

**Donald Bohning
& Associates**

7979 Hub Parkway
Valley View, Ohio 44125

T 216.642.1130

F 216.642.1132

May 26, 2020

City of Parma
6611 Ridge Road
Parma, Ohio 44129

ATTENTION: Paul W. Deichmann, P.E.
City Engineer & Building Commissioner

**RE: 7257-7265 & 7335-7339 Meadow Lane Storm Sewer Outfall Repairs,
and Meadow / Sherwood Area Storm Drainage Improvements Project
Scope of Work & Engineering Service Proposal**

Dear Mr. Deichmann:

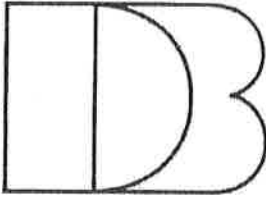
At the request of the City of Parma, please accept the following Scope of Work and Engineering Service Proposal for the above referenced drainage system improvement project. Attached is an outline of potential work scope as determined by the City, and associated service proposal for Parma's consideration and authorization. Proposals from our sub-consultants, CTL Engineering, Inc. (geotechnical consultant) and Chagrin Valley Engineering, Ltd. (environmental consultant) are also attached for your information.

Don Bohning & Associates has previously performed design services for the City of Parma for the two indicated Meadow Lane outfall repair sites under our previous Engineering Services Proposal dated February 27, 2015. A summary of our invoicing for these sites under the previous authorization, totaling \$31,041.10, can be provided upon request. This new proposal incorporates services to complete the outfall repair plans and specifications, as well as additional services for drainage system improvements in the Meadow Lane / Sherwood Drive area and corresponding adjusted project scope, as directed by the Parma Engineering Department.

This proposal does not include any supplementary services (e.g., additional environmental assessments, reports, applications, or design modifications) related to any potential project funding that the City may or may not pursue.

Donald G. Bohning & Associates, Inc. shall perform the described services on a per task basis for a total fee not to exceed the total shown. Contingent tasks will be performed only if needed and as authorized by the Engineering Department. Our engineering services will be billed monthly on a percent complete basis per task. As requested, an amount is included for Construction Phase Services if needed; this task would be invoiced at our current hourly rates. All application and review fees (if any) are the responsibility of the City of Parma.





**Donald Bohning
& Associates**

7979 Hub Parkway
Valley View, Ohio 44125

T 216.642.1130

F 216.642.1132

Additional services, if requested, will be performed by Don Bohning & Associates per the current hourly rate schedule (2020 schedule attached for reference).

We appreciate the opportunity to provide this proposal and look forward to continuing to work with the City of Parma to bring this important project to a successful completion. If you have any questions or need additional information, don't hesitate to contact me.

Sincerely,

DONALD G. BOHNING & ASSOCIATES, INC.

David M. Gracon

Encl.

M:\adccaddp\4290-8\Documents\Parma Proposals\May 2020\Meadow-Sherwood Cover Letter 2020-05-26.docx

AUTHORIZATION TO PROCEED

Total Fee Authorized

\$ _____

Paul W. Deichmann, P.E.

Date

**Scope of Work & Engineering Service Proposal For:
7257-7265 Meadow Lane ("Meadow North")
& 7335-7339 Meadow Lane ("Meadow South")
Storm Sewer Outfall Repairs, and
Meadow / Sherwood Area Storm Drainage Improvements Project**

At the Meadow North and Meadow South sites, the headwall and a length of storm sewer outfall pipe have become dislodged. This project scope of work is based on the design solution of repairing each outfall by removing and replacing the failed sections of storm sewer and slightly extending the sewer in its current location. In addition, previous investigations have identified improvements to the public storm drainage system in the vicinity of each outfall which could reduce the incidence of flooding. The City of Parma has chosen to implement a number of these improvements (e.g., increasing storm conduit size, adding inlet structures, and re-grading of flow corridors).

