



## **Request for Proposals for Design and Engineering Support Services for the Last Mile Networks Project**

RFP No. 2017-MBI-01

**Massachusetts Technology Collaborative  
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<b>RFP Issued:</b>	<b>9/14/16</b>
<b>Bidders' Conference:</b>	<b>9/26/16</b>
<b>Questions Due:</b>	<b>9/29/16</b>
<b>Answers to Questions Posted:</b>	<b>10/7/16</b>
<b>Responses Due:</b>	<b>10/20/16</b>

## Table of Contents

1	Introduction.....	5
1.1	<b>Key Principles</b> .....	5
1.2	<b>Characterization (Essential Features) of the Project</b> .....	6
2	Background on Sponsors and Project .....	7
2.1	<b>The Last Mile Network</b> .....	7
2.2	<b>Project Stakeholders</b> .....	7
2.2.1	Massachusetts Technology Collaborative.....	7
2.2.2	Massachusetts Broadband Institute (MBI).....	7
2.2.3	Towns and/or Municipal Lighting Plants (MLPs) .....	7
2.3	<b>Roles and Responsibilities</b> .....	8
2.3.1	Mass Tech Collaborative .....	8
2.3.2	Towns and/or Municipal Lighting Plants (MLPs).....	8
2.3.3	Project Team .....	8
2.3.3.1	Design Engineering Firm .....	8
2.3.3.2	Construction Management Firm.....	9
2.3.3.3	Pole Data Collection Firm.....	9
2.3.3.4	Route Facility Owners.....	9
2.3.3.5	Property Owners.....	9
2.3.3.6	Network Operator.....	9
3	Services Required.....	9
3.1	<b>Scope of Services</b> .....	10
3.1.1	Develop a Detailed Project Plan .....	10
3.1.2	Develop, Implement and Maintain a System of Record .....	10
3.1.3	Develop Technology/Product Roadmaps and Equipment Specifications .....	10
3.1.4	Evaluate Material/Equipment Uniformity .....	11
3.1.5	Perform Route/Premise Evaluations, Site Visits and Identification of Challenges	11
3.1.6	Develop Route Design Drawings.....	12
3.1.7	Develop Preliminary Design.....	12
3.1.8	Develop Final Designs .....	13
3.1.9	Drafting of Conduit License Applications .....	14
3.1.10	Develop Construction Clusters .....	14
3.1.11	Develop Construction Bid Packages.....	14
3.1.12	General Engineering and Project Management Services.....	15
3.1.12.1	General Engineering and Project Management Services (Town Specific).....	15
3.1.12.2	General Engineering and Project Management Services (Non-Town Specific).	16

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3.1.13	Standards & Procedural Manual Development.....	17
3.1.14	Special Permitting Services .....	17
3.1.14.1	Providing Archaeological Permit Services .....	17
3.1.14.2	Providing Environmental Permit Services .....	17
3.1.14.3	Providing Railroad Crossing and Access Permit Services.....	18
3.1.14.4	Providing Highway Access Permit and Bridge Attachment Services .....	19
3.1.15	Develop Systems Integration and Commissioning Plan.....	19
3.1.16	Develop Acceptance Test Plan .....	19
3.1.17	Develop Town Turnover Package .....	21
3.1.18	Develop Communications Management Plan.....	22
<b>3.3</b>	<b>Period of Award</b> .....	<b>22</b>
<b>4.1</b>	<b>Schedule</b> .....	<b>22</b>
<b>4.2</b>	<b>Bidders' Conference</b> .....	<b>23</b>
<b>4.3</b>	<b>Questions</b> .....	<b>23</b>
<b>4.4</b>	<b>Instructions for Submission of Responses</b> .....	<b>23</b>
<b>4.5</b>	<b>Information Required</b> .....	<b>24</b>
(a)	Executive Summary.....	24
(b)	Project Plan.....	24
(c)	Statement of Respondent's Qualifications .....	24
(d)	Staff Qualifications.....	24
(e)	Major Subcontractor Qualifications .....	25
(f)	Project Approach .....	25
(h)	References .....	26
(i)	Price Proposals .....	26
(j)	Tax Law Compliance.....	29
<b>4.6</b>	<b>Finalist Interviews</b> .....	<b>30</b>
<b>5.</b>	<b>Evaluation Process, Criteria and Selection</b> .....	<b>30</b>
<b>5.1</b>	<b>Process</b> .....	<b>30</b>
<b>5.2</b>	<b>Criteria</b> .....	<b>30</b>
5.2.1	Threshold Criterion.....	30
5.2.2	Evaluation Criterion #1 - Company and Personnel Qualifications .....	30
5.2.3	Evaluation Criterion #2 – Major Subcontractor Company and Personnel Qualifications.....	31
5.2.4	Evaluation Criterion #3 - Approach to Scope of Work .....	31
5.2.5	Evaluation Criterion #4 – Fixed- and Unit-Based Pricing.....	31
<b>5.3</b>	<b>Selection</b> .....	<b>31</b>
<b>6.</b>	<b>Other Provisions</b> .....	<b>31</b>

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6.1	<b>General Information</b> .....	31
6.2	<b>Changes/Amendments to RFP</b> .....	33
Attachment A-1	Submission of Sensitive Information.....	34
Attachment A-2	Holding Parties in Possession of Sensitive Information.....	37
Attachment B-1	Authorized Respondent’s Signature and Acceptance Form .....	39
Attachment B-2	Response Cover Sheet .....	40
Attachment C	Price Proposal .....	41
Attachment D	Officer’s Certificate.....	42
Attachment E	Map of Proposed Participating Towns .....	45
Attachment F	Town Information .....	46
Attachment G	Response Checklist.....	47
Attachment H	Design Engineer Responsibility Flowchart.....	48

## 1 Introduction

Massachusetts Technology Collaborative (“Mass Tech Collaborative”), on behalf of Massachusetts Broadband Institute, is issuing this Request for Proposals for Design and Engineering Support Services for the *Last Mile* Network (RFP No. 2017-MBI-01) (the “RFP”) to solicit responses from qualified contractors (“Respondents”) with experience in design and engineering *Last Mile* networks (e.g. Fiber-to-the-Premise (FTTP), fixed wireless networks). Respondents will be competing in an open procurement to provide the design, project management, project support, and consulting services set forth herein (the “Services”). The submissions of Respondents shall be compared and evaluated pursuant to the evaluation criteria set forth in this RFP, and a single Respondent shall be selected for the multi-year engagement.

Mass Tech Collaborative will be the contracting entity on behalf of Massachusetts Broadband Institute. For the purposes of this RFP (and except where the specific context warrants otherwise), Massachusetts Broadband Institute, MBI and Mass Tech Collaborative are collectively referred to as Mass Tech Collaborative.

The Mass Tech Collaborative is building a flexible framework that will help all unserved towns achieve broadband access, allowing for a range of project models, including multi-town collaborations, locally-owned networks, and public private partnerships. Mass Tech Collaborative has now prioritized embracing a wider range of options, projects and choices after spending significant effort over the prior two years testing the political and economic viability of the “one size fits all” approach that originated from a groundswell of local support for a regional ubiquitous FTTP solution.

As this plan developed, it became clear that expanded broadband access in the unserved towns would require a more flexible approach than a sole reliance on an FTTP solution. Mass Tech Collaborative worked with the Baker Administration to develop the parameters of a strategic pathway forward for unserved towns. On May 10, 2016, the Baker Administration met with legislative leaders, Mass Tech Collaborative officials and local representatives from unserved municipalities in Western and Central Massachusetts to discuss this strategic pathway forward for the *Last Mile* program designed to accelerate progress.

The Mass Tech Collaborative team is working closely with town designees, through a collaborative process, to determine the project readiness status of each eligible town. Mass Tech Collaborative has provided the towns with tools to develop their own projections on the take rates and broadband service pricing that will need to be achieved for long term financial sustainability. Mass Tech Collaborative is deferring to the judgments of town officials that the take rate and pricing projections are reasonable and affordable to a sufficient number of town residents.

### 1.1 Key Principles

- All procurements will be conducted in accordance with applicable Massachusetts laws governing the design and construction of public works projects.
- Mass Tech Collaborative expects to approach the construction work by dividing it up into smaller groupings or clusters of towns that decide to participate in a centralized design and construction process administered by Mass Tech Collaborative. The size and composition of the clusters could be based on the timing of town decisions to make binding commitments to authorize a broadband project and other factors that create logical and manageable groupings.
- Mass Tech Collaborative will utilize a design-bid-build approach for the *Last Mile* networks project.
- Mass Tech Collaborative will release a construction bid package for each cluster of towns. Each construction bid package will incorporate a final design with precise specifications for all elements of the work, including procurement and installation of equipment, materials and supplies (inside plant and outside plant). In rare instances, a single-town project may be released for construction bids
- The design of the *Last Mile* network(s) will incorporate the relevant portions of the MBI *Last Mile* Program Policy Statement. For example, the design must accommodate the near-term preferences of each participating town and provide sufficient downstream flexibility to allow a participating town to join or leave a regional network.

- The Design/Engineering (D/E) firm will strive to maximize the cost-efficiency, long-term resiliency, stability, and sustainability of each of the *Last Mile* networks.

## 1.2 Characterization (Essential Features) of the Project

- Mass Tech Collaborative has been charged by the Commonwealth of Massachusetts with managing the construction of broadband infrastructure in up to 40 towns in western Massachusetts that do not meet the Federal Communications Commission (FCC) minimum broadband speed of 25 Mbps down and 3 Mbps up.
- Mass Tech Collaborative has already built a robust fiber, carrier class, middle mile network that runs through towns in western and north central Massachusetts. Mass Tech Collaborative is seeking to leverage the middle mile network while extending infrastructure in these 40 unserved towns.
- While many of the towns have expressed an interest in constructing a new FTTP network, some are pursuing public/private partnership with a commercial enterprise, other towns are more interested in a less expensive wireless network, and a few have yet to decide on the best option to meet their needs. Open issues for many of these towns include:
  - Opt in or opt out to contracting with Mass Tech Collaborative to oversee the design and construction of a town's *Last Mile* network. Some of the 40 towns may elect not to have any broadband project.
  - Who will operate the network for the town?
  - Will the town be part of a larger regional network?
  - Who will be selected to provide services? (e.g. Internet Service Provider)
  - Where fiber drops will be terminated during construction – Fiber to the Curb (FTTC) vs. FTTP.
  - Extent of the coverage within each town – balancing ubiquitous access vs. cost of reaching outliers.
- Mass Tech Collaborative is working with each town as part of the readiness process to help the towns make informed decisions on whether to proceed with a broadband project, who will design and construct the broadband projects and the nature of the broadband project to be implemented.
- Each town that is building a FTTP or wireless network is currently expected to co-invest and cover a portion of the capital cost.
- All broadband projects except for the public/private partnerships will be owned by that town post turnover and commissioning.

### RESPONDENTS PLEASE NOTE:

- (a) This RFP does not commit Mass Tech Collaborative to select any firm(s), award any agreement, pay any costs incurred in preparing a response, or procure or contract for any services or supplies. Mass Tech Collaborative reserves the right, in its sole discretion, to accept or reject any or all submittals received, to negotiate with any or all qualified Respondents, to request modifications to proposals in accordance with such negotiations, to request supplemental or clarifying information from respondents, or to cancel, amend or modify the RFP in any manner, in part or in its entirety, at any time.
- (b) Individuals providing services to Mass Tech Collaborative may be considered “special state employees” subject to the provisions of the Massachusetts Conflict of Interest Law (M.G.L. c.268A). Mass Tech Collaborative’s Agreement Between Owner and Design Professional (the “Design Services Agreement”) requires service providers to certify, amongst other things, compliance with the Massachusetts Conflict of Interest law.
- (c) Respondents to this RFP who are currently (or who anticipate that they prospectively may be) providing services to Mass Tech Collaborative grantees are advised to review the Mass Tech Collaborative procurement conflicts policy (located at <http://masstech.org/procurements>). As part of its response,

Respondent must affirmatively indicate whether it has contracts for services funded in part or in whole by Mass Tech Collaborative grants.

## 2 Background on Sponsors and Project

### 2.1 The *Last Mile* Network

Of the towns and cities included in the **MassBroadband 123** network, 83 are served or will soon be served to varying degrees by an incumbent or new broadband provider but the remaining 40 towns in the **MassBroadband 123** footprint are low density, rural areas that do not have an incumbent cable broadband provider and are referred to as “unserved.” The Mass Tech Collaborative is addressing the last mile challenge with the goal of making high-speed Internet available to unserved residents and businesses within the remaining 40 unserved towns.

The Commonwealth has responded to the *Last Mile* challenge with a \$50 Million appropriation of state capital funding (Chapter 257 of the Acts of 2014) enacted in August of 2014 to support the build-out of *Last Mile* infrastructure in western Massachusetts. Of these funds, up to \$40 million has been allocated for the unserved towns. Mass Tech Collaborative’s main objective is to develop solutions to offer broadband access for households and businesses that maximize the impact of limited public resources, leverage other sources of funding (to the extent necessary and appropriate), and promote economic growth in the region.

Most of the *Last Mile* Networks will constitute the installation of new fiber optic cables attached to existing utility poles. Mass Tech Collaborative plans to oversee the construction of up to 1869 miles of new fiber optic cabling in western Massachusetts with approximately 24,123 homes being passed based upon current desk top town model estimates. Mass Tech Collaborative anticipates that the *Last Mile* network may consist of multiple FTTP Gigabit-capable Passive Optical Network (GPON), Active Ethernet (AE) and fixed wireless networks or a combination thereof. Some of the towns will likely form public-private partnerships and therefore the aggregate number of route miles and homes passed from all MBI-manage projects will be reduced accordingly.

### 2.2 Project Stakeholders

#### 2.2.1 **Massachusetts Technology Collaborative**

Mass Tech Collaborative is an independent public instrumentality of the Commonwealth of Massachusetts chartered by the Commonwealth to serve as a catalyst for growing its innovation economy. Mass Tech Collaborative brings together leaders from industry, academia, and government to advance technology-focused solutions that lead to economic growth, job creation, and public benefits in Massachusetts. Mass Tech Collaborative energizes emerging markets in the high-tech sector by filling gaps in the marketplace, connecting key stakeholders, expanding broadband services, conducting critical economic analysis, and providing access to intellectual and financial capital. Mass Tech Collaborative has three primary divisions: The Innovation Institute at Mass Tech Collaborative, the Massachusetts Broadband Institute, and the Massachusetts e-Health Institute. For additional information about Mass Tech Collaborative and its programs and initiatives, please visit our website at [www.masstech.org](http://www.masstech.org).

#### 2.2.2 **Massachusetts Broadband Institute (MBI)**

The MBI is the central broadband program for the Commonwealth. The MBI was created on August 4, 2008, when Governor Deval Patrick signed Chapter 231 of the Acts of 2008, An Act Establishing and Funding the Massachusetts Broadband Institute (the “Broadband Act”). The primary mission of the MBI is to extend affordable, robust, high-speed Internet access to all homes, businesses, schools, libraries, medical facilities, government offices and other public places across Massachusetts, with a focus on the hard-to-serve areas of western and central Massachusetts. For more information about the MBI and its programs and activities generally, please visit the web site at [www.massbroadband.org](http://www.massbroadband.org).

#### 2.2.3 **Towns and/or Municipal Lighting Plants (MLPs)**

The *Last Mile* project is intended to bring broadband services to unserved towns in western Massachusetts. Interested towns willing to take part in a *Last Mile* network project managed by the MBI are currently expected to obtain funding to pay for approximately two-thirds of the total cost of their project.

Towns will own the broadband infrastructure and assets that are built in the participating town upon completion of the project.

A town may create a Municipal Lighting Plant (“MLP”), which is a public entity formed for the purpose of furnishing efficient, low cost, and reliable electric power, energy-related services or cable television services.

## 2.3 Roles and Responsibilities

### 2.3.1 Mass Tech Collaborative

Mass Tech Collaborative’s primary role and responsibility is to serve as the project “sponsor” and to perform overall management of the *Last Mile* project. Mass Tech Collaborative will contribute information, provide recommendations, articulate strategic plans, manage and execute all procurements, review/approve deliverables, and jointly approve designs and changes in concert with the towns. Mass Tech Collaborative will engage pole data collection, design and engineering, and construction firms as well as other project consultants deemed necessary. Mass Tech Collaborative, acting as an agent for towns, will manage and execute all steps necessary in the pole license application process. Mass Tech Collaborative will report to the towns, its Board of Directors and other stakeholders.

### 2.3.2 Towns and/or Municipal Lighting Plants (MLPs)

Towns and their MLPs are the customers of Mass Tech Collaborative. Each town will ultimately own the *Last Mile* network built in the town. A town may have its MLP serve as the political body responsible in the decision making process for each town. A town will provide baseline requirements for its *Last Mile* network and will be required to jointly approve of all designs and changes in concert with the Mass Tech Collaborative. Mass Tech Collaborative will communicate directly with the towns or their MLPs. Towns will be responsible to select their Network Operator and Internet Service Provider prior to the turnover of the network.

### 2.3.3 Project Team

#### 2.3.3.1 Design Engineering Firm

Design Engineering services will be performed by the selected respondent to this RFP. The D/E firm selected will not be eligible to construct any of the *Last Mile* Networks. Select personnel from the firm will be required to work in the Westborough, MA office to work closely on a day to day basis with Mass Tech Collaborative personnel. The selected D/E firm’s primary role and responsibility will be to perform design, engineering and project management services for up to 40 towns in the *Last Mile* networks project as specified in section 3.1 and as depicted in the responsibility flowchart included as Attachment H. The selected D/E firm is currently expected to have the following high level responsibilities:

- Design *Last Mile* networks,
- Create system specifications and test procedures,
- Inspect all system functions related to the *Last Mile* networks,
- Perform project management tasks as specified,
- Recommend vendor equipment,
- Prepare bid packages for each construction cluster,
- Perform construction QA/QC,
- Ensure system specifications are being met by construction management firm(s) and/or its subcontractors in the Access, Distribution, Core, and Service layers,
- Coordinate testing,
- Hire or manage sub-contractors or other project vendors,
- Interface with Network Operator(s) and coordination with the towns during the commissioning phase for each network, and



- Create town turnover packages

Mass Tech Collaborative will provide Westborough, MA office space for the D/E firm. This office space will be used to support integration between the D/E firm and the Mass Tech Collaborative team. Each workspace (cubicle) will only include a telephone, internet access and power. Personnel will be granted standard work day building and office access capabilities.

#### **2.3.3.2 Construction Management Firm**

Construction Management (CM) firm(s) are responsible for purchasing materials and equipment and constructing *Last Mile* networks. CM firms will perform multiple construction disciplines for different aspects of the project such as outside plant (OSP), inside plant (ISP), active electronics, and civil construction of network shelters. A CM firm will be hired for each construction cluster and will be responsible to perform the work specified in the construction bid package which may include subcontracting to construction or professional service companies if necessary, and will be responsible for any applicable local electrical and building permits.

Mass Tech Collaborative does not intend to impose the risk for make ready work on the CM firm and will work with the D/E firm to develop a project approach for scheduling and sequencing of construction to accomplish this objective. The CM firm, however, will still assume full responsibility for implementing the final design.

#### **2.3.3.3 Pole Data Collection Firm**

Mass Tech Collaborative has contracted with a firm that will perform pole data collection services on behalf of Mass Tech Collaborative and the towns.

The requested pole data collection services are necessary for Mass Tech Collaborative and the Route Facility Owners to determine appropriate “make-ready” work, if any, associated with anticipated pole attachments along *Last Mile* networks project routes. After collection, pole data will be submitted as part of the Route Facility Owners’ license application process.

#### **2.3.3.4 Route Facility Owners**

Route Facility Owners are the owners of poles, conduit, railroad structures and bridges to which fiber of the Project may be attached or through which fiber of the Project may pass. The pole, conduit, etc., are referred to in this RFP as Route Facilities. Route Facility Owners process applications for licenses to permit attachments or otherwise allow licensees to use such Route Facilities. Part of that application process involves make-ready work. Route Facility Owners also have insurance requirements.

#### **2.3.3.5 Property Owners**

Property Owners are the owners of homes, business and other premises to which fiber of the Project may be attached to structures or through which fiber of the Project may pass aurally or below ground. The homes, business, etc. are referred to in this RFP as Premises. Access to Property Owners’ private properties can only be obtained with prior written consent of the Property Owner.

#### **2.3.3.6 Network Operator**

Network Operators are firms hired by the towns that operate the *Last Mile* networks. Network Operators may consult with Mass Tech Collaborative and the D/E firm during the design, test, and turn up of the network where appropriate. Network Operators will be responsible for monitoring network status, supervision and coordination of network maintenance, accumulation of accounting and usage data and user support.

## **3 Services Required**

### 3.1 Scope of Services

Mass Tech Collaborative is requesting responses to this RFP for services to design and engineer various options in building a single town or multi town wide fixed wireless and/or FTTP network(s). These network(s) will provide broadband services to residents and businesses in up to 40 towns in western Massachusetts.

In the cases where towns decide to have the Mass Tech Collaborative oversee the design, construction and turnover of their *Last Mile* network, the Mass Tech Collaborative expects to use the firm selected as part of this RFP to provide design options for a FTTP solution utilizing GPON and/or AE; a fixed wireless solution utilizing Wi-Fi, microwave, TV whitespace, LTE, and/or other proprietary technologies in unlicensed spectrums (e.g. UHF, 2.4Ghz, 3.65Ghz, 5Ghz, 10Ghz); or hybrid fiber/wireless solution.

The FTTP and fixed wireless networks may be interconnected with the **MassBroadband 123** fiber optic network which has a presence within each town. The D/E firm is expected to work with Mass Tech Collaborative to determine the best means to incorporate the **MassBroadband 123** network into the development of *Last Mile* networks. The D/E firm is expected to propose plans for a network capable of delivering data, voice, and (whenever mandated by the town and/or if economically feasible) broadcast video services. It is expected that the preliminary design for the first construction cluster, which could include up to eight towns, will be completed within 3 months from the execution of a contract.

Mass Tech Collaborative desires to contract with one qualified firm that would serve as the Design, Engineering, and Project Management contractor for all related tasks outlined in this RFP. This section provides descriptions of the work to be completed by the selected D/E firm and/or its subcontracting partners.

#### 3.1.1 Develop a Detailed Project Plan

The selected D/E firm will create and manage a detailed overall MS project plan, or equivalent, with the input from the Mass Tech Collaborative identifying major milestones and critical path items throughout the project. The selected D/E firm will manage the evolution of this plan with scheduling input from all members of the Project Team and their subcontractors throughout the life cycle of the project as part of the General Project Management Services tasks.

#### 3.1.2 Develop, Implement and Maintain a System of Record

The selected D/E firm will develop, implement and maintain a System of Record (SOR) that will be the authoritative source for, and ensure the integrity and validity of, all data collected, created and maintained during the project. The SOR will be used as a means of collaboration between all stakeholders (i.e. information repository) to upload, manage, preserve, and disseminate project content.

All project outputs will flow through the SOR. Data stored in the SOR will be used to support project management requirements, enabling Mass Tech Collaborative to view progress, make decisions, evaluate options, and generate maps, charts and reports.

The selected D/E firm will need to determine if a secure cloud-based system could be used for the SOR and could be configured for web-based accessibility, usability and administration, and information must be able to be structured to allow or deny access on a town-by-town basis.

Mass Tech Collaborative requires the SOR to remain accessible to all users for one year after the close of the project and the data should be exported and delivered to the Mass Tech Collaborative in a logical and organized format within the one year timeframe.

#### 3.1.3 Develop Technology/Product Roadmaps and Equipment Specifications

Mass Tech Collaborative expects the selected D/E firm to create a ten (10) year network technology and vendor product evolution roadmap identifying the differences between Active Ethernet, passive optical, and fixed wireless networks from selection, design, impacts, and cost comparisons. Vendor products should include key features of each platform consisting, but not limited to, the following: hardware capacities, software specifications, environmental and management capabilities, equipment management software functionality for service configuration, surveillance, performance and administration.

Roadmaps shall start at a baseline providing an explanation of the current capabilities for each technology. They shall then map out the anticipated evolution for each technology, including a forecast of expected changes in performance (e.g. speed, features, and functionality) and reductions in costs (e.g. equipment cost, cost of service to subscribers, cost to operate). Roadmaps shall include the limitations of each technology (e.g. insufficient capacity to or inability to support real-time traffic such as voice over IP or Broadcast video), elements that would affect consumer and/or carrier adoption, and the extent to which these limitations can be mitigated. Roadmaps shall convey the market availability of next generation technologies (e.g. technologies that are in production by multiple manufacturers), and any market constraints that would affect their adoption in the western Massachusetts region. Lastly, Roadmaps shall include forecasts (if any) of when the technology will reach 'end of life' within the next 10 years. The D/E firm shall list assumptions that were made while conducting forecasts.

Upon completion, the D/E firm will provide a detailed recommendation on the selection of qualified vendors and identify specifications for equipment to be deployed for the *Last Mile* network (e.g. FTTP and fixed wireless). This recommendation will include reasons why these vendors should be considered (e.g. pros and cons).

The selected D/E firm shall present findings from the technology and product roadmaps (in MS PowerPoint format) to the Mass Tech Collaborative and provide a recommendation as to whether or not there are advantages or disadvantages to deploying fixed wireless broadband networks in the towns. The D/E firm shall provide a recommendation of the most appropriate technologies to provide broadband services in the towns as both a formalized narrative and PowerPoint presentation to the Mass Tech Collaborative. The Mass Tech Collaborative will review and approve or reject the D/E firm's recommendation. The approved recommendation will provide the foundation for the preliminary and final design phases.

#### 3.1.4 **Evaluate Material/Equipment Uniformity**

The selected D/E firm will evaluate the extent to which the project needs uniformity of OSP materials/equipment and systems equipment across all towns and/or regional networks. This is to be evaluated within Massachusetts procurement rules, which emphasize competitive procurements vs. proprietary specifications, and with respect to projected operational efficiency. If requested by the Mass Tech Collaborative, the D/E firm will prepare a written justification for a proprietary specification.

#### 3.1.5 **Perform Route/Premise Evaluations, Site Visits and Identification of Challenges**

The selected D/E firm will be required to ride out each planned route and visit each premise to document the feasibility of the route and document any roadblocks and hurdles that may delay the construction of these routes. Evaluations will consist of the following:

- FTTP networks:
  - Identify hut and/or Fiber Distribution Hub (FDH) location(s) per town (e.g. siting)
  - Conduct surveys in each town to identify existing utility infrastructure along all roads to support development of a route design
    - Identify the extent to which new underground (conduit) or aerial (poles) infrastructure will need to be installed
  - Conduct surveys in each town to collect information about each premise that will be served by the *Last Mile* networks to support development of a customer premise design. The surveys must include information as to driveway lengths, types of entry, entry locations, and any privately-owned poles
- Fixed wireless networks:
  - Identify fixed wireless equipment sites per town
  - Conduct new or verify existing fixed wireless propagation studies by conducting site surveys in each town to collect information about proposed/planned fixed wireless equipment sites (e.g. base station siting on utility poles, monopoles, municipal facilities, DCR fire towers, existing communications towers) and client stations located at customer premises

- Conduct surveys in each town to identify existing utility infrastructure along backhaul paths, when fiber optic backhaul is required rather than fixed wireless backhaul
- Identify extent to which new underground (conduit) or aerial (poles) infrastructure will need to be installed, when fiber optic backhaul is required rather than fixed wireless backhaul
- Identify any permitting or construction challenges while conducting surveys to support development of design alternatives
- Identify any Multiple Dwelling Units (MDU), Multiple Tenant Units (MTU), and commercial and seasonal properties
- Consider design implications of approved buildable land parcels. Most current data will be provided in consultation with towns
- Verify fiber egress points to support single and redundant connections to the **MassBroadband 123** network and regional inter-town connections, if applicable.

### 3.1.6 **Develop Route Design Drawings**

Mass Tech Collaborative has provided in Attachment F the list of the 40 towns that may be included in this project, and each town's preliminary data, which includes:

- Estimated unit count (households or businesses consisting of one or more people living or working together that occupy all or part of a standalone building)
- Estimated number of telephone poles
- Estimated route miles
- Square miles
- Proposed technology to be deployed

Working with Mass Tech Collaborative and the towns, using the data from Attachment F and data collected from the route and premise evaluation, the selected D/E firm will develop route designs for only the FTTP towns authorized by the Mass Tech Collaborative. These route designs shall identify the roads to be included in each town's build-out. Identify the installation type for the fiber optic cables (e.g. new/existing aerial, new/existing underground, dark fiber and overlash) in each town's build-out. These drawings will be submitted to the Mass Tech Collaborative which in turn will be provided to its Pole Data Collector firm to be used in determining the pole data to be collected per FTTP town for pole application submittal for make ready work by the Route Facility Owners.

The selected D/E firm will be required to consider and evaluation opportunities to leverage the **MassBroadband 123** network, including overlash, bifurcation of network spurs and use of dark fiber on the **MassBroadband 123** network in consultation with the Mass Tech Collaborative.

### 3.1.7 **Develop Preliminary Design**

The Mass Tech Collaborative, during its Town Readiness process, provided each town a network design decision tree document to identify baseline requirements for their town's network. These baseline requirements will be provided to the selected D/E firm as a starting point in the development of preliminary designs for each town. The selected D/E firm will develop these high-level designs, and create estimated costs per town based on these requirements. Mass Tech Collaborative and towns will have the ability to approve, reject or request modifications of the design based on budgetary restrictions. After a short period of this collaborative interaction, the D/E firm will incorporate all modifications and develop one final version of the preliminary design and project budget which implements any approved modifications.

Preliminary designs will also be informed by route and premise evaluations, and may be used in support of special permitting projects such as conservation commission hearings, historical society hearings, MassDOT bridge attachment petitions, etc.

Preliminary FTTP, fixed wireless, and hybrid designs will include but will not be limited to the following:

- General requirements:
  - Network technology (i.e. AE, GPON, and/or fixed wireless) and a listing of equipment to be installed
  - Premise location maps
  - Percentage existing/new aerial/underground
  - Design Layer 1 (physical), Layer 2 (switching) and Layer 3 (routing) architecture that may utilize homogeneous network equipment with considerations around remote management
  - Project budget spreadsheets (e.g. material and labor construction estimates including prevailing wage requirements)
  - Growth, redundancy and owner-specified service level projections
  - Network capacity plans that demonstrate support for the required data speeds (i.e. Internet)
  - An integration strategy for cloud based voice services
  - Analysis of broadcast video services (e.g. IPTV) and/or analysis for support of video streaming technologies (linear, video-on-demand, in-home and out of home streaming)
  - Opportunities to leverage the **MassBroadband 123** network, including overlashing, bifurcation of network spurs and use of dark fiber on the **MassBroadband 123** network based on determination during route design
- FTTP networks:
  - Physical topology (i.e. point-to-point, bus, star)
  - Potential hut/FDH location(s) including flood plane and elevation analyses
  - Splitter placements (i.e. centralized, distributed, or central office split)
  - Outside Plant (“OSP”) feeder, distribution and drop cable schematics which list cable types and minimum stand counts
  - Driveway lengths
  - Cable management recommendations (e.g. FDH, Fiber Access Terminals, splice closures, vaults, handholes, etc.)
- Fixed wireless networks:
  - Potential fixed wireless equipment sites
  - Fixed wireless propagation maps

### 3.1.8 Develop Final Designs

The selected D/E firm will create detailed designs based on the preliminary designs approved by the Mass Tech Collaborative and the town. These designs will include, but will not be limited to:

- FTTP networks:
  - Fully developed, stamped GIS/CAD drawings detailing OSP cable construction with pole by pole detail, butterfly drawings, splice locations and splicing plans (fiber cable strand counts, cable management locations)
    - Finalized detailed hut construction plans including, but not limited to:
      - Civil drawing requirements for hut location(s)
      - Fiber cable attachments and hut penetration locations
      - Infrastructure design including ladder tray, relay racks, vertical/horizontal wire management, patch panels, fiber trough, fiber modules/splice trays
      - Network design drawings, equipment specifications, port mapping documentation, and system configurations
      - Power requirements including commercial, backup and redundant systems
      - Grounding requirements
      - HVAC requirements
      - Floor plans
      - Rack elevations drawings

- Environmental alarming (HVAC, Temperature, site/security access, etc.)
  - Route definition (feeder, distribution and drop locations, construction types (aerial/underground new/existing, multiple egress connections))
- Fixed wireless networks:
  - Fully developed, stamped GIS/CAD drawings detailing fixed wireless equipment sites with pole, mast, or tower detail, and equipment specifications
  - Propagation maps that minimally show which base stations are serving which client stations with which fixed wireless technologies
- Growth, redundancy and specified service levels projections
- Distance calculations (RF, optical and road miles)
- Verification that all necessary licenses or permits have been obtained or the status of those in process

### 3.1.9 **Drafting of Conduit License Applications**

The selected D/E firm will prepare and perform a quality check of Route Facility Owner conduit license applications for each of the towns. Specifically, the firm will:

- Prepare and submit initial conduit applications for the Mass Tech Collaborative to submit to the utility
- Make edits or modifications to the draft application after the Mass Tech Collaborative and/or the towns review
- Resubmit edited applications to the Mass Tech Collaborative
- Provide design and engineering services for manhole surveys
- Provide design and engineering services for rod and rope survey
- Provide detailed survey results to the Mass Tech Collaborative
- Submit any new alternative conduit/route designs to the Mass Tech Collaborative as required
- Maintain applications in the System of Record

### 3.1.10 **Develop Construction Clusters**

The selected D/E firm will recommend to the Mass Tech Collaborative the size and composition of construction clusters that reflects, but is not limited to, the following interests:

- Reducing costs and barriers to competition among qualified construction companies (e.g. bonding capacity, staffing, subcontracting)
- Addressing external constraints (e.g. ability of Route Facility Owners to process make ready applications and prosecute make ready work or material acquisition lead times)
- Completing all work within project timeframe
- Sequencing construction activities across multiple construction clusters

Mass Tech Collaborative is defining a “construction cluster” as a group, or batch, of up to eight towns where construction crews can be mobilized simultaneously to save time and money where appropriate. These clusters of towns may or may not be adjacent to each other.

### 3.1.11 **Develop Construction Bid Packages**

The selected D/E firm will create construction bid packages for each construction cluster or single town network that will be similar, or equal, in quality, level of development, detail and scope to the *RUS Form 515 Construction Contract* documents. Bid packages will be issued for bidding by construction firm(s) for the physical construction, equipment installation, and configuration of the *Last Mile* network. The selected D/E firm will assist the Mass Tech Collaborative in responding to questions received from bidders during the bidding period, and participate in the evaluation of bids and qualifications of such bidders.

Construction packages will consist of, but will not be limited to, the following:

- Fully developed, stamped GIS/CAD FTTP drawings with pole by pole detail
- Engineering Work Documents

- For FTTP projects:
  - Finalized detailed hut construction plans utilizing modular construction where feasible
  - Detailed description of network equipment specifications
  - Test plan responsibilities, execution and documentation
- For fixed wireless projects:
  - Finalized detailed fixed wireless infrastructure construction plans
  - Detailed description of network equipment specifications
  - Test plan responsibilities, execution and documentation
- Detailed listing of materials and inventory management requirements for all aspects of the project including hardware (e.g. active and passive equipment), software, and licensing components
- Qualifications required of bidders (and/or their subcontractors) for the physical construction, equipment installation, and configuration of the fiber optic network
- Any conditions imposed by conservation commissions as dictated by environmental permits
- Should a National Pollutant Discharge Elimination System (NPDES) notice threshold be met for any proposed construction cluster, construction documents shall include the requirements the Construction Management Firm(s) must meet to comply with the NPDES requirements
- Request for information from construction firm(s) to determine if the firm is a preferred vendor or Vendor Approved Reseller for OSP material and/or network equipment
- Requirement for construction firm(s) to reflect prevailing wages

Each bid package shall be capable of being transmitted in electronic form, and the D/E shall deliver at least one reproducible printed set of each bid package to the Mass Tech Collaborative.

The D/E firm will support Mass Tech Collaborative's evaluation of the qualifications listed in responses from bidders and the bidders' subcontractors.

### 3.1.12 **General Engineering and Project Management Services**

The selected D/E firm will provide the following engineering and project management services:

#### 3.1.12.1 **General Engineering and Project Management Services (Town Specific)**

- Prepare and manage detailed town-by-town Microsoft Project plans, or equivalent, detailing all tasks with start and end dates to be performed in each town and identify major milestones and critical path items
- Maintain SOR ensuring data is current throughout the lifecycle of the project
- Submit town specific or cluster based reports as specified in the approved Communications Plan
- Review the CM firm's submittals, including shop drawings, project plans, product data, and samples, and making approvals of or recommendations about such submittals to the Mass Tech Collaborative
- Review and recommend approval, rejection, or modification of invoices from project vendors
- Respond to Requests for Information ("RFI") or clarification from the CM firm regarding the plans and specifications
- Ensure CM firms' compliance with the approved design by performing the following:
  - Process Red Lined Construction Plans:
    - Update plans with red lined information from CM firm(s)
    - Conduct desktop assessments of red lined plans identifying any deviations from design plans
    - Prepare final as-built plans
    - Manage version control
  - Prepare inspection checklists and develop inspection schedules
  - Lead, participate in, and report on routine inspection of contractors, ensuring proper construction methods and specifications for the project are being met
  - Identify and report any unauthorized deviations from design plans as punch list items

- Develop punch lists that include photos and corrective actions to be taken which will be documented in System of Record
- Track construction status for all active route segments per town through completion of construction
- Make modifications to the approved designs as a result of route adds, moves and/or changes
  - Reason for route adds, moves and/or changes may include but are not limited to, denial of existing conduit licenses, denial of existing aerial licenses, town change request, value engineering, denial of (or in order to avoid) special permit (e.g. environmental, archaeological, bridge attachment, railroad crossing), hut relocation
  - The selected D/E firm will partially redesign the network in the town in order to address the adds, moves or changes needed and submit the new design to the Mass Tech Collaborative for approval
- Evaluate change requests, provide recommendations to the Mass Tech Collaborative and tracking all approved change requests by project stakeholders
- Identify and recommend actions aimed at value engineering and other cost-saving opportunities
- Perform oversight on all aspects of Acceptance Testing
- Verify completion of all aspects of the build whether physical or virtual by any vendor or operator to ensure all work has been completed to specification
- Ensure network and equipment can deliver the services requested by the town (e.g. voice, data, video)
- Ensure CM firm's compliance with obtaining all necessary building permits prior to construction such as:
  - Construction Permits
  - Electrical Permits
- Direct and monitor towns progress in granting and/or securing Right of Way (ROW) and in securing Right of Access (ROA) from towns and property owners
- Recommend when construction segments can be released to construction
- Ensure that all final design plans, licenses, permits, etc. are stored in the System of Record
- Establish and implement closeout procedures per construction cluster

#### 3.1.12.2 **General Engineering and Project Management Services (Non-Town Specific)**

- Provide Project Management and scheduling services
  - Coordinate, schedule, and attend pre-construction and on-going construction meetings
  - Maintain overall project schedule
- Provide electronic meeting minutes to Mass Tech Collaborative within two days of any meeting
- Monitor progress and performance of all project vendors
- Submit reports as specified in the approved Communications Plan
- Submit status and productivity reports for all project vendors to the Mass Tech Collaborative
- Draft notices or other forms of correspondence to the CM firm, and submit to the Mass Tech Collaborative
- Prepare, maintain, update and report on the project budget in coordination with the Mass Tech Collaborative and recommend adjustments for optimization, changes, or to address variances that arise during the project (e.g. design, materials, equipment, labor, administrative and legal)
- Review, track, negotiate, recommend and update all requests for changes by any project vendor, including but not limited to changes in software or firmware code
- Create and enforce safety assurance plan for the project
- Alert Mass Tech Collaborative of potential critical path schedule slippage and upcoming milestones to keep project on track with regard to critical payment dates for pole applications, make ready estimates; material acquisition lead time delays; weather delays; permitting issues; manpower or crew shortages; etc.
- Collaborate with the operator of the **MassBroadband 123** network to discuss backhaul optimization of *Last Mile* networks.
- Establish and implement closeout procedures for the overall project



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### 3.1.13 **Standards & Procedural Manual Development**

The selected D/E firm will prepare and submit for approval, manuals for all contractors to follow. These manuals shall include the following:

#### **Standards**

- Writing standards (conventions for design plan markups)
- Document templates (BOM, splicing plan, equipment port mapping, change request, etc.)
- Naming conventions
- Labeling standards
- CAD and GIS data standards
- Workmanship and installation standards
  - These standards should incorporate all relevant ANSI/TIA/EIA and Telcordia SR-1421 standards

#### **Manuals**

- Safety management plan
- Quality management plan
- Construction installation procedure (Method of Procedure (“MOP”))
- Technical operations manual development (network service provisioning guidelines)

### 3.1.14 **Special Permitting Services**

The selected D/E firm will be responsible for the following permitting services:

#### 3.1.14.1 **Providing Archaeological Permit Services**

- Coordination and Consultation:
  - With local historical commissions, historical district and the Massachusetts Historical Commission for any elements of the project that require review under Section 106 of the National Historic Preservation Act of 1966, as amended, and
  - With members of the *Last Mile* networks project team(s) to utilize plans, photographs, and other materials that assist with the identification of below ground and visual impacts to cultural resources
- Apply for any permits required
- Archaeological Sensitivity Assessment – involves the review by a qualified archaeologist of any elements of the *Last Mile* networks project for potential ground disturbance. This review may be conducted as any combination of desktop survey, review of aerial photography, walk-over/drive-over survey, consultation with Mass Tech Collaborative and/or CM firm or archaeological dig. Upon review completion, the D/E firm will compile the information, document findings, make recommendations regarding the potential effect of the new *Last Mile* networks construction on archaeological resources.
- Historic Architectural Assessment –involves the review by a qualified archaeologist of any elements of the *Last Mile* networks project for potential visual effects caused by alterations to properties or their immediate surroundings. This review may be conducted as any combination of desktop survey, review of aerial photography, walk-over/drive-over survey, or consultation with Mass Tech Collaborative and/or CM firm. Upon review completion, the D/E firm will compile the information, document findings, make recommendations regarding the potential impact of the new *Last Mile* networks construction on historical properties.

#### 3.1.14.2 **Providing Environmental Permit Services**

- Project Documentation and Administration:
  - Prepare meeting minutes,

- Assess the extent, if any, to which the project is subject to federal (e.g. Environmental Protection Agency (“EPA”) Construction General Permit requirements, state (e.g. Massachusetts Environmental Policy Act (“MEPA) or local (e.g. Conservation Commission by-laws) environmental compliance regulations. Pursuant to the Federal Clean Water Act, construction activities which disturb one acre or more are required to apply to the U.S. EPA for coverage under the National Pollutant Discharge Elimination System (“NPDES”) General Permit for Storm Water Discharges from Construction Activities
- Document and track of environmental aspects of project areas,
- Communicate conditions imposed by conservation commissions to CM firm and other members of the *Last Mile* networks project team,
- Coordinate follow-on consultations, and
- Create close-out documentation for all environmental permitting activities conducted during the *Last Mile* networks project.
- Ongoing Consultations:
  - With federal agencies (e.g. US Environmental Protection Agency, US Army Corps of Engineers),
  - With state agencies (e.g. Department of Environmental Protection, the Natural Heritage and Endangered Species Program (“NHESP”), the Department of Conservation and Recreation (“DCR”)), and
  - With local conservation commissions.
- Permitting Support:
  - Conduct field surveys utilizing a qualified environmental scientist,
  - Conduct wetlands delineation,
  - Utilize a qualified environmental scientist to review construction plans by qualified environmental scientist to determine the potential for wetland or endangered species impact,
  - Support design conversations and suggest specific construction techniques to mitigate impacts where required by local state or federal law,
  - Assist Mass Tech Collaborative by completing the documents necessary to obtain necessary permits,
  - Assist Mass Tech Collaborative by representing the organization in permit hearings with conservation commissions
  - Apply for any required permits required; this includes filing permits with the Registry of Deeds, if needed
  - Present mitigations and/or species protection plans to the NHESP, and
  - Assist Mass Tech Collaborative by implementing non-construction related mitigation actions approved by the NHESP, per the species protection plan.

#### 3.1.14.3 Providing Railroad Crossing and Access Permit Services

- Railroad Crossing Engineering:
  - Develop a preliminary design plan for the fiber optic cable crossing that is certified and approved by a Professional Engineer that has done all the necessary structural analysis and calculations
  - Submit a preliminary design plan for the fiber-optic cable crossing of the railroad tracks to rail company that indicates that the proposed crossing meets railroad vertical clearance and horizontal span requirements
  - Obtain approval for the preliminary design plan from railroad company’s engineering department
- Railroad Crossing Documentation and Administration:
  - Receive notification from the Mass Tech Collaborative that it has received a railroad crossing license for the crossing and file the license in the System of Record
  - Coordinate between CM firm and rail company to schedule the crossing work
  - Ensure that the CM firm has submitted proof of railroad protective liability insurance to rail company

- Ensure that the CM firm has executed a standard railroad services and construction agreement
- Coordinate with rail company's railroad flagging/inspection representative to supervise the work

#### 3.1.14.4 **Providing Highway Access Permit and Bridge Attachment Services**

- Bridge Attachment Engineering:
  - Develop a preliminary design plan for the conduit attachment that is certified and approved by a Massachusetts Licensed Professional Engineer that has done all the necessary structural analysis, installation method determination, clearance calculations, restoration planning and other calculations
  - Ensure design is in accordance with the latest edition of the American Association of State Highway and Transportation Officials Load & Resistance Factor Design - Bridge Design Specifications and the MassHighway Bridge Manual
  - Submit a preliminary design plan for the conduit attachment to the MassDOT that indicates the proposed attachment meets MassDOT requirements
  - Obtain approval for the preliminary design plan from MassDOT's engineering department
- Highway Access Engineering:
  - Work with Mass Tech Collaborative to develop and submit traffic plans to the MassDOT
- Documentation and Administration:
  - Support the Mass Tech Collaborative in its application to the MassDOT to establish a license agreement for the attachment
  - Receive notification from the Mass Tech Collaborative that it has received a bridge attachment and highway access permit and file the permit in the System of Record
  - Coordinate between CM firm and MassDOT to schedule the work
  - Coordinate with MassDOT representative to supervise the work

#### 3.1.15 **Develop Systems Integration and Commissioning Plan**

The selected D/E firm will create a systems integration and commissioning plan for a standalone network or multiple regional networks, listing all tasks to be completed and responsible parties from the Access layer up through the Distribution and Core to the Service layer. This plan will need to be approved by the Mass Tech Collaborative. The approved plan will become part of each set of construction bid packages prepared by the D/E firm.

