

## **ENGINEERING CONSULTANT CONTRACT PROCESS v2014**

### **Introduction**

The Maine Turnpike Authority (Authority) may engage consultants to perform engineering related services to accomplish the goals and objectives of the Authority's Mission and those of The General Turnpike Revenue Bond Resolution (Bond Resolution) adopted by the Maine Turnpike Authority on April 18, 1991, as amended and supplemented.

The number of engineering contracts and the scope of each shall be evaluated annually and based on the needs as outlined in the most recent 4-year plan. The Chief Operations Officer (COO) and/or Chief Financial Officer (CFO) assigns each project a Reference Code number which is budgeted in advance and used to record the expenses related to that project. The Reference Code number is associated with a 30-year plan key code detailing a Reserve Maintenance or Capital budget line. Reference Codes and 30-year plan budget lines are reviewed with and approved by the Finance Department prior to being assigned to a project.

### **Types of Engineering Consultant Contract Scopes**

Engineering Consultant contracts have one of two types of scopes. Contracts are either project specific, or "on-call service" contracts.

Project specific contracts are solicited when a specific scope is defined and the project is of a one-time or infrequent basis.

An on-call service contract is an agreement which provides for an indefinite quantity of Consultant services that will be defined and agreed upon in subsequent Task/Project Orders. On-call service contracts are used where similar projects will be reoccurring on a frequent basis and combining those services in one contract is an effective and economical method of fulfilling the need. Multiple on-call service contracts may be awarded in the same discipline to multiple Consultants if the need is warranted.

### **Engineering Consultant Contracts**

All Engineering Consultant Contracts should be in compliance with the latest edition of the Authority's Engineering Consultant General Conditions, as amended in the specific Contract's Scope of Work.

### **Types of Engineering Consultant Contracts**

There are four (4) types of Engineering Consultant contracts:

- General Engineering Consultant (GEC)
- Consultant Program Manager (CPM)
- Project Engineering Services (PES)
- Consultant Inspection Services (CIS)

### General Engineering Consultant (GEC)

The General Engineering Consultant (GEC) shall be a single independent engineer or consulting firm having a nationwide and favorable reputation for skill and experience in such work. Many of the tasks assigned to the GEC are defined by the Bond Resolution. Other tasks are important for the GEC to develop and maintain a level of knowledge of the condition of the physical facilities and operations of the Maine Turnpike. The contract term is determined by the Board and must be approved by the Trustee. The Trustee is a bank employed by the Authority to oversee certain aspects of the Authority's operations and to ensure compliance with the Authority's contractual agreements with its revenue bond holders. Tasks included in the Scope of Work for this on-call service contract include, but are not limited to:

- Perform an inspection once per year of the Turnpike and submit a report of findings on or before October 20<sup>th</sup>. Said report of findings shall include an opinion as to whether the Turnpike has been maintained in good repair; their advice and recommendations for repair and maintenance and operation for the ensuing fiscal year; and estimate the amount of money necessary for such purposes.
- Recommend the amount of insurance to be carried under the provisions of Section 807 of the Bond Resolution.
- Recommend the amount that should be deposited into the Reserve Maintenance Fund during the ensuing year.
- Review and approve sales or other dispositions of Turnpike property.
- Review all Authority construction projects at substantial completion and approve any request for partial release of retainage and approve all final payments for Authority construction contracts.
- Review and assist in the establishment of toll rate structures.
- Participate in general long term planning and revenue forecasting in support of the Authority's 10-yr and 30-yr plans, including providing the 4-year construction project lists for planning purposes.

### Consultant Program Manager (CPM)

The Consultant Program Manager(s) provides additional staffing resources and expertise to the Authority's Engineering, Government Relations/Planning and Finance/Toll Departments. This type of on-call service contract is the most dynamic of the four types. Consultants may be hired to fulfill these roles and/or the roles may be assigned to the GEC or a PES contract if the tasks are related to that contract's scope of work and are deemed an efficient and effective method of fulfilling the roles. Tasks included in the Scope of Work for this contract type may include:

