Doing Business with BWSC

ACEC Private Sector Committee & Energy & Environmental Affairs Committee

January 17, 2019
Aldrich Center – One Walnut Street, Boston

Mike Nelson, Director of Engineering
Boston Water and Sewer Commission
Doing Business with BWSC

Today’s Topics:

System Highlights
People & Structure
Development Approvals
Technology Initiatives
Approach to Capital Planning
Integrating Green Infrastructure
Who we are

Distribution
1,010 Miles of Water Mains
12,700 Hydrants
17,500 Valves
91,000 Accounts

5 Pressure Zones
Northern High – 4.2
Northern Low – 89.5
Southern High – 562
Southern Low – 258.75
Southern Extra High – 80
HPFS – 15.8
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Collection
706 Miles of Sanitary Sewer
157 Miles of Combined Sewers
665 Miles of Storm Drains
30,257 Catch Basins
50,300 Manholes
252 Outfalls
200+ Tide Gates

9 Pump Station Facilities
BWSC  Who are we

Operations Division
Engineering Division
Planning
Design
Construction

Design Engineering
CAD Drafting
GIS
Engineering Customer Service

Engineering Customer Service
Engineering Customer Service

- Review plans for any proposed connections to BWSC system
- Provide permits for approved work
- Provide research (records) to contractors and utilities
- Is the Gateway between Developers and BWSC

Tips From Phil, Frank, and Luis
**Site Plan Process**

**Volume Increase:**

<table>
<thead>
<tr>
<th></th>
<th>Site Plan Submissions</th>
<th>Utility Plan Submissions</th>
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<tbody>
<tr>
<td><strong>2016:</strong></td>
<td>635</td>
<td>249</td>
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<td><strong>2017:</strong></td>
<td>682</td>
<td>619</td>
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<td><strong>2018:</strong></td>
<td>767</td>
<td>703</td>
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</table>

- Backlog can range 4-8 weeks
- 2.5 Engineers currently staffed
- Most Common Issue: 1"
### Site Plan Process

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<td>2018: 703</td>
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- Backlog can range 4-8 weeks
- 2.5 Engineers currently staffed
- Most Common Issue:

For Projects over 100k Sq. Ft.

This is GI
Large Project Review

Large-Scale Development is Reviewed by the Design Group

- Current Projects:
  - Harvard University – Allston Landing
  - Suffolk Downs Race Track

- Future:
  - South Boston
  - I-90 / Allston Landing South
Large Project Review

Large-Scale Development Considerations

Hydraulic Model Buildout – InfoWater
Drainage and Sewer Modeling – PCSWMM
Green Infrastructure Approaches

✓ Public or Private Ways
✓ Complete Streets
✓ Smart Utilities
Technology Initiatives at BWSC

**Big 2019 Planned:**
- **Paperless** Bid Documents
- New Website
- New Billing System

**Near Future:**
- New Work Management System
- Improved Modeling
Technology Initiatives at BWSC

Electronic Bid Documents:

- Solicitation & Advertising thru BidNet
- **BidNet**: Procurement Portal
  - Proprietary Service
  - **Free** to Sign up
- Responses thru BidNet
  - Now: RFPs
  - Future: Bidding
Annual Capital Improvement Plan

2018 Highlights

• Over $35M in Construction Bids
• 7.5 miles of water main renewal $21.5M

<table>
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<th>Water Relay (ft)</th>
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<th>Sewer Relay (ft)</th>
<th>Sewer Portion ($)</th>
<th>Sewer Rehab (ft)</th>
<th>Rehab Portion ($)</th>
<th>Drain Relay (ft)</th>
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Annual Capital Improvement Plan

2019 CIP

• 6+ miles of Water Renewal
• East Boston Sewer Separation Continues
• South Boston Sewer Separation Begins
• Tide Gates
• Dorchester I-1

Charlestown
South End
City Proper
City-Wide
System Renewal

“What’s Old is New Again”
System Renewal

“What’s Old is New Again”

He’s not around anymore

and This is still in Service
Thank you for your Time