The following questions should be analyzed within the context of the guiding principle that the project should be implemented on a design-bid-build basis and the determination by the Mass Tech Collaborative, in consultation with the D/E firm about the use of proprietary specification:

- How will systems integration and commissioning be completed from the Access Layer up through the Distribution and Core to the Service layer?
- What options exist to create the appropriate level of integration standardization and consistency across construction clusters?
- How, and by whom, will network equipment installations be performed to ensure consistency and standardization of installations across construction clusters? Should the professional service arm of a network equipment manufacturer be considered?
- How does the Mass Tech Collaborative integrate towns which may be part of separate construction clusters?
- When is it critical to have a network operator(s) involved to assist with decisions around systems integration?

#### 3.1.16 **Develop Acceptance Test Plan**

The selected D/E firm will be required to develop an overall Acceptance Test Plan ("ATP") for all aspects of the project. This plan will outline all testing procedures to be completed by the selected D/E firm as part of the General Project Management Services tasks, as well as all other contractors, and it shall include, but not be limited to:

FTTP projects:

- OSP installation inspections
  - Installation inspection checklist shall list tasks which can verify CM firm has followed all applicable installation standards such as ANSI/EIA/TIA and Telcordia that are outlined in the standards and procedural manuals created by the selected D/E firm.
  - Track and be accountable for performing OSP installation inspections. These inspections will be documented in the System of Record.
  - Tracer wire tests specifications
    - These specifications whenever applicable, shall list the procedures for testing of each tracer wire in underground fiber to verify end-to-end electrical continuity.
- Develop optical performance, power, signal quality, and maintenance specifications
  - Provide inspection guidelines and oversight.
  - Standardize final acceptance test result documents specifying the types of tests. These tests will be documented in the System of Record. Summary data will also be required at a town by town level, such as:
    - Tier 1 Optical Loss Test (“OLT”) and Light Source and Power Meter (“LSPM”) tests
      - Link attenuation
      - Polarity check
    - Tier 2 Optical Time Domain Reflectometer (“OTDR”) testing will be performed at different stages throughout the project such as prior to installation to test for cable length, defects, splices, abnormalities and loss value as well as upon completion of a fiber span. Testing should include:
      - Continuity uniformity test
      - Splice loss test
      - Optical length measurement
    - Loss budget calculations to determine if the systems were installed correctly and if the combined loss of all installed components is within allowable limits. Loss budget should include fiber optic connectors, fiber splices, and the fiber cable.
    - Fiber characterization (when required)
      - The fiber characterization test shall record Polarization Mode Dispersion (“PMD”) and Chromatic Dispersion (“CD”) on the entire span.
- Develop test equipment specifications and calibration requirements
- Develop network performance specifications which should consist of the following:
  - Component level test
  - Link level test
  - System level test
  - Original Equipment Manufacturer test
- Develop and execute the inspection checklists, which include:
  - The inspection of: any applicable room or site modifications, grounding systems, electrical work, HVAC systems, relay racks, cable and wiring, labeling, and general suitability for network operations and maintenance activities, applicable:
  - The inspection checklist shall be created, including:
    - Fiber construction checklist
    - Hut construction checklist
    - Electronics configuration checklist
    - Customer premise construction checklist
- The ATP should include all corrective action steps and/or punch list procedures for any items found not to be within specification, including:
  - Deviation policy
  - Anomaly tracking
  - Maximum number of re-burns

Fixed wireless projects:

- Fixed wireless infrastructure inspections
  - Installation inspection checklist should list tasks which can verify contractors have followed all applicable installation standards such as ANSI/EIA/TIA and Telcordia that are outlined in the standards and procedural manuals created by the selected D/E firm.
  - Track and be accountable for performing these inspections.
- Develop fixed wireless system performance, coverage, signal quality, and equipment maintenance specifications
  - Provide inspection guidelines and oversight.
  - Standardize final acceptance test result documents specifying the types of tests. These tests will be documented in the System of Record. Summary data will also be required at a town by town level.
- Develop test equipment specifications and calibration requirements
- Develop network performance specifications which should consist of the following:
  - Component level test
  - Link level test
  - System level test
- Develop and execute the inspection checklists, which shall include:
  - The inspection of: any applicable room or site modifications, grounding systems, electrical work, HVAC systems, relay racks, cable and wiring, labeling, and general suitability for network operations and maintenance activities, applicable:
  - The inspection checklist shall be created, including:
    - Fixed wireless infrastructure construction checklist
    - Electronics configuration checklist
    - Customer premise construction checklist
- The ATP should include all corrective action steps and/or punch list procedures for any items found not to be within specification

### 3.1.17 **Develop Town Turnover Package**

The selected D/E firm will assist Mass Tech Collaborative in preparing robust turnover packages for delivery to each town upon completion of construction and inspection. The D/E shall prepare each element of the turnover package unless otherwise directed by the Mass Tech Collaborative. The selected D/E firm's responsibility shall include, but is not limited to:

- Assembling Turnover Packages for each town within each construction cluster which will include but not be limited to:
  - Town/Owner's Manual
  - Technical Equipment Manual (manufacturer supplied owner's manuals and product cut sheets)
  - Technical Operations Manual (network service provisioning guidelines)
  - Final As-Builts - as-built plans for each construction cluster when all construction is complete and all punch list items have been addressed
  - Route Facility licenses
  - Permits
  - GIS data (if applicable)
  - Warranties (e.g. material and equipment)
  - Software licenses
  - Test results and certification documentation
  - Inspection reports
  - Asset listing in Excel format (e.g. make, model, serial numbers) and proof of transfer of equipment to the town
  - Final financial report
  - BOM for OSP restoration kit
    - Material list
    - Ordering information

- Date coded issues; material with expiration dates (e.g. adhesives, sealing compounds)
    - Instructions
  - Sparing recommendation
- Updating the turnover package based on feedback from the towns

### 3.1.18 **Develop Communications Management Plan**

The selected D/E firm will be required to develop an overall communications management plan for the interaction between all stakeholders, including, but not limited to, Mass Tech Collaborative, D/E, town, and CM firm(s). This plan shall incorporate effective and timely delivery methods and should include, but is not limited to, the following:

- Communication Type – Reports, presentations, reviews and meetings, announcements
- Communication Purpose – Project status, project review, project submittals, team meeting, risk assessment
- Delivery Method – Email, meeting, conference call
- Frequency – Daily, weekly, monthly, quarterly
- Audience – Program Manager, project team, executive team, construction team, town

The selected D/E firm shall provide a detailed description of how they will comply with the reporting requirements for this project. The table below lists the reports required. Mass Tech Collaborative reserves the right to add, remove, or modify any or all reporting requirements. The selected D/E firm will create the Communications Management Plan and report templates as part of this task. The on-going reporting will be completed as part of the General Project Management Services tasks.

Reports shall be linked and maintained in the system of record.

**Table 3.1.18**

Report Title	Frequency	Description
Design status reports	Bi-Weekly	Provide MBI a report on progress with route, preliminary and final design effort
Route and premise evaluation status report	Weekly	Provide MBI a report on progress with route and premise evaluations and site visits
Project budget status report	Monthly	Provide MBI/MassTech a project budget report
Change Management status report	Monthly	Provide MBI a report on progress with changes, status of request, impact analysis (budget/schedule)
Safety inspection status report	Monthly	Provide MBI a report of ongoing safety inspections
Construction status report	Weekly	Provide MBI a report on construction firm progress per town/cluster
Project health status report	Bi-Weekly	Provide MBI a dashboard listing of overall project health regarding time/budget
Quality Management status report	Monthly	Provide MBI a report on construction and equipment vendor work quality and/or design deviations
Design Engineer team status report	Monthly	Provide MBI a report on staffing and engineering teams' progress (e.g. Lab, Design, Engineering, PM, Permitting)

### 3.2 **Period of Award**

The approximate period of providing the required services for the design and engineering management of the *Last Mile* network, is estimated to be from January 1, 2017 through December 31, 2020. These dates are approximations only and may be adjusted at the discretion of the Mass Tech Collaborative. The Design Services Agreement shall remain in effect until completion of the *Last Mile* Network build-out, unless terminated earlier by Mass Tech Collaborative.

## 4 **Submission of Responses**

### 4.1 **Schedule**

The RFP process will proceed according to the following anticipated schedule:

9/14/16	RFP Issued.
9/26/16	Mandatory Bidders' Conference 1:00 PM

9/29/16	Deadline for all questions and clarification inquiries, submitted via e-mail to <a href="mailto:proposals@masstech.org">proposals@masstech.org</a>
10/7/16	Deadline for all answers to Respondents questions.
10/20/16	Responses due by 3:00 p.m.
11/08/16	Finalist Notification
11/14-15/16	Finalist Interviews

**Responses will be due no later than 3:00 p.m. EST, on 10/20/16.** Responses received later than the date and time specified will be rejected or deemed non-conforming and may be returned to the Respondent unopened. Mass Tech Collaborative assumes no responsibility or liability for late delivery or receipt of responses.

#### 4.2 Bidders' Conference

A **mandatory** bidders' conference will be held on 9/26/16 at 1:00 PM. Conference can be attended in person or by teleconference. Conference will be located at 75 North Drive, Westborough, MA 01581. All respondents must register with Mass Tech Collaborative by 5:00 p.m. on 9/22/16 in order to attend or obtain the conference call information. To register, please email Todd Corcoran at [corcoran@masstech.org](mailto:corcoran@masstech.org). Mass Tech Collaborative will transmit the conference call information to all registered bidders 24 hours in advance of the teleconference. Mass Tech Collaborative will post summary responses to procedural questions and issues addressed at the bidders' teleconference on the Mass Tech Collaborative's and the Comm-Buys websites.

#### 4.3 Questions

Questions regarding this RFP must be submitted by electronic mail to [proposals@masstech.org](mailto:proposals@masstech.org) with the following Subject Line: "Questions – RFP No. 2017-MBI-01". All questions must be received by 5:00 p.m. EST on 9/29/16. Responses to all questions received will be posted on or before 5:00 p.m. on 10/7/16 to Mass Tech Collaborative and Comm-Buys website(s).

#### 4.4 Instructions for Submission of Responses

Respondents are cautioned to read this RFP carefully and to conform to its specific requirements. Failure to comply with the requirements of this RFP may serve as grounds for rejection.

- (a) All responses must be submitted in writing, on 8 ½ x 11 paper (including all required submissions), with one (1) unbound original; one (1) unbound copy; and 6.00 bound copies (no three ring binders); and one electronic version (.pdf or .doc with the budget in excel format) thereof.

**RESPONDENTS ARE CAUTIONED TO REVIEW ATTACHMENT A-1, PRIOR TO SUBMITTING AN ELECTRONIC COPY OF THEIR RESPONSE. IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN ATTACHMENT A-1, ANY INFORMATION THAT RESPONDENT HAS IDENTIFIED AS "SENSITIVE INFORMATION" IN THE HARD COPY OF THEIR RESPONSE SHOULD BE DELETED FROM THE ELECTRONIC COPY PRIOR TO SUBMISSION TO MASS TECH COLLABORATIVE.**

- (b) Responses **must** be delivered to:

Request for Proposals No. 2017-MBI-01  
Massachusetts Technology Collaborative  
75 North Drive  
Westborough, MA 01581

- (c) A statement indicating compliance with the terms, conditions and specifications contained in this RFP must be included in the response. Submission of the signed Authorized Respondent's Signature and Acceptance Form (Attachment B-1) shall satisfy this requirement.
- (d) Any and all data, materials and documentation submitted to Mass Tech Collaborative in response to this RFP shall become Mass Tech Collaborative's property and shall be subject to public disclosure under the Massachusetts Public Records Act. In this regard, Respondents are required to sign the Authorized Respondent's Signature and Acceptance Form, set forth as Attachment B hereto.

**RESPONDENTS PLEASE NOTE : BY EXECUTING THE AUTHORIZED RESPONDENT'S SIGNATURE AND ACCEPTANCE FORM AND SUBMITTING A RESPONSE TO THIS RFP, RESPONDENT CERTIFIES THAT IT (1) ACKNOWLEDGES AND UNDERSTANDS THE PROCEDURES FOR HANDLING MATERIALS SUBMITTED TO MASS**

**TECH COLLABORATIVE, AS SET FORTH IN ATTACHMENT A-1 HERETO, (2) AGREES TO BE BOUND BY THOSE PROCEDURES, AND (3) AGREES THAT MASS TECH COLLABORATIVE SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR THE DISCLOSURE OF ANY MATERIALS SUBMITTED TO IT PURSUANT TO THIS RFP OR UPON RESPONDENT'S SELECTION.**

#### 4.5 Information Required

- (a) Executive Summary: Respondents must provide a high level summary of their response to this RFP. This summary should be a maximum of two (2) pages in length.
- (b) Project Plan: Respondents must include a high-level, single town, exemplar project plan. The project plan minimally shall include, but not be limited to, any major milestones from project start to finish.
- (c) Statement of Respondent's Qualifications: All responses must include a statement of the Respondent's history, along with its qualifications and experience to provide the services identified in the RFP. If the Respondent is a joint venture, either respond to each subsection of section 4.5(c) on behalf of each joint venture partner or explain why such a response is inappropriate or inapplicable, and indicate to which joint venture partner each response pertains. Respondent will need to provide the following:
1. Provide a minimum of three FTTP projects and one fixed wireless projects that you have designed and project managed. Include project scope and value, cost per mile, passing's per mile, cost per passing and status for each of the four projects.
  2. Of the projects listed above, please provide a detailed explanation of either (i) one project that incorporates both FTTP and fixed wireless; or (ii) one FTTP project and one fixed wireless project. The detailed explanation(s) shall describe how the following issues were addressed:
    - a. FTTP and fixed wireless technologies selection
    - b. Bandwidth impact of end user technologies and services
    - c. Delivery of IP services via FTTP and fixed wireless topologies and IPTV delivery systems and infrastructure requirements
    - d. Working with Route Facility Owners in the conduit licensing and make ready process
    - e. Project management – ensuring project was on time and on budget
    - f. FTTP and fixed wireless final documentation packages (e.g. as-builds, test plans and results, inspection reports, quality management plans)
  3. Describe Respondent's experience working with state and/or federal, and municipal organizations on similar broadband projects. Specifically, describe broadband projects performed for municipal or state entities. Please include details including organization name, population density, coverage area, design type (OH vs. UG), etc.
  4. Identify projects where the Respondent was required to identify differences between active Ethernet, passive optical and fixed wireless networks from selection, design, impacts, cost comparisons and migration path considerations.
  5. Describe any value added relationships with equipment vendors/network equipment suppliers.
  6. Provide examples of when Respondent provided value-added engineering that resulted in your clients realizing significant savings because of an innovative idea that your firm proposed.
  7. Describe Respondent's experience in developing and maintaining safety and health programs.
  8. Explain the reporting and financial relationships of each joint venture partner.
  9. Provide evidence that the Respondent has sufficient financial capacity and resources to undertake its role in a project of this size, scope and magnitude.
- (d) Staff Qualifications: Mass Tech Collaborative reserves the right to investigate and to review the background of any or all personnel assigned to work under the Design Services Agreement and based on such investigations, at its sole discretion, to reject the use of any individuals. Any changes



to the project personnel shall require formal written approval by Mass Tech Collaborative. Mass Tech Collaborative reserves the right to terminate the Design Services Agreement with Mass Tech Collaborative if appropriate project personnel are not provided by the selected Respondent.

1. All Respondents must identify the following key project team members:
    - a. The person who will serve as the project manager;
    - b. The person who will have primary responsibility for contact and communications with Mass Tech Collaborative; and
    - c. The person who is authorized to negotiate for and contractually-bind the Respondent.
  2. Provide an organizational chart that depicts the proposed project team, individual team members, and roles. If the Respondent is a partnership or joint venture, the organization chart should identify all partners. Identify and describe the roles in the organizational chart that will be held by major subcontractors.
  3. Provide bios for and briefly describe each proposed team member that possesses (this will include joint venture partners and major subcontractors) experience and certifications for each of the following disciplines:
    - a. Fiber systems
    - b. Fixed wireless systems
    - c. Project management
    - d. Special permitting (e.g. environmental, archaeological, railroad and bridge attachments)
    - e. Engineering (in addition, indicate which team member(s) are Massachusetts licensed Professional Engineers and the disciplines in which the license pertains (e.g. architectural, civil, electrical, environmental, and mechanical)).
- (e) **Major Subcontractor Qualifications:** Mass Tech Collaborate requests that each Respondent provide information regarding qualifications for Major Subcontractors. Mass Tech Collaborative defines a Major Subcontractors as a subcontracted organization that will be performing the majority of the work related to any project discipline defined in 4.5.(d)3 or would otherwise substantially contribute to the overall scope of the D/E's work. Provide the following information for each Major Subcontractor:
1. List the names of all Major Subcontractors the Respondent expects to use,
  2. List the services to be provided by each Major Subcontractor and the amount of time that each is expected to spend on the project.
  3. Provide firm-wide qualifications and descriptions of past performances for projects similar to the project identified in this RFP for each Major Subcontractor. Mass Tech Collaborative reserves the right to request references for Major Subcontractors.
- (f) **Project Approach:** Respondents must provide a description of the approach they will use to complete the project and provide the required deliverables. The proposed approach shall minimally include methodologies or ideas that you would apply to this project and that you feel would enhance the quality of your services.

Provide the project approach that your firm will use to:

1. Ensure preliminary design for the first construction cluster is completed within 3 months from the execution of the Design Services Agreement.
2. Integrate with the Mass Tech Collaborative team and use of office space provided in Westborough, MA
3. Develop, implement and maintain a System of Record
4. Develop technology/product roadmaps and equipment specifications
5. Develop a recommendation regarding the potential need for equipment uniformity across

- construction clusters
6. Conduct route/premise evaluations, site visits and identify associated challenges
  7. Prepare route, preliminary and final designs
  8. Evaluate the opportunities to leverage the **MassBroadband 123** network to support *Last Mile* broadband projects, including overlashing, bifurcation of network spurs and use of dark fiber.
  9. Effectively draft, track and manage the process of conduit application/licensing
  10. Determine sizing and composition of each construction cluster
  11. Ensure construction bid packages are complete, accurate, and coordinated with subcontractors
  12. Manage and track town specific engineering and project management services such as project plans, CM firm submittals, invoices, CM firm RFI's, CM firm compliance, construction status, design changes, change requests, value engineering, CM firm's permits, ROW/ROA progress and release of construction segments
  13. Manage and track non-town specific engineering and project management services such as scheduling, meeting minutes, vendor progress and performance, productivity reports, CM firm correspondence, project budget, change requests, safety plan, project milestones and critical path items, and backhaul optimization
  14. Develop standards and procedural manuals
  15. Manage or provide permitting services as described in section 3.1.14
  16. Develop a systems integration and commissioning plan
  17. Develop, implement, and manage the acceptance test plan process for all components
  18. Develop town turnover package
  19. Develop a communications plan and adhere to Mass Tech Collaborative reporting requirements
  20. Complete the project related work with respect to the software and tools for each discipline listed in section 4.5.(d)3 (e.g. MS Project, AutoDesk AutoCAD, ESRI ArcMap)
  21. Ensure quality control
  22. Identify the major areas of risk for the project and propose risk mitigation strategies (e.g. resolving design issues that may come up during the execution of the project).
  23. Prepare, modify and submit all required D/E firm deliverables
- (g) Registered to do Business in Massachusetts: The party with which Mass Tech Collaborative contracts must be registered to do business in Massachusetts or commit to registering with the Secretary of State's office prior to contract execution and must be in good standing. If the party is a joint venture, then each joint venture partner must also be registered to do business in Massachusetts and must be in good standing.
- (h) References: All responses must include references from the three (3) FTTP projects and one (1) fixed wireless project listed in section 4.5(c)(1) above. If the respondent is a joint venture, include additional references so that there are at least four (4) references for each joint venture partner. All references must include a contact name, address, telephone number, fax number, and email address. In addition to the foregoing, all responses must include a listing of public and private clients for whom the firm has provided services similar to those set forth in this RFP within the past five years, with a description of the services provided. If individuals identified as proposed members of the project team previously participated in any of the projects performed for other clients on the foregoing list, the Respondent must identify the projects in which the individual participated.
- Note: Mass Tech Collaborative reserves the right to contact the references provided in your proposal as well as other references without prior notification to you.*
- (i) Price Proposals:

Mass Tech Collaborative is seeking pricing from Respondents in the Price Proposal templates provided in Attachment C. Mass Tech Collaborative represents that it is exempt from federal excise, state, and local taxes and that sales to Mass Tech Collaborative are exempt from Massachusetts State and Use taxes. The number of the certificate granted by the Commissioner of Revenue for use in documenting the exemption is 042-773-673.

1. Using the Price Proposal Template *Excel* form, Respondent shall provide a not-to-exceed price proposal. The Price Proposal will propose pricing for the projected costs under the specified assumptions. As a result of final town participation and design decisions, Mass Tech Collaborative understands that the total project cost will change. Respondent's proposed unit prices and hourly rates specified in the pricing template should not change, however, except as otherwise described in the Respondent's pricing narrative and as agreed to by the Mass Tech Collaborative.

All Respondents should base the pricing on the following assumptions:

- All towns listed in Attachment F will participate in the project.
- Key attributes for each town have been provided in Attachment F and in Town Specific Pricing tab.
- 2% of the Route Miles across the towns would be new conduit or new aerial and as broken out in the Pricing Template for Town Costs. This is an estimate only and is not based upon known conditions. Unit prices will apply to actual unit quantities.
- 10 Conduit Licenses Applications are required across the towns. This is an estimate only and is not based upon known conditions. Unit prices will apply to actual unit quantities
- Special Permitting Assumptions:
  - Archaeological Permit Support Services:
    - Obtain a blanket permit from the SHPO for the entire project (40 towns)
    - Each town (total of 40 towns) will need to have support for:
      - Hut siting,
      - New conduit (1% of total route miles), and
      - New aerial construction (1% of total route miles)
    - Report to the SHPO on a monthly basis
  - Environmental Permit Support Services:
    - Wetlands:
      - Each town (total of 40 towns) will need to have one permit that includes construction that may potentially impact wetlands (total of 40 permits)
    - Endangered Species:
      - One blanket permit to be obtained from NHESP for the entire project (40 towns),
      - Multiple interactions with NHESP may be required
  - Railroad Crossing and Access Permits Support:
    - Expect that there will be no more than 30 railroad crossing across all towns in the project (40 towns)
  - Bridge Attachment Permit Support Services:
    - Expect that there will be no more than 8 bridge attachments across all towns in the project (40 towns)

The Price Proposal is broken down into two components, town specific costs and non-town specific costs (tasks). Each of the Price Proposal elements are derived from the Scope of Services outlined in section 3.1. Respondents should be sure that the costs for all sub-tasks listed in the scope of work for each primary task are included in the Price Proposal.

Instructions for Price Proposal:

There are four tabs in the Price Proposal Template.

**Town Specific Pricing** tab lists each of the 40 towns with the key attributes from Attachment F.

Respondents should develop unit prices for each of the primary tasks for the Scope of Services in section 3.1 as specified in the Pricing template.

- The Town Specific spreadsheet will automatically calculate Town-Specific pricing based upon the unit costs entered in G4:M8 by town.
- The unit priced items highlighted in each column are Mass Tech Collaborative's preferred unit(s) for pricing that task but Respondents may use any of the un-highlighted unit price items listed in the template.
- The "Town" unit can be used for all costs that are not covered by one of the other units listed.

In addition to completing the spreadsheet for Town Specific costs, each Respondent must provide a description of the assumptions and basis for all town based unit prices in the Pricing Narrative and if applicable should also provide an explanation as to why any preferred unit was not used. Assumptions should include assumed staffing, level of effort and rates. See below for additional instructions regarding the Pricing Narrative. The unit prices will be used to determine the pricing for a work order once the specific towns participating are known and are ready to proceed with design activities. Mass Tech Collaborative assumes that a payment will be made for each primary Town Specific task completed on a town by town basis for all Town Specific tasks except for the General Engineering and Project Management Services.

**Non-Town Specific Pricing** - lists tasks within the Scope of Services section 3.1 that in most cases are less dependent upon the number of towns participating and design and are therefore less likely to vary. The costs proposed should be not-to-exceed totals based upon the assumptions provided.

**Level of Effort Non-Town Specific** tab - For each task listed, list all the employees/positions, consultants and subcontractors working on the task, the level of effort (in hours) and hourly rate for each. This will calculate a staffing total that will be rolled up to the Non-Town Specific pricing tab.

**Non-Town Specific** pricing tab lists the same tasks from the Level of Effort Non-Town Pricing sheet and pulls in the labor totals. Any non-labor costs should be listed in the Other Cost column on the Non-Town Specific Summary tab and should have a brief description of the type of cost and basis for the estimate.

**Summary Sheet** tab auto-populates that pricing developed for town and non-town pricing tabs. Respondents should verify the totals listed and their company name where specified.

2. **Pricing Narrative:** Respondents are required to submit a Pricing Narrative that will support the Price Proposal and document pricing assumptions.
  - **Pricing Narrative** must address at least the following items:
    - Hourly rate escalations anticipated over the life of the project, if any.
    - Assumptions for categories and amounts of costs included in the Town Specific unit price for the unit called "Town." Assumptions shall include assumed staffing, level of effort, and rates.
    - Any variables or contingencies that the Respondent proposes would alter a unit price in the Town Specific spreadsheet. Examples of variables may include number of towns participating, number of Clusters, Aerial vs. Underground

Construction, and number of Network Operators. For any variable or contingency that a Respondent identifies, the Respondent must state the magnitude of the variation that would trigger a change in unit price and the amount of such change, and provide a full explanation of why the unit price would vary with the change in certain assumptions. Mass Tech Collaborative will assume that the proposed unit prices will be fixed and remain in effect for the term of the Design Services Agreement, except to the extent there is, and Mass Tech Collaborative accepts, a clear justification for modifying a given unit in the Pricing Narrative and clear principles for quantifying the amount of the unit price modification. As with all aspects of this RFP, Mass Tech Collaborative reserves the right, in its sole discretion, to accept or reject any or all proposed variables, contingencies, justifications, principles and quantifications.

- A recommended approach for payments for the Town Specific General Engineering and Project Management Services category, which may include but is not limited to: milestone based payments, percentage payments over the duration of the construction period, or time and material payments (provided that all options take into consideration a sufficient retainage for final turnover and close-out activities for a town or cluster). MassTech reserves the right to not to accept the recommended approach of the selected D/E firm and may specify an alternative approach to authorizing Non-Town Specific costs.
- Any variables or contingencies that the Respondent proposes that would alter the not-to-exceed pricing included in the Non-Town Specific tabs. For any variable or contingency that a Respondent identifies, the Respondent must state the magnitude of the variation that would trigger a change in level of effort and the modified not-to-exceed pricing proposed for each task impacted. Respondents shall provide a full explanation of why the cost would vary based upon a change in certain assumptions.
- For conduit license applications and permitting services in addition to total cost assumptions listed in the template, please also provide a fixed unit cost per application or permit in the narrative.
- Assumptions for any direct non-labor costs listed in the Non-Town Specific Costs
- The Mass Tech Collaborative anticipates that it shall issue work orders to the selected D/E firm on a cluster by cluster basis. The amount of each work order shall be based on the Town Specific pricing for the towns included in a particular cluster plus an allocation of the Non-Town Specific Costs.

Respondents shall provide a recommended approach for allocating Non-Town Specific costs to each construction cluster, or as appropriate, to the initial construction cluster. The Mass Tech Collaborative reserves the right to not accept the recommended approach of the selected D/E firm and may specify an alternative approach to authorizing Non-Town Specific costs. The Mass Tech Collaborative assumes that Non-Town Specific costs will be paid on a time and material reimbursement basis up to the allocated portion for a construction cluster as authorized in a particular work order and the total of all work orders shall not exceed the total price proposal amount.

- (j) Tax Law Compliance: All responses must include an affidavit of compliance with all corporate filing requirements and compliance with state tax laws. Submission of the signed Authorized Respondent's Signature and Acceptance Form (Attachment B-1) shall satisfy this requirement. If the Respondent is a joint venture, provide a separate such affidavit of compliance for and signed by an authorized officer of each joint venture partner.
- (k) Additional Documentation: All responses must include the following additional documentation.

- Authorized Respondent's Signature and Acceptance Form (see Attachment B-1)
- Response Coversheet (see Attachment B-2)
- Officer's Certificate (see Attachment D) If the Respondent is a joint venture, provide a separate Officer's Certificate for and signed by an authorized officer of each joint venture partner.
- Audited financial statement or Certified P&L Statement for each Respondent, and if the respondent is a joint venture, each joint venture partner for its three (3) most recent Fiscal Years.
- Response Checklist (see Attachment G)

#### 4.6 Finalist Interviews

Notification to the finalists is expected to be provided on 11/08/16 and may include a request for supplemental information. A **mandatory** onsite interview for the finalists is expected to be conducted on 11/14/16 and 11/15/16 at the Mass Tech Collaborative offices in Westborough, MA.

## 5. Evaluation Process, Criteria and Selection

### 5.1 Process

Mass Tech Collaborative's evaluation committee shall evaluate each response that is properly submitted and complies with the requirements of this RFP. As part of the selection process, Mass Tech Collaborative may request that Respondents answer questions to clarify or supplement their responses. In its sole discretion, Mass Tech Collaborative may also choose to enter into a negotiation period with one or more finalist Respondents and then ask the Respondent(s) to submit a best and final offer.

### 5.2 Criteria

Selection of a Respondent to provide the services sought herein will be based on the following criteria (references to Respondent shall be deemed to also include joint venture partners, if applicable):

#### 5.2.1 Threshold Criterion

1. Respondent lists three FTTP and one fixed wireless projects and a detailed explanation about one FTTP & fixed wireless project, or one detailed FTTP and one detailed fixed wireless project to demonstrate relevant experience as specified in section 4.5
2. Respondent has documented experience working with state and/or federal, and municipal organizations on similar broadband projects and the successful completion of those projects.
3. Design services requiring a Professional Engineer ("PE") must be performed by a PE registered in Massachusetts in the discipline in which their services will be provided. The PE, as identified in the organizational chart, must be registered in Massachusetts no later than at the time of contracting.
4. Respondent is registered to do business in Massachusetts or has committed to register prior to contract execution and must be in good standing.
5. Lack of debarment status for Respondent (and any joint venture partners).
6. Respondent has provided audited financial statement or Certified P&L Statement for its three (3) most recent Fiscal Years for the Respondent, and if the Respondent is a joint venture, these statements have been provided for each joint venture partner.
7. Respondent has completed the Response Checklist and has complied with all submission requirements set forth in the RFP.

#### 5.2.2 Evaluation Criterion #1 - Company and Personnel Qualifications

Respondent shall be evaluated based upon the qualifications and relevant experience of the firm(s) (including each joint venture partner, if applicable) included in the Respondent's proposal

demonstrating successful past performances on projects of similar scale and scope as well as information obtained through sources, including references.

