelp) page.

Registration Information

Please note the information below and keep it in your records for future use. You will receive an email with similar information. You must download the listed documents as they will not be physically mailed to you. **We will mail your Business Registration Certificate to you in ten business days. You can also download your Business Registration Certificate in two business days by visiting https://www1.state.nj.us/TYTR_BRC/jsp/BRCLoginJsp.jsp (https://www1.state.nj.us/TYTR_BRC/jsp/BRCLoginJsp.jsp).**

Filer ID:

###-###-763/000

Document Locator Number:

N0000564713

Entity ID:

0450706070

Filing Date

09/23/2021

Download Documents:

- Business Registration Document (/DOR/BusinessRegistration/Document/BusinessRegistrationCertificate)

Documents will be available for download for 30 days, until 10/23/2021 from the Document Retrieval Center (/DOR/BusinessRegistration/Document). Use access code: ***bf7d3b00-b167-4810-8d99-2e721ccf9edf***

Corporations and LLC-1120s may elect to register in New Jersey as a Sub-Chapter S corporation. Since the S corporation status for federal purposes does not automatically flow through for New Jersey State purposes, you must apply for S corporation status in this state and receive approval of the election. Without this filing and approval, your filings in New Jersey will be considered as those of a standard C corporation with all the rates that apply to that designation. To learn more about electing S corporation status, click here (http://www.nj.gov/treasury/revenue/scorp.shtml).
Please allow 10 business days **after** registering before using the online S Corp Filing Service.

Tell us what you think. Take our quick 1-2 minute survey (https://www.surveymonkey.com/r/busregistration)!

Did you know New Jersey offers many business services online?

- Changes to your business? File online (http://www.nj.gov/treasury/revenue/amendcerts.shtml).
- Need copies of your business records? Use the Business Records Service (BRS) (https://www.njportal.com/dor/businessrecords/) to obtain copies instantly.
- Monitor your business filings with CorpWatch (https://www.njportal.com/DOR/CorpWatch).

For more online business services, visit the Division of Revenue and Enterprise Services (http://www.nj.gov/treasury/revenue/).

Go to Premier Business Services (http://www.nj.gov/njbusiness/home/pbs/)

Division of Revenue and Enterprise Services
PO (Post Office) Box 252
Trenton, NJ 08625-0252

Support
DORES (Division of Revenue and Enterprise Services) Website (http://www.state.nj.us/treasury/revenue/)

Policies & Procedures
Privacy Policy (https://www.njportal.com/ErrorPages/Privacy.aspx)
Accessibility Policy (https://www.njportal.com/ErrorPages/Accessibility.aspx)
Security Policy (https://www.njportal.com/ErrorPages/Security.aspx)
Legal Statements & Disclaimers (https://www.njportal.com/errorpages/disclaimer.aspx)

DLN	N0000564713
Sequence Number	5489521
Filing Date	09/23/2021
Authorized Representative	James A. Moskal

Business Name	CORBY ENERGY SERVICES INC.
Entity ID	0450706070
EIN Number	###-###-763/000
Trade Name on Certificate	
Other Trade Names	
Beginning Date in NJ	09/23/2021
Open all Year	Yes
Business Location	6001 SCHOONER ST. BELLEVILLE MI 48111
Mailing Name and Address	James Moskal 6001 SCHOONER ST. BELLEVILLE MI 48111
Ownership Type	Authorized Foreign Corporation
Last Month of Fiscal Year	December
State of Incorporation	MI
Is a subsidiary	No
Owners	Mark S Helsel Pres. (Owns 49%) ###-##-6548 6338 Cobblestone Lane Dexter MI 48130 Cheryl A Helsel Owner (Owns 51%) ###-##-9730 10826 Rustic Dr. Pinckney MI 48169
Business Code	2900
Principal Product or Service	Utility construction and maintenance services
Principal Activity	Utility construction and maintenance services
Industrial Code	1623
NAICS Code	237130
Number of Workers	

Activities applicable to this business:

Paying employees working in New Jersey	No
Paying New Jersey residents working outside of New Jersey	No
Paying a pension or annuity to any New Jersey residents	No
Operates more than one facility in New Jersey with employees	No

Acquired assets, trade/business, and/or employees	No
Activities applicable to this business:	
Sell or use taxable goods or services in New Jersey	No
Need to make exempt purchases	No
Wholesale sales or distribution of tobacco products	No
Sell or transport motor fuels or petroleum	No
Store petroleum and/or hazardous chemicals	No
Manufacture, distribute or sell litter generating products	No
Required to file for solid waste disposal facility	No
Required to file for solid waste transport	No
Operate a sanitary landfill	No
Sell or deliver natural gas or electricity	No
Sell goods or services to State Agencies or Casinos	Yes
Operate a Motor Vehicle Rental Company	No
Sell new tires or sell or lease Motor Vehicles	No
Sell voice grade access/mobile telecommunications	No
Operate a Hotel, Motel or Other Facility that rents rooms	No
Operate a Gambling Hall that holds games of chance	No
Operates in the Millville Sports & Entertainment District	No
Other business activities subject to miscellaneous taxes	None
Contact Name	JAMES MOSKAL
Title	Sec.
Email	jmoskal@corbyenergy.com
Daytime Phone	(734) 547 - 9237
Evening Phone	

Form AA302
Rev. 11/11

STATE OF NEW JERSEY

Division of Purchase & Property
Contract Compliance Audit Unit
EEO Monitoring Program

EMPLOYEE INFORMATION REPORT

IMPORTANT-READ INSTRUCTIONS CAREFULLY BEFORE COMPLETING FORM. FAILURE TO PROPERLY COMPLETE THE ENTIRE FORM AND TO SUBMIT THE REQUIRED $150.00 FEE MAY DELAY ISSUANCE OF YOUR CERTIFICATE. DO NOT SUBMIT EEO-1 REPORT FOR SECTION B, ITEM 11. For Instructions on completing the form, go to: http://www.state.nj.us/treasury/contract_compliance/pdf/aa302ins.pdf

SECTION A - COMPANY IDENTIFICATION

1. FID. NO. OR SOCIAL SECURITY	2. TYPE OF BUSINESS	3. TOTAL NO. EMPLOYEES IN THE ENTIRE COMPANY
38-2402763	☐ 1. MFG ☒ 2. SERVICE ☐ 3. WHOLESALE ☐ 4. RETAIL ☐ 5. OTHER	279

4. COMPANY NAME: Corby Energy Services, Inc.

5. STREET	CITY	COUNTY	STATE	ZIP CODE
6001 Schooner St.	Belleville	Wayne	MI	48111

6. NAME OF PARENT OR AFFILIATED COMPANY (IF NONE, SO INDICATE) — CITY — STATE — ZIP CODE

None

7. CHECK ONE: IS THE COMPANY: ☒ SINGLE-ESTABLISHMENT EMPLOYER ☐ MULTI-ESTABLISHMENT EMPLOYER

8. IF MULTI-ESTABLISHMENT EMPLOYER, STATE THE NUMBER OF ESTABLISHMENTS IN NJ

9. TOTAL NUMBER OF EMPLOYEES AT ESTABLISHMENT WHICH HAS BEEN AWARDED THE CONTRACT

10. PUBLIC AGENCY AWARDING CONTRACT — CITY — COUNTY — STATE — ZIP CODE

Official Use Only	DATE RECEIVED	INAUG.DATE	ASSIGNED CERTIFICATION NUMBER

SECTION B - EMPLOYMENT DATA

11. Report all permanent, temporary and part-time employees ON YOUR OWN PAYROLL. Enter the appropriate figures on all lines and in all columns. Where there are no employees in a particular category, enter a zero. Include ALL employees, not just those in minority/non-minority categories, in columns 1, 2, & 3. *DO NOT SUBMIT AN EEO-1 REPORT.*

JOB CATEGORIES	ALL EMPLOYEES			PERMANENT MINORITY/NON-MINORITY EMPLOYEE BREAKDOWN										
				********** MALE **********					********** FEMALE **********					
	COL. 1 TOTAL (Cols.2 &3)	COL. 2 MALE	COL. 3 FEMALE	BLACK	HISPANIC	AMER. INDIAN	ASIAN	NON MIN.	BLACK	HISPANIC	AMER. INDIAN	ASIAN	NON MIN.
Officials/ Managers	~~15~~ 15	10	5					10					5
Professionals	~~23~~ 30	23	~~7~~ 7			1	1	~~21~~ 21	1				6
Technicians	14	14		1	2			11					
Sales Workers													
Office & Clerical	~~10~~ 10	6	4	~~4~~ 4				6					4
Craftworkers (Skilled)	~~210~~ 210	209	1	6	10	3	1	189					1
Operatives (Semi-skilled)													
Laborers (Unskilled)													
Service Workers													
TOTAL	279	262	17	7	12	4	2	237	1				16
Total employment From previous Report (if any)													
Temporary & Part-Time Employees	The data below shall NOT be included in the figures for the appropriate categories above.													

12. HOW WAS INFORMATION AS TO RACE OR ETHNIC GROUP IN SECTION B OBTAINED? ☒ 1. Visual Survey ☒ 2. Employment Record ☐ 3. Other (Specify)

13. DATES OF PAYROLL PERIOD USED From: 09/19/2021 To: 09/25/2021

14. IS THIS THE FIRST Employee Information Report Submitted? 1. YES ☒ 2. NO ☐

15. IF NO, DATE LAST REPORT SUBMITTED MO. DAY YEAR

SECTION C - SIGNATURE AND IDENTIFICATION

16. NAME OF PERSON COMPLETING FORM (Print or Type)	SIGNATURE	TITLE	DATE MO DAY YEAR
James A. Moskal		Corporate Secretary	09 23 2021

17. ADDRESS NO. & STREET	CITY	COUNTY	STATE	ZIP CODE	PHONE (AREA CODE, NO.,EXTENSION)
6001 Schooner St.	Belleville	Wayne	MI	48111	734 - 547 - 9237

The contractor or subcontractor agrees to inform in writing its appropriate recruitment agencies including, but not limited to, employment agencies, placement bureaus, colleges, universities, and labor unions, that it does not discriminate on the basis of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

In conforming with the targeted employment goals, the contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor shall submit to the public agency, after notification of award but prior to execution of a goods and services contract, one of the following three documents:

Letter of Federal Affirmative Action Plan Approval

Certificate of Employee Information Report

Employee Information Report Form AA302 (electronically provided by the Division and distributed to the public agency through the Division's website at www.state.nj.us/treasury/contract_compliance)

The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27**.

INSTRUCTIONS FOR COMPLETING THE EMPLOYEE INFORMATION REPORT (FORM AA302)

IMPORTANT: READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE COMPLETING THE FORM. PRINT OR TYPE ALL INFORMATION. FAILURE TO PROPERLY COMPLETE THE ENTIRE FORM **AND TO SUBMIT THE REQUIRED $150.00 NON-REFUNDABLE FEE MAY DELAY ISSUANCE OF YOUR CERTIFICATE. IF YOU HAVE A CURRENT CERTIFICATE OF EMPLOYEE INFORMATION REPORT, DO NOT COMPLETE THIS FORM UNLESS YOUR ARE RENEWING A CERTIFICATE THAT IS DUE FOR EXPIRATION. DO NOT COMPLETE THIS FORM FOR CONSTRUCTION CONTRACT AWARDS.**

ITEM 1 - Enter the Federal Identification Number assigned by the Internal Revenue Service, or if a Federal Employer Identification Number has been applied for, or if your business is such that you have not or will not receive a Federal Employer Identification Number, enter the Social Security Number of the owner or of one partner, in the case of a partnership.

ITEM 2 - Check the box appropriate to your TYPE OF BUSINESS. If you are engaged in more than one type of business check the predominate one. If you are a manufacturer deriving more than 50% of your receipts from your own retail outlets, check "Retail".

ITEM 3 - Enter the total "number" of employees in the entire company, including part-time employees. This number shall include all facilities in the entire firm or corporation.

ITEM 4 - Enter the name by which the company is identified. If there is more than one company name, enter the predominate one.

ITEM 5 - Enter the physical location of the company. Include City, County, State and Zip Code.

ITEM 6 - Enter the name of any parent or affiliated company including the City, County, State and Zip Code. If there is none, so indicate by entering "None" or N/A.

ITEM 7 - Check the box appropriate to your type of company establishment. "Single-establishment Employer" shall include an employer whose business is conducted at only one physical location. "Multi-establishment Employer" shall include an employer whose business is conducted at more than one location.

ITEM 8 - If "Multi-establishment" was entered in item 8, enter the number of establishments within the State of New Jersey.

ITEM 9 - Enter the total number of employees at the establishment being awarded the contract.

ITEM 10 - Enter the name of the Public Agency awarding the contract. Include City, County, State and Zip Code. This is not applicable if you are renewing a current Certificate.

ITEM 11 - Enter the appropriate figures on all lines and in all columns. THIS SHALL ONLY INCLUDE EMPLOYMENT DATA FROM THE FACILITY THAT IS BEING AWARDED THE CONTRACT. DO NOT list the same employee in more than one job category. **DO NOT attach an EEO-1 Report.**

Racial/Ethnic Groups will be defined:
Black: Not of Hispanic origin. Persons having origin in any of the Black racial groups of Africa.
Hispanic: Persons of Mexican, Puerto Rican, Cuban, or Central or South American or other Spanish culture or origin, regardless of race.
American Indian or Alaskan Native: Persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.
Asian or Pacific Islander: Persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian Sub-continent or the Pacific Islands. This area includes for example, China, Japan, Korea, the Phillippine Islands and Samoa.
Non-Minority: Any Persons not identified in any of the aforementioned Racial/Ethnic Groups.

ITEM 12 - Check the appropriate box. If the race or ethnic group information was not obtained by 1 or 2, specify by what other means this was done in 3.

ITEM 13 - Enter the dates of the payroll period used to prepare the employment data presented in Item 12.

ITEM 14 - If this is the first time an Employee Information Report has been submitted for this company, check block "Yes".

ITEM 15 - If the answer to Item 15 is "No", enter the date when the last Employee Information Report was submitted by this company.

ITEM 16 - Print or type the name of the person completing the form. Include the signature, title and date.

ITEM 17 - Enter the physical location where the form is being completed. Include City, State, Zip Code and Phone Number.

TYPE OR PRINT IN SHARP BALL POINT PEN

THE VENDOR IS TO COMPLETE THE EMPLOYEE INFORMATION REPORT FORM (AA302) AND RETAIN A COPY FOR THE VENDOR'S OWN FILES. THE VENDOR SHOULD ALSO SUBMIT A COPY TO THE PUBLIC AGENCY AWARDING THE CONTRACT IF THIS IS YOUR FIRST REPORT; AND FORWARD ONE COPY **WITH A CHECK IN THE AMOUNT OF $150.00 PAYABLE TO THE TREASURER, STATE OF NEW JERSEY(FEE IS NON-REFUNDABLE)** TO:

NJ Department of the Treasury
Division of Purchase & Property
Contract Compliance Audit Unit
EEO Monitoring Program
P.O. Box 206
Trenton, New Jersey 08625-0206 **Telephone No. (609) 292-5473**

(REVISED 4/10)

EXHIBIT A

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127)
N.J.A.C. 17:27

GOODS, PROFESSIONAL SERVICE AND GENERAL SERVICE CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union of the contractor's commitments under this chapter and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to make good faith efforts to meet targeted county employment goals established in accordance with N.J.A.C. 17:27-5.2.

DOC #8

EEOAA EVIDENCE

Equal Employment Opportunity/Affirmative Action
Goods, Professional Services & General Service Projects

EEO/AA Evidence

Vendors are required to submit evidence of compliance with N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27 in order to be considered a responsible vendor.

One of the following must be included with submission:

- Copy of Letter of Federal Approval
- Certificate of Employee Information Report
- Fully Executed Form AA302
- Fully Executed EEO-1 Report

See the guidelines at: http://www.state.nj.us/treasury/contract_compliance/pdf/pa.pdf for further information.

I certify that my bid package includes the required evidence per the above list and State website.

Name: James A. Mostal Title: Corp. Secretary

Signature: [signature] Date: 9/23/2021

DOC #9

MCBRIDE-PRINCIPLES

STATE OF NEW JERSEY DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY

33 WEST STATE STREET, P.O. BOX 230
TRENTON, NEW JERSEY 08625-0230

MACBRIDE PRINCIPALS FORM

BID SOLICITATION #: _____ **VENDOR/BIDDER:** Cocky Energy Services Inc.

VENDOR'S/BIDDER'S REQUIREMENT
TO PROVIDE A CERTIFICATION IN COMPLIANCE WITH THE MACBRIDE PRINCIPALS AND NORTHERN IRELAND ACT OF 1989

Pursuant to Public Law 1995, c. 134, a responsible Vendor/Bidder selected, after public bidding, by the Director of the Division of Purchase and Property, pursuant to N.J.S.A. 52:34-12, must complete the certification below by checking one of the two options listed below and signing where indicated. If a Vendor/Bidder that would otherwise be awarded a purchase, contract or agreement does not complete the certification, then the Director may determine, in accordance with applicable law and rules, that it is in the best interest of the State to award the purchase, contract or agreement to another Vendor/Bidder that has completed the certification and has submitted a bid within five (5) percent of the most advantageous bid. If the Director finds contractors to be in violation of the principals that are the subject of this law, he/she shall take such action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

I, the undersigned, on behalf the Vendor/Bidder, certify pursuant to N.J.S.A. 52:34-12.2 that:

CHECK THE APPROPRIATE BOX

☒ The Vendor/Bidder has no business operations in Northern Ireland; or

OR

☐ The Vendor/Bidder will take lawful steps in good faith to conduct any business operations it has in Northern Ireland in accordance with the MacBride principals of nondiscrimination in employment as set forth in section 2 of P.L. 1987, c. 177 (N.J.S.A. 52:18A-89.5) and in conformance with the United Kingdom's Fair Employment (Northern Ireland) Act of 1989, and permit independent monitoring of its compliance with those principals.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of **my** agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification to be void and unenforceable.

Signature _____ Date 09/24/2021

James A. Maskal
Print Name and Title

Exhibit H
Advertising Compliance Requirement

Pursuant to certain state notice provisions, including but not limited to Oregon Revised Statutes Chapter 279A.220, the following public agencies and political subdivisions of the referenced public agencies are eligible to register with OMNIA Partners and access the Master Agreement contract award made pursuant to this solicitation, and are hereby given notice of the foregoing request for proposals for purposes of complying with the procedural requirements of said statutes:

Nationwide:

State of Alabama	State of Hawaii	Commonwealth of Massachusetts	State of New Mexico	State of South Dakota
State of Alaska	State of Idaho	State of Michigan	State of New York	State of Tennessee
State of Arizona	State of Illinois	State of Minnesota	State of North Carolina	State of Texas
State of Arkansas	State of Indiana	State of Mississippi	State of North Dakota	State of Utah
State of California	State of Iowa	State of Missouri	State of Ohio	State of Vermont
State of Colorado	State of Kansas	State of Montana	State of Oklahoma	Commonwealth of Virginia
State of Connecticut	Commonwealth of Kentucky	State of Nebraska	State of Oregon	State of Washington
State of Delaware	State of Louisiana	State of Nevada	Commonwealth of Pennsylvania	State of West Virginia
State of Florida	State of Maine	State of New Hampshire	State of Rhode Island	State of Wisconsin
State of Georgia	State of Maryland	State of New Jersey	State of South Carolina	State of Wyoming
District of Columbia				

Lists of political subdivisions and local governments in the above referenced states / districts may be found at http://www.usa.gov/Agencies/State_and_Territories.shtml and https://www.usa.gov/local-governments.

Certain Public Agencies and Political Subdivisions:

CITIES, TOWNS, VILLAGES AND BOROUGHS INCLUDING BUT NOT LIMITED TO:

BAKER CITY GOLF COURSE, OR
CITY OF ADAIR VILLAGE, OR
CITY OF ASHLAND, OR
CITY OF AUMSVILLE, OR
CITY OF AURORA, OR
CITY OF BAKER, OR
CITY OF BATON ROUGE, LA
CITY OF BEAVERTON, OR
CITY OF BEND, OR
CITY OF BOARDMAN, OR
CITY OF BONANAZA, OR
CITY OF BOSSIER CITY, LA
CITY OF BROOKINGS, OR
CITY OF BURNS, OR
CITY OF CANBY, OR
CITY OF CANYONVILLE, OR
CITY OF CLATSKANIE, OR
CITY OF COBURG, OR
CITY OF CONDON, OR
CITY OF COQUILLE, OR
CITY OF CORVALLI, OR
CITY OF CORVALLIS PARKS AND RECREATION DEPARTMENT, OR
CITY OF COTTAGE GROVE, OR
CITY OF DONALD, OR
CITY OF EUGENE, OR
CITY OF FOREST GROVE, OR
CITY OF GOLD HILL, OR
CITY OF GRANTS PASS, OR
CITY OF GRESHAM, OR
CITY OF HILLSBORO, OR
CITY OF INDEPENDENCE, OR
CITY AND COUNTY OF HONOLULU, HI
CITY OF KENNER, LA
CITY OF LA GRANDE, OR
CITY OF LAFAYETTE, LA
CITY OF LAKE CHARLES, OR
CITY OF LEBANON, OR
CITY OF MCMINNVILLE, OR
CITY OF MEDFORD, OR
CITY OF METAIRIE, LA
CITY OF MILL CITY, OR
CITY OF MILWAUKIE, OR
CITY OF MONROE, LA
CITY OF MOSIER, OR
CITY OF NEW ORLEANS, LA
CITY OF NORTH PLAINS, OR
CITY OF OREGON CITY, OR
CITY OF PILOT ROCK, OR
CITY OF PORTLAND, OR
CITY OF POWERS, OR
CITY OF PRINEVILLE, OR
CITY OF REDMOND, OR
CITY OF REEDSPORT, OR
CITY OF RIDDLE, OR
CITY OF ROGUE RIVER, OR
CITY OF ROSEBURG, OR
CITY OF SALEM, OR
CITY OF SANDY, OR
CITY OF SCAPPOOSE, OR
CITY OF SHADY COVE, OR
CITY OF SHERWOOD, OR
CITY OF SHREVEPORT, LA
CITY OF SILVERTON, OR
CITY OF SPRINGFIELD, OR
CITY OF ST. HELENS, OR

CITY OF ST. PAUL, OR
CITY OF SULPHUR, LA
CITY OF TIGARD, OR
CITY OF TROUTDALE, OR
CITY OF TUALATIN, OR
CITY OF WALKER, LA
CITY OF WARRENTON, OR
CITY OF WEST LINN, OR
CITY OF WILSONVILLE, OR
CITY OF WINSTON, OR
CITY OF WOODBURN, OR
LEAGUE OF OREGON CITES
THE CITY OF HAPPY VALLEY OREGON
ALPINE, UT
ALTA, UT
ALTAMONT, UT
ALTON, UT
AMALGA, UT
AMERICAN FORK CITY, UT
ANNABELLA, UT
ANTIMONY, UT
APPLE VALLEY, UT
AURORA, UT
BALLARD, UT
BEAR RIVER CITY, UT
BEAVER, UT
BICKNELL, UT
BIG WATER, UT
BLANDING, UT
BLUFFDALE, UT
BOULDER, UT
CITY OF BOUNTIFUL, UT
BRIAN HEAD, UT
BRIGHAM CITY CORPORATION, UT
BRYCE CANYON CITY, UT
CANNONVILLE, UT
CASTLE DALE, UT
CASTLE VALLEY, UT
CITY OF CEDAR CITY, UT
CEDAR FORT, UT
CITY OF CEDAR HILLS, UT
CENTERFIELD, UT
CENTERVILLE CITY CORPORATION, UT
CENTRAL VALLEY, UT
CHARLESTON, UT
CIRCLEVILLE, UT
CLARKSTON, UT
CLAWSON, UT
CLEARFIELD, UT
CLEVELAND, UT
CLINTON CITY CORPORATION, UT
COALVILLE, UT
CORINNE, UT
CORNISH, UT
COTTONWOOD HEIGHTS, UT
DANIEL, UT
DELTA, UT
DEWEYVILLE, UT
DRAPER CITY, UT
DUCHESNE, UT
EAGLE MOUNTAIN, UT
EAST CARBON, UT
ELK RIDGE, UT
ELMO, UT
ELSINORE, UT
ELWOOD, UT
EMERY, UT
ENOCH, UT
ENTERPRISE, UT
EPHRAIM, UT
ESCALANTE, UT
EUREKA, UT
FAIRFIELD, UT
FAIRVIEW, UT
FARMINGTON, UT
FARR WEST, UT
FAYETTE, UT
FERRON, UT
FIELDING, UT
FILLMORE, UT
FOUNTAIN GREEN, UT
FRANCIS, UT
FRUIT HEIGHTS, UT
GARDEN CITY, UT
GARLAND, UT
GENOLA, UT
GLENDALE, UT
GLENWOOD, UT
GOSHEN, UT
GRANTSVILLE, UT
GREEN RIVER, UT
GUNNISON, UT
HANKSVILLE, UT
HARRISVILLE, UT
HATCH, UT
HEBER CITY CORPORATION, UT
HELPER, UT
HENEFER, UT
HENRIEVILLE, UT
HERRIMAN, UT
HIDEOUT, UT
HIGHLAND, UT
HILDALE, UT
HINCKLEY, UT
HOLDEN, UT
HOLLADAY, UT
HONEYVILLE, UT
HOOPER, UT
HOWELL, UT
HUNTINGTON, UT
HUNTSVILLE, UT
CITY OF HURRICANE, UT
HYDE PARK, UT
HYRUM, UT
INDEPENDENCE, UT
IVINS, UT
JOSEPH, UT
JUNCTION, UT
KAMAS, UT
KANAB, UT
KANARRAVILLE, UT
KANOSH, UT
KAYSVILLE, UT
KINGSTON, UT
KOOSHAREM, UT
LAKETOWN, UT
LA VERKIN, UT
LAYTON, UT
LEAMINGTON, UT
LEEDS, UT
LEHI CITY CORPORATION, UT
LEVAN, UT
LEWISTON, UT
LINDON, UT

LOA, UT
LOGAN CITY, UT
LYMAN, UT
LYNNDYL, UT
MANILA, UT
MANTI, UT
MANTUA, UT
MAPLETON, UT
MARRIOTT-SLATERVILLE, UT
MARYSVALE, UT
MAYFIELD, UT
MEADOW, UT
MENDON, UT
MIDVALE CITY INC., UT
MIDWAY, UT
MILFORD, UT
MILLVILLE, UT
MINERSVILLE, UT
MOAB, UT
MONA, UT
MONROE, UT
CITY OF MONTICELLO, UT
MORGAN, UT
MORONI, UT
MOUNT PLEASANT, UT
MURRAY CITY CORPORATION, UT
MYTON, UT
NAPLES, UT
NEPHI, UT
NEW HARMONY, UT
NEWTON, UT
NIBLEY, UT
NORTH LOGAN, UT
NORTH OGDEN, UT
NORTH SALT LAKE CITY, UT
OAK CITY, UT
OAKLEY, UT
OGDEN CITY CORPORATION, UT
OPHIR, UT
ORANGEVILLE, UT
ORDERVILLE, UT
OREM, UT
PANGUITCH, UT
PARADISE, UT
PARAGONAH, UT
PARK CITY, UT
PAROWAN, UT
PAYSON, UT
PERRY, UT
PLAIN CITY, UT
PLEASANT GROVE CITY, UT
PLEASANT VIEW, UT
PLYMOUTH, UT
PORTAGE, UT
PRICE, UT
PROVIDENCE, UT
PROVO, UT
RANDOLPH, UT
REDMOND, UT
RICHFIELD, UT
RICHMOND, UT
RIVERDALE, UT
RIVER HEIGHTS, UT
RIVERTON CITY, UT
ROCKVILLE, UT
ROCKY RIDGE, UT
ROOSEVELT CITY CORPORATION, UT
ROY, UT
RUSH VALLEY, UT
CITY OF ST. GEORGE, UT
SALEM, UT
SALINA, UT
SALT LAKE CITY CORPORATION, UT
SANDY, UT
SANTA CLARA, UT
SANTAQUIN, UT
SARATOGA SPRINGS, UT
SCIPIO, UT
SCOFIELD, UT
SIGURD, UT
SMITHFIELD, UT
SNOWVILLE, UT
CITY OF SOUTH JORDAN, UT
SOUTH OGDEN, UT
CITY OF SOUTH SALT LAKE, UT
SOUTH WEBER, UT
SPANISH FORK, UT
SPRING CITY, UT
SPRINGDALE, UT
SPRINGVILLE, UT
STERLING, UT
STOCKTON, UT
SUNNYSIDE, UT
SUNSET CITY CORP, UT
SYRACUSE, UT
TABIONA, UT
CITY OF TAYLORSVILLE, UT
TOOELE CITY CORPORATION, UT
TOQUERVILLE, UT
TORREY, UT
TREMONTON CITY, UT
TRENTON, UT
TROPIC, UT
UINTAH, UT
VERNAL CITY, UT
VERNON, UT
VINEYARD, UT
VIRGIN, UT
WALES, UT
WALLSBURG, UT
WASHINGTON CITY, UT
WASHINGTON TERRACE, UT
WELLINGTON, UT
WELLSVILLE, UT
WENDOVER, UT
WEST BOUNTIFUL, UT
WEST HAVEN, UT
WEST JORDAN, UT
WEST POINT, UT
WEST VALLEY CITY, UT
WILLARD, UT
WOODLAND HILLS, UT
WOODRUFF, UT
WOODS CROSS, UT

