

Peer Review

Symmes Hospital Redevelopment Arlington, Massachusetts Transportation Overview and Supporting Materials

Prepared By Howard/Stein-Hudson

Prepared for:

**Arlington Transportation Advisory Committee
Arlington Redevelopment Board**

9/14/04

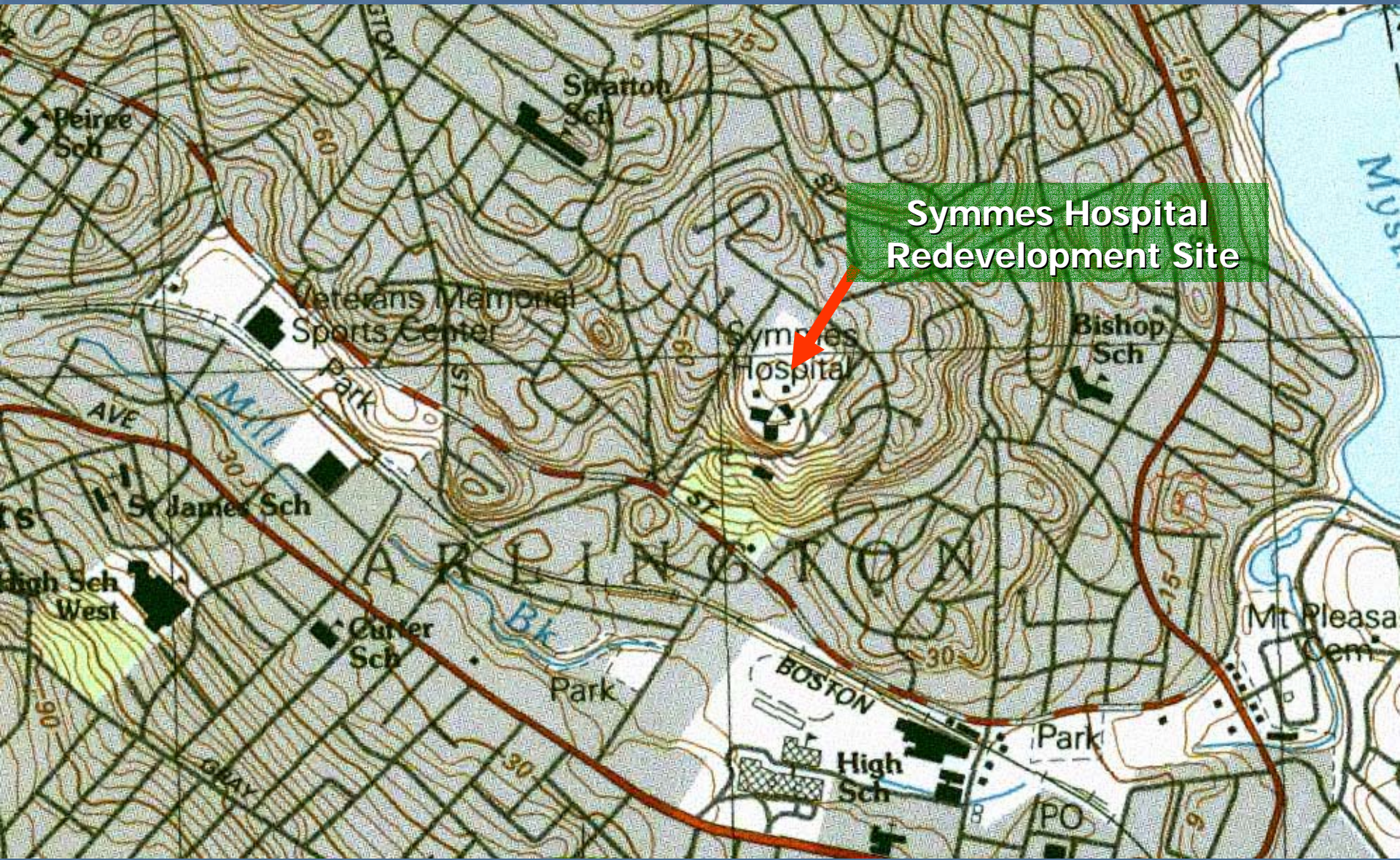
By:

Fay, Spofford & Thorndike

Gary Hebert, PE, PTOE

Vice President

USGS Location



Symmes Hospital
Redevelopment Site

Aerial Location (2001 MassGIS)