Mass Tech Collaborative's review of Respondent's qualifications shall also include, but not be limited to, consideration of Respondent's financial standing, resources, capacity and stability, including prior history of contract terminations and civil and criminal legal proceedings. Mass Tech Collaborative's evaluation of Respondent's financial viability shall include a review and evaluation of the Respondent's audited financial statements, information in the officer's certificate provided and any other resources publically available to Mass Tech Collaborative. Mass Tech Collaborative reserves the right to seek additional information from Respondent as it deems necessary to appropriately determine financial viability.

5.2.3 **Evaluation Criterion #2 – Major Subcontractor Company and Personnel Qualifications**

Respondent's major subcontractors shall be evaluated based upon the qualifications and relevant experience of each firm and its project personnel included in the Respondents' proposal demonstrating successful past performances on projects of similar scale and scope as well as information obtained through other sources, including references.

5.2.4 **Evaluation Criterion #3 - Approach to Scope of Work**

Respondent's approach to the scope of work shall be evaluated based upon the Respondents attention to detail, quality and completeness of proposal and the proposed approach to each of the tasks specified in section 4.5 (f).

5.2.5 **Evaluation Criterion #4 – Fixed- and Unit-Based Pricing**

Respondents' price proposal for both Town Specific and Non-Town Specific pricing as well as the assumptions and considerations provided in the pricing narrative. Mass Tech Collaborative shall select the Respondent determined to provide the overall best value.

The order of these factors does not generally denote relative importance. Mass Tech Collaborative reserves the right to consider such other relevant factors as it deems appropriate in order to obtain the "best value".

5.3 **Selection**

Notification of selection or non-selection of all Respondents who submitted conforming responses will be mailed when the selection process is final. The selected Respondent will execute the form of Design Services Agreement to be provided as part of this RFP. The Design Services Agreement will be posted no later than 9/22/16.

**RESPONDENTS ARE REQUIRED TO SPECIFY ANY EXCEPTIONS TO THE FORM OF DESIGN SERVICES AGREEMENT AND TO MAKE ANY SUGGESTED COUNTERPROPOSAL(S) WITH THEIR RESPONSE. FAILURE TO SPECIFY EXCEPTIONS AND/OR COUNTERPROPOSALS WILL BE DEEMED AN ACCEPTANCE OF THE FORM OF DESIGN SERVICES AGREEMENT'S TERMS AND CONDITIONS, AND NO SUBSEQUENT NEGOTIATION OF SUCH PROVISIONS SHALL BE PERMITTED. RESERVING ONE'S RIGHTS TO NEGOTIATE TERMS AFTER AN AWARD IS MADE IS UNACCEPTABLE**

6. **Other Provisions**

6.1 **General Information**

- (a) All responses, proposals, related documentation and information submitted in response to this RFP are subject to the Massachusetts Public Records Law, M.G. L. c. 66, §10, and to M.G.L. c. 4, §7(26), regarding public inspection and access to such documents. Any statements reserving any confidentiality or privacy rights in submitted responses or otherwise inconsistent with these statutes will be void and disregarded. The foregoing notwithstanding, Mass Tech Collaborative has developed a set of procedures to deal with all documents submitted to it in response to this RFP, and those procedures are set forth in Attachment A hereto. By executing the Authorized Respondent's Signature and Acceptance Form appended hereto as Attachment B1, Respondent acknowledges, understands

and agrees to be bound by the procedures set forth in Attachment A, and agrees that Mass Tech Collaborative shall not be liable under any circumstances for the subsequent disclosure of any materials submitted to it by Respondent pursuant to this RFP and/or in connection with any contract entered into between Respondent and Mass Tech Collaborative as a result of this RFP process.

- (b) Further, any selected Respondent must recognize that in the performance of the Design Professional Agreement it may become a holder of personal data (as defined in M.G.L. c. 66A, and as set forth in Attachment A2) or other information deemed confidential by the Commonwealth. Respondent shall comply with the laws and regulations relating to confidentiality and privacy, including any rules or regulations of Mass Tech Collaborative. Any questions concerning issues of confidentiality, the submission of materials to Mass Tech Collaborative, application of the procedures set forth in Attachment A, or any other questions related to these matters should be addressed to Michael Baldino, Esq., Associate General Counsel at Mass Tech Collaborative.
- (c) It is the policy of Mass Tech Collaborative that contracts are awarded only to responsive and responsible Respondents. The Respondent must respond to all requirements of the RFP in a complete and thorough manner. The Respondent must demonstrate: (1) the availability of adequate resources and staffing to efficiently and expeditiously service Mass Tech Collaborative's needs; (2) the necessary experience, organization, qualifications, skills and facilities to provide the Services set forth in this RFP; (3) a satisfactory record of performance in the provision of the Services set forth in this RFP; (4) the ability and willingness to comply with the requirements of Federal and State law relative to equal employment opportunity. **ANY RESPONSE DETERMINED TO BE NON-RESPONSIVE TO THIS RFP, INCLUDING INSTRUCTIONS GOVERNING THE SUBMISSION OF RESPONSES, WILL BE DISQUALIFIED WITHOUT EVALUATION SUBJECT TO THE RIGHT OF THE MASS TECH COLLABORATIVE TO WAIVE MINOR IRREGULARITIES IN RESPONSES SUBMITTED UNDER THIS RFP.**
- (d) Unless otherwise specified in this RFP, all communications, responses, and documentation must be in English, and all cost proposals or figures in U.S. currency. All responses must be submitted in accordance with the specific terms of this RFP. Respondents should note that the procedures for handling information deemed sensitive by Respondent and submitted to Mass Tech Collaborative set forth in Attachment A apply only to hard copy documents, and are not applicable to information submitted by, among other methods, electronic mail, facsimile or verbally.
- (e) Respondents are prohibited from communicating directly with any employee of Mass Tech Collaborative except as specified in this RFP, and no other individual Commonwealth employee or representative is authorized to provide any information or respond to any questions or inquiries concerning this RFP. Respondents may contact the Procurement Team Leader for this RFP in the event this RFP is incomplete. The foregoing notwithstanding, any questions concerning issues of confidentiality, the submission of materials to Mass Tech Collaborative, application of the procedures set forth in Attachment A, or any other questions related to these matters, should be addressed to Michael Baldino, Esq., Associate General Counsel at Mass Tech Collaborative.
- (f) The Mass Tech Collaborative Legal Department may provide reasonable accommodations, including the provision of material in an alternative format, for qualified Respondents with disabilities or other hardships. Respondents requiring accommodations shall submit requests in writing, with supporting documentation justifying the accommodations, to the Mass Tech Collaborative Legal Department. The Mass Tech Collaborative Legal Department reserves the right to grant or reject any request for accommodations.
- (g) If a Respondent is unable to meet any of the specifications required in this RFP, the Respondent's response must include an alternative method for meeting such specification by identifying the specification, the proposed alternative and thoroughly describing how the alternative achieves substantially equivalent or better performance to the performance required in the RFP specification. Mass Tech Collaborative will determine if a proposed alternative method of performance achieves substantially equivalent or better performance.
- (h) The goal of this RFP is to select and enter into a Design Professional Agreement with the Respondent that will provide the best value for the Services to achieve Mass Tech Collaborative's goals.



Respondents are therefore invited to propose alternatives which provide substantially better or more cost-effective performance than achievable under a stated RFP specification.

- (i) Costs that are not specifically identified in the Respondent's response and/or not specifically accepted by Mass Tech Collaborative as part of the Design Professional Agreement will not be compensated under any contract awarded pursuant to this RFP. Mass Tech Collaborative shall not be responsible for any costs or expenses incurred by Respondents in responding to this RFP.
- (j) The Respondent may not alter the RFP or its components except for those portions intended to collect the Respondent's response (Cost pages, *etc.*). Modifications to the body of this RFP, specifications, terms and conditions, or which change the intent of this RFP are prohibited. Any modifications other than where the Respondent is prompted for a response will disqualify the response. The foregoing notwithstanding, proposed exceptions and/or counterproposals to the form of Design Professional Agreement are permitted to be submitted with a response.

**Respondent's submitted Response shall be treated by Mass Tech Collaborative as an accurate statement of Respondent's capabilities and experience. Should any statement asserted by Respondent prove to be inaccurate or inconsistent with the foregoing, such inaccuracy or inconsistency shall constitute sufficient cause for rejection of the response and/or of any resulting contract. The RFP evaluation committee will rule on any such matters and will determine appropriate action.**

- (k) Submitted responses must be valid in all respects for a minimum period of sixty (60) days after the deadline for submission.
- (l) Mass Tech Collaborative's prior approval is required for any subcontracted services under any Design Professional Agreement entered into as a result of this RFP. The selected Respondent will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible. The selected Respondent is responsible for the satisfactory performance and adequate oversight of its subcontractors. Subcontractors are required to meet the same requirements and are held to the same reimbursable cost standards as the selected Respondent.
- (m) The Design Professional Agreement entered into as a result of this RFP shall generally be on a fee-for-service basis. It is anticipated that Mass Tech Collaborative will select one Respondent to this RFP and will enter into a Design Professional Agreement with the selected Respondent.

## 6.2 Changes/Amendments to RFP

This RFP has been distributed electronically using the Mass Tech Collaborative and the Comm-Buys websites. If Mass Tech Collaborative determines that it is necessary to revise any part of this RFP, or if additional data is necessary to clarify any of its provisions, a supplement or addenda will be posted to the Mass Tech Collaborative and Comm-Buys websites. It is the responsibility of Respondents to check the Mass Tech Collaborative and/or the Comm-Buys websites for any addenda or modifications to any RFP to which they intend to respond. Mass Tech Collaborative, the Commonwealth of Massachusetts, and its subdivisions accept no liability and will provide no accommodation to Respondents who submit a response based on an out-of-date RFP document.

## Attachment A-1 Submission of Sensitive Information

### **THE MASSACHUSETTS TECHNOLOGY COLLABORATIVE POLICY AND PROCEDURES REGARDING SUBMISSION OF "SENSITIVE INFORMATION"**

Massachusetts Technology Collaborative, the Innovation Institute, the Massachusetts Broadband Institute and the Massachusetts e-Health Institute (collectively referred to herein as "Mass Tech Collaborative") are subject to the requirements concerning disclosure of public records under the Massachusetts Public Records Act, M.G.L. c. 66 (the "Public Records Act"), which governs the retention, disposition and archiving of public records. For purposes of the Public Records Act, "public records" include all books, papers, maps, photographs, recorded tapes, financial statements, statistical tabulations, or other documentary materials or data, regardless of physical form or characteristics, made or received by Mass Tech Collaborative. As a result, any information submitted to Mass Tech Collaborative by a grant applicant, recipient grantee, respondent to a request for response (including, but not limited to an RFQ, RFP and RFI), contractor, or any other party (collectively the "Submitting Party") is subject to public disclosure as set forth in the Public Records Act.

The foregoing notwithstanding, "public records" do not include certain materials or data which fall within one of the specifically enumerated exemptions set forth in the Public Records Act or in other statutes, including Mass Tech Collaborative's enabling act, M.G.L. Chapter 40J. One such exemption that may be applicable to documents submitted by a Submitting Party is for any documentary materials or data made or received by Mass Tech Collaborative that consists of trade secrets or commercial or financial information regarding the operation of any business conducted by the Submitting Party, or regarding the competitive position of such Submitting Party in a particular field of endeavor (the "Trade Secrets Exemption").

**IT IS MASS TECH COLLABORATIVE'S EXPECTATION AND BELIEF THAT THE OVERWHELMING PERCENTAGE OF DOCUMENTS IT RECEIVES FROM A SUBMITTING PARTY DOES NOT CONTAIN ANY INFORMATION THAT WOULD WARRANT AN ASSERTION BY MASS TECH COLLABORATIVE OF AN EXEMPTION FROM THE PUBLIC RECORDS ACT. SUBMITTING PARTIES SHOULD THEREFORE TAKE CARE IN DETERMINING WHICH DOCUMENTS THEY SUBMIT TO MASS TECH COLLABORATIVE, AND SHOULD ASSUME THAT ALL DOCUMENTS SUBMITTED TO MASS TECH COLLABORATIVE ARE SUBJECT TO PUBLIC DISCLOSURE WITHOUT ANY PRIOR NOTICE TO THE SUBMITTING PARTY AND WITHOUT RESORT TO ANY FORMAL PUBLIC RECORDS REQUEST.**

In the event that a Submitting Party wishes to submit certain documents to Mass Tech Collaborative and believes such a document or documents may be proprietary in nature and may fall within the parameters of the Trade Secrets Exemption and/or some other applicable exemption, the following procedures shall apply:

1. At the time of the Submitting Party's initial submission of documents to Mass Tech Collaborative, the Submitting Party must provide a cover letter, addressed to Mass Tech Collaborative's General Counsel, indicating that it is submitting documents which it believes are exempt from public disclosure, including a description of the specific exemption(s) that the Submitting Party contends is/are applicable to the submitted materials, a precise description of the type and magnitude of harm that would result in the event of the documents' disclosure, and a specific start date and end date within which the claimed exemption applies. If different exemptions, harms and/or dates apply to different documents, it is the Submitting Party's responsibility and obligation to provide detailed explanations for each such document.
2. At the time of the Submitting Party's initial submission of documents to Mass Tech Collaborative, the Submitting Party must also clearly and unambiguously identify each and every such document that it contends is subject to an exemption from public disclosure as "Sensitive Information." It is the Submitting Party's responsibility and obligation to ensure that all such documents are sufficiently identified as "Sensitive Information", and Submitting Party's designation must be placed in a prominent location on the face of each and every document that it contends is exempt from disclosure under the Public Records Act.

**INFORMATION SUBMITTED TO MASS TECH COLLABORATIVE IN ANY FORM OTHER THAN A HARD COPY DOCUMENT WILL NOT BE SUBJECT TO THE PROCEDURES SET FORTH IN THIS POLICY. FOR EXAMPLE, INFORMATION SUBMITTED**

**BY E-MAIL, FACSIMILE AND/OR VERBALLY WILL NOT BE SUBJECT TO THESE PROCEDURES AND MAY BE DISCLOSED AT ANY TIME WITHOUT NOTICE TO THE SUBMITTING PARTY.**

3. Documents that are not accompanied by the written notification to Mass Tech Collaborative's General Counsel or are not properly identified by the Submitting Party as "Sensitive Information" at the time of their initial submission to Mass Tech Collaborative are presumptively subject to disclosure under the Public Records Act, and the procedures for providing the Submitting Party with notice of any formal public records request for documents, as set forth below, shall be inapplicable.
4. At the time Mass Tech Collaborative receives documents from the Submitting Party, any such documents designated by Submitting Party as "Sensitive Information" shall be segregated and stored in a secure filing area when not being utilized by appropriate Mass Tech Collaborative staff. By submitting a grant application, request for response, or any other act that involves the submission of information to Mass Tech Collaborative, the Submitting Party certifies, acknowledges and agrees that (a) Mass Tech Collaborative's receipt, segregation and storage of documents designated by Submitting Party as "Sensitive Information" does not represent a finding by Mass Tech Collaborative that such documents fall within the Trade Secrets Exemption or any other exemption to the Public Records Act, or that the documents are otherwise exempt from disclosure under the Public Records Act, and (b) Mass Tech Collaborative is not liable under any circumstances for the subsequent disclosure of any information submitted to Mass Tech Collaborative by the Submitting Party, whether or not such documents are designated as "Sensitive Information" or Mass Tech Collaborative was negligent in disclosing such documents.
5. In the event that Mass Tech Collaborative receives an inquiry or request for information submitted by a Submitting Party, Mass Tech Collaborative shall produce all responsive information without notice to the Submitting Party. In the event that the inquiry or request entails documents that the Submitting Party has previously designated as "Sensitive Information" in strict accordance with this Policy, the inquiring party shall be notified in writing that one or more of the documents it has requested has been designated by the Submitting Party as "Sensitive Information", and, if not already submitted, that a formal, written public records request must be submitted by the requesting party to Mass Tech Collaborative's General Counsel for a determination of whether the subject documents are exempt from disclosure.
6. Upon the General Counsel's receipt of a formal, written public records request for information that encompass documents previously designated by Submitting Party as "Sensitive Information", the Submitting Party shall be notified in writing of Mass Tech Collaborative's receipt of the public records request, and Mass Tech Collaborative may, but shall not be required to provide Submitting Party an opportunity to present Mass Tech Collaborative with information and/or legal arguments concerning the applicability of the Trade Secrets Exemption or some other exemption to the subject documents.
7. The General Counsel shall review the subject documents, the Public Records Act and the exemption(s) claimed by the Submitting Party in making a determination concerning their potential disclosure.

**THE GENERAL COUNSEL IS THE SOLE AUTHORITY WITHIN MASS TECH COLLABORATIVE FOR MAKING DETERMINATIONS ON THE APPLICABILITY AND/OR ASSERTION OF AN EXEMPTION TO THE PUBLIC RECORDS ACT. NO EMPLOYEE OF MASS TECH COLLABORATIVE OTHER THAN THE GENERAL COUNSEL HAS ANY AUTHORITY TO ADDRESS ISSUES CONCERNING THE STATUS OF "SENSITIVE INFORMATION" OR TO BIND MASS TECH COLLABORATIVE IN ANY MANNER CONCERNING MASS TECH COLLABORATIVE'S TREATMENT AND DISCLOSURE OF SUCH DOCUMENTS.**

**FURTHERMORE, THE POTENTIAL APPLICABILITY OF AN EXEMPTION TO THE DISCLOSURE OF DOCUMENTS DESIGNATED BY THE SUBMITTING PARTY AS "SENSITIVE INFORMATION" SHALL NOT REQUIRE MASS TECH COLLABORATIVE TO ASSERT SUCH AN EXEMPTION. MASS TECH COLLABORATIVE'S GENERAL COUNSEL RETAINS THE SOLE DISCRETION AND AUTHORITY TO ASSERT AN EXEMPTION, AND HE MAY DECLINE TO EXERT SUCH AN EXEMPTION IF, WITHIN HIS DISCRETION, THE PUBLIC INTEREST IS SERVED BY THE DISCLOSURE OF ANY DOCUMENTS SUBMITTED BY THE SUBMITTING PARTY.**

8. Mass Tech Collaborative shall provide the requesting party and Submitting Party with written notice of its determination that the subject documents are either exempt or not exempt from disclosure.
9. In the event that Mass Tech Collaborative determines that the subject documents are exempt from disclosure, the requesting party may seek review of Mass Tech Collaborative's determination before the Supervisor of Public Records, and Mass Tech Collaborative shall notify the Submitting Party in writing in the event that the requesting party pursues a review of the Mass Tech Collaborative's determination.
10. In the event the requesting party pursues a review of Mass Tech Collaborative's determination that the documents are exempt from disclosure and the Supervisor of Public Records concludes that the subject documents are not exempt from disclosure and orders the Mass Tech Collaborative to disclose such documents to the requester, Mass Tech Collaborative shall notify the Submitting Party in writing prior to the disclosure of any such documents, and Submitting Party may pursue injunctive relief or any other course of action in its discretion.
11. In the event that Mass Tech Collaborative determines that the subject documents are not exempt from disclosure or the General Counsel determines that, under the circumstances and in his discretion, Mass Tech Collaborative shall not assert an exemption, Mass Tech Collaborative shall notify the Submitting Party in writing prior to the disclosure of any such documents, and Submitting Party may pursue injunctive relief or any other course of action in its discretion.

**THE SUBMITTING PARTY'S SUBMISSION OF DOCUMENTATION TO MASS TECH COLLABORATIVE SHALL REQUIRE A SIGNED CERTIFICATION THAT SUBMITTING PARTY ACKNOWLEDGES, UNDERSTANDS AND AGREES WITH THE APPLICABILITY OF THE FOREGOING PROCEDURES TO ANY DOCUMENTS SUBMITTED TO MASS TECH COLLABORATIVE BY SUBMITTING PARTY AT ANY TIME, INCLUDING BUT NOT LIMITED TO THE ACKNOWLEDGEMENTS SET FORTH HEREIN, AND THAT SUBMITTING PARTY SHALL BE BOUND BY THESE PROCEDURES.**

All documents submitted by Submitting Party, whether designated as "Sensitive Information" or not, are not returnable to Submitting Party.

## Attachment A-2 Holding Parties in Possession of Sensitive Information

### MASS TECH COLLABORATIVE POLICY AND PROCEDURES FOR HOLDING PARTIES IN POSSESSION OF SENSITIVE INFORMATION

From time to time, consultants, contractors, grantees, as well as other third parties interacting with Mass Tech Collaborative (collectively, the "Holding Party") may receive, have access to or create confidential, proprietary or otherwise sensitive information regarding Mass Tech Collaborative, its activities, its employees and/or third parties, such as applicants, consultants, grantees, recipients or respondents under Mass Tech Collaborative programs, which information is not generally known by or disseminated to the public as a matter of course. Information of this nature is sometimes referred to in this Agreement as "Sensitive Information." Mass Tech Collaborative expects all Holding Parties to maintain the highest degree of professionalism, integrity and propriety with respect to Sensitive Information at all times. In addition, the Massachusetts Conflict of Interest Statute, M.G.L. Chapter 268A, prohibits current and former state employees (defined in the statute to include regular full-time and part-time employees, elected or appointed officials and independent contractors) from improperly disclosing certain categories of Sensitive Information or using it to further their personal interests, and the Massachusetts Fair Information Practices Act, M.G.L. Chapter 66A, contains numerous legal requirements aimed at protecting "personal data" from improper disclosure.

Mass Tech Collaborative's policy regarding a Holding Party's possession of Sensitive Information has two key elements:

1. Holding Parties should not request or accept any more Sensitive Information -- whether of a business or personal nature -- than is reasonably necessary under the circumstances; and
2. In the absence of a specific legal requirement compelling disclosure of Sensitive Information in a particular instance, all Holding Parties are expected to take appropriate measures to safeguard such information from improper use and disclosure.

Because the relevant legal requirements and the nature and scope of the information in question can create uncertainty, **HOLDING PARTIES ARE URGED TO CONFER WITH MASS TECH COLLABORATIVE'S GENERAL COUNSEL IF THEY HAVE ANY QUESTIONS ABOUT CONFIDENTIALITY, THE SCOPE OR PROPER TREATMENT OF SENSITIVE INFORMATION, OR MASS TECH COLLABORATIVE'S POLICIES OR PROCEDURES WITH RESPECT TO SUCH TOPICS.** Holding Parties shall not substitute their own judgment for that of Mass Tech Collaborative's General Counsel in deciding whether particular information is innocuous data or Sensitive Information that should be handled with care, or the advisability or sufficiency of safeguards with respect to particular types of information. **FAILURE TO COMPLY WITH THE POLICIES AND PROCEDURES RELATING TO SENSITIVE INFORMATION AND MASS TECH COLLABORATIVE'S OBLIGATIONS PURSUANT TO THE PUBLIC RECORDS ACT AND OTHER LEGAL DISCLOSURE REQUIREMENTS CAN RESULT IN IMMEDIATE TERMINATION OF THIS AGREEMENT, AND/OR POTENTIAL LEGAL LIABILITY.**

**IT SHOULD BE NOTED THAT THE OBLIGATIONS UNDER THESE POLICIES CONTINUE EVEN AFTER MASS TECH COLLABORATIVE'S RELATIONSHIP WITH A PARTICULAR APPLICANT, RECIPIENT OR OTHER THIRD PARTY ENDS OR THIS AGREEMENT TERMINATES.**

In the absence of a specific legal requirement necessitating disclosure of particular information in a specific instance, Holding Parties are expected to protect Sensitive Information from improper use and disclosure at all times. The following are examples of the kinds of protective procedures that should be followed:

- **Limited Communication to Mass Tech Collaborative Personnel:** Sensitive Information should not be communicated to other the Mass Tech Collaborative employees or consultants, except to the extent that they need to know the information to fulfill their Mass Tech Collaborative mission-related responsibilities and their knowledge of the information is not likely to result in misuse or a conflict of interest.
- **Limited Communication to Non-Mass Tech Collaborative Personnel:** Sensitive Information should not be communicated to anyone outside Mass Tech Collaborative, including family members, except to the extent outside parties need to know the information in order to provide necessary services to Mass Tech Collaborative, its Holding Parties or as otherwise directed by the

General Counsel to comply with legal requirements necessitating disclosure, such as proper requests under the Public Records Act.

- **Notification of Confidentiality:** When Sensitive Information is communicated to any person outside Mass Tech Collaborative, the individual receiving such information should be informed of its sensitive nature and the need to safeguard such information from improper use and disclosure. When Sensitive Information is communicated to parties inside Mass Tech Collaborative, the procedures set forth in Attachment A-1 are applicable. Mass Tech Collaborative may require that Holding Parties execute a confidentiality agreement that has either been provided or approved by the General Counsel before Sensitive Information is disclosed to them.
- **Mass Tech Collaborative Use Only:** Sensitive Information should only be used for Mass Tech Collaborative purposes. Under no circumstances may a present or former Holding Party "trade on" such information or otherwise use it, directly or indirectly, for personal gain or for the benefit of any party other than the owner of such information.
- **Prevention of Eavesdropping, Unauthorized Viewing, etc.:** Sensitive matters should not be discussed in restaurants, on public transportation or in other public places or in locations, such as hallways, elevators and building lobbies, where unauthorized individuals could overhear the discussion. Similarly, Sensitive Information should not be exchanged or discussed via cordless or cellular phones or similar "non-secure" communication lines. Speaker phones can amplify conversations and should be used with care when discussing Sensitive Information. Common sense precautions should also be taken with respect to Sensitive Information in written form, such as stamping or marking such documents "CONFIDENTIAL" to flag them for special handling, limiting access to files to those with an Mass Tech Collaborative-related "need to know," locking documents that contain Sensitive Information in desk drawers or file cabinets when you are away from your desk, carefully limiting the circumstances in which (and exercising appropriate care when) such materials leave Mass Tech Collaborative's office, delivering sensitive materials to others in sealed envelopes, and limiting the addressees and "cc's" of letters, memoranda, emails and other communications containing Sensitive Information to those individuals who reasonably need to see such communications. Data stored on personal computers, and floppy disks, CD ROM's and other electronic media containing Sensitive Information, should be properly secured to keep them from being accessed by unauthorized individuals. Documents containing Sensitive Information that are sent to printers should be picked up promptly.
- **Communications with the Public; Compulsory Legal Process:** All contacts with the media and all speeches or other oral or written public statements made on behalf of Mass Tech Collaborative, or concerning its activities, applicants or recipients, must be cleared in advance by Mass Tech Collaborative's Chief of Staff. In speeches and statements *not* made on behalf of Mass Tech Collaborative, proper care should be taken to avoid any implication that the Mass Tech Collaborative endorses the views expressed. All disclosure requests under the Public Records Act or in the form of requests for discovery, subpoenas, court or administrative orders or the like must also be referred to the General Counsel for appropriate handling.

**QUESTIONS CONCERNING WHETHER A GIVEN TYPE OF INFORMATION OR DOCUMENT IN A HOLDING PARTY'S POSSESSION IS A "PUBLIC RECORD," AND THUS SUBJECT TO DISCLOSURE UNDER THE PUBLIC RECORDS ACT, OR IS COVERED BY AN AVAILABLE EXEMPTION, SHOULD BE DIRECTED TO MASS TECH COLLABORATIVE'S GENERAL COUNSEL. NO OTHER MASS TECH COLLABORATIVE EMPLOYEE IS AUTHORIZED TO MAKE SUCH ASSESSMENTS OR TO PROVIDE ANY GUIDANCE TO A HOLDING PARTY CONCERNING POTENTIAL DISCLOSURE OF ANY INFORMATION PROVIDED TO OR IN POSSESSION OF A HOLDING PARTY.**

**IN ADDITION, ALL COMMUNICATIONS SEEKING INSPECTION OR OTHER DISCLOSURE OF MATERIALS IN A HOLDING PARTY'S POSSESSION UNDER THE PUBLIC RECORDS ACT MUST BE REFERRED PROMPTLY TO THE GENERAL COUNSEL. SIMILARLY, ALL SUBPOENAS AND OTHER LEGAL PROCESS DOCUMENTS REQUESTING OR SEEKING TO COMPEL DISCLOSURE OF MATERIALS IN A HOLDING PARTY'S POSSESSION MUST BE DELIVERED OR PROMPTLY FORWARDED TO THE GENERAL COUNSEL UPON RECEIPT.**

## Attachment B-1 Authorized Respondent's Signature and Acceptance Form

### MASSACHUSETTS TECHNOLOGY COLLABORATIVE AUTHORIZED RESPONDENT'S SIGNATURE AND ACCEPTANCE FORM

The undersigned is a duly authorized representative of the Respondent listed below. The Respondent has read and understands the RFP requirements. The Respondent acknowledges that all of the terms and conditions of the RFP are mandatory, and that Respondent's response is compliant with such requirements. The Respondent specifically acknowledges the application of the procedures regarding disclosure of sensitive information as set forth in Attachment A of the RFP, and specifically agrees that it shall be bound by those procedures.

The Respondent understands that, if selected by the Mass Tech Collaborative, the Respondent and the Mass Tech Collaborative will execute written agreements specifying the mutual requirements of participation. The undersigned has either (*please check one*):

specified exceptions and counterproposals to the terms and conditions of the Design Professional Agreement; or

agrees to the terms and conditions set forth therein.

The undersigned acknowledges and agrees that the failure to submit exceptions and counterproposals with this response shall be deemed a waiver, and the Design Professional Agreement shall not be subject to further negotiation.

Respondent agrees that the entire bid response will remain valid for sixty (60) days from receipt by the Mass Tech Collaborative.

I certify that Respondent is in compliance with all corporate filing requirements and State tax laws.

I further certify that the statements made in this response to the RFP, including all attachments and exhibits, are true and correct to the best of my knowledge.

Respondent: \_\_\_\_\_  
(Printed Name of Respondent)

By: \_\_\_\_\_  
(Signature of Authorized Representative)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Attachment B-2 Response Cover Sheet

### Response Cover Sheet

Name of Respondent			
Mailing Address	City/Town	State	Zip Code
Telephone	Fax	Web Address	
Primary Contact for Clarification		Primary Contact Telephone	
Primary Contact Title		Primary Contact E-mail Address	
Authorized Signatory		Authorized Signatory Telephone	
Authorized Signatory Title		Authorized Signatory E-mail Address	
Legal Status/Jurisdiction (e.g., a Massachusetts corporation)		Respondents DUNS No.	



**Attachment C    Price Proposal**

See Excel file Attachment C

## Attachment D Officer's Certificate

The respondent must attach its audited financial statement or Certified P&L Statement for the three (3) most recent Fiscal Years, and if the respondent is a joint venture, each joint venture partner must attach its audited financial statement or Certified P&L Statement for its three (3) most recent Fiscal Years. The following questions must be answered by the respondent and if the respondent is a joint venture, by each joint venture partner.