COUNTIES AND PARISHES INCLUDING BUT NOT LIMITED TO:

ASCENSION PARISH, LA
ASCENSION PARISH, LA, CLEAR OF COURT
CADDO PARISH, LA
CALCASIEU PARISH, LA
CALCASIEU PARISH SHERIFF'S OFFICE, LA
CITY AND COUNTY OF HONOLULU, HI
CLACKAMAS COUNTY, OR

CLACKAMAS COUNTY DEPT OF TRANSPORTATION, OR
CLATSOP COUNTY, OR
COLUMBIA COUNTY, OR
COOS COUNTY, OR
COOS COUNTY HIGHWAY DEPARTMENT, OR
COUNTY OF HAWAII, OR
CROOK COUNTY, OR
CROOK COUNTY ROAD DEPARTMENT, OR
CURRY COUNTY, OR
DESCHUTES COUNTY, OR
DOUGLAS COUNTY, OR
EAST BATON ROUGE PARISH, LA
GILLIAM COUNTY, OR
GRANT COUNTY, OR
HARNEY COUNTY, OR
HARNEY COUNTY SHERIFFS OFFICE, OR
HAWAII COUNTY, HI
HOOD RIVER COUNTY, OR
JACKSON COUNTY, OR
JEFFERSON COUNTY, OR
JEFFERSON PARISH, LA
JOSEPHINE COUNTY GOVERNMENT, OR
LAFAYETTE CONSOLIDATED GOVERNMENT, LA
LAFAYETTE PARISH, LA
LAFAYETTE PARISH CONVENTION & VISITORS COMMISSION
LAFOURCHE PARISH, LA
KAUAI COUNTY, HI
KLAMATH COUNTY, OR
LAKE COUNTY, OR
LANE COUNTY, OR
LINCOLN COUNTY, OR
LINN COUNTY, OR
LIVINGSTON PARISH, LA
MALHEUR COUNTY, OR
MAUI COUNTY, HI
MARION COUNTY, SALEM, OR
MORROW COUNTY, OR
MULTNOMAH COUNTY, OR
MULTNOMAH COUNTY BUSINESS AND COMMUNITY SERVICES, OR
MULTNOMAH COUNTY SHERIFFS OFFICE, OR
MULTNOMAH LAW LIBRARY, OR
ORLEANS PARISH, LA
PLAQUEMINES PARISH, LA
POLK COUNTY, OR
RAPIDES PARISH, LA
SAINT CHARLES PARISH, LA
SAINT CHARLES PARISH PUBLIC SCHOOLS, LA
SAINT LANDRY PARISH, LA
SAINT TAMMANY PARISH, LA
SHERMAN COUNTY, OR
TERREBONNE PARISH, LA
TILLAMOOK COUNTY, OR
TILLAMOOK COUNTY SHERIFF'S OFFICE, OR
TILLAMOOK COUNTY GENERAL HOSPITAL, OR
UMATILLA COUNTY, OR
UNION COUNTY, OR
WALLOWA COUNTY, OR
WASCO COUNTY, OR
WASHINGTON COUNTY, OR
WEST BATON ROUGE PARISH, LA
WHEELER COUNTY, OR
YAMHILL COUNTY, OR
COUNTY OF BOX ELDER, UT
COUNTY OF CACHE, UT
COUNTY OF RICH, UT
COUNTY OF WEBER, UT
COUNTY OF MORGAN, UT
COUNTY OF DAVIS, UT
COUNTY OF SUMMIT, UT
COUNTY OF DAGGETT, UT
COUNTY OF SALT LAKE, UT
COUNTY OF TOOELE, UT
COUNTY OF UTAH, UT
COUNTY OF WASATCH, UT
COUNTY OF DUCHESNE, UT
COUNTY OF UINTAH, UT
COUNTY OF CARBON, UT
COUNTY OF SANPETE, UT
COUNTY OF JUAB, UT
COUNTY OF MILLARD, UT
COUNTY OF SEVIER, UT
COUNTY OF EMERY, UT
COUNTY OF GRAND, UT
COUNTY OF BEVER, UT
COUNTY OF PIUTE, UT
COUNTY OF WAYNE, UT
COUNTY OF SAN JUAN, UT
COUNTY OF GARFIELD, UT
COUNTY OF KANE, UT
COUNTY OF IRON, UT
COUNTY OF WASHINGTON, UT

OTHER AGENCIES INCLUDING ASSOCIATIONS, BOARDS, DISTRICTS, COMMISSIONS, COUNCILS, PUBLIC CORPORATIONS, PUBLIC DEVELOPMENT AUTHORITIES, RESERVATIONS AND UTILITIES INCLUDING BUT NOT LIMITED TO:

ADAIR R.F.P.D., OR
ADEL WATER IMPROVEMENT DISTRICT, OR
ADRIAN R.F.P.D., OR
AGNESS COMMUNITY LIBRARY, OR
AGNESS-ILLAHE R.F.P.D., OR
AGRICULTURE EDUCATION SERVICE EXTENSION DISTRICT, OR
ALDER CREEK-BARLOW WATER DISTRICT NO. 29, OR
ALFALFA FIRE DISTRICT, OR
ALSEA R.F.P.D., OR
ALSEA RIVIERA WATER IMPROVEMENT DISTRICT, OR
AMITY FIRE DISTRICT, OR
ANTELOPE MEADOWS SPECIAL ROAD DISTRICT, OR
APPLE ROGUE DISTRICT IMPROVEMENT COMPANY, OR
APPLEGATE VALLEY R.F.P.D. #9, OR
ARCH CAPE DOMESTIC WATER SUPPLY DISTRICT, OR
ARCH CAPE SANITARY DISTRICT, OR
ARNOLD IRRIGATION DISTRICT, OR
ASH CREEK WATER CONTROL DISTRICT, OR
ATHENA CEMETERY MAINTENANCE DISTRICT, OR
AUMSVILLE R.F.P.D., OR
AURORA R.F.P.D., OR
AZALEA R.F.P.D., OR
BADGER IMPROVEMENT DISTRICT, OR
BAILEY-SPENCER R.F.P.D., OR
BAKER COUNTY LIBRARY DISTRICT, OR
BAKER R.F.P.D., OR
BAKER RIVERTON ROAD DISTRICT, OR
BAKER VALLEY IRRIGATION DISTRICT, OR
BAKER VALLEY S.W.C.D., OR

BAKER VALLEY VECTOR CONTROL DISTRICT, OR
BANDON CRANBERRY WATER CONTROL DISTRICT, OR
BANDON R.F.P.D., OR
BANKS FIRE DISTRICT, OR
BANKS FIRE DISTRICT #13, OR
BAR L RANCH ROAD DISTRICT, OR
BARLOW WATER IMPROVEMENT DISTRICT, OR
BASIN AMBULANCE SERVICE DISTRICT, OR
BASIN TRANSIT SERVICE TRANSPORTATION DISTRICT, OR
BATON ROUGE WATER COMPANY
BAY AREA HEALTH DISTRICT, OR
BAYSHORE SPECIAL ROAD DISTRICT, OR
BEAR VALLEY SPECIAL ROAD DISTRICT, OR
BEAVER CREEK WATER CONTROL DISTRICT, OR
BEAVER DRAINAGE IMPROVEMENT COMPANY, INC., OR
BEAVER SLOUGH DRAINAGE DISTRICT, OR
BEAVER SPECIAL ROAD DISTRICT, OR
BEAVER WATER DISTRICT, OR
BELLE MER S.I.G.L. TRACTS SPECIAL ROAD DISTRICT, OR
BEND METRO PARK AND RECREATION DISTRICT
BENTON S.W.C.D., OR
BERNDT SUBDIVISION WATER IMPROVEMENT DISTRICT, OR
BEVERLY BEACH WATER DISTRICT, OR
BIENVILLE PARISH FIRE PROTECTION DISTRICT 6, LA
BIG BEND IRRIGATION DISTRICT, OR
BIGGS SERVICE DISTRICT, OR
BLACK BUTTE RANCH DEPARTMENT OF POLICE SERVICES, OR
BLACK BUTTE RANCH R.F.P.D., OR
BLACK MOUNTAIN WATER DISTRICT, OR
BLODGETT-SUMMIT R.F.P.D., OR
BLUE MOUNTAIN HOSPITAL DISTRICT, OR
BLUE MOUNTAIN TRANSLATOR DISTRICT, OR
BLUE RIVER PARK & RECREATION DISTRICT, OR
BLUE RIVER WATER DISTRICT, OR
BLY R.F.P.D., OR
BLY VECTOR CONTROL DISTRICT, OR
BLY WATER AND SANITARY DISTRICT, OR
BOARDMAN CEMETERY MAINTENANCE DISTRICT, OR
BOARDMAN PARK AND RECREATION DISTRICT
BOARDMAN R.F.P.D., OR
BONANZA BIG SPRINGS PARK & RECREATION DISTRICT, OR
BONANZA MEMORIAL PARK CEMETERY DISTRICT, OR
BONANZA R.F.P.D., OR
BONANZA-LANGELL VALLEY VECTOR CONTROL DISTRICT, OR
BORING WATER DISTRICT #24, OR
BOULDER CREEK RETREAT SPECIAL ROAD DISTRICT, OR
BRIDGE R.F.P.D., OR
BROOKS COMMUNITY SERVICE DISTRICT, OR
BROWNSVILLE R.F.P.D., OR
BUELL-RED PRAIRIE WATER DISTRICT, OR
BUNKER HILL R.F.P.D. #1, OR
BUNKER HILL SANITARY DISTRICT, OR
BURLINGTON WATER DISTRICT, OR
BURNT RIVER IRRIGATION DISTRICT, OR
BURNT RIVER S.W.C.D., OR
CALAPOOIA R.F.P.D., OR
CAMAS VALLEY R.F.P.D., OR
CAMELLIA PARK SANITARY DISTRICT, OR
CAMMANN ROAD DISTRICT, OR
CAMP SHERMAN ROAD DISTRICT, OR
CANBY AREA TRANSIT, OR
CANBY R.F.P.D. #62, OR
CANBY UTILITY BOARD, OR
CANNON BEACH R.F.P.D., OR
CANYONVILLE SOUTH UMPQUA FIRE DISTRICT, OR
CAPE FERRELO R.F.P.D., OR
CAPE FOULWEATHER SANITARY DISTRICT, OR
CARLSON PRIMROSE SPECIAL ROAD DISTRICT, OR
CARMEL BEACH WATER DISTRICT, OR
CASCADE VIEW ESTATES TRACT 2, OR
CEDAR CREST SPECIAL ROAD DISTRICT, OR
CEDAR TRAILS SPECIAL ROAD DISTRICT, OR
CEDAR VALLEY - NORTH BANK R.F.P.D., OR
CENTRAL CASCADES FIRE AND EMS, OR
CENTRAL CITY ECONOMIC OPPORTUNITY CORP, LA
CENTRAL LINCOLN P.U.D., OR
CENTRAL OREGON COAST FIRE & RESCUE DISTRICT, OR
CENTRAL OREGON INTERGOVERNMENTAL COUNCIL
CENTRAL OREGON IRRIGATION DISTRICT, OR
CHAPARRAL WATER CONTROL DISTRICT, OR
CHARLESTON FIRE DISTRICT, OR
CHARLESTON SANITARY DISTRICT, OR
CHARLOTTE ANN WATER DISTRICT, OR
CHEHALEM PARK & RECREATION DISTRICT, OR
CHEHALEM PARK AND RECREATION DISTRICT
CHEMULT R.F.P.D., OR
CHENOWITH WATER P.U.D., OR
CHERRIOTS, OR
CHETCO COMMUNITY PUBLIC LIBRARY DISTRICT, OR
CHILOQUIN VECTOR CONTROL DISTRICT, OR
CHILOQUIN-AGENCY LAKE R.F.P.D., OR
CHINOOK DRIVE SPECIAL ROAD DISTRICT, OR
CHR DISTRICT IMPROVEMENT COMPANY, OR
CHRISTMAS VALLEY DOMESTIC WATER DISTRICT, OR
CHRISTMAS VALLEY PARK & RECREATION DISTRICT, OR
CHRISTMAS VALLEY R.F.P.D., OR
CITY OF BOGALUSA SCHOOL BOARD, LA
CLACKAMAS COUNTY FIRE DISTRICT #1, OR
CLACKAMAS COUNTY SERVICE DISTRICT #1, OR
CLACKAMAS COUNTY VECTOR CONTROL DISTRICT, OR
CLACKAMAS RIVER WATER
CLACKAMAS RIVER WATER, OR
CLACKAMAS S.W.C.D., OR
CLATSKANIE DRAINAGE IMPROVEMENT COMPANY, OR
CLATSKANIE LIBRARY DISTRICT, OR
CLATSKANIE P.U.D., OR
CLATSKANIE PARK & RECREATION DISTRICT, OR
CLATSKANIE PEOPLE'S UTILITY DISTRICT
CLATSKANIE R.F.P.D., OR
CLATSOP CARE CENTER HEALTH DISTRICT, OR
CLATSOP COUNTY S.W.C.D., OR
CLATSOP DRAINAGE IMPROVEMENT COMPANY #15, INC., OR
CLEAN WATER SERVICES
CLEAN WATER SERVICES, OR

CLOVERDALE R.F.P.D., OR
CLOVERDALE SANITARY DISTRICT, OR
CLOVERDALE WATER DISTRICT, OR
COALEDO DRAINAGE DISTRICT, OR
COBURG FIRE DISTRICT, OR
COLESTIN RURAL FIRE DISTRICT, OR
COLTON R.F.P.D., OR
COLTON WATER DISTRICT #11, OR
COLUMBIA 911 COMMUNICATIONS DISTRICT, OR
COLUMBIA COUNTY 4-H & EXTENSION SERVICE DISTRICT, OR
COLUMBIA DRAINAGE VECTOR CONTROL, OR
COLUMBIA IMPROVEMENT DISTRICT, OR
COLUMBIA R.F.P.D., OR
COLUMBIA RIVER FIRE & RESCUE, OR
COLUMBIA RIVER PUD, OR
COLUMBIA S.W.C.D., OR
COLUMBIA S.W.C.D., OR
CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION
COOS COUNTY AIRPORT DISTRICT, OR
COOS COUNTY AIRPORT DISTRICT, OR
COOS COUNTY AREA TRANSIT SERVICE DISTRICT, OR
COOS COUNTY AREA TRANSIT SERVICE DISTRICT, OR
COOS FOREST PROTECTIVE ASSOCIATION
COOS S.W.C.D., OR
COQUILLE R.F.P.D., OR
COQUILLE VALLEY HOSPITAL DISTRICT, OR
CORBETT WATER DISTRICT, OR
CORNELIUS R.F.P.D., OR
CORP RANCH ROAD WATER IMPROVEMENT, OR
CORVALLIS R.F.P.D., OR
COUNTRY CLUB ESTATES SPECIAL WATER DISTRICT, OR
COUNTRY CLUB WATER DISTRICT, OR
COUNTRY ESTATES ROAD DISTRICT, OR
COVE CEMETERY MAINTENANCE DISTRICT, OR
COVE ORCHARD SEWER SERVICE DISTRICT, OR
COVE R.F.P.D., OR
CRESCENT R.F.P.D., OR
CRESCENT SANITARY DISTRICT, OR
CRESCENT WATER SUPPLY AND IMPROVEMENT DISTRICT, OR
CROOK COUNTY AGRICULTURE EXTENSION SERVICE DISTRICT, OR
CROOK COUNTY CEMETERY DISTRICT, OR
CROOK COUNTY FIRE AND RESCUE, OR
CROOK COUNTY PARKS & RECREATION DISTRICT, OR
CROOK COUNTY S.W.C.D., OR
CROOK COUNTY VECTOR CONTROL DISTRICT, OR
CROOKED RIVER RANCH R.F.P.D., OR
CROOKED RIVER RANCH SPECIAL ROAD DISTRICT, OR
CRYSTAL SPRINGS WATER DISTRICT, OR
CURRY COUNTY 4-H & EXTENSION SERVICE DISTRICT, OR
CURRY COUNTY PUBLIC TRANSIT SERVICE DISTRICT, OR
CURRY COUNTY S.W.C.D., OR
CURRY HEALTH DISTRICT, OR
CURRY PUBLIC LIBRARY DISTRICT, OR
DALLAS CEMETERY DISTRICT #4, OR
DARLEY DRIVE SPECIAL ROAD DISTRICT, OR
DAVID CROCKETT STEAM FIRE COMPANY #1, LA
DAYS CREEK R.F.P.D., OR
DAYTON FIRE DISTRICT, OR
DEAN MINARD WATER DISTRICT, OR
DEE IRRIGATION DISTRICT, OR
DEER ISLAND DRAINAGE IMPROVEMENT COMPANY, OR
DELL BROGAN CEMETERY MAINTENANCE DISTRICT, OR
DEPOE BAY R.F.P.D., OR
DESCHUTES COUNTY 911 SERVICE DISTRICT, OR
DESCHUTES COUNTY R.F.P.D. #2, OR
DESCHUTES PUBLIC LIBRARY DISTRICT, OR
DESCHUTES S.W.C.D., OR
DESCHUTES VALLEY WATER DISTRICT, OR
DEVILS LAKE WATER IMPROVEMENT DISTRICT, OR
DEXTER R.F.P.D., OR
DEXTER SANITARY DISTRICT, OR
DORA-SITKUM R.F.P.D., OR
DOUGLAS COUNTY FIRE DISTRICT #2, OR
DOUGLAS S.W.C.D., OR
DRAKES CROSSING R.F.P.D., OR
DRRH SPECIAL ROAD DISTRICT #6, OR
DRY GULCH DITCH DISTRICT IMPROVEMENT COMPANY, OR
DUFUR RECREATION DISTRICT, OR
DUMBECK LANE DOMESTIC WATER SUPPLY, OR
DUNDEE R.F.P.D., OR
DURKEE COMMUNITY BUILDING PRESERVATION DISTRICT, OR
EAGLE POINT IRRIGATION DISTRICT, OR
EAGLE VALLEY CEMETERY MAINTENANCE DISTRICT, OR
EAGLE VALLEY R.F.P.D., OR
EAGLE VALLEY S.W.C.D., OR
EAST FORK IRRIGATION DISTRICT, OR
EAST MULTNOMAH S.W.C.D., OR
EAST SALEM SERVICE DISTRICT, OR
EAST UMATILLA CHEMICAL CONTROL DISTRICT, OR
EAST UMATILLA COUNTY AMBULANCE AREA HEALTH DISTRICT, OR
EAST UMATILLA COUNTY R.F.P.D., OR
EAST VALLEY WATER DISTRICT, OR
ELGIN COMMUNITY PARKS & RECREATION DISTRICT, OR
ELGIN HEALTH DISTRICT, OR
ELGIN R.F.P.D., OR
ELKTON ESTATES PHASE II SPECIAL ROAD DISTRICT, OR
ELKTON R.F.P.D., OR
EMERALD P.U.D., OR
ENTERPRISE IRRIGATION DISTRICT, OR
ESTACADA CEMETERY MAINTENANCE DISTRICT, OR
ESTACADA R.F.P.D. #69, OR
EUGENE R.F.P.D. # 1, OR
EUGENE WATER AND ELECTRIC BOARD
EVANS VALLEY FIRE DISTRICT #6, OR
FAIR OAKS R.F.P.D., OR
FAIRVIEW R.F.P.D., OR
FAIRVIEW WATER DISTRICT, OR
FALCON HEIGHTS WATER AND SEWER, OR
FALCON-COVE BEACH WATER DISTRICT, OR
FALL RIVER ESTATES SPECIAL ROAD DISTRICT, OR
FARGO INTERCHANGE SERVICE DISTRICT, OR
FARMERS IRRIGATION DISTRICT, OR
FAT ELK DRAINAGE DISTRICT, OR

WBENC

WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

JOIN FORCES. SUCCEED TOGETHER.

hereby grants

National Women's Business Enterprise Certification

to

Corby Energy Services, Inc.

who has successfully met WBENC's standards as a Women's Business Enterprise (WBE).
This certification affirms the business is woman-owned, operated and controlled and is valid through the date herein.

WBENC National WBE Certification was processed and validated by Great Lakes Women's Business Council, a WBENC Regional Partner Organization.

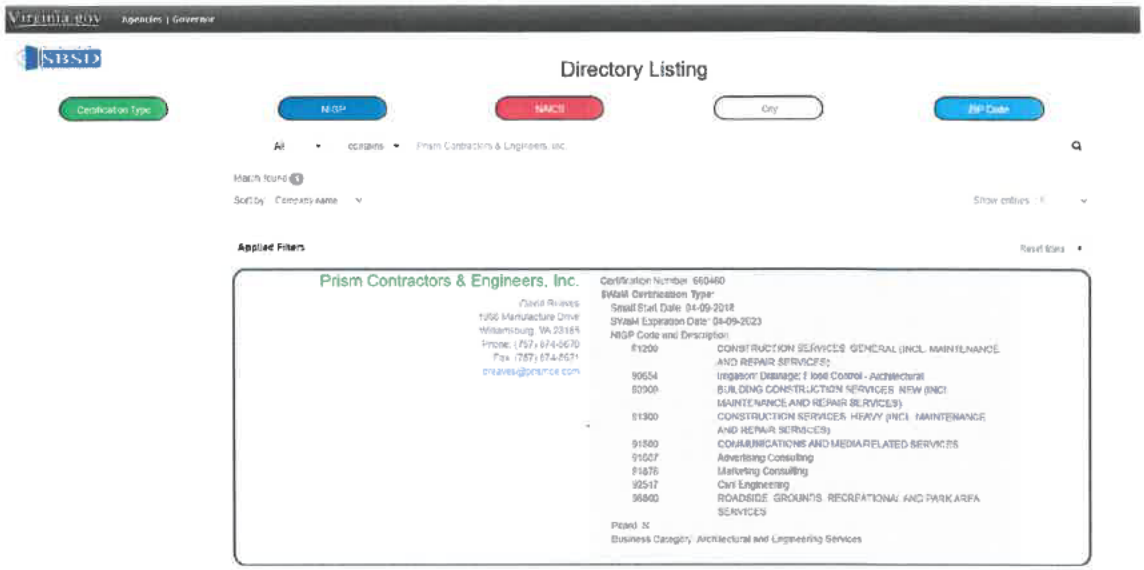
Certification Granted: January 11, 2012
Expiration Date: January 11, 2022
WBENC National Certification Number: 2005119629

Great Lakes Women's Business COUNCIL

Authorized by Michelle Richards, President Great Lakes Women's Business Council

NAICS: 238210, 237130
UNSPSC: 26121632, 26121633, 72121509, 72141126, 72151502, 72154000, 83112300

WOMEN'S BUSINESS COUNCIL – SOUTHWEST · WOMEN'S BUSINESS DEVELOPMENT CENTER · WBEA · WBECEAST · WBECFLORIDA · WBECMW · WBECPACIFIC · WBECSOUTH · WBECWEST


Virginia.gov
Agencies | Governor
SBSD
Directory Listing
Certification Type
NIGP
NAICS
City
ZIP Code
All
contains
Prism Contractors & Engineers, Inc.
Match found 1
Sort by Company name
Show entries
Applied Filters
Reset filters
Prism Contractors & Engineers, Inc.
David Reaves
1956 Manufacture Drive
Williamsburg, VA 23185
Phone: (757) 874-5670
Fax: (757) 874-5671
dreaves@prismce.com
Certification Number: 660460
SWaM Certification Type:
Small Start Date: 04-09-2018
SWaM Expiration Date: 04-09-2023
NIGP Code and Description:
91200 CONSTRUCTION SERVICES: GENERAL (INCL. MAINTENANCE AND REPAIR SERVICES)
90654 Irrigation: Drainage: Flood Control - Architectural
90909 BUILDING CONSTRUCTION SERVICES: NEW (INCL MAINTENANCE AND REPAIR SERVICES)
91300 CONSTRUCTION SERVICES: HEAVY (INCL MAINTENANCE AND REPAIR SERVICES)
91560 COMMUNICATIONS AND MEDIA RELATED SERVICES
91607 Advertising Consulting
91676 Marketing Consulting
92517 Civil Engineering
95860 ROADSIDE GROUNDS: RECREATIONAL AND PARK AREA SERVICES
Pearl: N
Business Category: Architectural and Engineering Services

dun & bradstreet

Business Information Report Snapshot

CORBY ENERGY SERVICES, INC.

D-U-N-S: 05-242-7481
ADDRESS: 6001 Schooner, Belleville, MI, 48112, United States
Date: 09/15/2021

RISK ASSESSMENT

SCORES AND RATINGS

Max. Credit Recommendation	PAYDEX® SCORE	Delinquency Predictor Percentile	Financial Stress Percentile	Supplier Evaluation Risk Rating
US$ 540,000	77	92	98	1
	LOW RISK	LOW RISK	LOW RISK	LOW RISK

MAXIMUM CREDIT RECOMMENDATION

Overall Business Risk

LOW | LOW-MODERATE | MODERATE | MODERATE-HIGH | HIGH

Maximum Credit Recommendation

US$ 540,000

The recommended limit is based on a low probability of severe delinquency.

Dun & Bradstreet Thinks...

- Overall assessment of this organization over the next 12 months: VERY STABLE CONDITION
- Based on the predicted risk of business discontinuation: STRONG LIKELIHOOD OF CONTINUED OPERATIONS
- Based on the predicted risk of severely delinquent payments: VERY LOW POTENTIAL FOR SEVERELY DELINQUENT PAYMENTS

PAYDEX® SUMMARY

3 Months

When weighted by dollar amount, payments to suppliers average 5 days beyond terms. Value is based on payments collected over the last **3 months**.

24 Months

When weighted by dollar amount, payments to suppliers average 5 days beyond terms. Value is based on payments collected over the last **24 months**.

