



## **Request for Proposal: Professional Design Services**

### **QUINOBEQUIN ROAD AND TRAIL IMPROVEMENTS – ELLIS STREET TO I-95 OVERPASS, NEWTON, MA CONTRACT #P20-3361-D7A**

**RFP Issued: January 17, 2020**

**Proposal Due Date: February 14, 2020**

#### **Part 1: RFP REQUIREMENTS**

##### **A. Professional Services Required:**

The Department of Conservation and Recreation (DCR) seeks professional consulting services under PRF 69 Facilities Engineering Services Master Contract to design, prepare 100% construction plans, specifications, and construction cost estimates; prepare and obtain required permits and approvals as necessary; and provide bidding and construction phase services for the design of the Quinobequin Road and Trail Improvements – Ellis Street to I-95 Overpass, Newton.

The scope of the project will include design of full depth reconstruction of approximately 8,000 LF of Quinobequin Road, and the design and layout of bicycle and pedestrian accommodations south of the roadway, with river overlooks. The professional services required may include:

- Landscape architect
- Transportation engineer with bicycle and pedestrian accommodations project experience
- Civil engineer with green infrastructure design and installation project experience
- Surveyor
- Lighting Design
- Geotechnical engineer
- Structural engineer
- Environmental engineer/ ecologist/ archeologist for permitting process and landscape restoration
- Public process facilitator
- Signage designer

The principal-in-charge of the prime and sub-consultant firms shall be a professional registered in the Commonwealth of Massachusetts.

##### **B. DCR Project Manager:**

GINNA JOHNSON

Bureau of Design and Project Management

Division of Design & Engineering

Department of Conservation and Recreation  
251 Causeway Street, Suite 700  
Boston, MA 02114  
Email: [ginna.johnson@mass.gov](mailto:ginna.johnson@mass.gov)

**C. Proposal Submission:**

Electronic proposals must be received via COMMBUYS no later than **12:00 pm on Friday, February 14, 2020** to be considered. Proposals shall be addressed to the attention of the Project Manager. A pre-proposal site walk is scheduled for **Thursday, February 6, 2020 at 10:00 am.** Park on Varick Road and meet on the Reservation opposite the Varick/ Quinobequin intersection. All questions must be submitted to the Project Manager listed above no later than **5:00 pm on Friday, February 7, 2020.**

Proposals shall include:

1. Letter of Transmittal
2. Project Understanding
3. Consultant Team: Describe the organization of your project team, including subconsultants. Identify key project personnel, including Principal-In-Charge, the Project Manager and staff, as well as key subconsultant personnel, and include a resume for each. DCR will consider the proposed personnel a commitment by the consultant for project staffing.
4. Project Schedule and Scope of Services: Provide a spreadsheet with Project Phases and Tasks and the amount of time anticipated for each, including meetings and deliverable dates. See RFP Attachments for spreadsheet template.
5. Project Cost: Using the same list of Phases and Tasks, provide a spreadsheet of level of effort associated with each, total fees, and estimated expenses.
6. Relevant Experience: Provide a brief statement and project descriptions describing 3 projects total completed by your firm and subconsultant firms. Include construction completion dates.
7. References: Submit 3 client references for relevant project work.

**D. Proposal Evaluation and Submittal Requirements**

Proposals will be evaluated by a Consultant Selection Committee based on the following criteria:

1. Understanding of the project goals and appropriateness of the approach presented;
2. Composition and qualifications of the consultant team;
3. Demonstrated experience and past performance of the consultant team on similar projects;
4. Feasibility of the proposed schedule and the ability of the consultant team to accomplish the task within the stated timeframes;
5. Quality and responsiveness of the proposal (proposals shall be clear, concise and complete);
6. References; and
7. Cost.

**Part 2: PROJECT PROGRAM AND SCOPE OF SERVICES**

**A. Project Limit of Work:**

See the RFP Attachments for a Limit of Work diagram. The Limit of Work is the area of the Charles River Reservation and Quinobequin Road right-of-way bounded on the northwest by the upstream side of the I-95 Overpass up to and including the intersection of Ellis Street and Boylston/ Route 9.

## **B. Project Background:**

Quinobequin is the Native American name for the Charles River, which is variously recorded as meaning “long still water,” “winding water,” or “meandering.” The Metropolitan Park Commission (a predecessor to DCR) acquired the property—in the Waban neighborhood of Newton—prior to 1917. Southeast of the I-95 overpass, Quinobequin has the character of a country lane. DCR has ownership from Route 9/ Boylston Street to Varick Road. This segment of roadway, about 1.4 miles, is two-directional, with a typical width of 30 feet. The road is not curbed. Few catch basins exist along the road and stormwater runoff is managed with “country drainage.” Several existing lengths of guardrail are in disrepair. There is no public parking provided, although there are informal pull-offs on the river side of the road. The service roads adjacent to Route 9, owned by MassDOT, do not have accessible crosswalks and sidewalks.

The road is adjacent to a natural and picturesque stretch of the Charles River. DCR parkland along the river side of Quinobequin Road between Route 9 and I-95 totals 29.75 acres. Although footpaths traverse the site, the paths do not comply with 521 CMR and where adjacent to the roadway, the narrow width and sinuous layout of the road make pedestrian travel dangerous.

Route 9/ Boylston Street Underpass is owned by MassDOT. The project will document an accessible route from Ellis Street to DCR property to proposed Quinobequin sidewalks and trails. After Schematic Design, DCR will coordinate installation of the accessible route with MassDOT and the City of Newton.

DCR references include *Historic Parkway Preservation and Treatment Guidelines* (March 2007).

## **C. Proposed Program and Design Goals:**

The proposed program and design goals for the Project include:

- Design for reconstruction of Quinobequin Road, including the feasibility of traffic calming or other speed reduction strategies, utility design and coordination, sidewalks, crosswalks and improvements to stormwater management and lighting. Small public parking areas and directional and regulatory signage—that improve safety as they maintain the rural character of Quinobequin Road—may be considered. No signalized intersections are anticipated, but this may change subject to the consultant’s recommendation.
- Design for construction of safe and accessible bike and pedestrian accommodations along the south side of the road, including off-road, grade-separated trails and boardwalks as required to negotiate the grade, protect resource areas, and provide access to the riverfront.
- Design for the construction of river overlooks.
- Landscape restoration—including the removal of invasive species and the installation of native species—of areas within the Limit of Work, to improve habitat, prevent erosion and improve water quality.

Commonwealth-wide, DCR’s design goals also include:

- **Public Access and Circulation:** Create a welcoming environment with enhanced public access that meets or exceeds the requirements of the Architectural Access Board (or, where directed by DCR, the USDA Forest Service Trail Accessibility Guidelines). Design circulation infrastructure that is low-maintenance, safe and convenient for all users, using *Complete Streets* design criteria where appropriate. Layout roads and paths to integrate visitor programming, maintenance regimens, emergency access, special event staging (where required) and ecosystem function efficiently.
- **Low-impact Design:** Specify durable, low-maintenance details and materials to improve water quality and eco-system function, including native plant communities and green infrastructure BMPs.

Preserve existing native vegetation and soil structure from the impacts of construction whenever possible. Include the restoration of low-functioning eco-systems, including stormwater erosion and invasive plants whenever possible. Design for climate resilience, anticipating the effects of extreme storm events, heat, drought, sea level rise and other impacts.

- Site-Specific Design: Protect cultural resources. Specify materials that reflect the natural and cultural history of the site. Design interpretive signage to educate visitors about site history.

#### **D. Scope of Services**

##### **General Requirements:**

- See the RFP attachments for Project Locus, Limit of Work Diagram, Project Phase and Task Spreadsheet Template and Survey Specification.
- Project Meetings: Consultant will prepare for and conduct meetings with DCR and City of Newton officials, including DCR Team meetings, site walks, meetings with neighborhood groups and/or elected officials. Assume project meetings will be held at the project site or at DCR's Headquarters at 251 Causeway Street, Boston. Consultant shall prepare all presentation materials and facilitate the meetings. Consultant shall provide meeting summaries with action items for all meetings and shall distribute those to all members of the DCR and consultant team within seventy-two (72) hours after the meeting.
- Public Outreach Process: Early and continuing public involvement opportunities throughout the transportation planning and programming process is crucial for the project. DCR Project Manager shall notify the town/city about the potential project and coordinate stakeholder meetings and/ or interviews. DCR's Office of External Affairs shall coordinate public presentation venue and publicity for public presentations. External Affairs will also coordinate public comments, which will be accepted for two weeks after each the public presentation via DCR's website. Assume public presentations will be held at an ADA accessible public venue close to the site. Prepare public presentations in PowerPoint format and provide handouts as required. Include one rehearsal meeting at Causeway Street for each presentation. Provide meeting summaries with action items for all presentations.
- Topographical Survey: See RFP Attachments for Survey Specification.
- DCR Review Period: Assume a two-week period for review and approvals for each of the DCR reviews listed in the Scope of Services.
- Project Documents: Prepare Plans, Specifications, and Estimate (PS&E) suitable for bidding. Provide all drawings in PDF and AutoCAD format. Professionals licensed in the Commonwealth of Massachusetts shall stamp and sign their seal on all Plan sheets and the title page of Specifications. Provide Conformed Plans and Specifications at the completion of Bid and Award Phase. Provide Record Plans and Specifications at the completion of Construction Services Phase. Plans shall include (at minimum):
  - Title sheet and index
  - Legend and abbreviations
  - Key plan
  - Existing conditions
  - Typical sections
  - Sign and pavement markings
  - Profiles
  - Site Preparation and Demolition Plan
  - Construction plan
  - Curb tie plan

- Grading and drainage plan
- Landscape plans, which also include grading information
- Sign summary
- Temporary traffic control plans
- Utility plan
- Details
- Estimates of Probable Cost: Submit with each plan submission. The cost estimate shall be based on the latest weighted unit prices found on the MassDOT web site.
- Landscape Management Plan: During Phase 3: Design Development, the consultant team shall develop a Landscape Management Plan (LMP) including a spreadsheet calendar of maintenance activities and diagrams of the location and/ or extent of each activity (e.g. mowing, sweeping, or invasive removals and restoration planting). The LMP will be revised as required at the end of CO Phase. Consultant will attend a site walk to review the LMP with DCR Operations staff. Landscape Management activities are not included in the Estimate of Probable Cost.
- Traffic Technical Memorandum including traffic counts and crash analysis.
- Permitting for this project may include:
  - WPA – Newton Conservation Commission
  - Project Notification Form – MassHistoric (DCR will submit the PNF to MHC accompanied by supporting documentation provided by the consultant)
  - Chapter 91 – DEP
  - Other permits and approvals required
- Additional Services: List the hourly rates for all consultant team members for any additional services. Every effort must be made by the consultant team to avoid additional services. While DCR recognizes that the scope of work may change after the Notice to Proceed is awarded, we expect the consultant team to alert DCR to anything that may result in a request for Additional Services as soon as possible. Under no circumstance may the consultant team perform additional services or charge additional time beyond what was estimated in the Proposal without written approval from DCR.

**Proposed Phase and Task List:**

Below follows an outline of phases and tasks anticipated by DCR. Consultant teams should review and revise or augment this list as they feel is required based on their project understanding or experience on projects of similar scope. Consultant teams should then use their proposed Phase and Task List as the basis of their Schedule and Fee.

**Phase 1: Concept Design**

- 1.1 Site Walk w/ Project Team. Include up to (1) meeting.
- 1.2 Topographical Survey
- 1.3 Existing Conditions Inventory:
  - Obtain, review and synthesize available documents relevant to the site.
    - Request Environmental Review
    - Draft Traffic Technical Memorandum. Traffic Data Collection:
      - Provide 7-day automatic traffic record to include speed, classification, and volume for Quinobequin Road.
      - Collect crash reports for most recent 3 years.
      - Create crash summary diagram and crash analysis.
  - Investigate Bicycle and Pedestrian travel needs

- Meet with DCR Planning and Operations Staff to understand maintenance activities and challenges. Include up to (1) meeting.
  - Meet with municipal officials, stakeholder groups and/ or abutters as identified by DCR to understand community use and goals for the site. Include up to (2) meetings.
  - Include the amount of time required on site to thoroughly research, observe and understand the use of the site during different seasons, times of day and special events.
- 1.4 Site Analysis:
- Existing Conditions Plan: Create a plan based on survey information illustrating existing site features, including topography, resource areas, drainage, utilities, footpaths, lawns areas, vegetation, etc.
  - Site Analysis Plan: Create a plan that diagrams roadway, utilities, natural conditions such as wind, solar exposure, topography, existing vegetation as well as the visitor experience of the site, including entry points, circulation and accessibility, views and cultural landmarks.
- 1.5 Meet with DCR Project Team for a design workshop on sketch alternatives. Include up to (1) meeting.
- 1.6 Concept Plan Alternatives:
- Plans: Develop a minimum of (3) design Alternatives.
  - Estimate of Probable Costs for each Alternative.
- \*\* DCR Review
- 1.7 Public Presentation Rehearsal: Prepare graphics (including rendered plans, plan enlargements, and section/ elevations) and PowerPoint for public presentation. Meet with DCR to rehearse for Public Meeting.
- 1.8 Public Presentation: Prepare for and attend a public presentation on a weekday evening. Present the revised Alternatives and solicit comment and ideas from those in attendance.
- 1.9 Preferred Plan: Revise the Alternatives according to DCR direction.
- \*\* DCR Review
- 1.10 Plan Submittal: Revise the Preferred Plan and supporting documents according to DCR direction.

*Phase 1 Summary:*

- *Meetings: (6)*
- *Public Presentations: (1)*
- *Deliverables:*
  - *Topographical Survey*
  - *Site Analysis Plans*
  - *Concept Design Alternatives Plans (as above)*
  - *Preferred Plan (as above)*
  - *Public Presentation PowerPoint and handouts as required*
  - *Concept Design Preferred Plan Submittal*
  - *Draft Traffic Technical Memorandum*

**Phase 2: Schematic Design (25%)**

- 2.1 Site Walk w/ Project Team to ground truth Preferred Plan. Include up to (1) meeting.
- 2.2 SD Plan:
- SD Plan
  - Outline Specifications
  - Estimate of Probable Costs
- \*\* DCR Review

- 2.3 Meeting with Project Team and Key Stakeholders. Include up to (1) meeting.
- 2.4 SD Plan (as above): Revise the SD Plan according to DCR direction.
- 2.5 Public Presentation Rehearsal: Prepare graphics (including rendered plans, plan enlargements, and section/ elevations) and PowerPoint for public presentation. Meet with DCR to rehearse for Public Meeting.
- 2.6 Public Presentation: Prepare for and attend a public presentation on a weekday evening. Present the revised Schematic Design Plan and solicit comment and ideas from those in attendance.
- \*\* DCR Review
- 2.7 SD Plan Submittal (as above): Revise the SD Plan according to DCR direction.
- 2.8 Meet with MassDOT and City of Newton to coordinate SD Plan.
- 2.9 Revise Traffic Technical Memorandum addressing DCR comments.

*Phase 2 Summary:*

- *Meetings: (4)*
- *Public Presentations: (1)*
- *Deliverables:*
  - *Schematic Design Plan (Plan, Outline Specifications, Estimate of Probable Costs)*
  - *Public Presentation PowerPoint and handouts as required*
  - *Schematic Design Plan Submittal*
  - *Final Traffic Technical Memorandum*

**Phase 3: Design Development (50%)**

- 3.1 Meet with Project Team. Include up to (1) meeting.
- 3.2 Site walk with DCR Operations to develop Landscape Management Plan.
- 3.3 Design Development Submittal:
  - Plans & Details
  - Specifications
  - Estimate of Probable Cost
  - Landscape Management Plan
- \*\* DCR Review
- 3.4 Meet with Project Team. Include up to (1) meeting.
- 3.5 DD Revised Submittal (as above)

*Phase 3 Summary:*

- *Meetings: (3)*
- *Deliverables:*
  - *Design Development Submittal (as above)*
  - *Design Development Revised Submittal (as above)*

**Phase 3A: Permitting Phase (concurrent with Design Development)**

- 3.6 Meet with Project Team to review Permitting Strategy; identify all required permits for the proposed work. Include up to (1) meeting.
- 3.7 Meet with Permitting Authorities to understand planning goals and BMPs for the project site. Include up to (4) meetings.
- 3.8 Draft filings: Prepare draft permit filings to local, State and Federal authorities as required for the proposed work.

- \*\* DCR Review
- 3.9 Revise & submit filings: Customize permit plans as necessary for each filing.
- 3.10 Hearings: Prepare for and attend public hearings in support of permit filings. Assume up to (2) hearings for each permit.
- 3.11 Record filings with the appropriate Registry of Deeds.

*Phase 3A Summary:*

- *Meetings/ Hearings: (7)*
- *Deliverables:*
  - *Permitting strategy*
  - *Permit filings and recording*

**Phase 4: Construction Plans (100%)**

- 4.1 Meet with Project Team. Include (1) meeting.
- 4.2 75% CD Submittal:
  - Plans & Details: Finalize the design of the proposed work, incorporating any changes required by permitting efforts or comments by DCR.
  - Specifications/ Special provisions
  - Estimate of Probable Cost
  - Landscape Management Plan (revised)
- \*\* DCR Review
- 4.3 90% CD submittal (as above)
- \*\* DCR Review
- 4.4 Meet with Project Team. Include (1) meeting.
- 4.5 100% CD submittal (as above)

*Phase 4 Summary:*

- *Meetings: (2)*
- *Deliverables:*
  - *75% CD Submittal (as above)*
  - *90% CD Submittal (as above)*
  - *100% CD Submittal (as above)*

**Phase 5: Bid and Award Phase Services (Bid to be conducted by DCR)**

- 5.1 Bid Package
- \*\* Advertisements
- \*\* DCR Review
- \*\* Bid Period
- 5.2 Bidder Site Walk
- 5.3 Responses to Bidder Questions & Addenda
- 5.4 Bid Review & Comparison (Canvass of Bids spreadsheet including all items and unit prices)
- 5.5 Conformed Set (Plans and Specifications) as required
- \*\* DCR Contract Award

*Phase 5 Summary:*

- *Meetings: (1)*
- *Deliverables:*

- *Bid Package*
- *Response to Bidder Questions and Addenda*
- *Bid Review and Comparison*
- *Conformed Set*

**Phase 6: Construction Support Services (DCR Resident Engineer to provide Construction Administration)**

- 6.1 Weekly Site Visits and Job Meetings, including review and approvals on:
- Pre-Construction Site Walk
  - Site Preparation (including erosion control, tree preservation and removals site walk)
  - Review for Approval by the Resident Engineer (including layout, subgrade, drainage infrastructure, pavement, site improvements, fine grade, plant materials delivered to the site prior to installation, plant layout)
  - Plant Procurement (including nursery visits & and plant material tagging)
  - Plant Layout
  - Final Punch List
  - Inspections, Warranties & Guarantees per the Contract Documents
  - Final Acceptance and Project Close-Out
  - One-Year Guarantees
- 6.2 Submittal Review & Action
- 6.3 Payment, Claims, CO Review & Action
- 6.4 Record Set
- 6.5 Meeting: Ops/ Landscape Management Plan

*Phase 6 Summary:*

- *Meetings: As required to complete Construction Support Services, with meeting minutes.*
- *Deliverables:*
  - *Record Set*
  - *Landscape Management Plan*

**E. Project Schedule**

DCR’s deadline for completion of design is no later than February 28, 2021. Please use the attached Project Phase and Task Spreadsheet (or consultant software) to indicate the consultant team’s anticipated schedule for each phase and task to meet DCR’s milestones for the project.

**F. Attachments:**

1. Project Locus and Limit of Work Diagram
2. Project Phase and Task Spreadsheet Template
3. Survey Specification