1. Is your organization in compliance with of all its obligations under all bank lending and other credit (e.g., equipment leases) arrangements and has it been in compliance with these requirements during the past 12 months?  
Yes  No
2. During the past 5 years has your organization filed for bankruptcy or has any Principal (more than 5% stockholder or other type of ownership) or officer been an officer or Principal of another firm that filed for or been the subject of any bankruptcy or insolvency proceeding?  
Yes  No
3. Has your organization complied with all of its obligations to federal, state and local taxing authorities over the past three years?  
Yes  No
4. Has your organization been a named party (either voluntarily or involuntarily) in any legal proceedings, administrative proceedings or arbitrations, whether currently pending or concluded within the past 5 years (10 years for litigation or legal proceedings involving allegations against your organization of false, claims, fraud or malpractice?)  
Yes  No
5. Has your organization or any officer or Principal been convicted in any criminal proceeding (other than minor traffic and other non-felony offenses) during the past 7 years or currently the subject of any similar criminal proceeding?  
Yes  No
6. Are your organization's financial statements audited? and,  
Yes  No
7. If so, have you received a "going concern" opinion from such audit firm during the past three years?  
Yes  No
8. Are more than 25% of your revenues derived from any single customer?  
Yes  No
9. Did your organization have positive net income in each of the three most recent fiscal years?  
Yes  No
10. Do your organization's tangible current assets (current assets less goodwill) exceed its current liabilities?"  
Yes  No
11. Has your organization been terminated or failed to complete work on a project within the last 7 years?  
Yes  No
12. Certify your organization has internal accounting controls as required by Massachusetts General Laws Chapter 30, Section 39R(c).  
Yes  No

If you have answered 'Yes' to questions 2, 7 or 8 please explain.  
If you answered 'Yes' to questions 4 or 5 please complete Part A.  
If you answered 'Yes' to question 11 please complete Part B.  
If you have answered 'No' to questions 1, 3, 6, 9, 10, or 12 please explain.  
Attach additional sheets if necessary.

**Part A. LEGAL PROCEEDINGS, CONVICTIONS AND FINES**

PROJECT NAME, LOCATION & OWNER	DESCRIPTION OF CONVICTIONS, FINES and LEGAL PROCEEDINGS (including administrative proceedings and arbitrations which relate to the procurement or performance of any public or private construction contract for the past five years(ten years for litigation and legal proceedings involving allegations against the firm of false claims, fraud or malpractice); include caption of case, parties, location of proceeding, description of the dispute or enforcement action, dates action commenced and concluded and status and/or outcome)

**Part B. TERMINATIONS AND INCOMPLETE PROJECTS**

PROJECT NAME & LOCATION	PROJECT OWNER	SCOPE OF WORK PERFORMED	PROJECT START & END DATES	ESTIMATED CONTRACT AMOUNT	% COMPLETE	REASON FOR FAILURE TO COMPLETE OR TERMINATION

### Certification

The undersigned, \_\_\_\_\_, hereby certifies  
(Name and Title)

that I am a duly authorized representative of \_\_\_\_\_  
(Organization Name)

and that all of the foregoing answers and all statements contained in any explanation are complete, true and correct. Providing false or misleading information or failure to provide all required information will be considered grounds for disqualification. I attest to the accuracy of all information contained in this application and verify that the information submitted is in fact complete, accurate and true.

Signed and sworn under the penalties of perjury

Dated at: \_\_\_\_\_  
(Location)

This \_\_\_\_\_ day of \_\_\_\_\_, 201\_.

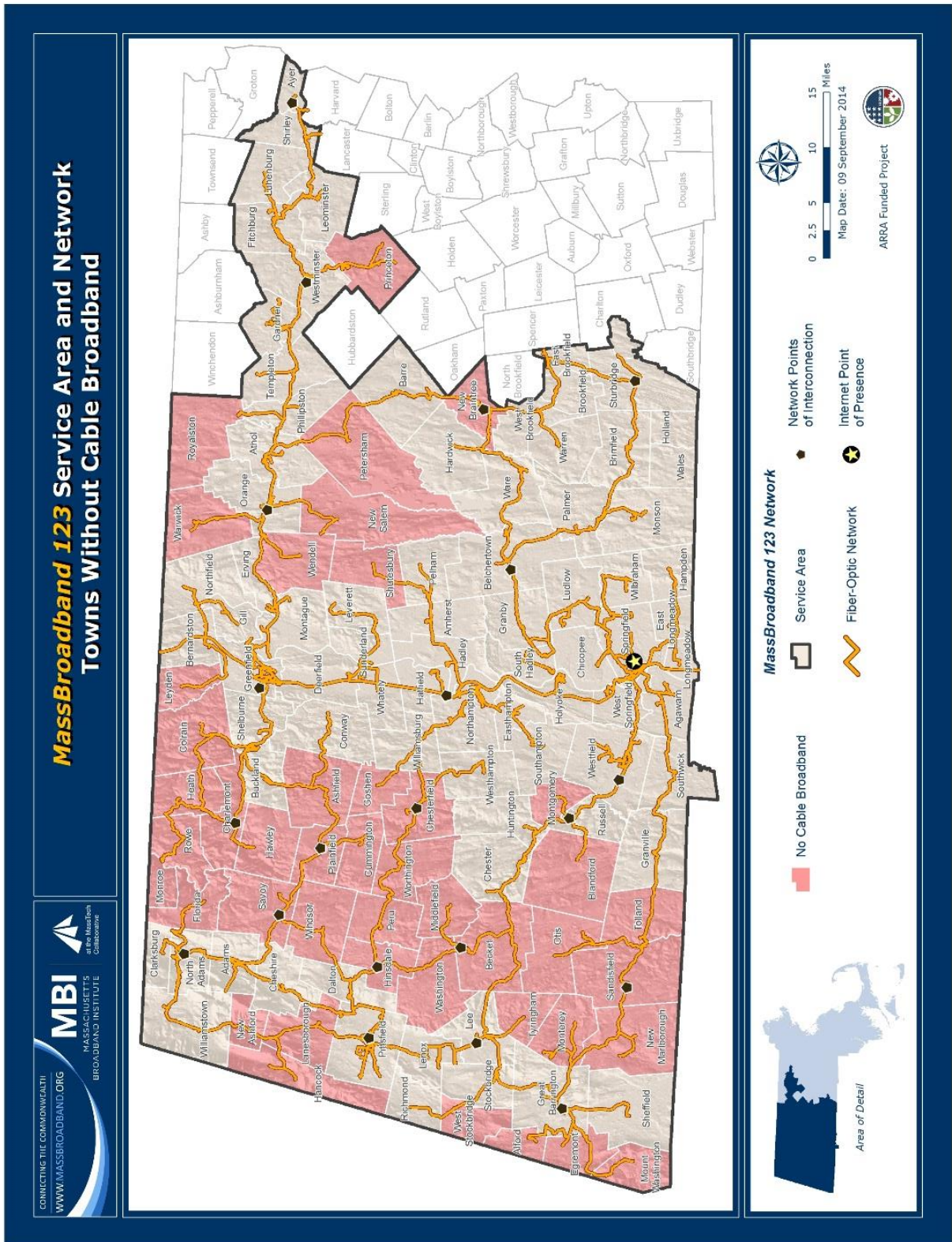
By: \_\_\_\_\_  
(Signature)

Name: \_\_\_\_\_  
(Printed or Typed)

Title/Position: \_\_\_\_\_

## Attachment E Map of Proposed Participating Towns

### MAP OF THE PROPOSED PARTICIPATING TOWNS WITH AN OVERLAY OF MASSBROADBAND 123 NETWORK



## Attachment F Town Information

\* Units are households or businesses consisting of one or more people living or working together that occupy all or part of a standalone building.

County	Municipality	Maintenance Responsibility	Power Distribution Provider (Service Area)	Estimated Unit Count*	Estimated Number of Poles	Estimated Route Miles for Existing Poles per Town	Square miles	Proposed Technology to be Deployed
BERKSHIRE	ALFORD	NGRID	NGrid - MassElectric (Baystate West)	357	730	21	11.5	GPON
FRANKLIN	ASHFIELD	VZ	Eversource Energy (Northern Division)	934	1743	77	40.3	GPON
BERKSHIRE	BECKET	EVERSOURCE	Eversource Energy (Northern Division)	1862	3560	119	47.8	GPON
HAMPDEN	BLANDFORD	SPLIT	Eversource Energy (Northern Division)	612	1385	55	53.6	GPON
FRANKLIN	CHARLEMONT	NGRID	NGrid - MassElectric (Baystate West)	671	1783	52	26.4	GPON
HAMPSHIRE	CHESTERFIELD	VZ	Eversource Energy (Northern Division)	618	1320	47	31.3	GPON
FRANKLIN	COLRAIN	SPLIT	Eversource Energy (Northern Division)	908	1802	74	43.4	GPON
HAMPSHIRE	CUMMINGTON	VZ	Eversource Energy (Northern Division)	533	1275	49	21.3	GPON
BERKSHIRE	EGREMONT	NGRID	NGrid - MassElectric (Baystate West)	1034	1837	47	18.9	GPON
BERKSHIRE	FLORIDA	NGRID	NGrid - MassElectric (Baystate West)	383	1108	36	24.6	GPON
HAMPSHIRE	GOSHEN	SPLIT	NGrid - MassElectric (Baystate West)	636 / 587	1324	35	17.7	GPON & AE
BERKSHIRE	HANCOCK	EVERSOURCE	Eversource (Northern Division)/Ngrid (Baystate West)	755	758	30	35.8	GPON
FRANKLIN	HAWLEY	VZ	NGrid - MassElectric (Baystate West)	218 / 197	833	28	30.9	WIRELESS
FRANKLIN	HEATH	VZ	NGrid - MassElectric (Baystate West)	403	1563	49	24.9	GPON
FRANKLIN	LEYDEN	VZ	Eversource Energy (Northern Division)	350	817	34	18	GPON & AE
HAMPSHIRE	MIDDLEFIELD	EVERSOURCE	Eversource Energy (Northern Division)	287	781	33	24.2	WIRELESS
FRANKLIN	MONROE	NGRID	NGrid - MassElectric (Baystate West)	88	260	13	10.8	GPON
BERKSHIRE	MONTEREY	NGRID	NGrid - MassElectric (Baystate West)	994	1900	55	27.4	GPON
HAMPDEN	MONTGOMERY	EVERSOURCE	Eversource Energy (Northern Division)	372	722	27	15.2	GPON
BERKSHIRE	NEW ASHFORD	EVERSOURCE	Eversource Energy (Northern Division)	114	228	12	13.48	GPON
WORCESTER	NEW BRAINTREE	NGRID	NGrid - MassElectric (Baystate West)	400	1510	49	20.9	GPON
BERKSHIRE	NEW MARLBOROUGH	NGRID	NGrid - MassElectric (Baystate West)	1116	2818	88	47.9	GPON
FRANKLIN	NEW SALEM	NGRID	NGrid - MassElectric (Baystate West)	472	1289	37	58.6	GPON
BERKSHIRE	OTIS	VZ	Eversource Energy (Northern Division)	1751	2421	80	38	GPON
BERKSHIRE	PERU	EVERSOURCE	Eversource Energy (Northern Division)	433	971	33	26	GPON
WORCESTER	PETERSHAM	NGRID	NGrid - MassElectric (Baystate West)	713	1561	50	68.3	GPON
HAMPSHIRE	PLAINFIELD	VZ	Eversource Energy (Northern Division)	361	979	41	21.3	GPON & AE
WORCESTER	PRINCETON	PRINCETON MUNICIPAL	Princeton Municipal Light Department	1394	2373	74	35.8	GPON & AE
FRANKLIN	ROWE	NGRID	NGrid - MassElectric (Baystate West)	249	942	29	24	GPON
WORCESTER	ROYALSTON	VZ	NGrid - MassElectric (Baystate West)	673	2000	62	42.5	WIRELESS
BERKSHIRE	SANDSFIELD	SPLIT	Eversource Energy (Northern Division)	766	1762	70	53	GPON
BERKSHIRE	SAVOY	EVERSOURCE	Eversource Energy (Northern Division)	388	735	34	36	HYBRID
FRANKLIN	SHUTESBURY	SPLIT	NGrid - MassElectric (Baystate West)	881	1350	37	27.2	GPON & AE
HAMPDEN	TOLLAND	EVERSOURCE	Eversource Energy (Northern Division)	566	868	38	32.8	GPON
BERKSHIRE	TYRINGHAM	VZ	Eversource Energy (Northern Division)	338	750	22	18.9	GPON
FRANKLIN	WARWICK	VZ	NGrid - MassElectric (Baystate West)	399	1570	47	37.7	WIRELESS
BERKSHIRE	WASHINGTON	EVERSOURCE	Eversource Energy (Northern Division)	269	562	26	38.8	GPON
FRANKLIN	WENDELL	VZ	NGrid - MassElectric (Baystate West)	471	1150	43	32.2	GPON & AE
BERKSHIRE	WINDSOR	EVERSOURCE	Eversource Energy (Northern Division)	510	1310	55	35.2	GPON
HAMPSHIRE	WORTHINGTON	VZ	Eversource Energy (Northern Division)	698	1623	61	32.1	GPON
<b>TOTALS</b>				<b>24123</b>	<b>54273</b>	<b>1869</b>	<b>1264.68</b>	

## Attachment G Response Checklist

The below checklist is to be completed and included with each response.

- Submittal in writing on 8 ½ x 11 paper (including all required submissions)
  - One (1) unbound original submitted
  - Six (6) bound copies submitted (no three ring binders)
  - One (1) electronic version submitted (.pdf or .doc)
- Submittal addressed as specified in section 4.4 (b)
- Authorized Respondent's Signature and Acceptance Form/tax law compliance (Attachment B-1)
- Executive summary submitted (maximum of two (2) pages in length)
- Officer's certificate completed by respondent and each joint venture (Attachment D)
- Audited financial statement or Certified P&L Statement for each Respondent and joint venture partner
- High-level exemplar project plan submitted
- Statement of respondent's qualifications
  - Joint venture partners included
  - Three FTTP and one fixed wireless projects identified
  - One detailed FTTP & fixed wireless, or one detailed FTTP and one detailed fixed wireless project.
  - Firms experience working with state and/or federal, and municipal organizations
  - Projects identifying differences between AE, PONs and fixed wireless
  - Value added relationships with equipment vendors/network equipment suppliers
  - Examples of value-added engineering
  - Safety and health program description
  - Joint venture partner(s) reporting and financial relationships
  - Financial evidence to undertake the project from Respondent and each joint venture partner
- Staff Qualifications
  - Identification by phase the key project team members
  - Respondents and any joint venture partners' organizational chart
  - Proposed key member experience and certifications for each discipline
  - List of Massachusetts licensed Professional Engineers on staff
  - Number of people respondent will commit to each discipline, role, and time expected on project
  - Names and bios for primary PM and key team members for each discipline
- Major subcontractor qualifications
  - Names of all major subcontractors
  - Subcontractor organizational chart
  - Services to be provided by each major subcontractor and amount of time expected on project
  - Firm-wide qualifications and descriptions of past performance for each major subcontractor
  - Names and bios for key major subcontractor personnel
- Project approach descriptions and their deliverables for all twenty-two (22) items in section 4.5(f)
- References for three (3) projects listed in section 4.5(c)1. Additional reference(s) if joint venture
- Price proposal in *Excel* format as depicted in section 4.5(i) (Attachment C)
- Response coversheet (Attachment B-2)
- Respondent is aware of mandatory onsite finalist interview dates in Westborough, MA
- Respondent is aware questions regarding RFP will be posted to Mass Tech Collaborative and Comm-Buys websites
- Respondent is aware changes/amendments to RFP will be posted to Mass Tech Collaborative and Comm-Buys websites
- Response submitted prior to deadline
- Response checklist (Attachment G)

## **Attachment H    Design Engineer Responsibility Flowchart**

See *MS Visio* file Attachment H