Hamden East-West Transportation Study

Spring Glen and Whitneyville Neighborhoods
Hamden, CT

DRAFT
11/30/11

South Central Regional Council of Governments
Fitzgerald & Halliday Inc.

Introduction

Hamden's transportation system is served by primarily north-south routes for connections within the Town as well as for connections between New Haven and Cheshire due to Hamden's geographical boundaries and orientation. The roadway system is strongly influenced by the Wilbur Cross Parkway and the Route 5 and Route 10 regional transportation corridors. The need to evaluate the east-west routes in town has become more prevalent as traffic increases on these routes to avoid "hot spots" of congestion on the north-south routes. These routes are mainly minor arterials and collectors that serve more local trips within the town. Neighborhoods, schools, and businesses along the east-west routes continue to be impacted by heavy traffic volume, truck traffic, and speeding vehicles.

This study will focus on transportation system deficiencies and opportunities to improve safety, access, travel by all modes, and the quality of life within the community. Since the east-west routes are primarily local routes, with the exception of the Wilbur Cross Parkway, both conventional and innovative approaches will be considered that promote livable communities and that are compatible with the natural and built environment.

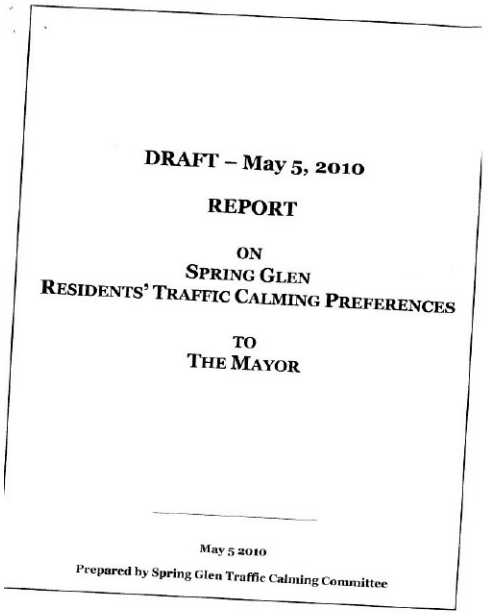
In particular, the Town has received numerous requests for traffic calming in the Spring Glen and Whitneyville areas of Hamden. The neighborhood associations that represent these areas have been active in collecting feedback from residents and planning for traffic calming and transportation improvements. This study seeks to build upon those efforts to develop and actionable transportation and traffic calming plan for the neighborhoods.

Spring Glen and Whitneyville Civic Association Reports

In 2010, the Spring Glen and Whitneyville Civic Associations submitted reports to the Mayor's office outlining traffic calming preferences and recommendations.

The Spring Glen report was limited to a survey of resident preferences. The preferred traffic calming treatments included: speedhumps, bike lanes, and on-street parking. Preferences were identified for each street in the neighborhood and include Ardmore, Eglin, and Haverford Street.

The Whitneyville report, which was more comprehensive and included documentation of issues and proposed solutions, identified several streets that are included in this study. These streets include Mather Street, Treadwell Street, Putnam Avenue and Augur Street. Recommendations varied and included: speedhumps, traffic circles, raised crosswalks, bike lanes, and sidewalks.



DRAFT – May 5, 2010

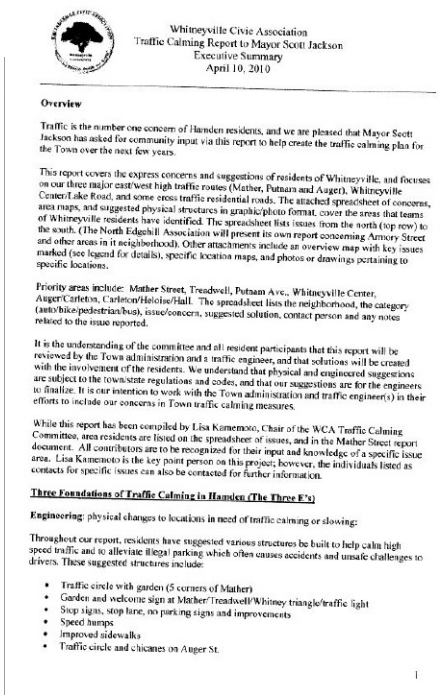
REPORT

ON
SPRING GLEN
RESIDENTS' TRAFFIC CALMING PREFERENCES

TO
THE MAYOR

May 5 2010

Prepared by Spring Glen Traffic Calming Committee



Whitneyville Civic Association
Traffic Calming Report to Mayor Scott Jackson
Executive Summary
April 10, 2010

Overview

Traffic is the number one concern of Hamden residents, and we are pleased that Mayor Scott Jackson has asked for community input via this report to help create the traffic calming plan for the Town over the next few years.

This report covers the express concerns and suggestions of residents of Whitneyville, and focuses on our three major east/west high traffic routes (Mather, Putnam and Auger), Whitneyville Center/Lake Road, and some cross traffic residential roads. The attached spreadsheet of concerns, area maps, and suggested physical structures in graphic/photo format, cover the areas that teams of Whitneyville residents have identified. The spreadsheet lists issues from the north (top row) to the south. (The North Edgehill Association will present its own report concerning Armory Street and other areas in it neighborhood). Other attachments include an overview map with key issues marked (see legend for details), specific location maps, and photos or drawings pertaining to specific locations.

Priority areas include: Mather Street, Treadwell, Putnam Ave., Whitneyville Center, Auger/Carleton, Carleton/Heloise/Hall. The spreadsheet lists the neighborhood, the category (auto/bike/pedestrian/bus), issue/concern, suggested solution, contact person and any notes related to the issue reported.

It is the understanding of the committee and all resident participants that this report will be reviewed by the Town administration and a traffic engineer, and that solutions will be created with the involvement of the residents. We understand that physical and engineered suggestions are subject to the town/state regulations and codes, and that our suggestions are for the engineers to finalize. It is our intention to work with the Town administration and traffic engineer(s) in their efforts to include our concerns in Town traffic calming measures.

While this report has been compiled by Lisa Kamemoto, Chair of the WCA Traffic Calming Committee, area residents are listed on the spreadsheet of issues, and in the Mather Street report document. All contributors are to be recognized for their input and knowledge of a specific issue area. Lisa Kamemoto is the key point person on this project; however, the individuals listed as contacts for specific issues can also be contacted for further information.

Three Foundations of Traffic Calming in Hamden (The Three E's)

Engineering: physical changes to locations in need of traffic calming or slowing:

Throughout our report, residents have suggested various structures be built to help calm high speed traffic and to alleviate illegal parking which often causes accidents and unsafe challenges to drivers. These suggested structures include:

- Traffic circle with garden (5 corners of Mather)
- Garden and welcome sign at Mather/Treadwell/Whitney triangle/traffic light
- Stop signs, stop lane, no parking signs and improvements
- Speed humps
- Improved sidewalks
- Traffic circle and chicanes on Auger St.

Steering Committee Workshop

On September 27th, 2011 Hamden traffic calming steering committee members and neighborhood representatives from Spring Glen and Whitneyville gathered for a workshop to identify traffic issues and recommend traffic calming and safety improvements for the neighborhoods.

The issues discussed were similar to those that had been previously identified within neighborhood association reports and steering committee meetings. The streets that were presented for inclusion into this transportation study include:

- Ardmore Street
- Armory Street
- Augur Street
- Elgin Street
- Connolly Parkway
- Haverford Street
- Mather Street
- Mill Rock Rd
- Putnam Avenue
- Treadwell Street
- Waite Street

Concerns in the Spring Glen neighborhood centered around traffic speed and volume and pedestrian conflicts due to inadequate crossings and incomplete sidewalk networks. Discussion was focused on the Connolly/Elgin/Ardmore corridor and Waite Street. Traffic circles, additional sidewalks, and speedhumps were discussed as potential solutions to various traffic issues.

The issues identified by Spring Glen residents included pedestrian crossing issues, access to the Farmington Canal Trail, stop sign running, truck traffic, on-street parking, sidewalk gaps, and speeding. The solutions discussed varied from improved crosswalks and more sidewalks to chicanes and intersection redesigns.

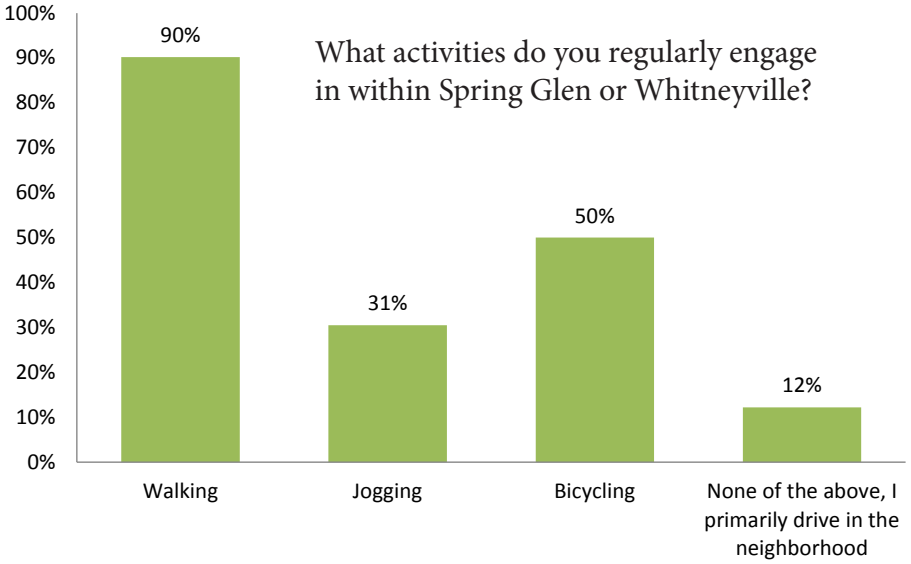
Online Survey

In October 2011 an online traffic calming survey was posted and a link was distributed to the neighborhood associations and residents. Over 160 responses were collected from residents on 51 different streets. The streets with the most respondents include: Blake Street, Mather Street, Whitney Street, Treadwell Street, Ralston Street, Armory Street, Carleton Street, King Street, Wilkins Street and Putnam Avenue.

Survey respondents ranked traffic study corridor streets in terms of their traffic safety concerns in the following order:

1. Putnam Avenue
2. Mather Street
3. Treadwell Street
4. Waite Street
5. Augur Street
6. Armory Street
7. Connolly Parkway
8. Mill Rock Road
9. Ardmore Street
10. Elgin Street
11. Haverford Street

When asked what activities that respondents regularly engaged in within the neighborhood, 90% of respondents reported that they walk in the neighborhood on a regular basis and 50% of respondents bicycle on a regular basis. Only 12% of respondents don't walk, jog or bicycle in the neighborhood on a regular basis.



