



Lafayette Street Improvements Project

Harbor Street to Washington and Dow Streets

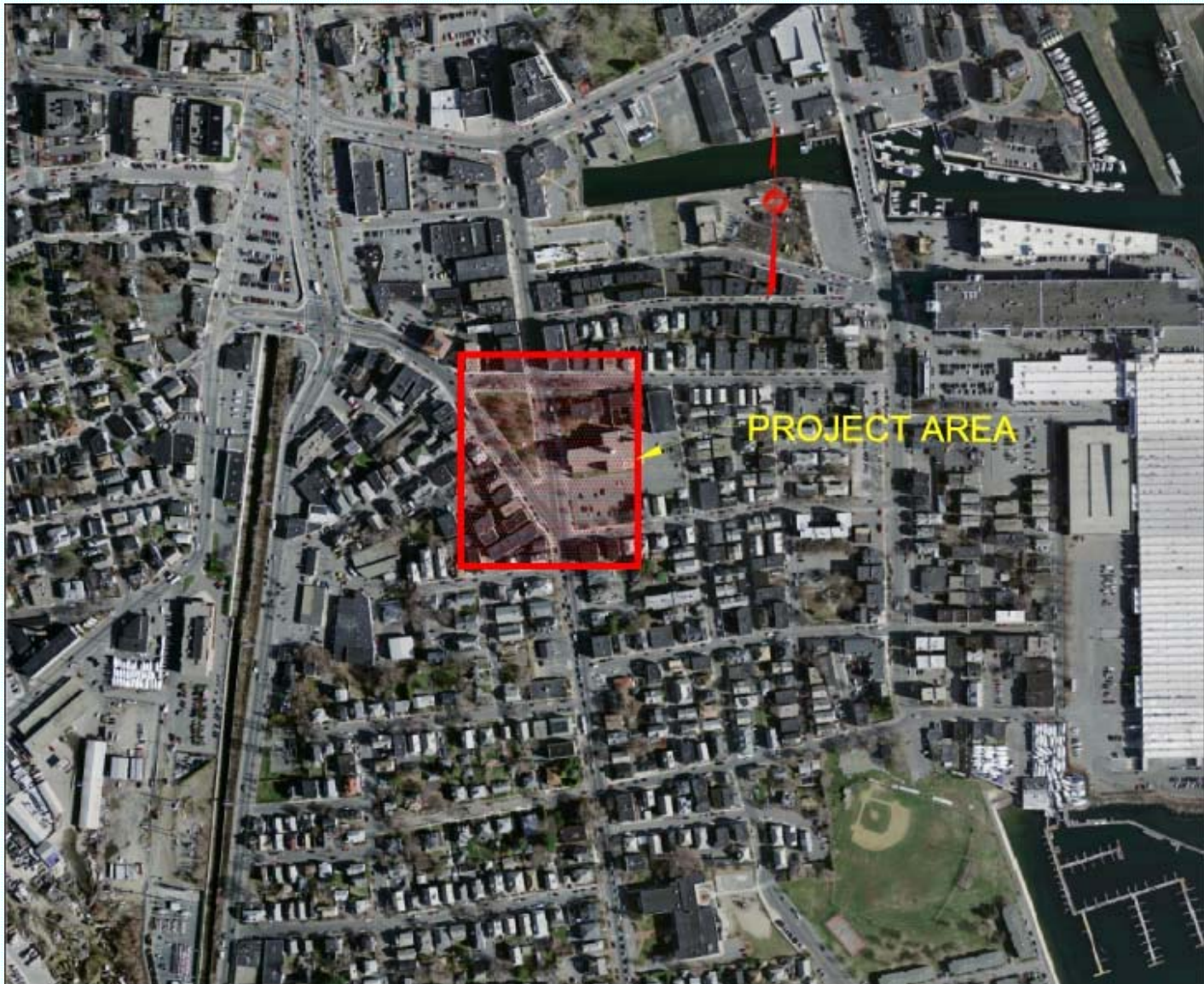
Public Information Meeting

Salem, Massachusetts

October 19, 2010



Project Area





Project Funding

- **State Funding**

- Public Works Economic Development Grant, (PWED) - \$1,000,000
- Construction must be completed by June, 2012