Stratton School

**Symmes Hospital
Redevelopment Site**

**Existing Dual
Access**

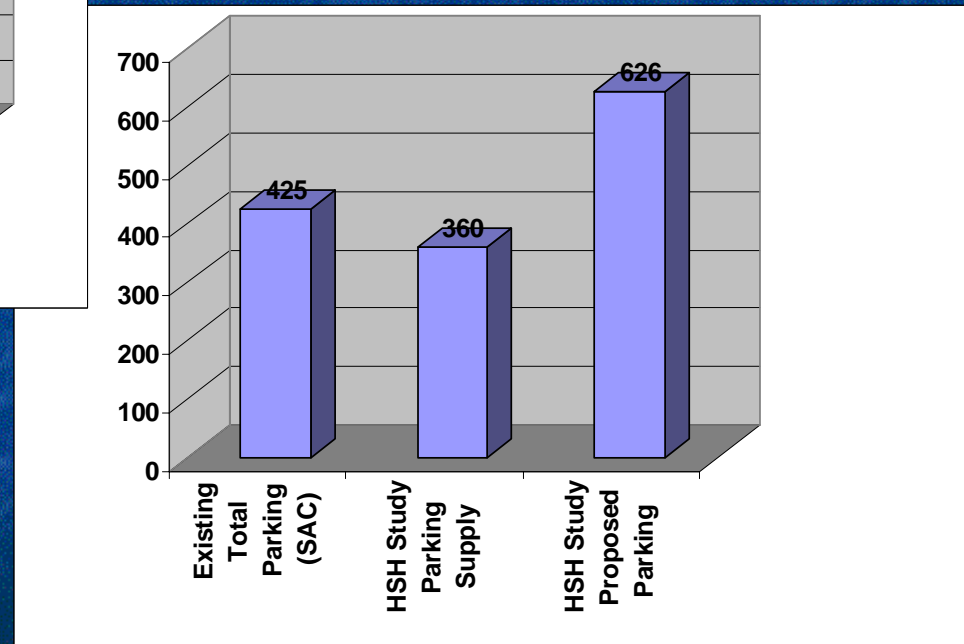
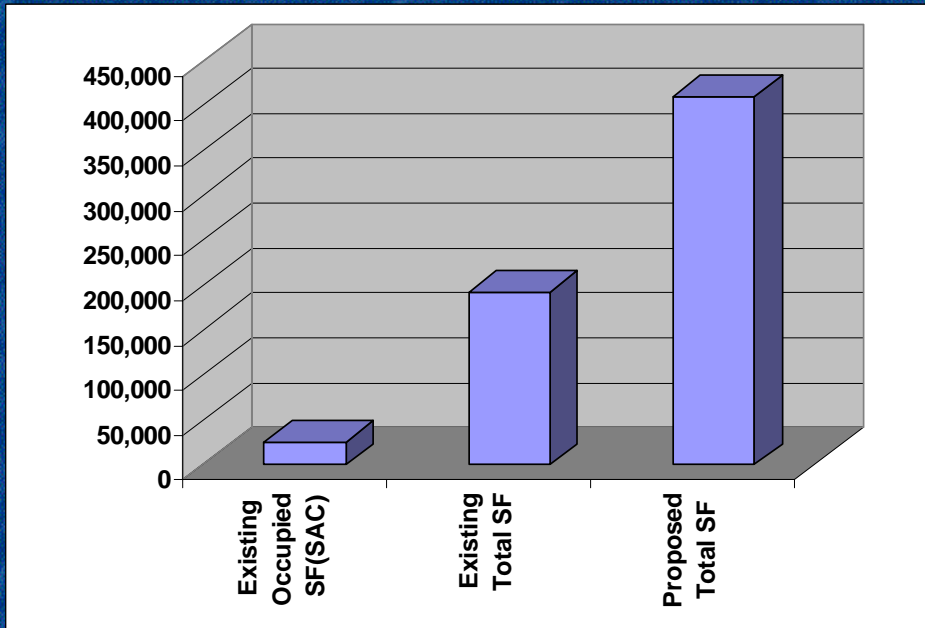
Bishop School

Arlington High

Summer Street Improvements Area —

Symmes Redevelopment Project Overview

Square Footage and Parking



Issue: Woodside Lane at Hospital
Road west sight line



Issue: Uncontrolled Intersection -
Woodside Lane at Oak Hill Drive
Looking east on Woodside Lane



Issue: Oak Hill Drive
cut-through and speeding

Looking south just north of
Woodside Lane



Local Summer street congestion
(Saturday September 11 'Town
Day' late morning observation)



Issue: Impacts on Brattle Street

looking south from Millett Street



Issue: Impacts on Millett Street at Brattle Street

looking west from Brattle Street

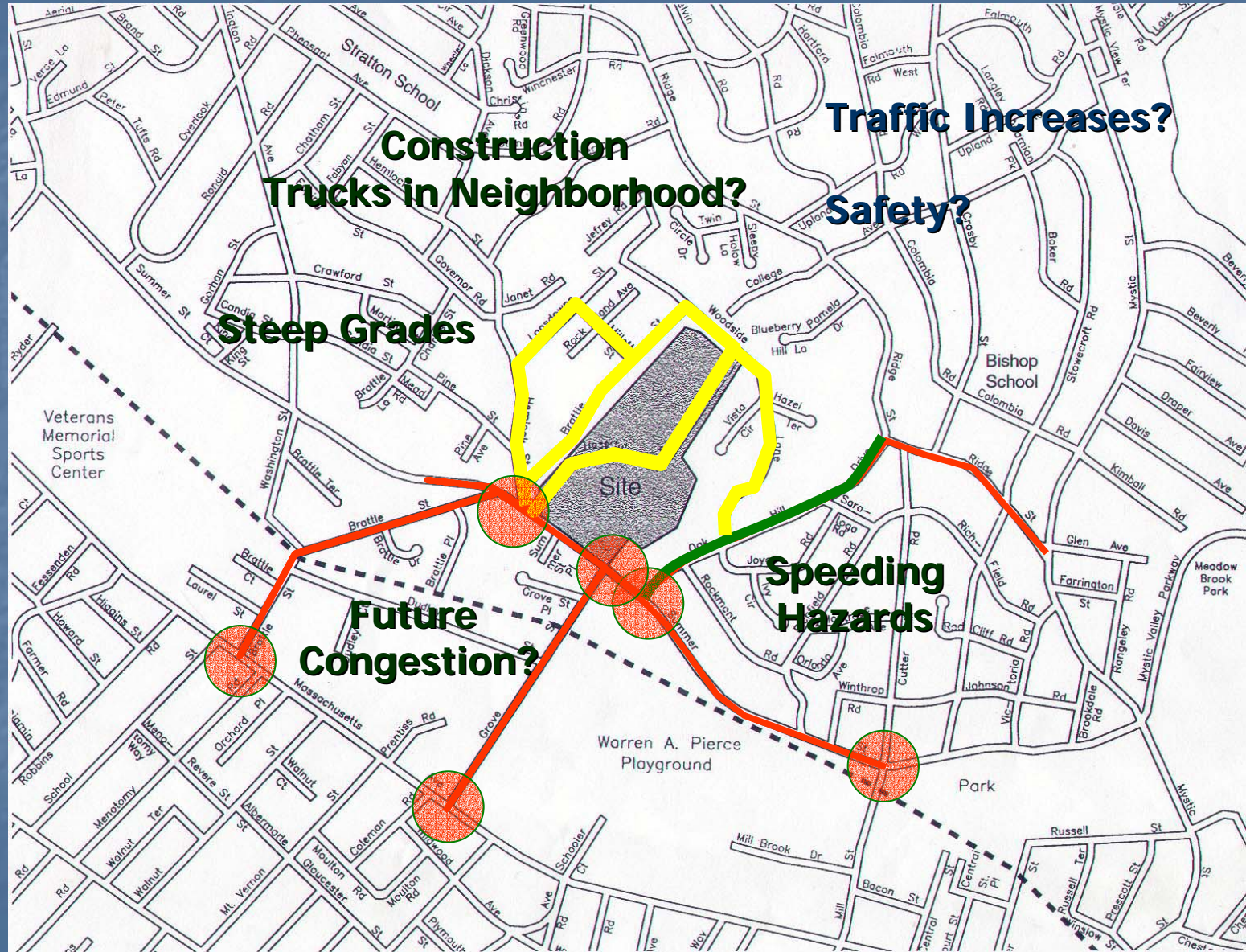
A photograph showing a residential street scene. On the left, a white house with a gabled roof and a stone foundation is visible. A paved road leads west from Brattle Street, with a dark car parked on the right side. The road is flanked by lush green trees and grass. The sky is blue with some light clouds.