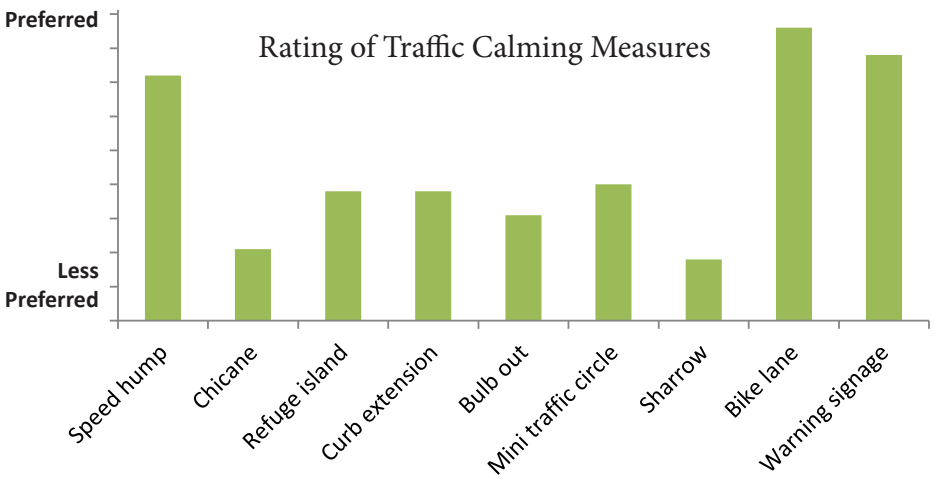
The most significant issues identified by respondents included speeding, unsafe intersections and reckless driving. The percentage of respondents who identified the following items as traffic safety concerns in the neighborhoods are as follows:

Speeding	80%	Maintenance	39%
Unsafe intersection	56%	Lack of bicycle facilities	32%
Reckless driving	56%	Lack of sidewalks	26%
Cut-through traffic	53%	On-street parking	19%
Difficulty crossing roadways	47%	Bicyclist behavior	9%
Traffic volume	41%		

When asked if they could improve only one street in each neighborhood, 69% of respondents identified Waite Street in Spring Glen while 36.2% of respondents identified Mather Street and 35.5% identified Putnam Avenue as the streets they would improve in Whitneyville.

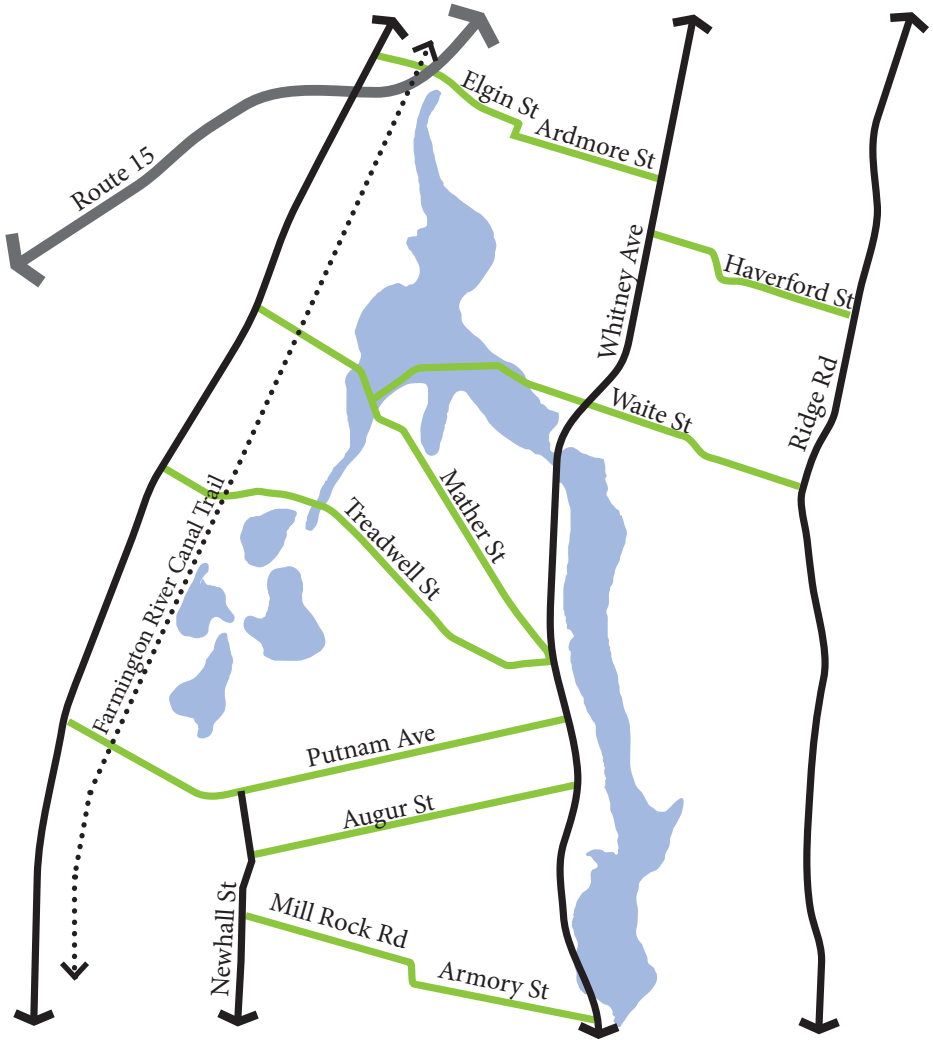
Respondents were likewise asked to identify one intersection that they would improve in each neighborhood. The Waite Street/Whitney Avenue intersection in Spring Glen was overwhelmingly identified by respondents with the Putnam/Whitney intersection followed by the Belmont/Mather intersection of Whitneyville being identified as priorities.

Of the traffic calming and pedestrian safety measures presented to survey respondents; bike lanes, speedhumps, warning signs and traffic circles were identified as the most familiar and were correspondinly rated as the most desirable measures.



Study Area

This study will recommend improvements for eight east/west corridors in the Spring Glen and Whitneyville areas of Hamden. The corridors have been chosen due to initial traffic assessment, neighborhood association reports, and the steering committee workshop. These corridors are identified in the graphic below and include Connolly Parkway/Elgin/Ardmore Street, Haverford Street, Waite Street, Mather Street, Treadwell Street, Putnam Avenue, Augur Street, Mill Rock Road/Armory Street.



Corridor Attributes and Issues

The following table provides a summary of the study corridors attributes and documented issues. The corridors are comprised of local, collector and arterial roadways with traffic volumes that range from 1,500 vehicles per day on Ardmore Street to 11,900 vehicles per day on Putnam Avenue. Roadway width varies slightly across the corridors with Augur Street being the narrowest roadway at 22-24' wide and Mill Rock Road being the widest roadway at 30-34' wide. Speed limits are 25mph on all corridors with the exception of Putnam Avenue which is posted at 30mph. While there are sidewalks on every corridor in the study area, there are significant sidewalk gaps on several roadways including Waite Street, Mather Street, Treadwell Street, Putnam Avenue, Augur Street, Mill Rock Road and Armory Street. Speeding has been identified as a concern on all corridors.

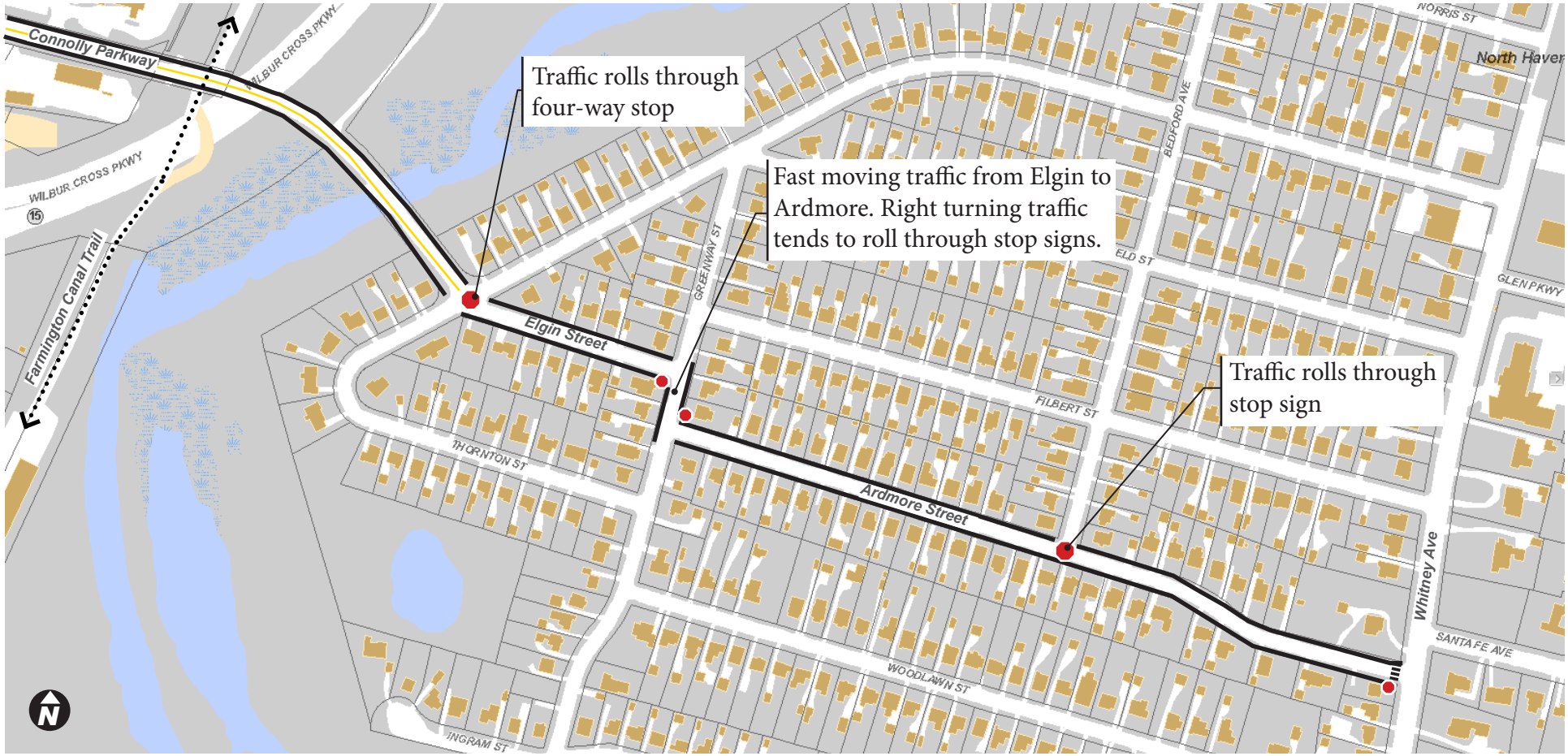
Corridor	Street Type	Volume (ADT)	Width	Speed Limit	Attributes	Issues
Connolly Pkwy/ Elgin St/Ardmore St	Local	6800/3100/1500	30'	25	Continuous sidewalks, no pavement markings or intersections within corridor, residential land use	Speeding, traffic rolls through stop signs
Haverford Street	Local	not available	30'	25	Continuous sidewalks, 2 all-way stops within corridor, residential land use	Limited sight lines due to curve, speeding
Waite Street	Arterial	3000	24-28'	25	Limited sidewalks. Pedestrian and bicyclist demand for access to Lake Whitney and Bassett Park. One traffic light and one all-way stop controlled intersection within corridor	Sidewalk gaps, complex intersections, speeding
Mather Street	Arterial	4200	26-30'	25	Limited sidewalks, uninterrupted traffic flow between Dixwell and Whitney Avenue.	Complex intersections at Whitney Ave and Waite Street, significant sidewalk gap at Lake Whitney, misdirected cut-thru traffic, pedestrian conflicts
Treadwell Street	Collector	3900	24-30'	25	Sidewalk gap at northern end, high pedestrian activity at southern end, one traffic signal and two all-way stops within corridor at southern end	Significant sidewalk gap between Dixwell Ave and Leeder Hill Dr. Complex intersection at Whitney Ave and Mather Street, speeding.
Putnam Avenue	Arterial	11,900	30-32'	30	Continuous sidewalks throughout much of corridor, on-street parking on south side, 3 traffic light controlled intersections within corridor, bus line	Sidewalk gaps, pedestrian crossing concerns, heavy traffic, speeding
Augur Street	Local	not available	22-24'	25	One-way westbound, parking on south side of road, continuous sidewalks, dense residential development, two all-way stops within corridor	Stop sign running, sidewalk gaps, speeding
Mill Rock Road/ Armory Street	Local	3400/2900	30-34'/ 28-30'	25	Park activity and parking on south side at western end of Mill Rock Road, sidewalk gaps, two all-way stop intersections within corridor	Speeding and failure to stop at Mill Rock Rd/ Prospect St/Armory Street intersection. High pedestrian activity and parking demand near park