As requested, we are also offering an expanded scope of services to identify, evaluate and provide plans for improvements to the existing drainage system in the Meadow Lane / Sherwood Drive area, which could reduce the incidence of flooding in that area. Potential improvements include re-configuring storm sewers / junction structures to improve hydraulics, installing relief sewers, adding inlet structures, and re-grading flow corridors.

A public easement currently exists for each storm sewer outfall. However, right-of-entry agreements or temporary access easements adjacent to the work area and/or expanded permanent easements will be required for the proposed repair projects. Access to the Meadow North site via the existing easement is between homes approximately 20' apart, with the back yard of #7265 currently enclosed by fencing and having extensive landscaping that impedes access. Access to the Meadow South site via the existing easement is also between homes approximately 20' apart, with side and back yards currently enclosed by fencing and having extensive trees and shrubs that impede access. For construction of the project, the public sewer easement access corridors will need to be cleared, including removal of landscaping features and fence removal and replacement at the time of construction.

It is anticipated that many of the Meadow / Sherwood area storm drainage improvements would be located within the public street Rights-of-Way. However, some of these improvements may require right-of-entry agreements or temporary access easements adjacent to the work area. Other improvements which may be implemented on private property would require right-of-entry agreements or temporary access easements adjacent to the work area and/or acquisition of permanent easements.

Construction cost for the combined outfall repair and storm drainage improvement project is anticipated to be in the range of \$675,000-\$750,000.

This proposal and estimated construction cost are based on the potential public drainage system improvements listed in Task 1A below. Design and construction costs may increase if other potential improvement(s) are identified in the Meadow / Sherwood area and are selected by the City for implementation.

Task 1: Preliminary Investigation and Design

(Services previously completed for the Meadow North & South sites)

- Don Bohning & Assoc. has previously completed preliminary investigation and design for the Meadow North & Meadow South outfall repair sites, including:
 - Resident notification services.
 - Obtaining record utility and property information.
 - Existing conditions survey.
 - Base mapping and preliminary alignments of the repair alternative at each site.
 - Additional analysis of the storm drainage system in the vicinity of each site, including overland flow corridors.
 - Identification and evaluation of alternatives for storm drainage system improvements which could reduce the incidence of flooding in the area of each site.
 - Preliminary design concept and estimated construction cost for each outfall repair site.
- On-site review to verify current conditions at each outfall repair site. If significant changed conditions exist, Don Bohning & Assoc. will consult with Parma to determine extent of additional services required and whether to utilize the project design contingency for these additional services or provide an amendment to this service proposal.

Task 1A: Preliminary Investigation and Design

(Services to be completed for the Meadow / Sherwood area)

- Prepare and supply Parma letters informing abutting residents and Cleveland Metroparks, if applicable, of the proposed project and upcoming investigations. Parma to approve and forward letters on Parma letterhead.
- Contact the Ohio Utilities Protection Service to obtain private utility records.
- Obtain available record plat and deed information from the Cuyahoga County Recorder's Office.
- Don Bohning & Assoc. survey crews will access the area to:
 - Establish roadway centerline and Right-of-way.
 - Field collect relevant information regarding the Meadow Lane / Sherwood Drive area including ground, house floor, top of casting and invert elevations, and pipe sizes.
 - Field collect ground characteristics of access easement and right-of-way (construction staging) areas.
 - Set temporary bench marks for use during construction.
 - Locate existing utilities as depicted on utility plans and visually apparent.
- Analysis of the existing storm drainage system in the Meadow Lane / Sherwood Drive area:
 - Review of available subdivision plans, storm sewer schematic maps, video sewer inspections, historic flood records, and other information regarding the study area as provided by the Cuyahoga County Engineer or City of Parma.
 - Determination of sewer system drainage areas, overland flow drainage area, and present storm sewer capacities.
 - Examination and evaluation of overland flow corridors.

- Identify and evaluate alternatives for storm drainage system improvements which could reduce the incidence of flooding in the Meadow Lane / Sherwood Drive area, for example:
 - Installing a storm sewer north to Dentzler Road and continuing west approximately 300' to an existing 48" diameter storm sewer outfall, -or-
 - Installing a storm sewer south to the 7231/7245 property line and continuing east and discharging to the existing drainageway.
 - Re-configuring storm sewers / junction structures to improve hydraulics
 - Adding or modifying inlet structures
 - Re-grading of flow corridors
 - Potential modifications by private property owners
- Develop base mapping and preliminary alignments of the preferred alternative(s).
- Provide design concept for improvements to the public drainage system and preliminary level anticipated range of construction cost to Parma for their review and authorization to develop Final Engineering Plans and Documents.

Task 2: Geotechnical Investigation

- CTL Engineering Inc. has previously completed subsurface investigations for the Meadow North and Meadow South sites.
- To assist in preliminary evaluation of the potential new storm sewer route north to Dentzler Road and continuing west to the existing 48" storm outfall, CTL will conduct three (3) exploratory borings within the public Right-of-way to classify the subsurface conditions, and will provide recommendations for construction activities.
- CTL will take precautions to minimize and avoid disturbance / damage by the boring operation, and will perform traffic control as required.
- CTL proposal attached.

Task 3: US Army Corps Permitting

- Due to the filling of the eroded areas and proposed sewer pipe extension at each outfall repair site, it is anticipated that the project will require an Army Corps Permit for impacts to jurisdictional waterways. Such work will require a qualified Environmental Consultant to complete the application. Chagrin Valley Engineering, Ltd. (CVE) has previously performed evaluations for the Meadow North and Meadow South sites and will provide documentation for the required permitting.
- To assist in preliminary evaluation of the potential new storm sewer outfall between 7231 & 7245 Meadow Lane, CVE will also perform a preliminary wetland assessment of the sewer route to visually determine if wetlands are present. If the route is selected for construction, CVE will complete a delineation and additional documentation as needed for permitting any wetland impacts (contingent task).
- CVE proposal attached.
- Don Bohning & Assoc. will coordinate and include cost for preparation of exhibits to be included with the Army Corps Permit application.

Task 4: Easement and Right of Entry Acquisition

- Upon preliminary alignment approval by the City, prepare temporary rights of access documents for construction, staging and access areas. All ownership information being based on available records at the Cuyahoga County Fiscal Officer and Recorders Office web sites.
- If required, prepare legal descriptions and exhibits as required for use in obtaining permanent easements (contingent task).
- Prepare easement and/or right of access documents based on standard language and format (e.g., Cuyahoga County standard) as approved by the City of Parma.
- If required, attend one (1) meeting with the City of Parma and residents of which access has been requested to discuss the project and attempt to obtain easement signatures (contingent task). All negotiations beyond this initial meeting and for any compensation for easements will be solely the responsibility of the City.
- All easement and/or right of access documents will be submitted to Parma for their processing, acceptance by City Council, and recording with the Cuyahoga County Recorder's office as applicable.

Task 5: Final Design

(Services previously partially completed for the Meadow North & South sites)

- Don Bohning & Assoc. has previously partially completed final design for the Meadow North & Meadow South outfall repair sites, including upon authorization by Parma, developing final construction plans and developing all specifications required to:
 - At each outfall repair site, remove and replace the failed section of storm sewer, extend the sewer approximately 20' to 30' with the use of manhole(s) to step the sewer down to and align it with the receiving channel, and install a new concrete headwall or end section.
- Finalize construction plans and specifications for each outfall repair site.
- Submit completed plans to Cleveland Water Department, Northeast Ohio Regional Sewer District, and Cleveland Metroparks, as applicable, and address any review comments.
- Submit completed plans to private utility companies for notification of the proposed project and with a request to evaluate any impacts to their facilities. All further communication with the respective utility owners to coordinate the project work is the responsibility of the City of Parma.
- Provide a summary of bid items and a final Engineer's Estimated Cost for the construction of the project.
- Prepare contract documents using the standard template provided by the City of Parma along with an example document; Don Bohning & Assoc. to perform cursory review of the template to verify no apparent conflicts exist with the design plans.
- Provide fifteen (15) full size sets of plans on bond paper, along with fifteen (15) copies of the contract documents for the City's use in advertising for and bidding the project. An electronic copy of the final approved plans will also be included.

