




**BUSINESS OF THE CITY COUNCIL  
BONDURANT, IOWA  
AGENDA STATEMENT**

Item No. 5h  
For Meeting of 04/06/2020

**ITEM TITLE:** Resolution approving the Terracon Proposal for Geotechnical Engineering Services for the Bondurant Public Library Additions

**CONTACT PERSON:** Marketa Oliver, City Administrator

**SUMMARY EXPLANATION:** Terracon's Scope of Services is based on their understanding of the project as described by FEH Design. Based on their understanding of the site, the project and planned Scope of Services, their base fee is \$4,200.00. They developed a schedule to complete the Scope of Services base on their existing availability. However, this does not account for delays in field exploration beyond their control, such as weather conditions, permit delays, or lack of permission to access the boring locations.

<input checked="" type="checkbox"/> Resolution _____ Ordinance ___ Contract _____ Other (Specify) _____
Funding Source _____ Not applicable _____
APPROVED FOR SUBMITTAL _____  City Administrator

**RECOMMENDATION:** Approve resolution on a roll call vote.

CITY OF BONDURANT  
RESOLUTION NO. 200406-93

RESOLUTION APPROVING THE TERRACON PROPOSAL FOR GEOTECHNICAL ENGINEERING SERVICES FOR  
THE BONDURANT PUBLIC LIBRARY ADDITIONS

WHEREAS, the Agreement is between the City of Bondurant and Terracon Consultants, Inc.; AND

WHEREAS, the Proposal includes Project Understanding, Scope of Services, Compensation and Project Schedule, Site Location, and Anticipated Exploration Plan; AND

WHEREAS, the City may request changes to the Scope of Services by altering or adding to the Services to be performed; AND

WHEREAS, the base fee to perform the Scope of Services described in the Proposal is \$4,200.00; AND

WHEREAS, Exhibit C of the Proposal includes more details of their fees and consideration of additional services,

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Bondurant, Iowa, that the Terracon Proposal for Geotechnical Engineering Services for the Bondurant Public Library Additions, is hereby approved as presented.

Passed this 6th day of April 2020,

By: \_\_\_\_\_  
Curt Sullivan, Mayor

ATTEST: I, Shelby Hagan, City Clerk of Bondurant, hereby certify that at a meeting of the City Council held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand the day and year above written.

\_\_\_\_\_  
Shelby Hagan, City Clerk

Council Action	Ayes	Nays	Abstain	Absent
Cox				
Peffer				
Enos				
McKenzie				
Elrod				

March 24, 2020



City of Bondurant IA c/o FEH Design  
200 2<sup>nd</sup> Street NE  
Bondurant, Iowa 50036

Attn: Mr. Dennis Sharp, AIA  
P: (515) 288 2000  
E: dennys@fehdesign.com

Re: Proposal for Geotechnical Engineering Services  
Bondurant Public Library Additions  
104 2<sup>nd</sup> Street NE  
Bondurant, Iowa  
Terracon Proposal No. P08205087

Dear Mr. Sharp:

We appreciate the opportunity to submit this proposal to the City of Bondurant to provide geotechnical engineering services for the referenced project. The following are exhibits to the attached Agreement for Services.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location
Exhibit E	Anticipated Exploration Plan

Our base fee to perform the Scope of Services described in this proposal is **\$4,200**. See Exhibit C for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by signing and returning a copy of the attached Agreement for Services to our office.

Sincerely,  
**Terracon Consultants, Inc.**

Adam S. Maher, E.I.  
Staff Engineer

Greg J. Klein, P.E.  
National Director

Terracon Consultants, Inc. 600 SW 7<sup>th</sup> Street, Suite M Des Moines, Iowa 50309  
P (515) 244 3184 F (515) 244 5249 terracon.com

Environmental

Facilities

Geotechnical

Materials

## AGREEMENT FOR SERVICES

This AGREEMENT is between City of Bondurant IA ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the Bondurant Public Library Additions project ("Project"), as described in Consultant's Proposal dated 03/25/2020 ("Proposal"), including but not limited to the Project Information section, unless the Project is otherwise described in Exhibit A to this Agreement (which section or Exhibit is incorporated into this Agreement).