Issue: Impacts on Lansdowne Street at Hemlock Street

looking north from Hemlock Street



Summary of Neighbor Concerns



HSH Trip Generation Estimates

Total Project

	<u>Two-Way</u>	<u>In</u>	<u>Out</u>
■ Daily	2738	1369	1369
■ AM Peak Hour estimates	198	85	113
■ PM Peak Hour estimates	263	125	138

Net 'New'

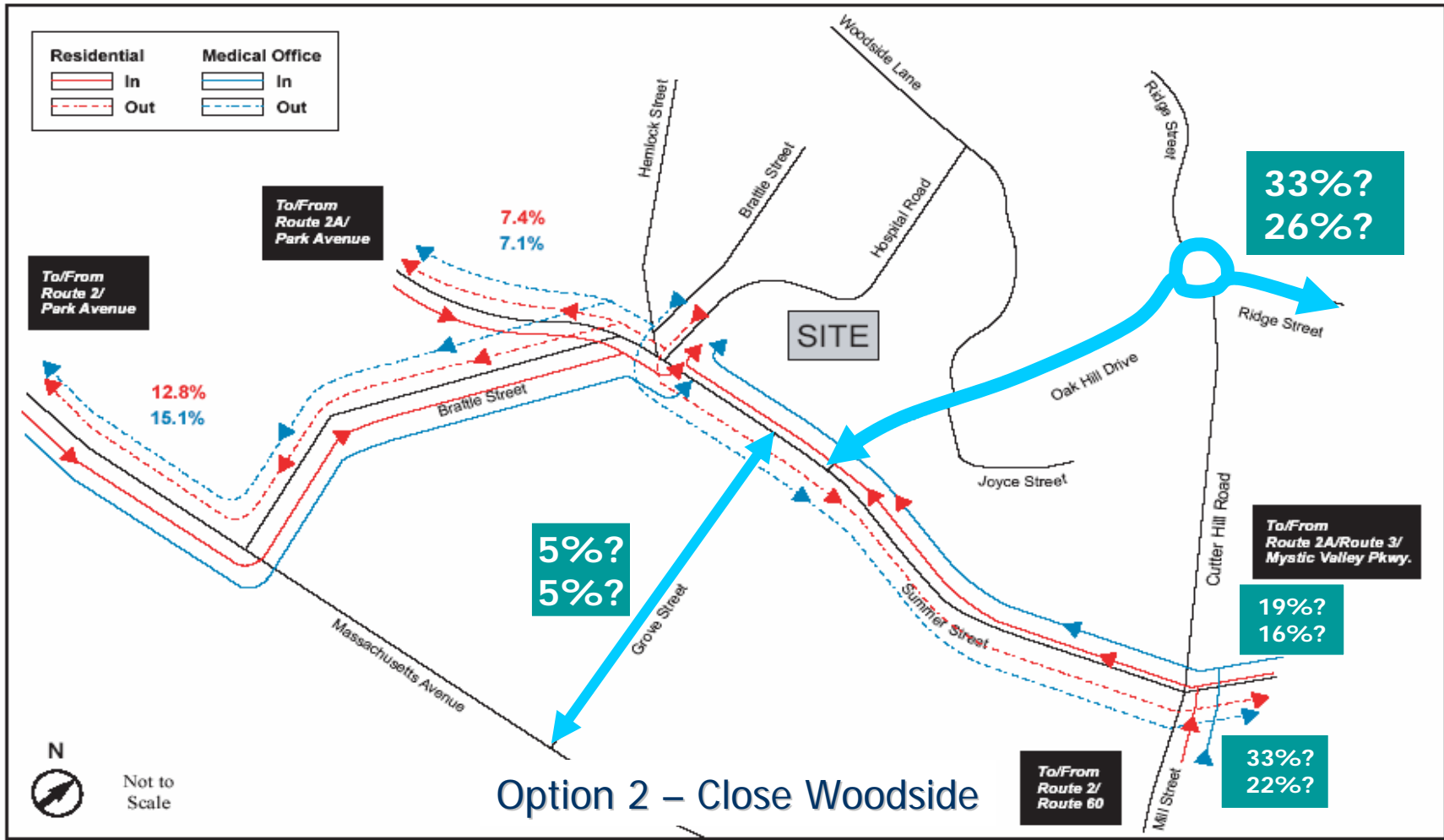
	<u>Two-Way</u>	<u>In</u>	<u>Out</u>
■ Daily	1970	985	986
■ AM Peak Hour estimates	162	57	105
■ PM Peak Hour estimates	212	113	99

HSH Summer Street Average Back-up Comparisons- Brattle/Summer

<i>Projected 2009 AM Peak Hour</i>	No-Build	Woodside Open	Woodside Closed
Eastbound	125 (5)	375 (15)	350 (14)
Westbound	150 (6)	325 (13)	450 (18)
<i>Projected 2009 PM Peak Hour</i>	No-Build	Woodside Open	Woodside Closed
Eastbound	100 (4)	375 (15)	425 (17)
Westbound	150 (6)	450 (18)	525 (21)

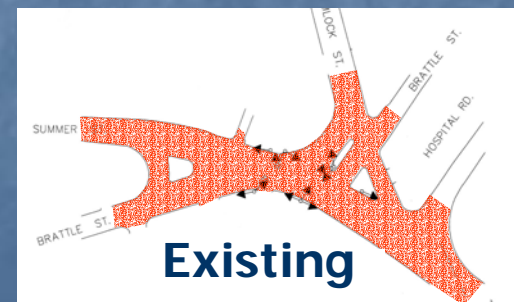
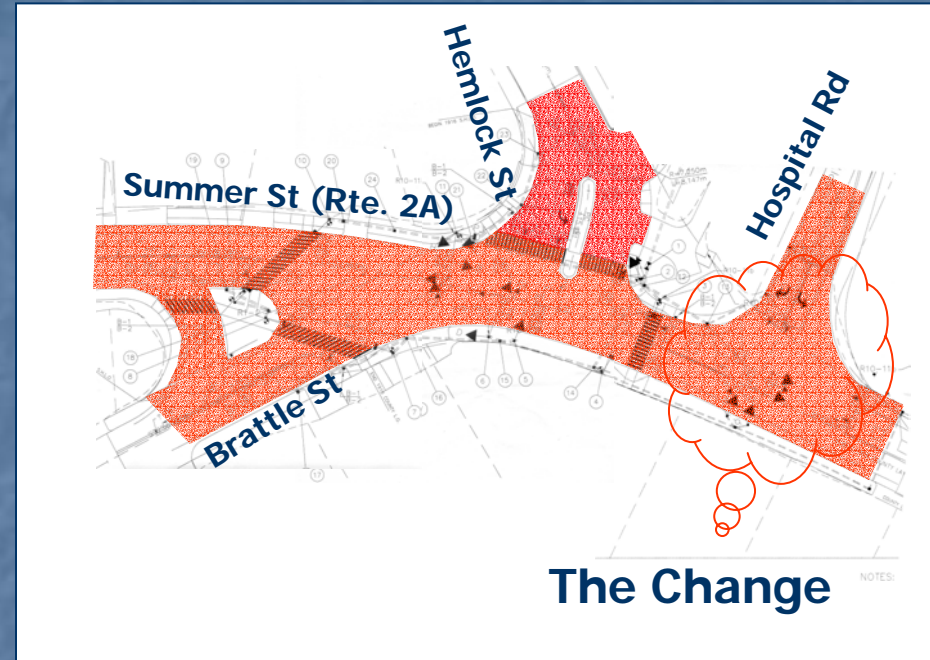
Backup to nearest 25 Feet (Cars)

HSH Trip Distribution Options



Summary of HSH Study Mitigation: Traffic

- Incorporate Hospital Road in Summer/Brattle/Hemlock traffic signal plan (under construction)
- Site vehicle trips inbound via Hospital Rd *and* Woodside Lane; outbound via Hospital Rd only; monitor Woodside Lane traffic for TAC
- All construction vehicles to use Hospital Road
- During Special Permit Process:
 - Adjust signal timing of:
 - Mill Street/Cutter Hill Rd
 - Mass Ave/Brattle
 - Explore signal warrants for Grove/Summer, Grove/Mass Ave & Oak Hill Dr/Summer intersections
 - Explore safety/speed reduction measures – ‘traffic calming’ at Oak Hill Dr/Woodside Ln intersection



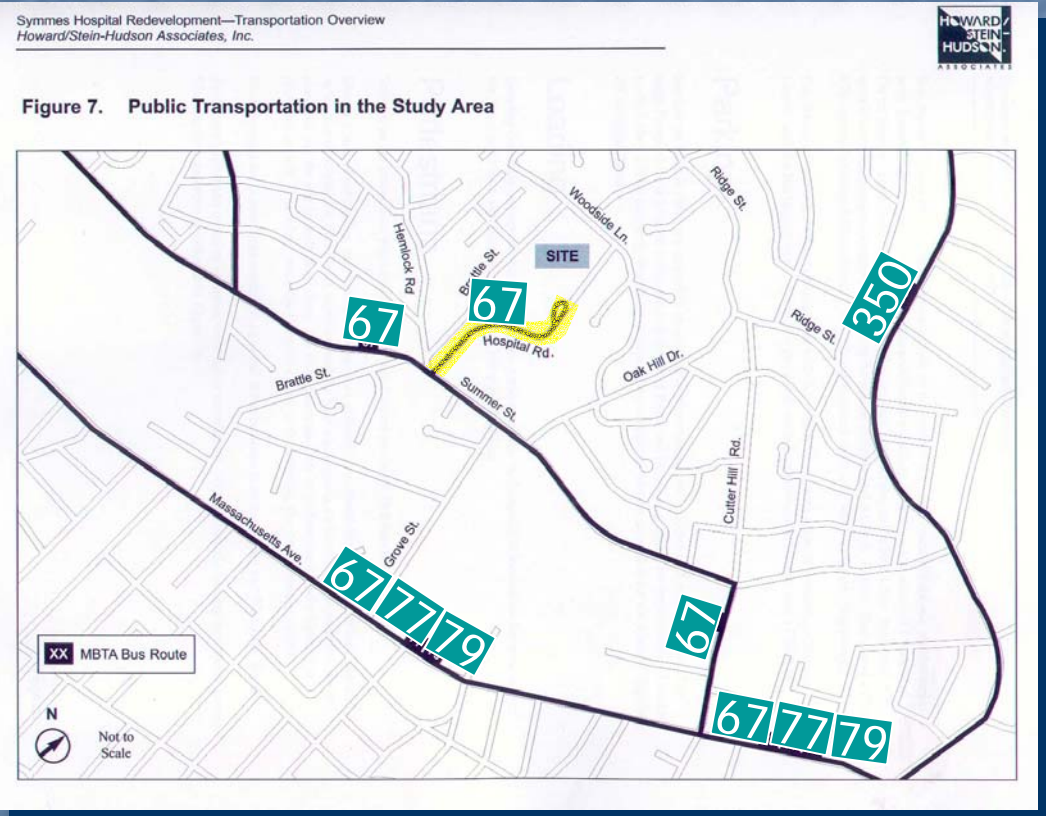
Summary of HSH Study Mitigation: Public Transportation

- Design Roads for T buses

- Work with T to increase service to site – existing is only outbound Route 67 up and down hill

- Transportation demand management measures for Med Office Bldg tenants

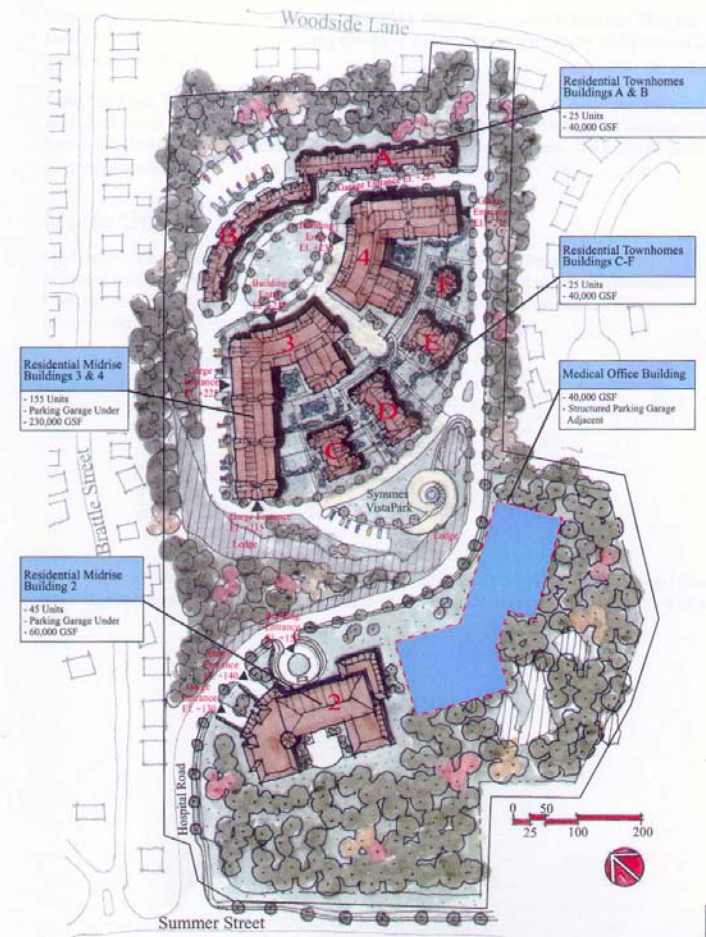
- On-site transit pass sales
- Partial employee subsidies
- Promote transit and ridesharing/ van/car pools in newsletters and website
- 'Guaranteed ride home' service



Summary of HSH Study Mitigation: Pedestrians and Bikes

- Provide new sidewalks on east side of Hospital Road and Summer Street north side
- Provide new pedestrian pathway through utility easement to Summer Street & MinuteMan Bikeway
- Explore pedestrian improvements with School re-districting as access may be affected to Stratton and Bishop Schools

Figure 12. Site Plan



Summary of HSH Study Mitigation: Overall

- “...the proponent will continue working with the community and the Town to develop a final mitigation package that will minimize any possible traffic impacts of the project as the Special Permit process continues.”

Peer Review Findings Summary

- HSH study approach and analysis assumptions are generally reasonable and generally comply with Symmes Advisory Committee recommended guidelines
- HSH study Mitigation Strategy is generally reasonable
- Traffic expected to be generated by the Symmes site will be approximately 70% of the lowest generating case assumed with any of the VHB recommendations for Symmes site from its 2002 study
- While either Option 1 (Option 1 with a one-way) or 2 is workable, given the potential impacts on steep/narrow local and private streets, the Option 2 circulation pattern – without vehicle access to Woodside Lane-- assuming no modifications to Woodside Lane -- is preferred over the Option 1 pattern. Option 2 uses Hospital Road as exclusive vehicle access; its Summer Street impacts are manageable
- Compared to Option 1, Option 2 results in more traffic on Summer Street between Hospital Road and Oak Hill Drive as well as Oak Hill Drive between Summer Street and Woodside Lane
- Option 2 results in no additional vehicle traffic on steep segments of Woodside Lane, Brattle Street, Millett Street to Lansdowne Street
- Grove Street/Mass Ave and Grove/Summer Street intersections likely meet traffic signal warrants today, averaging 3 crashes per year

Peer Review Recommended Mitigation Modifications

- Woodside Lane should provide pedestrian, bicycle and emergency vehicle access.
- For mitigation, consider providing free peak period express shuttle service (small vehicles) between the Alewife Red Line station and the Symmes site Residences and Medical Office Building. Allow neighbors to access the service via a new stop on both sides of Hospital Road at its intersection with Summer Street as well as two stops – top of hill and at the Medical Office Building
- Consider providing additional crosswalk and pedestrian signal/push buttons between northwest corner of Brattle Street to southeast corner of Brattle to enhance pedestrian/bike access to MinuteMan bikeway and crosswalk at Hospital Road
- Consider providing a sidewalk on the north side of Summer Street between Oak Hill Drive and Hospital Road
- Consider traffic calming measures on Oak Hill Drive to slow traffic e.g., speed table at Woodside Lane, pavement texture shoulder, etc.
- Consider sight line enhancements and future signalization at Grove/Summer for pedestrian crossings to High School if not full traffic signalization

A photograph of a street intersection. In the foreground, a paved road curves to the right. In the middle ground, a silver minivan is stopped at a traffic light. The traffic light is red. There are several large green trees on the right side of the road. Power lines are visible in the sky. The background shows a residential building with a porch. The text "Thank you Questions?" is overlaid in the center of the image in a large, bold, yellow font with a white outline.

**Thank you
Questions?**