Connolly Parkway/Elgin Street/Ardmore Street: Existing Conditions

This corridor is used as a cut-through for traffic between Dixwell and Whitney Avenues. The posted speed limit through this corridor is 25mph, but observed traffic speeds appear to be higher. Roadway width varies between 28' to 30' and is relatively uniform. Connolly Parkway is the only road with a yellow centerline, pavement markings are otherwise sparse. While sidewalks are present on both sides of the street throughout this corridor, the only marked crosswalk is at the intersection of Ardmore Street and Whitney Avenue. With the exception of this intersection, there are no stop-bar pavement markings at stop sign locations.

Traffic volumes are moderate to low with a majority of traffic (6800 ADT) being carried by Connolly Parkway with Elgin and Ardmore Streets carrying an average of 3100 and 1500 vehicles per day respectively. The progression of these volumes from east to west reveals of funneling of traffic towards and away from both Elgin Street and Connolly Parkway.

Notable features along this corridor include the Farmington Canal Trail which has a trail head off Connolly Parkway just west of the Route 15 overpass.



Haverford Street: Existing Conditions

Haverford Street is a local roadway that carries traffic between Whitney Avenue and Ridge Road. The roadway is 29' wide and unstriped. Observed traffic at site visits suggests a low volume of traffic, similar to that of Ardmore Street (CT DOT traffic volume is unavailable). Haverford Street between Whitney Avenue and Ridge Road is unobstructed by stop signs for a distance of 2700 feet (1/2 mile). This unobstructed distance allows vehicles to gain speeds in excess of the 25mph posted speed limit. Speeding is compounded by a curve in Haverford and corresponding short site lines approaching the intersection of Haverford Lane and Landsdowne Avenue.

While sidewalks are present on both sides of the roadway, there is only one marked crosswalk in the corridor, it being located at the intersection of Haverford Street and Whitney Avenue. Stop bars were also absent from the stop sign locations at Haverford Lane, Lansdowne Avenue, and Ridge Road.

With the exception of Sante Fe Avenue, Haverford Street provides the most direct connection between Whitney Avenue and Ridge Road.

Waite Street: Existing Conditions

Waite Street is an arterial roadway that spans Lake Whitney and connects Mather Street to Whitney Avenue and Ridge Road. Waite Street has an average daily traffic volume of 3000 vehicles and ranges in width from 24 to 28 feet. Sidewalks are present on Waite Street although not continuous. Significant sidewalk gaps exist from Mather Street across Lake Whitney and between Ford Street and Barrett Street. The speed limit on Waite Street is 25mph although reported speeds are much higher.

Pavement markings on Waite Street include a yellow centerline and marked crosswalks and stop bars at Whitney Avenue and Ridge Road.

A primary concern of residents is the segment of Waite Street that crosses Lake Whitney. This segment lacks sidewalks despite demand for walking and jogging along this scenic area. The intersection of Waite and Mather Street is also a concern and is described as confusing and potentially dangerous. This intersection is also home to swans which attract on-lookers despite the lack of sidewalks near the intersection.

Waite Street combined with Mather Street has the potential to form a strong pedestrian and bicycle connection between Dixwell Avenue, Whitney Avenue and Ridge Road.

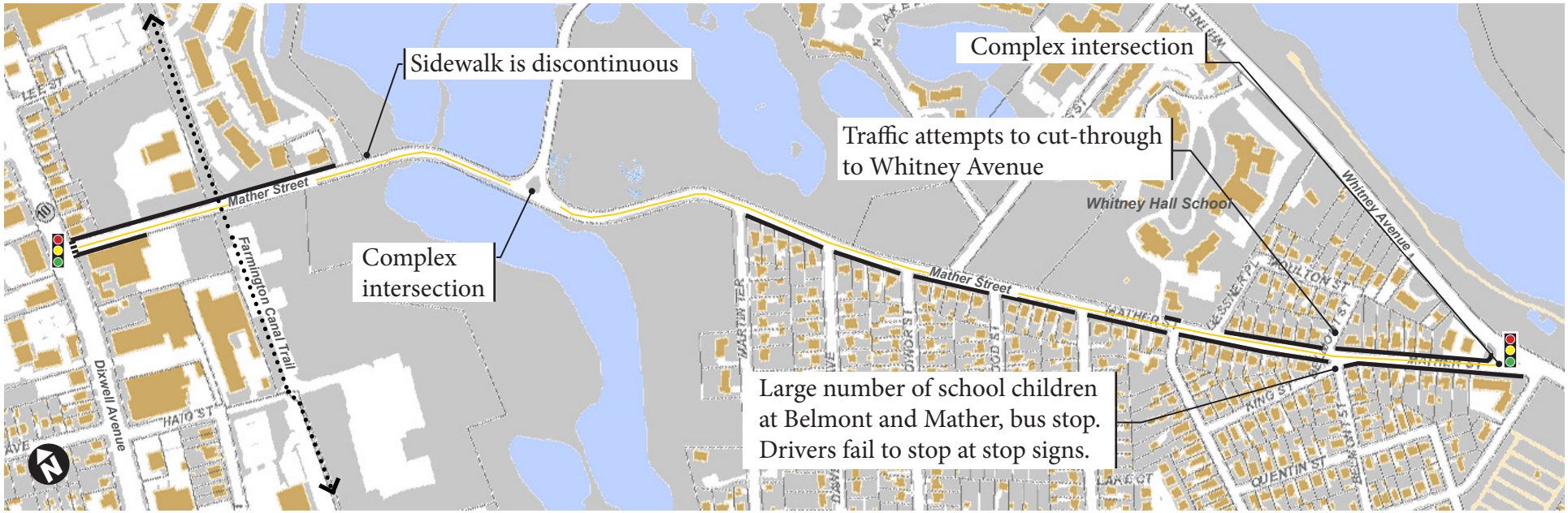
Waite Street at Lake Whitney

Mather Street: Existing Conditions

Mather Street is an arterial roadway that connects Dixwell Avenue to Whitney Avenue. Mather Street has an average daily traffic volume of 4200 vehicles and ranges in width from 26 to 30 feet. Sidewalks are present on Mather Street although not continuous. The speed limit on Mather Street is 25mph, although the neighborhood association reports that speeding is a significant issue on this street. Pavement markings on Mather Street include a yellow centerline and marked crosswalks and stop bars at Mather Street's intersection with Dixwell and Whitney Avenues.

Mather Street is comprised of two distinct segments. The northern segment is abutted by commercial development at Dixwell Avenue and naturalized areas adjacent to Lake Whitney. Less than half of this segment has sidewalks and there are few driveways or intersections. The southern segment of Mather Street is primarily residential in nature, is punctuated by several cross streets and driveways and has continuous sidewalks on the western side.

The southeast end of Mather Street particularly between Clifford Street and Whitney Avenue has a relatively high number of pedestrians and a demand for on-street parking. The intersection of Mather and Belmont Street is a gathering spot for children who wait for the bus at this location. Southbound traffic often turns onto Gessner Place or east on Belmont in search of Whitney Avenue only to find that these roads do not continue through.



