

MEMORANDUM

TO: Aisling Kerr, Project Manager
FROM: John (Tad) Read, Senior Deputy Director for Transportation & Infrastructure Planning
Manuel Esquivel, Senior Infrastructure & Energy Planning Fellow
Ryan Walker, Smart Utilities Program - Associate
DATE: September 17, 2019
SUBJECT: 401 Congress Street- **Smart Utilities Comments - PNF**

Comments and request for additional information:

Thank you for your Smart Utilities Checklist submission. Below are our comments and requests for additional information. Please update the Checklist using the edit link and/or send any diagrams to manuel.esquivel@boston.gov.

- Please provide a diagram indicating where Green Infrastructure will be located (see Checklist Part 4).
- Please provide a diagram indicating where existing and proposed utility infrastructure laterals are located, showing how utilities will be extended into the building from the right of way. This includes: water, sewer, electric, gas and telecom. (see Checklist Part 7).
- Please provide a Smart Street Lights diagram (see Checklist Parts 6 and 7) that indicates the following:
 - The main electricity loop that will power the lights and where the connection between this loop and the electricity in the right of way will occur.
 - "Shadow" conduits running next to the main electricity loop, with capacity for the additional electricity and fiber to comply with Smart Streetlight capability; and hand holes for access to these conduits.
 - Where these conduits would connect in the future to electricity and fiber in the right of way.

If you have any questions regarding these comments or would like to arrange a meeting to discuss the policy please feel free to contact Manuel Esquivel.

Context:

On June 14, 2018 the BPDA Board adopted the [Smart Utilities Policy for Article 80 Development Review](#). The policy (attached) calls for the incorporation of five (5) Smart Utility Technologies (SUTs) into new Article 80 developments. Table 1 describes these five (5) SUTs. Table 2 summarizes the key provisions and requirements of the policy, including the development project size thresholds that would trigger the incorporation of each SUT.

In general, conversations about and review of the incorporation of the applicable SUTs into new Article 80 developments will be carried out by the BPDA and City staff during every stage (as applicable) of the review and permitting process, including a) prefile stage; b) initial filing; c) Article 80 development review prior to BPDA Board approval; d) prior to filing an application for a Building Permit; and e) prior to filing an application for a Certificate of Occupancy.

In conjunction with the SUTs contemplated in the *Smart Utilities Policy*, the BPDA and City staff will review the installation of SUTs and related infrastructure in right-of-ways in accordance with the *Smart Utility Standards* (“SUS”). The SUS set forth guidelines for planning and integration of SUTs with existing utility infrastructure in existing or new streets, including cross-section, lateral, and intersection diagrams. The *Smart Utility Standards* are intended to serve as guidelines for developers, architects, engineers, and utility providers for planning, designing, and locating utilities.

In order to facilitate the review of integration of the SUTs and the SUS, the BPDA and the Smart Utilities Steering Committee has put together a *Smart Utilities Checklist* that can be filled out and updated during the review process. Please fill out the parts of the *Checklist* that apply to your project. Make sure to review this *template* first, before submitting the *Smart Utilities Checklist*.

After submission, you will receive:

1. A confirmation email with a PDF of your completed checklist. Please include a copy of this document with your next filing with the BPDA.
2. A separate email with a link to update your initial submission. Please use ONLY this link for updating the Checklist associated with a specific project.

Note: Any documents submitted via email to Manuel.Esquivel@Boston.gov will not be attached to the PDF form generated after submission, but are available upon request.

The *Smart Utilities Policy for Article 80 Development Review*, the *Smart Utility Standards*, the *Smart Utilities Checklist*, and further information regarding the *Boston Smart Utilities Vision* project are available on the project’s website: <http://www.bostonplans.org/smart-utilities>.

Manuel Esquivel, BPDA Senior Infrastructure and Energy Planning Fellow, will soon follow up to schedule a meeting with the proponent to discuss the *Smart Utilities Policy*. For any questions, you can contact Manuel Esquivel at manuel.esquivel@boston.gov or 617.918.4382.