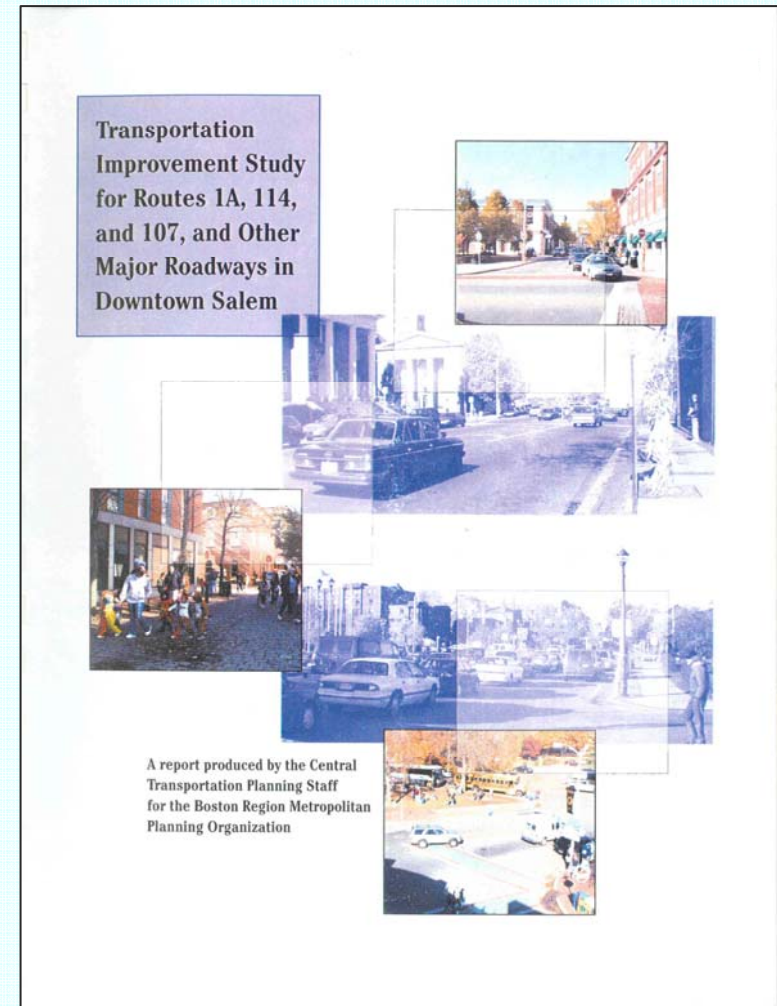
- **Local Funding**

- Community Development Block Grant - \$100,000



Project Needs

- **Background**
 - Intersections identified in Central Transportation Planning Staff (CTPS) 2005 Improvement Study





St. Joseph's Church Redevelopment

Mayor Kimberley Driscoll





St Joseph's Church Redevelopment

Mayor Kimberley Driscoll





Existing Conditions - Roadway

- **Lafayette St (Route 1A/114)**
 - Two lane Principal Arterial
 - Left turn lane onto Washington St
 - Left turns prohibited onto Dow St
 - 30 MPH posted speed limit
 - Parking permitted along both sides
 - Bus Stops on both sides
- **Washington St (Route 114)**
 - Two lane roadway, intersects Lafayette St at sharp angle
 - Parking permitted along both sides
 - Only right turns onto Lafayette St permitted
- **Harbor Street**
 - Two lane roadway between Washington St and Lafayette St
 - East leg is one way toward Lafayette Street
 - Parking permitted along both sides
 - All three roadways form perimeter around park



Existing Conditions - Traffic Operations

- **Average Daily Traffic (ADT) along Lafayette Street is:**
 - 14,000 vehicles per day north of Washington Street
 - 28,000 vehicles per day south of Washington Street
- **Washington Street Intersection**
 - Stop sign control for Washington Street approach
 - Wide intersection, not well defined
 - Location of pedestrian signals (3) creates confusion
 - Only right turns onto Lafayette Street permitted; illegal movements have been observed
 - Inadequate signing and pavement markings



Existing Conditions - Traffic Operations (Cont.)

