

RESOLUTION NO. 2017-114

WHEREAS, the Township Council of the Township of Aberdeen is in need of professional engineering services associated with 2018 Road Improvement Program; and

WHEREAS, CME Associates submitted a proposal on November 9, 2017 for aforementioned engineering services for a cost not to exceed the sum of \$349,882.00.

NOW, THEREFORE, BE IT RESOLVED by the Township Council of the Township of Aberdeen that the Manager and Clerk are authorized to execute an agreement with CME Associates for a cost not to exceed the sum of \$349,882.00 and authorizing partial payment of \$175,000, in accordance with a proposal dated November 9, 2017, attached hereto and made part of this resolution.

This agreement is made without competitive bidding as a “professional service” under the provisions of the Local Public Contracts Law, N.J.S.A. 40A:11-5(1)a(I).

BE IT FURTHER RESOLVED that this resolution is subject to the Township Manager’s certification of availability of Township of Aberdeen funds.



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November 9, 2017

Ms. Holly Reycraft
Township Manager
Township of Aberdeen
One Aberdeen Square
Aberdeen, New Jersey 07747

X-03-3-797-220

Re: Proposal for Professional Services for the
2018 Road Improvement Program
Our File No. PAB00662.01

Dear Ms. Reycraft:

Thank you for considering our Firm for the above referenced work and allowing us to submit this proposal for Professional Services associated with the above referenced Project.

INTRODUCTION

We have reviewed the scope of services for the Project, and we have visited the roadways in order to familiarize ourselves with the Project limits.

Based upon meetings and discussions with Township Representatives, we understand that the Township is considering the following improvements to the entire length of the roadways listed:

- Cashel Drive – Partial Reconstruction and Resurface
- Carol Lane – Full Reconstruction
- Crystal Place – Full Reconstruction
- Indigo Lane – Full Reconstruction
- Wayside Drive – Mill and Resurface including Outfall Replacement

We understand that the scope of the proposed improvements generally includes the installation and/or removal and replacement of concrete curb; sidewalks and driveway aprons; curb replacement at each intersection including depressed curbs for curb ramps; installing ADA conforming curb ramps with detectable warning surfaces; traffic striping and markings; roadway excavation; pavement milling; storm drainage improvements; the installation of a dense graded aggregate subbase; hot mix asphalt base and surface course; and maintenance and protection of traffic during the improvements. In addition, we anticipate the replacement of an existing 15" diameter outfall along Wayside Drive including a new headwall and associated restoration. We have preliminarily estimated the construction cost for this project at \$3,690,000.00, which is dependent on the actual magnitude of improvements deemed necessary during the design phase.

SURVEY, BASE MAPPING AND DESIGN

We anticipate that the Professional Services associated with the 2018 Road Improvement Program will consist of the necessary topographic survey and base mapping, design, permitting, plan and specification preparation for the proposed improvements on Cashel Drive, Carol Lane, Crystal Place, Indigo



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Lane, and Wayside Drive.

TASK 1 – SURVEY AND BASE MAPPING

Concerning the survey and base mapping, we anticipate performing field surveys to establish existing right-of-way lines, baselines, locate topographic features, establish vertical control, and obtain cross-section data at 50' intervals along Cashel Drive, Carol Lane, Crystal Place, Indigo Lane, and Wayside Drive within the defined project limits. Cross section elevations will be taken at the roadway centerline, at the top and bottom of curb, and will extend a distance of approximately 40' from the roadway centerline. Spot elevations will be taken, if and where required, in order to supplement the cross-section data, including elevations at driveways in order to eliminate potential conflicts.

We intend to prepare plan and profile base maps at a scale of 1" = 30', or other appropriate scale. Where possible the locations of existing utilities will be compiled and added to the plans, if and where necessary.