PAYDEX®

Based on 24 months of data

77

Low Risk (100)

High Risk (1)

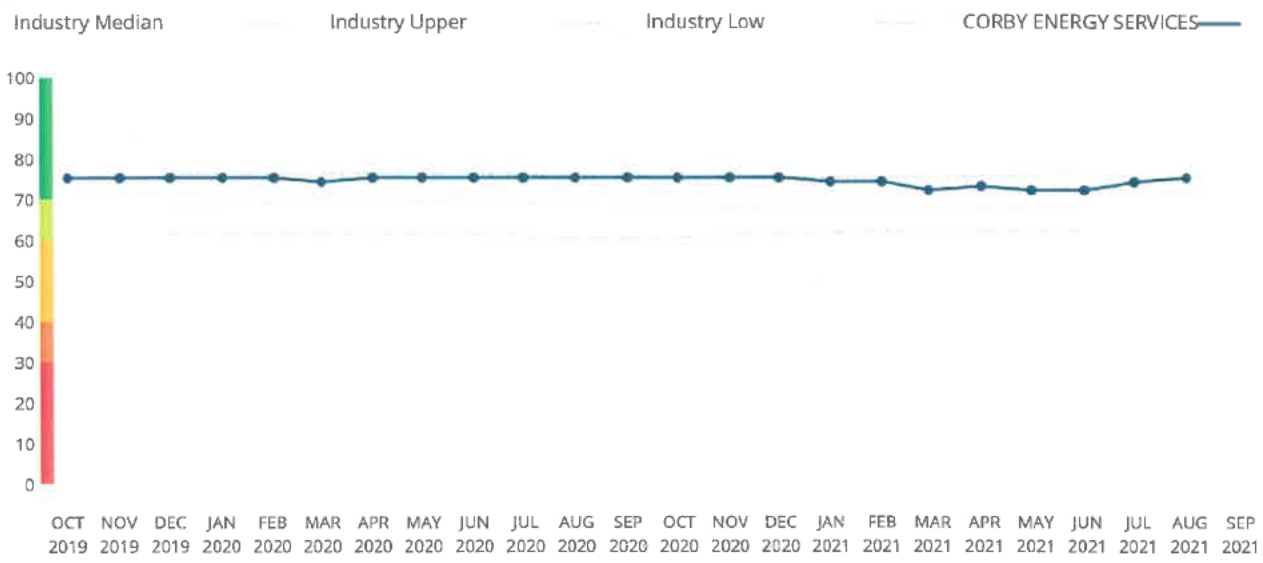
Risk of Slow Pay
LOW

Payment Behavior
5 Days Beyond Terms

Based on a D&B PAYDEX® of 77

Business and Industry Trends

1629 - Heavy construction



DELINQUENCY PREDICTOR SCORE

92

Low Risk (100)

High Risk (1)

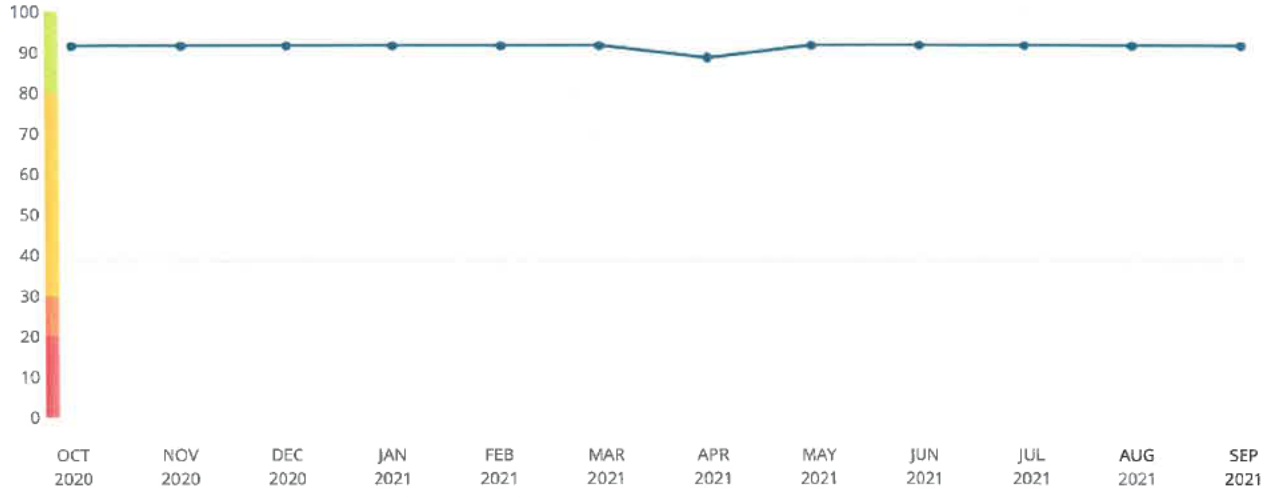
- Higher risk industry based on delinquency rates for this industry
- Proportion of slow payments in recent months

Based on a D&B Delinquency Predictor Percentile of 92

Level of Risk	Raw Score	Probability of Delinquency	Compared to Businesses in D&B
LOW	584	1.42%	10.2%

Business and Industry Trends

1629 - Heavy construction



FINANCIAL STRESS SCORE

98

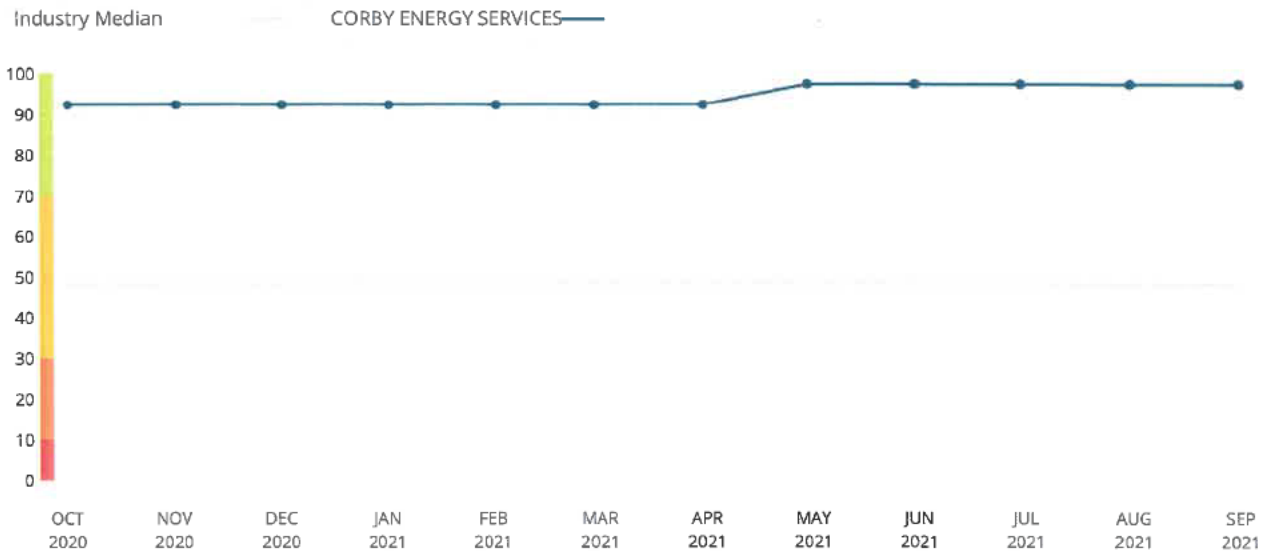
Low Risk (100) High Risk (1)

- UCC Filings reported
- Low proportion of satisfactory payment experiences to total payment experiences

Based on a D&B Financial Stress Percentile of 98

Level of Risk	Raw Score	Probability of Failure	Compared to Businesses in D&B
LOW	1597	0.03%	0.48%

Business and Industry Trends 1629 - Heavy construction



SUPPLIER EVALUATION RISK RATING

1

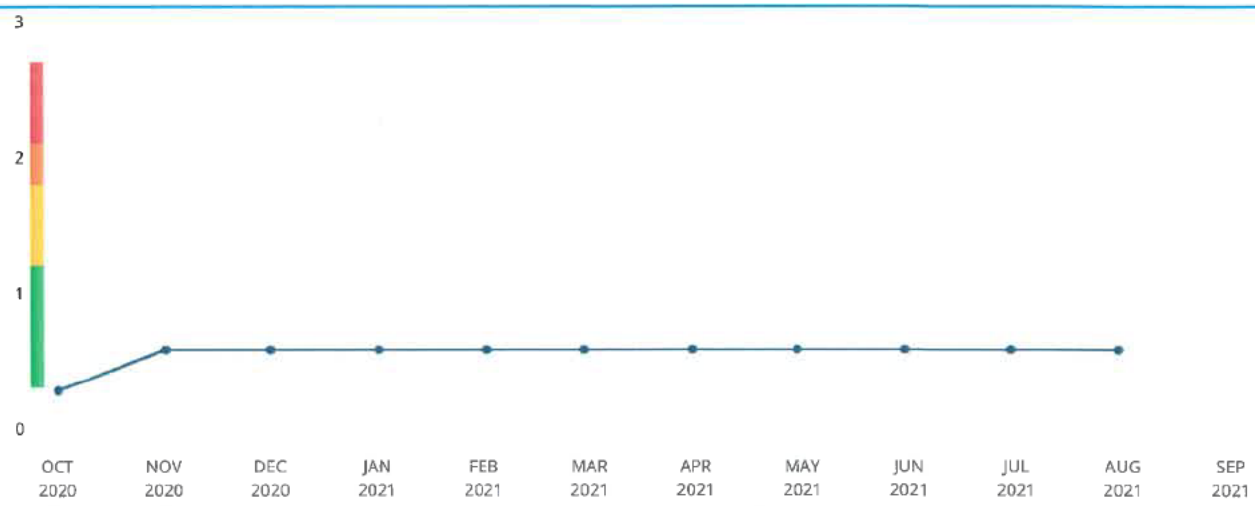
Low Risk (1) High Risk (9)

Based on a Supplier Evaluation Risk Rating of 1

Factors Affecting Your Score

- Proportion of past due balances to total amount owing
- Business belongs to an industry with above average risk of ceasing operations or becoming inactive
- Proportion of slow payment experiences to total number of payment experiences reported

Business and Industry Trends 1629 - Heavy construction



D&B RATING

Current Rating as of 02-01-2017

Employee Size	Risk Indicator
1R: 10 employees and over	2: Low Risk

Previous Rating

Employee Size	Risk Indicator
1R: 10 employees and over	3: Moderate Risk

TRADE PAYMENTS

TRADE PAYMENTS SUMMARY

Based on 24 months of data

Overall Payment Behavior
5
Days Beyond Terms

% of Trade Within Terms
89%

Highest Past Due
US$ 7,500

Highest Now Owing: US$ 100,000

Total Trade Experiences: 56
Largest High Credit: US$ 200,000
Average High Credit: US$ 18,504

Total Unfavorable Comments : 0
Largest High Credit: US$ 0
Total Placed in Collections: 0
Largest High Credit: US$ 0

TRADE PAYMENTS BY CREDIT EXTENDED

$ CREDIT EXTENDED	% OF PAYMENTS WITHIN TERMS	# PAYMENT EXPERIENCES	TOTAL & DOLLAR AMOUNT
OVER 100,000	67%	2	$300,000
50,000 - 100,000	90%	4	$315,000
15,000 - 49,999	93%	9	$240,000
5,000 - 14,999	77%	4	$32,500
1,000 - 4,999	87%	17	$30,500
UNDER 1,000	86%	14	$7,200

TRADE PAYMENTS BY INDUSTRY

Collapse All | Expand All

Industry Category	Number of Payment Experiences	Largest High Credit (US$)	% Within Terms (Expand to View)
▾99 - Nonclassifiable Establishments	6	1,000	
9999 - Nonclassified	6	1,000	100
▾73 - Business Services	6	80,000	
7389 - Misc Business Service	4	80,000	100
7359 - Misc Equipment Rental	1	7,500	50
7363 - Help Supply Service	1	1,000	100

▾50 - Wholesale Trade - Durable Goods	12	65,000	
5013 - Whol Auto Parts	4	20,000	100
5085 - Whol Industrial Suppl	3	7,500	98
5063 - Whol Electrical Equip	2	65,000	50
5045 - Whol Computers/softwr	1	20,000	100
5051 - Whol Metal	1	15,000	100
5074 - Whol Plumb/hydronics	1	750	0
▾48 - Communications	7	45,000	
4813 - Telephone Communictns	4	2,500	100
4812 - Radiotelephone Commun	3	45,000	100
▾35 - Industrial And Commercial Machinery And Computer Equipment	4	100,000	
3572 - Mfg Computer Storage	2	100,000	97
3534 - Mfg Elevator/escaltrs	1	2,500	100
3531 - Mfg Construction Mach	1	1,000	100
▾87 - Engineering Accounting Research Management And Related Services	3	75,000	
8721 - Accounting Services	2	75,000	100
8748 - Business Consulting	1	30,000	100
▾51 - Wholesale Trade - Nondurable Goods	2	200,000	
5162 - Whol Plastic Material	1	200,000	50
5113 - Whol Service Paper	1	1,000	50
▾16 - Heavy Construction Other Than Building Construction-Contractors	1	95,000	
1623 - Utility Construction	1	95,000	100
▾61 - Nondepository Credit Institutions	1	10,000	
6153 - Short-trm Busn Credit	1	10,000	100
▾36 - Electronic And Other Electrical Equipment And Components Except Computer Equipment	1	2,500	
3621 - Mfg Motors/generators	1	2,500	100
▾27 - Printing, Publishing And Allied Industries	1	2,500	
2741 - Misc Publishing	1	2,500	0
▾30 - Rubber And Miscellaneous Plastics Products	1	1,000	

3088 - Mfg Plstc Plumbng Fix	1	1,000	100
15 - Building Construction - General Contractors And Operative Builders	1	1,000	
1531 - Operative Builders	1	1,000	0
60 - Depository Institutions	1	1,000	
6022 - State Commercial Bank	1	1,000	100
55 - Automotive Dealers And Gasoline Service Stations	1	750	
5531 - Ret Auto Supplies	1	750	100
89 - Services, Not Elsewhere Classified	1	750	
8999 - Misc Services	1	750	100
45 - Transportation By Air	1	100	
4513 - Air Courier Service	1	100	100

TRADE LINES

Date of Experience	Payment Status	Selling Terms	High Credit (US$)	Now Owes (US$)	Past Due (US$)	Months Since Last Sale
08/2021	Prompt	-	100,000	100,000	0	1 Month
08/2021	Prompt	-	80,000	80,000	0	1 Month
08/2021	Prompt	-	75,000	40,000	0	1 Month
08/2021	Prompt	-	35,000	0	0	1 Month
08/2021	Prompt	-	30,000	0	0	Between 4 and 5 Months
08/2021	Prompt	-	25,000	0	0	1 Month
08/2021	Prompt	-	20,000	7,500	0	1 Month
08/2021	Prompt	N30	20,000	250	0	1 Month
08/2021	Prompt	-	15,000	0	0	Between 6 and 12 Months
08/2021	Prompt	-	10,000	10,000	0	1 Month
08/2021	Prompt	N30	7,500	2,500	0	1 Month
08/2021	Prompt	-	2,500	0	0	Between 6 and 12 Months
08/2021	Prompt	-	2,500	50	0	1 Month
08/2021	Prompt	-	2,500	0	0	Between 2 and 3 Months

08/2021	Prompt	-	2,500	250	0	1 Month
08/2021	Prompt	-	2,500	0	0	Between 2 and 3 Months
08/2021	Prompt	-	1,000	0	0	Between 6 and 12 Months
08/2021	Prompt	-	1,000	0	0	Between 4 and 5 Months
08/2021	Prompt	-	1,000	1,000	0	1 Month
08/2021	Prompt	-	1,000	1,000	0	1 Month
08/2021	Prompt	-	750	750	0	1 Month
08/2021	Prompt	-	750	750	0	1 Month
08/2021	Prompt	-	500	500	0	1 Month
08/2021	Prompt	-	250	0	0	Between 2 and 3 Months
08/2021	Prompt to Slow	-	1,000	250	0	1 Month
08/2021	Prompt to Slow	-	65,000	0	0	Between 6 and 12 Months
08/2021	Prompt to Slow	-	35,000	25,000	5,000	1 Month
08/2021	Prompt to Slow	-	7,500	100	0	1 Month
08/2021	Slow	-	2,500	1,000	750	1 Month
08/2021	Slow	-	750	100	100	1 Month
08/2021	-	-	750	750	750	Between 4 and 5 Months
08/2021	-	Cash Account	0	0	0	Between 2 and 3 Months
07/2021	Prompt	-	95,000	95,000	0	1 Month
07/2021	Prompt	-	45,000	30,000	0	1 Month
07/2021	Prompt	-	2,500	2,500	0	1 Month
07/2021	Prompt	-	2,500	0	0	Between 4 and 5 Months
07/2021	Prompt	-	750	0	0	1 Month
07/2021	Prompt	-	750	0	0	1 Month
07/2021	Prompt	-	500	500	0	1 Month
07/2021	Prompt	-	250	0	0	1 Month
07/2021	Prompt	-	100	0	0	1 Month
06/2021	Prompt to Slow	-	200,000	70,000	7,500	1 Month

05/2021	Prompt to Slow	N30	7,500	0	0	Between 6 and 12 Months
02/2021	Prompt	-	1,000	0	0	Between 6 and 12 Months
02/2021	Prompt	-	100	100	0	1 Month
01/2021	Prompt	-	500	0	0	Between 6 and 12 Months
01/2021	Slow	-	1,000	1,000	1,000	-
10/2020	-	Cash Account	50	-	-	1 Month
09/2020	-	Cash Account	250	-	-	1 Month
08/2020	Prompt	-	750	0	0	Between 6 and 12 Months
06/2020	Prompt	-	2,500	2,500	0	1 Month
05/2020	Prompt to Slow	-	500	0	0	Between 6 and 12 Months
02/2020	-	Cash Account	50	-	-	Between 2 and 3 Months
01/2020	Prompt	-	15,000	750	0	1 Month
11/2019	Prompt	-	1,000	0	0	Between 6 and 12 Months
10/2019	-	Cash Account	500	-	-	1 Month

EVENTS

LEGAL EVENTS

The following Public Filing data is for information purposes only and is not the official record. Certified copies can only be obtained from the official source.

SUITS		JUDGEMENTS		LIENS		UCC FILINGS	
TOTAL	0	TOTAL	0	TOTAL	0	TOTAL	3
LAST FILING DATE	-	LAST FILING DATE	-	LAST FILING DATE	-	LAST FILING DATE	12/16/2019

General: The public record items contained in this report may have been paid, terminated, vacated or released prior to the date this was reported. This information may not be reproduced in whole or in part by any means of reproduction.

UCC Filings: There may be additional UCC Filings in the D&B file on this company which are available by contacting 1-800-234-3867.

Suits, Liens, Judgements: There may be additional suits, liens, or judgements in D&B's file on this company available in the U.S. Public Records Database that are also covered under your contract. If you would like more information on this database, please contact the Customer Resource Center at 1-800-234-3867.

Lien: A lien holder can file the same lien in more than one filing location. The appearance of multiple liens filed by the same lien holder against a debtor may be indicative of such an occurrence.

EVENTS

UCC Filing - Original

Filing Date	2019-12-16
Filing Number	191216001089-2
Received Date	2020-01-06
Secured Party	KONICA MINOLTA PREMIER FINANCE, JACKSONVILLE, FL
Debtors	CORBY ENERGY SERVICES INC.
Filing Office	UNIFORM COMMERCIAL CODE SECTION, LANSING, MI

UCC Filing - Original

Filing Date	2010-10-12
Filing Number	2010137226-5
Received Date	2010-11-17
Collateral	NOTICE OF BAILMENT
Secured Party	MICHIGAN CONSOLIDATED GAS COMPANY, DETROIT, MI
Debtors	CORBY ENERGY SERVICES, INC.
Filing Office	UNIFORM COMMERCIAL CODE SECTION, LANSING, MI

UCC Filing - Original

Filing Date	2010-03-16
Filing Number	2010035213-5
Received Date	2010-04-21
Collateral	Inventory and proceeds - Account(s) and proceeds - Contract rights and proceeds - Chattel paper and proceeds - and OTHERS
Secured Party	FORD MOTOR CREDIT COMPANY LLC, FRANKLIN, TN
Debtors	CORBY ENERGY SERVICES, INC
Filing Office	UNIFORM COMMERCIAL CODE SECTION, LANSING, MI

COMPANY EVENTS

The following information was reported on: 07-20-2020

The Michigan Secretary of State's business registrations file showed that Corby Energy Services, Inc., was registered as a Corporation on March 25, 1982.

Business started 1975 by others. Present control succeeded 1982. 100% of capital stock is owned by Mark S Helsel.

MARK S HELSEL born 1951. 1982-present active here.

CHERRI A HELSEL born 1952. 1982-present active here.

SPECIAL EVENTS

12-12-2020

CORBY ENERGY SERVICES, INC. was reported by the SBA as a recipient of a loan for $8,668,700 from Comerica Bank on 04/27/2020 under the Paycheck Protection Program as authorized under the CARES Act of 2020.

Financials

Source: D&B | Currency: All figures shown in USD unless otherwise stated

INCOME STATEMENT

Income Statement data is not available for this company.

BALANCE SHEET

Balance Sheet data is not available for this company.

FINANCIAL RATIOS

Solvency	Fiscal Consolidated 12-29-2001	Fiscal Consolidated 01-31-2001	Fiscal Consolidated 01-01-2000
Current Ratio	4.9	7.9	4.7
Quick Ratio	3	6	4.5
Current Liabilities To Net Worth (%)	25.2	14.3	26.5
Total Liabilities/Net Worth (%)	25.2	14.3	26.5
Current Liabilities To Inventory (%)	999.9	398.3	999.9
Fixed Assets To Net Worth (%)	0.7	1.5	1.6

Efficiency	Fiscal Consolidated 12-29-2001	Fiscal Consolidated 01-31-2001	Fiscal Consolidated 01-01-2000
Accounts Payable To Sales Ratio	2.9	40.8	4.7
Sales To Working Capital Ratio	2.6	0.2	2.9
Sales To Inventory (%)	127.7	5.1	118.2
Assets/Sales	49.4	625.7	44.3

Profitability	Fiscal Consolidated 12-29-2001	Fiscal Consolidated 01-31-2001	Fiscal Consolidated 01-01-2000
Return On Net Worth (%)	13.9	0.5	45.4
Return On Assets (%)	11.1	0.4	35.9
Return On Sales (%)	5.5	2.5	15.9

COMPANY PROFILE

COMPANY OVERVIEW

D-U-N-S 05-242-7481	**Mailing Address** PO Box 970, Belleville MI 48112, US	**Annual Sales** -
Business Form Corporation (US)	**Telephone** (734) 547-9237	**Employees** 150
Date Incorporated 03/25/1982	**Fax** -	**Age (Year Started)** 46 years (1975)
State of Incorporation Michigan	**Website** www.corbyenergy.com	**Named Principal** MARK S HELSEL, PRES- CEO
Ownership -	**Line of Business** Heavy construction	**SIC** 1629

OWNERSHIP

This business is not currently a part of a family tree.

TAB 4

QUALIFICATION AND EXPERIENCE

6001 Schooner St. • PO Box 970 • Belleville, MI 48112
Phone: 734.547.9237 • Fax: 734.547.0340

TAB 4

i. **Brief History**: Established in 1982, Corby Energy Services, Inc. (CES) has installed thousands of miles of underground fiber optic, conventional power and communication cable. CES's beginnings are rooted in underground construction including duct runs, manholes, and vaults and use all construction methods including horizontal directional drilling, tunneling, plowing, and trenching.

CES is a pioneering partner in joint trench construction combining electric, gas, communications, and CATV in a single trench. CES finds solutions to the most difficult construction problems in the densest urban to rural areas. CES has a proven record of quality, workmanship and assigns the highest priority to the satisfaction of clients, their customers and property owners.

CES expanded in February of 2000 with experienced and successful construction / utility professionals. They recognized the increased demand for methods of utility / infrastructure installation and repairs that offered minimal surface and subsurface disruption. They also recognized the confusion caused with emerging new markets and new products and technologies often introduced by marketing firms and manufacturers. Their interest was in providing customers multiple trenchless solutions for varying pipeline concerns all performed through a singular and reputable provider.

CES has quickly grown due to providing reliable and quality product solutions supported by recognized industry leaders and professionals. This has provided CES the platform to offer a number of competing trenchless products including: pipe-bursting, CIPP and slip-lining as well as conventional excavation needs. In addition, CES has developed strategic alliances with several key firms to provide additional services on its projects such as engineering services, gas and electric work as well as telecom and line work.

CES is dedicated to maintaining a safe and healthy work environment for our employees, our customers, and the general public. We consistently monitor and implement new methods of construction to improve jobsite safety, and we actively promote health and safety awareness. Through years of experience and continual training, our employees are up-to-date on the latest standards in workplace safety. We have dedicated Health and Safety and Quality Control representatives who provide self-inspection services and enforce company and regulatory standards and procedures on every job site. Over the past several years, CES has grown, measuring success in the continuing acceptance of our services by satisfied customers. It is our commitment to excellence that drives us beyond the competition. Through building enduring and profitable relationships with our customers, we have become a rapidly growing leader in providing affordable and innovative pipeline solutions. Corporate office location: 6001 Schooner Drive Belleville, MI 48111

ii. Offeror's Reputation in the marketplace: Our reputation is one of a responsible and responsive contractor. We are well-known as a get it done team that is ready to take on a diverse scope of work. We have in-house master electricians, experts, in water, sewer, and gas. As well as fiber installation, design, and engineering. The owners that know of us, know that we have the capability and integrity to complete projects correctly and timely. We have been performing projects throughout the seven regions in the state of Michigan and developed a marketplace reputation as a company that makes things happen.

iii. Offeror's reputation for products and services in the marketplace: Our firm has been in the trenchless industry for over thirty years. During this time, we have utilized the various services and products offered in this RFP. We have vast experience with the technologies and products that are utilized in the trenchless industry. With that, we have successfully completed and established a reputation as a professional contractor.

iv. Experience and qualifications of key employees: Affixed to the end of this document

v. Offeror's experience in working in the government sector: Our firm has been in the trenchless industry for over thirty years. During this time, we have utilized the various services and products offered in this RFP. We have vast experience with the technologies and products that are utilized in the trenchless

industry. With that, we have successfully completed and established a reputation as a professional contractor. Because of this, we have developed relationships in the government sector, specifically municipalities, that have allowed us to position ourselves to be "the go to contractor" for specific work types. That said, our experience has had a positive impact in the government sector.

vi. Past litigation, bankruptcy, reorganization, state investigations…: We currently have three auto accidents that have resulted in litigation (currently unresolved). We also have one additional claim recently filed against our firm, DTE Energy, and Olympia Entertainment alleging flooding of the Plaintiff's parking lot occurs due to construction activities related to the construction of Little Caesar's Arena in Detroit. The claim is for $6,000.00 and flooding was documented to have occurred prior to our construction activities. No other items to report.

vii. Customer references:

- City of Grand Rapids
  John Brom, Supervisor
  300 Monroe Ave
  5th floor Engineering
  Grand Rapids, MI. 49503
  616-456-3076 Work
  jbrom@grand-rapiods.mi.us
  3 Years

CIPP, CCTV, MH lining
$600,000.00

- City of Kalamazoo Michigan
  Ryan Stoughton, Supervisor
  415 Stockbridge Ave
  Kalamazoo, MI 49001
  269-337-8736
  stoughtonr@kalamazoocity.org
  3 Years
  CIPP, CCTV
  $1,200,000.00
- City of Holland Michigan
  David Cyrus, Supervisor
  625 Hastings Ave
  Holland, MI 49423
  616-355-1646
  dcyrus@hollandbpw.com
  CCTV, CIPP Lining, Spot Liners
  $800,000.00
- City of Saginaw Michigan
  Josh Hoffman, DPW
  1709 S. Jefferson
  Saginaw, MI 48601
  989-233-1507
  joshhoffman@saginaw-mi.com
  3 Years
  CCTV, GIS, CIPP, Pipe Bursting
  $1,300,000.00

- Michigan Department of Transportation
  James Rath, Project Manager
  425 W. Ottawa St.
  Lansing, MI 48909
  517-230-5361
  Roathj@michigan.gov
  3 Years
  CCTV, GIS, CIPP, Pipe Bursting, Slip lining
  $7,000,000.00
- East Grand Rapids Michigan
  Douglas LaFave, City Manager
  750 Lakeside Dr. SE
  East Grand Rapids, MI 49506
  616-949-2110
  dlafave@eastgr.org
  5 Years
  CCTV, CIPP Lining
  $1,250,000.00
- City of Wyoming Michigan
  Jodie Theis, Supervisor Public Works
  1155 28th Street SW
  Wyoming, MI 49509-0905
  theisj@wyomingmi.gov
  616-530-7260
  5 Years
  CCTV, CIPP, Spot Lining
  $1,650,250.00

viii. Provide copy of NSF for Cured-in-Place water mains: Affixed to the end of this document.

ix. Offeror's safety record: Latest safety information affixed to the end of this document. Additionally, CES follows all federal and State safety requirements per the particular jurisdictional area. For example, in Ohio, OSHA is the measurement stick for compliance. However, in Michigan, MIOSHA is the measurement stick for compliance. CES has a safety handbook. When our safety policy conflicts with governing jurisdiction, we follow their standard (unless our requirements are more stringent). We protect the public and the government sector employees using safety measures established through federal and state agencies. Site-specific safety plans to ensure the protection of peoples.

x. Additional information: N/A

Water main lining licensed installer:

RS Blueline does not have a licensing process for installing their product. However, an RS Blueline representative from the manufacturer will be present during all installations to ensure that all protocols are followed properly.

NSF International
789 N. Dixboro Rd. Ann Arbor, MI 48105, USA
1-800.NSF.MARK | +1-734.769.8010 | www.nsf.org

EVALUATION REPORT

Send To: C0023384
Mr. Steve Wierzchowski
RS Technik / HammerHead
Earth Tool Company LLC
(Hamerhead Trenchless)
500 South C.P. Avenue
Lake Mills, WI 53551

Facility: C0338236
Earth Tool Company LLC (Hamerhead Trenchless)
500 South C.P. Avenue
Lake Mills WI 53551
United States

Result	**PASS**	Report Date	06-JAN-2021

Customer Name	RS Technik / HammerHead
Tested To	NSF/ANSI/CAN 61
Description	RS BlueLine® | 8" Lined Pipe (BlueLine CIPP Liner 928-1576)
Trade Designation	RS BlueLine®
Test Type	Annual Collection
Job Number	A-00366582
Project Number	W0596229
Project Manager	Jenae Yono

Thank you for having your product tested by NSF International.

Please contact your Project Manager if you have any questions or concerns pertaining to this report.

Report Authorization Kathryn Foster **Date** 06-JAN-2021

Kathryn Foster - Technical Operations Manager, Water

General Information

Standard: NSF/ANSI/CAN 61

Lot Number: T83223/D344IBJ036/D553HB003

Monitor Code: B

Physical Description of Sample: 8" Lined Pipe (BlueLine CIPP Liner 928-1576)

Tested DCC Number: PM12435

Trade Designation/Model Number: RS BlueLine®

Sample Id: **S-0001763343**
Description: Sample exposed at 23C and pH 5
Sampled Date: 11/14/2020
Received Date: 11/12/2020

Normalization Information:

Date exposure completed:	14-NOV-2020	Calculated N1:	1.05	Field Exposure Time:	16 hours	Lab Exposure Time:	16 hours
Field Surface Area:	40.7 in2	Lab Surface Area:	284.1 in2	Constant N2:	1	Misc. Factor:	1
Field Static Volume:	1 L	Lab Static Volume:	7.30 L				
				Calculated NFm:	1.00		

Compound Reference Key: SPAC

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab					
* Standard 61 Additives LAB SUM TEST Code					
External Note:	Product w as glued to glass.				
Metals I in w ater by ICPMS (Ref: EPA 200.8)					
Aluminum	ND(10)	ND(10)	ND(10)	ND(10)	ug/L
Arsenic	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Barium	3	2	1	1	ug/L
Beryllium	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Bismuth	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Cadmium	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ug/L
Chromium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Copper	1	ND(1)	1	1	ug/L
Mercury	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ug/L
Nickel	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Lead	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Antimony	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Selenium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Tin	6.9	11	ND(0.5)	ND(0.52)	ug/L
Strontium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Thallium	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ug/L
Zinc	ND(10)	ND(10)	ND(10)	ND(10)	ug/L
Silver	ND(1)	ND(1)	ND(1)	ND(1)	ug/L

Sample Id: **S-0001763344**
Description: Sample exposed at 23C and pH 8
Sampled Date: 11/14/2020
Received Date: 11/12/2020

Sample Id: **S-0001763344**

Normalization Information:

Date exposure completed:	14-NOV-2020	Calculated N1:	1.05	Field Exposure Time:	16 hours	Lab Exposure Time:	16 hours
Field Surface Area:	40.7 in2	Lab Surface Area:	284.1 in2	Constant N2:	1	Misc. Factor:	1
Field Static Volume:	1 L	Lab Static Volume:	7.34 L				
				Calculated NFm:	1.00		

Compound Reference Key: SPAC

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab					
* Bisphenol F and Adducts					
2,2'-Methylenediphenol	ND(50)	ND(50)	ND(50)	ND(53)	ug/L
2,4'-Methylenediphenol	ND(50)	ND(50)	ND(50)	ND(53)	ug/L
4,4'-Methylenediphenol	ND(50)	ND(50)	ND(50)	ND(53)	ug/L
Bisphenol F Diglycidylether	ND(50)	ND(50)	ND(50)	ND(53)	ug/L
* Standard 61 Additives LAB SUM TEST Code					
External Note:	Product w as glued to glass.				
Metals I in w ater by ICPMS (Ref: EPA 200.8)					
Aluminum	ND(10)	ND(10)	ND(10)	ND(11)	ug/L
Arsenic	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Barium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Beryllium	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Bismuth	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Cadmium	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ug/L
Chromium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Copper	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Mercury	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ug/L
Nickel	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Lead	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Antimony	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Selenium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Tin	7.3	6.4	0.95	1.0	ug/L
Strontium	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Thallium	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ug/L
Zinc	ND(10)	ND(10)	ND(10)	ND(11)	ug/L
Silver	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
BASE/NEUTRAL/ACID EPA METHOD 625 Scan for Tentatively Identified Compou					
O cmpd MW>143 1	7	Complete	7	7	ug/L
O cmpd MW>143 2	7	Complete	7	7	ug/L
O cmpd MW>157 1	8	Complete	8	8	ug/L
O cmpd MW>157 2	6	Complete	6	6	ug/L
O cmpd MW>157 3	5	Complete	5	5	ug/L
O cmpd MW>157 4	7	Complete	7	7	ug/L
O cmpd MW>157 5	8	Complete	8	8	ug/L
O cmpd MW>157 6	10	Complete	10	10	ug/L
Scan Control Complete	TRUE				
Semivolatile Compounds, Base/Neutral/Acid Target 625, Data Workup					

Sample Id: **S-0001763344**

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab (Continued)					
Pyridine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Nitrosodimethylamine (N-)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Nitrosomethylethylamine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
5-Methyl-2-hexanone (MIAK)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1-Methoxy-2-propanol acetate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Heptanone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Cyclohexanone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Nitrosodiethylamine (N-)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Isobutylisobutyrate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Aniline	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Phenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Di(chloroethyl) ether	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Chlorophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,3-Benzofuran	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1,3-Dichlorobenzene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1,4-Dichlorobenzene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
3-Cyclohexene-1-carbonitrile	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Ethylhexanol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzyl alcohol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1,2-Dichlorobenzene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
bis(2-Chloroisopropyl)ether	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Methylphenol (o-Cresol)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Methylaniline	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Acetophenone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Nitrosodi-n-propylamine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Nitrosopyrrolidine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
3- and 4-Methylphenol (m&p-Cresol)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Hexachloroethane	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Phenyl-2-propanol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Nitrosomorpholine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Nitrobenzene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,6-Dimethylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Vinylpyrrolidinone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Nitrosopiperidine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Triethylphosphate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Isophorone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Nitrophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,4-Dimethylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
bis(2-Chloroethoxy)methane	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,4-Dichlorophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Trichlorobenzene (1,2,4-)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Naphthalene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
4-Chloroaniline	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1,1,3,3,-Tetramethyl-2-thiourea	ND(4)	ND(4)	ND(4)	ND(4)	ug/L

Sample Id: S-0001763344

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab (Continued)					
Hexachlorobutadiene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzothiazole	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
N-Nitrosodi-n-butylamine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
4-Chloro-3-methylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
p-tert-Butylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Ethylhexyl glycidyl ether	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,6-Di-t-butyl-4-methylphenol(BHT)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Methylnaphthalene, 2-	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Cyclododecane	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,4,5-Trichlorophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,4,6-trichlorophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1(3H)-Isobenzofuranone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Chloronaphthalene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2-Nitroaniline	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1,1'-(1,3-Phenylene)bis ethanone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,6-Di-tert-butylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Dimethylphthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
1,1'-(1,4-Phenylene)bis ethanone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Acenaphthylene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzenedimethanol, a,a,a',a'-tetramethyl-1,3-	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,6-Dinitrotoluene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,4-Dinitrotoluene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzenedimethanol, a,a,a',a'-Tetramethyl-1,4-	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
2,4-Di-tert-butylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Dimethyl terephthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Acenaphthene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Dibenzofuran	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Ethyl-4-ethoxybenzoate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
4-Nitrophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Cyclododecanone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Diethyl Phthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
p-tert-Octylphenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Fluorene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
4-Chlorophenylphenylether	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
3-Nitroaniline	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
4-Nitroaniline	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Nitrosodiphenylamine (N-)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Azobenzene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
4-Bromophenylphenylether	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Hexachlorobenzene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Pentachlorophenol	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Phenanthrene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Anthracene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Diisobutyl phthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L

Sample Id: **S-0001763344**

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab (Continued)					
Dibutyl phthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Diphenyl sulfone	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Hydroxymethylphenylbenzotriazole	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Fluoranthene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Pyrene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Butyl benzyl phthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Di(2-ethylhexyl)adipate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
3,3-Dichlorobenzidine	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzo(a)anthracene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Di(2-ethylhexyl)phthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Chrysene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Di-n-octylphthalate	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzo(b)fluoranthene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzo(k)fluoranthene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzo(a)Pyrene (PAH)	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Dibenzo(a,h)anthracene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Indeno(1,2,3-cd)pyrene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
Benzo(g,h,i)perylene	ND(2)	ND(2)	ND(2)	ND(2)	ug/L
* Formaldehyde (mg/L)					
Formaldehyde	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	mg/L
* Epichlorohydrin (Modified EPA 524.2)					
Epichlorohydrin	ND(5)	ND(5)	ND(5)	ND(5)	ug/L
* 1,3-Dichloro-2-propanol in water, GC/FID					
1,3-Dichloro-2-propanol	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
* Benzyl alcohol					
Benzyl Alcohol	ND(50)	ND(50)	ND(50)	ND(53)	ug/L
Bisphenol A - propylene oxide adducts, LC/UV					
Bisphenol A diglycideryl ether	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
Bisphenol A propoxylate	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
Bisphenol A diglycidyl ether	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
Bisphenol A, LC/UV					
Bisphenol A	ND(10)	ND(10)	ND(10)	ND(11)	ug/L
* Butanediol, 1,4- by NSF Method					
Butanediol, 1,4	ND(100)	ND(100)	ND(100)	ND(110)	ug/L
* Caprolactam, LC/UV					
Caprolactam	ND(50)	ND(50)	ND(50)	ND(53)	ug/L
* 1,2-Dichloro-3-propanol in Water, GC/FID					
1,2-Dichloro-3-Propanol	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
* Ethylene Diamine, LC/Post-column fluorescence, in water					
Ethylene Diamine	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
* Ethylene glycol, LC/MS					
Ethylene glycol	ND(200)	ND(200)	ND(200)	ND(210)	ug/L
* Glycidol, in water, GC/FID					
Glycidol	ND(1000)	ND(1000)	ND(1000)	ND(1100)	ug/L

Sample Id: **S-0001763344**

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab (Continued)					
* Isophorone diamine, LC/Post-column fluorescence					
Isophorone diamine	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
* Propylene glycol , LC/MS					
Glycol, Propylene	ND(200)	ND(200)	ND(200)	ND(210)	ug/L
* Phthalic Acids					
Phthalic Acid	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
Terephthalic Acid	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
Isophthalic Acid	ND(20)	ND(20)	ND(20)	ND(21)	ug/L
Volatile Organic Compounds (Ref: EPA 524.2)					
Dichlorodifluoromethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Chloromethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Vinyl Chloride	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Bromomethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Chloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Trichlorofluoromethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Trichlorotrifluoroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Methylene Chloride	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1-Dichloroethylene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
trans-1,2-Dichloroethylene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1-Dichloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
2,2-Dichloropropane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
cis-1,2-Dichloroethylene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Chloroform	1.1	ND(0.5)	1.1	1.1	ug/L
Bromochloromethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1,1-Trichloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1-Dichloropropene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Carbon Tetrachloride	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2-Dichloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Trichloroethylene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2-Dichloropropane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Bromodichloromethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Dibromomethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
cis-1,3-Dichloropropene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
trans-1,3-Dichloropropene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1,2-Trichloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,3-Dichloropropane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Tetrachloroethylene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Chlorodibromomethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Chlorobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1,1,2-Tetrachloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Bromoform	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,1,2,2-Tetrachloroethane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2,3-Trichloropropane	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,3-Dichlorobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,4-Dichlorobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L

Sample Id: **S-0001763344**

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab (Continued)					
1,2-Dichlorobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Carbon Disulfide	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
Methyl-tert-Butyl Ether (MTBE)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
tert-Butyl ethyl ether	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Methyl Ethyl Ketone	ND(5)	ND(5)	ND(5)	ND(5)	ug/L
Methyl Isobutyl Ketone	ND(5)	ND(5)	ND(5)	ND(5)	ug/L
Toluene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Ethyl Benzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
m+p-Xylenes	ND(1)	ND(1)	ND(1)	ND(1)	ug/L
o-Xylene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Styrene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Isopropylbenzene (Cumene)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
n-Propylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Bromobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
2-Chlorotoluene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
4-Chlorotoluene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,3,5-Trimethylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
tert-Butylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2,4-Trimethylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
sec-Butylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
p-Isopropyltoluene (Cymene)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2,3-Trimethylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
n-Butylbenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2,4-Trichlorobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Hexachlorobutadiene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
1,2,3-Trichlorobenzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Naphthalene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Benzene	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L
Total Trihalomethanes	1.1	ND(0.5)	1.1	1.1	ug/L
Total Xylenes	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ug/L

Sample Id: **S-0001763346**
Description: Pipe Liner
Sampled Date: 11/12/2020
Received Date: 11/12/2020

Normalization Information:

Testing Parameter	Sample	Control	Result	Normalized Result	Units
Chemistry Lab					
Material Screening for Lead by XRF					
Lead content verification	Pass				

Testing Laboratories:

	Id	Address
All work performed at:	NSF_AA	NSF International 789 N. Dixboro Road Ann Arbor MI 48105

References to Testing Procedures:

NSF Reference	Parameter / Test Description
C0034	* Bisphenol F and Adducts
C0513	Material Screening for Lead by XRF
C1031	* Standard 61 Additives LAB SUM TEST Code
C1182	Metals I in water by ICPMS (Ref: EPA 200.8)
C2023	BASE/NEUTRAL/ACID EPA METHOD 625 Scan for Tentatively Identified Compounds (TICs)
C2024	Semivolatile Compounds, Base/Neutral/Acid Target 625, Data Workup
C3213	* Formaldehyde (mg/L)
C3364	* Epichlorohydrin (Modified EPA 524.2)
C4004	* 1,3-Dichloro-2-propanol in water, GC/FID
C4050	* Benzyl alcohol
C4056	Bisphenol A - propylene oxide adducts, LC/UV
C4057	Bisphenol A, LC/UV
C4064	* Butanediol, 1,4- by NSF Method
C4074	* Caprolactam, LC/UV
C4114	* 1,2-Dichloro-3-propanol in Water, GC/FID
C4163	* Ethylene Diamine, LC/Post-column fluorescence, in water
C4168	* Ethylene glycol, LC/MS
C4191	* Glycidol, in water, GC/FID
C4226	* Isophorone diamine, LC/Post-column fluorescence
C4330	* Propylene glycol , LC/MS
C4357	* Phthalic Acids
C4662	Volatile Organic Compounds (Ref: EPA 524.2)

Test descriptions preceded by an asterisk "*" indicate that testing has been performed per NSF International requirements but is not within its scope of accreditation.

Unless otherwise indicated, method uncertainties are not applied in any determinations of conformity. Testing utilizes the requested sections of any referenced standards, which may not be the entire standard.

OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 2021

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	0	0
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0	0
(K)	(L)

Injury and Illness Types

Total number of...	(M)		
(1) Injury	0	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Establishment information

Your establishment name: Corby Energy Services, Inc.

Street: 6001 Schooner St.

City: Belleville State: Michigan Zip: 48111

Industry description (e.g., Manufacture of motor truck trailers)
Utility construction

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)

OR North American Industrial Classification (NAICS), if known (e.g., 336212)
2 3 7 1

Employment information

Annual average number of employees: 292

Total hours worked by all employees last year: 261,771

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

James A Moskal
Company executive

Compliance Manag
Title

(734) 547-9237
Phone

6/3/2021
Date

OSHA's Form 300 (Rev. 01/2004)
Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 2021

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an injury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name Corby Energy Services, Inc.

City Belleville State MI

Identify the person			Describe the case			Classify the case				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	CHECK ONLY ONE box for each case based on the most serious outcome for that case:						(M)					
						Death	Days away from work	Remained at work		Away From Work (days)	On job transfer or restriction (days)	Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
								Job transfer or restriction	Other record-able cases								
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
					Page totals	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Public reporting burden for this collection of information is estimated to average 14 minutes per response, including time to review the instruction, search and gather the data needed, and complete and review the collection of information. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. If you have any comments about these estimates or any aspects of this data collection, contact: US Department of Labor, OSHA Office of Statistics, Room N-3644, 200 Constitution Ave, NW, Washington, DC 20210. Do not send the completed forms to this office.

OSHA's Form 300A (Rev. 01/2004)
Summary of Work-Related Injuries and Illnesses

Year 2018

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	1	1	0
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
14	194
(K)	(L)

Injury and Illness Types

Total number of...	(M)		
(1) Injury	2	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Establishment information

Your establishment name Corby Energy Services, Inc.

Street 6001 Schooner St.

City Belleville State Michigan Zip 48111

Industry description (e.g., Manufacture of motor truck trailers)
Utility construction

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)
____ ____ ____ ____

OR North American Industrial Classification (NAICS), if known (e.g., 336212)
2 3 7 1 ____ ____

Employment information

Annual average number of employees 276

Total hours worked by all employees last year 621,523

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

James A Moskal
Company executive

Compliance Manage
Title

(734) 547-9237
Phone

1/31/2019
Date

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 2018

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an injury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name: Corby Energy Services, Inc.

City: Belleville State: MI

Identify the person				Describe the case		Classify the case											
						CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death	Days away from work	Remained at work		Away From Work (days)	On job transfer or restriction (days)	(M) Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
								Job transfer or restriction	Other record-able cases								
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
1	[redacted]	Warehouse	8/1/2018	Warehouse	Carpal tunnel of upper limb		x			14	14	x					
2	[redacted]	Laborer	5/17/2018	Job Site	Back/Leg Strain			X			180	x					
					Page totals	0	1	1	0	14	194	2	0	0	0	0	0

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

	Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
	(1)	(2)	(3)	(4)	(5)	(6)

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OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 2020

U.S. Department of Labor

Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees, former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	3	0
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0	160
(K)	(L)

Injury and Illness Types

Total number of...

	(M)		
(1) Injury	3	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Establishment information

Your establishment name Corby Energy Services, Inc.

Street 6001 Schooner St.

City Belleville State Michigan Zip 48111

Industry description (e.g., Manufacture of motor truck trailers)
Utility Construction

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)

OR North American Industrial Classification (NAICS), if known (e.g., 336212)
2 3 7 1

Employment information

Annual average number of employees 272

Total hours worked by all employees last year 605,344

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

James Moskal
Company executive

Compliance Manage
Title

(734) 547-9237
Phone

1/27/2021
Date

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 2020

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

You must record information about every work-related injury or illness that involves loss of consciousness, restricted work activity or job transfer, days away from work, or medical treatment beyond first aid. You must also record significant work-related injuries and illnesses that are diagnosed by a physician or licensed health care professional. You must also record work-related injuries and illnesses that meet any of the specific recording criteria listed in 29 CFR 1904.8 through 1904.12. Feel free to use two lines for a single case if you need to. You must complete an injury and illness incident report (OSHA Form 301) or equivalent form for each injury or illness recorded on this form. If you're not sure whether a case is recordable, call your local OSHA office for help.

Establishment name Corby Energy Services, Inc.

City Belleville State Michigan

Identify the person				Describe the case		Classify the case											
						CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death	Days away from work	Remained at work		Away From Work (days)	On job transfer or restriction (days)	(M) Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
								Job transfer or restriction	Other record-able cases								
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
1	[redacted]	Laborer	02/18/2020	Walking from yard into the shop	Open fracture right ring finger			X			50	X					
2	[redacted]	Laborer	06/01/2020	Job site in Holland, MI	Left ankle fracture			X			57	X					
3	[redacted]	Laborer	11/09/2020	Job site in Romulus, MI	Extensor tendon laceration on left thumb and contusion on left hand			X			53	X					
					Page totals	*0*	*0*	*3*	*0*	*0*	*160*	*3*	*0*	*0*	*0*	*0*	*0*

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
(1)	(2)	(3)	(4)	(5)	(6)

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OSHA's Form 300A (Rev. 01/2004)

Summary of Work-Related Injuries and Illnesses

Year 2017

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

Using the Log, count the individual entries you made for each category. Then write the totals below, making sure you've added the entries from every page of the log. If you had no cases write "0."

Employees former employees, and their representatives have the right to review the OSHA Form 300 in its entirety. They also have limited access to the OSHA Form 301 or its equivalent. See 29 CFR 1904.35, in OSHA's Recordkeeping rule, for further details on the access provisions for these forms.

Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	1	1
(G)	(H)	(I)	(J)

Total number of days away from work	Total number of days of job transfer or restriction
0	16
(K)	(L)

Injury and Illness Types

Total number of... (M)			
(1) Injury	2	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

Establishment Information

Your establishment name Corby Energy Services, Inc.

Street 8001 Schooner St.

City Belleville State Michigan Zip 48111

Industry description (e.g., Manufacture of motor truck trailers)
Utility construction

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)
___ ___ ___ ___

OR North American Industrial Classification (NAICS), if known (e.g., 336212)
2 3 7 1 ___ ___

Employment Information

Annual average number of employees 253

Total hours worked by all employees last year 560,856

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

James A Moskal
Company executive

Compliance Manage
Title

(734) 547-9237
Phone

1/31/2018
Date

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

Attention: This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes.

Year 2017

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

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Establishment name Corby Energy Services, Inc.

City Belleville State MI

Identify the person			Describe the case			Classify the case											
						CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death	Days away from work	Remained at work		Away From Work (days)	On job transfer or restriction (days)	(M) Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
								Job transfer or restriction	Other record-able cases								
						(G)	(H)	(I)	(J)	(K)	(L)	(1)	(2)	(3)	(4)	(5)	(6)
1	[redacted]	Operator	3/22/2017	Yard	Carpal tunnel of upper limb			X			16	x					
2	[redacted]	Operator	8/16/2017	Job Site	Strain of the left arm				x			x					
					Page totals	*0*	*0*	*1*	*1*	*0*	*16*	*2*	*0*	*0*	*0*	*0*	*0*

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
(1)	(2)	(3)	(4)	(5)	(6)

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OSHA's Form 300A (Rev. 01/2004)
Summary of Work-Related Injuries and Illnesses

Year 2019

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

All establishments covered by Part 1904 must complete this Summary page, even if no injuries or illnesses occurred during the year. Remember to review the Log to verify that the entries are complete

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Number of Cases

Total number of deaths	Total number of cases with days away from work	Total number of cases with job transfer or restriction	Total number of other recordable cases
0	0	3	0
(G)	(H)	(I)	(J)

Number of Days

Total number of days away from work	Total number of days of job transfer or restriction
0	176
(K)	(L)

Injury and Illness Types

Total number of...	(M)		
(1) Injury	3	(4) Poisoning	0
(2) Skin Disorder	0	(5) Hearing Loss	0
(3) Respiratory Condition	0	(6) All Other Illnesses	0

Establishment information

Your establishment name Corby Energy Services, Inc.

Street 6001 Schooner St.

City Belleville State Michigan Zip 48111

Industry description (e.g., Manufacture of motor truck trailers)
Utility construction

Standard Industrial Classification (SIC), if known (e.g., SIC 3715)
____

OR North American Industrial Classification (NAICS), if known (e.g., 336212)
2 3 7 1 ____ ____

Employment information

Annual average number of employees 294

Total hours worked by all employees last year 698,880

Sign here

Knowingly falsifying this document may result in a fine.

I certify that I have examined this document and that to the best of my knowledge the entries are true, accurate, and complete.

James A Moskal
Company executive

Compliance Manage
Title

(734) 547-9237
Phone

1/23/2020
Date

Post this Summary page from February 1 to April 30 of the year following the year covered by the form

OSHA's Form 300 (Rev. 01/2004)

Log of Work-Related Injuries and Illnesses

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Year 2019

U.S. Department of Labor
Occupational Safety and Health Administration

Form approved OMB no. 1218-0176

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Establishment name Corby Energy Services, Inc.

City Belleville State MI

Identify the person			Describe the case			Classify the case											
						CHECK ONLY ONE box for each case based on the most serious outcome for that case:				Enter the number of days the injured or ill worker was:		Check the "injury" column or choose one type of illness:					
(A) Case No.	(B) Employee's Name	(C) Job Title (e.g., Welder)	(D) Date of injury or onset of illness (mo./day)	(E) Where the event occurred (e.g. Loading dock north end)	(F) Describe injury or illness, parts of body affected, and object/substance that directly injured or made person ill (e.g. Second degree burns on right forearm from acetylene torch)	Death (G)	Days away from work (H)	Remained at work: Job transfer or restriction (I)	Remained at work: Other record-able cases (J)	Away From Work (days) (K)	On job transfer or restriction (days) (L)	(M) Injury (1)	Skin Disorder (2)	Respiratory Condition (3)	Poisoning (4)	Hearing Loss (5)	All other illnesses (6)
1	[redacted]	Laborer	5/7/2019	Jobsite	Ankle Fracture			X			50	X					
2	[redacted]	Laborer	7/25/2019	Jobsite	Ankle Sprain			X			118	X					
3	[redacted]	Laborer	11/1/2019	Jobsite	Laceration			X			8	X					
					Page totals	*0*	*0*	*3*	*0*	*0*	*176*	*3*	*0*	*0*	*0*	*0*	*0*

Be sure to transfer these totals to the Summary page (Form 300A) before you post it.

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Injury	Skin Disorder	Respiratory Condition	Poisoning	Hearing Loss	All other illnesses
(1)	(2)	(3)	(4)	(5)	(6)

David Carpenter, PMP

Vice President – Trenchless Division

Mr. Carpenter entered the underground industry in 1986 as an entry level laborer (shooting grades and performing general labor). By 1988 he had become a utility pipe layer and crew pusher. In 1991 he was promoted to utility foreman and in 1993 made the rank of Superintendent. Between 1993 and 1999 he began to supervise over utility projects. In 1999 he joined the ranks of estimating and project management where he continued to climb the business ladder until he became Vice President. Mr. Carpenter is celebrating his 36th year in the underground industry.

- **2011 – Present: Corby Energy services, Inc.**
  Vice President – Oversight of Horizontal Directional Drilling (HDD), Closed Circuit Televising (CCTV), Cured-In-Place-Pipe (CIPP), Pipe Bursting, Slip-Lining, and other various technologies.

- **2009 – 2010: WRScompass (Tampa, FL)**
  Project Manager/Estimator – Responsible for the management and oversight HDD, CIPP and Open Cut projects

- **2006 – 2009: D&K Excavating, LLC (Perrysburg, OH)**
  Project Manager/Estimator – Responsible for the management and oversight HDD, CIPP and Open Cut projects

- **2003 – 2006: Utility Services Authority, LLC**
  Project Manager/Estimator – Responsible for the management and oversight HDD, CIPP and Open Cut projects

QUALIFICATIONS

- Experience in the underground utility, power, telephone and communications industries for over 25 years
- Extensive experience in running complex multi crew projects and multi crew maintenance contracts in water, sewer, power and communications industries

PROJECT EXPERIENCE

- Walnut Lake Force Main – Oakland County, MI – Installation of 20,800 LF of 20" Force Main by horizontal directional drill (HDD) along 14 Mile Rd.
- Huron Street 72" Water Main and Road Reconstruction – Toledo, OH – Open cut over 1 mile of 72" water main in Toledo, OH with depths over 20 feet
- Mack Ave Water Main Replacement – Grosse Pointe Woods, MI – Installation of 15,000 LF of 8", 12" and 20" Water Main by HDD along Mack Ave
- Live Oak CIPP Project – Live Oak, FL - Over 100,00 LF of 8"-18" CIPP

Mark Helsel, Jr.