1. **Scope of Services.** The scope of Consultant's services is described in the Proposal, including but not limited to the Scope of Services section ("Services"), unless Services are otherwise described in Exhibit B to this Agreement (which section or exhibit is incorporated into this Agreement). Portions of the Services may be subcontracted. Consultant's Services do not include the investigation or detection of, nor do recommendations in Consultant's reports address the presence or prevention of biological pollutants (e.g., mold, fungi, bacteria, viruses, or their byproducts) or occupant safety issues, such as vulnerability to natural disasters, terrorism, or violence. If Services include purchase of software, Client will execute a separate software license agreement. Consultant's findings, opinions, and recommendations are based solely upon data and information obtained by and furnished to Consultant at the time of the Services.
2. **Acceptance/ Termination.** Client agrees that execution of this Agreement is a material element of the consideration Consultant requires to execute the Services, and if Services are initiated by Consultant prior to execution of this Agreement as an accommodation for Client at Client's request, both parties shall consider that commencement of Services constitutes formal acceptance of all terms and conditions of this Agreement. Additional terms and conditions may be added or changed only by written amendment to this Agreement signed by both parties. In the event Client uses a purchase order or other form to administer this Agreement, the use of such form shall be for convenience purposes only and any additional or conflicting terms it contains are stricken. This Agreement shall not be assigned by either party without prior written consent of the other party. Either party may terminate this Agreement or the Services upon written notice to the other. In such case, Consultant shall be paid costs incurred and fees earned to the date of termination plus reasonable costs of closing the Project.
3. **Change Orders.** Client may request changes to the scope of Services by altering or adding to the Services to be performed. If Client so requests, Consultant will return to Client a statement (or supplemental proposal) of the change setting forth an adjustment to the Services and fees for the requested changes. Following Client's review, Client shall provide written acceptance. If Client does not follow these procedures, but instead directs, authorizes, or permits Consultant to perform changed or additional work, the Services are changed accordingly and Consultant will be paid for this work according to the fees stated or its current fee schedule. If project conditions change materially from those observed at the site or described to Consultant at the time of proposal, Consultant is entitled to a change order equitably adjusting its Services and fee.
4. **Compensation and Terms of Payment.** Client shall pay compensation for the Services performed at the fees stated in the Proposal, including but not limited to the Compensation section, unless fees are otherwise stated in Exhibit C to this Agreement (which section or Exhibit is incorporated into this Agreement). If not stated in either, fees will be according to Consultant's current fee schedule. Fee schedules are valid for the calendar year in which they are issued. Fees do not include sales tax. Client will pay applicable sales tax as required by law. Consultant may invoice Client at least monthly and payment is due upon receipt of invoice. Client shall notify Consultant in writing, at the address below, within 15 days of the date of the invoice if Client objects to any portion of the charges on the invoice, and shall promptly pay the undisputed portion. Client shall pay a finance fee of 1.5% per month, but not exceeding the maximum rate allowed by law, for all unpaid amounts 30 days or older. Client agrees to pay all collection-related costs that Consultant incurs, including attorney fees. Consultant may suspend Services for lack of timely payment. It is the responsibility of Client to determine whether federal, state, or local prevailing wage requirements apply and to notify Consultant if prevailing wages apply. If it is later determined that prevailing wages apply, and Consultant was not previously notified by Client, Client agrees to pay the prevailing wage from that point forward, as well as a retroactive payment adjustment to bring previously paid amounts in line with prevailing wages. Client also agrees to defend, indemnify, and hold harmless Consultant from any alleged violations made by any governmental agency regulating prevailing wage activity for failing to pay prevailing wages, including the payment of any fines or penalties.