- Engineering Program Support:
  - Provide general assistance to Authority's Engineering Program Manager with managing overall capital and maintenance program and developing projects in planning and permitting stage. Continued development into the design and construction stages would be the subject of further negotiations with the Authority.
  - Assist in the creation and management of a Specification Database and a Standard Details Library.
  - Review construction specifications and design guidelines and provide advice and comments.
  - Provide assistance in developing scopes of work for consultant or in-house work
  - Conduct peer review of other consultant work
  - Perform feasibility investigations and preliminary design engineering for projects in order to develop refined project scopes and construction cost estimates.
- Traffic Engineering Support: provide resources to assist with general traffic engineering, sign design, intersection safety analysis and support in interpreting the needs identified in the Manual on Uniform Traffic Control Devices.
- Environmental Engineering Support: provide support for stormwater, drainage issues, natural resources and other environmental regulation & permitting processes.
- Finance/Toll System Support: provide Finance/Toll Department with Intelligent Transportation System (ITS) engineering support and general toll system support.
- Government Relations/Planning Support: provide general planning assistance, alternative transportation program management assistance and perform studies and other projects.

### Project Engineering Services (PES)

The Project Engineering Services roles shall be fulfilled with multiple on-call service contracts and project specific contracts with multiple qualified engineering consultants. Project Engineering Services is a broader scope of work including planning projects, preliminary design report projects, and design projects. Some of the disciplines only require one consultant be available either for a specific one-time project or as needed due to limited scope of work required as part of MTA program. Other disciplines require multiple consultants be under contract. Disciplines may include:

- **Planning related:** travel demand modeling, traffic simulation modeling, traffic feasibility studies, traffic noise studies, and alternative transportation management support and studies.
- **Engineering related:** Architectural Services, CADD services, pavement management support, highway design, bridge design, overhead signing design, lighting design, site development, surveying, geotechnical engineering, and landscape architecture.
- **Right of way related:** property surveying, aerial photography, title research, appraisal services, and utility coordination.
- **Environmental related:** including permitting, hazardous waste and contaminated site review, natural resources identification and assessment, wetland mitigation services, fluvial geomorphology design, cultural resources and architectural historian services, storm-water management, and Hydraulic & Hydrology studies.
- **Finance/Toll System related:** Traffic data collection, ITS engineering and maintenance support, Toll Plaza & system design and support; and Open Road Tolling conversion projects.

### Consultant Inspection Services (CIS)

There are two types of Consultant Inspection Services contracts: Construction Inspection and Material Testing. The Consultant Inspection Services roles will be fulfilled with on-call service contracts with multiple qualified engineering consultants as determined by the MTA Engineering Department. The number of firms retained will be based on the planned construction program at the time. The Scope of Work for this contract consists of providing construction inspection services at various levels including office support, resident engineering services and providing construction inspectors or material testing agents.

### **Consultant Selection for Contracts**

There are four methods for procuring engineering professional services for contracts. The four methods outline minimum process requirements that ensure consultants are selected through a competitive, qualification-based selection process and that work is assigned fairly, while maximizing the efficiency of Authority resources. "Initial value" shall be defined as the estimated initial value of the contract, which is determined by the Authority. The four methods are:

- Method 1: Initial contract value \$150,000 or less
- Method 2: Initial contract value greater than \$150,000
- Method 3: Emergency contracts
- Method 4: Non-Competitive Procurement (sole source) Contracts

The four methods are used herein below to determine the "best qualified consultant(s)". The following general criteria may be used to determine the best qualified consultant; the Consultant is considered qualified to perform the work required, has experienced resources readily available to complete the work on the schedule required by the Authority and has had success with managing project costs on prior projects. This Consultant has also had positive past performance evaluations on performance of similar work and employing this Consultant would be an efficient and effective use of resources for the project or tasks. In determining the best qualified consultant, the GEC may be precluded from consideration on certain engineering consultant contracts, or task/project orders considering the number, types and value of the contracts that they have at that time. This policy is in conformance with 23 MRSA § 1966(2-B), which requires the Authority to mitigate the advantage the GEC may have and promote a fair distribution of the available work among qualified competing applicants. Further, the consultant selection methods described herein are in conformance with 23 MRSA § 1966 (2-A), which requires the Authority to select Consultants through a competitive selection process.