Vice-President

Mr. Helsel has been employed by Corby Energy Services, Inc. since 2000. His dedication and commitment to the betterment of the organization has resulted in his promotion through the ranks of the company. Serving as a field mechanic during his early years provided Mr. Helsel with the opportunity to work on nearly every type of project site and become intimately familiar with both the nuances of the work and the equipment needs of the organization. In 2004, Mr. Helsel was promoted to the Asset Manager of the organization and held overall responsibility for a fleet of over 500 light and heavy duty vehicles and a wide array of heavy equipment. After serving in this capacity for over six years, Mr. Helsel was promoted to the Vice-President of the company in 2011 and continues in this position today.

Professional Experience:

Corby Energy Services, Inc. - Belleville, Michigan

Vice-President *2011 - Present*

- Carry out the strategic plan and vision of the organization through overseeing operations, developing functional roles and assigning responsibilities to employees.
- Maintain awareness of both the external and internal competitive landscape, opportunities for expansion, customers, markets, new industry developments and standards, and so forth.
- Lead, guide, direct, and evaluate the work of other executive leaders including upper-level managers, officers, and directors.
- Form, staff, guide, lead, and manage the organization to the strategic plan of the business.

Asset Manager *2004 - 2011*

- Supervised a team of mechanics, both in a shop setting and in the field, to ensure the company's fleet was maintained properly.
- Allocated resources to ensure operation efficiencies were maintained.
- Directed, monitored, supervised and evaluated the various external providers of services for all of the company's assets.

Field Mechanic *2000 - 2004*

- Repaired and maintained heavy equipment, heavy duty and light duty trucks, as well as all ancillary equipment.

Jason Newton

Controller/Treasurer

Mr. Newton has been in the utility infrastructure industry for over 22 years serving as the financial controller for Corby Energy Services, Inc.

Professional Experience:

Corby Energy Services, Inc. - Belleville, Michigan 2000-Present
Controller

Overall authority for the financial operations of the organization, budget preparation and administration, audit, taxation, accounting, monthly closing of books of record, account reconciliation, and journal entry adjustments. Prepare monthly, quarterly, and annual reports summarizing and forecasting company business activities and financials position in areas of income, expenses, and earnings based on past, present, and expected operations. Develops financial statements, analyzes business trends and operating costs. Supervises, leads, and supports staff of six.

Weldaloy Products Company, Inc.-Warren, Michigan 1998-1999
Controller

Directed all areas of financial reporting from review of account entry to budget preparation and analysis. Supervised, directed, and supported and Administrative Department of 5 responsible for accounting, contract administration and purchasing.

Ricardo, Inc.-Belleville, Michigan 1993-1998
Financial Analyst

Responsible for the billing and collections. Assisted the Controller with daily activities. Prepared fixed assets schedules. Prepared monthly, quarterly, and annual tax returns.

Education:

Michigan State University, East Lansing, MI 1992
Bachelor of Arts in Finance

James A. Moskal

Compliance Manager

Mr. Moskal has been with Corby Energy Services for 19 years. During his tenure he has developed comprehensive programs for project specific and general health and safety, created efficient processes to streamline the flow of work from field operations to corporate support personnel (including satellite locations), and developed and communicated cost savings opportunities with the company's clients.

Additionally, Mr. Moskal serves as the Corporate Secretary and manages the legal affairs of the firm. He is responsible for the selection and coordination of outside counsel and provides guidance to the firm's Board of Directors on a multitude of issues. He also reviews the monthly financials of the firm to ensure performance targets are met and discusses to what extent current and future process changes are likely to financially impact the company.

Professional Accomplishments

- Corporate Counsel for multiple organizations
- Creation and implementation of workflow management systems creating efficiencies between operations and support professionals
- Development of management tracking systems and programs leading to higher resource production rates
- Personnel supervision and corporate training
- Serves as a senior member on the company's Technology Committee

Education / Certifications / Professional Activities

- B.B.A. in Management and Management Information Systems, University of Michigan – Dearborn, MI
    - Concentrations in Management and Management Information Systems
- J.D. Degree, University of Detroit Mercy-School of Law, Detroit, MI
- M.B.A. and M.S.F. Degrees, University of Michigan – Dearborn, MI

Relevant Qualifications/Certifications

- Licensed to practice law in the State of Michigan
- Certified and Licensed General Contractor – State of Florida
- Licensed Contractor – Alabama, Arkansas, Arizona, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee
- OSHA 30-Hour Training Course
- NUCA Trench and Excavation Certification Training
- Substance Abuse and Awareness Training
- Effective Safety Committees Seminar
- Workers' Compensation 3-D Seminar
- Fleet Risk Management – Best Practices Seminar
- Wayne – Oakland – Macomb Construction Safety Committee – Member
- Construction Lien Law Seminar
- Highway Construction Work Zones and Traffic Control Hazards – Seminar
- Detroit Edison Wire Down Training

Troy Freed

Business / Development

Mr. Freed has been actively engaged in both the domestic, wastewater and gas industry for over 30 years. His credentials include the use of Trenchless Technologies such as Pipe-Bursting, Horizontal Directional Drilling, Slip-Lining, CIPP, Open Cut Excavation, etc. Mr. Freed has lent his expertise to aiding in writing installation and qualifications specifications, design build projects, consulting, and assessment of pre-design and emergency projects. Currently holds the Specification Chair for the International Pipe Bursting Association (a division of NASSCO). Currently he holds the membership chair at the Center for Underground Infrastructure Research and Education at Michigan State University and University of Arlington Texas.

Mr. Freed aided in design and construction of the largest pipe bursting machine in the world.

Mr. Freed has gave numerous educational presentations to various State & Local Municipals. Along with presentations to such organizations as, American Water Works Assoc., American Public Works Assoc., Rural Water Assoc., County Road Associations, MSTT.

Employment History

2003 - Present Corby Energy Services, Inc. – Trenchless Director / Business Development

- Responsible for the oversite of trenchless field related tasks and business development.

Notable Projects / Relevant Qualifications / Certifications

Southern Clinton County Municipal Utilities Authority – Designed and constructed a sanitary force main project that involved an 18" RCP pipe that had very bad hydrogen sulfate problems. 4000' of the 18 in. was pipe-burst to 24 in. HDPE, 2500 ft was CIPP (Cured in Place Pipe), and 3100 ft. of 12 in. HDPE was Directionally Drilled to replace deteriorated 12 in. ductile iron.

City of Gary, IN. – The City of Gary has numerous problems in their existing sanitary sewer mains. One project in particular was 3,000 feet of 30 in. 3 layer brick sewer that had been installed in the late 1800's and was collapsing. The line was approximately 25 feet deep with a water table at 2 feet with running sands. The job was Pipe-Burst and 36 in. HDPE pulled in, some length of pulls was greater than 1300 ft.

University of Notre Dame – Pipe Bursting 12in. existing VCP and upsizing to 18in. HDPE. The Project was right thru the heart of campus running from 25' to 30'. in depth. Also notable on the project was 1,000 foot continuous pulls and bursting thru existing manholes. The project had to be completed before the "Blue and Gold" game with no excuses due to weather. Etc... The project ended up finishing the 2 weeks ahead of schedule.

City of Warren, MI. In 1998 the city brought Mr. Freed in to consult on a water main rehab project on Van Dyke Highway which is a MDOT route and is covered with various businesses. There were water mains on both sides of this 6 lane highway. The city had an open-cut contractor dig and replacement the east side of Van Dyke the previous year before and had 4 to 5 complaints a day from businesses that had been affected during the process. This project on the west side ran about four miles of existing 8 & 12in diameter cast iron that had been breaking in several different locations. Mr. Freed worked with the city engineering dept. to help design and then implement a water main bursting specification along with plans. Mr. Freed then constructed the project which at the time was the largest water main pipe-bursting project in the United States. This project was also finished ahead of schedule along with saving the city about $650,000.00 in concrete restoration compared to open-cut.

Josh Freeman, B.A. Construction Mgmt.

Project Manager

Mr. Freeman has over 15 years of construction management experience related to trenchless technologies, Mechanical Engineering and Heavy Industrial Facility Management. As a Project Manager at Corby Energy Services Inc., he is responsible for directing and executing project activities including: pre-bid activity coordination, estimating, scheduling, resource leveling, logistics, contract management, work scopes, cost control, project execution and project closeout. During the life of the project he serves as a client liaison and PM.

Employment History

2012 - Present Corby Energy Services, Inc. – Project Manager

- Responsible for the management and oversight of all trenchless projects

2008 – 2012 ATI Group – Project Manager

- Responsible for the management of construction projects related to the mechanical engineering field

2006 – 2008 Sorensen Gross Construction Services – Project Scheduler/Assistant PM

- Responsible for the day-to-day scheduling and manpower allocation of 150 skilled trade employees. Supervised the installation of multiple capital projects ranging from $1M to $10M within an automotive manufacturing facility.

Education / Certifications / Professional Activities

- B.A. in Construction Management, Michigan State University – East Lansing, MI

Notable Projects / Relevant Qualifications / Certifications

- City of Freeport Illinois Sanitary Sewer Rehabilitation - $7.5M project consisting of the installation of over 65,000 LF of CIPP liner ranging in size from 6"to 42" in diameter.
- City of Grand Rapids - 3-year contract rehabilitating over 60,000 LF of City storm and sanitary sewers by CIPP methods. $2M project
- City of Janesville Sanitary Sewer Rehabilitation- $2M project consisting of 20,000 lf of CIPP sewer liner from 8"-24" diameter pipe.
- City of Dearborn Sanitary Rehabilitation by Lining- $2M CIPP Lining project over 28,000 LF of combined sanitary and storm water sewer.
- TREMCO LEED Certified building - Installation of a complete restoration of the existing building mechanical system resulting in a LEED platinum Certification.
- Jackson Public Schools - $20M bond project. District wide mechanical system improvements and engineering design.
- Installation of the TARGA Line - Installation for the General Motors TARGA launch.
- OSHA 30 Hour Safety Certification
- Confined Space Certification
- Primavera P3E/P6 Scheduling Software, Microsoft Project
- AIA Contract Documentation

Randy Perrien

Project Superintendent

Mr. Perrien has over 35 years of construction experience related to trenchless technologies. As General Superintendent at Corby Energy Services, he is responsible for directing and executing onsite project activities including: televising and pipe prep, CIPP lining of pipes ranging in size from 6"-72", bypass pumping, project logistics and project management. Mr. Perrien has personally been involved in over 20,000 miles of cured in place pipe (CIPP) during his professional career.

Employment History

2004 - Present Corby Energy Services, Inc. – Project Superintendent

- Responsible for the oversite of all field related tasks related to trenchless projects. Daily oversite of all trenchless crews and equipment.

1983 - 2004 Insituform Technologies – General Superintendent

- Responsible for the oversite of all crews and projects for CIPP lining.

Notable Projects / Relevant Qualifications / Certifications

- City of Freeport Illinois Sanitary Sewer Rehabilitation - $7.5M project consisting of the installation of over 65,000 LF of CIPP liner ranging in size from 6"to 42" in diameter.
- City of Grand Rapids – 3-year contract rehabilitating over 60,000 LF of City storm and sanitary sewers by CIPP methods.
- City of Janesville Sanitary Sewer Rehabilitation - $2M project consisting of 20,000 LF of CIPP sewer liner from 8"-24" diameter pipe.
- City of Dearborn Sanitary Rehabilitation by Lining (various diameters) - $2M CIPP Lining project over 28,000 LF of combined sanitary and storm water sewer.
- City of Ann Arbor Sanitary Sewer Lining - Installation of over 30,000 LF of CIPP lining
- 2007 University of Michigan Football stadium - 10" CIPP lining inside the stadium seating
- University of Michigan Storm Lining inside Campus housing
- City of Detroit Sewer Lining - 50,000 LF of CIPP lining
- OSHA 10 Safety training
- Confined Space certification
- First Aid certified
- Other projects
    - Live Oak, FL $1,000.000.00
    - Franklin, VA $336,000.00
    - Michigan Department of Transportation (various TSC's)
    - Consumers Energy
    - John Mansville (plant)

Donald Stamper

CIPP Foreman

Mr. Stamper has 13 years of construction experience related to trenchless technologies. As a supervisor at Corby Energy Services Inc., he is responsible for directing and executing onsite project activities including: televising and pipe preparation, CIPP lining of pipes ranging in size from 6"-42", bypass pumping, project logistics and project management. Mr. Stamper has personally been involved in over 100 miles of cured-in place-pipe (CIPP) during his career.

Employment History

2008 - Present Corby Energy Services, Inc. – CIPP Foreman

- Responsible for the oversite of all field related tasks related to trenchless projects. Daily oversite of all trenchless crews and equipment.

Notable Projects / Relevant Qualifications / Certifications

- City of Freeport Illinois Sanitary Sewer Rehabilitation - $7.5M project consisting of the installation of over 65,000 LF of CIPP liner ranging in size from 6"to 42" in diameter.
- City of Grand Rapids - 3-year contract rehabilitating over 60,000 LF of City storm and sanitary sewers by CIPP methods. $2M project
- City of Janesville Sanitary Sewer Rehabilitation- $2M project consisting of 20,000 lf of CIPP sewer liner from 8"-24" diameter pipe.
- City of Kalamazoo Michigan - Direct CIPP lining oversight of 20,000 LF of 8"-18" Sewer
- City of Dearborn Sanitary Rehabilitation by Lining- $2M CIPP Lining project over 28,000 LF of combined sanitary and storm water sewer.
- City of Ann Arbor - Installation of over 30,000 LF of sanitary sewer CIPP lining
- City of Detroit - 50,000 LF of CIPP sewer lining
- OSHA 10 Safety training
- Confined space certification
- First Aid certified
- Other projects
    - Live Oak, FL $1,000.000.00
    - Franklin, VA $336,000.00
    - Michigan Department of Transportation (various TSC's)
    - Consumers Energy
    - John Mansville (plant)

References

- City of Grand Rapids
  John Brom, Supervisor
  300 Monroe Ave
  5th floor Engineering
  Grand Rapids, MI. 49503
  616-456-3076 Work
  jbrom@grand-rapiods.mi.us
  3 Years
  CIPP, CCTV, MH lining
  $600,000.00
- City of Kalamazoo Michigan
  Ryan Stoughton, Supervisor
  415 Stockbridge Ave
  Kalamazoo, MI 49001
  269-337-8736
  stoughtonr@kalamazoocity.org
  3 Years
  CIPP, CCTV
  $1,200,000.00
- City of Holland Michigan
  David Cyrus, Supervisor
  625 Hastings Ave
  Holland, MI 49423
  616-355-1646
  dcyrus@hollandbpw.com
  CCTV, CIPP Lining, Spot Liners
  $800,000.00

- City of Saginaw Michigan
  Josh Hoffman, DPW
  1709 S. Jefferson
  Saginaw, MI 48601
  989-233-1507
  joshhoffman@saginaw-mi.com
  3 Years
  CCTV, GIS, CIPP, Pipe Bursting
  $1,300,000.00
- Michigan Department of Transportation
  James Rath, Project Manager
  425 W. Ottawa St.
  Lansing, MI 48909
  517-230-5361
  Roathj@michigan.gov
  3 Years
  CCTV, GIS, CIPP, Pipe Bursting, Slip lining
  $7,000,000.00
- East Grand Rapids Michigan
  Douglas LaFave, City Manager
  750 Lakeside Dr. SE
  East Grand Rapids, MI 49506
  616-949-2110
  dlafave@eastgr.org
  5 Years
  CCTV, CIPP Lining
  $1,250,000.00
- City of Wyoming Michigan

Corby Energy Services, Inc.

Jodie Theis, Supervisor Public Works
1155 28th Street SW
Wyoming, MI 49509-0905
theisj@wyomingmi.gov
616-530-7260
5 Years
CCTV, CIPP, Spot Lining
$1,650,250.00

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TAB 5

VALUE ADD

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i. Provide any additional information related to products and services offeror proposes to enhance and add value to the contract:

We are offering to provide the following value adds:

1. Horizontal Directional Drilling (a trenchless technology)
2. Professional Services (project management, engineering, inspection, survey, design)

Value add pricing is affixed to the end of this document.

Additional information about horizontal directional drilling standards are affixed to the end of this document.

Designation: F1962 – 05

An American National Standard

Standard Guide for Use of Maxi-Horizontal Directional Drilling for Placement of Polyethylene Pipe or Conduit Under Obstacles, Including River Crossings[1]

This standard is issued under the fixed designation F1962; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide describes the design, selection considerations, and installation procedures for the placement of polyethylene pipe or conduit below ground using maxi-horizontal directional drilling equipment. The pipes or conduits may be used for various applications including telecommunications, electric power, natural gas, petroleum, water lines, sewer lines, or other fluid transport.

1.2 Horizontal directional drilling is a form of trenchless technology. The equipment and procedures are intended to minimize surface damage, restoration requirements, and disruption of vehicular or maritime traffic with little or no interruption of other existing lines or services. Mini-horizontal directional drilling (min-HDD) is typically used for the relatively shorter distances and smaller diameter pipes associated with local utility distribution lines. In comparison, maxi-horizontal directional drilling (maxi-HDD) is typically used for longer distances and larger diameter pipes common in major river crossings. Applications that are intermediate to the mini-HDD or maxi-HDD categories may utilize appropriate "medi" equipment of intermediate size and capabilities. In such cases, the design guidelines and installation practices would follow those described for the mini- or maxi-HDD categories, as judged to be most suitable for each situation.

1.3 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information purposes only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of the regulatory limitations prior to use.* Section 6 contains general safety information related to the use of maxi-horizontal directional drilling equipment.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

D420 Guide to Site Characterization for Engineering Design and Construction Purposes

D422 Test Method for Particle-Size Analysis of Soils

D1586 Test Method for Penetration Test (SPT) and Split-Barrel Sampling of Soils

D1587 Practice for Thin-Walled Tube Sampling of Soils for Geotechnical Purposes

D2113 Practice for Rock Core Drilling and Sampling of Rock for Site Investigation

D2166 Test Method for Unconfined Compressive Strength of Cohesive Soil

D2435 Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading

D2447 Specification for Polyethylene (PE) Plastic Pipe, Schedules 40 and 80, Based on Outside Diameter

D2513 Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings

D2657 Practice for Heat Fusion Joining of Polyolefin Pipe and Fittings

D2850 Test Method for Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils

D3035 Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter

D4186 Test Method for One-Dimensional Consolidation Properties of Saturated Cohesive Soils Using Controlled-Strain Loading

D4220 Practices for Preserving and Transporting Soil Samples

D4318 Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils

D4767 Test Method for Consolidated Undrained Triaxial Compression Test for Cohesive Soils

[1] This guide is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.67 on Trenchless Plastic Pipeline Technology.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

D5084 Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter

F714 Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter

F1804 Practice for Determining Allowable Tensile Load for Polyethylene (PE) Gas Pipe During Pull-In Installation

2.2 *Other Standards:*

ANSI Preferred Number Series 10

ANSI/EIA/TIA-590 Standard for Physical Location and Protection of Below-Ground Fiber Optic Cable Plant[3]

OSHA-3075 Controlling Electrical Hazards[4]

TR-NWT-000356 Generic Requirements for Optical Cable Innerduct[5]

3. Terminology

3.1 *Definitions:*

3.1.1 *horizontal directional drilling, HDD, n*—a technique for installing pipes or utility lines below ground using a surface-mounted drill rig that launches and places a drill string at a shallow angle to the surface and has tracking and steering capabilities.

3.1.1.1 *Discussion*—The drill string creates a pilot bore hole in an essentially horizontal path or shallow arc which may subsequently be enlarged to a larger diameter during a secondary operation which typically includes reaming and then pullback of the pipe or utility line. Tracking of the initial bore path is accomplished by a manually operated overhead receiver or a remote tracking system. Steering is achieved by controlling the orientation of the drill head which has a directional bias and pushing the drill string forward with the drill head oriented in the direction desired. Continuous rotation of the drill string allows the drill head to bore a straight path. The procedure uses fluid jet or mechanical cutting, or both, with a low, controlled volume of drilling fluid flow to minimize the creation of voids during the initial boring or backreaming operations. The drilling fluid helps stabilize the bore hole, remove cuttings, provide lubricant for the drill string and plastic pipe, and cool the drill head. The resultant slurry surrounds the pipe, typically filling the annulus between the pipe and the bored cavity.

3.1.2 *maxi-horizontal directional drilling, maxi-HDD, n*—a class of HDD, sometimes referred to as directional drilling, for boring holes of up to several thousand feet in length and placing pipes of up to 48 in. (1¼ m) diameter or greater at depths up to 200 ft (60 m).

3.1.2.1 *Discussion*—Maxi-HDD is appropriate for placing pipes under large rivers or other large obstacles (Fig. 1). Tracking information is provided remotely to the operator of the drill rig by sensors located towards the leading end of the drill string. Cutting of the pilot hole and expansion of the hole is typically accomplished with a bit or reamer attached to the drill pipe, which is rotated and pulled by the drilling rig.

3.1.3 *mini-horizontal directional drilling, mini-HDD, n*—a class of HDD, sometimes referred to as guided boring, for boring holes of up to several hundred feet in length and placing pipes of typically 12 in. (300 mm) or less nominal diameter at depths typically less than 25 ft (7 m).

3.1.3.1 *Discussion*—Mini-HDD is appropriate for placing local distribution lines (including service lines or laterals) beneath local streets, private property, and along right-of-ways. The creation of the pilot bore hole and the reaming operations are typically accomplished by fluid jet cutting or the cutting torque provided by rotating the drill string, although mud motors powered by the drilling fluid are sometimes used for hard or rocky soil conditions. The use of such mud motors would only be applicable for the larger mini-HDD machines. The locating and tracking systems typically require a manually operated overhead receiver to follow the progress of the initial pilot bore. The receiver is placed above the general vicinity of the drill head to allow a determination of its precise location and depth, indicate drill head orientation for determining steering information to be implemented from the drill rig.

3.1.4 *pipe dimension ratio, DR, n*—the average specified diameter of a pipe divided by the minimum specified wall thickness.

3.1.4.1 *Discussion*—For pipes manufactured to a controlled outside diameter (OD), the DR is the ratio of pipe outer diameter to minimum wall thickness. The standard dimension ratio (SDR) is a specific ratio of the outside diameter to the minimum wall thickness as specified by ANSI Preferred Number Series 10.

[3] Available from the Electronics Industries Association, 2001 Pennsylvania Ave., N.W., Washington, DC, 20006.

[4] Available from the Occupational Health and Safety Administration, 200 Constitution Ave. N.W. Washington, DC 20210.

[5] Available from Bellcore, 60 New England Ave., Room 1B252, Piscataway, NJ, 08854-4196.

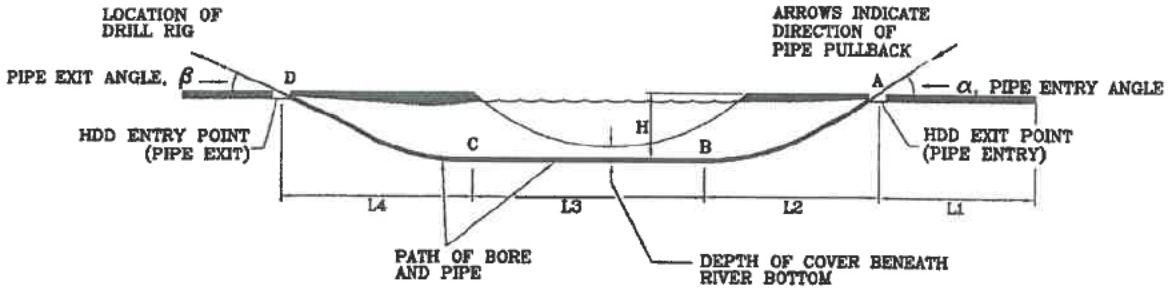

FIG. 1 Maxi-HDD for Obstacle (for example, River) Crossing

NOTE 1—Lower DR values correspond to thicker, stronger pipes.

4. Preliminary Site Investigation

4.1 *General Considerations*—A maxi-HDD project, such as that associated with a river crossing, is a major event that will require extensive and thorough surface and subsurface investigations. Qualified geotechnical engineers should perform the work for the owner in preparation for planning and designing of the bore route. The information should also be provided to the potential contractors to provide guidance for the bidding stage and subsequent installation. The contractor may perform additional investigations, as desired. Since typical maxi-HDD projects represent river crossings, the following procedures are described in terms of the specific investigations and issues arising in such cases. The general procedures, however, may be appropriately interpreted to also apply to non-river crossings, such as under land-based obstacles including highways, railways, etc.

4.2 *Surface Investigation* (1, 2)[6]

4.2.1 *Topographic Survey*—A survey should be conducted to accurately define the working areas described in 4.1 for the proposed crossing site. Horizontal and vertical references must be established for referencing hydrographic and geotechnical data. The survey should typically include overbank profiles on the anticipated path center-line, extending about 150 ft (75 m) landward of the bore entry point to the length of the (prefabricated) pull section landward of the bore exit point. The survey information should be related to topographical features in the vicinity of the proposed crossing. Existing topographical information may be available from the U.S. Geological Survey, or Federal, state, or county publications. Aerial photographs or ordnance surveys may be useful, especially for crossing land-based obstacles in urban areas, since these may indicate the presence of demolished buildings and the possibility of old foundations, as well any filled areas (3). It is also necessary to check available utility records to help identify the precise location of existing below-ground facilities in the vicinity, including electric power, natural gas, petroleum, water, sewer, or telecommunications lines. The presence of existing pipelines, support pilings, etc., containing significant steel mass should be noted since this may cause interference with magnetically sensitive equipment guidance or location instrumentation.

4.2.1.1 *Drill Rig (Bore Entry) Side*—The available area required on the side of the drill rig must be sufficient for the rig itself and its ancillary equipment. In general, the size of the required area on the rig side will depend upon the magnitude of the operation, including length of bore and diameter of pipe to be placed. Typically, a temporary workspace of approximately 150 ft (45 m) width by 250 ft (75 m) length will be sufficient. These dimensions may vary from 100 by 150 ft (30 by 45 m) for shorter crossings of 1000 ft (300 m) or less, to 200 by 300 ft (60 by 90 m) for medium or long crossings.

4.2.1.2 *Water Supply*—Water storage and facilities for mixing, storing, and pumping drilling fluid will require significant space. Although it is standard practice to draw fresh water found at the location for mixing the drilling fluid, alternate water supplies may be required to obtain proper drilling fluid characteristics. Hard or salty water is undesirable, although additives may be used to create the proper pH value. It may be necessary to provide access for trucks to transport water or to provide for the installation of a relatively long surface pipe or hose connecting a remote hydrant.

4.2.1.3 *Pipe (Bore Exit) Side*—Assuming the pipe to be placed is too large a diameter to be supplied on a reel (for example, larger than 6 in. (150 mm)), sufficient space is required at the side opposite that of the drill rig, where the bore will exit and the pipe be inserted, to accommodate a continuous straight length of pre-fabricated pipe. The space for the straight length will begin approximately 50 to 100 ft (15 to 30 m) from the anticipated bore exit and extend straight landward at a width of 35 to 50 ft (10 to 15 m), depending upon the pipe diameter. In the immediate vicinity of the bore exit (pipe entry), an area of typically 50 ft (15 m) width by 100 ft (30 m) length is required; for relatively large diameter pipes (larger than 24 in. (600 mm), or in cases of difficult soil conditions, an area of 100 ft (30 m) width by 150 ft (45 m) length should be provided.

4.2.2 *Hydrographic/Potamological Survey*—For crossing significant waterways, a survey should be conducted to accurately describe the bottom contours and river stability to establish suitability for the design life of the pipeline. Typically, depths should be established along the anticipated center-line, and approximately 200 ft (60 m) upstream and downstream; closer readings may be required if it is necessary to monitor future river activity. Consideration should be given to future changes in river bank terrain. Washouts, bank migrations, or scour can expose pipe.

