



December 14, 2021

Mr. Scott A. Ringler, P.E. LEEP-AP
Partner
Giffels Webster
1025 E. Maple, Suite 100
Birmingham, Michigan 48009

RE: Proposal for Geotechnical Pavement Investigation
Lathrup Village Alley Reconstruction
Lathrup Village, Michigan
G2 Proposal No. 210903

Dear Mr. Ringler:

This letter will serve as our proposal and agreement to provide a geotechnical pavement investigation for the proposed rehabilitation/reconstruction of the pavements within select alleys within the Village of Lathrup, Michigan. The existing pavements consist of bituminous concrete. The age of the pavements or traffic counts within the alleys were not available at the time of this proposal.

The purpose of our investigation is to determine and evaluate the general pavement and subsurface conditions within the existing pavements develop general recommendations for the proposed pavement rehabilitation/reconstruction. Our proposal has been prepared based on our conversation, the existing site plan, and our experience with numerous other pavement evaluations.

SCOPE OF SERVICES

A licensed professional engineer acting as a Project Manager will direct the investigation. Our scope of services will consist of the following:

1. G2 Consulting Group, LLC will contact the local utility locating company "MISS DIG". It should be noted that "MISS DIG" requires a minimum of 72 hours to locate utilities. Private utilities are not located by "MISS DIG". Therefore, any information you have pertaining to private utilities should be forwarded to us prior to drilling operations commencing. We will use reasonable care to avoid underground utilities, however, G2 will not be responsible for any damage to utilities not marked or incorrectly marked. Also, any special access issues regarding the site should be provided to G2 prior to commencement of our on-site work.
2. We will determine the pavement core locations by measuring from existing site features using conventional taping methods.
3. We will perform a visual condition survey within the alley ways to determine the extent, quantity, and severity of the existing pavement distress. We will also visually review drainage conditions.
4. As directed, we will perform thirty (30) pavement cores/hand-auger soil borings, extending to a depth of 3 feet each. Coring will be performed using an electric rotary coring rig with a diamond-tipped core barrel. The pavement will be cored with a 4-inch diameter core barrel. The existing pavement material types and thicknesses will be recorded. Bag samples of any underlying aggregate base materials, if present, will also be obtained. The aggregate base thicknesses will be recorded.

g2consultinggroup.com

Headquarters	1866 Woodslee St	Troy, MI 48083	P 248.680.0400	F 248.680.9745
Ann Arbor	1350 Eisenhower Pl	Ann Arbor, MI 48108	P 734.390.9330	F 734.390.9331
Chicagoland	1186 Heather Dr	Lake Zurich, IL 60047	P 847.353.8740	F 847.353.8742



During hand-auger boring operations, DCP testing will be performed at 2-feet to evaluate the relative density of the in-situ soils. The hand-auger borings will be backfilled with on-site soils and the cores will be cemented in place or patched with cold patch within asphalt pavement areas. Select cores will be retained for laboratory evaluation. It should be understood that some settlement of the borehole fill may occur and no future maintenance of the holes is included in our fee.

5. We will perform laboratory testing to determine the physical characteristics of the subsurface soils. The testing program may include, as appropriate, determination of the unconfined compressive strength, natural moisture content, grain-size distribution, Atterberg limits, and soil classification in accordance with the Unified Soil Classification System.
6. We will prepare an engineering report summarizing our findings and presenting evaluations, conclusions, and recommendations about the following items:
 - Visual reconnaissance of the existing pavement surface, including type and severity of primary distress and surface drainage conditions.
 - Existing pavement cross-section materials and thicknesses.
 - Suitability of existing aggregate base course for re-use.
 - Recommendations for pavement reconstruction, including asphalt or Portland cement concrete design pavement cross-sections based on AASHTO design procedures.
 - Recommendations for maintenance of rehabilitated pavements, including crack sealing
 - Other conditions which may impact the proposed pavement rehabilitation.

PROFESSIONAL FEES

We propose to perform the services outlined in this proposal for a lump sum fee of **\$6,100**. Should you or field conditions require additional work beyond the scope outlined in this proposal, we would contact your office with an estimate and obtain your permission prior to performing such services. Charges for additional services will be based on the attached Fee and Rate Schedule.

PROJECT SCHEDULE

Pavement coring operations can be scheduled once frost is out of the ground in Spring of 2022 following notice to proceed from the client and utility clearance through the MISS DIG network. Fieldwork is expected to take two days, if weather and/or site conditions permit. The engineering report will be available within approximately ten working days following completion of the drilling operations. Preliminary verbal recommendations should be available within several days after completion of the drilling operations. We will provide an electronic copy of the geotechnical report. Hard copies are available upon request.

TERMS AND CONDITIONS

General conditions relating to the performance of our services are presented in the attached General Conditions and are made part of this proposal. As authorization to proceed, please have one copy of this proposal executed by an authorized representative of the party responsible for payment of services and return it to G2 Consulting Group, LLC.



We appreciate the opportunity to be of service to you and look forward to working with you. If you have any questions regarding our proposed scope of services or any other matter pertaining to the pavement investigation, please do not hesitate to call.

Sincerely,

G2 Consulting Group, LLC

A handwritten signature in black ink that reads "Jeffrey M. Hayball".

Jeffrey M. Hayball, P.E.
Project Engineer

A handwritten signature in blue ink that reads "Jason B. Stoops".

Jason B. Stoops, P.E.
Associate / Project Manager

JMH/JBS/jbs

Encl: Fee Schedule
General Conditions

ACCEPTED FOR GIFFELS WEBSTER:

BY: _____

DATE: _____



CONSULTING GROUP

FEE AND RATE SCHEDULE PROFESSIONAL SERVICES

PERSONNEL

Fees for our services will be based upon the time worked on the project by professional, technical, and clerical personnel according to the following schedule:

Table with 2 columns: Personnel Role and Rate. Roles include Principal (\$175.00), Project Consultant (\$160.00), Project Manager (\$150.00), Senior Project Engineer (\$125.00), Project Engineer (\$120.00), Senior Environmental Scientist (\$120.00), Senior Staff Engineer (\$115.00), Staff Engineer (\$92.00), Field Engineer (\$90.00), Field Coordinator (\$85.00), Senior Technician (\$85.00), Technician II* (\$78.00), Technician I* (\$66.00), and Word Processor* (\$63.00).

*For these personnel, overtime work will be charged at a rate equal to 1.5 times the Standard Rate.

A premium of 50 percent will be added to hourly rates for expert testimony and depositions.

G2 Consulting Group technicians include Engineering, Environmental, and Construction Materials technical specialists.

G2 operates on a strong project management system, and a Project Manager is appointed for each project.

EXPENSES

The following expenses, when incurred in direct connection with the project, will be charged at the rate shown:

Table with 2 columns: Expense Category and Rate. Categories include Transportation, Lodging, and Subsistence for Out of Town Travel (Cost + 15%), Printing, Reproduction, Photographs, Long Distance Telephone and Telecopier Charges, Shipping Charges and Material Purchases (Cost + 15%), and Vehicle Travel for Projects (\$0.80/Mile).

SUBCONTRACTORS/SUBCONSULTANTS

On projects requiring subcontractors or subconsultants, we will obtain the services of reputable contractors or consultants to perform such work. The fees of these contractors or consultants plus a 15 % service charge will be added to our invoices.

INVOICES

Progress invoices will be submitted to the client monthly and a final bill will be submitted upon completion of our services. Invoices will show charges for different personnel and expense classifications. Each invoice is due on presentation and is past due thirty (30) days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1.5%) per month on past due accounts.

We reserve the right to suspend or terminate work under our agreement upon failure of the client to pay invoices when due.

g2consultinggroup.com

Table with 5 columns: Location, Address, City, State, ZIP, Phone, and Fax. Locations include Headquarters (Troy, MI), Ann Arbor, and Chicagoland (Lake Zurich, IL).



GENERAL CONDITIONS

PUBLIC LIABILITY INSURANCE

We represent and warrant that we and our agents, staff and consultants employed by us are protected by worker's compensation insurance and that we have coverage under public liability, professional liability, and property damage insurance policies which we deem to be adequate. Certificates for all such policies of insurance can be provided to the client upon request. Within the limits and conditions of such insurance, we agree to indemnify and save clients harmless from and against any loss, damage or liability arising from any negligent acts by us, our agents, staff or consultants employed by us. Provided the client has obtained a similar acknowledgement from the Owner in its professional services agreement with the Owner, we shall not be responsible for any loss, damage or liability beyond the amounts, limits and conditions of such insurance. We shall not be responsible for any loss, damage or liability arising from any negligent acts by our client, the Owner, its agents, staff and other consultants employed by client.

LIMITATION OF PROFESSIONAL LIABILITY

In performing our professional services, we will use that degree of care and skill ordinarily exercised under similar circumstances by members of our profession. No warranty, express or implied, is made or intended by our proposal for consulting services, by our furnishing oral or written reports, or by our observation of work. Client recognizes that actual conditions may vary from those encountered at the location where borings, surveys or explorations are made by us or provided by others, and that our data, interpretations and recommendations are based solely on the information available to the client. We will be responsible for those data, interpretations and recommendations, but shall not be responsible for the interpretation by others of the information developed. Client also recognizes that monitoring of construction by a qualified engineer is essential to verify that designs are appropriate for actual site conditions.

RIGHT OF ENTRY

The client will provide for right of our entry and all necessary equipment, in order for us to complete the work. While we will take reasonable precautions to minimize any damage to the property, it is understood by client that in the normal course of work some damage may occur, the correction of which is not part of this agreement.

DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

Property owner represents that property owner has made a reasonable effort to evaluate if hazardous materials including gases are on or near the project site, and that property owner has informed us of property owner's findings relative to the possible presence of such materials.