Task 5A: Final Design

(Services to be completed for the Meadow / Sherwood area)

- Upon Authorization by Parma, develop final construction plans and develop all specifications required to:
 - Implement improvements to the public drainage system in the Meadow Lane / Sherwood Drive area (e.g., installing new storm sewer(s), re-configuring storm sewers / junction structures, adding or modifying inlet structures, and/or re-grading of flow corridors).
 - Such plans and specifications to be incorporated into the outfall repair project plans as outlined in Task 5 above.
- Include the proposed drainage system improvement work in the submittals to public agencies and private utility companies.
- Incorporate the drainage system improvement work into the outfall repair project summary of bid items, final Engineer's Estimated Cost, and contract documents.

Task 6: Project Bidding

- Provide continuous engineering support during the bidding process, which will include attendance at a pre-bid meeting, prepare addendums as needed, answer questions during the bidding process and attend the public bid opening at the location directed.
- This task is based on bidding the project one time only.

Task 7: Construction Phase Services

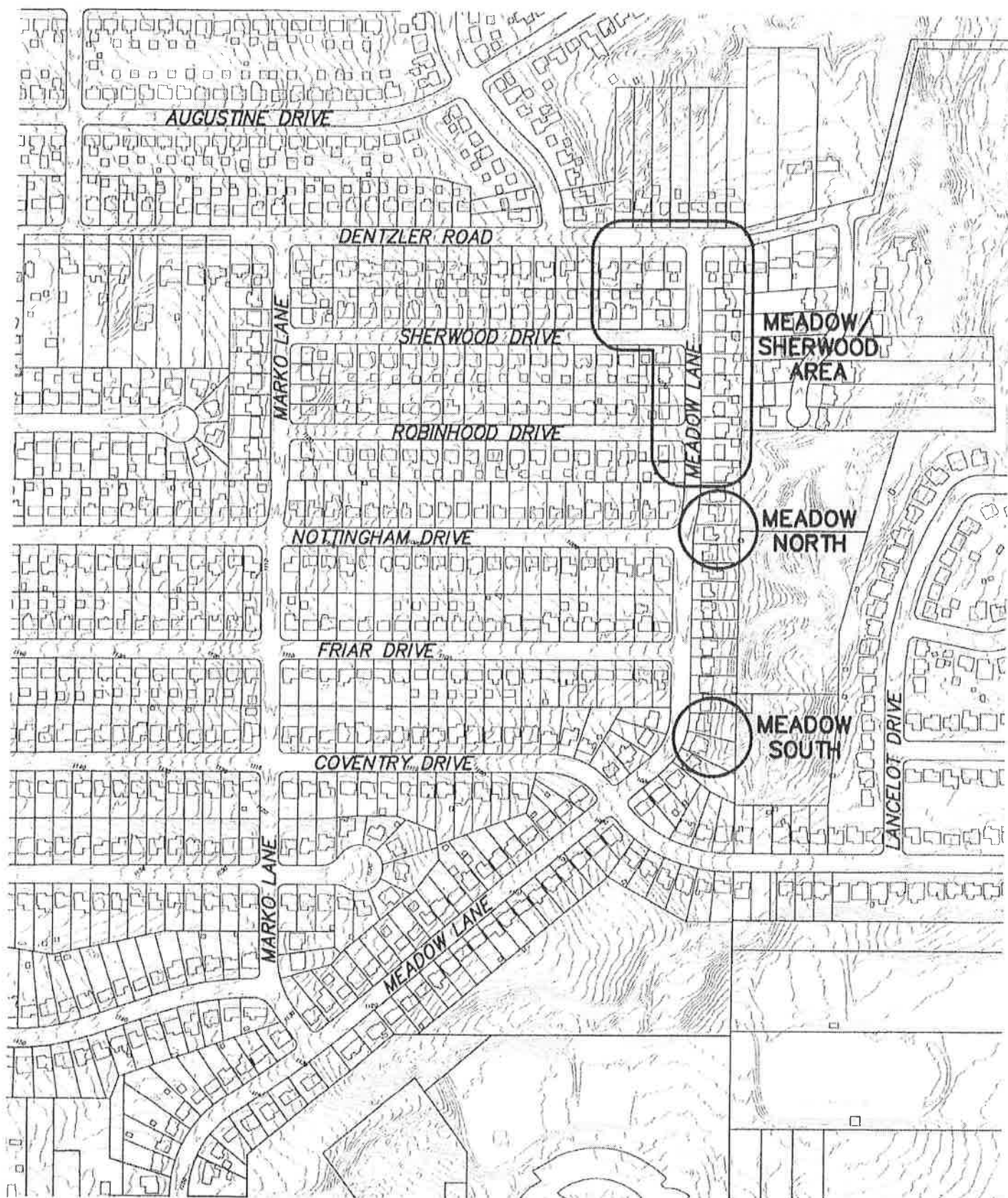
- Provide engineering support services on an as-needed basis during the project construction, at the direction of the City. This will include attendance at a pre-construction meeting, site visits, review contractor's submittals / shop drawings for plan conformance, communicate with private property owners and/or utility companies, answer questions during construction, review requests for information from the City's contractor and/or construction administration / inspection services firm, advise the City on cost or construction issues, and prepare minor plan revisions and addendums.
- Clarifications and/or support of design intent for the project improvement plans by Don Bohning & Associates are included in the fee for Task 5: Final Design, and such services will not be invoiced to the City as construction phase services.
- Construction phase services will be performed and invoiced by Don Bohning & Associates per the current hourly rate schedule (2020 schedule attached for reference). An estimated allowance amount has been included in this service proposal for budgetary purposes.

Reimbursables

- Reimbursable expenses include, but are not limited to: express mail, delivery services and prints at cost beyond what is identified in the proposal.
- Reimbursables will be invoiced to the City by Don Bohning & Associates at cost. An estimated allowance amount has been included in this service proposal for budgetary purposes.

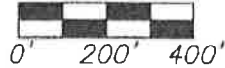
Fee Schedule

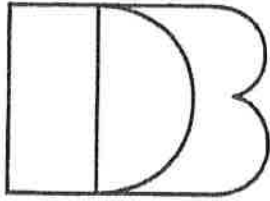
	<u>Totals</u>
Tasks 1 & 1A – Preliminary Investigation and Design	\$ 11,377.00
Task 2 – Geotechnical Investigation	\$ 4,565.00
a) Subconsultant Base Fee	\$3,650.00
b) Traffic Control Contingency (if required)	\$500.00
c) 10% Administration & Coordination Fee	\$415.00
Task 3 – US Army Corps Permitting	\$ 7,250.00
a) Subconsultant Base Fee	\$5,656.00
b) Delineation Contingency (if required)	\$935.00
c) 10% Administration & Coordination Fee	\$659.00
Task 4 – Easement and Right of Entry Acquisition	\$ 2,676.00
a) Right of Entry Base Fee	\$1,535.00
b) Easement Contingencies (if required)	\$1,141.00
Tasks 5 & 5A – Final Design	\$ 23,295.00
Task 6 – Project Bidding	\$ 788.00
10% Project Design Contingency (if required)	<u>\$ 4,995.00</u>
Total Engineering Fee (including contingencies)	\$ 54,946.00
Task 7 – Construction Phase Services (if needed)	\$ 3,500.00
Reimbursables (if needed)	<u>\$ 500.00</u>
Total Fee (including if needed services)	\$ 58,946.00



VICINITY MAP

GRAPHIC SCALE





**Donald Bohning
& Associates**
7979 Hub Parkway
Valley View, Ohio 44125
T 216.642.1130
F 216.642.1132

SCHEDULE OF HOURLY RATES - 2020

Principal Engineer-----	\$106.50
Project Coordinator-----	\$100.50
Registered Engineer Registered Surveyor-----	\$ 98.50
Senior Designer Party Chief-----	\$ 91.25
Senior C.A.D. Technician-----	\$ 88.25
C.A.D. Technician-----	\$ 79.50
Designer-----	\$ 70.50
Construction Observer-----	\$ 51.50
Assistant; Clerical-----	\$ 51.50
One-Man Field Crew-----	\$113.75
Two-Man Field Crew-----	\$157.50
Materials and services of others-----	At Cost *

* Note: An additional 10% fee is applied to all sub-consultant professional services.

May 15, 2020

Donald G. Bohning & Associates
7979 Hub Parkway
Valley View, Ohio 44125

Attention: Mr. David Gracon, P.E.

Reference: Proposal for Geotechnical Engineering
Meadow Lane & Dentzler Road -- Storm Sewer
Parma, Cuyahoga County, Ohio

CTL Proposal No. 20050036CLE-P

Mr. Gracon:

In response to your request, CTL Engineering, Inc. is pleased to submit this proposal for Geotechnical Investigation services for the referenced project.

PROJECT DESCRIPTION AND SCOPE OF WORK

The project consists of installing a storm sewer about 20 feet deep progressing from the Sherwood / Meadow Lane intersection about 300' north to Dentzler Road, and then west along Dentzler another 300' to tie into a large existing sewer.

CTL plans to advance three (3) soil borings about 20 to 25 feet deep along the proposed alignment within the right of way. The borings will be advanced to the designated depths or rock refusal whichever occurs first. At one of the boring CTL will extract a 5 to 10-foot rock core.

Based on the collected soil data, CTL will provide recommendations for trench excavation, side support, pipe and substructures support, and backfill requirements.

PROCEDURES

CTL services will include the following items:

- A. Mark the soil boring locations and obtain their surface elevations using topo maps.
- B. Contact Ohio Utility Protection Services (OUPS) to locate underground utilities. Borings, which are in the area of utilities will be offset and noted on the site plan.
- C. Drill the test borings in the proposed area.

- D. Field and laboratory testing in accordance with ASTM specifications.
- E. Engineering evaluation and reporting to include:
 - 1. General description of site.
 - 2. Boring logs and soil profile to include:
 - (a) Surface elevation at each test boring location.
 - (b) Thickness of topsoil fills and subsoil strata.
 - (c) Groundwater encountered during drilling, and at completion.
 - (d) Standard penetration and moisture content as a function of depth.
 - 3. Existing subsurface conditions.
 - 4. Groundwater management recommendations.
 - 5. Recommendations for excavation and backfill.
 - 6. Recommendation for pipe and manhole support.

COST ESTIMATE

CTL has previously performed subsurface investigation for two storms outfall repair sites at 7257-7265 Meadow North Ln and 7335-7339 Meadow South Ln. for a budget of \$7,000.00

The cost to perform the additional services under this proposal is as follow:

Soil Borings & Samplings:	\$1,800.00
Traffic Control:	\$500.00 (If Required)
Laboratory Soil Testing:	\$500.00
Engineering Reporting:	<u>\$1,350.00</u>
Estimated Total:	\$4,150.00

CONTINGENCIES

This proposal does not include the costs incurred due to any unforeseen conditions. Whenever the actual amount of work will exceed the estimated quantity, the client will be notified and authorization will be obtained, prior to CTL performing additional work. In addition, this information is proprietary and confidential and CTL assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than City of Parma and their Representatives.

SCHEDULE

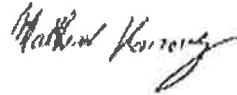
CTL can start the drilling within 5 to 7 working days of authorization. The final report will be submitted within 15 to 20 working days of authorization.



CLOSING

CTL is committed to provide comprehensive and quality services to its clients, and is confident that our services are commensurate with your professional expectations. We sincerely appreciate the opportunity to provide this cost proposal and look forward to working with you. Should you have any questions, please feel free to contact me at (330) 220-8900.

Respectfully submitted,
CTL ENGINEERING, INC.



H. Matthew Kairouz, P.E.
Project Engineer



May 18, 2020

Mr. David M. Gracon
Donald G. Bohning & Associates
7979 Hub Parkway
Valley View, Ohio 44125

Re: Environmental Consulting Proposal
Meadow North & Meadow South Storm Sewer Outfall Repairs
Meadow / Sherwood Area Storm Drainage Improvements Project
Parma, Ohio

Dear Mr. Gracon:

Chagrin Valley Engineering, Ltd. (CVE) would be pleased to provide environmental consulting services for the city of Parma's Meadow Lane outfall repair and sewer line projects. Work on the delineation and Army Corps permit applications commenced in the fall of 2015 and was later placed on hold in 2016. At that time, the environmental services were 65 percent complete and CVE invoiced \$3,198.00 for work at the Meadow Lane outfall repair sites.

The services completed consisted of the delineation fieldwork, headwater stream quality analyses (HHEIs), draft maps, draft report, and photograph log. Because the data was collected almost five years ago and the report contains information on the five original outfall repair sites, a new report with only the following addresses shall be prepared:

- 7257-7265 Meadow Lane (Outfall repair)
- 7335-7339 Meadow Lane (Outfall repair)
- 7231-7245 Meadow Lane (New Sewer Line – *Optional Route*)

SCOPE OF WORK

TASK 1 – PRELIMINARY WETLAND ASSESSMENT (OPTIONAL ROUTE)

Assess the optional route for the new sewer line located between 7231-7245 Meadow Lane to visually determine if wetlands are present. Forward our findings and recommendations to you and the City Engineer in an email.

TASK 2 – OPTIONAL ROUTE DELINEATION (CONTINGENT TASK)

Should wetlands be identified in Task 1 and the new sewer route option is selected for construction, CVE shall delineate the optional sewer line route between 7231-7245 Meadow Lane and score the quality of the wetland using the Ohio Rapid Assessment Method (ORAM) for wetlands classification procedure. This project shall be added to the Army Corps permit application (Task 4).



TASK 3 – WETLAND DELINEATION REPORT

Inspect both Meadow Lane outfall repair sites to check the existing conditions and update the wetland delineation report and photograph log – add the Optional Route to the report if wetlands are identified in Tasks 1 and 2.

TASK 4 – ARMY CORPS PERMIT APPLICATION

Prepare the Army Corps permit application describing the projects' purpose, proposed stream impacts, avoidance & minimization measures, HHEI / ORAM results discussion, and conduct an endangered species review and cultural resource records search.

SCHEDULE AND PERFORMANCE

Task 1 will be completed within one (1) week from receipt of your notice to proceed. Tasks 2, 3, and 4 will be completed within three (3) weeks from receipt of project plans from DGB.

Once submitted, NWP's are typically processed and issued by the Army Corps within 45 days. However, this timeframe is dependent on their project workload, the results of the cultural resource records reviews, and the Ohio EPA's timeframe to review and verify the HHEI / ORAM results.

COST

The lump sum costs to complete Tasks 1 – 4 are as follows:

- Task 1 (Wetland Assessment / Optional Route) -- \$425.00
- Task 2 (Optional Route Delineation / ORAM) -- \$935.00 (*Contingent on Task 1*)
- Task 3 (Wetland Delineation Report / Update) -- \$1,275.00
- Task 4 (Army Corps Permit Application) -- \$3,956.00

Terms are net 30 with a one and one-half percent interest rate on any outstanding balance. Payment is required upon submission of the Army Corps permit application package.

We look forward to working with you and the City on this important project. If this proposal is acceptable, please sign in the space provided and return one copy to us. Please call us if you have any questions or concerns.

Respectfully submitted,

CHAGRIN VALLEY ENGINEERING, LTD.

Lawrence N. Ludwig

Accepted by: _____ Date: _____
Authorized Signature