4.2.3 *Drilling Fluid Disposal*—The means for disposal of the drilling fluid wastes must be considered. The volume of drilling fluid used will depend upon the soil characteristics but is typically on the order of 1 to 3 times the volume of removed soil. Most drilling fluids use bentonite or polymer additives which are not generally considered to be hazardous. However, local regulations should be followed regarding disposal.

4.2.3.1 *Drilling Fluid Recirculation*—Occasionally, drilling fluid recirculation is used to reduce overall material and disposal costs. If drilling fluid recirculation is contemplated, a means must be considered for transporting any fluid exhausted from the opposite (bore exit) side, during the pullback operation, to the rig side. This may be accomplished by truck, barge, or a temporary recirculation pipe line on the bottom of the waterway (for river-crossings). The recirculation line must be adequate to prevent accidental discharge into the waterway.

4.3 *Subsurface Investigation*—The overall technical and economic feasibility of the maxi-HDD process is highly dependent upon the properties of the soil formation through which the penetration will be accomplished. Thus, an accurate and thorough geotechnical investigation must be performed by a qualified engineer, including review of existing information and site specific studies for the proposed location. This information will be used to produce design drawings (including final bore route, pipe design, and bore design), construction

[6] The boldface numbers in parentheses refer to the list of references at the end of this standard.

specifications, and permit applications as well as to provide information for the contractors upon which to select appropriate tools and methods for the actual construction. While the guidelines given in the following sections point out general procedures or types of information, or both, which could be developed, unforeseeable site-specific variables make the thoroughness and accuracy of any site characterization study directly dependent on the skill, experience, and inquisitiveness of the investigating engineer. Therefore, the investigator should define the configuration, extent, and constituency of the investigation. Site characterization information must go beyond just defining soil conditions along the bore path to include a forecast of future conditions (that is, river meanders and scours) and to anticipate the affect of the maxi-HDD process on site conditions.

4.3.1 *Preliminary Study*—The subsurface investigation should begin with a review of existing data such as may be obtained from published soil reports (for example, Soil Conservation Service Report, U.S. Geological Survey, U.S. Army Corps of Engineers reports, etc.) or records from previous construction projects. In particular, data from nearby pipe or cable river-crossings, or bridge foundation construction should be examined. The results of this study will be used to define the initially recommended bore penetration profile path.

4.3.2 *Test Borings (1,2,4)*—Site-specific data must be obtained to fully characterize and verify the conditions through which the proposed bore path will be created. Refer to Guide D420, Test Method D1586, Test Method D1587, Test Method D2213 and Practice D4220. Data collection should be aimed at identifying earth materials at the site and at exploring subsurface stratification (including identification of the boundary between rock and other strata, presence of cobbles or boulders and other anomalies such as old tree stumps and fill debris). The location, depth, and number of borings should be determined by the engineer based on the preliminary study, anticipated future changes in site conditions (river meanders, scours, etc.), and modifications of soil conditions during construction. These borings should be located at a sufficient lateral distance (to either side) from the proposed bore path to avoid boring into the test hole, and the holes should be sealed with grouting to avoid potential leakage paths for drilling fluid during the actual installation. Following completion of the detailed route design (Section 7), additional test borings may be desirable at critical points such as bends.

NOTE 2—In environmentally sensitive areas, possible restrictions may exist on the location or number of test borings.

4.3.3 In addition to test borings, dynamic cone testing or developing non-intrusive techniques such as ground penetrating radar or sonar may be used to identify stratification and areas with anomalies. Such probing techniques may be applied in the proximity of known conditions determined by a boring to obtain proper calibration, and then extended towards untested areas at relatively close intervals to identify irregularities between borings. If needed, additional borings may then be made at intermediate points of interest **(3,4)**.

4.3.4 *Soil Analysis (2,5,6)*—The geotechnical study should evaluate several parameters, including soil classifications, (Refer to Test Methods D4318 and D4220.) strength and deformation properties, (Refer to Test Methods D1586, D2166, D2435, D2850, D4186, and D4767.) and groundwater table behavior. (Refer to Test Method D5084.) Although some field evaluation and in-situ testing should be included, the geotechnical investigation should emphasize laboratory testing in order to obtain more accurate and meaningful quantitative results. If rock is encountered, the borings should penetrate sufficiently to verify whether or not it is bedrock. The relevant soil testing methods listed in Section 2 should be followed. In general, the following specific data should be obtained from the borings:

4.3.4.1 Standard classification of soils, (Refer to Test Method D4318),

4.3.4.2 Gradation curves for granular soils, as described in Test Method D4220,

4.3.4.3 Standard penetration test values, as described in Test Method D1586,

4.3.4.4 Cored samples of rock with rock quality designation (RQD) and percent recovery,

4.3.4.5 Unconfined compressive strength, as described in Test Method D2166,

4.3.4.6 Moh's hardness for rock samples,

4.3.4.7 Possible contamination (hazardous waste),

4.3.4.8 Groundwater location, type, and behavior, and

4.3.4.9 Electrical resistivity or mineralogical constituents.

4.3.5 For river crossings, the results from the preliminary study and site specific tests should be combined in a comprehensive report describing the geotechnical subsurface conditions beneath the river bottom plus the stream's potential for meandering and scouring. The results must then be considered by the owner, the engineer, and potential contractors, with regard to compatibility with the state-of-the-art of directional drilling technology for cost-effectively completing the task. If necessary, the crossing location may be altered to a more favorable crossing site. In this case, many of the surface and subsurface investigations may have to be repeated for the new proposed crossing location and bore path.

4.3.6 *Feasibility*—Soil conditions are a major factor affecting the feasibility and cost of using maxi-HDD in a given geographic area. Table 1 indicates the suitability of horizontal directional drilling as a function of the general characteristics of the soil conditions in the area and depths of interest **(3,5)**. The "generally suitable" category presumes knowledgeable, experienced contractors or personnel using appropriate equipment. Such contractors are assumed to have a minimum of one year field experience and completed approximately 30 000 ft (10 km) of construction in related projects. The size and type machines considered appropriate for particular installations are a function of bore length, final hole diameter, and soil conditions. Various type drill heads, mud motors, reamers, and drilling fluid capabilities are available for various ground conditions. The conditions under which "difficulties may occur" may require modifications of routine procedures or equipment, such as the use of special purpose drill heads or optimized drilling fluids. Some cases will entail "substantial problems" and may not be economically feasible for directional drilling using present technology. The potential for problems to occur increases with the presence of gravels, boulders, or cobbles or with transitions from non-lithified

TABLE 1 Soil Conditions and Suitability of Horizontal Directional Drilling[A]

Soil Conditions	Generally Suitable	Difficulties May Occur	Substantial Problems
Soft to very soft clays, silts, and organic deposits		X	
Medium to very stiff clays and silts	X		
Hard clays and highly weathered shales	X		
Very loose to loose sands above and below the water table (not more than 30 % gravel by weight)		X	
Medium to dense sands above or below the water table (not more than 30 % gravel by weight)	X		
Very loose to dense gravelly sand, (30 % to 50 % gravel by weight)		X	
Very loose to dense gravelly sand (50 % to 85 % gravel by weight)			X
Very loose to very dense gravel			X
Soils with significant cobbles, boulders, and obstructions			X
Weathered rocks, marls, chalks, and firmly cemented soils	X		
Slightly weathered to unweathered rocks		X	

[A]For additional information, see Ref. (5).

material into solid rock. In such cases, other drilling locations or construction alternatives should be considered unless special circumstances dictate the need for directional drilling at the present location, even at high costs associated with special rock drilling techniques, etc.

5. Safety and Environmental Considerations

5.1 *General Considerations*—Injury to personnel may result from the mechanical and hydraulic machine operations directly related to the drilling operation or from striking of electric power lines or buried pipelines. In addition, the scale of maxi-HDD operations may involve additional equipment and accessories required for the lifting and handling of heavy drill rods, drill heads, reamers, etc., as well as the product pipe or conduit. Additional precautions relating to specific auxiliary equipment must be followed, but is beyond the scope of this standard. Non-essential personnel and bystanders should not be allowed in the immediate vicinity of the maxi-HDD equipment. Barriers and warnings should be placed a minimum of 30 ft (10 m) from the edge of the equipment or associated hardware. Safety precautions are to be followed by all personnel and at both ends of the bore path. Inadvertent contact with electric power, natural gas, or petroleum lines may result in hazards to personnel or contamination. If possible, any in-service pipeline in the proximity of the bore should be de-activated during the construction. In general, the possibility of injury or environmental impact caused by damage to working or powered subsurface facilities or pipelines during the initial boring or backreaming operations is reduced by appropriate adherence to regulations and damage prevention procedures, as outlined in Section 6.

5.2 *Work Clothing*—**Caution:** Loose clothing or jewelry should not be worn since they may snag on moving mechanical parts. Safety glasses or OSHA approved goggles, or both, and OSHA approved head gear should be worn at all times. Protective work shoes and gloves must be worn by all personnel.

5.3 *Machine Safety Practices*—Contractors must comply with all applicable OSHA, state, and local regulations, and accepted industry practices. All personnel in the vicinity of the drill rig or at the opposite end of the bore must be properly trained and educated regarding the potential hazards associated with the maxi-HDD equipment. For electrical hazards, see OSHA 3075. Personnel shall be knowledgeable of safe operating procedures, safety equipment, and proper precautions. Courses and seminars are available in the industry, including training provided by the equipment suppliers.

5.3.1 The operation of the drill rig requires rotation and advancement or retraction of the drill rods. Drill rig operation is typically accomplished using chain drives, gear systems, and vises which may potentially lead to personal injury due to the moving mechanical components. All safety shields or guards must be properly mounted. The equipment must be checked at the beginning of each work day to verify proper operation.

5.3.2 *Hydraulic Fluid*—The hydraulic oil lines powering the drill rig operate under pressures of several thousand psi (hundreds of bars). The hoses and connectors must be properly maintained to avoid leaks.

5.3.2.1 *Caution:* If a leak is suspected, it should be checked by using a piece of cardboard or other object, but not hands or any other part of the body. The high pressure hydraulic fluid can penetrate the skin, burn, or cause blood poisoning. Before disconnecting any hydraulic lines, the system pressure should be relieved.

5.3.3 *Drilling Fluid*—Drilling fluid pressures will vary depending upon the equipment design and operator preference; pressures of several thousand psi (hundreds of bars) are possible. The hoses and connections must be properly maintained to avoid leaks.

5.3.3.1 *Caution:* Suspected leaks should be checked by using a piece of cardboard or other object. Avoid the use of hands or any other part of the body to check for a leak. Before individual drill rods are inserted or removed from the drill string, it must be verified that the drilling fluid pressure has been shut off and allowed to decrease; otherwise, high pressure fluid will squirt from the joint and possibly cause injury to personnel. The drilling fluid pressure gage must be checked to verify the pressure has been relieved before disconnecting any rods.

NOTE 3—If the pressure does not decrease in a short interval following pressure shut off, the fluid jet openings at the drill head may be clogged. Special care must then be made when disconnecting the rod. It may be necessary to retract the drill string or expose the drill head to clear the jets before continuing the operation. To avoid injury from the drill head and drilling fluid, all personnel should maintain a safe distance from the exit point of the bore as the drill head surfaces. The pressure should be shut off as soon as the drill head exits.

5.4 *Construction Effects on Site*—It is assumed that the preliminary site investigations included analyses to verify the stability of embankments, roads, or other major features to be traversed. It is necessary to ensure that the maxi-HDD operation will not negatively impact the site upon completion. In many cases, it will be appropriate to use grouting to seal the final bore path hole or the end portions of the hole following the installation of the pipe to prevent future flow or environmental contamination. Particularly sensitive areas include statutorily designated areas, such as wetlands, natural and scenic waterways, or contaminated or waste disposal sites. If the bore will pass through, or in close proximity to, a contaminated area, special spoils monitoring and disposal procedures must be followed, consistent with applicable Federal, state, or local regulations.

5.4.1 *Drilling Fluid*—The most common drilling fluid additive is bentonite, a naturally occurring clay. When added to water, the resulting fluid provides desired properties including viscosity, low density, and lubricity. The bentonite material used should be National Sanitation Foundation (NSF) certified. Disposal should be in accordance with local laws and regulations. The bentonite-water slurry is not a hazardous material unless it becomes mixed with toxic pollutants. The waste material is usually considered as typical excavation spoils and can be disposed or by means similar to other spoils. If other additives are of concern or hazardous material disposal is required, it may be necessary to de-water the spoils, transport the solids to an appropriate disposal site, and treat the water to meet disposal requirements.

5.4.2 The utility access pits which may be present at both ends of the bore are convenient receptacles for collecting used drilling fluid. If not present for utility access, small pits should be provided at both ends to serve as such receptacles. Depending upon soil permeability, the pits may be lined with an appropriate material or membrane. The pits should be emptied as necessary. Some maxi-HDD systems use drilling fluid recirculating systems to reduce the volume of spoils. If the geotechnical investigation revealed the existence of soil conditions conductive to fluid migration, such as through prefractures in surrounding clay or soil mass permeability, this condition must be anticipated and accounted for in the drilling operation.

6. Regulations and Damage Prevention

6.1 *General Considerations*—The owner of the proposed pipeline should obtain any required drilling permits and is responsible for obtaining approvals from the Federal, state, or local jurisdictions or other agencies that may be affected by the work. The preliminary investigations (Section 4) should identify appropriate site locations and paths, including safe separations from other facilities such as electric power, natural gas, or petroleum lines. If the constraints for a particular maxi-HDD bore are such as to be in the vicinity of known facilities, the affected owners must be contacted and strict procedures for location and marking followed. If a maxi-HDD bore interconnects points under the jurisdiction of several states or governing bodies, then the regulations of all parties must be considered, including relevant permits. Special restrictions may exist, including restoration regulations, in environmentally sensitive habitat areas.

6.2 *Environmental, Health, and Safety Plan*—When required, each contractor that will work on the project must submit an environmental, health, and safety plan. Items to consider are the responsibilities of the plan, reporting, employee training, MSDS sheets for materials being used, emergency telephone numbers for police, fire department, and medical assistance, fire prevention, sanitation, and industrial hygiene.

6.3 *Environmental and Archaeological Impact Study*—Most projects using maxi-HDD will require procurement of various environmental permits. When an environmental permitting plan must be prepared, it should include a list of required permits (for example, USAE, USEPA), the time needed to prepare permits, and an estimated date of issuance. Items to consider are solid and hazardous materials and waste management, wetlands, burial grounds, land use, air pollution, noise, water supply and discharge, traffic control and river and railroad transportation.

6.4 *Waterways (see ANSI/EIA/TIA-590)*—The U.S. Army Corps of Engineers (USAE) regulates activities involving interstate bodies of water, including marshes and tributaries, as well as intrastate waters which could affect interstate or foreign commerce. The organization is responsible for work affecting such waterways, including to the headwaters of freshwater streams, wetlands, swamps and lakes. The Regional District Engineer of the USAE will advise applicants of the types of permits required for such proposed projects. In addition, a state or local, or both, agency environmental review and permit may be required.

6.5 *Railroad Crossings (see ANSI/EIA/TIA-590)*—The chief engineer of the railroad should be consulted for the approved methods of crossing the railroad line. For spur tracks or sidings, the tract owner should be consulted. Railroads normally require cased pipes at crossings to prevent track washouts or damage in the event of pipeline rupture. (At the time of writing of this standard, an American Railway Engineering Association (AREA) committee is studying the use of HDD for uncased and cased crossing of railroads for both plastic and steel gas pipelines.)

7. Bore Path Layout and Design

7.1 *General Considerations*—For maxi-HDD projects, such as river crossings, the bore path should be designed and specified by the engineer representing the owner prior to the contractor bidding process. Based upon the preliminary surface and subsurface investigations, the path will be selected to place the pipe within stable ground and isolated from river activities for the design life of the utility line. The ground through which the path will traverse must be compatible with maxi-HDD technology. In general, for maxi-HDD projects, the design path will lie within a vertical plane. If necessary, lateral curvature is possible, consistent with the capabilities of the equipment and the product pipe. The path should be clearly designated in an integrated report summarizing the results of the surface and subsurface investigations, and should be used for pricing, planning, and executing the operation.

7.2 *Steering and Drill Rod Constraints*—The planned path must be consistent with the steering capability of the drill string and the allowable radius of curvature of the steel drill rods based upon the corresponding bending stresses in the steel rods and joints. Although some soil conditions will inhibit sharp steering maneuvers, path limitations will often be based upon fatigue strength considerations of the rods. A given rod may be able to withstand a single bend cycle corresponding to a relatively sharp radius of curvature, but the rotation of the rod during the boring operation results in flexural cycles which may eventually cause cumulative fatigue failure. The diameter of the drill rod is an important parameter affecting its stiffness, steering capability, and the allowable bend radii. A conservative industry guideline indicates the minimum bend radius should be approximately:

$$(R_{rod})_{min} = 1200\, D_{rod} \quad (1)$$

where:

$(R_{rod})_{min}$ = medium recommended bend radius of drill rod, in. (mm), and

D_{rod} = nominal diameter of drill rod, in. (mm).

This applies to bends in horizontal (plan) or vertical (profile) planes.

7.3 The proposed path should avoid unnecessary bends. Such trajectories may be difficult to follow and may lead to oversteering and excessive bends, resulting in increased stresses in the drill rods and greater required pulling forces during the installation of the pipe. The local radius of curvature of the path at any point may be estimated by:

$$R = \frac{\Delta S}{\Delta \phi} \quad (2)$$

where:

R = local radius of curvature along path segment, ft (m),

ΔS = distance along path, ft (m), and

$\Delta \phi$ = angular change in direction, rad.

NOTE 4—The angle in radians is equal to the angle in degrees × 0.0175. (One radian equals 57.3°.)

Thus, if ΔS is selected to be equal to 30 ft (10 m) (for example, one rod length for some maxi-HDD machines) a change of 0.1 rad (6°) corresponds to a radius of curvature of 300 ft (100 m).

7.4 *Bore Paths Profile (Vertical Plane) Trajectory* (1,2)—A typical obstacle crossing, such as that represented by a river is illustrated in Fig. 1.

7.4.1 The following parameters must be specified in defining the bore path:

7.4.1.1 Bore entry (pipe exit) point,

7.4.1.2 Bore exit (pipe entry) point,

7.4.1.3 Bore entry (pipe exit) angle,

7.4.1.4 Bore exit (pipe entry) angle,

7.4.1.5 Depth of path, (for example, depth of cover of pipe beneath river bottom), and

7.4.1.6 Path curvatures.

7.4.2 *Bore Entry (Pipe Exit)*—The bore entry point must be accurately specified consistent with the pipe route, equipment requirements, and preliminary topographical investigations. Bore entry angles should be in the range of 8 to 20° (0.15 to 0.35 rad) from the ground surface, preferably 12 to 15° (0.20 to 0.25 rad) from the ground surface. These angles are compatible with typical equipment capabilities.

7.4.3 *Bore Exit (Pipe Entry)*—The bore exit point must also be accurately specified consistent with the pipe length and topographical investigations. Bore exit angles should be relatively shallow, preferably less than 10° (0.15 rad). A shallow angle will facilitate the insertion of the pipe into the bore hole while maintaining the minimum radius of curvature requirements. Relatively steep angles will require greater elevation of the pipe to maintain the required bend radii.

7.4.4 *Path Profile*—The proposed path should optimally lay within a vertical plane including the bore entry and exit points. The arcs of the bore path and straight sections (that is, after achieving desired depth) must be defined, including the radii of curvature and approximate points of tangency of curved and straight segments. The curvatures must be compatible with both the steel drill rods (Eq 1) and the PE pipe or conduit (Section 8). It should be noted that even larger bend radii (lower curvatures) will further reduce lateral flexural bending loads on the pipe and drill rods as they traverse the route, thereby helping avoid additional increases in tensile loads associated with their stiffness effects. Typically, the path should ensure a minimum depth of cover of 15 ft (5 m) beneath the river bottom as projected over the design life of the pipe line, including allowance for scouring (**2,4**). This will overcome buoyancy effects and help overcome the tendency for the drill head to rise towards the free surface, thereby complicating the steering operation.

NOTE 5—The Directional Crossing Contractors Associations (DCCA) (**7**) recommends a minimum depth of 20 ft beneath the river bottom.

7.4.4.1 *Average Radius of Curvature*—The average radius of curvature for a path segment (that is, A-B or C-D in Fig. 1) reaching to or from a depth required to pass beneath an obstacle, may be estimated from the bore exit or entry angle, respectively, and the depth of the bore:

$$R_{avg} = \frac{2H}{\theta^2} \quad (3)$$

where:

R_{avg} = average radius of curvature along path segment, ft (m),

θ = bore exit or entry angle to surface, rad, and

H = depth of bore beneath surface, ft (m).

The corresponding horizontal distance required to achieve the depth or rise to the surface may be estimated by:

$$L = \frac{2H}{\theta} \quad (4)$$

where:

L = horizontal transition distance, ft (m).

It must be noted that departures from a uniform radius will result in locally smaller radii.

7.4.4.2 The resultant path will determine the stresses to be exerted upon the pipe during the installation and service life. The product pipe design must therefore be analyzed based upon the final selected path, following the pipe design and selection procedures given in Section 8.

8. Pipe Design and Selection Considerations

8.1 *General Guidelines*:

8.1.1 Maxi-HDD applications typically require detailed analysis of the pipe or conduit in relation to its intended application. Due to the large anticipated pulling loads and potentially high external pressure, a careful analysis of the PE pipe must be performed, subject to the route geometry, to verify or determine an appropriate DR (or pipe wall thickness). The analysis should consider both the installation forces occurring during pull-back and the long-term operational loads.

8.1.2 *PE Pipe*—Pipes made from either high density polyethylene (HDPE) or medium density polyethylene (MDPE) are suited for directional drilling. PE pipe specifications include Specifications D2447, D2513, D3035, and F714. If such pipe is provided in short segments, the individual units should be joined using a butt-fusion technique in accordance with Practice D2657. This will allow the inherent strength of the PE pipe to be maintained during the placement process and when subjected to other operational stresses. Small diameter pipe of continuous length may be provided on reels. Table X1.1 gives modulus and strength values for typical pressure-rated HDPE and MDPE resins.

8.1.3 *Cable Conduit Applications*—For cable conduit applications, including electric power and telecommunications, small diameter pipe may be supplied on a continuous reel including internal pull line or the cable itself, as pre-installed by the manufacturer. In addition, the pipe may be provided with the interior surface pre-lubricated. Such features will be in accordance with that specified by the owner or engineer. Requirements for telecommunications applications, including HDPE pipe with various internal surface profiles, including smoothwall or ribbed are specified in TR-NWT-000356.

8.2 *Pipe Loading*:

8.2.1 *Operational and Installation Loads*—The pipe will be subject to loads during its long-term operation and during the installation process. It is the responsibility of the owner (or the owner's contractor or engineer) to determine the design and selection of the pipe to serve the function intended and withstand the operational stresses at the directionally drilled section as well as at other sections along the pipe line. This practice deals primarily with the loads imposed during the directional drilling process and earth and groundwater loads during operation (post-installation).

8.2.2 *Internal (Operational) Pressure Loads*—It is the responsibility of the owner (or owner's contractor or engineer) to determine the nominal diameter and wall thickness appropriate for the intended application. For example, if the pipe will be used for the pressurized flow of liquids or gases, it is necessary to determine the nominal diameter based on flow capacity requirements and the minimum wall thickness (or DR) to withstand the corresponding circumferential stresses on a long term basis. Specification D2513, D3035, or F714 may be used to determine an initial estimate of the corresponding maximum dimension ratio (DR) for PE pipe.

8.2.3 *External (Operational) Hydraulic and Earth Loads*—The pipe will be subjected to hydrostatic external pressure due to the height of water or drilling fluid (or slurry) above the maximum depth of placement relative to the entry or exit point, and earth loads and liveloads due to load transfer through the deformation of the soil around the borehole (8). If borehole deformation is minimal (such as in rock) or does not deform the pipe, the only loading applied to the pipe is the hydrostatic external pressure. When earth load does reach the pipe, load reductions from the geostatic stress (arching) may be anticipated. The reductions may be significant when the in situ soil is normally- or over-consolidated. On the other hand, in under-consolidated soils such as river deposits, the earth load on the pipe may equal the prism load (adjusted for buoyancy in the case of a river crossing). The external pressure applied to the pipe equals the total stress, that is, it is the sum of the effective earth pressure, reduced for arching, and the hydrostatic pressure. In some cases, the mud-slurry pressure will offset the earth pressure. As the earth load applied to directional drilled pipe is dependent on the depth of cover, borehole diameter, mud-slurry properties, drilling and back-reaming techniques, and the in situ soil properties, among other things, a geotechnical engineer should be consulted. See X2.2 for a discussion earth load calculations. Liveload pressure can be transmitted to shallow directional drilled pipe. For shallow applications, it is likely that the pipe is subjected to the same liveload and earth pressures as an entrenched pipe.

8.2.3.1 *Net External Pressure*—The net external pressure, P_{net} is the differential pressure between the inside and outside of the pipe. The external operational load applied to the pipe may be decreased or totally off-set by internal pressure occurring within the pipe. Likewise, the external load may increase with the occurrence of negative pressure (vacuum) inside the pipe. The net external pressure may vary at different times in the life of the pipeline. For instance, during pressurized flow, the net external pressure may be zero but during a shut-down or prior to service, considerable external pressure may be applied. An analysis should be made of all potential external loadings, internal pressurization or vacuum events, and of their duration of occurrence, so that the net external pressure and its duration is determined for each cycle of the pipeline's service life.

8.2.4 *Pipe Resistance to External Loads*—The pipe must be of sufficient thickness (or DR ratio) to withstand the net external pressure without collapsing or deflecting unduly during each cycle of the operational life of the pipeline. (The effects of external hydrosatic loads applied during the installation phase are discussed in 8.2.8.2.)

NOTE 6—Spangler's Iowa Formula is typically not applicable to directional drilled pipes as the mud-slurry (unless cemented) on setting develops only the consistency of a soft clay which will not provide significant side-support for the pipe.

8.2.4.1 *Pipe Deflection (Ovality)*—Deflection reduces the pipe's resistance to external collapse pressure. Earth loads, longitudinal bending (bore path curvature), and buoyancy forces during installation will produce ring deflection in the pipe. Formulas for calculating earth load deflection, buoyancy deflection, and curvature-induced deflection along with permissible deflection limits are given in Appendix X2. When bore path curvature is limited to the guidelines given in Note 7 and the DR is 21 or less, ovality due to longitudinal bending

can generally be ignored. Filling the pipe with water during the placement operation will reduce the buoyancy force (see 8.2.6) and greatly eliminate the possible short-term collapse. The effective external pressure would then be equal to that corresponding to the actual external differential pressure due to the head of drilling slurry minus the internal pressure due to that of the water inside the pipe.

8.2.4.2 *Unconstrained Collapse*—The following version of Levy's equation may be used to determine the allowable external pressure for directional drilled pipe:

$$P_{ua} = \frac{2E}{(1-\mu^2)}\left(\frac{1}{DR-1}\right)^3 \frac{f_o}{N} \quad (5)$$

where:

P_{ua} = allowable external collapse pressure, psi (kPa),
E = apparent (time-corrected) modulus, psi (kPa), for the grade of material used to manufacture the pipe, and time and temperature of interest,
μ = Poisson's Ratio (long term loading = 0.45, short term loading = 0.35),
DR = dimension ratio (OD/t),
f_o = ovality compensation factor (see Fig. 2), and
N = safety factor, generally 2.0 or higher.

For design, the allowable collapse pressure, P_{ua}, *must equal or exceed the net effective pressure,* P_{net}. *The modulus of elasticity and Poisson's ratio are a function of the duration of the anticipated load. Modulus values are given in Table X1.1. If the safety factor in Levy's equation is set equal to one, the equation gives the critical collapse (buckling) pressure. Table X1.3 gives the critical collapse pressure for different DR's of HDPE pipe. For design purposes, the critical collapse pressure must be reduced by a safety factor and by ovality compensation to obtain an allowable stress,* P_{ua}. *When using Table X1.3 for determining pipe's resistance to buckling during pull-back, an additional reduction for tensile stresses is required. In general, if the resulting DR value is lower than that determined by the initial selection criteria based upon internal pressure considerations, the lower value must be used as corresponding to a required thicker, stronger pipe.*

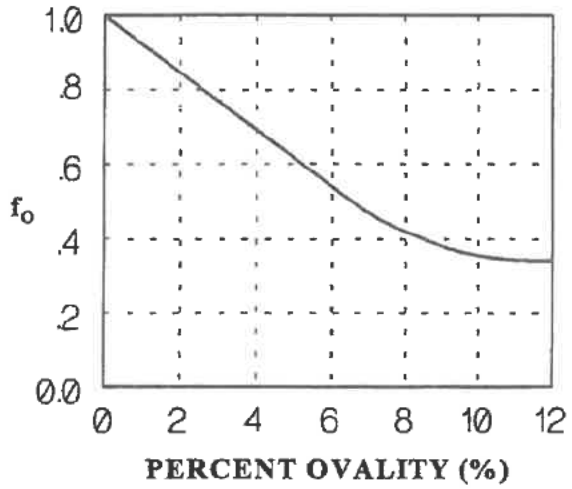

FIG. 2 Ovality Compensation Factor

8.2.4.3 For a pipe that will be supported by grouting, the allowable external collapse pressure increases (is enhanced) by a factor of approximately 4 (1). Accordingly, the allowable pressure obtained from Levy's Equation, Eq 5, can be increased by a factor of 4. However, the enhancement will not apply to unsupported pipe until the grouting is fully effective. A period of 1 week may be conservatively assumed.

8.2.5 *Axial Bending Stress*—The radii of curvature for segments of the bored path, as indicated in Fig. 1, must be sufficiently large to ensure minimal bending strains and stresses within the pipe or conduit. The recommended minimum bend radius may be provided by the manufacturer, and corresponds to the following peak axial strain level:

$$\varepsilon_a = \frac{D}{2R} \quad (6)$$

where:

ε_a = peak axial strain, in./in. (mm/mm),
D = outer diameter of pipe, in. (mm), and
R = local radius of curvature, in. (mm).

The corresponding axial bending stresses may be calculated by:

$$\sigma_a = E_a \varepsilon_a \quad (7)$$

where:

σ_a = peak axial stress, psi (kPa),
E_a = apparent modulus of elasticity, psi (kPa) (see Table X1.1).

NOTE 7—Some PE pipe manufacturers recommend an allowable bending radius to diameter ratio of approximately 40 or 50 to 1 during pull-back to minimize the effect of ovaling due to tensile loads.

See X2.5 for calculating ovality induced by bending curvature.

8.2.5.1 *PE Pipe*—In general, the relatively stiff drill rods will require considerably larger bending radii than the flexible PE pipe. The resulting path radii for passing beneath a major obstacle, such as a river, are typically at least an order of magnitude greater than the minimum recommended for the plastic pipe. The corresponding bending strains and stresses are therefore usually not of major significance. However, the curvature required for the pipe to enter or exit the bore hole may be more severe and must be externally controlled to avoid excessive strains or stresses in these areas.

8.2.6 *Pulling Force*—The pipe pullback operation is illustrated in Fig. 1, which shows the geometry of the path including the depth, entry and exit curves, and the possibly straight interim segment beneath the river or obstacle to be crossed. The required tensile force at the leading end of the product pipe will vary during the operation and is, in general, less than that experienced at the drill rig due to the additional load on the balance of the drill string still within the bore hole and that due to any simultaneous reaming operation. The tensile forces on the pipe result from the fractional drag forces acting on the sides of the pipe due to the weight or buoyancy forces as it is pulled into and along the hole, force amplifications due to pulling the pipe around the curves, and resistance due to the pipe stiffness. The resultant forces will depend upon whether the pipe is empty or deliberately weighted (for

example, filled with ballast) to reduce the buoyancy. For the purposes of estimating the peak force on the product pipe, the load is calculated at the 4 transition points, A, B, C, D shown in Fig. 1 (1). The greatest load on the pipe would typically be at point D. The corresponding loads may be estimated by the following equations:

$$T_A = \exp(\nu_a\alpha)\,(\nu_a w_a (L_1 + L_2 + L_3 + L_4)) \quad (8)$$

$$T_B = \exp(\nu_b\alpha)\,(T_A + \nu_b|w_b|L_2 + w_b H - \nu_a w_a L_2 \exp(\nu_a\alpha)) \quad (9)$$

$$T_C = T_B + \nu_b|w_b|L_3 - \exp(\nu_b\alpha)(\nu_a w_a L_3 \exp(\nu_a\alpha)) \quad (10)$$

$$T_D = \exp(\nu_b\beta)\,(T_C + \nu_b|w_b|L_4 - w_b H - \exp(\nu_a\alpha)(\nu_a w_a L_4 \exp(\nu_a\alpha))) \quad (11)$$

where:

- T_A = pull force on pipe at point A, lbf (N),
- T_B = pull force on pipe at point B, lbf (N),
- T_C = pull force on pipe at point C, lbf (N),
- T_D = pull force on pipe at point D, lbf (N),
- L_1 = additional length of pipe required for handling and thermal contraction, ft (m),
- L_2 = horizontal distance to achieve desired depth, ft (m),
- L_3 = additional distance traversed at desired depth, ft (m),
- L_4 = horizontal distance to rise to surface, ft (m),
- H = depth of bore hole from ground surface, ft (m),
- $\exp(X)$ = e^X, where e = natural logarithm base (e = 2.71828),
- ν_a = coefficient of friction applicable at the surface before the pipe enters bore hole,
- ν_b = coefficient of friction applicable within the lubricated bore hole or after the (wet) pipe exits,
- w_a = weight of empty pipe, lbf/ft (N/m),
- w_b = net upward buoyant force on pipe in bore hole, lbf/ft (N/m),
- α = bore hole angle at pipe entry (or HDD exit, at side opposite drill rig), rad, and
- β = bore hole angle at pipe exit (or HDD entry, at same side as drill rig), rad.

The exponential factors correspond to the capstan effect, reflecting increased bearing pressure caused by the pipe pulled against the inside surface of the bend.

NOTE 8—Although the actual value of L_1 may be considered to be approximately 100 ft (30 m) to allow for handling at both ends of the bore, including possible thermal contraction, it is recommended that a larger value of L_1(for example, 200 to 250 ft (60 to 75 m)) be used in Eq 8 to account for the actual path length along the arc. In some cases, L_3 may be equal to zero.

NOTE 9— Eq 8-11 are based on the assumption that the borehole is open with no collapses, curvature is gradual (for example, no dog-legs from steering corrections), cuttings removal is mostly complete, a low-viscosity slurry is present, and fluid circulation is maintained throughout the bore. The calculated pullback force, TD, will typically be less than the actual pullback force experienced during installation. The closer the bore matches the above conditions the closer the calculated value should be to the actual pullback force (14, 15). Engineering judgment should be applied when bore conditions deviate from conditions described above.

8.2.6.1 If additional pipe length (to accommodate subsequent elastic, viscoelastic, or thermal contractions) is pulled through the bore hole by using a pulling force applied in a horizontal direction at the drill rig side, resulting in an additional bend of angle β at the surface, there may be a further increase in the pull force T_D. The total force would correspond to that of multiplying the value of T_D, as calculated by Eq 11, by the additional factor $\exp(\nu_b\beta)$. Furthermore, depending upon the total force magnitude and the local bend radius at this point, the corresponding sidewall bearing pressure at the inside of the bend may cause collapse of the pipe or conduit. This procedure should therefore be avoided in preference to pulling additional pipe length in a direction along the pipe exit (bore entry) angle.

8.2.6.2 *Pipe Stiffness*—The equations in 8.2.6 do not explicitly account for the resistance due to the pipe stiffness at curves along the bore path. This effect will be reduced for sufficiently large radii and greater clearance within the bore hole, but may still represent a significant contribution. Thus, Eq 8-11 and associated calculations should be considered primarily as estimates for the purposes of investigating the overall feasibility of the installation and providing an understanding of the effect of the other parameters. The operational procedures (Section 9) include methods for limiting the actual pulling force applied to the pipe to provide confidence in the integrity of the installed pipeline.

8.2.6.3 *Coefficient of Friction*—The coefficient of friction depends on the characteristics of the surfaces bearing against each other, the presence of any lubrication, and whether there is relative motion between the surfaces. The degree of friction immediately prior to slippage is generally greater than the level during subsequent sliding. Although brief interruptions in the placement process are necessary during the removal of the drill rods during the pullback operation, it is important to attempt to complete the operation without extensive interruptions, which may allow the bore hole to collapse or the pipe to become embedded in the surrounding soil. The value for ν_b represents the lubricated value for the pipe in the bore hole as surrounded by drilling fluid and mud slurry assuming minimal interruptions. It is recommended that the pipe external to the bore hole be supported such as to provide as low a coefficient of friction ν_a as possible.

NOTE 10—Suggested design values for the frictional coefficients ν_a and ν_b are 0.5 and 0.3, respectively (1). Where pipe is placed on rollers, ν_a is typically considered equal to 0.1.

8.2.6.4 *Multiple Pipes*—If more than one pipe (that is, a bundle of small diameter pipes) is simultaneously pulled into the hole, higher overall loads will result due to the greater weight or buoyancy of the combination as well as an effectively amplified coefficient of friction ν_b within the hole. The degree of amplification will depend upon the relative pipe and hole diameters and will be minimized for greater clearance within the borehole.

8.2.6.5 *Effective Weight and Buoyancy Forces*—The weight of the vacant pipe or conduit may be obtained from the manufacturer, or may be calculated by the following formula:

$$w_a = \pi D^2 \frac{(DR-1)}{DR^2} \rho_w \gamma_a \quad (12)$$

where:
w_a = weight of empty pipe, lbf/in. (N/mm),
γ_a = specific gravity of pipe material (for example, 0.955 for PE),
ρ_w = weight density of water times length unit conversion factor, lbf/in.^{3}(N/mm^3), and
D = outside diameter of pipe, in. (mm).

NOTE 11—The density of water is 3.61×10^{-2} lbf/in.^{3}(9.80×10^{-6} N/mm^3).

The net (upward) buoyant force on the vacant pipe surrounded by a drilling fluid or mud slurry may be calculated by:

$$w_b = \frac{\pi D^2}{4}\rho_w\gamma_b - w_a \tag{13}$$

$$w_b = \frac{D^2}{\pi\frac{4}{4}}\rho_w\left(\gamma_b - \frac{4\gamma_a(DR-1)}{DR^2}\right) \tag{14}$$

where γ_b equals specific gravity of mud slurry.

NOTE 12—The specific gravity of the mud slurry may be conservatively assumed to be 1.5 (see 8.2.3).

If the pipe is filled with water or fluid to serve as ballast, the buoyant force is reduced and is given by either:

$$w_b = \frac{D^2}{\pi\frac{4}{4}}\rho_w\left(\gamma_b - \gamma_c\left(1 - \frac{2}{DR}\right)^2\right) - w_a \tag{15}$$

$$w_b = \frac{D^2}{\pi\frac{4}{4}}\rho_w\left(\gamma_b - \gamma_c\left(1 - \frac{2}{DR}\right)^2 - \frac{4\gamma_a(DR-1)}{DR^2}\right) \tag{16}$$

where γ_c equals specific gravity of ballast fluid.

If the pipe is filled with water, then $\gamma_c = 1$; if the pipe is filled with mud slurry (that is, if an open-ended pulling grip is used that allows the drilling fluid or slurry to enter the pipe), then $\gamma_c = \gamma_b$, and the above formula becomes:

$$w_b = \pi D^2\rho_w(\gamma_b - \gamma_a)\frac{(DR-1)}{DR^2} \tag{17}$$

For PE pipe, these procedures will typically result in a lower required pull force as calculated by Eq 8-11.

8.2.6.6 *Hydrokinetic Pressure*—A pressure gradient exists during the pipe pullback operation corresponding to that required to exhaust the drilling fluid out of the hole, towards the pipe entry area. Additional pressure surges are possible due to nonuniform pulling rates (**1,2**). The flow of the drilling fluid along the length of the pipe results in a drag force which may be estimated by considering a balance of the forces acting on the fluid annulus in the bore hole due to the hydrokinetic pressure and the lateral shear forces acting on the pipe and walls of the bore hole:

$$\Delta T = \Delta P\frac{\pi}{8}(D_{hole}^2 - D^2) \tag{18}$$

where:
ΔT = pulling force increment, lbf (N),
ΔP = hydrokinetic pressure, psi (kPa $\times 10^{-3}$), and
D_{hole} = backreamed hole diameter, in. (mm).

NOTE 13—ΔP is estimated to be 10 psi (70 kPa) (**1,6**).

The term ΔT may be added to the pulling forces calculated by Eq 8-11 to obtain the total pull force at each corresponding point of the installation. This is shown explicitly in Eq 19.

NOTE 14—For a bundle of pipes, the term D^2 in Eq 18 is replaced by an equivalent sum of the corresponding quantities (diameters squared) for the individual pipes.

8.2.7 *Axial Tensile Stress*—The average axial stress acting on the pipe cross-section at point A, B, C, or D, including the increment for hydrokinetic pressure, is given by:

$$\sigma_i = (T_i + \Delta T)\frac{1}{\pi D^2}\left(\frac{DR^2}{DR-1}\right) \tag{19}$$

where:
T_i = T_A, T_B, T_C, or T_D, lbf (N), and
σ_i = corresponding stress, psi (kPa $\times 10^{-3}$).

The highest average axial stress will occur at the pulling head. However, depending on the curvature of the borepath, the peak tensile stress may not occur at the pulling head, but in a curve. In the curve, the maximum tensile stress due to bending occurs in the outer fibers of the pipe. For each curve, the maximum tensile stress equals the sum of the bending stress, as in Eq 7, due the curvature and the average axial stress at that point due to pulling. The maximum tensile stress for each curve should be determined and compared with the average axial stress at the pulling head to determine the peak tensile stress, σ_p, occurring in the pipe:

$$\sigma_{pi} = \sigma_i + \sigma_{ai} \tag{20}$$

where:
σ_{pi} = peak tensile stress at i-th point (where i = A, B, C, or D), psi (kPa),
σ_i = average axial tensile pull stress i-th point (where i = A, B, C, or D), psi (kPa), and
σ_{ai} = outerfiber tensile stress (Eq 7) at i-th point (where i = A, B, C, or D), psi (kPa).

8.2.7.1 *Allowable Tensile Stress*—The peak tensile stress, σ_p, should be compared to the allowable stress at the anticipated installation temperature. Thus, it is required that:

$$\sigma p \le SPS \tag{21}$$

where *SPS* equals safe pull tensile stress, psi (kPa $\times 10^{-3}$) at the anticipated installation temperature. Under continuous load, polyethylene undergoes creep deformation. Therefore, the safe pull stress values are time and temperature dependent. See Table X1.1 for typical SPS values. The time interval for the installation depends upon the length and rate of pullback of the pipe. Pullback rates are on the order of several feet per minute, depending upon the soil conditions. If it is anticipated that the back-reaming process will be slow and difficult (see Section 9), it is recommended that a separate pre-reaming operation be used to allow a subsequent faster pipe pullback and shorter time interval for installation pull forces to be applied.

8.2.7.2 If necessary, the stress on the PE pipe or conduit may be reduced by increasing the pipe wall thickness (that is, lower SDR value) or, possibly, reducing the net buoyant force by filling the pipe with fluid ballast (as described in 8.2.7.1).

8.2.8 *Torsional Stress*—Torsional stresses are eliminated or minimized by the use of a swivel at the leading end of the pipe. Section 9 provides information for the selection of an appropriate swivel.

8.2.9 *Combined Loads During Installation*—The calculations allow a preliminary selection of the pipe DR consistent with the anticipated application, installation, and path characteristics. It is necessary, however, to finally consider the overall installation stresses due to the combination of loads which many be present simultaneously. If the combined stresses are not within the desired overall design margin, it may be necessary to select a thicker wall pipe or modify the installation parameters to relieve the resultant stresses.

8.2.9.1 *Reduced PE Collapse Strength*—For PE pipe, the presence of an axial tensile load will have a tendency to reduce the pipe's short-term resistance to collapse under external pressure, as otherwise estimated from Eq 5 (**1**). In addition, the hydrokinetic pressure increment at the leading end of the pipe also increases the external hydrostatic pressure during this period. The modified equation to account for these effects is:

$$P_{pba} = \frac{2E}{(1-\mu^2)}\left(\frac{1}{DR-1}\right)^3 \frac{f_O f_R}{N} \tag{22}$$

where f_R, the tensile pull reduction factor, is given by:

$$f_R = \sqrt{5.57 - (r+1.09)^2} - 1.09 \tag{23}$$

and

$$r = \frac{\sigma_i}{2(SPS)} \tag{24}$$

σ_i = maximum average axial tensile pull stress from Eq 19, psi (kPa), and
SPS = safe pull tensile stress, psi (kPa).

The allowable collapse pressure, P_{pba}, should equal or exceed the sum of the net effective pressure during pull-back and the hydrokinetic pressure:

$$P_{pba} \geq P_{eff} + \Delta P \tag{25}$$

where:

P_{eff} = net effective pressure acting on pipe during pull-back, psi (kPa), and
ΔP = hydrokinetic pressure, psi (kPa).

NOTE 15—The modulus value used in Eq 22 and in the deflection calculation for determining ovality for use in Eq 22 during pull-back should be selected to match the time-interval of the pull-back.

8.2.9.2 The net effective external pressure term, P_{eff}, in Eq 25 corresponds to the external head of drilling fluid or slurry reduced by the internal pressure due to any fluid used as ballast. For the case of an open-ended pulling grip allowing the drilling fluid to serve as ballast (see 8.2.6.5), the net effective external pressure, P_{eff}, including the hydrokinetic pressure, is negligible and the possibility of collapse due to external pressure during the installation stage is essentially eliminated.

8.2.9.3 *Thermal Effects*—Potential effects due to thermal expansion may be minimized by allowing the pipe to reach temperature equilibrium with the soil before cutting the pipe to length to complete the installation.

8.2.10 *Combined Loads During Operation*—In general, it is the responsibility of the owner or owner's contractor or engineer to ensure that the design will be compatible with the long term operation of the pipe line, including sections away from that being placed by the drilling operation, as well as sections in the vicinity of the crossing, both at the surface and passing beneath the obstacle.

8.2.10.1 *Thermal Stress*—Thermal stresses due to temperature differentials existing during the placement process may be considered small, as discussed in 8.2.10. However, possible thermal effects during long-term operation due to seasonal expansion or contraction at the surface, including at sections away from the drilled crossing, are not specific to the HDD process and should be considered by the owner as for non-drilled pipe lines, in combination with the other stress contributions.

9. Implementation

9.1 Due to the magnitude of the typical operation and complexity of the equipment and control systems, maxi-HDD requires a highly trained crew. See Mini-Horizontal Directional Drilling Manual. It is beyond the scope of this guide to provide operational procedures for the various equipment. Such training is generally provided by the manufacturer. Contractors should be required to demonstrate evidence of proper training for their crews, including classroom and field experience for the primary personnel. The following items represent some of the issues related to the implementation process for placement of pipe or conduit.

9.1.1 *Machine Size & Capability*—The size and capacity of the drilling equipment must be compatible with the thrust and torque required to perform the drilling, reaming, and pipe pullback operations. It is difficult to estimate the drill rig forces associated with the reaming operation, which may be significantly greater than that directly applied to the pipe itself during pullback (as estimated by the formulas in 8.2.4), particularly when both operations are performed simultaneously. The estimated forces applied to the pipe may be considered a minimum equipment requirement.

9.1.2 *Drill Unit Positioning*—The drill rig unit is positioned consistent with the discussion in Section 7 and the desired bore route and pipe depth. Proper anchoring is especially important for soft or sandy soils.

9.1.3 *Boring and Drill Rods*—HDD operations begin with the initial pilot bore. Different ground conditions will require different type drill heads for the pilot bore operation. The drill rods should be as least as strong as the equipment capability. The planned bore route should also be compatible with drill rod capabilities with respect to cumulative fatigue stresses (Section 7). Proper care and handling of the drill rods is important to avoid breakage during boring or backreaming. The rod threads must be cared for and properly coated (greased) when inserted into the drill string. Proper torque should initially be applied to the drill rods as added at the bore entry to avoid potential loosening of the rods and loss of connection in the ground.

9.1.4 *Washover Pipe*—For many maxi-HDD operations, a washover pipe is inserted over the drill string as the bore progresses to support the hole and reduce torque. This steel pipe may be removed during the backreaming operation. If

reaming is not required, the washover pipe may be left in place and used as a casing into which a group of small plastic pipes may be placed by a later independent pulling operation.

9.1.5 *Drilling Fluid Usage*—Drilling fluids serve a critical role in maxi-HDD operations. The fluid powers the mud-motor at the front of the drill string that bores the pilot hole. The fluid also provides lubrication during the pilot boring, reaming, and pullback operations to reduce the required torque and thrust or pullback loads. In addition, the drilling fluid stabilizes the bore hole, cools the drill head (and internal circuitry), and removes cuttings and spoils. The crew must be trained in the proper use of drilling fluids and the appropriate types for various ground conditions. Note that excessive drilling fluid pressures or volumes may result in greater disposal problems or appearances at undesired surface locations as the fluid penetrates through fissures.

9.2 *Tracking and Locating*:

9.2.1 *Location Interval*—In order to maintain the actual bore along the planned path, the pilot bore must be carefully tracked, and path confirmation established at least once each 30 ft (10 m) interval (for example, when adding drill rods). For paths with horizontal or vertical turns, or in critical areas including the vicinity of other obstacles, shorter intervals for example, 15 ft (5 m) are recommended. In areas with pockets of cobbles or other obstacles that may divert the drill head, measurements should be made whenever contact with such obstacles is suspected. A misdirected drill head must be corrected as soon as possible.

9.2.2 *As-Built Drawings*—A record of the actual as-built bore path, including plan and profile views and vertical and horizontal deviations, indicating the relation to the planned path, must be submitted to the owner. Any information obtained during the initial bore regarding soil characteristics, etc. should be added. The experiences gained during the initial bore may be used to provide guidance for the backreaming operating, as well as for subsequent operations in the project area. Additional information should also be included, such as steering or correction commands, drilling fluid usage, and the type of drill head being used. Regarding the reaming and pullback operations, the pipe insertion velocity, duration, type and size of reamers (cutters or compactors), final bore hole size, drilling fluid usage, and required pullback forces should be recorded.

9.3 *Reaming*—In some maxi-HDD applications, a backreaming operation to increase the hole size may not be required (for example, when a small pipe is to be pulled back into the initial bore hole or, possibly, a bundle of small pipes is to be pulled into the remaining washover pipe by a separate procedure after completion of the HDD operation). However, a backreaming operation is typically performed to produce a hole size sufficiently large to readily install the pipe(s) or conduit. Appropriate cutters and compactors compatible with the soil conditions are required, including proper usage of drilling fluid. In some cases, several reaming (that is, pre-reaming) operations may be required. In general, pre-reaming is not required for placing pipe 20 in. (500 mm) or less in diameter, and the reaming and pipe pullback may be performed simultaneously. The pre-reaming operations allow relatively large holes to be created in stages, reducing the required torque and thrust loads at the machine. For difficult installations for which a high pulling load is anticipated, a pre-reaming operation will help ensure that the capability of the machine is not exceeded due to the combined forces due to increasing the hole diameter and pulling the pipe. The pullback operation may also then be performed at a faster rate, reducing the time the pipe is under axial load. In addition, pre-reaming reduces the possibility of voids or surface heaving or settlement, including unanticipated drilling fluid appearances. Hole diameter increments should be restricted to approximately 10 in. (250 mm) or less during a single pass. The final hole diameter is typically 50 % greater than the outer diameter of the pipe (or pipe bundle) to provide clearance for pipe grips, allow spoils flow, and reduce the required loads during the pipe pullback operation. During pre-reaming, additional drill rods must be available at the pilot bore exit which are connected to a swivel at the rear of the reamer and pulled into the hole to maintain the path.

9.3.1 *Grouting*—If grouting has been specified to fill the annulus of the hole surrounding the pipe(s), it may be pumped during the pullback operation, serving as drilling fluid. However, if the pullback encounters any difficulty, the grout can set-up. Consideration should be given to placing grout through a tremie pipe pulled in during pullback. The requirement and formulation of the grouting shall have been established in advance by the owner and the owner's engineer following the preliminary surface and subsurface studies and route planning, for environmental considerations, or to increase the long-term collapse resistance of the pipe or provide additional strength or mechanical protection. The grouting requires proper formulation consistent with desired set-up time; appropriate fluid pumps are required to handle the thicker fluid mixture. In may cases it may only be required to plug the entry and exit penetration points, possibly using a cement-bentonite mixture (5).

9.4 *Gripping the Pipe*—If not supplied as a continuous length on a reel, it is assumed that the pipe(s) have been fused and tested prior to completion of the boring operation to avoid unnecessary delays in completing the installation. The bored and reamed hole may tend to close in or collapse after an extended period of time, significantly inhibiting or preventing the insertion of the pipe.

9.4.1 Due to the distance of the operation and the relatively high pullback loads generated, secure gripping procedures must be used. Basket-type or internal only grips are not recommended. The gripping method selected must allow essentially the full tensile rating of the pipe to be developed. Appropriate types may include an internal/external clamping or bolting device, or a fused PE pipe adapter with a built-in pulling eye. In the latter case, a smaller diameter section of the adapter may serve as a breakaway link protecting the main section of pipe (see 9.4.3). In general, the end of the pipe should be plugged or sealed to prevent contamination during the pull-back operation. However, if it is desired to allow the mud slurry to serve as ballast (see 8.2.5), a gripping method should be used that allows the fluid to enter the pipe. Several

pipes may be pulled simultaneously, but the position of the grips should be staggered, if necessary, to avoid a single large bulge.

9.4.2 *Swivel*—A swivel is required between the reamer or compactor preceding the pipe to prevent the transmission of torsional loads to the pipe. The rating of the swivel should be somewhat larger than the lower of the pull force capability of the drill rig or the total strengths of the bundle of pipes to be installed, but not excessively greater. Inefficiencies in overly large swivels may result in relatively significant twist transmitted to small pipes.

9.4.3 *Breakaway Link*—In general, the recorded pulling forces as indicated at the drill rig will exceed the tensions experienced by the pipe or conduit throughout most of the pullback process. Limiting these loads to that of the allowable pipe strength will generally be overly conservative. It is recommended that individual breakaway links be provided between the main swivel and the grip(s) at the pipe(s), to ensure that the pipelines are installed within allowable load levels. Broken links will require removal of the pipe(s) from the entry end, or possibly abandonment. Following a determination of the problem, and an appropriate solution, another attempt may be made, possibly requiring a new bore path.

9.4.3.1 Each breakaway link rating should be within the safe pull tensile load, also called the allowable tensile load of its corresponding pipe. See Table X1.1.

9.4.3.2 Although less desirable, a single breakaway link may be used for a bundle of pipes. The corresponding safe working loads for the individual pipes in the bundle are added to determine the total safe working load and the corresponding rating of the breakaway link. If a breakaway swivel is used as the breakaway link, and not specifically designed for direct exposure with soil, this item should be cleaned well after each application. The use of such a breakaway swivel does not eliminate the need for the main swivel described in 9.4.2.

9.5 *Handling the Pipe*—Extreme care must be exercised when handling the pipe to ensure that it is not subject to excessively sharp bends which may cause a kink or other damage to the pipe. Section 8 provides appropriate guidelines, including discussion of the combined effects of bending loads and tension in the pipe. Particular areas of concern typically include the pipe entry or exit points. It is important to minimize bending of the pipe as it enters the bore hole, consistent with 7.3, 7.4.4 and 8.2.7, and to ensure low friction on the portion of the pipe outside the hole. This may be accomplished by the use of appropriate lifting equipment and roller stands to reduce friction. Due to the potentially high tensile load at the pipe exit, it is especially important to avoid sharp bends at this point.

10. Inspection and Site Cleanup

10.1 *Completion and Inspection*—It is necessary to minimize any residual stresses or strains remaining in the pipe following the installation, due to the imposed pulling forces and potential thermal expansion or contraction. Thus, the pipe should be allowed to achieve mechanical and thermal equilibrium with its surroundings prior to cutting the pipe at either end. Premature cutting of the pipe may allow the ends to shrink back into the hole. The pipe may be cut after it has been verified that there has been insignificant movement at the pipe entry end and negligible residual tensile load at the drill rig end. If any fluid or slurry was allowed to enter the pipe to serve as ballast (see 8.2.6), the fluid must be purged and the pipe thoroughly flushed and cleaned.

10.1.1 *Integrity*—Some pipes, such as for gas or fluid transport, may be required to pass hydrostatic pressure or leakage tests, before or after pullback, or both, as specified by the owner. For pipes to be used as paths for cables, the integrity of the path should be verified by pulling a "pig" through the installed pipe prior to splicing or terminating.

10.1.2 *Visual Inspection*—The pipe exiting the borehole should not show signs of yielding or necking-down. The surface of the pipe should be inspected for gouges or scratches. Gouges or scratches in excess of 10 % of the minimum wall thickness should be assessed as to whether pipe is suitable or not for pressure service.

10.1.3 *Bore Path*—The as-built drawings shall be submitted to the owner's representative to indicate the pipe was placed at the proper location and depth, or within acceptable limits. Maintaining an appropriate minimum depth of cover beneath the river bottom is critical, including margin to account for scouring, to avoid subsequent exposure or damage. Recording of the exact location will help avoid damage during any future construction activities in the area. In addition, records of pullback forces at the drill rig, breakaway link ratings, installation rate, final hole diameter, grouting information, etc., should be recorded and provided.

10.2 *Cleanup*—After inspection and approval by the owner or representative, the surface area must be restored to its original condition. The site must be cleaned of equipment, tools, and spoils. All drilling fluid must be cleaned from the site or its vicinity and properly disposed of, consistent with Section 6.

APPENDIXES

(Nonmandatory Information)

X1. MATERIAL PROPERTIES OF POLYETHYLENE

X1.1 *Material Properties of Polyethylene*—Typical values for the apparent modulus of elasticity and tensile strength at 73°F (23°C) for medium density (PE 2406) and high density polyethylene (PE3408) resins are presented in Table X1.1. Consult the manufacturer for specific applications.

TABLE X1.1 Apparent Modulus of Elasticity and Safe Pull Tensile Stress at 73°F

Typical Apparent Modulus of Elasticity			Typical Safe Pull Stress		
Duration	HDPE	MDPE	Duration	HDPE	MDPE
Short-term	110 000 psi (800 MPa)	87 000 psi (600 MPa)	30 min	1300 psi (9.0 MPa)	1000 psi (6.9 MPa)
10 h	57 500 psi (400 MPa)	43 500 psi (300 MPa)	60 min	1200 psi (8.3 MPa)	900 psi (6.2 MPa)
100 h	51 200 psi (350 MPa)	36 200 psi (250 MPa)	12 h	1150 psi (7.9 MPa)	850 psi (5.9 MPa)
50 years	28 200 psi (200 MPa)	21 700 psi (150 MPa)	24 h	1100 psi (7.6 MPa)	800 psi (5.5 MPa)

X2. POST-INSTALLATION LOADS AND DEFLECTION OF HORIZONTAL DIRECTIONAL DRILLED PIPES

X2.1 Allowable Tensile Load—The safe pull tensile load for a pipe is equal to its allowable tensile load ATL, which can be calculated from the safe pull tensile stress SPS, as follows:

$$ATL = (SPS)\,\pi\,D^2\left(\frac{1}{DR} - \frac{1}{DR^2}\right) \tag{X2.1}$$

where:

D = pipe outer diameter, in. (mm),
SPS = safe pull stress, psi (kPa), and
DR = pipe dimension ratio (outer diameter/minimum wall thickness).

For gas pipes, see Practice F1804 for determining ATL.

X2.2 *Earth Pressure Calculation*—The soil load on directional drilled pipe is essentially dependent on the depth of cover, borehole diameter, mud-slurry properties, and the in situ properties. Earth and live-load pressures are transferred to the pipe through the deformation of the soil around the borehole. As the deformation occurs, a cavity of loosened soil forms above the borehole. This cavity is filled by soil sloughing from above it. The process causes the soil to bulk, that is, the density of the sloughed soil is less than the density of the undisturbed soil. The sloughing process continues until an equilibrium is reached where the stiffness of the sloughed soil is sufficient to resist further sloughing from the soil above. This bulking state results in arching of load around the pipe (that is, the earth load applied to the pipe is less than the geostatic stress (or prism load).) There is a lack of published equations for calculating earth loads on directional pipes. However, equations have been published for calculating loads on jacked pipe. Although the applicability of these equations to directional drilling has not been confirmed, they are likely applicable where the PE is installed in a mud slurry. The normal jacking procedure like the directional drilled process overcuts the hole but the overcut is typically less than 10 % of the pipe diameter with jacked pipe, whereas with directional drilled pipes the overcut may be 50 %. Equations for calculating the loads occurring on jacked-pipe due to the bulking process are given by O'Rourke et al. Another interpretation of arching above jacked-pipe is given in **(10)**. Stein's method in Ref. **(10)** considers the process of arching to be similar to trench arching. Only Stein's method is given below as O'Rourke's method in Ref. **(9)** involves extensive calculations and typically results in lesser load than Stein's method. Credit for arching should only be considered where the depth of cover is sufficient to develop arching (typically exceeding five pipe diameters), dynamic loads such as traffic or rail loads are insignificant, the soil has sufficient internal friction to transmit arching, as confirmed by a geotechnical engineer.

X2.2.1 Use of Terzaghi's equation as given in Eq X2.2 for calculating earth loads on jacked pipe is suggested in Ref. **(10)**. Note that the friction angle, has been reduced in Terzaghi's equation by 50 %.

$$P_{EV} = \frac{\kappa\gamma H}{144\,\frac{in.^2}{ft^2}} \tag{X2.2}$$

$$\kappa = \frac{1 - exp\left(-2\frac{KH}{B}\tan\left(\frac{\delta}{2}\right)\right)}{2\frac{KH}{B}\tan\left(\frac{\delta}{2}\right)} \tag{X2.3}$$

[For metric units, the conversion factor of 144 in^2/ft^2 should be dropped]

where:

P_E = external earth pressure, psi (kPa),
Y = soil weight, pcf (kN/m^3),
H = depth of cover, ft (m),
κ = arching factor,
B = "silo" width, ft (m),
δ = angle of wall friction, degrees (for directional drilling, assume $\delta = \phi$, and ϕ = angle of internal friction, degrees.), and
K = earth pressure coefficient given by:

$$K = \tan^2\left(45 - \frac{\phi}{2}\right) \quad \text{(X2.4)}$$

The silo width must be estimated based on the application. It varies between the pipe diameter and the borehole diameter. A conservative approach is to assume the silo width equals the borehole diameter. (If the effective soil weight is used the groundwater pressure must be added back into Eq X2.2 to get the total external pressure acting on the pipe. The effective soil weight is the dry unit weight of the soil for soil above the groundwater level; it is the saturated unit weight less the weight of water for soil below the groundwater level.)

X2.3 *Earth Load Deflection*—Earth load is generally applied at the pipe crown with a reaction at the invert. As slurry provides essentially no side-support, there is little pressure at the springline to restrain vertical deflection. The primary resistance to deflection is provided by the pipe's stiffness. Whereas, actual soil loads will occur over a good portion of the top and bottom halves of the pipe, Ref. (**11**) gives two ring deflection formulas for uniform loading on the top half of a pipe in the Appendix of the text. One formula assumes the pipe's invert is supported on a rigid, flat base while the other assumes the invert reaction load is uniform around the bottom half of the pipe. Neither case fits exactly what occurs with directional drilled pipe but the average of the two formulas may come close.

$$\frac{\Delta}{D} = \frac{0.0125P_E}{\frac{E}{12\,(DR-1)^3}} \quad \text{(X2.5)}$$

where:

D = pipe diameter, in. (mm),
Δ = ring deformation, in. (mm),
P_E = earth pressure, psi (kPa),
DR = pipe dimension ratio, and
E = modulus of elasticity, psi (kPa).

X2.4 *Buoyant Deflection*—An external pressure difference between crown and invert occurs when pipe is submerged in grout due to the difference in grout head pressure across the pipe. The pressure difference applies a force which deflects the invert upward toward the crown, thus creating ovality. Deflection is given by Eq X2.6. This can be converted to percent deflection by multiplying it by 100.

$$\frac{\Delta}{D} = \frac{0.1169\gamma_w\left(\frac{D}{2}\right)^4}{EI} \quad \text{(X2.6)}$$

where:

Δ = ring deflection, in. (m),
D = pipe diameter, in. (m),
Y_w = weight of fluid in borehole, lbs/in.^{3} (to convert fluid weight from lbs/ft^3 to lbs/in^3 divide by 1728) (kN/m^3),
E = modulus of elasticity, psi (kPa), and
I = moment of inertia of pipe wall cross-section ($t^3/12$), in.^{4}/in. (m^4/m).

X2.5 *Reissner Effect*—Longitudinal bending of a pipe induces ovality. For entrenched pipes this ovality is usually ignored as it is oriented transverse to earth load deflection. In a directional drilled pipe ovality is additive to earth load deflection. For DR 21 or lower pipes, when the bending radius is greater than or equal to 40 pipe diameters, the ovality is negligible. Ovality in terms of percent deflection can be calculated from the Reissner equation:

$$\frac{\Delta y}{D} = \left(\frac{2}{3}\right)z + \left(\frac{71}{135}\right)z^2 \quad \text{(X2.7)}$$

$$z = \frac{\frac{3}{2}(1-\mu^2)(D-t)^4}{16t^2R^2} \quad \text{(X2.8)}$$

where:

μ = Poisson's ratio,
D = pipe OD, in. (mm),
t = pipe wall thickness, in. (mm),
R = radius of curvature, in. (mm), and
$\Delta y/D$ = deflection, in./in. (mm/mm) (convert to percent by multiplying by 100).

X2.6 *Deflection Limits*—The limiting deflection (in percent) is determined by the geometric stability of the deflected pipe, hydraulic capacity, and the strain occurring in the pipe wall. It has been observed that for PE, pressure-rated pipe, subjected to soil pressure only, no upper limit from a practical design point of view seems to exist for the bending strain (**12**). Therefore, for non-pressure pipes or conduits the safe long-term deflection is 7.5 % of the diameter. When subjected to internal pressure in addition to soil pressure, the localized bending strain resulting from deflection combines with the hoop tensile strain caused by internal pressure to produce a higher, localized tensile fiber-stress. However, as the internal pressure is increased the pipe re-rounds and the bending strain is reduced. At high pressures, the bending strain is reduced and the ring tensile stress approaches that due to internal pressure alone. For calculation method, see Ref. (**13**). This fact coupled with the ductility of PE permits the designer to ignore the combined effect of pressure and deflection. In lieu of an exact calculation based on allowable strain, the designer can use the safe long-term design deflection values for pressure pipe shown to Table X2.1.

X2.6.1 Design deflections are for use in selecting DR and for field quality control. Field measured deflections exceeding

TABLE X2.1 Safe Long-Term Design Deflection values for Buried Pressurized Polyethylene Pipe

DR or SDR	Deflection Limits as % of Diameter
21	7.5
17	6.0
15.5	6.0
13.5	6.0
11	5.0
9	4.0
7.3	3.0

the design deflection do not necessarily indicate unstable or over-strained pipe. In this case, an engineering analysis of such pipe should be performed before acceptance.

X3. CRITICAL BUCKLING PRESSURE FOR HDPE PIPE

X3.1 *Critical Buckling Pressure*—Table X3.1 gives the critical collapse pressure for HDPE pipes. The values do not contain a safety factor nor any compensation for ovality or pulling force. See 9.2.3.1 for discussion.

TABLE X3.1 Critical Collapse Pressure for Unconstrained HDPE Pipe[A,B,C] at 73°F

NOTE—**Table does not include ovality compensation or safety factor.**

	Pipe SDR, psi, ft H_2O, in Hg						
Service Life	7.3	9	11	13.5	15.5	17	21
Short-term	1003, 2316, 2045	490, 1131, 999	251, 579, 512	128, 297, 262	82, 190, 168	61, 141, 125	31, 72, 64
100 h	488, 1126, 995	238, 550, 486	122, 282, 249	62, 144, 127	40, 92, 82	30, 69, 61	15, 35, 31
50 years	283, 653, 577	138, 319, 282	71, 163, 144	36, 84, 74	23, 54, 47	17, 40, 35	9, 20, 18

[A] Axial Tension during pull-back reduces collapse strength.
[B] Full vacuum is 14.7 psi, 34 ft water, 30 in Hg.
[C] Multipliers for temperature rerating:

60°F (16°C)	73.4°F (23°C)	100°F (38°C)	120°F (49°C)
1.08	1.00	0.78	0.63

REFERENCES

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(14) 14. Duyvestyn, G.M., Knight, M.A. "Behavior of 180 m long MDPE and HDPE pipes installed using a midi HDD rig", No-Dig 2002, Montreal, Canada.

(15) 15. Baumert, M.E., Allouche, E.A., and Moore, I.D. "Experimental Investigation of Pull Loads and Borehole Pressures During Horizontal Directional Drilling Installations", Canadian Journal of Geotechnical Engineering, CGS, August, 2004.

TRENCHLESS TECHNOLOGY REPLACEMENT

Tab 7 - Value add

Horizontal Directional Drilling (jettable soils) Materials Section N

	Quantity	Unit	Unit Price
HDD - 2"	1	LF	$25.00
HDD - 4"	1	LF	$45.00
HDD - 6"	1	LF	$50.00
HDD - 8"	1	LF	$100.00
HDD - 10"	1	LF	$120.00
HDD - 12"	1	LF	$144.00
HDD - 14"	1	LF	$168.00
HDD - 16"	1	LF	$192.00
HDD - 18"	1	LF	$216.00
HDD - 20"	1	LF	$240.00
HDD - 24"	1	LF	$288.00
HDD - 30"	1	LF	$385.00
HDD - 36"	1	LF	$490.00
HDD - 42"	1	LF	$680.00
HDD - 48"	1	LF	$720.00

HDD - Mobilization

	Quantity	Unit	Unit Price
2" thru 8" Sizes	1	EA	$25,000.00
10" thru 16" Sizes	1	EA	$30,000.00
18" - 28"	1	EA	$40,000.00
30" - 48"	1	EA	$50,000.00

Drill Fluid (Mud) Disposal

Per Gallon	1	Gal	$3.00
Hazardous and Non-Hazardous Contaminated Materials Disposal			Cost plus 15%

HDD - Stackable Solids Disposal	Quantity	Unit	Unit Price
Per Cubic Yard	1	CY	$50.00

Recycling Equipment (as required)

Mobilization	1	EA	$25,000.00
Day Rate	1	Day	$4,000.00

HDD Crew Down Time

Hours - up to 4 hours (day rates after 4 hours)

	Quantity	Unit	Unit Price
2" thru 8" Sizes	1	Hr	$700.00
10" thru 16" Sizes	1	Hr	$950.00
18" - 28"	1	Hr	$1,500.00
30" - 48"	1	Hr	$2,750.00
Day Rates			
2" thru 8" Sizes	1	Day	$4,000.00
10" thru 16" Sizes	1	Day	$6,000.00
18" - 28"	1	Day	$10,000.00
30" - 48"	1	Day	$15,000.00

HDD Pipe Rollers

Day Rates per roller	Quantity	Unit	Unit Price
2" thru 8" Sizes	1	Day	$4.00
10" thru 16" Sizes	1	Day	$10.00
18" - 28"	1	Day	$15.00
30" - 48"	1	Day	$25.00

HDD - Tracing Wire	Quantity	Unit	Unit Price
2" thru 8" Sizes	1	LF	$4.00
10" thru 16" Sizes	1	LF	$6.00
18" - 28"	1	LF	$8.00
30" - 48"	1	LF	$10.00

HDD - Wire Line Locating Equipment & Streering Hand

	Quantity	Unit	Unit Price
Down Hole Wire	1	LF	$4.00
Perimeter Wire	1	LF	$8.00
Steering Hand (Day Rate)	1	Day	$2,500.00
As Build Information	1	EA	$6,000.00

HDD - Inadvertant returns clean up and services

Cost Plus 15%

HDD - Transporation and procurement of Water for HDD opertions (if not on site)

Cost Plus 15%

HDD - Frac- Tanks

Includes mob / demob / frac tank rental **Cost Plus 15%**

Permits and Licenses

Permits, licenses and written permission from governmental authorities and private land owners to perform work **Cost Plus 15%**

Maintenance of Traffic

All safety signage as necessary on water/land as per D.O.T. and Marine specifications, or flagmen if required **Cost Plus 15%**

HDD - Product Pipe Materials

Cost Plus 15%

HDD - Noise Mitigation (as required)

Cost Plus 15%

Where needed, items from tab 6 may be implemented to make acomplete project

Crossing designs must be reflective of industry standards. Please refer to ASTM, ASCE and NASTT guide lines, to including geometry, pipe thickness and integrity, ground contours, pullback alignment, allotted workspace, and depth of cover beneath obstacles. If additional length is required for constructability, a per foot charge will be added to the contract. Price based on the assumption that site conditions are conducive to horizontal directional drilling and that no obstacles such as caverns or fissures will be encountered. If such conditions exist, Utility Services Authority, LLC reserves the right to cease operations and/or renegotiate at an equitable adjustments with the owner/general contractor. If unable to negotiate, our standby rate plus mobilization charges will be enforced.

Professional Services, Civil Engineering, and Land Surveying

Tab 7 - Value add

	Quantity	Unit		Unit Price
Firm Principal	1	HR	$	275.00
Senior Project Manager	1	HR	$	250.00
Project Manager	1	HR	$	200.00
Coordinator	1	HR	$	195.00
Project surveyor	1	HR	$	175.00
Project engineer	1	HR	$	175.00
Engineering Technician	1	HR	$	150.00
Two person field survey crew	1	HR	$	350.00
One person field survey crew	1	HR	$	200.00
Administrative services	1	HR	$	125.00
Auto CAD technician	1	HR	$	150.00
GIS technician	1	HR	$	150.00
Computer programming or coding	1	HR	$	150.00
Web-based design or maintenance	1	HR	$	175.00
Professional Engineer (all-areas)	1	HR	$	275.00
Project Inspector	1	HR	$	200.00

Project related reimbursable expenses including mileage, stakes, monuments, monuments, data reports, postage, shipping, copies, to be billed at 7% of the labor charge, per diems, subcontractors billed at cost plus 15%

Appendix C
ADDITIONAL REQUIRED DOCUMENTS

DOC #1 Acknowledgment and Acceptance of Region 4 ESC's Open Records Policy

DOC #2 Antitrust Certification Statements (Tex. Government Code § 2155.005)

DOC #3 Implementation of House Bill 1295 Certificate of Interested Parties (Form 1295)

DOC #4 Texas Government Code 2270 Verification Form

DOC #5 Felony Conviction Notification

Appendix C, Doc #1

ACKNOWLEDGMENT AND ACCEPTANCE
OF REGION 4 ESC's OPEN RECORDS POLICY

OPEN RECORDS POLICY

All proposals, information and documents submitted are subject to the Public Information Act requirements governed by the State of Texas once a Contract(s) is executed. If an Offeror believes its response, or parts of its response, may be exempted from disclosure, the Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt and include detailed reasons to substantiate the exemption. Price is not confidential and will not be withheld. Any unmarked information will be considered public information and released, if requested under the Public Information Act.

The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 4 ESC must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the Offeror are not acceptable. Region 4 ESC must comply with the opinions of the OAG. Region 4 ESC assumes no responsibility for asserting legal arguments on behalf of any Offeror. Offeror is advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

Signature below certifies complete acceptance of Region 4 ESC's Open Records Policy, except as noted below (additional pages may be attached, if necessary).

Check one of the following responses to the Acknowledgment and Acceptance of Region 4 ESC's Open Records Policy below:

☐ We acknowledge Region 4 ESC's Open Records Policy and declare that no information submitted with this proposal, or any part of our proposal, is exempt from disclosure under the Public Information Act.

☐ We declare the following information to be a trade secret or proprietary and exempt from disclosure under the Public Information Act.

(Note: Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, Offeror must include detailed reasons to substantiate the exemption(s). Price is not confident and will not be withheld. All information believed to be a trade secret or proprietary must be listed. It is further understood that failure to identify such information, in strict accordance with the instructions, will result in that information being considered public information and released, if requested under the Public Information Act.)

9/28/2021
Date

Vice President
Authorized Signature & Title

Appendix C, Doc #2

ANTITRUST CERTIFICATION STATEMENTS
(Tex. Government Code § 2155.005)
Attorney General Form

I affirm under penalty of perjury of the laws of the State of Texas that:

1. I am duly authorized to execute this Contract on my own behalf or on behalf of the company, corporation, firm, partnership or individual (Company) listed below;

2. In connection with this proposal, neither I nor any representative of the Company has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15;

3. In connection with this proposal, neither I nor any representative of the Company has violated any federal antitrust law; and

4. Neither I nor any representative of the Company has directly or indirectly communicated any of the contents of this proposal to a competitor of the Company or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Company.

Company Corby Energy Services, Inc

Address 6001 Schooner Dr
Belleville, MI 48111

dcarpenter@corbyenergy.com

Phone 734-547-9237

Fax 734-482-1505

Contact

Signature

David Carpenter
Printed Name

Vice President
Position with Company

Official Authorizing Proposal

Signature

James Moskal
Printed Name

Secretary
Position with Company

Appendix C, DOC # 3

Implementation of House Bill 1295

Certificate of Interested Parties (Form 1295):

In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that a governmental entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency. The law applies only to a contract of a governmental entity or state agency that either (1) requires an action or vote by the governing body of the entity or agency before the contract may be signed or (2) has a value of at least $1 million. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The Texas Ethics Commission was required to adopt rules necessary to implement that law, prescribe the disclosure of interested parties form, and post a copy of the form on the commission's website. The commission adopted the Certificate of Interested Parties form (Form 1295) on October 5, 2015. The commission also adopted new rules (Chapter 46) on November 30, 2015, to implement the law. The commission does not have any additional authority to enforce or interpret House Bill 1295.

Filing Process:

Staring on January 1, 2016, the commission made available on its website a new filing application that must be used to file Form 1295. A business entity must use the application to enter the required information on Form 1295 and print a copy of the completed form, which will include a certification of filing that will contain a unique certification number. An authorized agent of the business entity must sign the printed copy of the form. The completed Form 1295 with the certification of filing must be filed with the governmental body or state agency with which the business entity is entering into the contract.

The governmental entity or state agency must notify the commission, using the commission's filing application, of the receipt of the filed Form 1295 with the certification of filing not later than the 30th day after the date the contract binds all parties to the contract. This process is known as acknowledging the certificate. The commission will post the acknowledged Form 1295 to its website within seven business days after receiving notice from the governmental entity or state agency. The posted acknowledged form does not contain the declaration of signature information provided by the business.

A certificate will stay in the pending state until it is acknowledged by the governmental agency. Only acknowledged certificates are posted to the commission's website.

Electronic Filing Application:
https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

Frequently Asked Questions:
https://www.ethics.state.tx.us/resources/FAQs/FAQ_Form1295.php

Changes to Form 1295: https://www.ethics.state.tx.us/data/filinginfo/1295Changes.pdf

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

OFFICE USE ONLY
CERTIFICATION OF FILING

Certificate Number:
2017-174760

Date Filed:
03/06/2017

Date Acknowledged:

1 Name of business entity filing form, and the city, state and country of the business entity's place of business.

Corby Energy Services, Inc.
Belleville, MI United States

2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.

TCPN

3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.

17-08
Trenchless infrastructure services

4 Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
		Controlling	Intermediary

5 Check only if there is NO Interested Party. [X]

6 AFFIDAVIT

I swear, or affirm, under penalty of perjury, that the above disclosure is true and correct.

PENNI LEA PEAVEY
Notary Public, State of Michigan
County of Livingston
My Commission Expires Dec. 04, 2018
Acting in the County of Wayne

James A. Moskal
Signature of authorized agent of contracting business entity

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said James Moskal, this the 6e day of March, 2017, to certify which, witness my hand and seal of office.

Penni Lea Peavey

PENNI LEA PEAVEY
Notary Public, State of Michigan
County of Livingston
My Commission Expires Dec. 04, 2018
Acting in the County of Wayne

Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

Appendix C, DOC # 4

Texas Government Code 2270 Verification Form

House Bill 89 (85R Legislative Session), which adds Chapter 2270 to the Texas Government Code, provides that a governmental entity may not enter into a contract with a company without verification that the contracting vendor does not and will not boycott Israel during the term of the contract.

Furthermore, Senate Bill 252 (85R Legislative Session), which amends Chapter 2252 of the Texas Government Code to add Subchapter F, prohibits contracting with a company engaged in business with Iran, Sudan or a foreign terrorist organization identified on a list prepared by the Texas Comptroller.

I, David Carpenter, as an authorized representative of

Cactus Energy Services, Inc., a contractor engaged by

Insert Name of Company

Region 4 Education Service Center, 7145 West Tidwell Road, Houston, TX 77092, verify by this writing that the above-named company affirms that it (1) does not boycott Israel; and (2) will not boycott Israel during the term of this contract, or any contract with the above-named Texas governmental entity in the future.

Also, our company is not listed on and we do not do business with companies that are on the Texas Comptroller of Public Accounts list of Designated Foreign Terrorists Organizations found at https://comptroller.texas.gov/purchasing/docs/foreign-terrorist.pdf.

I further affirm that if our company's position on this issue is reversed and this affirmation is no longer valid, that the above-named Texas governmental entity will be notified in writing within one (1) business day and we understand that our company's failure to affirm and comply with the requirements of Texas Government Code 2270 et seq. shall be grounds for immediate contract termination without penalty to the above-named Texas governmental entity.

I swear and affirm that the above is true and correct.

VP

Signature of Named Authorized Company Representative

9/28/2021

Date

Appendix C, DOC # 5

FELONY CONVICTION NOTIFICATION

Section 44.034, Texas Education Code, Notification of Criminal History, Subsection (a), states "A person or business entity that enters into a contract with a school district must give advance notice to the district if the person or an owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony."

Subsection (b) states "A school district may terminate a contract with a person or business entity if the district determines that the person or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract."

This Notice is Not Required of a Publicly-Held Corporation

CRIMINAL HISTORY REVIEW OF CONTRACTOR EMPLOYEES

Offeror shall review §22.0834, Texas Education Code and 19 Texas Administrative Code §§153.1101 and 153.1117 regarding criminal history checks of school contractor employees. The rules define continuing duties related to contracted services, direct contact with students, covered contract employee and other relevant terms within the statute.

Except as otherwise provided herein, Offeror will obtain and certify in writing, before work begins, that the Offeror has received all criminal history record information that relates to an employee, applicant, agent or Subcontractor of the Offeror/Contractor or Subcontractor, if the person has or will have continuing duties related to the contracted services, and the duties are or will be performed on Region 4 ESC's, or Participating Public Agency as applicable to the Texas Education Code, property where students are regularly present or at another location where students are regularly present. Awarded Offer(s) shall assume all expenses associated with the background checks and shall immediately remove any employee or agency who was convicted of, receive probation for, or received deferred adjudication for any felony as outlined below or any misdemeanor involving moral turpitude, from Region 4 ESC's property or other location where students are regularly present.

Offeror/Contractor or sub-contractors may not work on Region 4 ESC's, or Participating Public Agency where the Texas Education Code may be applicable, property where students are present when they have been convicted, received probation, or deferred adjudication for the following felony offenses:

1. Any offense against a person who was, at the time the offense occurred, under 18 years of age or enrolled at a public school;
2. Any sex offense;
3. Any crimes against persons involving:

a. Controlled substances; or

b. Property; or

4. Any other offense Region 4 ESC, or Participating Public Agency where the Texas Education Code may be applicable, believes might compromise the safety of students, employees or property.

I, David Carpenter, as an authorized representative of

Corby Energy Services, INC., the Offeror verify that:

A. My company **is not** owned nor operated by anyone who has been convicted of a felony.

Signature of Company Official: [signature] Vice President Date: 9/28/2021

B. My company **is owned** or operated by the following individual(s) who has/have been convicted of a felony:

Name of Felon(s): _____

Details of Conviction(s) : _____

Date: _____

C. My company is a **publicly held** corporate, therefore, this reporting requirement is not applicable.

Signature of Company Official: _____ Date: _____