The four methods are streamlined to take advantage of the work that MaineDOT has done in prequalifying engineering consultants through a competitive selection process. For the methods described below, a "MaineDOT Prequalified Consultant" shall be defined as an engineering consultant that has been prequalified by the MaineDOT to perform work in a particular service or discipline. The use of MaineDOT Prequalified Consultants ensures that the Authority employs engineering consultants that have been selected through a competitive process and are qualified to perform work in a particular discipline.

Method 1: For Authority engineering project specific contracts with an initial value of \$150,000 or less, to select the best qualified consultant to negotiate and execute a contract with, the Authority may solicit proposals from multiple firms, or from a single Consultant currently under contract with the Authority or a single MaineDOT Prequalified Consultant.

For Authority engineering on-call service contracts with an initial value of \$150,000 or less, to select the best qualified consultant to negotiate and execute a contract with, the Authority should:

July 24, 2014

- a. Review qualified Consultant(s) currently under contract with the Authority and/or MaineDOT Prequalified Consultant(s). Or,
- b. Solicit Authority, MaineDOT Prequalified Consultants and/or any other consultants and should evaluate at least 3 consultants.

Method 2: For Authority engineering project specific contracts with an initial value greater than \$150,000, to select the best qualified consultant to negotiate and execute a contract with, the Authority should solicit proposals from at least 3 Consultants that the Authority considers qualified for that project discipline.

For Authority engineering on-call service contracts with an initial value greater than \$150,000, to select the best qualified consultant to negotiate and execute a contract with, the Authority should solicit at least 3 Consultants for proposals. Consultants that are solicited shall be either currently under contract with the Authority, MaineDOT Prequalified Consultant(s) and/or any other Consultant(s) that the Authority considers qualified for that project discipline.

Method 3: An emergency contract, for the purposes of compliance with 23 MRSA § 1966 (2-A) (B), is defined as a need that was unanticipated and is required to be performed in a short time schedule in the interest of public safety. For emergency projects, the Authority may select a qualified Consultant currently under contract with the Authority, a qualified MaineDOT Prequalified Consultant or any other Consultant that the Authority considers qualified for the emergency project. The best qualified Consultant is the one whose previous or on-going work is satisfactory and resources are available immediately to perform the work in an expeditious manner. Due to the emergency nature of the project, a verbal or email notice to proceed may be given before the formal execution of the contract. However, emergency projects are considered a type of Non-Competitive Procurement and justification must be documented prior to executing the contract.

Method 4: Non-Competitive Procurement of Engineering Consultants, as allowed under 23 MRSA § 1966 (2-A), will only occur when (a) it is determined to be the most economical, effective and appropriate method of fulfilling a demonstrated engineering consultant need, (b) the service is uniquely available from a single source, or (c) only one known source can meet the authority's needs within the required time. For Non-Competitive Procurement contracts, to select the best qualified consultant to negotiate and execute a contract with, the Authority shall solicit a proposal from a qualified Consultant currently under contract with the Authority or another qualified Consultant for that project discipline. Justification for Non-Competitive Procurement contracts must be documented and approved prior to executing the contract.

For any method, prior to executing a contract with the best qualified consultant, hourly labor rates, profit and overhead rates, overtime expectations and other direct expenses may be reviewed to confirm employee salary rates commensurate with qualifications and experience of the employees and to determine if the proposed Consultant's costs are within the Authority's acceptable budget for the requested services.

## Solicitation Process

Two processes are typically used to determine Consultant qualifications, resources, availability and/or to confirm the Consultant understands the Authority's needs. The two processes are Request for Qualifications and Request for Proposals. The Request for Qualifications process is typically used when soliciting Consultants for on-call service contracts. The Request for Proposals process is typically used when soliciting Consultants for project specific contracts.

In projects where Sub-Consultants are performing at least twenty-five percent (25%) of the value of the contract, the Sub-Consultant's proposal information must be included. The Authority reserves the right to require Sub-Consultant information for contracts where the Sub-Consultant provides less than 25% of the value of the contract.