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- **Harbor Street Intersection**

- Stop sign control for Harbor Street approaches
- High delays on Harbor Street during peak periods
- Difficult for pedestrians to cross Lafayette Street due to heavy traffic



Existing Conditions - Safety

- **Washington Street Intersection**

- 4 accidents per year
- Parking too close to traffic control devices (stop sign, pedestrian signals)

- **Harbor Street Intersection**

- 8 accidents per year
- 3 accidents involving pedestrians
- Crash rate is more than double the statewide average
- Location is listed in latest "Top 1000 High Crash Locations Report" published by the DOT
- Vehicles parked close to intersection obstruct driver and pedestrian views



Existing Conditions – Level of Service

Level of Service (LOS): Measure of the operational conditions or effectiveness of a roadway facility

Intersection	AM Peak Hr	PM Peak Hr
Washington Street	F	F
Harbor Street	F	F

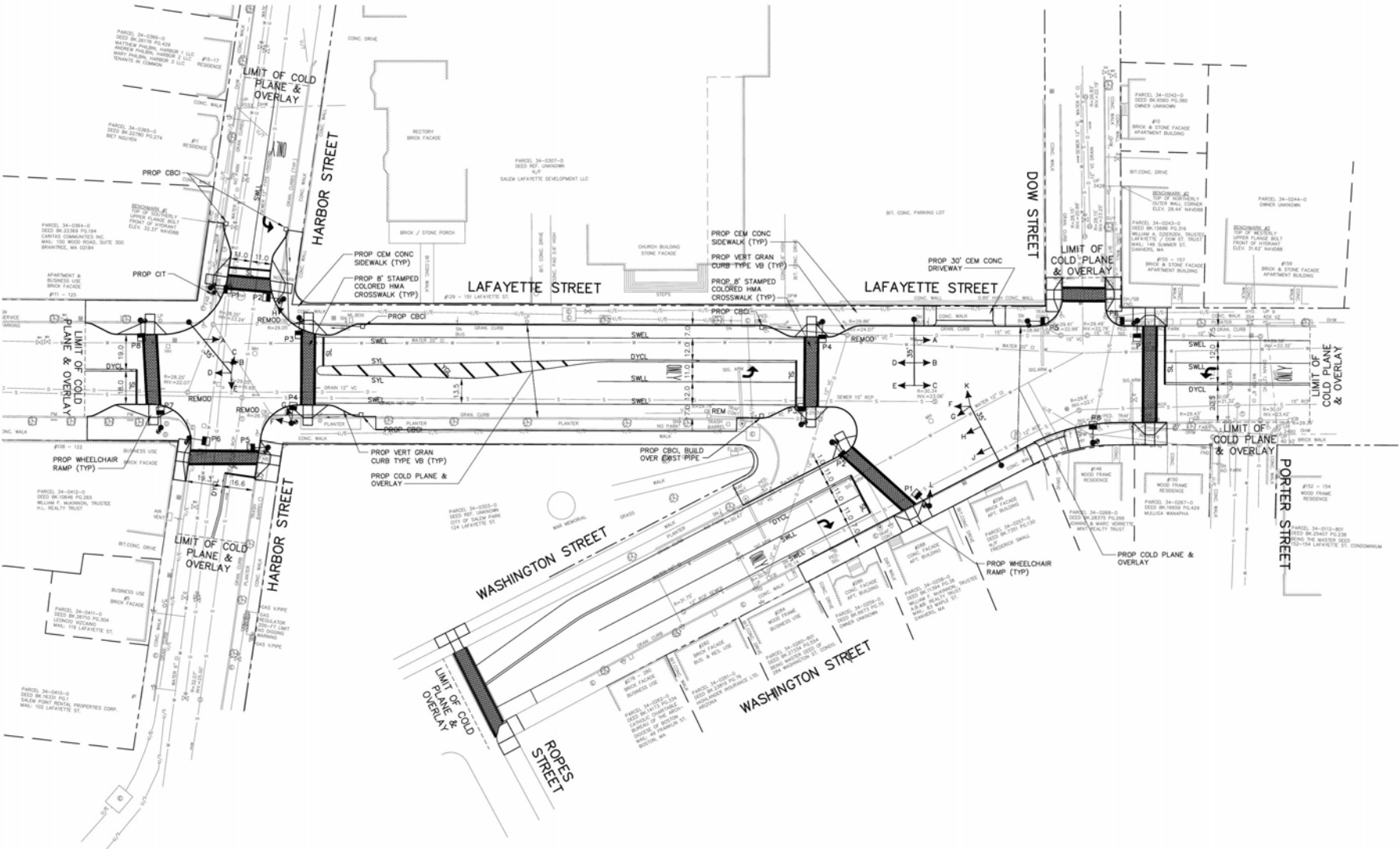


Project Goals

- Improve safety and driver expectation
- Reduce traffic delay, improve LOS
- Improve pedestrian mobility
- Increase vehicle access
- Minimize impacts to on street parking
- Improve aesthetic character of project area