Hazardous materials may exist at a site where there is no reason to believe they could or should be present. We and property owner agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work or termination of services. We and property owner also agree that the discovery of unanticipated hazardous materials may make it necessary for us to take immediate measures to protect health and safety. Property owner agrees to compensate us for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials.

We agree to notify property owner when unanticipated hazardous materials or suspected hazardous materials are encountered. Property owner agrees to make any disclosures required by law to the appropriate governing agencies. Property owner also agrees to hold us harmless for any and all consequences of disclosures made by us which are required by governing law.

Notwithstanding any other provisions of the agreement, property owner waives any claim against us and, to the maximum extent permitted by law, agrees to defend, indemnify, and save us harmless from any claim, liability, and/or defense costs for injury or loss arising from our discovery of unanticipated hazardous materials or suspected hazardous materials, including, but not limited to, any costs created by delays of the project and any cost associated with possible reduction of the property's value. Property owner will be responsible for ultimate disposal of any samples secured by us which are found to be contaminated.

UTILITIES

In the prosecution of the work, we will take reasonable precaution to avoid damage or injury to subterranean structures or utilities. The client agrees to hold us harmless for any damages to subterranean structures which are not called to our attention and correctly shown or described on the documents furnished.



OWNERSHIP OF DOCUMENTS

All reports, drawings, plans, specifications, field data, field notes, calculations, estimates and other documents we prepare, as instruments of service, shall remain our property. Client agrees that all reports and other work furnished to the client or his agents, which is not paid for, will be returned upon demand and will not be used by the client for any purpose whatever. We will retain pertinent records relating to the services performed for a period of five (5) years following submission of the report, during which period the records will be made available to the client at reasonable times for a reasonable fee.

RESOLUTION OF DISPUTES

All claims, disputes and other matters in controversy arising out of or in any way related to this agreement will be submitted to Alternative Dispute Resolution (ADR) before and as a condition precedent to other remedies provided by law. If and to the extent we have agreed on methods for resolving such disputes, then such methods will be set forth in the "Alternate Dispute Resolution Agreement" which, if attached, is incorporated into and made a part of this agreement. If no specific ADR procedures are set forth in the agreement, then it shall be understood that the parties shall submit disputes to mediation as a condition precedent to litigation.

If a dispute at law arises from matters related to the services provided under this agreement and that dispute requires litigation instead of ADR as provided above, then:

- (1) the claim will be brought and tried in the judicial jurisdiction of the court where our principal place of business is located and the client waives the right to remove the action to any other judicial jurisdiction, and
- (2) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorney's fees, and other claim-related expenses.

TERMINATION

This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, we shall be paid for services performed to the termination notice date plus reasonable termination expenses.

In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by this agreement, we may complete such analyses and records as are necessary to complete our files and may also complete a report on the services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all our direct costs in completing such analyses, records and reports.

ASSIGNS

Neither the client nor our firm may delegate, assign, sublet or transfer its duties or interest in this agreement without the written consent of the party.

Representative Client Services

Geotechnical Engineering

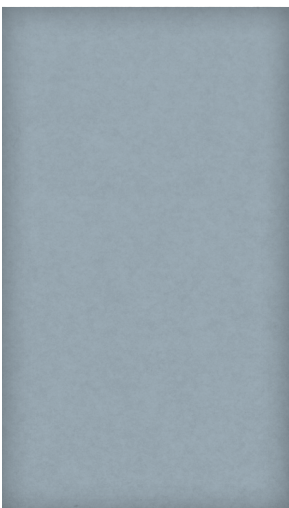
- Soil investigations, including soil borings and test pits
- Design recommendations for foundations, pavements, underground construction and earthwork
- Design of dewatering systems
- Soil dynamic studies, vibrations monitoring and evaluation
- Pile load tests, static and dynamic pile analyses
- Investigation of soil related failures
- Soil and foundation instrumentation
- Laboratory testing of soils

Geoenvironmental Engineering

- Phase I/II Environmental Site Assessment (ESA)
- Baseline Environmental Assessments (BEA)
- National Environmental Policy Act (NEPA) compliance
- Due Care Plan
- Wetland determination/delineation
- Floodplain and wetland permitting
- Hazardous materials evaluations
- Comprehensive asbestos surveys
- Lead based paint evaluations
- Brownfield studies
- Environmental drilling and sampling
- Groundwater monitoring
- Indoor air quality studies
- Water Intrusion/mold evaluations

Construction Engineering

- Field observation and testing
- Earthwork operations
- Foundation construction
- Concrete materials and placement
- Bituminous paving materials and placement
- Masonry
- Laboratory testing of aggregates, concrete, bituminous and masonry
- Construction material evaluation
- AASHTO Accredited Laboratory
- AASHTO R18
- ASTM C1077



Earth Retention Wall Design and Construction



Road Infrastructure Design & Construction