### Request for Qualifications (RFQ)

The Request for Qualifications process is an opportunity to request from the consultant community an outline of a firm's ability to provide consultant and professional services in a particular area of need, discipline or disciplines based on specific criteria. The RFQ responses may be used to develop shortlist of consultants for interview. **At a minimum, three (3) Consultants should be solicited and evaluated.** If the service or discipline that is being solicited for has a MaineDOT list of Prequalified Consultants, the Authority will determine what number of consultants to solicit from based on the number of contracts the Authority anticipates on awarding for that service or discipline. A maximum of 12 proposals is desirable, though the actual number of Consultants solicited will be based on the discipline and the availability of likely qualified consultants in that area. The Authority reserves the unqualified right to reject any or all qualification statements and to accept only those, which in its sole judgment will serve its best interest. When the Authority makes a formal Request for Qualifications, the Authority should provide prospective consultants with the following:

- General scope and identified need of the project
- Proposed construction or program budget (if applicable),
- General schedule, if identified,
- MTA Engineering Consultant General Conditions, and
- Sample MTA Contract and sample MTA task/project order
- Submittal and selection protocol including: proposed page limits, deadline and address for submittal, contact for questions, schedule for the review of the qualifications, duration and method of interview, notification procedure, etc.

July 24, 2014

In response to the Request, the prospective consultant shall include a Qualification Statement. The Qualification Statement must demonstrate the Consultant's understanding of the proposed work and detail the Consultant's ability to perform the work. The Qualification Statement should include:

- A letter of interest,
- Skill and experience of the firm on projects of comparable scope, including dates the services were performed,
- Skill and experience of the proposed Project Manager and key staff in providing services on projects of comparable scope,
- Disclosure of past misconduct, as described in the solicitation.

In some instances the Authority may elect to use a Request for Letters of Interest (RFLI) process to determine qualifications of consultants and select a consultant to negotiate a contract. This process is similar to the RFQ process but requires less submittal materials from Consultants.

### Request for Proposals

The Request for Proposals process is an invitation for consultants to submit a proposal on a specific service. The Authority reserves the unqualified right to reject any or all proposals and to accept the proposal, which in its sole judgment, will serve its best interest. When the Authority makes a formal Request for Proposals, the Authority should provide prospective consultants with the following:

- Specific scope of work and identified need of the project, including desired deliverables and services required as part of the project
- Proposed construction or program budget (if applicable),
- Specific needs, if identified, including if public meetings will be required or specific coordination with other projects is required,
- General schedule, if identified,
- MTA Engineering Consultant General Conditions, and
- Project Development Process and other design guides as applicable;
- Sample MTA Contract and sample MTA task/project order
- Submittal and selection protocol including: proposed page limits, software/hardware requirements, deadline and address for submittal, contact for questions, schedule for the review of the proposals, duration and method of interview, notification procedure, etc.

July 24, 2014

In response to the Request for Proposals, the prospective consultant shall include a technical proposal and a fee proposal.

The technical proposal must demonstrate the Consultant's understanding of the proposed work and detail the Consultant's proposed approach to the work. The technical proposal should include:

- A letter of interest,
- Narrative approach to the project
- A list of key team members available for the project and their locations and resumes,
- Proposed schedule (availability to start and finish work),
- Current and planned work, including work for MaineDOT,
- Disclosure of past misconduct,
- Past experience on similar type projects (if applicable),
- Location of nearest office that will support the project,
- List of Sub-Consultants to be employed,
- Strategies to meet the requirements of the scope of work

The fee proposal should detail the cost corresponding to each task in the technical proposal. The fee proposal shall be used to confirm employee salary rates commensurate with qualifications and experience of the employees and to determine if the proposed Consultant's total cost is within the Authority's acceptable budget for the requested services. The fee proposal should include:

- A spreadsheet showing the proposed hours (if applicable),
- Direct labor expenses for each employee and respective classification of labor,
- Proposed overhead and profit rates,
- Other non-salary direct expenses,
- Over-time expectations,
- Total estimated price and proposed method of payment (i.e., actual hourly labor rates plus overhead & profit percentage up to a maximum, or lump sum)

### **Consultant Analysis**

The Authority should create a Consultant Selection Committee for each RFQ or RFP process and that committee shall evaluate their respective consultant proposal submitted in response to a Request for Qualifications or Request for Proposals. This Committee determines if the Consultants are in fact qualified to perform the work and selects the best qualified Consultant(s).