Alternative 1 – Multilane Washington Street (Original Design)



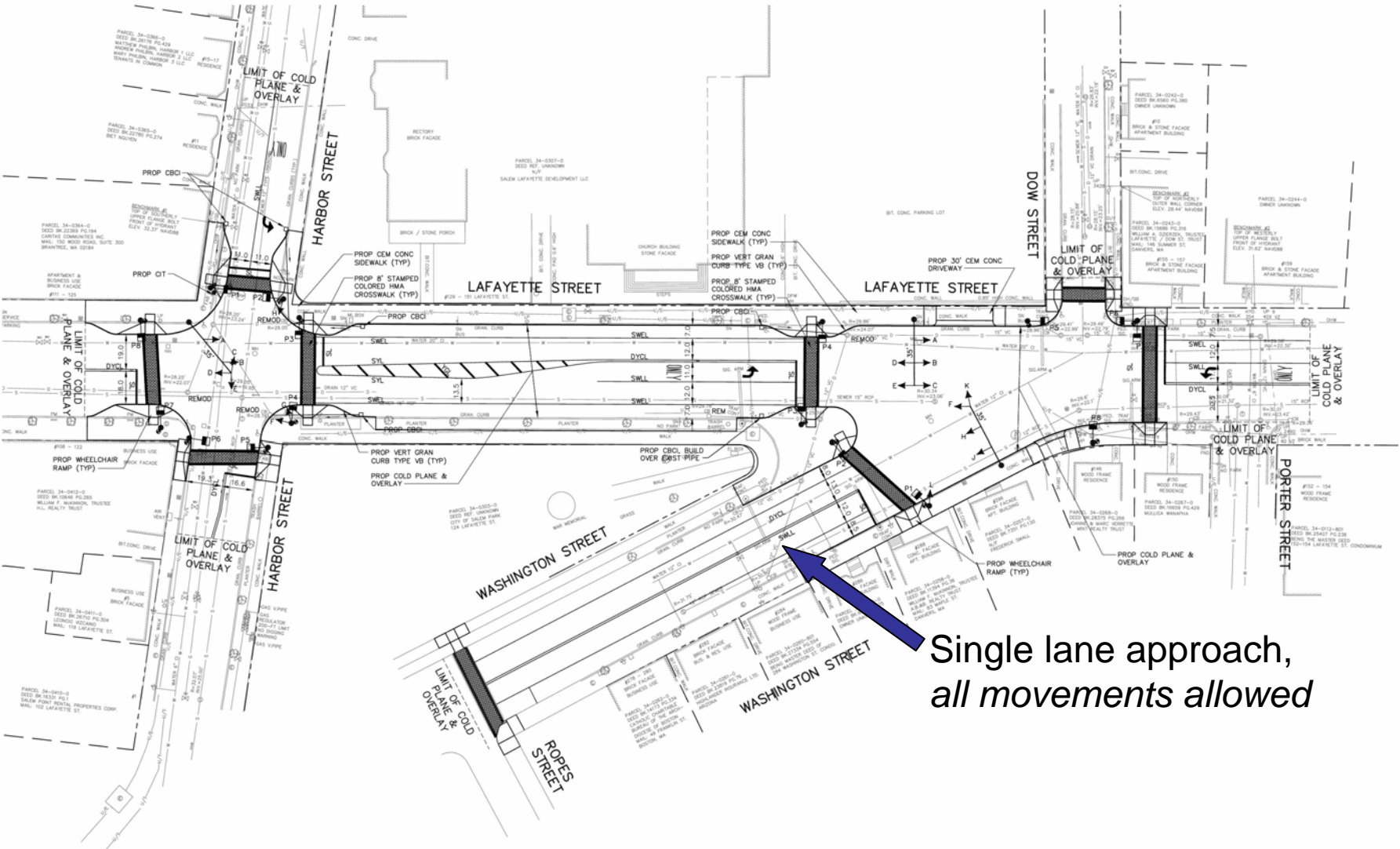


Alternatives Reviewed

1. Multi-lane Washington Street approach
2. Single lane Washington Street approach
(All movements allowed)
3. Single lane Washington Street approach
(Only right turns allowed)
4. One-way circulation around park
5. Widening Washington Street