5. **Third Party Reliance.** This Agreement and the Services provided are for Consultant and Client's sole benefit and exclusive use with no third party beneficiaries intended. Reliance upon the Services and any work product is limited to Client, and is not intended for third parties other than those who have executed Consultant's reliance agreement, subject to the prior approval of Consultant and Client.
6. **LIMITATION OF LIABILITY. CLIENT AND CONSULTANT HAVE EVALUATED THE RISKS AND REWARDS ASSOCIATED WITH THIS PROJECT, INCLUDING CONSULTANT'S FEE RELATIVE TO THE RISKS ASSUMED, AND AGREE TO ALLOCATE CERTAIN OF THE ASSOCIATED RISKS. TO THE FULLEST EXTENT PERMITTED BY LAW, THE TOTAL AGGREGATE LIABILITY OF CONSULTANT (AND ITS RELATED CORPORATIONS AND EMPLOYEES) TO CLIENT AND THIRD PARTIES GRANTED RELIANCE IS LIMITED TO THE GREATER OF \$25,000 OR CONSULTANT'S FEE, FOR ANY AND ALL INJURIES, DAMAGES, CLAIMS, LOSSES, OR EXPENSES (INCLUDING ATTORNEY AND EXPERT FEES) ARISING OUT OF CONSULTANT'S SERVICES OR THIS AGREEMENT. PRIOR TO ACCEPTANCE OF THIS AGREEMENT AND UPON WRITTEN REQUEST FROM CLIENT, CONSULTANT MAY NEGOTIATE A HIGHER LIMITATION FOR ADDITIONAL CONSIDERATION IN THE FORM OF A SURCHARGE TO BE ADDED TO THE AMOUNT STATED IN THE COMPENSATION SECTION OF THE PROPOSAL. THIS LIMITATION SHALL APPLY REGARDLESS OF AVAILABLE PROFESSIONAL LIABILITY INSURANCE COVERAGE, CAUSE(S), OR THE THEORY OF LIABILITY, INCLUDING NEGLIGENCE, INDEMNITY, OR OTHER RECOVERY. THIS LIMITATION SHALL NOT APPLY TO THE EXTENT THE DAMAGE IS PAID UNDER CONSULTANT'S COMMERCIAL GENERAL LIABILITY POLICY.**
7. **Indemnity/Statute of Limitations.** Consultant and Client shall indemnify and hold harmless the other and their respective employees from and against legal liability for claims, losses, damages, and expenses to the extent such claims, losses, damages, or expenses are legally determined to be caused by their negligent acts, errors, or omissions. In the event such claims, losses, damages, or expenses are legally determined to be caused by the joint or concurrent negligence of Consultant and Client, they shall be borne by each party in proportion to its own negligence under comparative fault principles. Neither party shall have a duty to defend the other party, and no duty to defend is hereby created by this indemnity provision and such duty is explicitly waived under this Agreement. Causes of action arising out of Consultant's Services or this Agreement regardless of cause(s) or the theory of liability, including negligence, indemnity or other recovery shall be deemed to have accrued and the applicable statute of limitations shall commence to run not later than the date of Consultant's substantial completion of Services on the project.
8. **Warranty.** Consultant will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale. **EXCEPT FOR THE STANDARD OF CARE PREVIOUSLY STATED, CONSULTANT MAKES NO WARRANTIES OR GUARANTEES, EXPRESS OR IMPLIED, RELATING TO CONSULTANT'S SERVICES AND CONSULTANT DISCLAIMS ANY IMPLIED WARRANTIES OR WARRANTIES IMPOSED BY LAW, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
9. **Insurance.** Consultant represents that it now carries, and will continue to carry: (i) workers' compensation insurance in accordance with the laws of the states having jurisdiction over Consultant's employees who are engaged in the Services, and employer's liability insurance (\$1,000,000); (ii) commercial general liability insurance (\$1,000,000 occ / \$2,000,000 agg); (iii) automobile liability insurance (\$1,000,000 B.I. and P.D. combined single limit); and (iv) professional liability insurance (\$1,000,000 claim / agg). Certificates of insurance will be provided upon request. Client and Consultant shall waive subrogation against the other party on all general liability and property coverage.

10. **CONSEQUENTIAL DAMAGES. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR LOSS OF PROFITS OR REVENUE; LOSS OF USE OR OPPORTUNITY; LOSS OF GOOD WILL; COST OF SUBSTITUTE FACILITIES, GOODS, OR SERVICES; COST OF CAPITAL; OR FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, PUNITIVE, OR EXEMPLARY DAMAGES.**
11. **Dispute Resolution.** Client shall not be entitled to assert a Claim against Consultant based on any theory of professional negligence unless and until Client has obtained the written opinion from a registered, independent, and reputable engineer, architect, or geologist that Consultant has violated the standard of care applicable to Consultant's performance of the Services. Client shall provide this opinion to Consultant and the parties shall endeavor to resolve the dispute within 30 days, after which Client may pursue its remedies at law. This Agreement shall be governed by and construed according to Kansas law.
12. **Subsurface Explorations.** Subsurface conditions throughout the site may vary from those depicted on logs of discrete borings, test pits, or other exploratory services. Client understands Consultant's layout of boring and test locations is approximate and that Consultant may deviate a reasonable distance from those locations. Consultant will take reasonable precautions to reduce damage to the site when performing Services; however, Client accepts that invasive services such as drilling or sampling may damage or alter the site. Site restoration is not provided unless specifically included in the Services.
13. **Testing and Observations.** Client understands that testing and observation are discrete sampling procedures, and that such procedures indicate conditions only at the depths, locations, and times the procedures were performed. Consultant will provide test results and opinions based on tests and field observations only for the work tested. Client understands that testing and observation are not continuous or exhaustive, and are conducted to reduce - not eliminate - project risk. Client shall cause all tests and inspections of the site, materials, and Services performed by Consultant to be timely and properly scheduled in order for the Services to be performed in accordance with the plans, specifications, contract documents, and Consultant's recommendations. No claims for loss or damage or injury shall be brought against Consultant by Client or any third party unless all tests and inspections have been so performed and Consultant's recommendations have been followed. Unless otherwise stated in the Proposal, Client assumes sole responsibility for determining whether the quantity and the nature of Services ordered by Client is adequate and sufficient for Client's intended purpose. Client is responsible (even if delegated to contractor) for requesting services, and notifying and scheduling Consultant so Consultant can perform these Services. Consultant is not responsible for damages caused by Services not performed due to a failure to request or schedule Consultant's Services. Consultant shall not be responsible for the quality and completeness of Client's contractor's work or their adherence to the project documents, and Consultant's performance of testing and observation services shall not relieve Client's contractor in any way from its responsibility for defects discovered in its work, or create a warranty or guarantee. Consultant will not supervise or direct the work performed by Client's contractor or its subcontractors and is not responsible for their means and methods. The extension of unit prices with quantities to establish a total estimated cost does not guarantee a maximum cost to complete the Services. The quantities, when given, are estimates based on contract documents and schedules made available at the time of the Proposal. Since schedule, performance, production, and charges are directed and/or controlled by others, any quantity extensions must be considered as estimated and not a guarantee of maximum cost.
14. **Sample Disposition, Affected Materials, and Indemnity.** Samples are consumed in testing or disposed of upon completion of the testing procedures (unless stated otherwise in the Services). Client shall furnish or cause to be furnished to Consultant all documents and information known or available to Client that relate to the identity, location, quantity, nature, or characteristic of any hazardous waste, toxic, radioactive, or contaminated materials ("Affected Materials") at or near the site, and shall immediately transmit new, updated, or revised information as it becomes available. Client agrees that Consultant is not responsible for the disposition of Affected Materials unless specifically provided in the Services, and that Client is responsible for directing such disposition. In no event shall Consultant be required to sign a hazardous waste manifest or take title to any Affected Materials. Client shall have the obligation to make all spill or release notifications to appropriate governmental agencies. The Client agrees that Consultant neither created nor contributed to the creation or existence of any Affected Materials conditions at the site and Consultant shall not be responsible for any claims, losses, or damages allegedly arising out of Consultant's performance of Services hereunder, or for any claims against Consultant as a generator, disposer, or arranger of Affected Materials under federal, state, or local law or ordinance.
15. **Ownership of Documents.** Work product, such as reports, logs, data, notes, or calculations, prepared by Consultant shall remain Consultant's property. Proprietary concepts, systems, and ideas developed during performance of the Services shall remain the sole property of Consultant. Files shall be maintained in general accordance with Consultant's document retention policies and practices.
16. **Utilities.** Unless otherwise stated in the Proposal, Client shall provide the location and/or arrange for the marking of private utilities and subterranean structures. Consultant shall take reasonable precautions to avoid damage or injury to subterranean structures or utilities. Consultant shall not be responsible for damage to subterranean structures or utilities that are not called to Consultant's attention, are not correctly marked, including by a utility locate service, or are incorrectly shown on the plans furnished to Consultant.
17. **Site Access and Safety.** Client shall secure all necessary site related approvals, permits, licenses, and consents necessary to commence and complete the Services and will execute any necessary site access agreement. Consultant will be responsible for supervision and site safety measures for its own employees, but shall not be responsible for the supervision or health and safety precautions for any other parties, including Client, Client's contractors, subcontractors, or other parties present at the site. In addition, Consultant retains the right to stop work without penalty at any time Consultant believes it is in the best interests of Consultant's employees or subcontractors to do so in order to reduce the risk of exposure to the coronavirus. Client agrees it will respond quickly to all requests for information made by Consultant related to Consultant's pre-task planning and risk assessment processes. Client acknowledges its responsibility for notifying Consultant of any circumstances that present a risk of exposure to the coronavirus or individuals who have tested positive for COVID-19 or are self-quarantining due to exhibiting symptoms associated with the coronavirus.

Consultant: Terracon Consultants, Inc.  
By: \_\_\_\_\_ Date: 3/25/2020  
Name/Title: Ryan J Morgan, P.E. / Geotechnical  
Department Manager  
Address: 600 SW 7th St, Ste M  
Des Moines, IA 50309-4508  
Phone: (515) 244-3184 Fax: (515) 244-5249  
Email: Ryan.Morgan@terracon.com

Client: City of Bondurant IA  
By: \_\_\_\_\_ Date: \_\_\_\_\_  
Name/Title: \_\_\_\_\_  
Address: 200 2nd St NE  
Bondurant, IA 50036  
Phone: (515) 967-2418 Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

## EXHIBIT A - PROJECT UNDERSTANDING

Our Scope of Services is based on our understanding of the project as described by FEH Design (FEH) in emails on March 23, 2020 that included a *Site Plan* (Sheet No. A117 with requested boring locations. Aspects of the project, undefined or assumed, are highlighted below. Though not critical for the start of field exploration activities, we request the design team provide input to verify all information to aid in our development of recommendations.

### Site Location and Anticipated Conditions

Item	Description
<b>Parcel Information</b>	<ul style="list-style-type: none"> <li>■ The project is located at 104 2<sup>nd</sup> Street NE in Bondurant, Iowa.</li> <li>■ Latitude/Longitude: 41.7033°, -93.4629° (approximate)</li> <li>■ See Exhibit D</li> </ul>
<b>Existing Improvements</b>	<ul style="list-style-type: none"> <li>■ Existing library building and associated parking and drive areas</li> <li>■ A building located on the southeast side of the site in the footprint of the proposed southwest addition is evident on aerial photographs but is anticipated to be currently demolished</li> </ul>
<b>Current Ground Cover</b>	Manicured grass and pavements
<b>Existing Topography</b>	Based on Google Earth aerial images, the site appears to be relatively level
<b>Site Access</b>	<ul style="list-style-type: none"> <li>■ We expect the site, and all exploration locations, are accessible with our truck-mounted drilling equipment.</li> <li>■ We anticipate coordinating the drill schedule with the library for performing our borings following identification of private utility lines</li> </ul>

### Planned Construction

Item	Description
<b>Project Description</b>	The project involves additions and pavement rehabilitation/reconstruction to the Bondurant Public Library
<b>Proposed Structure(s)</b>	Three additions area planned: southwest addition (3,800 square feet), northwest addition (800 square feet), and northeast addition (2,500 square feet). Each addition is anticipated to be single-story, slab-on-grade, wood-framed with brick veneer.
<b>Finished Floor Elevation</b>	Not provided at the time of this proposal, but anticipated to match the floor of the existing library building
<b>Maximum Loads</b>	<ul style="list-style-type: none"> <li>■ Columns: 50 kips</li> <li>■ Walls: 2 to 3 kips per linear foot (klf)</li> <li>■ Slabs: 100 pounds per square foot (psf)</li> </ul>
<b>Grading/Slopes</b>	A grading plan was not provided at the time of this proposal, but we anticipate cuts and fills up to about 2 feet will be required to achieve final grade.

Item	Description
<b>Below Grade Structures</b>	None anticipated
<b>Free-Standing Retaining Walls</b>	None anticipated
<b>Pavements</b>	A pavement reconstruction program appears to be planned in the area of the existing parking/drive areas. <b>Traffic information was not provided</b> ; our analysis will consider passenger vehicle support. We should be notified if bus or other heavy vehicle traffic is intended in the new parking area.

## EXHIBIT B - SCOPE OF SERVICES

### Field Exploration

FEH prescribed the following boring locations and we recommend the following depths:

Planned Location	Number of Borings <sup>1</sup>	Planned Boring Depth (bgs) <sup>2, 3</sup>
Southwest addition	2	15 to 20 feet
Northeast addition	2	15 to 20 feet
Pavement	1	5 to 10 feet

1. See Exhibit E for proposed exploration plan.

2. bgs = below existing ground surface

3. Although not anticipated for the proposed boring depths, borings may be terminated at shallower depths if bedrock or relatively dense material is encountered. Rock coring is not included in this scope of services.

**Boring Layout and Elevations:** We will stake the boring locations as shown on Exhibit E using by measuring off existing site features with the provided dimensions. Approximate ground surface elevations at each boring location will be obtained by Terracon's drill crew using a surveyor's level and rod in reference to a convenient benchmark such as the floor of the existing library building. If a specific benchmark is desired, we request its location and elevation before we commence field work. If more precise boring layout and ground surface elevations are desired, we recommend the client retain a licensed professional surveyor to stake the boring locations and obtain ground surface elevations.

**Subsurface Exploration Procedures:** We will advance the soil borings with a drilling rig using continuous flight augers (solid stem and/or hollow stem augers, as necessary, depending on soil conditions). Four samples will be obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using thin-wall tube and/or split-barrel sampling procedures. The samples will be placed in appropriate containers and taken to our laboratory for testing under the direction of a geotechnical engineer. We will observe and record groundwater levels during, after, and up to 24 hours after completion of drilling and sampling. The borings in areas typically accessed by the public (parking lot) will be backfilled at the end of drilling, and the remaining borings will be temporarily covered and backfilled the follow day after taking additional water level measurements. These water level observations might not be reliable indications of current groundwater levels as a significant period is often required for water seepage from the site soils anticipated to seep into open borehole to fill the volume to a representative level. Longer term monitoring is often needed and we can perform prolonged observations if needed with adjustments to our scope.