- Ranking process – The Authority may provide the Consultants with the criteria that will be used during the consultant selection process. An initial ranking process may be utilized to create a shortlist of Consultants to interview.
- Interviews – Interviews may be conducted with the shortlisted consultants and shall be performed in person or via telephone. The interview provides the shortlisted firms an opportunity to present their qualifications, experiences and approach to the project prior to the final ranking.
- Negotiation process – The Authority reserves the right to negotiate the final product and cost (if applicable) with the selected Consultant. If the Authority is unable to enter into an agreement for a contract with the selected Consultant, the Authority reserves the right to terminate negotiations and initiate negotiations with another Consultant. No compensation will be paid for the failed negotiations.
- Notice to Proceed – Upon awarding and executing the consultant contract, the Authority shall authorize work to begin by executing a Task/Project Order, or other written notification. The Authority reserves the right to negotiate the scope and fee for every task/project order after a contract is executed. If the Authority is unable to enter into an agreement with the selected Consultant, the Authority reserves the right to not issue any task/project orders with that consultant and will negotiate and award the work to another consultant. No compensation will be paid for the failed negotiations.

### **Consultant Contract Approval Process**

All Engineering Consultant Contracts valued at \$150,000 or over shall be authorized by the Maine Turnpike Authority Board (Board).

All Engineering consultant contracts solicited through a competitive process with a contract value less than \$150,000 must be approved by the Executive Director, Board Secretary or Treasurer and shall be included in the monthly consent agenda for the Board.

Any consultant contract selected through Method 3 or 4 (Emergency or Non-Competitive Procurement) shall be approved by the Executive Director if \$25,000 or less and shall be included in the monthly consent agenda for the Board.

For Emergency projects (Method 3) with consultant contract value over \$25,000 shall be approved by the Chair of the Board and shall be included in the monthly consent agenda for the Board.

For Non-Competitive Procurement Consultant contracts (Method 4) the Board must approve if value is over \$25,000.

**Table 1: Contract authorization. All contracts not directly authorized by the Board shall be included in the monthly consent agenda for the Board.**

Value	Methods 1 and 2	Method 3 (emergency)	Method 4 (Sole)
<\$25,000		Executive Director	Executive Director
>\$25,000		Chair	Board
<\$150,000	Executive Director		
>\$150,000	Board		

**Engineering Consultant Contract Modification Process**

A document used to reflect changes to a Consultant Contract is called a Contract Modification. Contract Modifications can modify any portion of the Contract, but are usually required for changes in scope of work (including changes in key personnel), time, or contract amount. Contract Modifications are to be executed by both the Consultant and the Authority prior to undertaking the work. Consultants who proceed with work based on a verbal approval from the Authority do so at their own risk.

If a Consultant anticipates, during the course of the contract, that there is a potential for a change in scope that may require additional hours and/or expense, they shall submit a Potential Change Notice to the Engineering Program Manager. The Potential Change Notice shall contain the following information:

- Authority Project Number and Contract Number
- Projected Total Additional Hours
- Projected Additional Cost
- Reason for Potential Change

Upon receipt of the Potential Change Notice, the Authority’s Engineering Program Manager will review the estimated additional hours and cost. A Contract Modification shall be executed once agreement has been reached on the revised scope, cost and time. Contract Modifications will require Maine Turnpike Authority Board authorization if the Contract Modification modifies the original contract to exceed \$150,000 in value or if it modifies the original contract value by more than \$150,000. If less than \$150,000 the Engineering Program Manager shall recommend the Contract Modification to the COO/CFO and the Executive Director for approval. All Contract Modifications must be sent to both Purchasing and Accounting for expense tracking and compliance reporting.

### **Task/Project Order Process**

Once an engineering consultant contract is executed, all Consultant services shall be managed through the Task/Project Order Process. Each Task/Project Order shall include the Reference Code number, Contract number and Task/Project Order number. In order to satisfactorily complete a Task/Project Order, the Consultant may be required to provide the following information:

1. Estimated number of hours by position level, required to satisfactorily complete the project requirements;
2. Personnel proposed for assignment to the project; including the Project Manager, Sub-Consultants and contact person;
3. Total estimated cost to complete the assignment;
4. A written understanding of the project requirements, including deliverables; and
5. A project schedule complete with milestones and completion date.

All of the above information is often completed during negotiation of a project specific contract. As a result, the Authority representative required to assign and manage any Task/Project Order under a project specific contract is the Authority's Project Manager for that contract, regardless of the Task/Project Order value. Project Managers will work with the Engineering Program Manager to administer the process. Approval of the task/project order in every case will be made by the appropriate Department head/Director and countersigned by the Executive Director, Board Secretary or Treasurer. A copy of all Task/Project Orders must be submitted to the Finance Department prior to any invoice submission. The Finance Department maintains a listing of all Task/Project Orders issued and the value of each for reporting purposes.

For on-call service contracts, a schedule of assignments may be developed in advance and reviewed with Management Team in order to maximize each Consultant assigned to that discipline. At a minimum, the Management Team consists of the COO/CFO, the Department Head/Director and all Authority Project Managers that may be responsible for projects in that discipline. The Management Team assigns each project an Authority Project Manager and a Consultant and reviews the project schedule and budget at the time of assignment. Task/Project Order assignments will be based on the Consultant's current workload and the Consultant's ability to demonstrate that previous or on-going work is satisfactory. Further, the use of such consultant would be an efficient and effective use of resources for the project or task(s). Subsequent assignments to a Consultant will be reviewed according to the latest schedule. In the case of the Consultant who is also the GEC, consideration (as described in the Consultant Selection for Contracts section of this process document) must be given before assigning any Task/Project Orders. Prior to executing a Task/Project Order, the Consultant should submit a written scope and fee proposal for review by the Authority. The scope proposal is used to confirm the Consultant's understanding of the project and schedule and the fee proposal is used to determine if the task(s) can be completed within the Authority's program budget. If an assignment is made to a Consultant and an appropriate scope and fee cannot be agreed to, the Authority reserves the right to negotiate with a different consultant

for that Task/Project Order. If a Management Team created a schedule of projects for the on-call service contract, the Project Manager may initiate contact with consultant for scope and fee proposals and will prepare and submit the Task/Project Order, thereby recommending the Task/Project Order for approval to their Department Head/Director and by the Executive Director, Board Secretary or Treasurer.

However, if a Management Team did not develop a schedule of projects for the on-call service contract(s), the Project Manager must review their recommended assignment of a consultant with their Department Head/Director. The Department Head/Director will recommend the assignment for approval to the COO/CFO. Once approved, the Project Manager will initiate contact with consultant for scope and fee proposals and will prepare and submit the task/Project Order, thereby recommending the Task/Project Order for approval of their Department Head/Director and the Executive Director, Board Secretary or Treasurer.

### **Engineering Consultant Task/Project Order Amendment Process**

A document used to reflect changes to a Task/Project Order is called a Task/Project Order Amendment. Task/Project Order Amendments can amend the original Task/Project Order, but may not affect the scope, time or value of the Contract. Task/Project Order Amendments are to be executed by both the Consultant and the Authority prior to undertaking the work. Consultants who proceed with work based on a verbal approval from the Authority do so at their own risk.

If a Consultant anticipates, during the course of the Task/Project Order, that there is a potential for a change in scope that may require additional hours and/or expense, they shall submit a Potential Change Notice to the Authority Project Manager. The Potential Change Notice should contain the following information:

- Authority Project Number, Contract Number and Task/Project Order Number
- Projected Total Additional Hours
- Projected Additional Cost
- Reason for Potential Change

Upon receipt of the Potential Change Notice, the Authority's Project Manager will review the estimated additional hours and cost and in concurrence with the Engineering Program Manager make a recommendation to their Department Head/Director. The Department Head/Director will recommend the Potential Change Notice for approval to the COO/CFO. A Task/Project Order Amendment shall be executed and approved by the Executive Director, Board Secretary or Treasurer once agreement has been reached on the revised scope, cost and time. Like the original Task/Project Order, a copy of all Task/Project Order Amendments must be submitted to the Finance Department. A Task/Project Order Amendment is not required when a change of scope does not exceed the original Task/Project Order expiration date or Not to Exceed value. However, such change of scope shall be documented.

July 24, 2014

**Consultant Contract Invoices**

All Consultant Contract Invoices shall be reviewed by the assigned Authority Project Manager for accuracy and completeness. The Project Manager shall indicate their recommendation for approval to the Department Head/Director for approval of expenditure. All invoices shall include the Reference Code number, Contract number and Task/Project Order number.