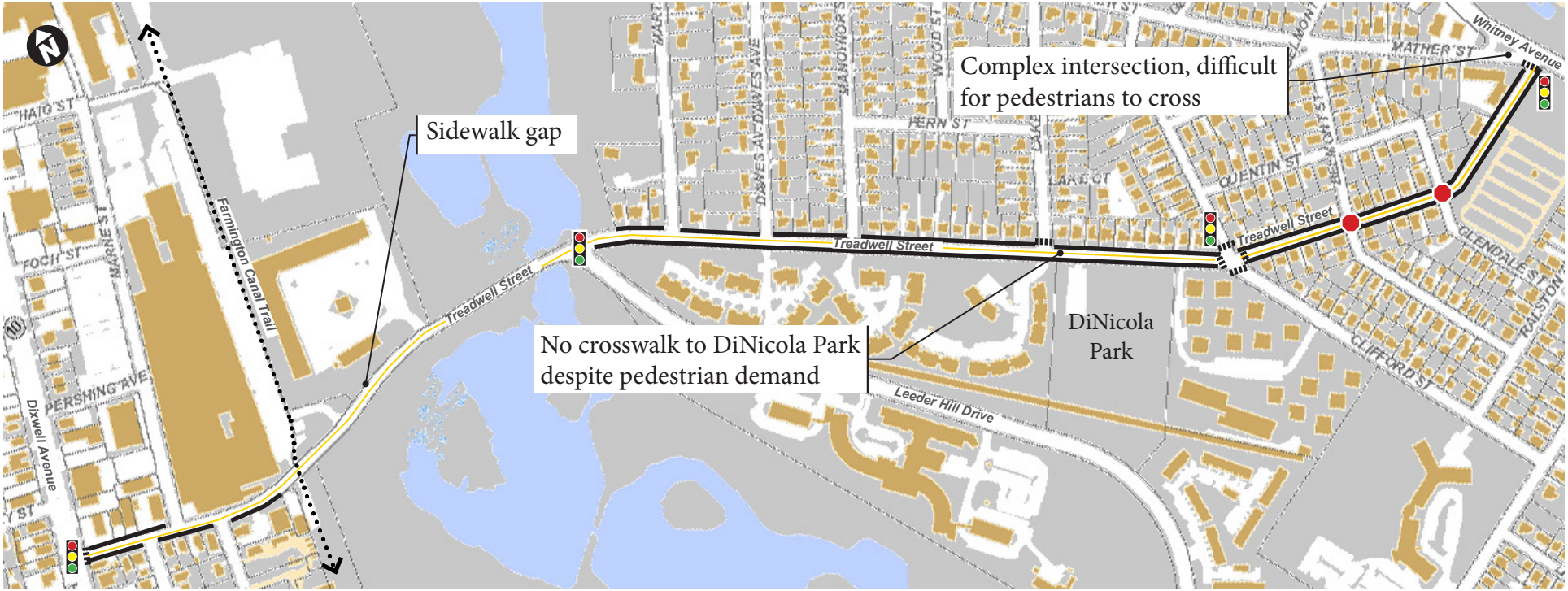
Treadwell Street: Existing Conditions

Treadwell Street is a collector roadway that, like Mather Street, connects Dixwell Avenue to Whitney Avenue. Treadwell Street has an average daily traffic volume of 3900 vehicles and ranges in width from 26 to 30 feet. Sidewalks are present on both sides of the street south of Leeder Hill Drive. The speed limit on Treadwell Street is posted 25mph east of Clifford Street, although the neighborhood association reports that speeding is a significant issue on this street. Pavement markings on Treadwell Street include a yellow centerline and marked crosswalks and stop bars at Treadwell Street's intersection with Dixwell Avenue, Clifford Street, and Whitney Avenue. Connecticut Transit Route O to New Haven travels on this corridor between Whitney Avenue and Treadwell Street.

Like Mather Street, the southeast end of Treadwell Street between Clifford Street and Whitney Avenue has a relatively high number of pedestrians. Like both Waite and Mather Street, the sidewalk network is incomplete through the Lake Whitney area.

Of significant concern to residents is the intersection of Treadwell Street, Mather Street and Whitney Avenue. This intersection is difficult for pedestrians to cross and complex for drivers to negotiate.

A concern noted by several residents was the volume of truck traffic on Treadwell Street. Much of this traffic is contributed to construction activities on Leeder Hill Drive and Newhall Street and is not expected to be a long term issue.



Putnam Avenue: Existing Conditions

Putnam Avenue is an arterial roadway that connects Dixwell Avenue to Whitney Avenue. Putnam Avenue has an average daily traffic volume of 11,900 vehicles and ranges in width from 30 to 32 feet. Sidewalks are continuous on both sides of Putnam Avenue with the exception of a gap on the north side between Leeder Hill Drive and Winnet Street. The speed limit on Putnam Avenue is 30mph, although the neighborhood association reports that speeding is a significant issue on this street. Pavement markings on Putnam Avenue include a yellow centerline and marked crosswalks at Dixwell Avenue Leeder Hill Drive, Clifford Street, Glendale Street, Whitney Avenue.

Putnam Avenue is an active street with a relatively high volume of traffic, on-street parking, bus stops, and a high level of pedestrian activity. CT Transit Route O to New Haven travels through this corridor. Additionally, the eastern segment of the street is signed as a school zone and there are retail establishments at the intersection of Putnam and Whitney Avenue.

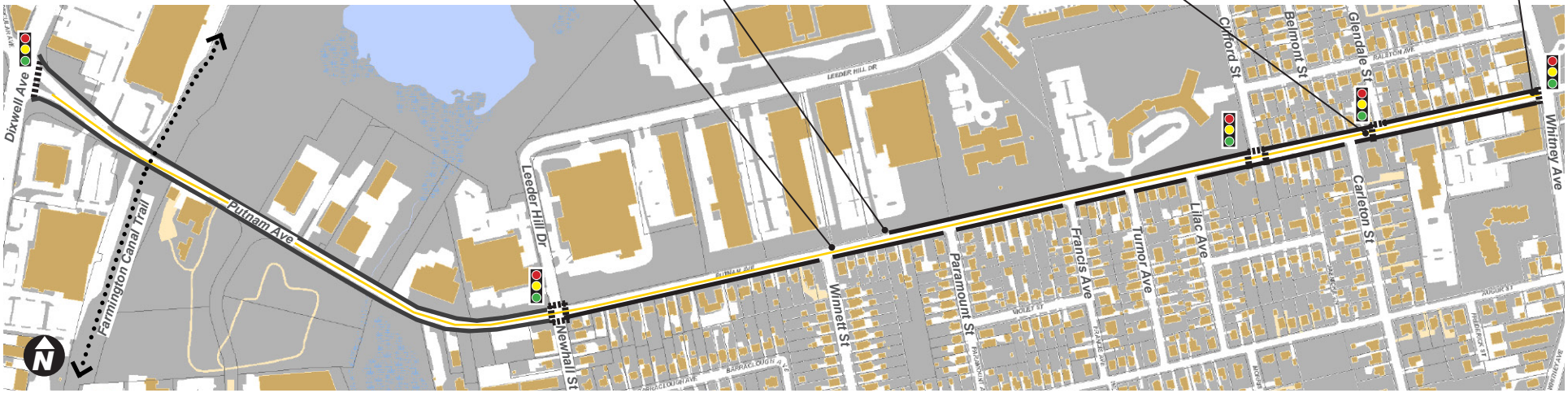
Putnam Avenue view west between Leeder Hill Drive and Winnet Street

Sidewalk terminates midblock

Pedestrian crossing safety concerns between sidewalk to Leeder Hill Drive and sidewalk on south side of Putnam Ave

Deli parking obstructs sidewalk and intersection

Traffic on Putnam queues too close to intersection and blocks turning truck and bus traffic from Whitney



Augur Street: Existing Conditions

Augur Street is a narrow (22'-24' wide) local roadway that connects Newhall Street to Whitney Avenue. Augur Street is one-way westbound from Frederick Street to Newhall Street. On-street parking is permitted and heavily used on the south side of the street. There are no pavement markings with the exception of marked crosswalks at Newhall Street and Whitney Avenue. Sidewalks are found on both sides of the roadway throughout the corridor with the exception of a gap on the south side between Farnsworth and Giles Street.

The primary concern of residents is speeding and stop sign running. Long, straight interrupted segments of roadway and one-way traffic flow contribute to speeding. Posted speed limit is 25 mph but reported speeds are higher. Augur Street acts as a bypass of Putnam Avenue for drivers traveling northbound on Whitney Avenue connecting to Newhall or Dixwell Avenues. The lack of signalization on Augur Street may act as an attractive alternative to Putnam Avenue.

Mill Rock Road & Armory Street: Existing Conditions

Mill Rock Road and Armory Street are local residential streets that carry traffic from Newhall Street to Whitney Avenue. The roadway width varies from 28 feet to 34 feet wide. Traffic volume on Mill Rock Road is 3,400 vehicles per day and 2,900 vehicles per day on Armory Street. These two distinct segments of roadway are connected by a short segment of Prospect Street. The posted speed limit is 25mph, but residents are concerned about speeding.

Pavement markings on these streets are limited to yellow centerline and marked crosswalks at Newhall Street and Whitney Avenue. On-street parking is found on the south side of Mill Rock Road particularly at the playground and athletic fields on the corner of Newhall Street.

Crosswalk from Mill Rock Road to Armory Street

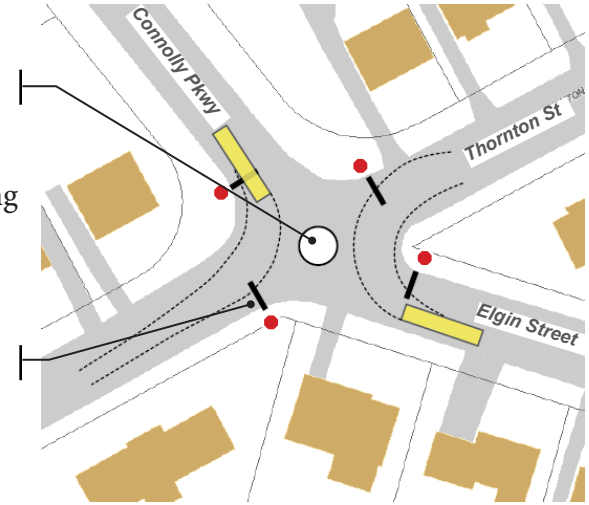
Connolly Parkway/Elgin Street/Ardmore Street: Recommendations

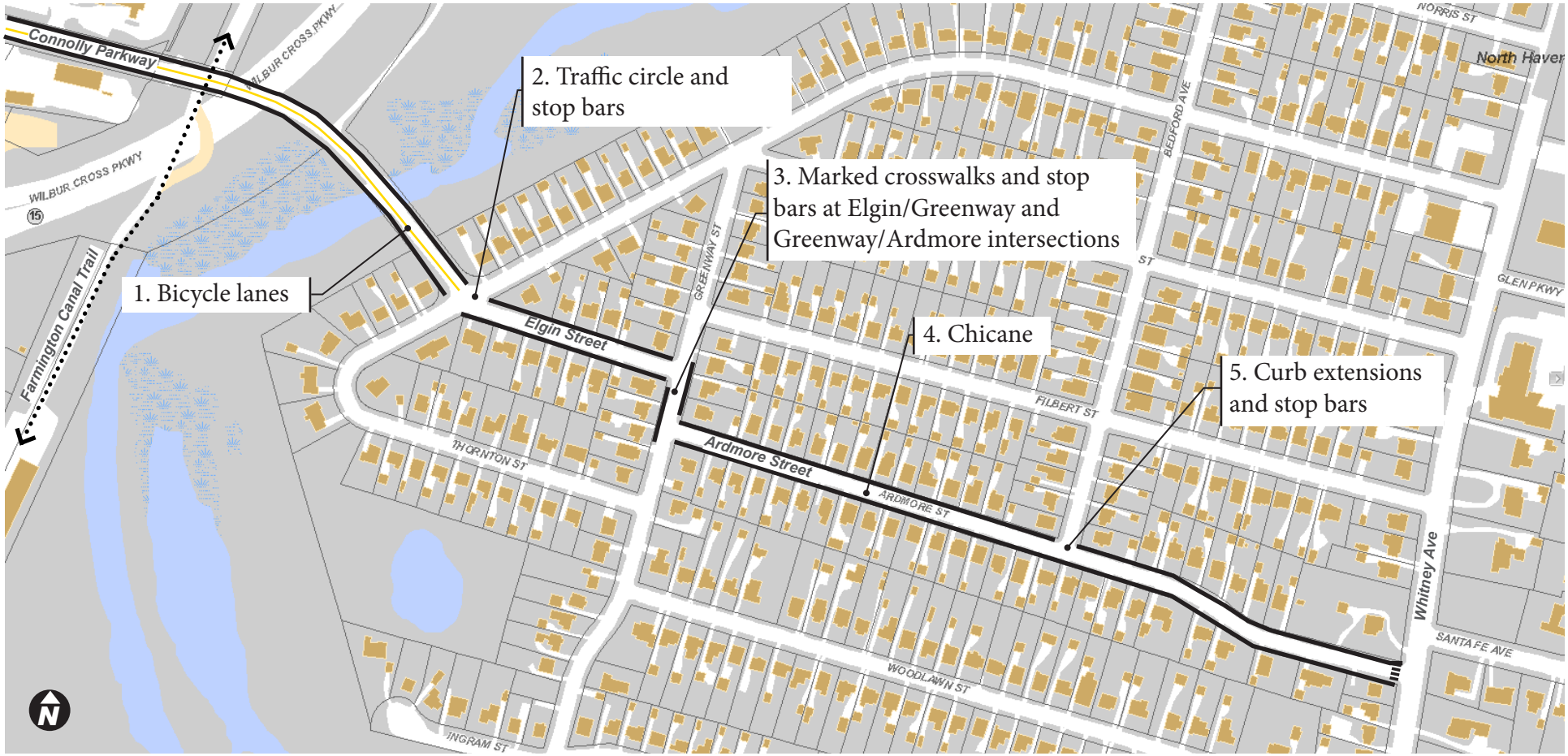
The improvements for this corridor focus on calming traffic as it enters Spring Glen from Connolly Parkway and managing traffic speed along the Elgin-Ardmore Street corridor. Recommendations include the use of a traffic circle, stop bars, crosswalk markings, chicanes and curb extensions. The overall effect should be to improve stop sign conformity and reduce traffic speeds without shifting traffic to parallel corridors.

Bicycle lanes are also recommended for Connolly Parkway as a means of improving access to the Farmington Canal Trail which has a trailhead on Connolly Parkway.

2. Install mini-traffic circle at intersection of Connolly Parkway, Thornton and Elgin Street. Traffic circle will prevent stop sign running and will accommodate bus and emergency vehicle traffic.

2.1 Paint marked stop bars at each approach.



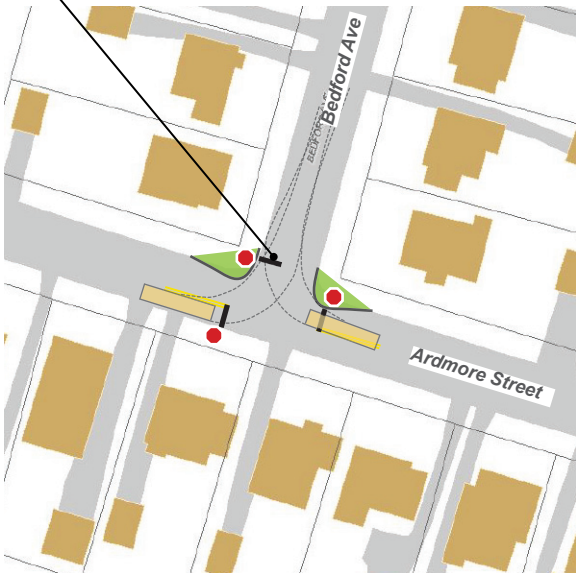


3. Paint stop bars, yellow centerlines, and crosswalks at intersection of Elgin Street and Greenway Street and Greenway and Ardmore Street. This measure will make stop signs more visible and encourage full stops before the intersection and thereby slowing vehicle speeds on Greenway between Elgin Street and Ardmore Street.

4. Install chicanes on Ardmore Street half-way between Greenway Street and Bedford Ave so as to shift and slow traffic.

5. Install curb extensions and new curb ramps at Bedford Avenue intersection to slow turning traffic and shift and slow thru-traffic.

5.1 Paint stop bars at each leg of intersection, install 20 lf of yellow centerline on each leg of Ardmore Street



Haverford Street: Recommendations

The goal of improvements to Haverford Street is to slow vehicles as they enter and exit the curved portion of the roadway. Speed humps are recommended on both sides of the curve as they are the most effective device for acutely lowering speeds. A third location on the east end of Haverford Street may be considered for placement of a speedhump if the two proposed locations prove ineffective at lowering speeds throughout the corridor. Discretion should be used in the number of these devices applied to one roadway as the placement of too many devices may cause traffic to shift to another residential street.

Waite Street: Recommendations

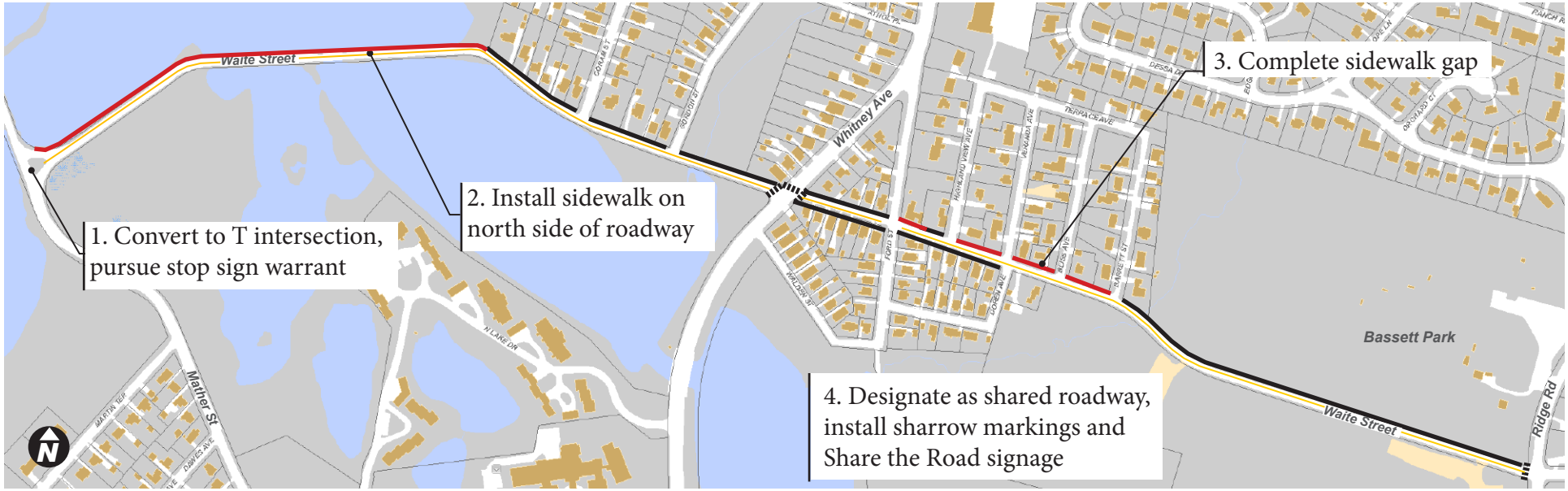
The Waite Street improvements seek to provide safe pedestrian access across Lake Whitney, improve the safety of the Waite Street/Mather Street intersection, improve pedestrian connections to Bassett Park, and provide accommodations for bicyclists.

In achieving these aims, the intersection of Waite and Mather Street should be converted to a traditional T intersection so as to reduce the complexity of the intersection, reduce vehicle turning speeds through the intersection and provide more space for pedestrians. Additionally, a stop sign warrant should be pursued for this location. To accommodate pedestrian demand on Waite Street, a sidewalk should be constructed on the north side of the roadway connecting the existing sidewalk to the east of Lake Whitney to the sidewalk on the north side of the bridge and to the Mather Street intersection.

These recommendations to the west end of Waite Street were made in a 2000 report by the TPA Group. Two options for the sidewalk were presented and should be considered going forward. The first option was a raised sidewalk and curb and the second option was an at-grade sidewalk separated by a post and cable guardrail. Either option would sufficiently address pedestrian needs. The recommendations herein differ in that the TPA report had recommended the sidewalk be constructed on the south side of the roadway. It is recommended that the sidewalk be located on the north side so as to connect with the existing sidewalk on the bridge and at the east of the lake.

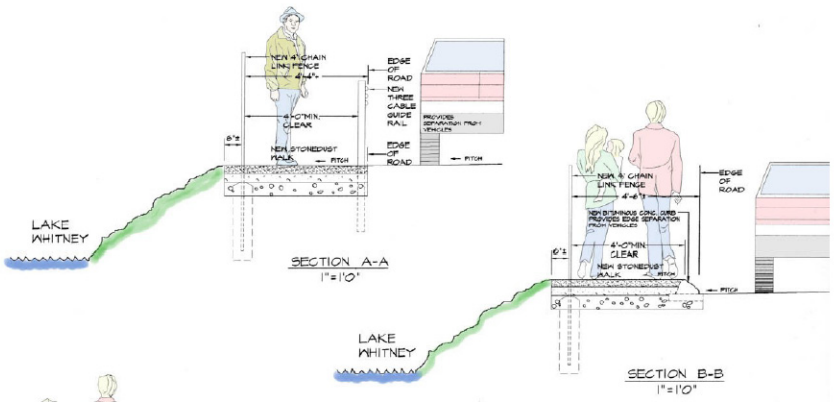
In addition to improvements at the west end of Waite Street, the sidewalk gap on the north side of Waite Street between Ford Street and Bassett Park should be completed to as to provide pedestrian access to Bassett Park.

Bicyclist demand for facilities should be satisfied via the provision of shared lane designation. This designation is provided by the installation of "sharrow" pavement markings and "Share the Road" signage.

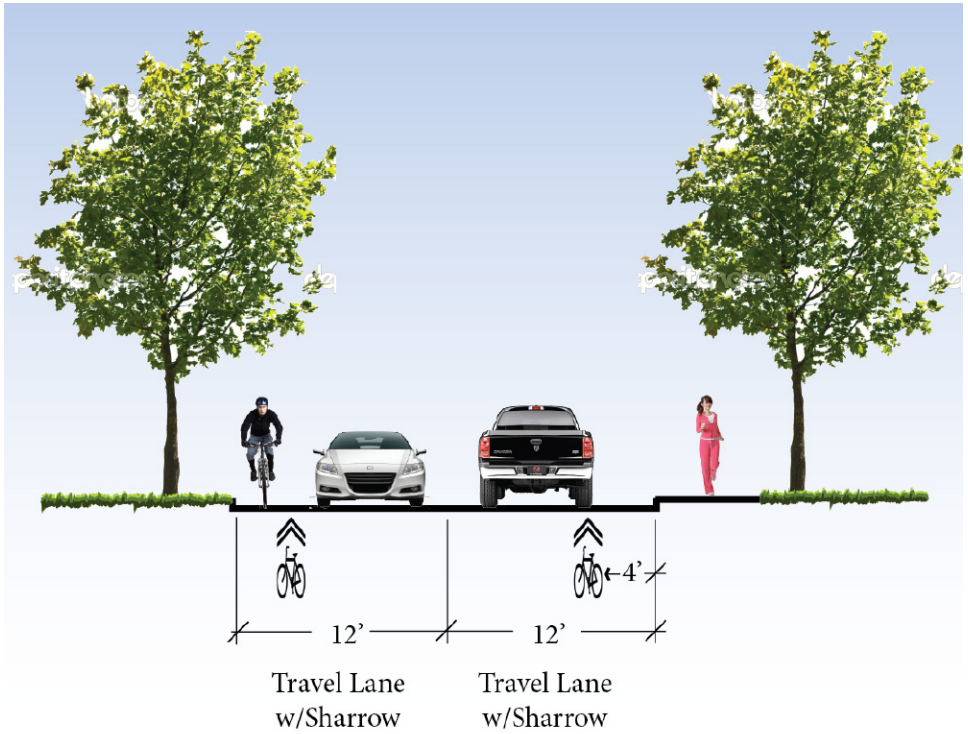


1. Convert Waite/Mather Street intersection to traditional "T" intersection. Maintain island for traffic separation and sign placement. Pursue warrant for new stop sign, consider evaluating intersection for all-way stop during warrant process.

2. Install sidewalk on the north side of Waite Street. Sidewalk to extend to Mather Street.



2. Sidewalk improvements to Waite Street. Drawings from TPA Group.



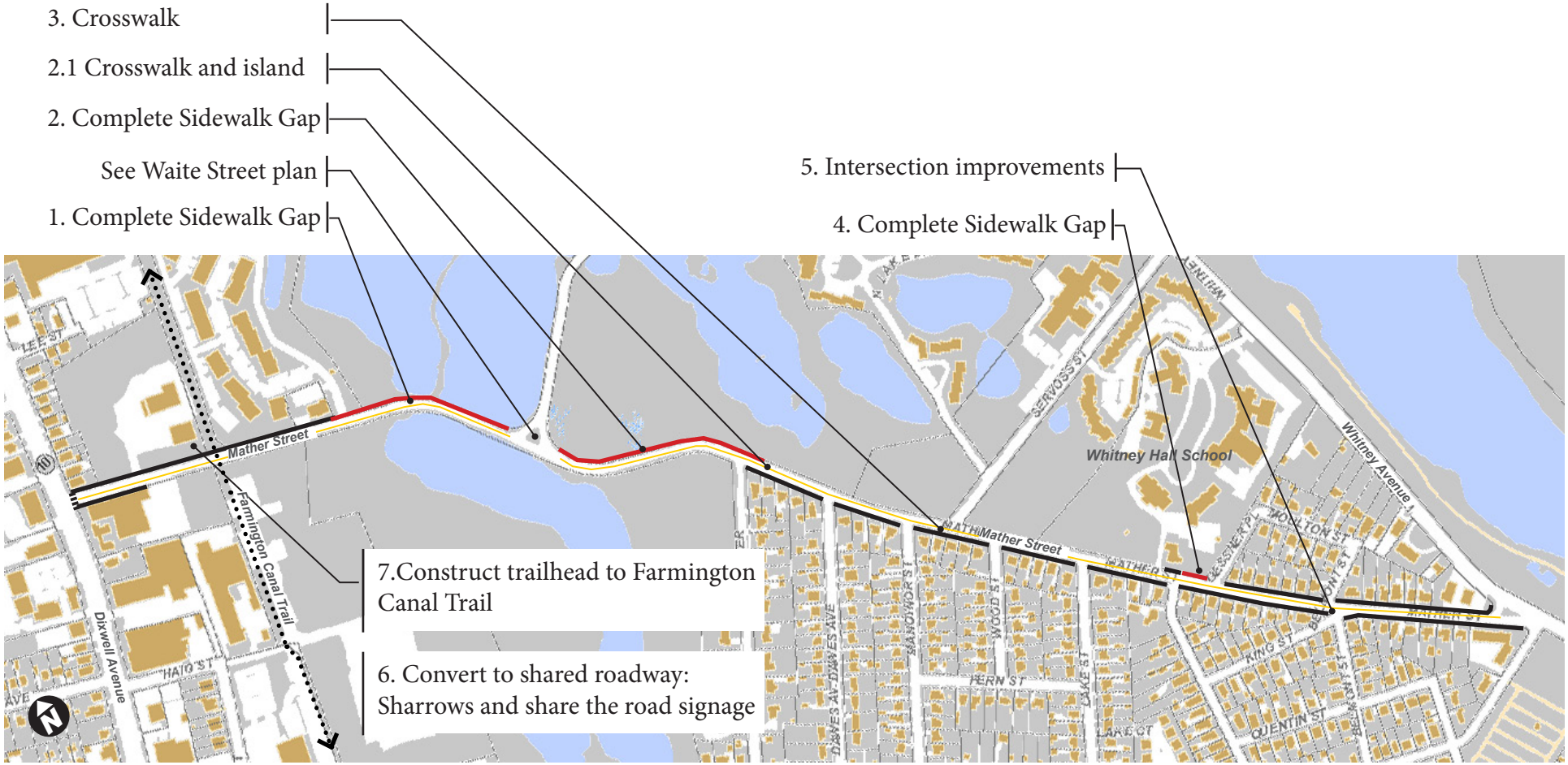
4. Shared lane designation on Waite Street "Sharrow"

Mather Street: Recommendations

The recommended improvements to Mather Street are focused upon improving pedestrian and bicycle movement through the corridor. There are three locations on the north side of Mather Street that would benefit from sidewalk improvements. This includes a segment from the end of the existing sidewalk on the west end of Mather Street to Waite Street; Waite Street to Martin Terrace; and a small segment west of Gessner Place. The construction of these sidewalks would provide a continuous pedestrian corridor through the length of Mather Street. In addition to the need for sidewalks along the corridor, there is a demand for opportunities to cross Mather Street, as there are no marked crosswalks on Mather Street between Dixwell Avenue and Whitney Avenue. Marked crosswalks across Mather Street should be installed at three locations; east of Martin Terrace (upon construction of sidewalk) and at Servoss Street and Belmont Street.

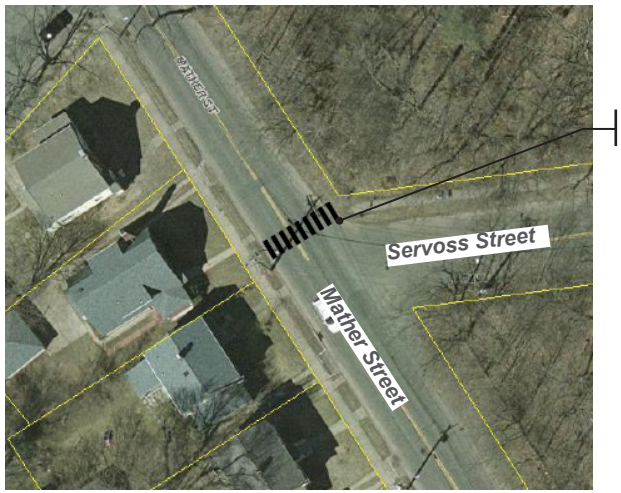
Intersection improvements are recommended for the Waite Street intersection (see Waite Street plan) and Belmont Street intersection where the realignment of a curb on the south side of Mather Street would calm traffic through the intersection. Several crosswalks should be marked at the Mather Street intersection to improve pedestrian circulation.

Bicycles can be accommodated on the roadway through designation of a shared road which includes sharrow pavement markings and share the road signage.



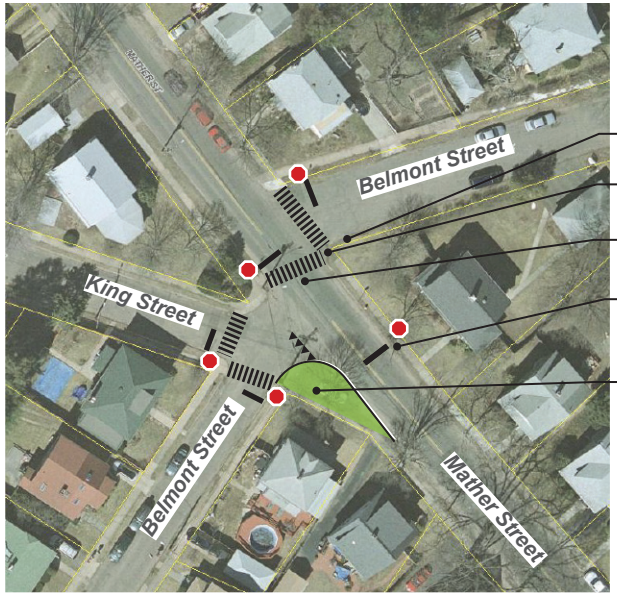
2. New Sidewalk to Waite Street

2.1 Mid-block crosswalk and pedestrian refuge island



3. Install crosswalk and curb ramps

4. Complete sidewalk gap



5. Mather-Belmont Improvements

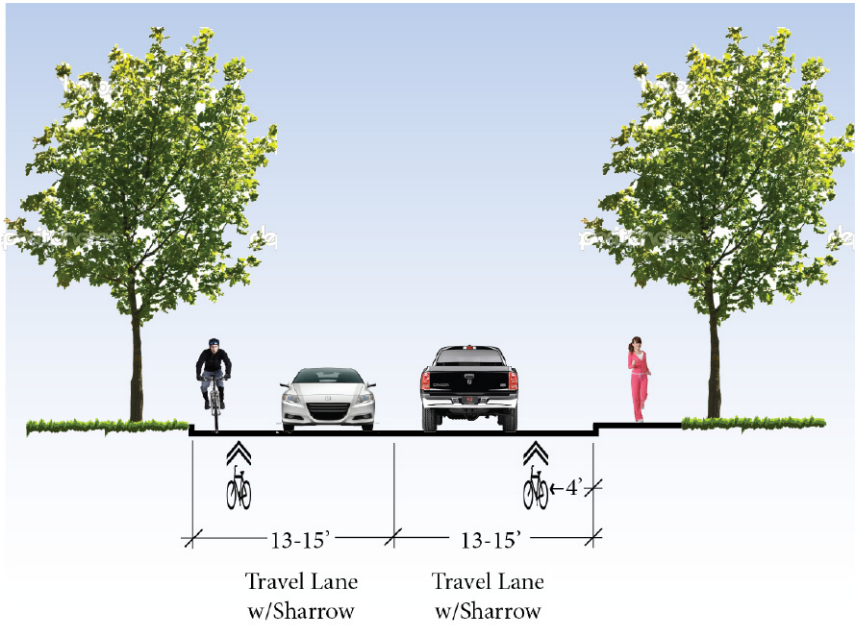
5.1 "No Outlet" sign

5.2 Install curb ramp

5.3 Paint crosswalks

5.4 Relocate stop sign & bar

5.5 Extend curb, install yield-to pavement markings



5. Shared lane markings

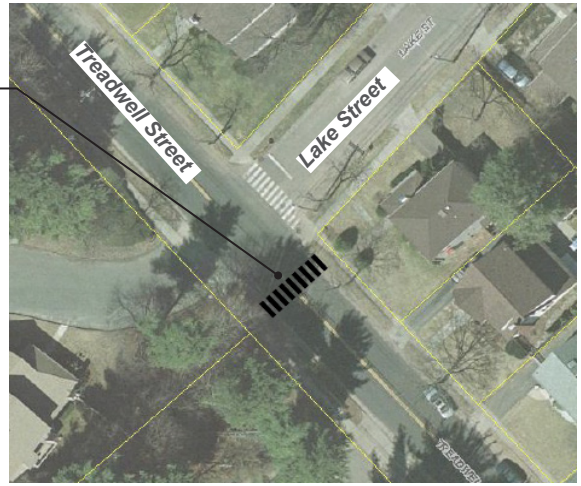
Treadwell Street: Recommendations

Improvements to Treadwell Street are focused on improving bicycle and pedestrian movement and crossings through the corridor. The recommended pedestrian improvements to Treadwell Street include a sidewalk from Marine Street to Leeder Hill Drive, a crosswalk at Leeder Hill Drive (upon construction of the sidewalk) and a new crosswalk at Lake Street.

Treadwell Street should also be designated as a shared roadway with sharrow markings and share the road signage. These improvements would minimize conflict between pedestrians, bicyclists, and motor vehicle traffic. Designation as a shared roadway will also improve bicycle connectivity to the Farmington Canal Trail.

While there are no stand-alone traffic calming measures recommended for the roadway, share the road signage and pavement markings increase the awareness of drivers and encourage more responsible driving.

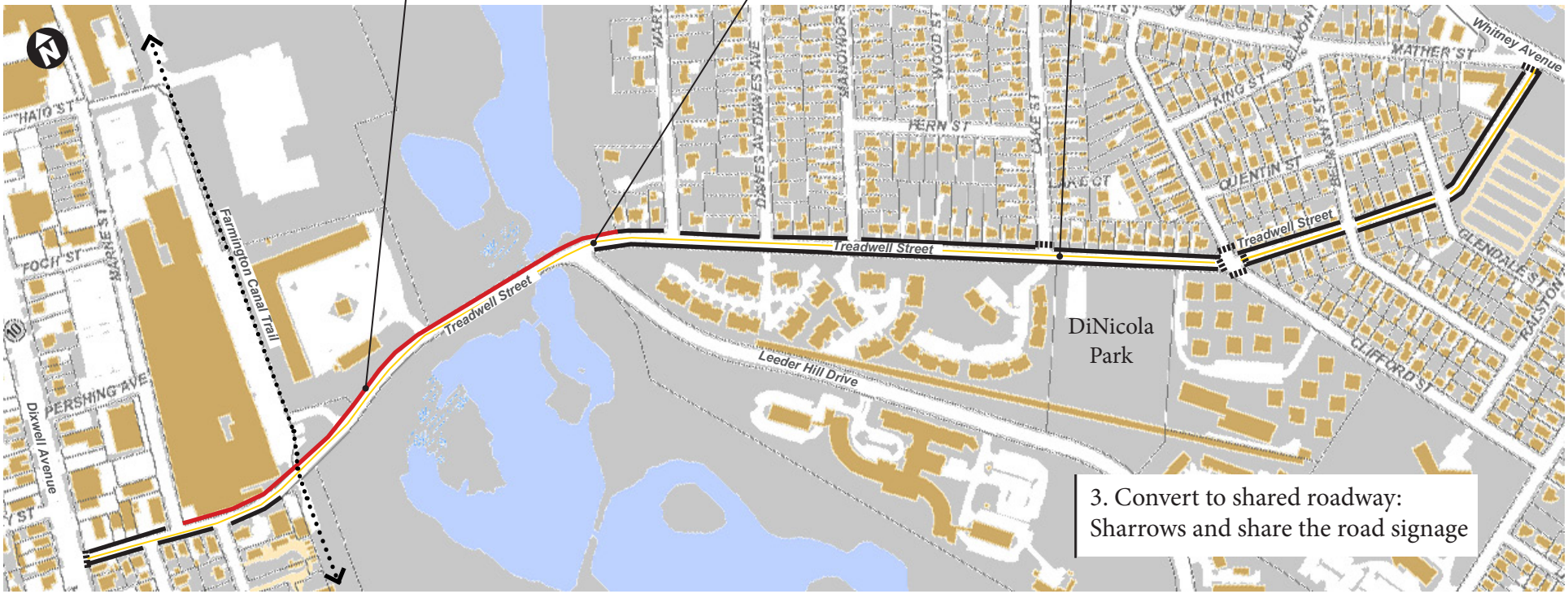
2. Install crosswalk



1. Complete sidewalk gap

1.1 Install crosswalk

2. Install crosswalk



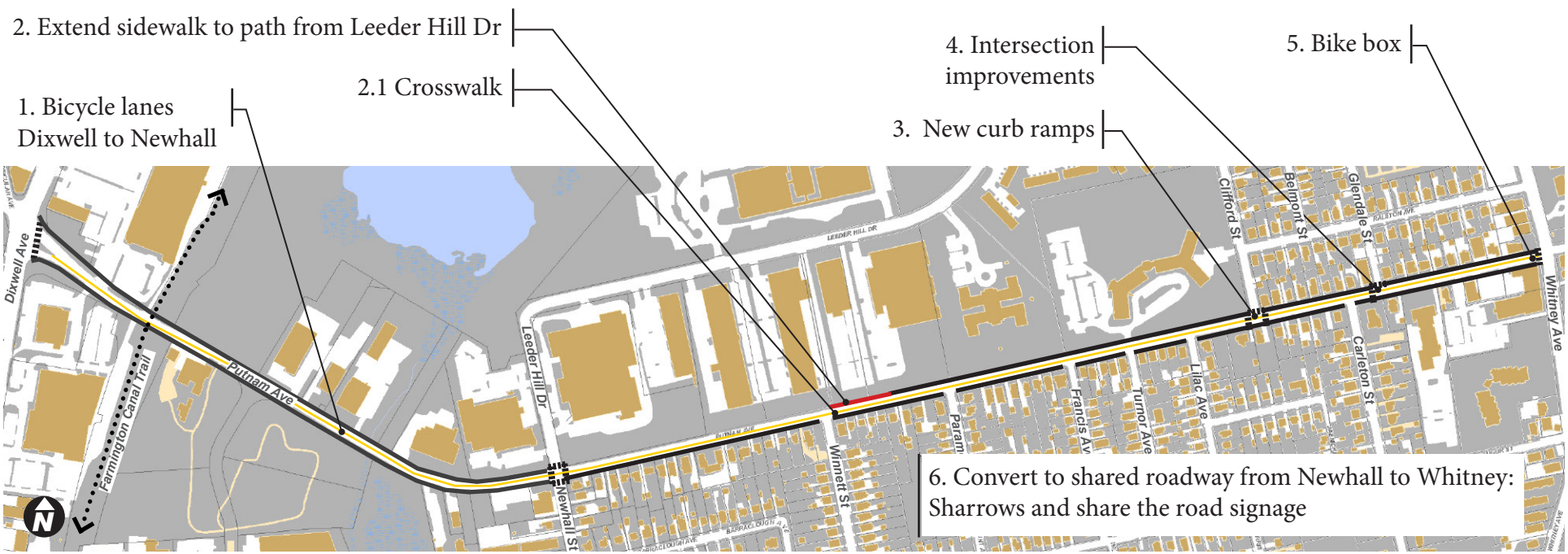
3. Convert to shared roadway: Sharrows and share the road signage

Putnam Avenue: Recommendations

The recommended improvements for Putnam Avenue are focused upon improving pedestrian crossings, accommodating bicycles, and managing parking. Recommended bicycle improvements include the installation of bicycle lanes from Dixwell Avenue to Newhall Drive, where the roadway width and lack of on-street parking allows for such designation. Shared lane markings (sharrows) and share the road signage is recommended between Newhall Street and Whitney Avenue. A painted "bike box" is recommended at the intersection of Putnam Avenue and Whitney Avenue to accommodate bicyclists that are waiting to turn left. The marking of this space is primarily aimed at discouraging drivers from creeping past the marked stop bar and queuing near the crosswalk where they obstruct turning bus and truck traffic.

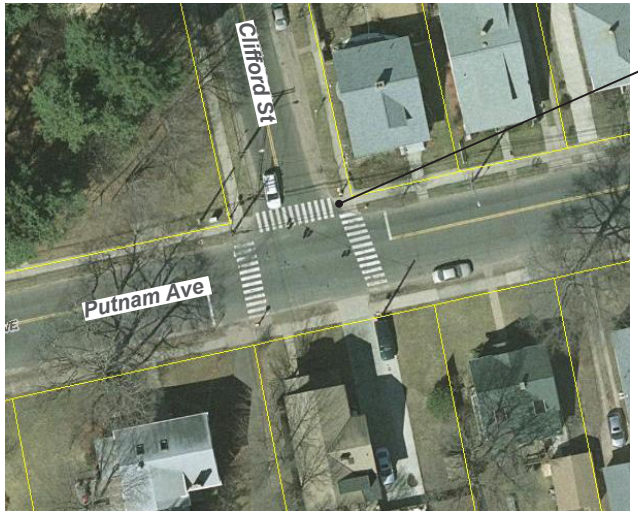
Recommended pedestrian improvements include improved curb ramps, extension of a sidewalk and a new crosswalk across Putnam Avenue. The sidewalk extension is planned for the north side of the roadway between Winnett and Paramount Street where the existing sidewalk terminates abruptly. This sidewalk should be extended to a pathway that leads from Putnam Avenue to Leeder Hill Drive. A crosswalk and pedestrian refuge island should be installed in this area to provide a safe crossing to the sidewalk on the south side of Putnam Avenue which continues west. Additionally, new curb ramps are needed at the Clifford Street intersection where curb ramps on the north side are not ADA compliant and there are no curb ramps on the south side.

Intersection improvements are needed at the intersection of Glendale Street, Putnam Avenue, and Carleton Street where patrons of a deli park illegally on the sidewalk and in the intersection. These improvements include reconstruction of the curb on the north side of Putnam Avenue at Glendale Street to prevent parking on the sidewalk, angled striping of the shoulder on the south side of the street within the intersection and additional no parking signage.



2. Extend sidewalk from existing sidewalk to pathway to Leeder Hill

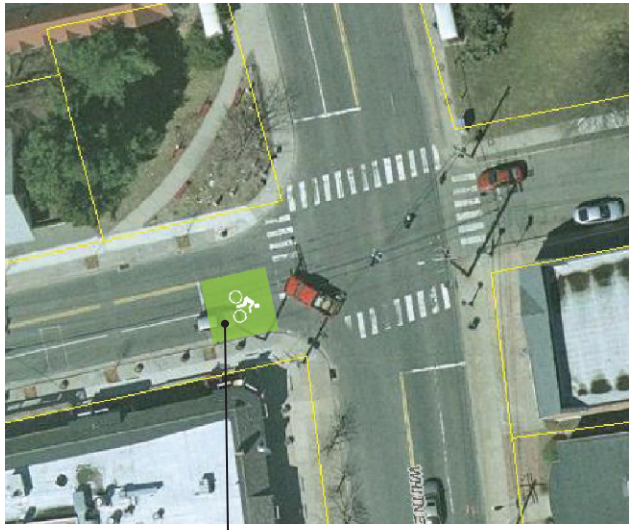
2.1 Install crosswalk and pedestrian refuge island



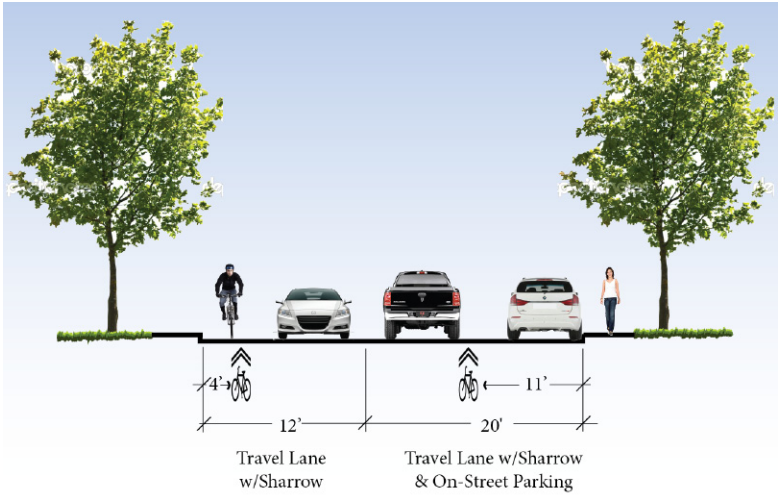
3. Upgrade curb ramps on north side of intersection, install curb ramps on south side at both crosswalks

4. Replace curb and install new 6" high curb to prevent parking on sidewalk. Install "no parking" signage

4.1 Install "no parking" signage and paint angled markings between shoulder stripe and curb line from crosswalk to utility pole



5. Paint bike box marking to accommodate left turning bikes and discourage queuing too close to intersection



6. Shared lane designation on Putnam Avenue "Sharrow"

Augur Street: Recommendations

A chicane strategy is the primary recommended improvement for Augur Street. This strategy would be effective in interrupting the long interrupted segments of roadway that are conducive to speeding. This strategy can be implemented by shifting parking to the north side of Augur Street at three locations: between Pacific Street and Barraclough Avenue, between Paramount Avenue and Francis Avenue, and between Morris Street and Carleton Avenue. This parking reassignment should be accompanied by the installation of pavement markings to designate parking lanes as well as parking signage.

Improvements should also be made to the two all-way stop intersections on Augur Street at Barraclough Avenue and Carleton Avenue. The recommended improvements include painting marked stop bars at each leg of the intersection and installing vertical reflective strips on the sign posts. These measures would improve the visibility of the stop signs and combined with slower speeds created by the chicanes would improve conformity to the stop signs.

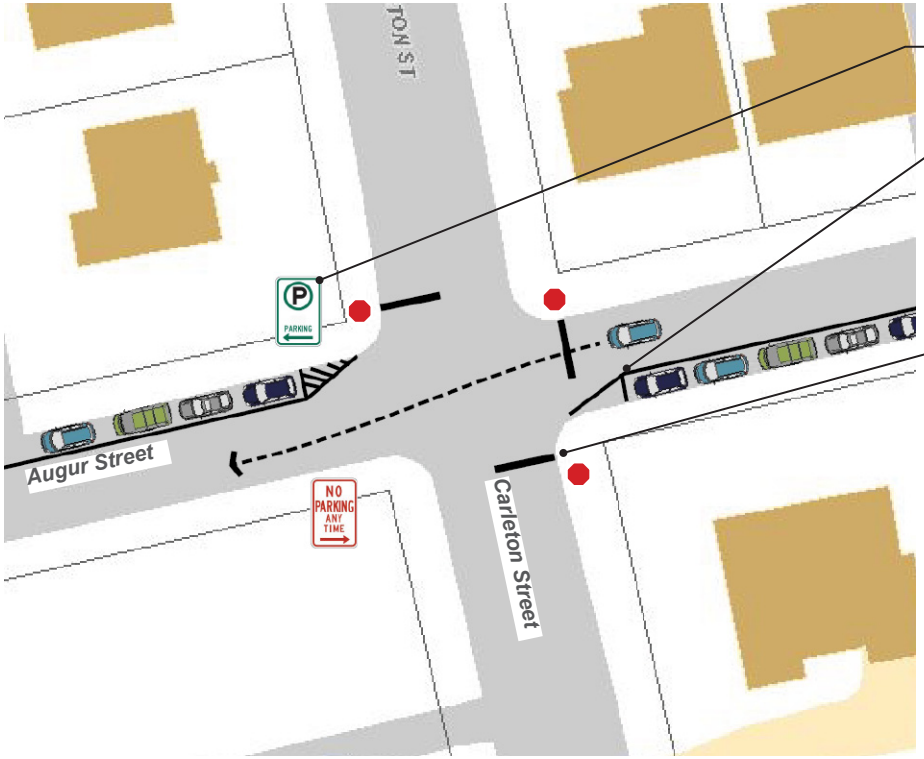
Additionally, a sidewalk gap on the south side of Augur Street between Farnsworth and Giles Street should be completed so that pedestrians don't walk in the roadway through this area.

1. Chicane traffic by alternating parking to north side of street

2. Complete sidewalk

3. Stop bars & signage improvements

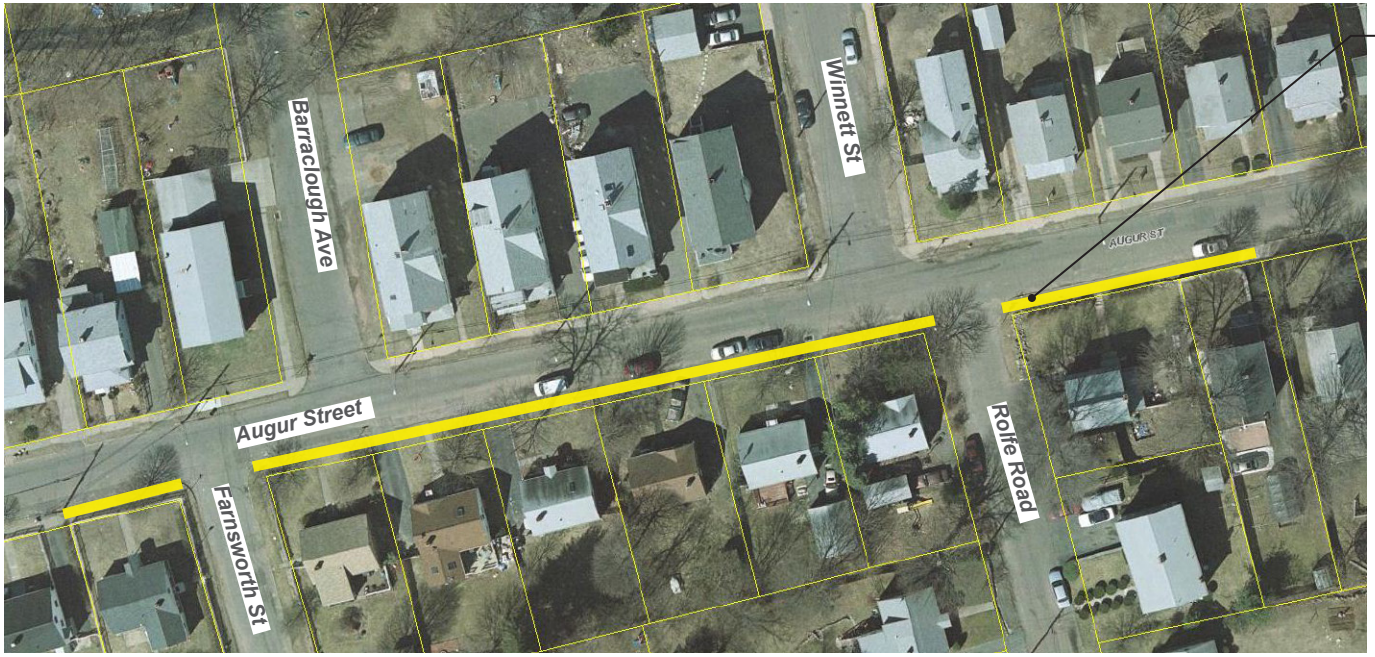
4. Stop bars & signage improvements



1.1 Install new parking and "no parking" signage

1. Stripe 8' wide parking bays on alternating north and south sides of road

4. Paint stop bars and add vertical reflective strips to stop sign posts



2. Install sidewalk on south side of Augur Street west side of Farnsworth Street to east of Rolfe Road

Mill Rock Road & Armory Street: Recommendations

Recommended improvements to Mill Rock Road and Armory Street are focused on improving safety at two locations: at the playground and at the intersection of Mill Rock Road and Prospect Street.

Safety improvements at the playground include the installation of playground warning signage on the east and west approach to the playground and the installation of a mid-block crosswalk and pedestrian refuge island from the playground to the end of the sidewalk on the north side of Mill Rock Road.

The recommended intersection improvements at Mill Rock Road include: lighting improvements, signage and pavement marking improvements, and the installation of an island that would slow turning speeds and allow for the placement of an additional stop sign on the left side of the travel lane on Prospect Street approaching Mill Rock Road.

An additional location that requires improvement is the marked crosswalk from Mill Rock Road to the south side of Armory Street. Crosswalk warning signage is recommended for both the east and west approaches on Armory Street and a curb ramp is recommended for the south side of the Armory Street.

2.1 Install curb ramp, connect to existing sidewalk

2.2 Install crosswalk and crosswalk warning signage

2.3 Install curb extension and curb ramp

2. Crosswalk at playground

3.1 Install W1-6R warning sign

3.2 Paint crosswalk and stop bar

3.3 Island with additional STOP sign

3.4 Add vertical reflective strips to stop sign and stop ahead posts

3.5 Trim vegetation as needed

3. Intersection improvements to Prospect Street at Mill Rock Road