TASK 2 – GEOTECHNICAL EXPLORATION AND ENGINEERING

We propose to perform one (1) test boring at the proposed headwall location on Wayside Drive. The boring will extend to a depth approximately 37 feet below the roadway grade or to a depth of at least 10 feet below the proposed bottom of the headwall. The boring may be drilled deeper depending upon the subsurface conditions that are encountered. We do not anticipate drilling into rock, or the need for any formal traffic control. The boring will be monitored and logged by experienced personnel from CME Associates. Soil samples will be returned to our office and visually examined and classified in accordance with the Burmister Soil Identification System, and assigned Unified Soil Classification symbols. Representative soil samples will be selected for soil mechanics laboratory testing which is anticipated to include moisture content, grain size analyses, and Atterberg limits tests. Torvane shear tests will be performed on cohesive soil samples where appropriate.

For purposes of this Proposal we assume that there is no contamination of the soil. We will prepare logs of the test boring in accordance with NJDOT Standards. The data and information shall be procured by currently accepted geotechnical engineering methods and practices as outlined in the NJDOT Bridges and Structures Design Manual.

CME's Geotechnical department will evaluate the boring and laboratory test data and prepare a design memorandum for internal use and distribution.





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TASK 3 – STRUCTURAL ENGINEERING

CME's Structural Engineers will utilize the soil design properties provided by our Geotechnical Engineers as part of the subsurface investigation. We anticipate preparing Structural plans and details for the proposed headwall and flared wingwalls that are required for this proposed pipe outfall on Wayside Drive proximate to Treasure Lake. Based on the geographic location of the proposed headwall the design will include either AASHTO LRFD HL-93 vehicular live loading or an equivalent live load soil surcharge of at least 250 to 300 PSF to simulate maintenance or other off-road vehicles that may be able to access this particular location.

TASK 4 - DESIGN OF IMPROVEMENTS, PLANS AND SPECIFICATIONS

With regard to the design phase for the Project, we anticipate meeting with representatives of the Township prior to commencing the design phase in order to review the Project schedule and other preliminary issues. Plans will be prepared in plan and profile format.

Additionally, we anticipate providing individual curb ramp details for proposed curb ramps throughout the project limits. Curb ramp details will be prepared at a suitable scale to provide ADA conforming curb ramps.

We will identify the locations of potential utility conflicts during the design phase and request that the utility companies provide test pit data for same.

In addition to the pre-design meeting, we anticipate meeting with representatives of the Township when the plans are 50% and 90% complete. The plans will be revised to comply with Township comments and preliminary cost estimates will be submitted for Township review at the 50% and 90% complete review meetings.

COST PROPOSAL

Accordingly, based upon the above outlined scope of services, we find that the necessary surveying, base map preparation, design, plan and specifications for Cashel Drive, Carol Lane, Crystal Place, Indigo Lane, and Wayside Drive can be provided for the lump sum fee indicated below based upon the following breakdown:

Task 1 - Surveying and Base Map Preparation	\$40,671.00
Task 2 - Geotechnical Exploration and Engineering	\$9,321.00
Task 3 - Structural Engineering	\$13,168.00
Task 4 - Design, Plans and Specifications	<u>\$244,969.00</u>
Subtotal	\$308,129.00





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PERMIT ACQUISITION

Concerning the permit acquisition phase of the project, we anticipate submitting complete applications for the permits outlined below, and our scope of services will include one (1) plan revision to comply with review agency comments. In addition we will submit the required application fees, and we understand the Township will reimburse these expenses to CME separate from this contract.

SOIL EROSION AND SEDIMENT CONTROL PLAN CERTIFICATION

We anticipate submitting the required applications for Soil Erosion and Sediment Control Plan Certification to the Freehold Soil Conservation District and Request for Authorization (RFA) for stormwater discharge associated with construction activity to the New Jersey Department of Environmental Protection as necessary, in accordance with the above Scope of Services.

NJDEP FLOOD HAZARD AREA INDIVIDUAL PERMIT

The Flood Hazard Control Act (FHA) regulations require an Individual Permit for the Wayside Drive Stormwater Outfall Structure, due to the proximity of the 100-year tidal floodplain of the Raritan Bay.

NJDEP FRESHWATER WETLANDS STATEWIDE GENERAL PERMIT #11

The Freshwater Wetlands component requires a Statewide General Permit #11 for the construction of a stormwater outfall along Wayside Drive.

US ARMY CORPS OF ENGINEERS

The Wayside Drive outfall is within 1,000 linear-feet of the tidally influenced Raritan Bay, therefore the US Army Corps of Engineers (ACOE) has co-jurisdiction over impacts to freshwater wetlands and Waters of the United States. Therefore, we also anticipate preparing an application for Nationwide Permit #43 (as found at CFR Chapter II). The ACOE can only issue their permit after the NJDEP has issued the wetlands and flood hazard area permit, as they need proof of the issuance of Coastal Zone Management Consistency determination from the State of NJ.

The formal permit applications require notifying property owners within 200', municipal and county offices of the application, and a detailed compliance statement that demonstrates how the work conforms to the applicable regulations. In order to complete the proposed above mentioned work, we will field delineate wetlands and/or State open waters, as appropriate, in the location of the subject outfall. All fieldwork will be performed utilizing the methodologies outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP under the Freshwater Wetlands Protection Act regulations. The wetland/upland boundaries will be determined based upon field examination of topography, hydrology, soils and vegetation characteristics at the site. The wetland boundary flags will be located by using a handheld GPS device, and then plotted on our





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NJDEP Permit plan, to be created for submission to the NJDEP, Division of Land Use Regulation.

COST PROPOSAL

Accordingly, based upon the above outlined Scope of Services, we find that the necessary permitting services can be provided for the lump sum fee indicated below:

Subtotal	\$35,395.00
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BID PHASE SERVICES

We anticipate that Bid Phase Services will generally include the furnishing of twenty (20) sets of plans and specifications prior to advertisement for bids; coordination with prospective bidders during the bid period; issuance of any addenda required; attendance at the bid opening, and the preparation of a report recommending award of the project.

COST PROPOSAL

Accordingly, based upon the above outlined scope of services, we find that the necessary bid phase services can be provided for the lump sum fee indicated below:

Subtotal	<u>\$6,358.00</u>
Total	\$349,882.00

CONSTRUCTION PHASE SERVICES

We will provide construction phase services based on our attached hourly rate schedule and the actual time necessary to provide these services since same could vary considerably depending upon the contractor awarded the Project and the final scope of work.

For budgeting purposes, we have preliminarily estimated the cost for anticipated **construction phase services at \$314,750.00**, based upon the required tasks and the anticipated contract completion time of 210 calendar days

SUMMARY

Our hourly rates shall be firm until January 1, 2018 after which they may be subject to re-negotiation. Invoices shall be paid within 30 days of presentation of same.

Our contract documents will include wording that requires the contractor to be responsible for all applicable OSHA and other regulatory agency requirements, as well as safety, construction means and methods, and the usual other requirements that are normally included in our standard specifications.





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Please note that the above estimate does not include costs associated with easement and/or right of way acquisition mapping and metes and bounds descriptions for property acquisition, nor do they include bonding fees, or legal fees. In addition, the above costs do not include subsurface investigations.

Our proposal does not include permit fees or the preparation of permits other than those listed, nor does it include demonstration of offsite stability if required by the Freehold Soil Conservation District.

Your return of a signed copy of this proposal indicating your acceptance to the terms and conditions presented herein will represent your authorization for us to proceed.

Thank you again for permitting our Firm to submit this proposal, and we look forward to serving your municipality.

Should you have any questions regarding this matter, do not hesitate to contact this office.

Very truly yours,
CME ASSOCIATES

Michael J. M. Cleland, P.E.
Township Engineer's Office

ACCEPTED BY: Holly Reycraft

THIS 28th DAY OF November, 2017

ATTESTED BY: _____

THIS _____ DAY OF _____, 2017