Alternative 2 – Single Lane (All Movements)







Alternative 4 – One-Way Circulation

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Alternative 5 – Widening Washington Street

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Summary

Safety

- Each alternative improves safety for all users
- Traffic signals regulate vehicle movements and provide dedicated pedestrian crossing phase
- Bumps out shorten crosswalks and provide better line of sight



Summary (Cont.)

LOS (Future Traffic Volumes)

	Alt 1		Alt 2		Alt 3		Alt 4		Alt 5	
Intersection	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
Washington Street	D	E	F	F	D	E	F	F	D	E
Harbor Street	B	C	B	C	B	D	F	F	B	C



Summary (Cont.)

Pedestrian Mobility

- Countdown pedestrian signals, bump outs

Access

- Alternatives 1, 2 and 5 provide full access; Alternative 4 limits access to Washington Street; Alternative 2 limits access from Washington Street



Summary (Cont.)

Parking

- Legal vs. Illegal Parking Spaces
- Spaces Eliminated

Spaces Eliminated									
Alt 1		Alt 2		Alt 3		Alt 4		Alt 5	
legal	illegal	legal	illegal	legal	illegal	legal	illegal	legal	illegal
13	13	5	12	5	12	5	12	5	12



Summary (Cont.)

Aesthetics

- Ornamental equipment will be installed (traffic signals, lighting)
- Imprint crosswalks
- Narrowing the Washington Street intersection increases the effective area of the park
- Alternative 5 removes trees from park side of Washington Street



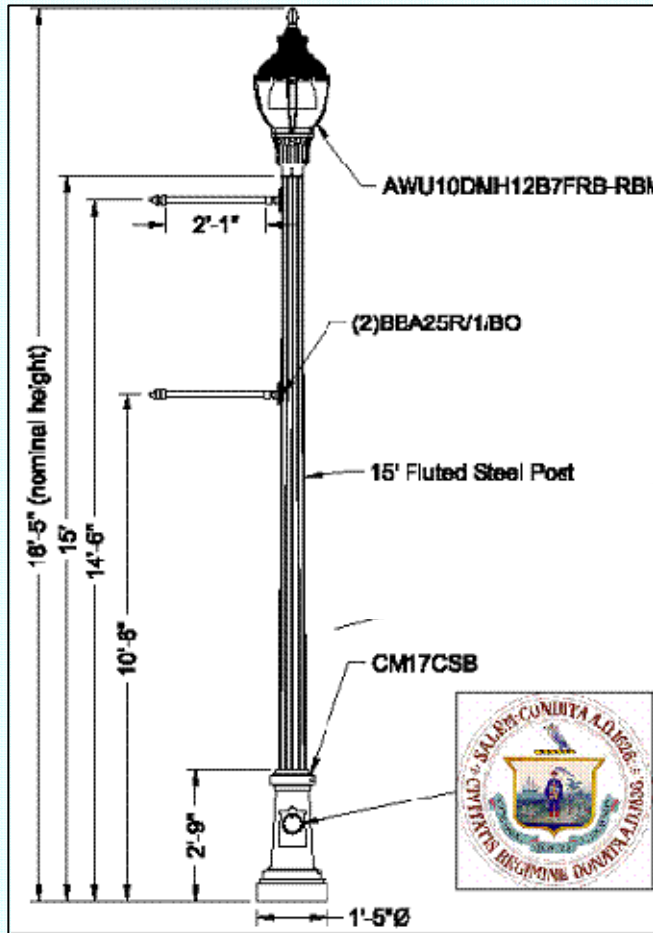
Ornamental Traffic Signals



- Traffic Signals to Match Street Lights
- Photo of Signals Currently Installed On North Street



Ornamental Period Lighting



- Salem Standard Street Lights
- Traffic Signals to Match





Next Steps

- **Finalize Design**
- **Present final plans at follow up public meeting; scheduled for March 2011**
- **Construction scheduled to begin summer 2011**