Our exploration team will prepare field boring logs as part of standard drilling operations, including sampling depths, penetration distances, and other relevant sampling information. These field logs



include visual descriptions of the materials encountered during drilling and the driller's interpretation of the subsurface conditions between samples.

**Site Access:** Terracon must be granted access to the site by the property owner. By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services.

**Property Disturbance:** We will take reasonable efforts to reduce damage to the property. However, it should be understood that in the normal course of our work, disturbance could occur (e.g., rutting from tires, muddying the ground surface, etc.). Our Scope of Services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, or repair of/damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our Scope of Services.

Borings will be backfilled with auger cuttings after their completion. Pavement penetrations created by our exploration crew will be patched with sack-mixed concrete. Our services do not include repair of the site beyond backfilling our boreholes and patching pavement penetrations. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period of time, we recommend the boreholes be checked periodically and backfilled if necessary. We can provide this service or grout the holes for additional fees at your request.

**Safety:** Terracon is currently not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require excavations into the subsurface, therefore Terracon will comply with local regulations to request a utility location service through Iowa One-Call. We will consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based on the results of this consultation, we will consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Private utilities should be marked by the owner/client prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities not disclosed to us. If the owner/client is unable to accurately locate private utilities, Terracon can assist the owner/client by coordinating or subcontracting with a private utility locating service. Fees associated with the additional services are not included in our current Scope of Services and will be forwarded to our client for approval prior to initiating. The detection of underground utilities is dependent on the

composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

## Laboratory Testing

The project engineer will review field data and assign various laboratory tests to better understand select engineering properties of various soil strata. Laboratory testing for this project is proposed to consist of:

Test Description	Number of Tests Included
Water Content	Each sample
Unit Weight	Each intact thin-walled tube sample
Unconfined Compression Strength	Each intact thin-walled tube sample
Atterberg Limits	Up to 2

Our laboratory testing program includes examination of soil samples. Based on the material's texture and plasticity, we describe and classify soil samples in general accordance with the Unified Soil Classification System (USCS).

## Engineering and Project Delivery

Results of our field and laboratory programs will be reviewed by a professional engineer. The engineer will develop a geotechnical site characterization and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our **GeoReport®** system. Upon initiation, we will provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule, and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration and preliminary recommendations
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When services are complete, we will upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration, and the report are maintained in our system. This

allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil description
- Groundwater levels observed during, after, and up to 24 hours after the completion of drilling
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Earthwork construction, including:
  - Site preparation
  - Considerations for existing fill soils
  - Shrink-swell soil design considerations, if applicable
  - Structural fill material types, including suitability of on-site soils
  - Structural fill compaction criteria
  - Excavation considerations
  - Dewatering considerations (if applicable)
- Shallow foundation design and construction recommendations, including:
  - Allowable bearing pressure and lateral resistance
  - Suitable bearing materials and anticipated depths
  - Frost protection depth
  - Estimated total and differential settlement
  - Corrections for unsuitable bearing conditions
- Floor slab support
  - Aggregate base recommendation
  - Subgrade support characteristics and preparation recommendations for grade supported floor slabs
- Pavements
  - Subgrade preparation recommendations for pavements
  - Subsurface drainage recommendations for pavements
- Estimated seismic site classification

### **Additional Services**

In addition to the basic services noted above, the following services are often associated with geotechnical engineering services. Fees for the services noted above do not include the following:

**Review of Plans and Specifications:** Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of the project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation and pavement construction. Our review will include a written statement conveying our opinions relating to the plans and specifications' consistency with our geotechnical engineering recommendations.

**Observation and Testing of Pertinent Construction Materials:** Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. This is based on widely spaced exploration locations, and assuming construction methods will be performed in a manner sufficient to meet our expectations, and is consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated materials testing, for site preparation, foundation, and pavement construction. This allows a more comprehensive understanding of subsurface conditions and necessary documentation of construction, to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers.

**Perform Environmental Assessments:** Our scope for this project does not include, either specifically or by implication, an environmental assessment of the site intended to identify or quantify potential site contaminants. If the client/owner is concerned about the potential for such conditions and/or contamination, an environmental site assessment should be conducted. We can provide a proposal for an environmental assessment, if desired.

## EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

### Compensation

Based on our understanding of the site, the project as summarized in Exhibit A, and our planned Scope of Services outlined in Exhibit B, our base fee is:

Task	Lump Sum Fee
Field Exploration, Laboratory Testing, Engineering and Project Delivery	\$4,200

Additional services not part of the base fee include the following:

Additional Services (see Exhibit B)	Lump Sum Fee	Initial for Authorization
Private Utility Locate	Cost +15% (Est. \$500)	

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require Scope of Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified Scope of Services as well as its effect on our fee will be prepared. We will not proceed without your authorization.

### Project Schedule

We developed a schedule to complete the Scope of Services based on our existing availability. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

Project Milestones and <i>GeoReport</i> <sup>®</sup> Delivery	Time Frame <sup>1</sup>
Notice to Proceed (NTP)	---
Project Planning	Posted within 3 business days after NTP
Field Exploration	Drill dates and times will be coordinated with client and library 1 day on-site for soil borings
Site Characterization	Posted within 10 business days after completing Field Exploration services

<b>Project Milestones and GeoReport® Delivery</b>	<b>Time Frame <sup>1</sup></b>
Geotechnical Engineering	Report posted within 5 business days after the Site Characterization Stage

- Upon receipt of your notice to proceed we will activate the schedule component of our **GeoReport®** website with specific, anticipated calendar dates for the delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc. We will maintain a current calendar of activities within our **GeoReport®** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.

**EXHIBIT D – SITE LOCATION**

Bondurant Public Library Additions ■ Bondurant, Iowa  
March 24, 2020 ■ Terracon Proposal No. P08205087

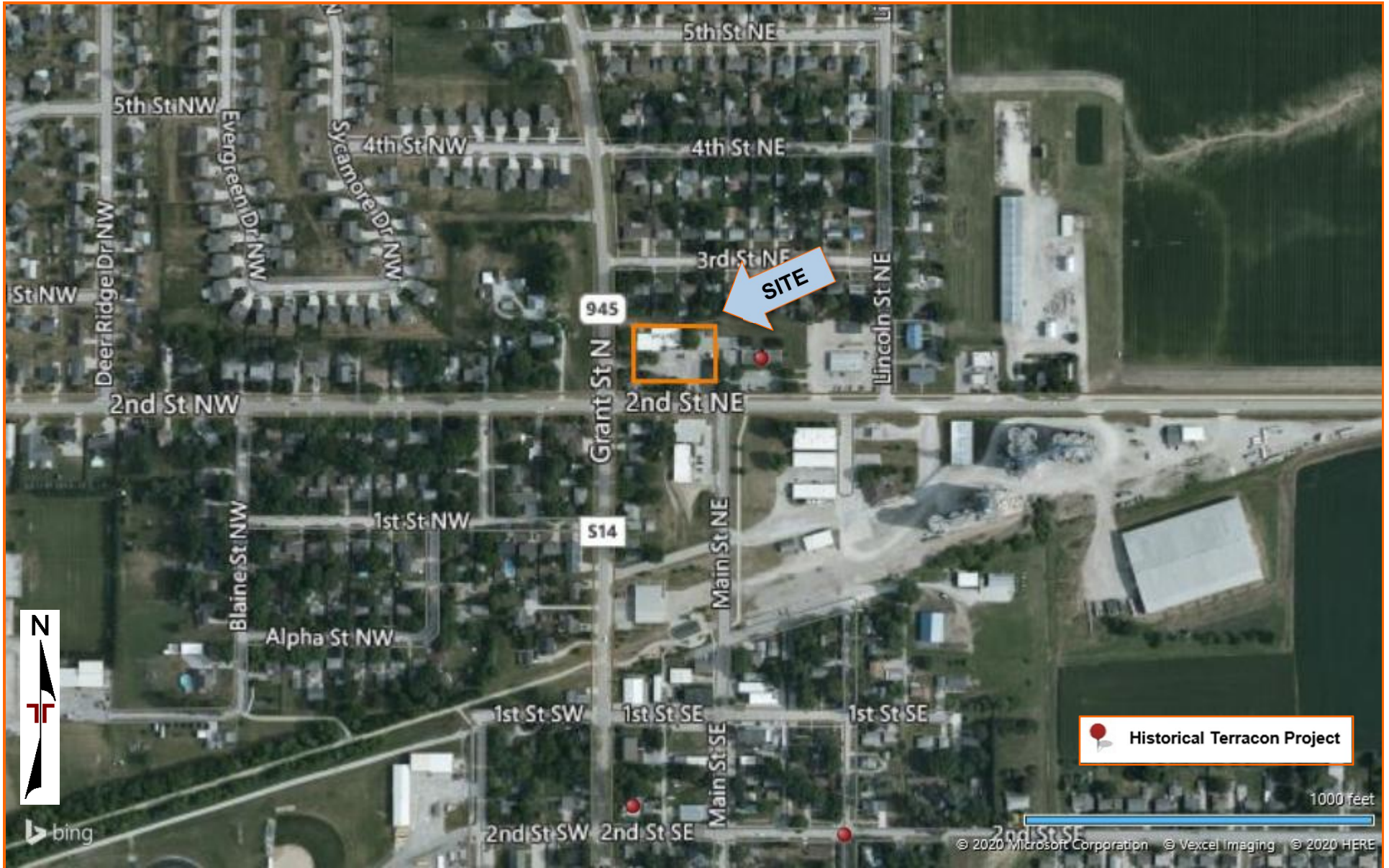


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

**EXHIBIT E – ANTICIPATED EXPLORATION PLAN**

Bondurant Public Library Additions ■ Bondurant, Iowa

March 24, 2020 ■ Terracon Proposal No. P08205087

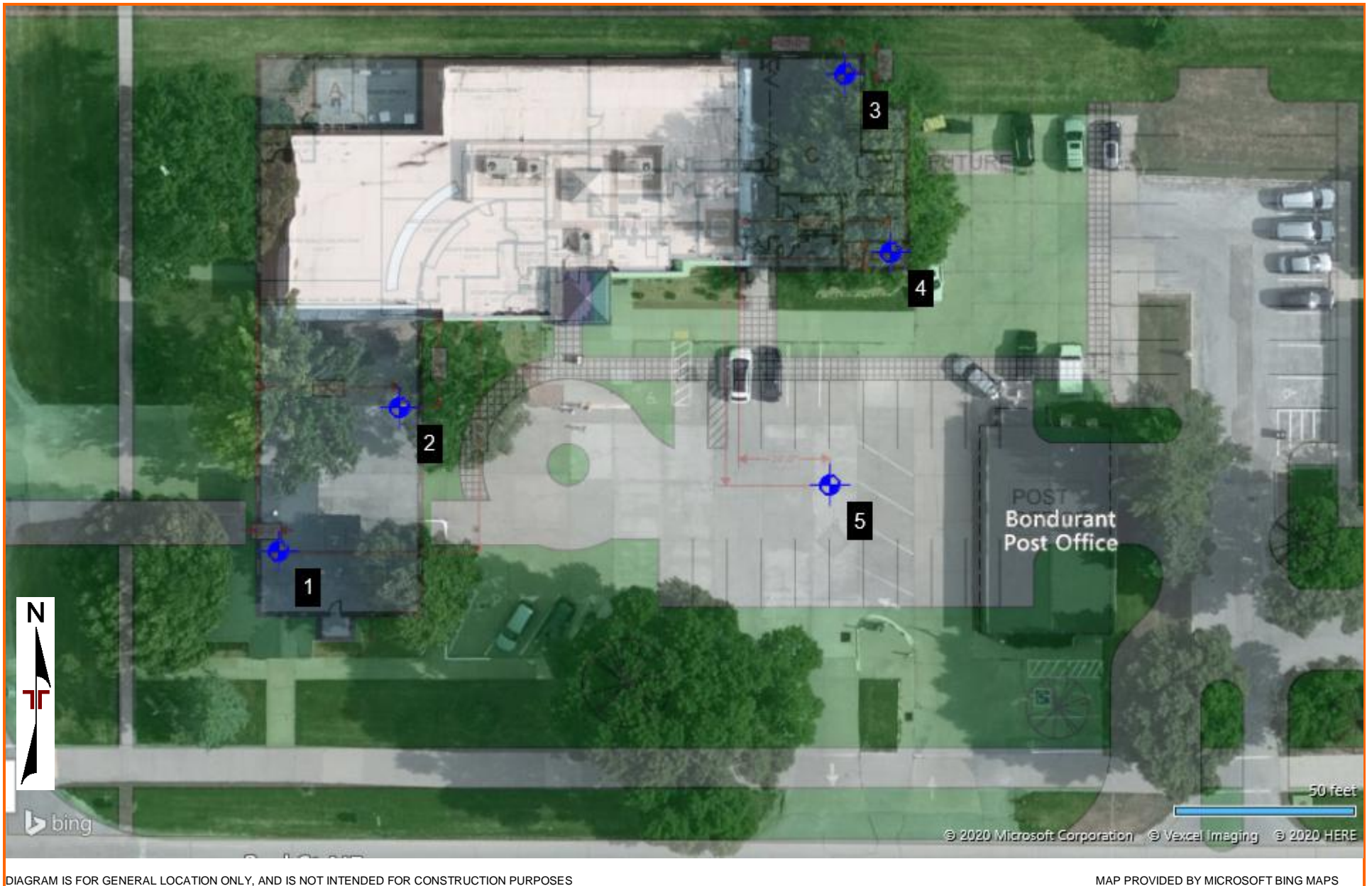


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

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