Table 1 - Summary description of 5 Smart Utility Technologies (SUTs) included in the *Smart Utilities Policy for Article 80 Development Review*

Smart Utility Technology (SUTs)	Summary Description
District Energy Microgrid	Energy system for clusters of buildings. Produces electricity on development site and uses excess “heat” to serve heating/cooling needs. By combining these two energy loads, the energy efficiency of fuel consumed is increased. The system normally operates connected to main electric utility grid, but can

	disconnect (“island”) during power outages and continue providing electric/heating/cooling needs to end-users.
Green Infrastructure	Infrastructure that allows rainwater to percolate into the ground. Can prevent storm runoff and excessive diversion of stormwater into the water and sewer system.
Adaptive Signal Technology	Smart traffic signals and sensors that communicate with each other to make multimodal travel safer and more efficient.
Smart Street Lights	Traditional light poles that are equipped with smart sensors, wifi, cameras, etc. for health, equity, safety, traffic management, and other benefits.
Telecom Utilidor	An underground duct bank used to consolidate the wires and fiber optics installed for cable, internet, and other telecom services. Access to the duct bank is available through manholes. Significantly reduces the need for street openings to install telecom services.

Table 2 - Summary of size threshold and other specifications for the 5 SUTs advanced in the Smart Utilities Policy for Article 80 Development Review (Note: This table is only for informational purposes. Please refer to the complete Smart Utilities Policy for Article 80 Development Review to review the details.)

	Article 80 Size Threshold	Other specifications
District Energy Microgrid	>1.5 million SF	Feasibility Assessment; if feasible, then Master Plan & District Energy Microgrid-Ready design
Green Infrastructure	>100,000 SF	Install to retain 1.25" rainfall on impervious areas (Increase from 1" currently required by BWSC)
Adaptive Signal Technology	All projects requiring signal installation or improvements	Install AST & related components into the traffic signal system network
Smart Street Lights	All Projects requiring street light installation or improvements	Install additional electrical connection & fiber optics at pole
Telecom Utilidor	>1.5 million SF of development, or >0.5 miles of roadway	Install Telecom Utilidor



Aisling Kerr <aisling.kerr@boston.gov>

Fwd: Contact Us Submission: # 4125 // Development

Emily Wieja <emily.wieja@boston.gov>

Wed, Jul 31, 2019 at 4:32 PM

To: Aisling Kerr <aisling.kerr@boston.gov>

Cc: Michael Christopher <michael.christopher@boston.gov>, Catherine Sullivan <catherine.sullivan@boston.gov>

Hi Aisling- see inquiry that came in through the website contact form below.

Thanks,



**boston planning &
development agency**

Emily Wieja

Web Content Manager

617.918.4443

Boston Planning & Development Agency (BPDA)

One City Hall Square | Boston, MA 02201

bostonplans.org

----- Forwarded message -----

From: <[REDACTED]>

Date: Wed, Jul 31, 2019 at 4:19 PM

Subject: Contact Us Submission: # 4125 // Development

To: <BRWebContent@boston.gov>, <catherine.sullivan@boston.gov>, <michael.christopher@boston.gov>

CommentsSubmissionFormID: 4125

Form inserted: 7/31/2019 4:19:12 PM

Form updated: 7/31/2019 4:19:12 PM

Document Name: Contact Us

Document Name Path: /About Us/Contact Us

Origin Page Url: /about-us/contact-us

First Name: Joshua

Last Name: Johnson

Organization:

Email: [REDACTED]

Street Address: [25 Northern Avenue](#)

Address Line 2: 1515

City: Boston

Subject: catherine.sullivan@boston.gov,michael.christopher@boston.gov:Development

State: MA

Phone: [REDACTED]

Zip: 02210

Comments: re: [401 Congress Street](#) Was a transportation analysis performed for this project? There are 100+ pages relating to traffic studies and impact, but only 1 page that states that there is MBTA service in the area. The developer should be required to show what the current MBTA ridership and capacity is before development and what MBTA ridership and capacity would be after development. MBTA currently exceeds their crush capacity loads on the Silver Line and Route 7 bus service as of January 2015. I would like to know how much more bad this will make Silver Line and Route 7 service in the area. BPDA needs to start requiring detailed analysis of the impact to public transportation of these projects, especially in the South Boston Waterfront Area. In addition, the traffic study companies need to be more realistic with their ride share estimates.

Security Code: