

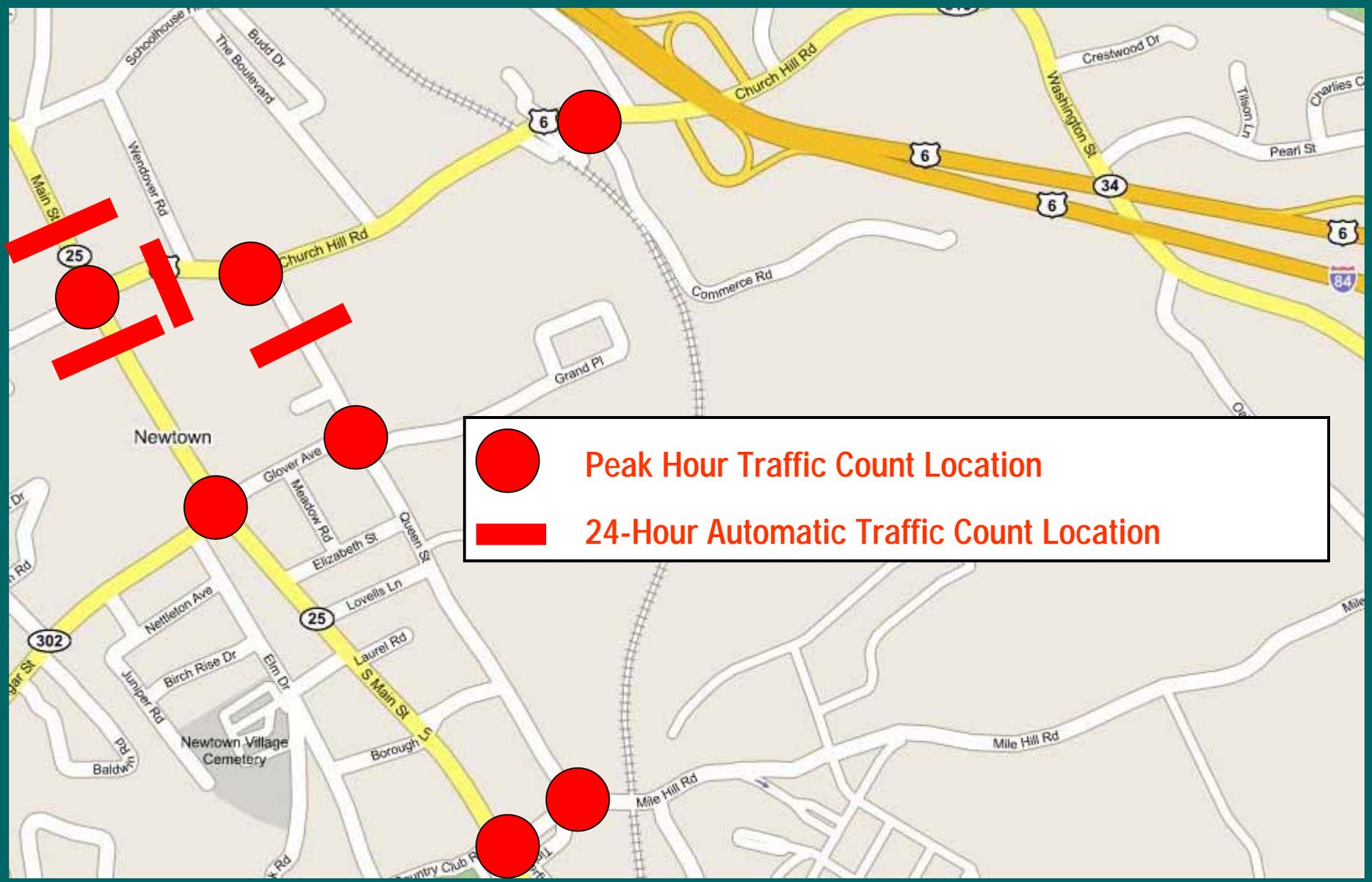
Traffic Improvement Plan For Queen Street Area Newtown, Connecticut

Public Workshop, May 4, 2006

Presented By:



STUDY AREA & DATA COLLECTION



STUDY OBJECTIVES



- Identify Traffic-Related Concerns
 - * Traffic Capacity Constraints, Queuing and Delays
 - * Speeding, Vehicular Safety and Pedestrian Safety
 - * Confusing Intersections
- Evaluate Improvement Options
 - * Intersections
 - * Traffic Calming

PROJECT STATUS



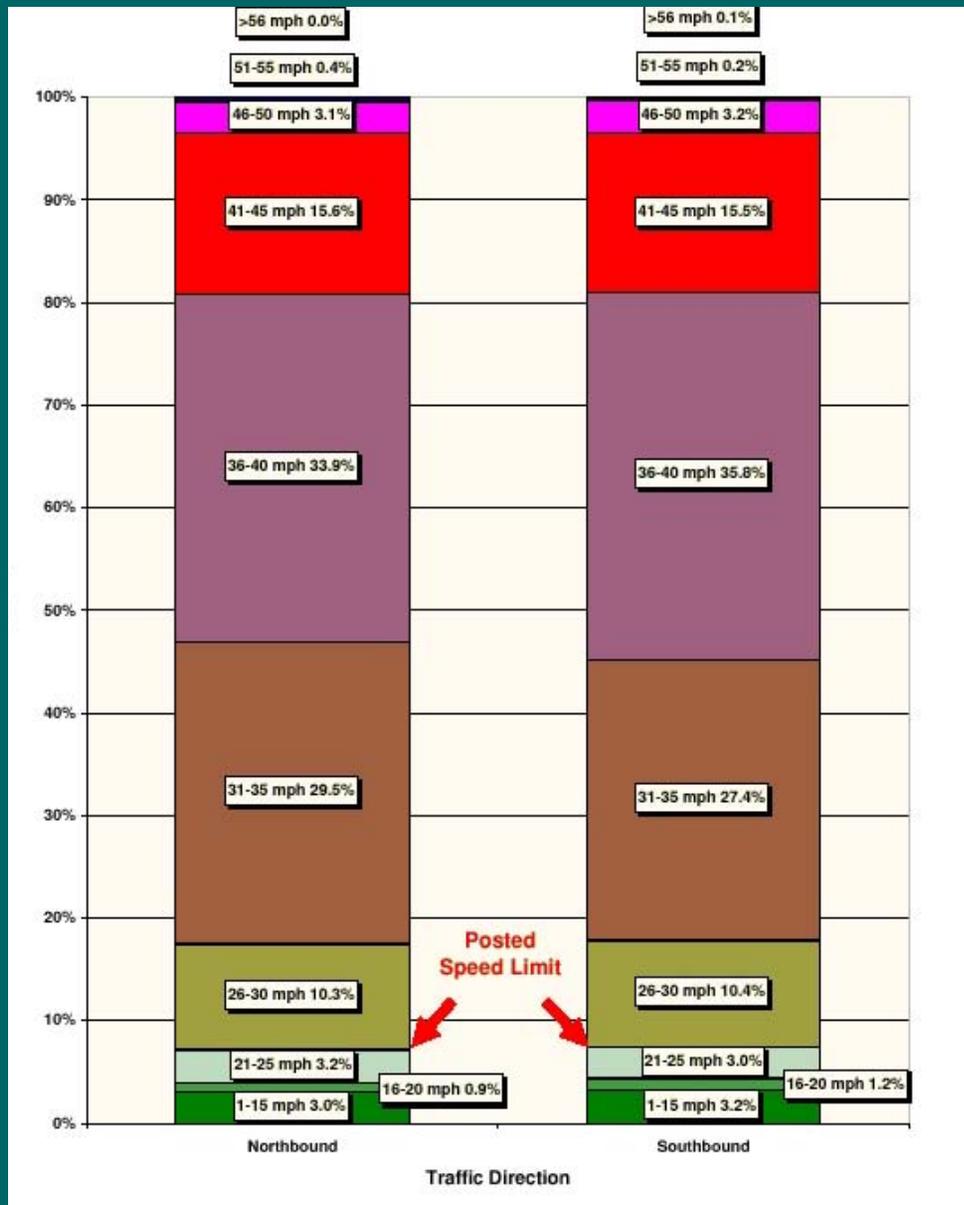
| PROJECT WEEK | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
|--|-----|-----|---|---|---|-------|---|---|---|-------|----|----|----|-----|----|----|----|------|----|----|----|----|---|
| MONTH | Jan | Feb | | | | March | | | | April | | | | May | | | | June | | | | | |
| Study Committee Meeting | ● | | | | | | | | | | | ● | | | ● | | | | ● | | | | |
| Public Workshop | | | | | | | | | | | | | | ● | | | | | | | | | ● |
| Public Presentation | | | | | | | | | | | | | | | | | | | | | | | ● |
| PROJECT INITIATION | | | | | | | | | | | | | | | | | | | | | | | |
| Committee Meeting # 1 | ● | | | | | | | | | | | | | | | | | | | | | | |
| Selection of Locations for Traffic Counts and Analysis | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | | |
| Review Existing Data, Documents and Reports | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | | |
| Prepare Base Maps | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | | |
| PHASE 1 | | | | | | | | | | | | | | | | | | | | | | | |
| Field Visits | | ■ | ■ | ■ | | | | | | | | | | | | | | | | | | | |
| Traffic Data Collection | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | | | |
| Safety Evaluation | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Roadway Deficiency Evaluation | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Environmental Resources and Constraints | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| Landscape Treatment Recommendation | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | | | | | |
| PHASE 2 | | | | | | | | | | | | | | | | | | | | | | | |
| Project Future Traffic Flow | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| Assess Future Traffic Operations | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| Improvement Concept Plans | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| Improvement Cost Estimate | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| Technical Memorandum # 1 | | | | | | | | ■ | ■ | ■ | ■ | ■ | | | | | | | | | | | |
| Committee Meeting # 2 | | | | | | | | | | | | ● | | | | | | | | | | | |
| Public Workshop | | | | | | | | | | | | | ● | | | | | | | | | | |
| Committee Meeting # 3 | | | | | | | | | | | | | | ● | | | | | | | | | |
| PHASE 3 | | | | | | | | | | | | | | | | | | | | | | | |
| Draft Final Report | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Technical Memorandum # 2 | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Committee Meeting # 4 | | | | | | | | | | | | | | | | | | | ● | | | | |
| Public Presentation | | | | | | | | | | | | | | | | | | | | | | | ● |
| Produce Final Report | | | | | | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ |

PROJECT STATUS



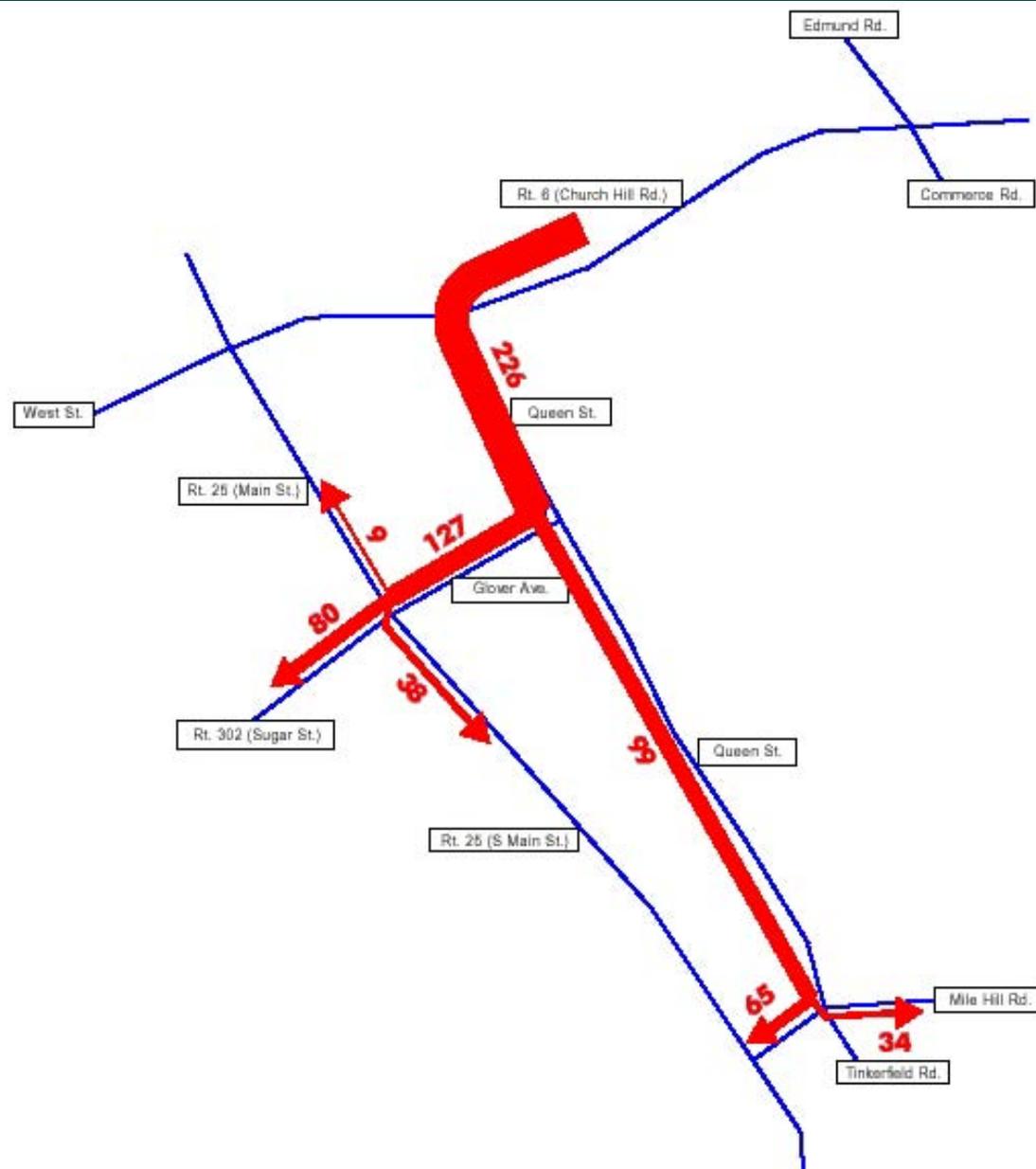
- Data Collection, Including Traffic Counts
- Traffic Capacity Analysis for Three Scenarios:
 - * 2006 Existing
 - * 2025
 - * 2025 with Commerce Road Connection
- Traffic Signal Needs Study (Rt. 6 and Rt. 25, Flag Pole)
- Safety Evaluation
- Identify Deficiencies
- Preliminary Improvement Options

TRAVEL SPEED ON QUEEN STREET

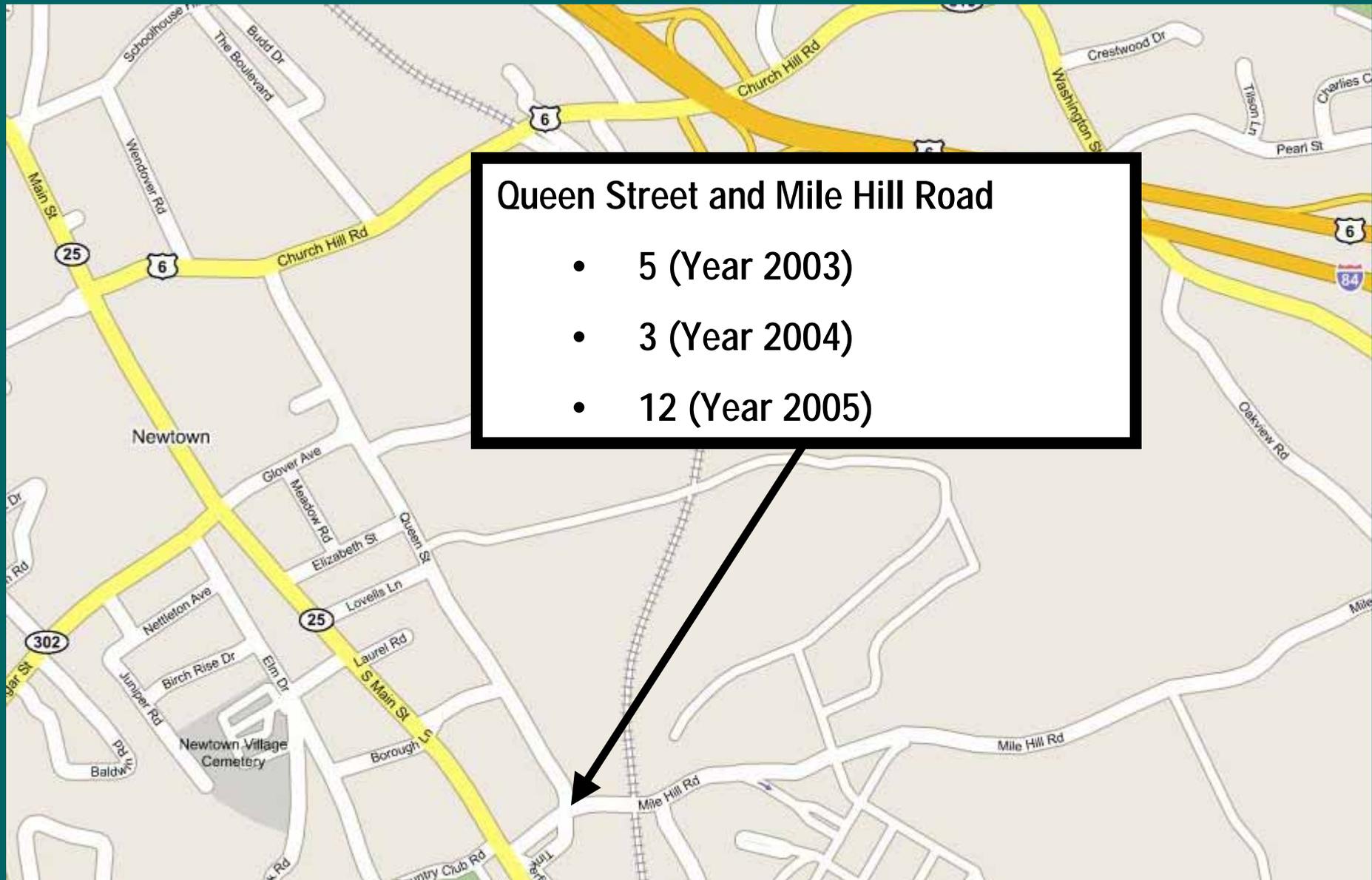


- Average Speed: 35 mph
- 50th Percentile Speed: 36 mph
- 85th Percentile Speed: 42 mph

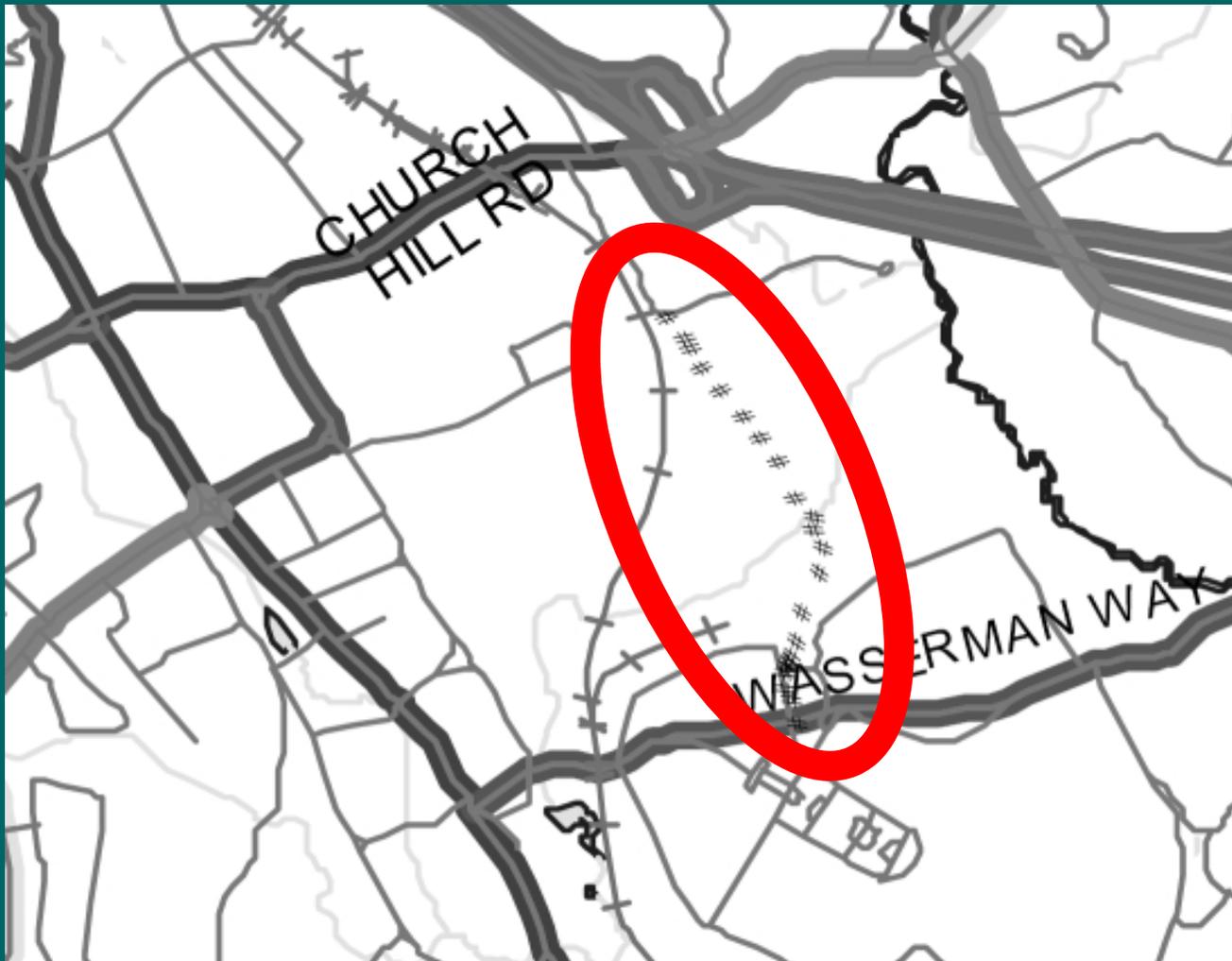
THROUGH TRAFFIC



ACCIDENTS



COMMERCE ROAD PROJECT



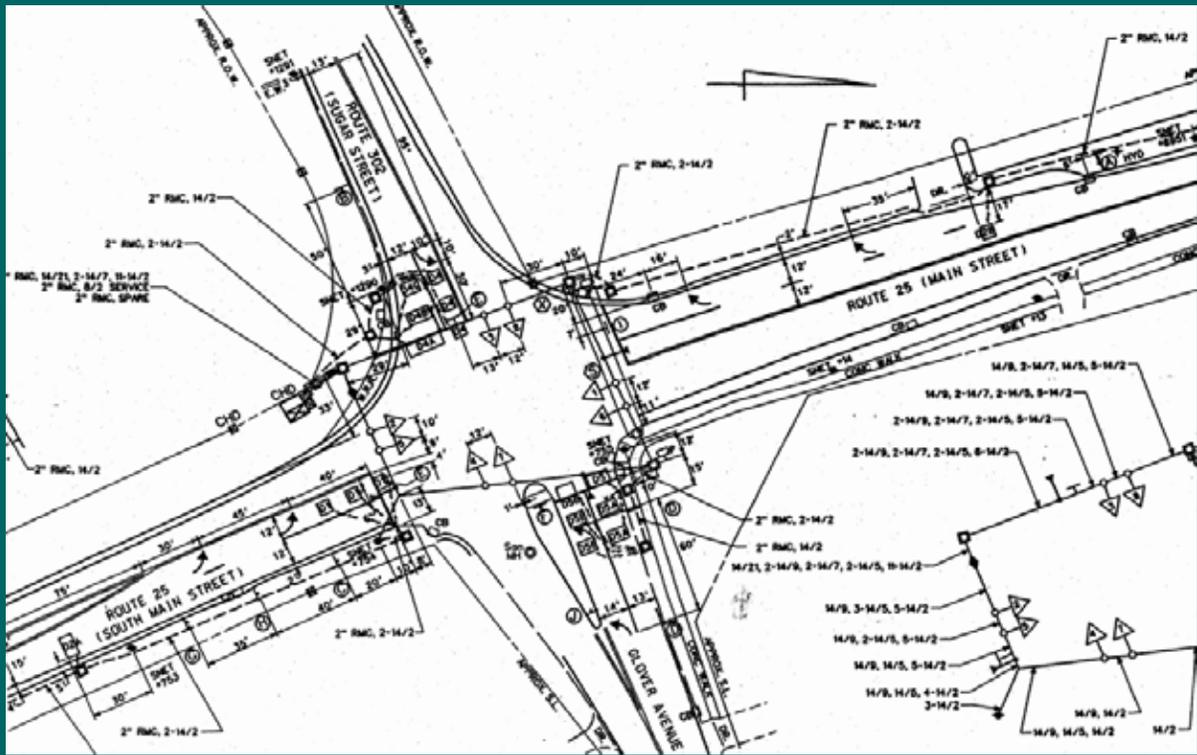
Source: Newtown Plan of Conservation and Development, 2004 Update

CONNDOT PROJECTS



- Glover Avenue and Main Street

| | PRE-EMPT 1 | PRE-EMPT 2 | PRE-EMPT 3 |
|---------|------------|------------|------------|
| | | | |
| PHASE 1 | PHASE 2 | PHASE 3 | PHASE 4 |

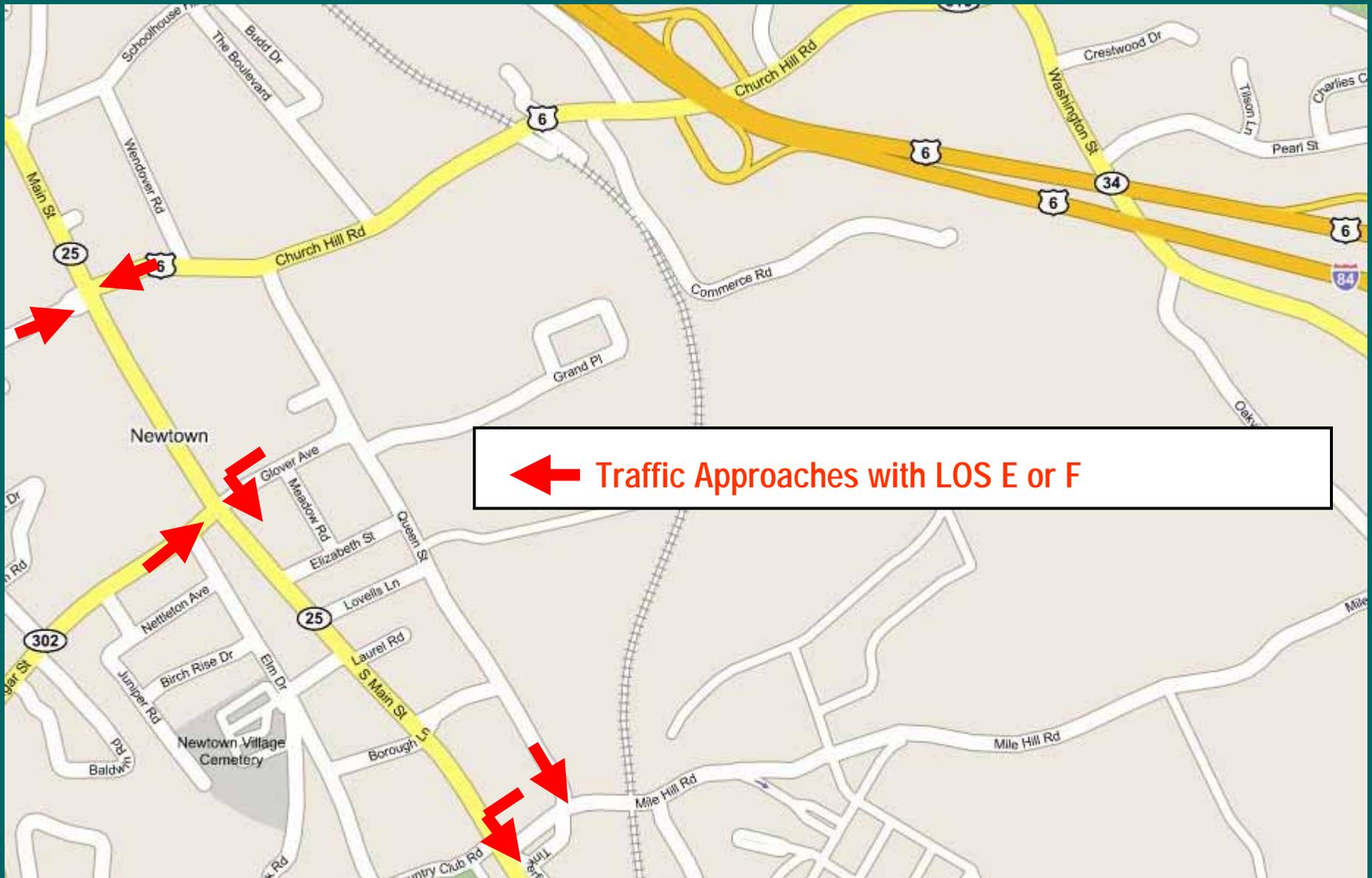


- Church Hill Road and Queen Street

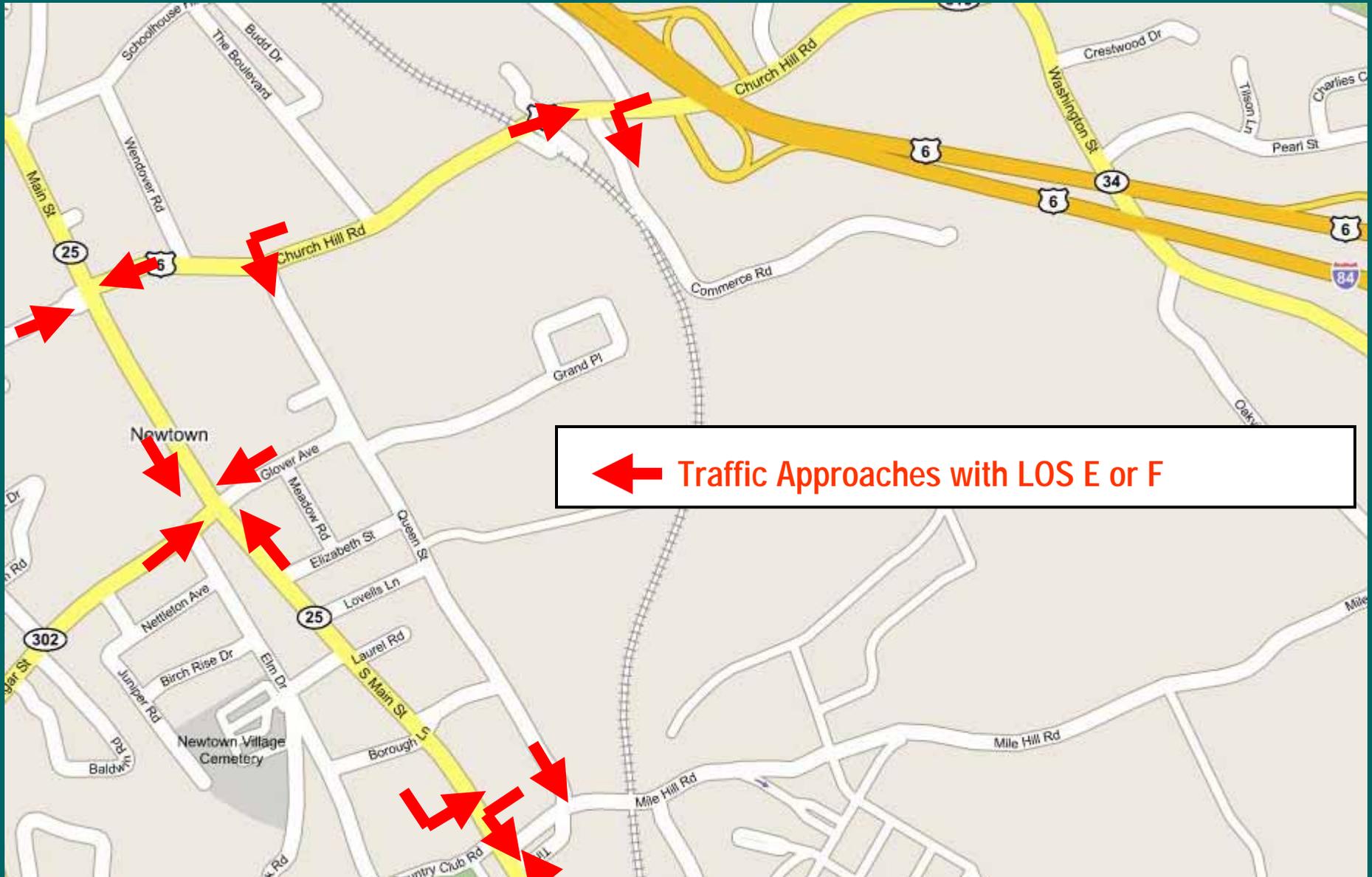


DEFICIENCIES IDENTIFIED

TRAFFIC ANALYSIS (2006)



TRAFFIC ANALYSIS (2025)



DEFICIENCIES IDENTIFIED



- Existing Traffic Delays at Intersections:
 - * Church Hill Road and Main Street
 - * Glover Avenue and Main Street
 - * Queen Street and Mile Hill Road
- Speeding and Pedestrian Safety
- Projected 2025 Traffic Delays
- Need for Access Management on the Northern Part of Queen Street
- Church Hill Road and Main Street (Flag Pole)
- Queen Street and Glover Avenue
- Queen Street and Mile Hill Road



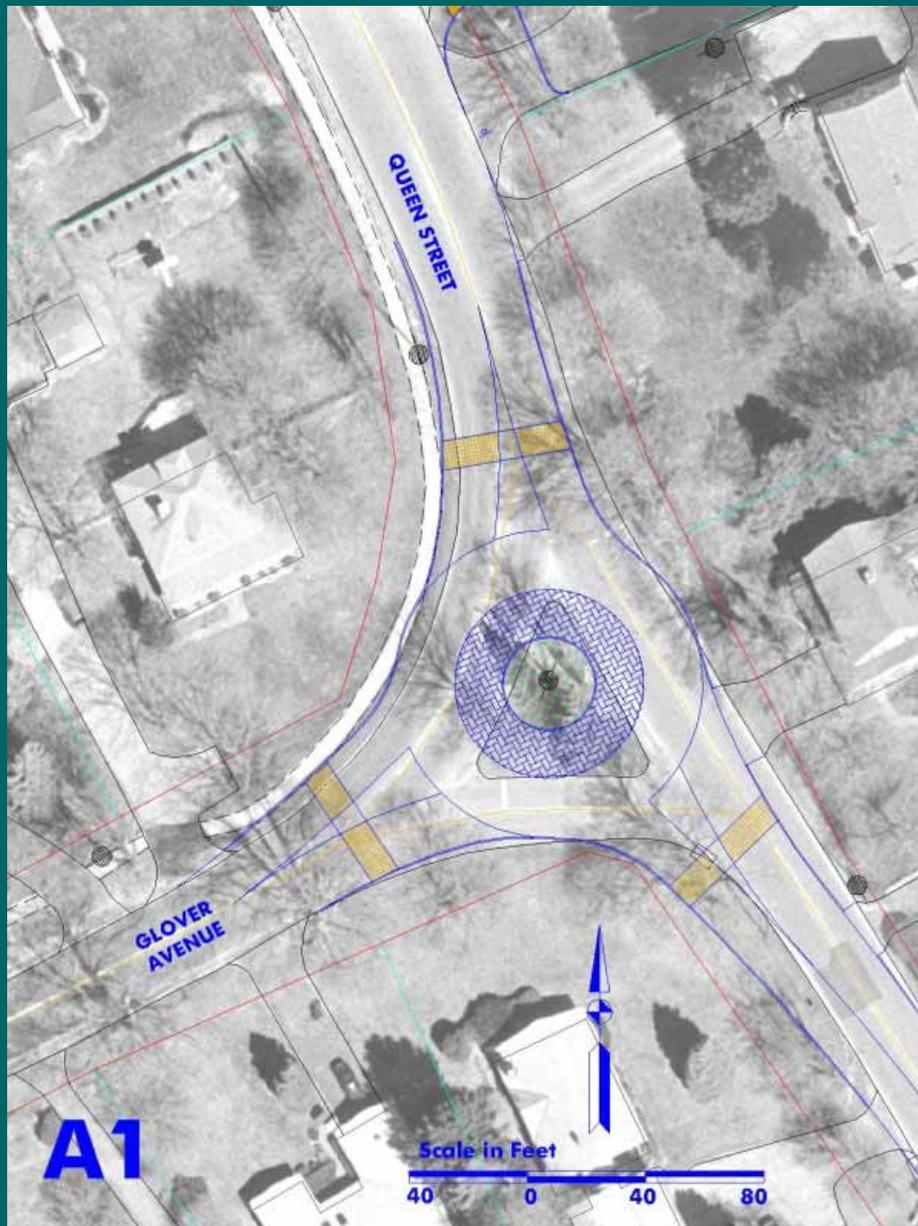
PRELIMINARY IMPROVEMENT OPTIONS

LOCATIONS OF IMPROVEMENT OPTIONS



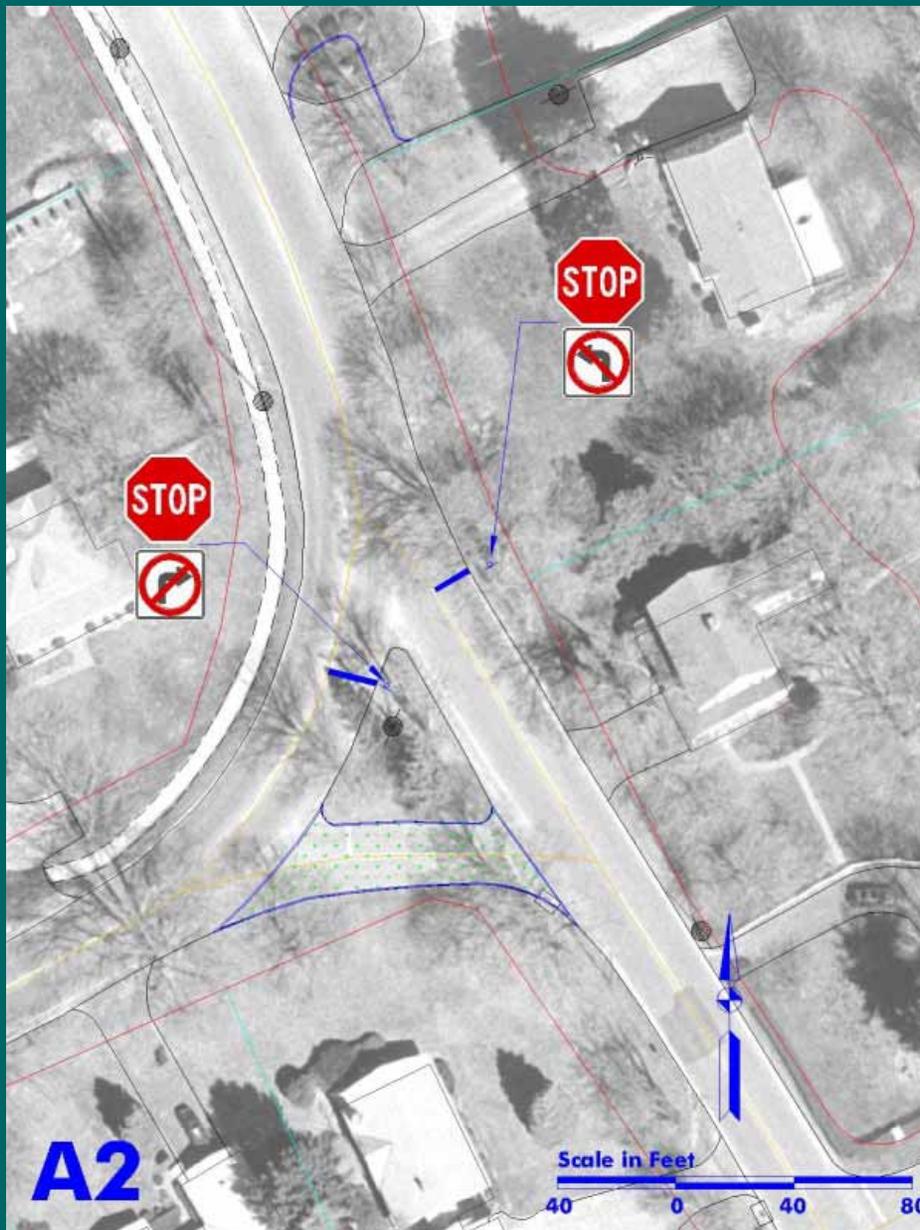
- Queen Street
- Glover Avenue
- Intersection of Route 6 and Route 25 (Flag Pole)

QUEEN STREET AND GLOVER AVENUE (A1)



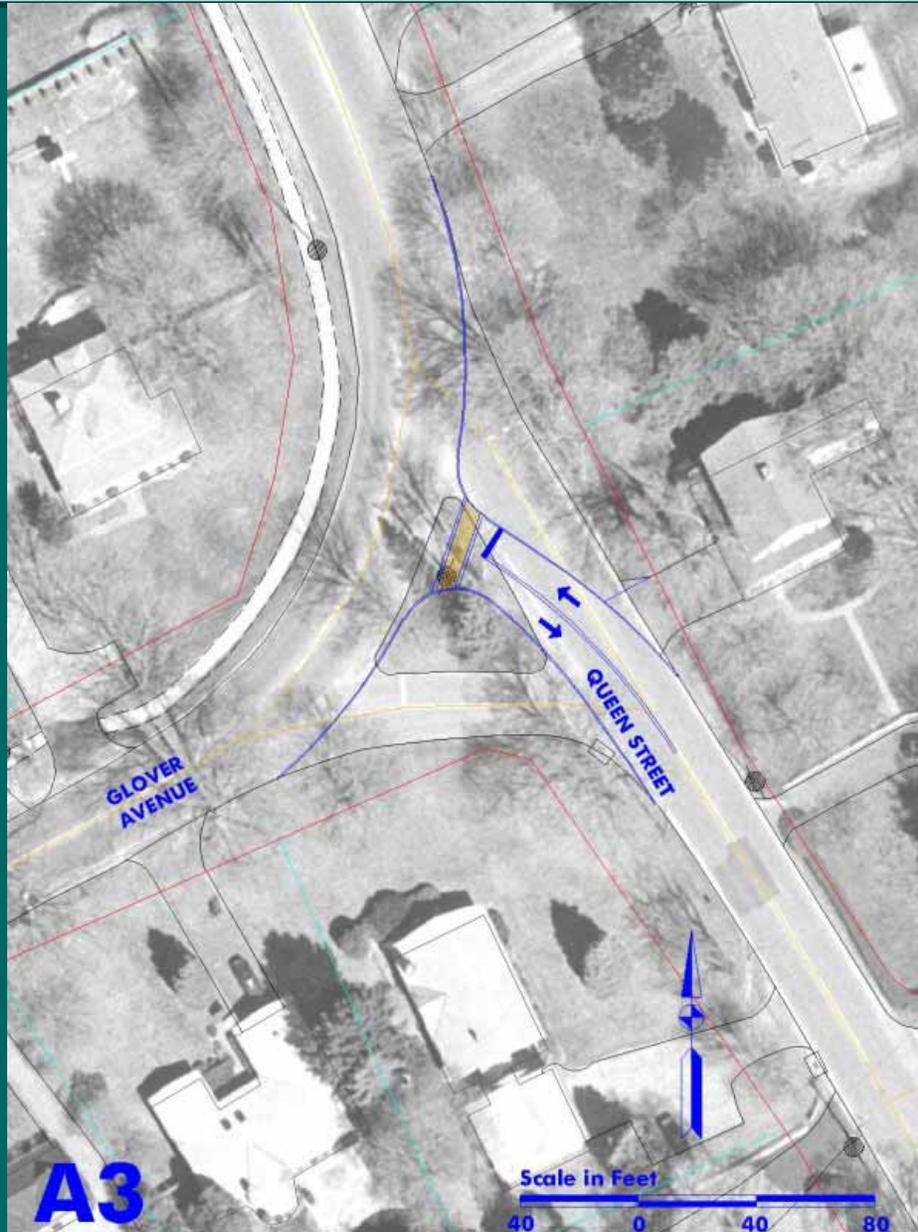
- Issues:
 - * Complex intersection
 - * Safety concerns
- Improvement Option:
 - * Roundabout
- Pros:
 - * Clarify movements
 - * Potentially reduce delays
- Cons:
 - * May require sliver property taking
 - * Drivers may be unfamiliar with roundabout
 - * Loss of green space
 - * Construction cost

QUEEN STREET AND GLOVER AVENUE (A2)



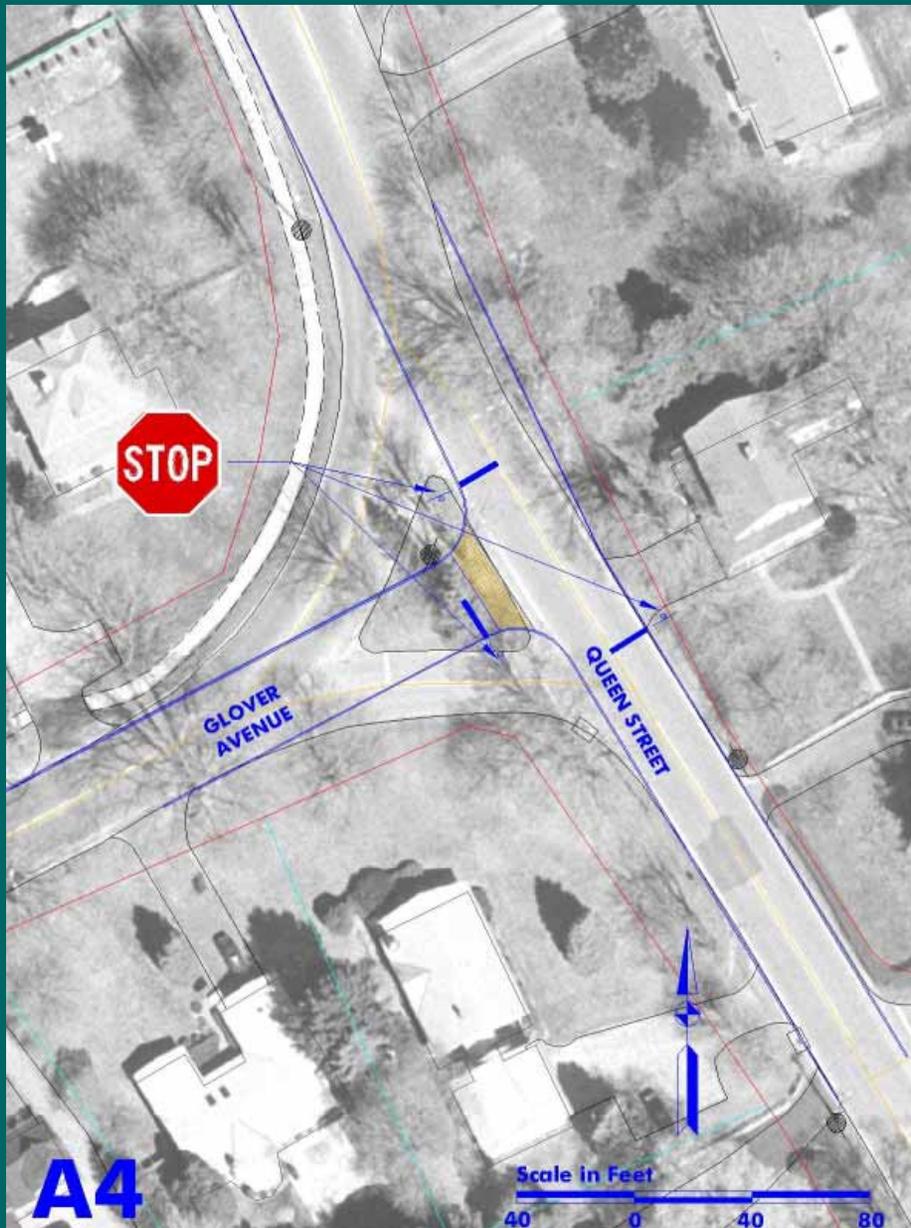
- Issues:
 - * Complex intersection
 - * Safety concerns
- Improvement Option:
 - * Replace bypass lane with a landscape area
 - * New signs
- Pros:
 - * Clarify movements
 - * Potential decrease in volumes on Queen St. & Glover Ave.
 - * Increase green space
 - * Minimal Cost
- Cons:
 - * Potential increase in volumes on residential streets between Queen St. & Main St.
 - * Inconvenience drivers
 - * Drivers may ignore turn restrictions

QUEEN STREET AND GLOVER AVENUE (A3)



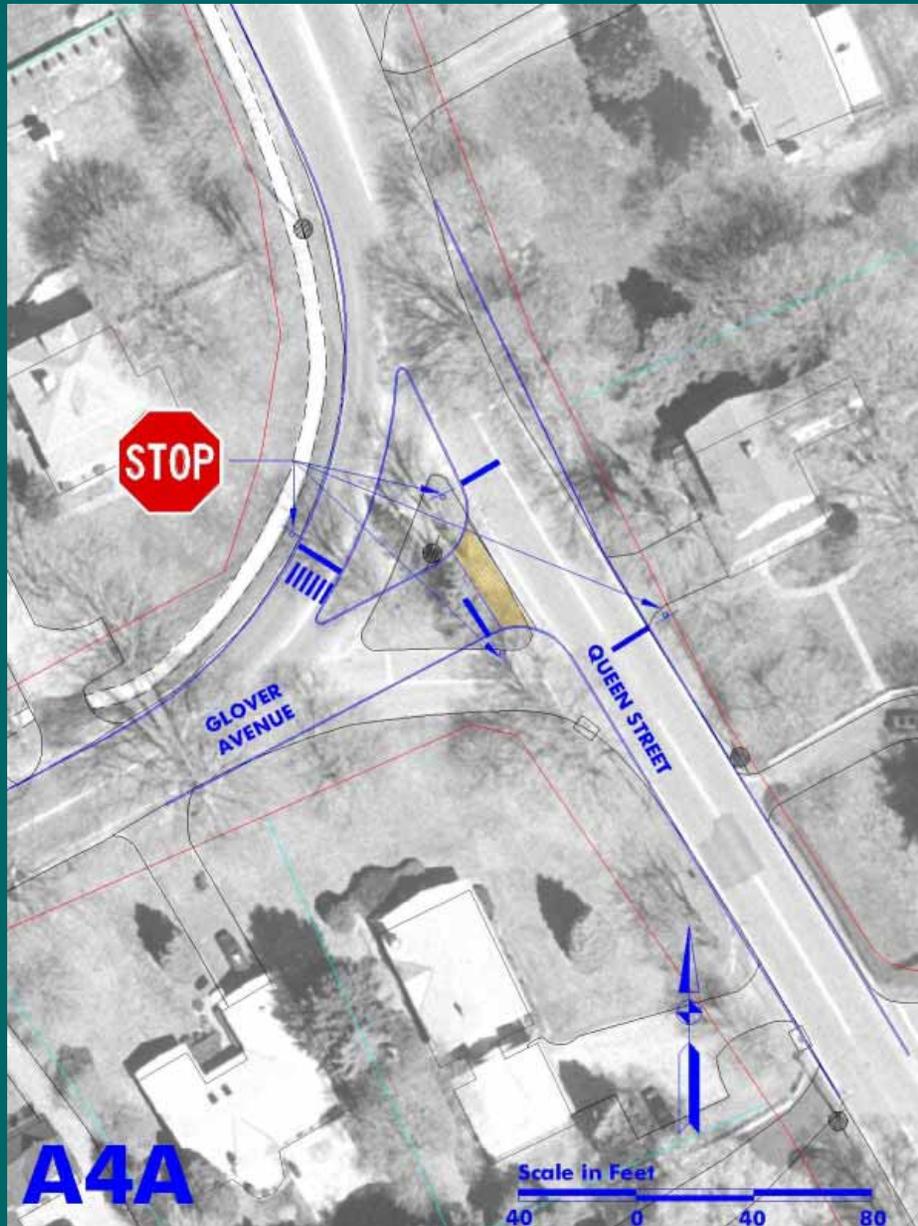
- Issues:
 - * Complex intersection
 - * Safety concerns
- Improvement Option:
 - * T intersection, with Queen St. as side street
- Pros:
 - * Clarify movements
 - * Potential decrease in volumes on Queen St. south of Glover Ave.
 - * Increase green space
- Cons:
 - * May direct additional traffic to Glover Ave.
 - * Potential increase in rear-end accidents on the curve section
 - * Potential delays exiting Queen St.

QUEEN STREET AND GLOVER AVENUE (A4)



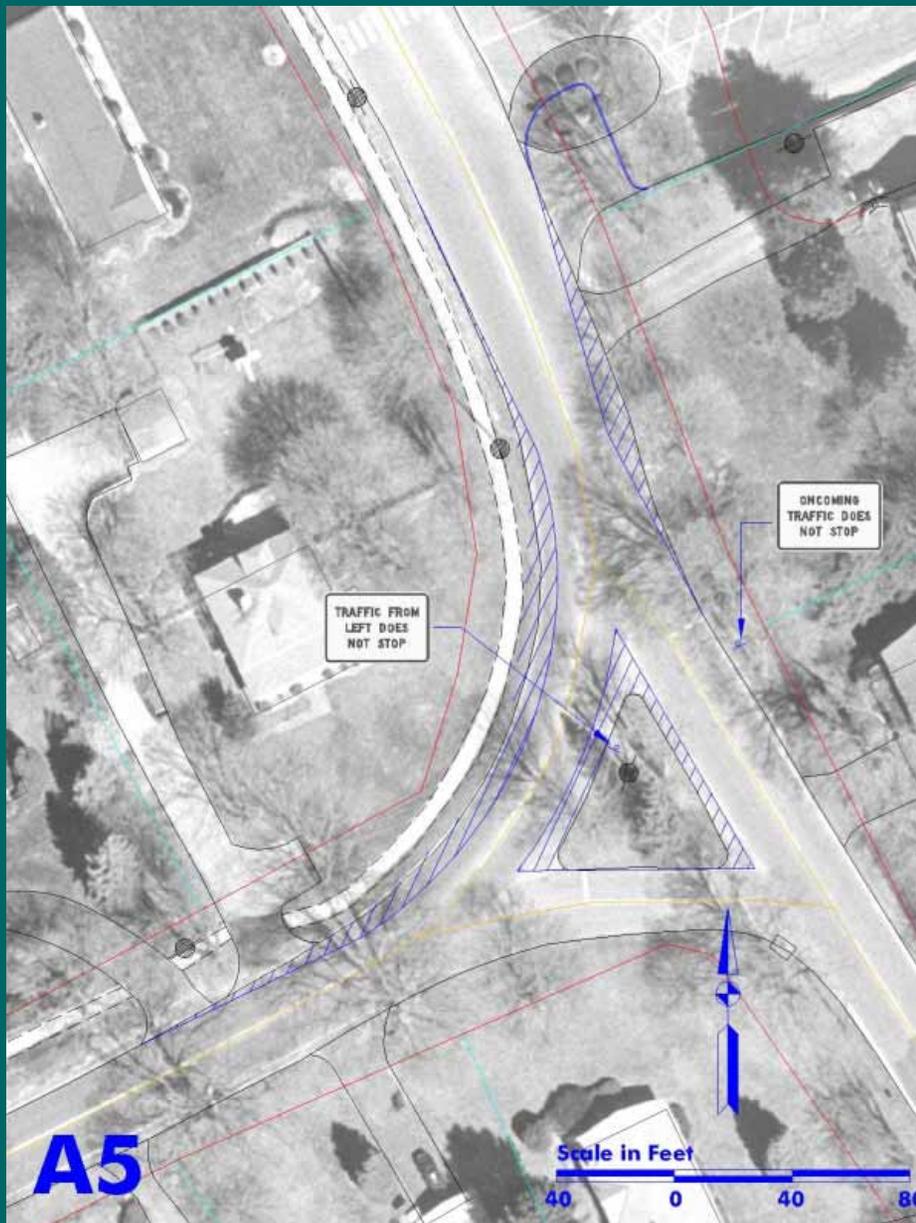
- Issues:
 - * Complex intersection
 - * Safety concerns
- Improvement Option:
 - * T intersection, with Glover Ave. as side street
 - * All-way stop
- Pros:
 - * Clarify movements
 - * Potential decrease in volumes on Glover Ave.
 - * Increase green space
- Cons:
 - * May direct additional traffic to Queen St. south of Glover Ave.
 - * Queuing
 - * Eastbound vehicle headlight beams directed at house

QUEEN STREET AND GLOVER AVENUE (A4A)



- Issues:
 - * Complex intersection
 - * Safety concerns
- Improvement Option:
 - * T intersection, with Glover Ave. as side street
 - * Bypass lane for southbound right- turns
 - * All-way stop at T intersection
- Pros:
 - * Clarify movements
- Cons:
 - * Queuing
 - * Eastbound vehicle headlight beams directed at house

QUEEN STREET AND GLOVER AVENUE (A5)



- Issues:
 - * Complex intersection
 - * Safety concerns
- Improvement Option:
 - * Pavement striping to visually narrow roadways
- Pros:
 - * Potential speed reduction
- Cons:
 - * Long-term effectiveness?
 - * Require maintenance

QUEEN ST. AND MILE HILL RD. (B1)



- Issues:
 - * Long delays for southbound traffic from Queen Street, especially left-turns
 - * Increase in accidents in 2005
 - * Wide throat on Queen St. may encourage speeding
- Improvement Options:
 - * Right-turn only from Queen St.
- Pros:
 - * Safety benefit by removing the left-turn movement
- Cons:
 - * Hardship for drivers heading towards Exit 11 of I-84
 - * Divert traffic to Glover Ave., Main St., and residential streets between the two

QUEEN STREET AND MILE HILL ROAD (B2)



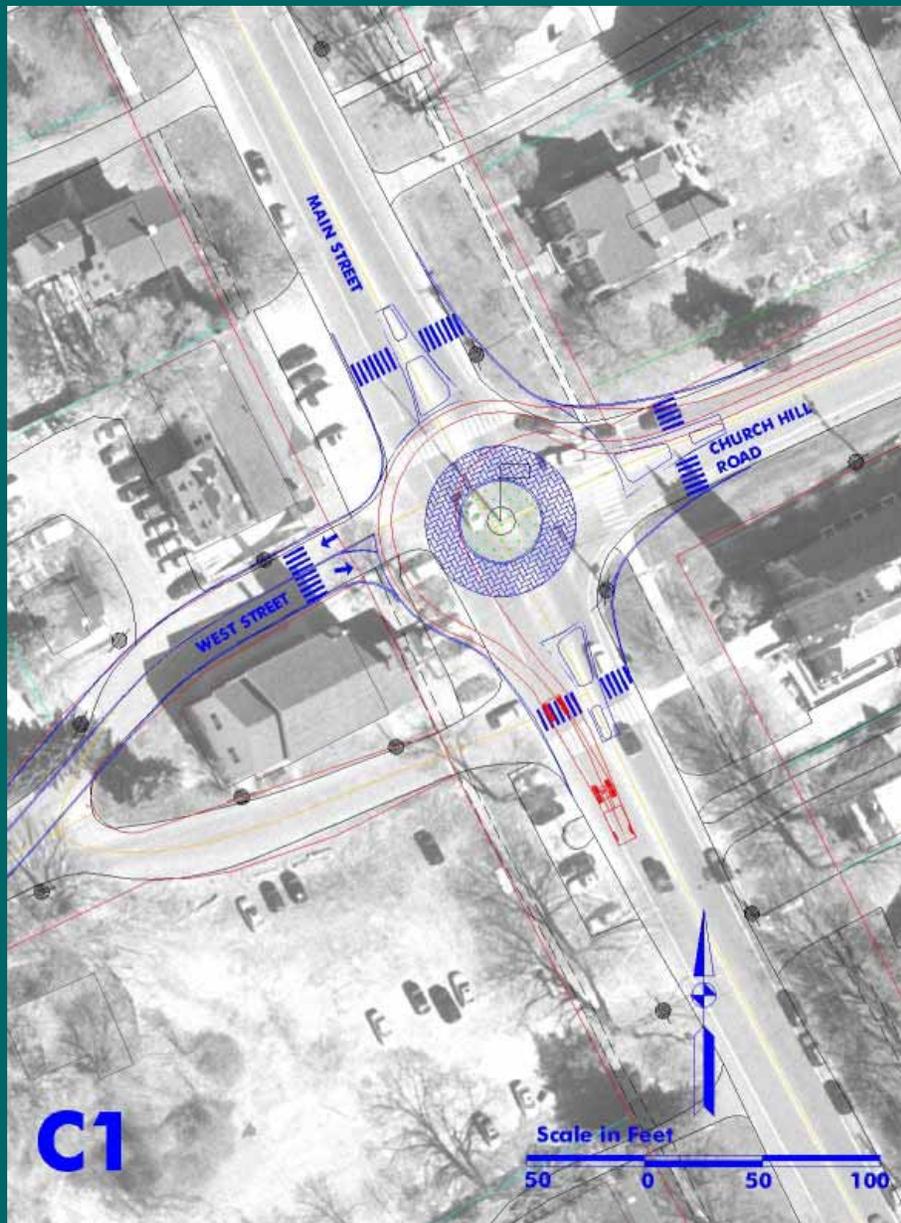
- Issues:
 - * Long delays for southbound traffic from Queen Street, especially left-turns
 - * Increase in accidents in 2005
 - * Wide throat on Queen St. may encourage speeding
- Improvement Options:
 - * Signalization
 - * Narrow throat on Queen St. with 30' corner radii
- Pros:
 - * Safety benefit and shorter delays for Queen St. traffic
 - * 90% cost by State, 10% cost by Town in typical signal projects
 - * Slow turning vehicles
- Cons:
 - * Potential increase in through traffic on Queen St.

QUEEN STREET AND MILE HILL ROAD (B3)



- Issues:
 - * Long delays for southbound traffic from Queen Street, especially left-turns
 - * Increase in accidents in 2005
 - * Wide throat on Queen St. may encourage speeding
- Improvement Options:
 - * Narrow throat on Queen St. with 30' corner radii
- Pros:
 - * Slow turning vehicles
- Cons:
 - * Safety concern of exiting from Queen St. remains

CHURCH HILL ROAD AND MAIN STREET (C1)



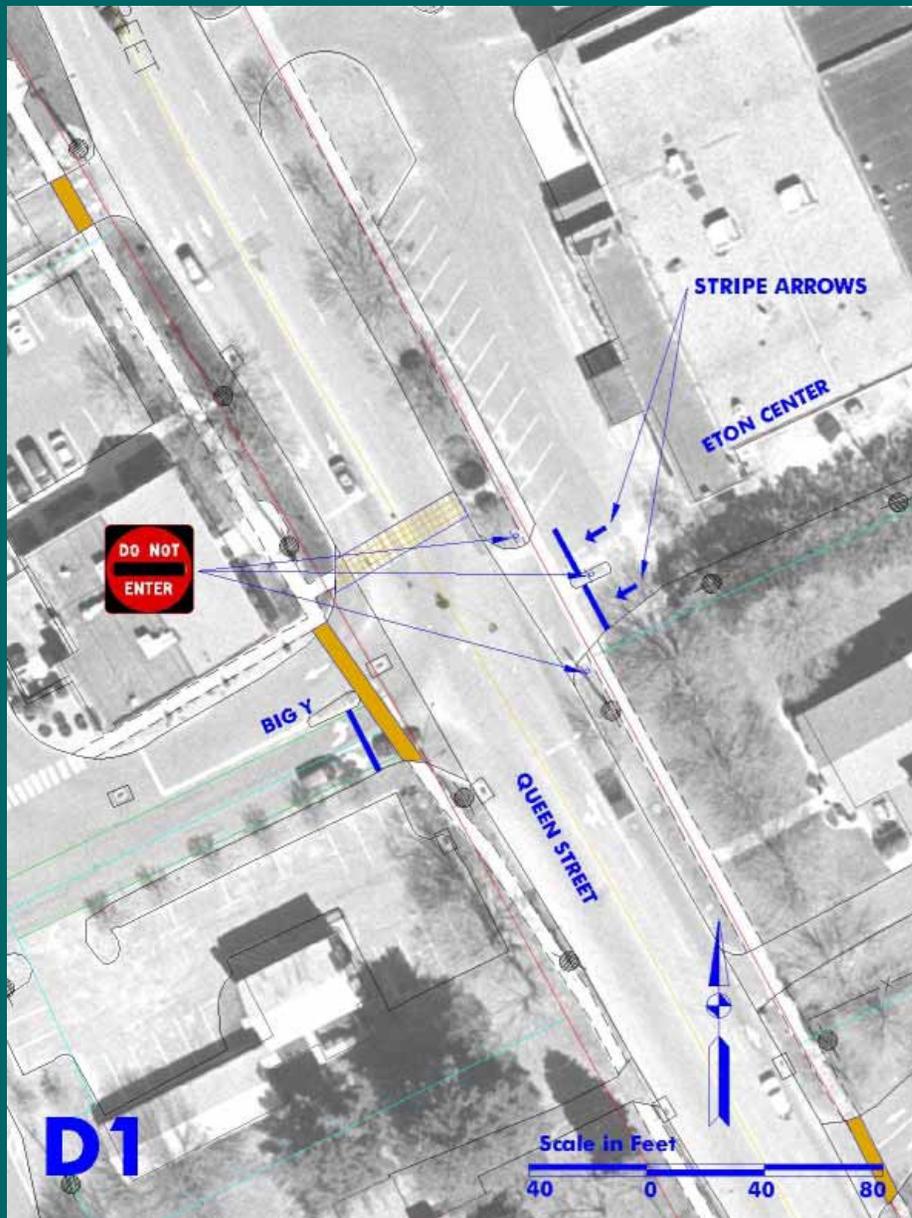
- Issues:
 - * Vehicular safety
 - * Long delays for eastbound and westbound traffic
- Improvement Options:
 - * Roundabout
 - * Close one leg of West Street; convert the other leg to two-way
- Pros:
 - * Potential safety benefits
 - * Decreased delays for westbound traffic
- Cons:
 - * May not be practical because of impact to historic surroundings
 - * Impact to adjacent properties
 - * Loss of on-street parking
 - * Large trucks cannot use West St.

CHURCH HILL ROAD AND MAIN STREET (C2)



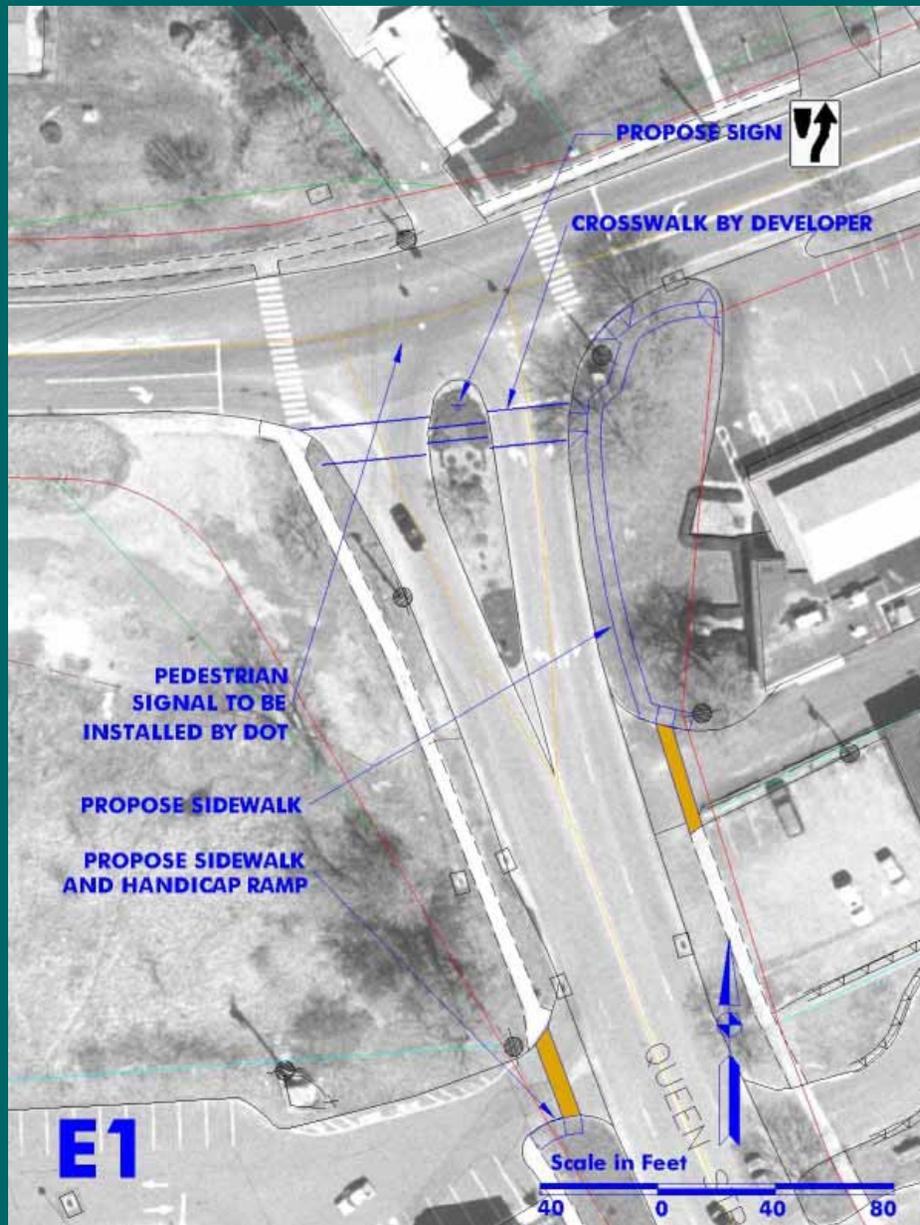
- Issues:
 - * Vehicular safety
 - * Long delays for eastbound and westbound traffic
- Improvement Options:
 - * Traffic Signal
 - * Convert one leg of West Street to two-way
- Pros:
 - * Decreased delays for eastbound and westbound traffic
 - * Potential safety benefits
- Cons:
 - * Impact to historic surroundings
 - * Impact to adjacent properties
 - * Loss of on-street parking
 - * Large trucks cannot use West St.
 - * Delay at church driveway

QUEEN STREET AND BIG Y DRIVEWAY (D1)



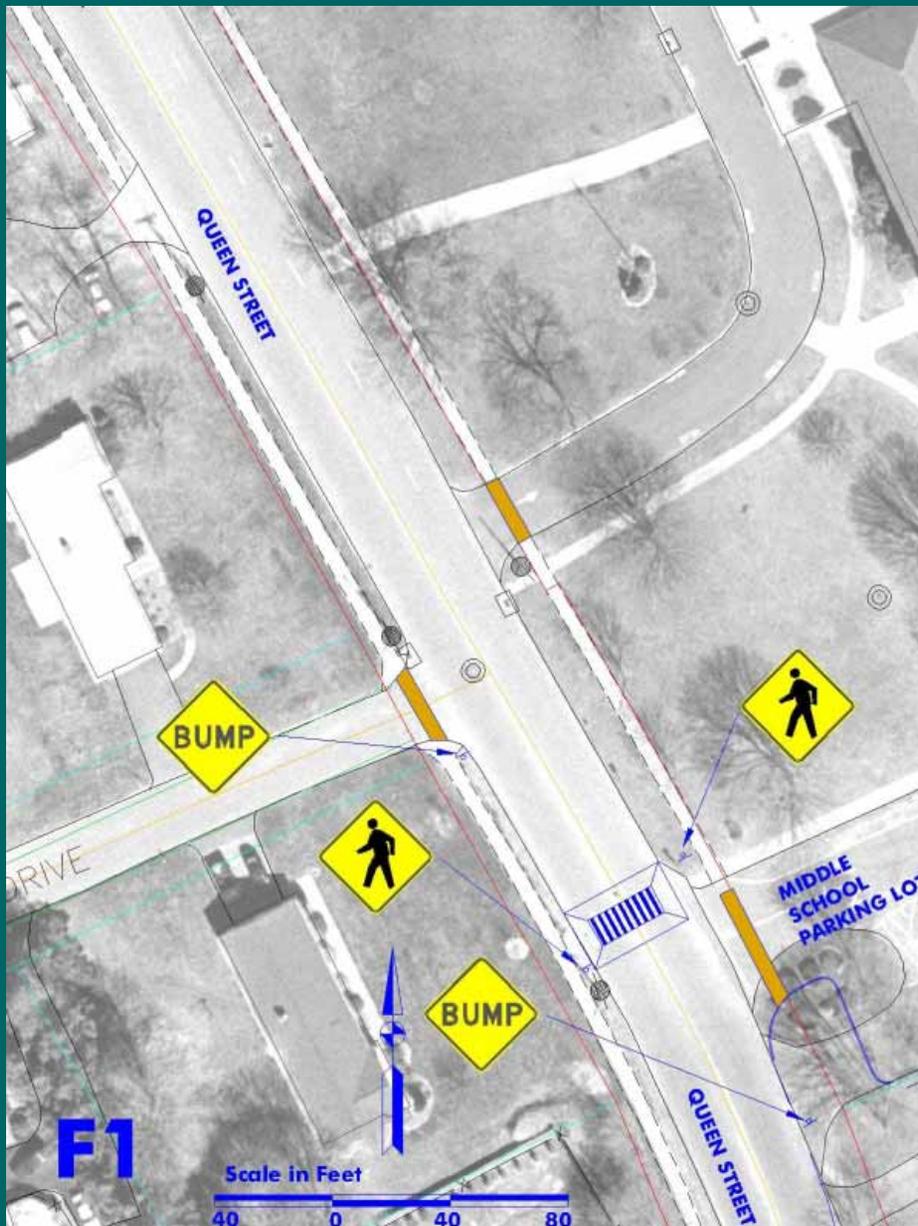
- Issues:
 - * Pedestrian Safety
 - * Confusion at Eton Center driveway
- Improvement Options:
 - * Crosswalks
 - * "Do Not Enter" signs and pavement arrows
- Pros:
 - * Safety benefits
- Cons:
 - * Shorter storage lengths for traffic exiting Big Y driveway

QUEEN STREET AND CHURCH HILL ROAD (E1)



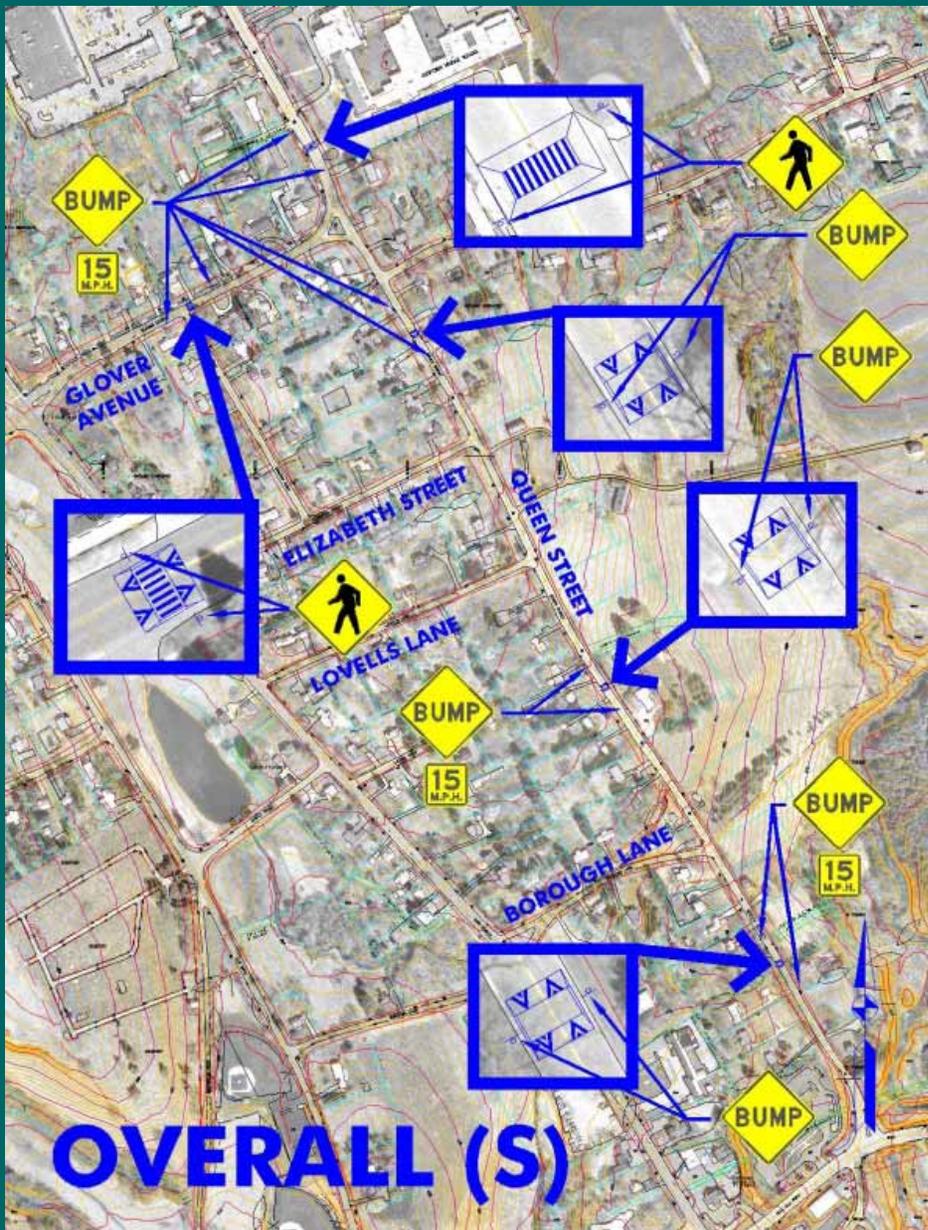
- Issues:
 - * Pedestrian safety
 - * Need to guide westbound left-turns away from center island
- Improvement Options:
 - * Crosswalks, sidewalks and pedestrian signals
 - * "Keep Right" sign
- Pros:
 - * Safety benefits
- Cons:
 - * ConnDOT is not responsible for the sidewalk and ramps on the southeast corner of the intersection

QUEEN STREET AND MIDDLE SCHOOL (F1)



- Issues:
 - * Pedestrian safety
- Improvement Options:
 - * Speed table with associated warning signs
- Pros:
 - * Safety benefits
 - * Traffic calming
- Cons:
 - * Construction Cost
 - * Potential noise from speed table

OVERALL (S)



- Issues:
 - * Speeding
 - * Pedestrian safety
- Improvement Options:
 - * Speed table at Middle School
 - * 22' speed humps on Queen St.
 - * 22' speed hump with pedestrian crossing on Glover Ave., east of Meadow
- Pros:
 - * Safety benefits
 - * Traffic calming
- Cons:
 - * Construction/maintenance cost
 - * Potential noise, especially from speed table

OVERALL (N)



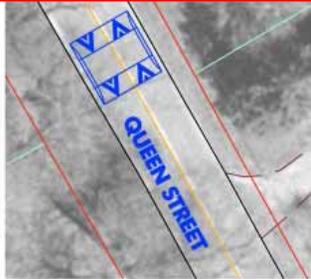
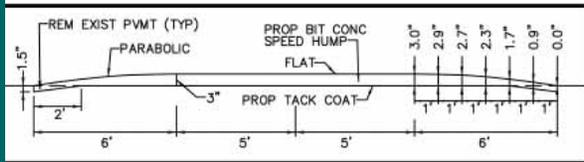
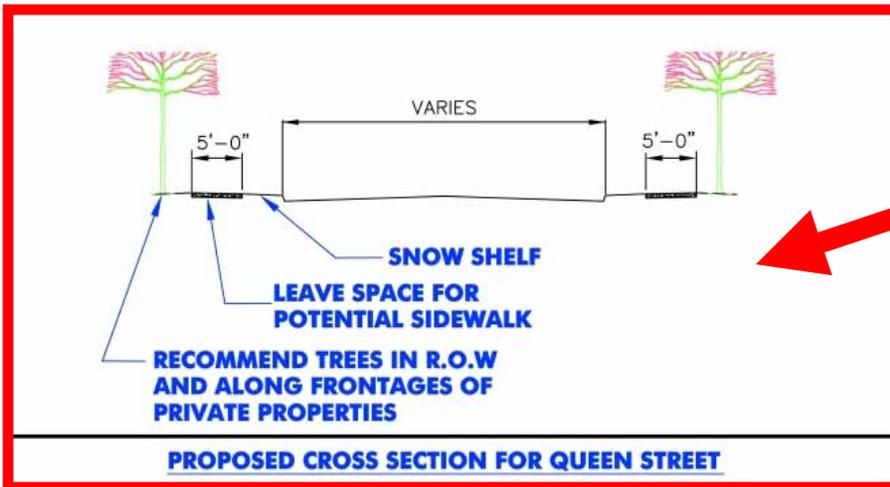
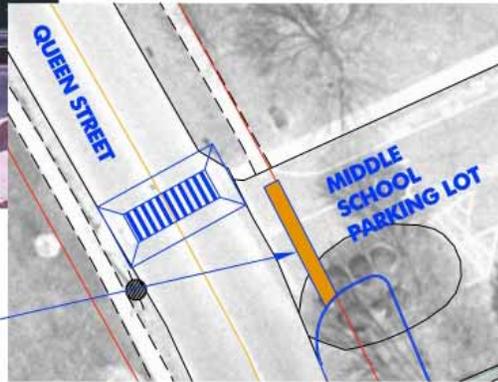
- Issues:
 - * Pedestrian safety
- Improvement Options:
 - * Stripe color sidewalks across asphalt driveways (commercial and Middle School)
- Pros:
 - * Remind drivers of pedestrians crossing driveways
- Cons:
 - * Require maintenance

DETAILS



RAISED CROSSWALK

**PAINTED SIDEWALK
ACROSS DRIVEWAY**



- Issues:
 - * Speeding
- Improvement Option:
 - * Encourage tree planting in R.O.W. and along private properties
- Pros:
 - * Traffic calming by creating a constricted impression for drivers
- Cons:
 - * Cost
 - * Long-term effectiveness?

ROUNABOUT EXAMPLE



Roundabout, New London, CT

NEXT STEPS...

- Advisory Committee Meeting #3, Mid May
- Advisory Committee Meeting #4, Early June
- Final Public Presentation, End of June

Traffic Improvement Plan For Queen Street Area Newtown, Connecticut

Public Workshop, May 4, 2006

Presented By:

