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# **Downtown Rochester Crosswalk Assessment**

Prepared For:

City of Rochester, Rochester, New Hampshire

April 2017

Tighe&Bond

# **Executive Summary**

The goal of this limited study was to summarize the existing conditions of the crosswalks and provide recommendations for accessibility and crosswalk improvements, including pavement markings, signage, and curb ramp reconstruction. The limited study did not include an analysis of vehicle or pedestrian volumes to determine whether existing crosswalks were warranted in their current locations or whether additional crosswalks were needed.

Twenty-six (26) crosswalks were assessed in this limited study, were located between the intersection of Dreyer Way and S. Main St., the intersection of Wakefield St. and Union St., and the intersection of Bridge St. and N. Main St. See Exhibit 1, on the following page, for an overview of the entire assessment area.

While a detailed probable cost analysis for the recommended improvements was not part of this study, preliminary opinions of probable cost are provided in Table 1 below to assist the City in determining which improvements to implement in the short term; and which to budget for future Capital Improvement Planning. The estimates have been broken out by five major recommended improvements identified in the study.

Table 1	Probable Cost	Notes
Signs Installation	\$30,000	Assumes existing signage will be removed and new signs to be installed. Minor sitework required to install in existing sidewalks.
Pavement Marking	\$12,500	Assumes existing markings to be obliterated prior to restriping and thermoplastic markings in crosswalks.
Curb Ramp Reconstruction	\$120,000	Field surveys are strongly recommended to determine the limits of City right of way, easements, elevations, etc. before completing this work.
Pedestrian Bump Out Construction	\$30,000	Optional feature to improve visibility of pedestrians. Snow management operations must be considered. Field surveys are strongly recommended to determine elevations and placement.
RRFB / Ped Signal Upgrades	\$52,000	Location of RRFB must be coordinated to ensure power source is available. Does not include any reconstruction of existing mast arms that may be required to upgrade pedestrian crossing signals.

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To further aide in City planning efforts, Table 2 below is provided to show the twenty-six (26) crosswalks, or possible projects into three tiers based on total probable costs.

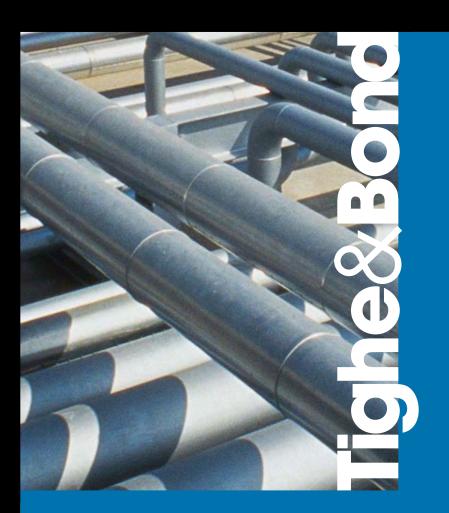
Table 2	Probable Cost per Project	Total Probable Cost of Projects	
Crosswalk (Project)*			
1, 2, 4a-b, 5, 6a-b, 7b, 8d, 9b, 11, 13, 14c, 16	X ≤ \$8,000	\$76,000	
8b-c, 9a, 10, 14b,14d, 15	\$8,000 < X < \$12,000	\$70,000	
3, 7a, 8a, 12, 14a	\$12,000 ≤ X	\$100,000	

<sup>\*</sup>See Exhibit 1 on the following page for location of project.

In addition to cost, safety should be taken into consideration when deciding how to prioritize improvements. A safety assessment of the existing pedestrian crossing locations was not included in the scope of this assessment. To determine if any of the existing crosswalk locations exhibits safety issues, a discussion with City staff and the Police Department can be conducted to determine if any issues exist which would guide the prioritization of the improvements to address safety issues. Absent this information, priority should be given to improving accessibility to existing pedestrian push buttons at signalized intersections in accordance with current design guidelines.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Tighe & Bond should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document. Reliance by others on the data presented herein or for purposes other than those stated in the text is authorized only if so permitted in writing by Tighe & Bond.

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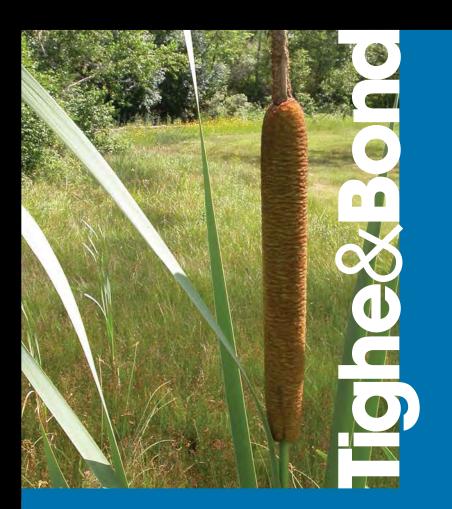


# **Executive Summary**

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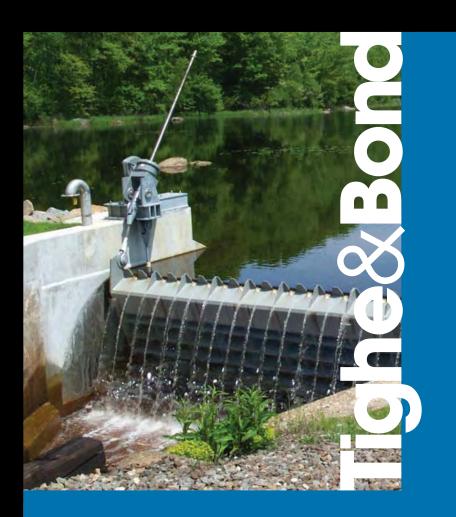


# Section 1 Introduction

Tighe & Bond, Inc. was retained to complete a limited study of twenty-six (26) crosswalks in the downtown area of Rochester, NH. The goal of the assessment was to summarize the existing conditions of the crosswalks and provide recommendations for accessibility and crosswalk improvements, including pavement markings, signage, and curb ramp improvements.

The limited study did not include an analysis of vehicle or pedestrian volumes to determine whether existing crosswalks were warranted in their current locations or whether additional crosswalks were needed. It is recommended that prior to installing additional or removing existing crosswalks, an full evaluation of vehicle and pedestrian volumes be conducted.

Additionally, collision data was not considered within the context of the assessment of existing conditions and deficiencies, nor was data used to identify locations that should be prioritized for improvements to mitigate an existing safety issue. During the design of the improvements, discussions with City staff and the Police Department can be conducted to determine if any current safety issues exist that warrant mitigation at the study locations, or at other pedestrian crossings in the City where funding could be used to improve safety for the transportation system users.



# Section 2 Assessment of Existing Conditions

A field assessment of the existing conditions of the crosswalks and curb ramps was performed by engineers from Tighe & Bond in March of 2017. This information was used to establish the current condition of the pedestrian crossing facilities within the assessment area. The data was then reviewed and deficiencies and/or areas for improvements were identified, as noted in Section 3. This section describes the assessment method and summarizes the existing conditions observed in the field. These existing conditions will serve as a baseline to which improvement alternatives can be compared.

## 2.1 Approach

The assessment of existing conditions was conducted using the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) and the Americans with Disabilities Act (ADA) as guides.

The MUTCD, which is published by the US Department of Transportation's Federal Highway Administration (FHWA), is a standard by which transportation signage and pavement markings are designed and constructed. These guidelines, which have been adopted by the State of New Hampshire, promote uniformity, safety and efficiency for all road users including vehicles, bicycles, motorcycles, and pedestrians.

In addition to observing pavement markings and signage, ADA regulations were reviewed to determine whether existing traffic signal push buttons and curb ramps were compliant with federal standards. Components of the pedestrian crossing facilities that were reviewed as part of a check on ADA accessibility were the pedestrians signal push buttons, detectable warning systems, and curb ramp cross and running slopes, in addition to the physical crosswalks.

#### 2.2 Observed Conditions

In March of 2017, the following data was collected for each of the crosswalks within the assessment area identified on Exhibit 1:

- Crosswalk Location: Crosswalks were organized by the street, intersection, landmark (business), and direction.
- Crosswalk Type: The type of crosswalk (mid-block, unsignalized intersection, or signalized intersection) is used to determine the necessary signage, markings, and curbing improvements.
- Zone: The type of zone the crosswalk is in (Commercial, Residential, School, or Other) is used to determine the style of signage package that is required.
- Crosswalk Marking: Pavement markings which are used to delineate crossing locations for both drivers and pedestrians.
- Pedestrian Signs and Signals: Pedestrian signs and signals are used to identify where crossing is appropriate, as well as protect pedestrians in a crosswalk from vehicular traffic.

- Lighting: The style, quantity, and proximity of lighting to crosswalks are used to ensure pedestrians are visible to drivers in low light or nighttime conditions. An analysis of the existing lighting levels was not performed.
- Curb Ramps: Properly constructed curb ramps are necessary to lead pedestrians from sidewalks to crosswalks.

Throughout the assessment, there were common opportunities for improvement noted at each of the assessed crosswalks. The most common deficiencies can be broken down in the following categories:

- Signs and Signals
- Pavements Markings
- ADA Accessibility
- Crosswalk Visibility
- Maintenance

The following is a summary of the field observations. A more detailed breakdown of observations for each crosswalk is provided in Appendix A.

#### 2.2.1 Signs and Signals

This limited study evaluated the condition and placement of existing signage and signals at, or in advance or pedestrian crossings. The need for electronic pedestrian crossing signals at signalized and unsignalized intersections was not analyzed as part of this assessment. To determine the need for such devices, an assessment of pedestrian and vehicle volumes must be conducted.

All the crosswalks observed lacked one or more MUTCD recommended sign, which defines the location of pedestrian crossings, gives advanced warning to drivers, or inform pedestrians when and where they should cross the street. Figure 2-1 shows Crosswalk #2 with deteriorated markings and no pedestrian warning signs or signals.



Figure 2-1: Crosswalk #2 with no signage and worn striping

#### 2.2.2 Pavement Markings

Crosswalk pavement markings are used to define the area where pedestrians can cross the roadway. Twenty-five of the twenty-six crosswalks observed in this assessment were striped in a zebra pattern (see Figure 2-2) and varied from 6.5



Figure 2-2: Common Pavement Markings

to 8.5 feet wide. There was one crosswalk observed to have a ladder striping pattern. While the crosswalks were striped with a recommended pattern and width, all the crosswalks had common deficiencies when it comes to pavement markings. These deficiencies include markings that were worn, as seen in Figure 2-1, inconsistent with respect to dimensions and materials, and some that were misaligned to the curb ramps. In some instances, the crosswalk markings were directing pedestrians into driveways instead of curb ramps.

#### 2.2.3 ADA Accessibility

The ADA, which was enacted in 1990, mandates that all public spaces must accommodate persons with disabilities. To make crosswalks accessible to pedestrians with disabilities (wheelchair bound or visually impaired), curb ramps must be constructed in compliance with ADA guidelines. In addition to curb ramps, pedestrians trying to cross signalized and unsignalized intersections may need to access push buttons to trigger pedestrian crossing signals. For the purposes of this assessment, only the push button location in relation to the sidewalk and not their height nor function were measured.



Figure 2-3: Non-ADA Compliant Curb Ramp with step

Thirty-seven (37) of the forty-two (42) curb ramps observed in this assessment

had greater than the allowed 8.5% slope (in some cases exceeding 13% as shown in Figure 2-3).

Detectable warning systems, as required by Section 705 of the ADA were not present at Thirty-eight (38) of the forty-two (42) curb ramps observed in the assessment.

Observations also determined that all eight the pedestrian push buttons used to actuate the pedestrian crossing phase at the signalized intersection were potentially inaccessible to persons with disabilities due to non-ADA compliant ramps, sidewalks, and physical barriers including buttons that were separated from the sidewalk by grass strips. The

MUTCD prescribes very specific requirements that define the allowable locations for pedestrian push buttons relative to the location of the ramps.

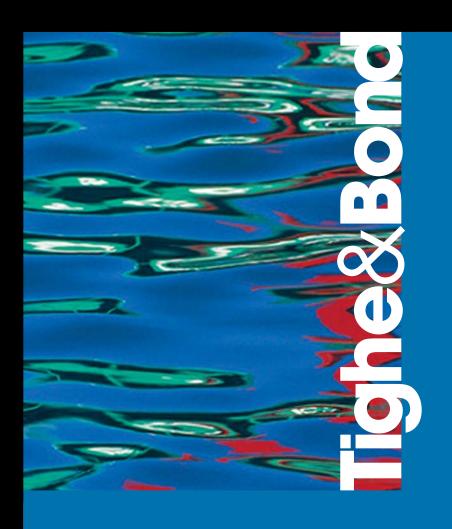
#### 2.2.4 Crosswalk Visibility

Ensuring that motorists and pedestrians can see each other is one factor associated with the overall safety of a pedestrian crossing. Vegetation, signs, and parked vehicles can all obscure pedestrians waiting to cross the road from approaching motorists.

While most of the crosswalks assessed in this report had acceptable visibility, eleven (11) of the twenty-six (26) crosswalks were noted to have some obstruction that could potentially reduce visibility including, lack of street lighting (within 20 feet of a crosswalk), low lying tree branches, and the crosswalk being situated too close to onstreet parking (within 25 feet).

#### 2.2.5 Maintenance

Proper maintenance of the roadway and its traffic control devices are vital to address some of the issues observed during this assessment. The condition of all crosswalks observed indicate that a formal crosswalk maintenance program, including strict quality control measures, may not be in place.



# Section 3 Recommended Improvements

Recommended improvements for the crosswalks are based on the guidelines set forth in the MUTCD and ADA with regards to signs and signals, pavement markings, accessibility, and visibility as noted in the previous section. See the individual reports and exhibits in the appendices for more detailed information on the assessments and recommended improvements for each of the crosswalks.

# 3.1 Signs and Signals

The MUTCD recommendations for signs and signals vary depending on where the crosswalk is located. For that reason, all intersections in this section were organized into three categories:

- Signalized Intersections: These intersections typically have traffic signals and push button controlled pedestrian crossing signals. (See Figure 3-1)
- Unsignalized Intersections:
   These intersections are typically stop or yield controlled on some or all of the approach legs depending on their configuration. (See Figure 3-2)
- Mid-Block Crosswalks: These are crosswalks located at neither a signalized nor an unsignalized intersection of two streets. Midblock crosswalks often have curb



Figure 3-1: Typical Signalized Intersection (Crosswalk 8)

bump outs as refuge for pedestrians who may be obscured by parked vehicles, trees, or other obstructions. (See Figure 3-3)



Figure 3-2: Typical Unsignalized Intersection (Crosswalk 6B, From Google Maps)



Figure 3-3: Typical Mid-Block Intersection (Crosswalk 12)

#### 3.1.1 Signalized Intersection

Two (2) signalized intersections were observed during the assessment. The recommended signal improvements at these intersections include the following:

- Replace crossing signals that do not have audible and visual pedestrian countdowns signal heads within the existing signal housing (See Figure 3-4)
- Replace or repair crossing signals that are damaged
- Add or relocate pedestrian push buttons so that they are accessible by persons in wheelchairs in compliance with the guidelines set forth in the MUTCD

Pedestrian crossing signs are not required at signalized intersections, as it is an expected location for pedestrians to cross the roadway under some form of traffic control.

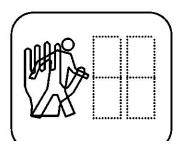


Figure 3-4: ADA Compliant Visual Pedestrian Signal

#### 3.1.2 Unsignalized Intersection

Seven (7) unsignalized intersections were observed during the assessment. The recommended sign and signal improvements at these intersections include the following:

- Install a stop sign (Crocker Street)
- Install advanced pedestrian crossing signs (MUTCD Sign W11-2 & W16-9P) at intersections with reduced visibility due to roadway geometry

Pedestrian crossing signs are not required at unsignalized intersections, as it is an expected location for pedestrians to cross.

#### 3.1.3 Mid-Block Crosswalks

Eleven (11) mid-block crosswalks were observed during the assessment. The recommended improvements at the mid-block crossings include the following:

 Install pedestrian crossing signage (W11-2 & W16-7P) on both sides of each crosswalk

The use of a Rapid Rectangular Flashing Beacon (RRFB), as shown in Figure 3-5, can help draw attention to pedestrians waiting at mid-block crossings. These signals can be wired to an electric service or solar powered. It is recommended that a RRFB be installed where

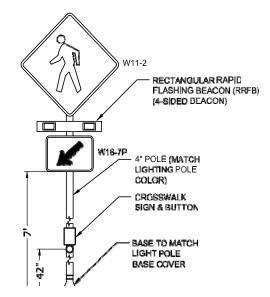


Figure 3-5: RRFB Warning System

North Main Street meets South Main Street as the crosswalks are located near a corner with limited pedestrian visibility for vehicles.

# 3.2 Pavement Markings

#### 3.2.1 Crosswalk Patterns

It is recommended that the City utilize the continental style crosswalk as shown in Figure 2-6 and Figure 3-6 below. This would replace the current standard zebra marking. By aligning the gaps in the crosswalk with the observed wheel paths, the life expectancy of continental style markings could be extended.

#### 3.2.2 Crosswalk Dimensions and Colors

It is recommended that all crosswalk markings have the following dimensions as shown in Figure 3-6:

- 12 inch solid white lines
- The spacing between the lines shall be 36 inches
- The minimum width of a crosswalk at a mid-block crossing shall be 6 feet
- The width at all crosswalks at intersections shall be a minimum of 8 feet

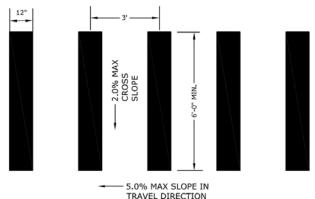


Figure 3-6: Typical Crosswalk Detail

 Crosswalks should start and end at a curb ramp and extend the full width of the road

#### 3.2.3 Materials

The crosswalk marking materials at all crosswalks within the City of Rochester shall be thermoplastic with glass beads per current City standard. It is also highly recommended that all previous pavement markings, patterns (stamped brick) and materials in the crosswalks be removed prior to installing new markings to avoid driver and pedestrian confusion.

## 3.3 ADA Accessibility

To improve the crosswalks and curb ramps that were observed in this study, ADA compliant, physical improvements are recommended.

#### 3.3.1 Curb Ramps

Crosswalk curb ramps shall be constructed to be ADA accessible. As shown in the "Sidewalk Curb Ramps With Detectable Warnings Detail" prepared by the NHDOT and dated March 3, 2017 (Appendix B) curb ramps can be constructed in a number of ways based on the location or site constraints. However, a common requirement throughout all the various designs is that curb ramps shall be constructed so the slope does not exceed 1:12.

If sufficient room exists, an ADA compliant landing which is at least 4 feet by 4 feet in area should be constructed at the top of the curb ramp. If area for a compliant landing is not present due to right-of-way limitations or lack of easements on private property alternate curb ramp layouts may need to be utilized. The need for easements and detailed designs for curb ramps were not evaluated in this report.

In areas where existing crosswalks direct pedestrians into driveways, it is recommended that new curb ramps be constructed to the side of the driveway to reduce the potential for vehicle and pedestrian conflicts.

Where crosswalks direct pedestrians to a median island, the curb ramp shall be flush with the existing pavement and have ADA compliant slopes in all directions (less than 2% cross slope and 5% in the direction of travel).

Chapter 4, Section 406 and Chapter 7, Section 705 of the ADA contains a more complete breakdown of requirements and guidelines for the construction of curb ramps that should be adhered to.

#### 3.3.1.1 Detectable Warning Systems

All curb ramps must have an ADA approved detectable warning system that extends the full width of the curb ramp, as shown in Figure 3-7. Detectable warning systems shall be placed at all transitions from a sidewalk to crosswalk. The detectable warning systems shall extend to the full width of the curb ramp and at least 2 feet deep. Per current City standards, the detectable warnings shall be untreated cast iron and shall be set in concrete.

#### 3.3.2 ADA Pedestrian Crossing Signals

All signalized intersections shall have a pedestrian push button controlled signal with audible and visual countdown components as specified in Section 3.1. Ensure that all visual components are properly aligned to the crosswalk and push buttons are located on an ADA accessible routes.

# 3.4 Crosswalk Visibility

#### 3.4.1 Street Parking

Upstream parking spaces (against the flow of traffic) shall be located no closer than 25' to an adjacent crosswalk (See Figure 3-8). Downstream street parking may abut a crosswalk as it does not impede the visibility of pedestrians attempting to use a crosswalk.

#### 3.4.2 Bump Outs / Refuge Medians

Bump outs or refuge medians are not required but can be useful at mid-block crosswalks as they can improve pedestrian visibility when vehicles are parked on both sides of the street or when there is a bend in



Figure 3-8: Crosswalk with Adjacent Street Parking

the roadway. It is recommended that the City consider adding pedestrian bump outs to the mid-block crosswalks within the assessment area. The design of these bump outs should be based on site specific data and was not performed in this assessment.

#### 3.5 Maintenance

It is recommended that the City develop standard maintenance plan for the crosswalks, pedestrian signage, and all pedestrian crossing signals. At a minimum, the maintenance guide shall include the following:

- Complete removal of existing deteriorated pavement markings
- Stripe pavement markings with consistent dimensions, material, and patterns, including conversion to the continental-style crosswalk pattern to replace the typical zebra patterns that were observed
- Replace faded, damaged, or missing signs and/or signals and consider upgrading mid-block crossings with RRFB actuated pedestrian crossing signals
- Signs in sidewalk area shall have a minimum clearance of 7 feet from the bottom of the sign to the sidewalk per the MUTCD
- Trim trees or vegetation in advance of crosswalks to maintain a minimum of 7 feet of clearance between the bottom of the branches and the sidewalk

#### 3.6 Conclusion

In conclusion, while the existing crosswalks in the assessment area need improvement, many of the recommendations can be implemented without major disruption to the pedestrians and at relative low cost (tree trimming, sign replacing, sign installation, restriping). Other improvements (curb ramp reconstruction, crosswalk relocation, etc.) are more extensive and may require temporary disruption to pedestrian traffic.

While a detailed probable cost analysis for the recommended improvements was not part of this study, a preliminary estimate is provided in table 1 below to assist the City in determining which improvements to implement in the short term and which to implement as part of future Capital Improvement Planning.

Table 1	Probable Cost	Notes
Signs Installation	\$30,000	Assumes existing signage will be removed and new signs to be installed. Minor sitework required to install in existing sidewalks.
Pavement Marking	\$12,500	Assumes existing markings to be obliterated prior to restriping and thermoplastic markings in crosswalks.
Curb Ramp Reconstruction	\$120,000	Field surveys are strongly recommended to determine the limits of City right of way, easements, elevations, etc. before completing this work.
Pedestrian Bump Out Construction	\$30,000	Optional feature to improve visibility of pedestrians. Snow management operations must be considered. Field surveys are strongly recommended to determine elevations and placement.
RRFB / Ped Signal Upgrades	\$52,000	Location of RRFB must be coordinated to ensure power source is available. Does not include any reconstruction of existing mast arms that may be required to upgrade pedestrian crossing signals.

To further aide in City planning efforts, Table 2 below is provided to show the twenty-six (26) crosswalks, or possible projects into three tiers based on total probable costs.

Table 2	Probable Cost per Project	Total Probable Cost of Projects	
Crosswalk (Project)			
1, 2, 4a-b, 5, 6a-b, 7b, 8d, 9b, 11, 13, 14c, 16	X ≤ \$8,000	\$76,000	
8b-c, 9a, 10, 14b,14d, 15	\$8,000 < X < \$12,000	\$70,000	
3, 7a, 8a, 12, 14a	\$12,000 ≤ X	\$100,000	

In addition to cost, safety should be taken into consideration when deciding how to prioritize improvements. A safety assessment of the existing pedestrian crossing locations was not included in the scope of this assessment. To determine if any of the existing crosswalk locations exhibits safety issues, a discussion with City staff and the Police Department can be conducted to determine if any issues exist which would guide the prioritization of the improvements to address safety issues. Absent this information, priority should be given to improving accessibility to existing pedestrian push buttons at signalized intersections in accordance with current design guidelines.

Lastly, while this assessment provides recommended improvements for the twenty-six (26) crosswalks located within the area shown in Exhibit 1, the City can use this report for future study of crosswalks and improvements throughout the City. To facilitate this effort, a blank copy of the Crosswalk Assessment Report has been provided in Appendix C. However, as noted throughout this report, additional engineering study, traffic analysis, and design effort is recommended prior to adding or removing crosswalks in the City or undertaking major reconstruction efforts to bring curb ramps into compliance with the current standards.



# Section 4 References

- 1. MUTCD, 2009 Edition, published by FHWA at http://mutcd.fhwa.dot.gov/pdfs/2009/pdf\_index.htm
- 2. Unsignalized Intersection Improvement Guide at http://www.ite.org/uiig/
- 3. Americans with Disabilities Act of 1990 or (Americans with Disabilities Act, 1990)

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# City of Rochester, NH – Crosswalk Assessment

#### Crosswalk No. 1

Location (Primary Stre	et, Cross Street)	Union Street Wakefie	eld Street	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream I	Parking: N/A			
Distance to Downstrea	m Parking: N/A			
Number of Vehicular La	anes: <sup>1</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to Ed	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor	Satisfactory	Good	
Pedestrian Signals	Yes	No No		
Audible Signal	Yes	No ✓		
Countdown	Yes	No V		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 1

Pedestrian Signs	Yes	No V		
Туре	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓	_	
Notes				
Lighting	Yes	No. ✓		
Number of Lights within	± 20ft: 0	<del>_</del>		
Distance & Direction to 0	Closest Light: 30' North	n		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North  V	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared 🗸	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
<u>Landing</u>	Yes	No V		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	<u>Nort</u> h	South	Fact	Most
Location		$\checkmark$	East	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other Flush
Slope	<8.5% <b>√</b>	>8.5%	N/A	
Landing	Yes	No V		
ADA Detectable Strip	Yes	No 🗸		

#### City of Rochester, NH - Crosswalk Assessment - Crosswalk 1

#### **Other Notes**

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Landscaped median island is well maintained.
- -Curbing shows signs of vehicle damage.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing warning signage.
- -Add lighting within 20 feet of crosswalk.

# City of Rochester, NH – Crosswalk Assessment

#### Crosswalk No. <sup>2</sup>

Location (Primary Stre	eet, Cross Street)			
, ,	•	Union Street Wakefiel	d Street	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Crosswark Type	Madioek	Intersection ✓		
Zone	Commercial	Residential	School	Other
	$\checkmark$			
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream	Parking: N/A			
Distance to Downstrea	am Parking: N/A			
Number of Vehicular L	anes: 1			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
<u>Dimensions</u>	Total Width (Edge to E	dge): 7ft 6in		
Color	White 🚺	Yellow	Other	
<u>Type</u>	Painted  ✓	Thermoplastic 🗸	Other Stamped Asphalt	
<u>Reflective</u>	Yes	No		
Condition	Poor	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
		<b>✓</b>		
Audible Signal	Yes	No		
Countdown	Yes	No		
Push Button	Yes	No No		

Pedestrian Signs	Yes	No ✓		
Туре	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
Notes				
Lighting	Yes 🗸	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 20' Sout	h		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North  ✓	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other Flush
Slope	<8.5% <b>√</b>	>8/5%	N/A	
Landing	Yes	No 🗸		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	<u>Nort</u> h	South	<u>East</u>	West
Location		$\checkmark$		West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel 🗸	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
<u>Landing</u>	Yes	No V		
ADA Detectable Strip	Yes	No		

#### **Other Notes**

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Landscaped median island is well maintained.
- -Curbing shows signs of vehicles traveling over.
- -Reconstruction of auto repair parking area may be required to accept new ADA compliant ramp and/or landing at the southern curb ramp.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing warning signage.
- -Add landscaped area or raised curb behind new curb ramp to provide separation from auto repair lot.

# City of Rochester, NH – Crosswalk Assessment

#### Crosswalk No. <sup>3</sup>

Location (Primary Stre	et, Cross Street) Wake	efield Street (Fire State	tion)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes ✓	No	Upstream	Downstream 🗸
Distance to Upstream I	Parking: N/A			
Distance to Downstrea	m Parking: <sup>20'</sup>			
Number of Vehicular La	anes: <sup>2 (One-way)</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to Ed	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor  ✓	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No. ✓		
Countdown	Yes	No.		
Push Button	Yes	No ✓		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 3

Pedestrian Signs	Yes	No 🗸		
Туре	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
Notes				
Lighting	Yes ✓	No		
Number of Lights within	± 20ft: 2			
Distance & Direction to 0	Closest Light: 4' North	and South		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East ✓	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel 🗸	Returned Sides	Other
Slope	<8.5%	>8/5% <b>√</b>	N/A	
<u>Landing</u>	Yes 🗸	No		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2	N. o. urb lo	South	Γα α <del>t</del>	\A/o at
Location	North	South	East	West ✓
Condition	Poor  ✓	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other No curbing on sides
Slope	<8.5%	>8.5%	N/A	
Landing	Yes ✓	No		
ADA Detectable Strip	Yes	No 🗸		

#### City of Rochester, NH - Crosswalk Assessment - Crosswalk 3

#### **Other Notes**

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Both curb ramps exceed 10% running slope.
- -Existing signals triggered by Summer Street intersection for fire station. No push button for pedestrian crossing.
- -No sidewalk bump outs for pedestrians.
- -Pedestrian visibility reduced by parked cars.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing warning signage
- -Add pedestrian crossing signals with audible and visual component tied to signals. If a pedestrian crossing signal is added, no pedestrian crossing warning signage would be necessary.
- -Designated parking areas shall be relocated to 25ft away from crosswalk and signed.
- -Candidate for Rectangular Rapid Flashing Beacon (RRFB) to warn drivers for mid-block crossing.

# City of Rochester, NH – Crosswalk Assessment

# Crosswalk No. <sup>4A</sup>

Location (Primary Street, Cross Street)  Wakefield Street Crocker Court						
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection			
Zone	Commercial 🗸	Residential	School	Other		
Marking						
Adjacent Parking	Yes	No	Upstream 🗸	Downstream 🗸		
Distance to Upstream Parking: 20'						
Distance to Downstream Parking: 53'						
Number of Vehicular Lanes: <sup>2 (One-way)</sup>						
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to Ed	Standard Continental	Dashed Zebra	Ladder		
Color	White	Yellow	Other			
Туре	Painted 🗸	Thermoplastic	Other Stamped Asphalt			
Reflective	Yes ✓	No				
Condition	Poor  ✓	Satisfactory	Good			
Pedestrian Signals	Yes	No.				
Audible Signal	Yes	No.				
<u>Countdown</u>	Yes	No ✓				
<u>Push Button</u>	Yes	No				

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 4A

Pedestrian Signs	Yes	No.					
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other			
<u>Downward Arrow</u>	Yes	No No	_				
<u>Notes</u>		_					
Lighting	Yes	No					
Number of Lights within ± 20ft: 1							
Distance & Direction to Closest Light: 5' North							
Туре	Dark Sky	Non-Dark Sky	Other				
Curb Ramp 1							
Location	North	South	East 🗸	West			
Condition	Poor  ✓	Satisfactory	Good	_			
Туре	Flared	Parallel	Returned Sides	Other			
Slope	<8.5%	>8/5%	N/A				
<u>Landing</u>	Yes	No					
ADA Detectable Strip	Yes	No 🗸					
Curb Ramp 2	NI - JII	Cauth	F I	M4 1			
Location	North	South	East	₩est			
Condition	Poor	Satisfactory	Good				
<u>Type</u>	Flared	Parallel	Returned Sides	Other No curbing on sides			
Slope	<8.5%	>8.5% ✓	N/A				
Landing	Yes Vos	No No					
ADA Detectable Strip	Yes	No ✓					

#### **Other Notes**

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Two hour parking sign (near 18 Wakefield Street) is located in an area too short for parking.
- -No sidewalk bump outs for pedestrians.
- -Pedestrian visibility reduced by parked cars.

#### Recommendations

- -Reconstruct curb ramps to add proper slope, ADA detectable warning strips and landing.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing warning signage.
- -Designated parking area north and west of crosswalk could be moved right up to the edge of the crosswalk as it is on a one way street.
- -Move two hour parking sign near 18 Wakefield Street
- -Extend no parking area north and east of crosswalk to accommodate COAST Bus. Coordinate with COAST Bus.

Crosswalk No. <sup>4B</sup>

Location (Primary Stre	et, Cross Street)	Crocker Court Wakefie	ld Street	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream I	Parking: <sub>N/A</sub>			
Distance to Downstrea	m Parking: N/A			
Number of Vehicular La	anes: <sup>2</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other	
Reflective	Yes ✓	No		
Condition	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No.		
Countdown	Yes	No 🗸		
Push Button	Yes	No.		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 4B

Pedestrian Signs	Yes	No.		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
Downward Arrow	Yes	No ✓		
Notes				
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 10' North	1		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North  ✓	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared 🗸	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%	N/A	
Landing	Yes	No		
ADA Detectable Strip	Yes	No V		
Curb Ramp 2	North	South	Fact	Most
Location	North	$\checkmark$	East	West
Condition	Poor 🗸	Satisfactory	Good	Other
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5% \[  \]	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	NO		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 4B Other Notes Recommendations -Reconstruct curb ramps to add proper slope, ADA detectable warning strips and landing. -Completely remove existing pavement markings, stamped texture, and restripe. -Add stop sign signage.

## Crosswalk No. <sup>5</sup>

Location (Primary Stre	et, Cross Street)	Museum Way Wakefield	d Street	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream I	Parking: N/A			
Distance to Downstrea	m Parking: N/A			
Number of Vehicular La	anes: <sup>2</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to I	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic	Other	
Reflective	Yes ✓	No		
Condition	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No ✓		
Countdown	Yes	No 🗸		
Push Button	Yes	No √		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 5

Pedestrian Signs	Yes	No		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No V		
Notes		<b>.</b>		
Lighting	Yes	No No		
Number of Lights within	<u> </u>			
Distance & Direction to C	Closest Light: 5' North			
<u>Туре</u>	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
<u>Location</u>	North 🗸	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%	N/A	
Landing	Yes	No ✓	_	
ADA Detectable Strip	Yes	No No		
Curb Ramp 2	No. of least	<del></del>	E	Maria
Location	North	South 🗸	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared 🗸	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No V		
ADA Detectable Strip	Yes	No V		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 5

Other Notes
-Location of parked cars on Wakefield Street may obscure pedestrians in crosswalk.
Recommendations
<ul> <li>-Reconstruct curb ramps to add proper slope and ADA detectable warning strips.</li> <li>-Completely remove existing pavement markings, stamped texture, and restripe.</li> <li>-Add pedestrian crossing warning signage (right turning vehicles look for pedestrians).</li> <li>-Designated parking areas shall be relocated to 25ft away from crosswalk. Remove one space in front of the mobile telephone space.</li> </ul>

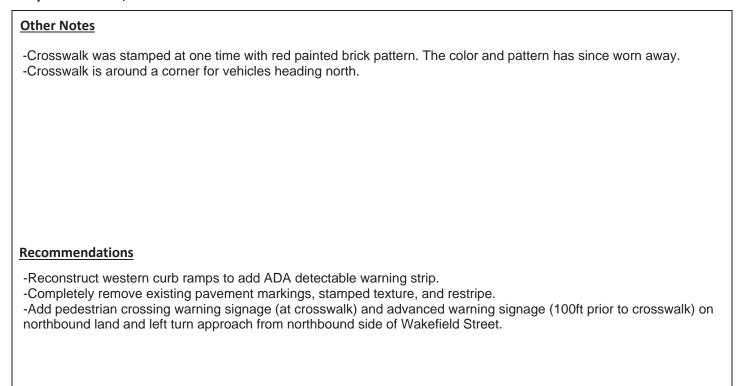
Crosswalk No. <sup>6A</sup>

Location (Primary Stre	et, Cross Street) Wa	kefield Street (Parson	Main Statue)	
		Hartan Pand	C'analina d	
Crosswalk Type	Mi <u>dbl</u> ock	Unsignalized Inte <u>rsec</u> tion	Signalized Inte <u>rsec</u> tion	
		$\checkmark$		
Zone	Commercial	Residential	School	Other
	<b>✓</b>			
Marking				
Adjacent Parking	Yes ✓	No	Upstream	Downstream 🗸
Distance to Upstream I	Parking: 0'			
Distance to Downstrea	m Parking: <sup>20'</sup>			
Number of Vehicular La	anes: <sup>2 (One-way)</sup>			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
	_			
		ПΞ		
			: : -	
<u>Dimensions</u>	Total Width (Edge to E	dge): 8ft Oin		
Color	White	Yellow	Other	
	$\checkmark$			
<u>Type</u>	Painted	Thermoplastic	Other	
- 0	<b>✓</b>	<b>✓</b>	Stamped Asphalt	
<u>Reflective</u>	Yes ✓	No		
Condition	<u>Poor</u>	Sati <u>sfac</u> tory	G <u>ood</u>	
	$\checkmark$			
Pedestrian Signals	Yes	No		
Audible Signal	Yes	No		
<u>Countdown</u>	Yes_	No_		
		$\checkmark$		
Push Button	Yes	No No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 6A

Pedestrian Signs	Yes	No.		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No V	_	
Notes				
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 20' North			
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East 🗸	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%	N/A	
<u>Landing</u>	Yes	No		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	NI a sabla	Courth	Ct	\A/a a+
Location	North	South	East	₩est
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other Cobblestone slope
Slope	<8.5% ✓	>8.5%	N/A	
Landing	Yes Vos	No No		
ADA Detectable Strip	Yes	No V		

### City of Rochester, NH - Crosswalk Assessment - Crosswalk 6A



Crosswalk No. <sup>6B</sup>

Location (Primary Stre	eet, Cross Street)	Hanson Street Wakefiel	ld Street	
C	n at alla la al	Unsignalized	Signalized	
Crosswalk Type	Midblock	Intersection	Intersection	
Zone	Commercial	Residential	School	Other
24 11	✓			
Marking	V.	NI.	Usalasa	December
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream	Parking: 28'			
Distance to Downstrea	am Parking: 0'			
Number of Vehicular L	anes: 1			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
			: : 🔼	
				$\checkmark$
<u>Dimensions</u>	Total Width (Edge to	Edge): 8ft 6in		
Color	White	Yellow	Other	
	$\checkmark$			
<u>Type</u>	Painted	Thermoplastic	Other	
	$\checkmark$	$\checkmark$	Stamped Asphalt	
<u>Reflective</u>	Yes	No		
	✓			
Condition	Poor	Satisfactory	Good	
Dodostvion Signals		No.		
Pedestrian Signals	Yes	No		
Audible Signal	Yes	No		
		<b>✓</b>		
Countdown	Yes	No ✓		
Duch Dutton	<u></u> <u>Yes</u>	No.		
Push Button		Ĭ <b>√</b>		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 6B

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No V		
Notes	Stop sign located	l just prior to crosswalk.		
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 12' Sou	th of southern curb ramp		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East ✓	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5% <b>✓</b>	>8/5%	N/A	
Landing	Yes	No		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	N I a sub-la	South	Foot	\\/+
Location	North	South	East	West  ✓
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5% ✓	>8.5% 	N/A	
Landing	Yes ✓	No.		
ADA Detectable Strip	Yes	No		

Other Notes
-Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn awayCurb ramps appear to be in compliance with ADA regulationsCrosswalk is at a stop controlled intersection. Pedestrian warning signs are not necessary.
Recommendations
-Completely remove existing pavement markings, stamped texture, and restripe.

# Crosswalk No. <sup>7A</sup>

Location (Primary Stre	et, Cross Street)	S. Main Street (Chambe	er of Com.)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream 🗸	Downstream 🗸
Distance to Upstream	Parking: 20'			
Distance to Downstrea	ım Parking: <sup>20'</sup>			
Number of Vehicular L	anes: <sup>3</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to 8	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor ✓	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No ✓		
Countdown	Yes	No.		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 7A

Pedestrian Signs	Yes ✓	No		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓	_	
Notes	Single pedestriar	crossing sign located 25' North	n of crosswalk	
Lighting	Yes	No No		
Number of Lights within	± 20ft: 2			
Distance & Direction to C	Closest Light: 5' North	and South		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East ✓	West
Condition	Poor  ✓	Satisfactory	Good	
<u>Type</u>	Flared 🗸	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5% <b>√</b>	N/A	
Landing	Yes	No 🗸		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2	N.I. o. utda	Couth	C+	\A/a-a+
Location	North	South	East	West ✓
Condition	Poor	Satisfactory	Good ✓	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5% ✓	>8.5%	N/A	
Landing	Yes ✓	No No		
ADA Detectable Strip	Yes 🗸	No		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Western curb ramp appears to be in compliance with ADA regulations.
- -Parking on northbound side of S. Main Street may obscure pedestrians in crosswalk.
- -Curb lip on western side is greater than one quarter inch.

- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Reconstruct eastern curb ramp to reduce slope, curb lip, and add ADA detectable warning strip.
- -Add pedestrian crossing warning signage to either ends of the crosswalk.
- -Designated parking areas shall be relocated to 25ft away from the crosswalk.
- -Candidate for Rectangular Rapid Flashing Beacon (RRFB) to warn drivers coming around the corner heading north.
- -Trees prior to the crosswalk should be pruned to bottom branches are a minimum of 7 feet off the ground.

Crosswalk No. 7B

Location (Drives are Street	at Cuasa Stuast			
Location (Primary Stre	eet, Cross Street)	S. Main Street Congres	s Street	
	a at III I	Unsignalized	Signalized	
Crosswalk Type	Midblock	Intersection	Intersection	
		<b>V</b>		
Zone	Commercial	Residential	School	Other
	✓			
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream	Parking: N/A			
Distance to Downstrea	am Parking: N/A			
Number of Vehicular L	anes: 1			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
			: : 🔼	_
		ШΞ		
<u>Dimensions</u>	Total Width (Edge to	Edge): 8ft 6in		
	_			
Color	White	Yellow	Other	
	<b>✓</b>		Red painted asphalt	
<u>Type</u>	Painted []	Thermoplastic	Other Stamped Asphalt	
D. flexit	<b>V</b>	<del></del>	Otampou Aophait	
<u>Reflective</u>	Yes	No		
<u>Condition</u>	Poor	Sati <u>sfac</u> tory	G <u>ood</u>	
Condition	Poor ✓	Satisfactory		
Pedestrian Signals	Yes.	<u>No_</u>		
r cucsulan eignais		$\checkmark$		
Audible Signal	Yes	No		
		✓		
Countdown	Yes	No /		
	Vas	No.		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 7B

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No.		
Notes				
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 15' Sout	h (West side of S. Main Street)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North ✓	South	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5% <b>√</b>	>8/5%	N/A	
Landing	Yes	No		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	North	Couth	Fact	Most
Location	North	South	East	West
Condition	Poor	Satisfactory	Good ✓	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5% ✓	>8.5%	N/A	
Landing	Yes Vos	No		
ADA Detectable Strip	Yes ✓	No		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Both curb ramps appear to be in compliance with ADA regulations.
- -Parking on southbound side of N. Main Street may obscure pedestrians in crosswalk.
- -Curb lip on western side is greater than one quarter inch.

- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add sign; "Right turning vehicles watch for pedestrians crossing sign".
- -Eliminate curb lip on curb ramp.

Crosswalk No. 8A

Location (Primary Stre	eet, Cross Street)	S. Main Street Portland	St. (North)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream 🗸	Downstream
Distance to Upstream	Parking: 20'			
Distance to Downstrea	am Parking: <sup>0'</sup>			
Number of Vehicular L	anes: <sup>4</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to E	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor ✓	Satisfactory	Good	
Pedestrian Signals	Yes	No		
Audible Signal	Yes	No No		
Countdown	Yes	No		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 8A

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No.	_	
Notes				
Lighting	Yes	No		
Number of Lights within	± 20ft: 2			
Distance & Direction to 0	Closest Light: 20' Wes	t and 5' East of either end		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East 🗸	West
Condition	Poor 🗸	Satisfactory	Good	_
Туре	Flared	Parallel 🗸	Returned Sides	Other On curve
Slope	<8.5%	>8/5%	N/A	
Landing	Yes	No 🗸		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2	NI a satila	Couth	C+	Mark
Location	North	South	East	West  ✓
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Both curb ramps exceed 13% running slope with no ADA detectable warning strips.
- -Pedestrian crossing buttons are inaccessible.

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing signals with audible and visual component (clock) tied to signals.
- -Add sidewalk access to the existing pedestrian crossing signals/push buttons.
- -Designated parking areas shall be relocated to 25ft away from the crosswalk.

Crosswalk No. 8B

Location (Primary Stre	et, Cross Street)	S. Main Street Portland	Street (South)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream 🗸	Downstream
Distance to Upstream I	Parking: 20'			
Distance to Downstrea	m Parking: N/A			
Number of Vehicular La	anes: <sup>4</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to I	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor  ✓	Satisfactory	Good	
Pedestrian Signals	Yes ✓	No		
Audible Signal	Yes	No ✓		
Countdown	Yes	No.		
<u>Push Button</u>	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 8B

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
Notes	_			
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 5' North	on East side		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North 🗸	South	East	West
Condition	Poor 🗸	Satisfactory	Good	_
Туре	Flared 🗸	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%	N/A	
<u>Landing</u>	Yes 🗸	No		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	NI II-	C a + b	Essi	14/1
Location	North	South 🗸	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No V		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Both curb ramps exceed 8.5% running slope with no ADA detectable warning strips.
- -Pedestrian crossing buttons are inaccessible.

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing signals with audible and visual component (clock) tied to signals.
- -Add sidewalk access to the existing pedestrian crossing signals/push buttons.
- -Add sign; "Right turning vehicles watch for pedestrians".

Crosswalk No. 8C

Location (Primary Stre	eet, Cross Street)	S. Main Street Portland	Street (South)	
			· · ·	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
,,			$\checkmark$	
Zone	Commercial	Residential	School	Other
	$\checkmark$			
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream 🗸
Distance to Upstream	Parking: N/A			
Distance to Downstrea	am Parking: <sup>20'</sup>			
Number of Vehicular L	Lanes: 4			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
<u>Dimensions</u>	Total Width (Edge to	Edge): 7ft 6in		
Color	White	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor ✓	Satisfactory	Good	
Pedestrian Signals	Yes •	No.		
Audible Signal	Yes	No ✓		
Countdown	Yes	No.		
Push Button	Yes	No		

# City of Rochester, NH - Crosswalk Assessment - Crosswalk 8C

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
Notes	_			
Lighting	Yes 🗸	No		
Number of Lights within	± 20ft: 1	_		
Distance & Direction to C	Closest Light: 10' Wes	t on West side of S. Main St		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East ✓	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5% <b>√</b>	N/A	
Landing	Yes	No 🗸		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	<u></u>	<u> </u>		
Location	North	South	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel 🗸	Returned Sides	Other On curve
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No V		
ADA Detectable Strip	Yes	No V		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Both curb ramps exceed 8.5% running slope with no ADA detectable warning strips.
- -Pedestrian crossing buttons are inaccessible.

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing signals with audible and visual component (clock) tied to signals.
- -Add sidewalk access to the existing pedestrian crossing signals/push buttons.
- -Designated parking areas shall be relocated to 25ft away from the crosswalk.

Crosswalk No. 8D

Location (Primary Stre	eet, Cross Street)	C Main Ctrant Doutland	Ctract (Mast)	
		S. Main Street Portland	Street (West)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Crosswank Type	IVII dolock		√ V	
Zone	Commercial	Residential	School	Other
	$\checkmark$			
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream
Distance to Upstream	Parking: N/A			
Distance to Downstrea	am Parking: N/A			
Number of Vehicular I	anes: <sup>2</sup>			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
<u>Dimensions</u>	Total Width (Edge to	Edge): 7ft 6in		
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic	Other Stamped Asphalt	
<u>Reflective</u>	Yes ✓	No		
Condition	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes •	No		
Audible Signal	Yes	No ✓		
<u>Countdown</u>	Yes	No ✓		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 8D

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No V		
Notes				
Lighting	Yes	No		
Number of Lights within	± 20ft: 2			
Distance & Direction to 0	Closest Light: 15' Sour	th of crosswalk		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North  V	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared	Parallel 🗸	Returned Sides	Other On curve
Slope	<8.5%	>8/5%	N/A	
Landing	Yes	No ✓		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	Mouth	South	Foot	\\/aa+
Location	North	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other On curve
Slope	<8.5%	>8.5% ✓	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -Both curb ramps exceed 8.5% running slope with no ADA detectable warning strips.
- -Pedestrian crossing buttons are inaccessible.

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing signals with audible and visual component (clock) tied to signals.
- -Add sidewalk access to the existing pedestrian crossing signals/push buttons.
- -Designated parking areas shall be relocated to 25ft away from the crosswalk.

Crosswalk No. 9A

CIUSSWAIK IVU.				
Location (Primary Str	eet, Cross Street)	S. Main Street (Bank	c of America & Church)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream 🗸	Downstream 🗸
Distance to Upstream	Parking: 15'			
Distance to Downstre				
Number of Vehicular I	Lanes: 3			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to	Standard Continents  But the standard continents of the standard continents		Ladder
Color	White 🗸	Yellow	Other	
Туре	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No ✓		
Countdown	Yes	No ✓		
Push Button	Yes	No V		

# City of Rochester, NH - Crosswalk Assessment - Crosswalk 9A

Pedestrian Signs	Yes ✓	No		
Туре	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
Notes	No pedestrian cre	ossing sign for Northbound trave	el.	
Lighting	Yes ✓	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to 0	Closest Light: 15' Nort	h on East side		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East ✓	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other Driveway
Slope	<8.5% <b>✓</b>	>8/5%	N/A	
Landing	Yes	No		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	N I o sub-lo	Couth	Fast	\A/==+
Location	North	South	East	₩est
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other No curb
Slope	<8.5%	>8.5% ✓	N/A	
Landing	Yes Vas	No No		
ADA Detectable Strip	Yes	No		

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -No bump outs for pedestrians.
- -Pedestrian visibility reduced by parked cars

- -Consider relocating curb ramp to line up with front door of church, away from the existing driveway.
- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing signs for Northbound travel lane.
- -Designated parking areas shall be relocated to 25ft away from the crosswalk.

Crosswalk No. 9B

CIUSSWAIK INU.						
Location (Primary Stre	eet, Cross Street)	S. Main Street Liberty S	Street			
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection			
Zone	Commercial 🗸	Residential	School	Other		
Marking						
Adjacent Parking	Yes	No	Upstream	Downstream		
Distance to Upstream Parking: N/A						
Distance to Downstrea	am Parking: N/A					
Number of Vehicular L	anes: 1					
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to	Standard Continental	Dashed Zebra	Ladder		
Color	White 🗸	Yellow	Other			
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt			
Reflective	Yes	No				
Condition	Poor 🗸	Satisfactory	Good			
Pedestrian Signals	Yes	No.				
Audible Signal	Yes	No ✓				
Countdown	Yes	No.				
Push Button	Yes	No No				

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 9B

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
<u>Notes</u>	_	_		
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 10' North	1		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North  ✓	South	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5% <b>√</b>	>8/5%	N/A	
Landing	Yes	No ✓		
ADA Detectable Strip	Yes	No V		
Curb Ramp 2	North	Couth	Fact	Most
Location	North	South	East	West
Condition	Poor 🗸	Satisfactory	Good	Other
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5% 	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	NO NO		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 9B

Other Notes
-Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
Recommendations
<ul> <li>-Reconstruct curb ramps to add proper slope and ADA detectable warning strips.</li> <li>-Completely remove existing pavement markings, stamped texture and restripe.</li> <li>-Consider installing additional street light to southern end of the crosswalk.</li> </ul>

Crosswalk No. 10

CIUSSWAIK INU.				
Location (Primary Stree	et, Cross Street)	S. Main Street Dreyer W	√ay	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream 🗸
Distance to Upstream P	arking: <sub>N/A</sub>			
Distance to Downstrear	n Parking: <sup>20'</sup>			
Number of Vehicular La	nes: <sup>4</sup>			
<u>Pattern</u> <u>Dimensions</u>	Solid  Solid  Total Width (Edge to	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other Stamped Asphalt	
<u>Reflective</u>	Yes 🗸	No		
Condition	Poor	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No.		
Countdown	Yes	No.		
Push Button	Yes	No V		

# City of Rochester, NH - Crosswalk Assessment - Crosswalk 10

Pedestrian Signs	Yes 🗸	No		
Туре	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
<u>Notes</u>	-Advanced Warn	ing sign is 100' South of crossw ing sign does not have 'Ahead' s gnage adjacent to crosswalk	alk only sign	
Lighting	Yes ✓	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 0' North	of crosswalk (West side)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East <b>✓</b>	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other No curb
Slope	<8.5% <b>✓</b>	>8/5%	N/A	
Landing	Yes	No		
ADA Detectable Strip	Yes	No.		
Curb Ramp 2	At a sele	Cauth	Facility	1471
Location	North	South	East	West ✓
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other Driveway
Slope	<8.5% ✓	>8.5% 	N/A	
Landing	Yes Vos	No No		
ADA Detectable Strip	Yes	No		

#### **Other Notes**

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -No bump outs on either side makes pedestrians harder to see with parked cars
- -Curb lip exceeds one quarter of an inch from pavement on both sides.

#### Recommendations

- -Reconstruct curb ramps to add ADA detectable warning strips and reduce curb lips between pavement and sidewalk.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Consider installing additional street light to eastern side of S. Main Street, adjacent to the crosswalk.
- -Separate curb ramp from driveway of Friendly's.
- -Add pedestrian crossing warning signage per MUTCD.
- -Stripe crosswalk across Dreyer Way and add sign northbound on S. Main street "Vehicles turning right watch for pedestrian crossings."

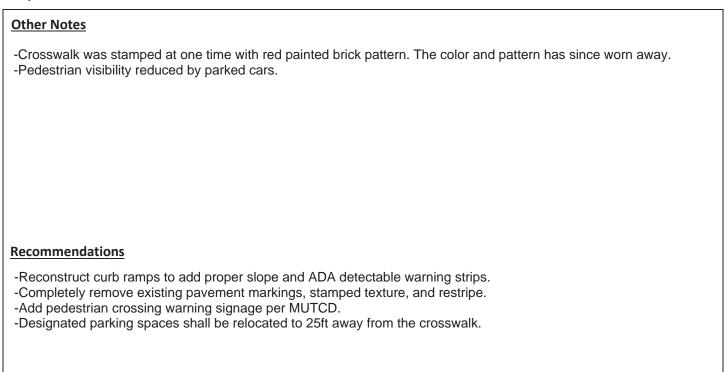
### Crosswalk No. 11

Location (Primary Stre	et, Cross Street)	I. Main Street (Citizens	Bank)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream ✓	Downstream
Distance to Upstream F	Parking: 20'			
Distance to Downstrea	m Parking: <sup>20'</sup>			
Number of Vehicular La	anes: 2 (One-way)			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to E	Standard Continental	Dashed Zebra	Ladder
Color	White	Yellow	Other	
<u>Туре</u>	Painted  V	Thermoplastic	Other Stamped Asphalt	
<u>Reflective</u>	Yes ✓	No		
Condition	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes	No ✓		
<u>Audible Signal</u>	Yes	No ✓		
Countdown	Yes	No V		
<u>Push Button</u>	Yes	No No		

# City of Rochester, NH - Crosswalk Assessment - Crosswalk 11

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No		
Notes				
Lighting	Yes 🗸	No		
Number of Lights within	± 20ft: 2			
Distance & Direction to 0	Closest Light: 10' Sout	h (W side) and 10' North (E side	e)	
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North 🗸	South	East	West
Condition	Poor	Satisfactory	Good	_
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	> <u>8/5</u> %	N/A	
Landing	Yes	No	_	
ADA Detectable Strip	Yes	No V		
Curb Ramp 2	AL L	Courth	Feet	NA/ 1
Location	North	South 🗸	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes ✓	No		
ADA Detectable Strip	Yes	No ✓		

#### City of Rochester, NH - Crosswalk Assessment - Crosswalk 11



Crosswalk No. 12

Location (Primary Street	et, Cross Street)	N. Main Street (Mid-bloc	k)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
7.	$\checkmark$			
Zone	Commercial	Res <u>ide</u> ntial	S <u>cho</u> ol	Other
	$\checkmark$			
Marking				
Adjacent Parking	Yes ✓	No	Upstream 🗸	Downstream 🗸
Distance to Upstream F	Parking: 20'			
Distance to Downstrea	m Parking: 0'			
Number of Vehicular La	anes: <sup>2 (One-way)</sup>			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
	_			
<u>Dimensions</u>	Total Width (Edge to	Edge): 7ft 6in		
			Othor	
Color	White	Yellow	Other	
<u>Type</u>	Painted	Thermoplastic	Other	
	$\checkmark$	$\checkmark$	Stamped Asphalt	
<u>Reflective</u>	Yes ✓	No		
<u>Condition</u>	<u>Poor</u>	Sati <u>sfac</u> tory	<u>Good</u>	
	$\checkmark$			
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No.		
<u>Countdown</u>	Yes_	No_		
		$\checkmark$		
Push Button	Yes	No V		

# City of Rochester, NH - Crosswalk Assessment - Crosswalk 12

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No.		
Notes	_			
Lighting	Yes 🗸	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to 0	Closest Light: 5' South	(W side)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North 🗸	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared 🗸	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%	N/A	
<u>Landing</u>	Yes	No		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2	At a set la	C a <del>t</del> b	Facility	1441
Location	North	South 🗸	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes Vac	No No		
ADA Detectable Strip	Yes	No V		

#### City of Rochester, NH – Crosswalk Assessment - Crosswalk 12

#### **Other Notes**

- -Crosswalk was stamped at one time with red painted brick pattern. The color and pattern has since worn away.
- -No bump outs for pedestrians.
- -Pedestrian visibility reduced by parked cars.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing warning signage per MUTCD.
- -Consider adding bump outs to both sides for pedestrians.
- -Designated parking spaces shall be relocated to 25ft away from the crosswalk.

Crosswalk No. 13

Location (Primary Stre	et, Cross Street)	N. Main Street (Revoluti	on)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Crosswalk Type	Midblock	Intersection	Intersection	
7000	Communical	Decidential	Cabaal	Othor
Zone	Commercial	Residential	School	Other
Marking	<u> </u>			
Adjacent Parking	Yes ✓	No	Upstream	Downstream 🗸
Distance to Upstream	Parking: N/A			
Distance to Downstrea	m Parking: <sup>20'</sup> N, 0' S			
Number of Vehicular L	anes: 2 (One-way)			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
			: : 🔼	
	_			
<u>Dimensions</u>	Total Width (Edge to I	Edge): 8ft Oin		
			Other	
Color	White 🗸	Yellow	Other	
<u>Type</u>	Pa <u>inte</u> d	Thermoplastic	Other	
	$\checkmark$	$\checkmark$	Stamped Asphalt	
<u>Reflective</u>	Yes	No		
<u>Condition</u>	Poor	Ll Sati <u>sfac</u> tory	Cood	
Condition	Poor	Satisfactory	Good	
Pedestrian Signals	Yes	No		
		$\checkmark$		
Audible Signal	Yes	No		
<u>Countdown</u>	<u> </u>	<u>▼</u> <u>No</u>		
Countaown		Ĭ		
Push Button	Yes	No No		

## City of Rochester, NH – Crosswalk Assessment - Crosswalk 13

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
<u>Notes</u>	_	_		
Lighting	Yes	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 0' (N sid	ie)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North 🗸	South	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5% <b>√</b>	N/A	
Landing	Yes	No		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	North	South	Fact	Most
Location	North	$\checkmark$	East	West
Condition	Poor	Satisfactory	Good	0.1
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5% \[  \]	N/A	
Landing	Yes Vas	No No		
ADA Detectable Strip	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 13 $\,$

## Crosswalk No. <sup>14A</sup>

Location (Primary Stre	et, Cross Street)	N. Main Street Bridge S	Street/Union Street (East Cross	walk)
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No	Upstream	Downstream 🗸
Distance to Upstream	Parking: N/A			
Distance to Downstrea	nm Parking: <sup>20'</sup> N, 0' S			
Number of Vehicular L	anes: 2 (One-way)			
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge to	Standard Continental	Dashed Zebra	Ladder
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic 🗸	Other	
Reflective	Yes ✓	No		
Condition	Poor ✓	Satisfactory	Good	
Pedestrian Signals	Yes	No		
Audible Signal	Yes	No ✓		
Countdown	Yes	No		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 14A

Pedestrian Signs	Yes	No.		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No No	_	
Notes				
Lighting	Yes	No V		
Number of Lights within	± 20ft: 0	_		
Distance & Direction to 0	Closest Light: 25' North			
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
<u>Location</u>	North 🗸	South	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel 🗸	Returned Sides	Other On curve
Slope	<8.5%	>8/5%	N/A	
Landing	Yes	No ✓		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2	Nouth	South	Foot	\\/aa+
Location	North	South	East	West
Condition	Poor	Satisfactory	Good	0.1
<u>Type</u>	Flared	Parallel	Returned Sides	Other On curve
Slope	<8.5%	>8.5% ✓	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No V		

#### City of Rochester, NH - Crosswalk Assessment - Crosswalk 14A

#### **Other Notes**

- -Pedestrian crossing button on northern side is above a raised curb.
- -Pedestrian crossing signal on northern side does not have a countdown.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, Stamped texture, and restripe.
- -Add pedestrian crossing signals with audible and visual component (countdown) to northern side.
- -Consider separating the curb ramps for the crosswalks.
- -Reconstruct the sidewalks up to the pedestrian crossing signals and push buttons.

Crosswalk No. 14B

Location (Primary Stre	eet, Cross Street)	N. Main Street	Bridge Street/Union Street (North	n Crosswalk)
Crosswalk Type	Midblock	Unsignali Intersect		
Zone	Commercial	Resident	cial School	Other
Marking				
Adjacent Parking	Yes	No ✓	Upstream	Downstream
Distance to Upstream	Parking: <sub>N/A</sub>			
Distance to Downstrea	am Parking: N/A			
Number of Vehicular L	anes 3 (One-way	)		
<u>Pattern</u> <u>Dimensions</u>	Solid  Total Width (Edge t		Oin	<b>7</b>   -
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermopla 🗸	astic Other	
<u>Reflective</u>	Yes ✓	No		
Condition	Poor 🗸	Satisfacto	ory Good	
Pedestrian Signals	Yes	No		
Audible Signal	Yes	No V		
Countdown	Yes	No.		
<u>Push Button</u>	Yes	No		

## City of Rochester, NH – Crosswalk Assessment - Crosswalk 14B

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
<u>Notes</u>	_	_		
Lighting	Yes 🗸	No		
Number of Lights within	± 20ft: 2	_		
Distance & Direction to C	Closest Light: 16' North	n (W and E side)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East 🗸	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%   <b>√</b>	N/A	
Landing	Yes	No ✓	_	
ADA Detectable Strip	Yes	No V		
Curb Ramp 2		C + l-	<b>.</b>	
Location	North	South	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel 🗸	Returned Sides	Other on curve
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No V		
ADA Detectable Strip	Yes	No V		

### **Other Notes**

-Pedestrian crossing button on eastern side is above a raised curb.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Realign pedestrian crossing signals on western side. Consider replacing the signal.
- -Add pedestrian crossing signals with audible and visual component (countdown) to both sides.
- -Consider separating the curb ramps for the crosswalks.
- -Reconstruct the sidewalks up to the pedestrian crossing signals and push buttons.

Crosswalk No. 14C

Location (Primary Stre	et, Cross Street)	N. Main Street	Bridge Street/Union Street (West Cro	osswalk)
		Uncignaliza	d Cignalizad	
Crosswalk Type	Mi <u>dbl</u> ock	Unsignalized Inte <u>rsec</u> tion	_	
			$\checkmark$	
Zone	Commercial	Residential	School	Other
	✓			
Marking	v			
Adjacent Parking	Yes ✓	No	Upstream	Downstream 🗸
Distance to Upstream	Parking: <sub>N/A</sub>			
Distance to Downstrea	m Parking: 50'			
Number of Vehicular L	anes 2			
<u>Pattern</u>	Solid	Standard Conti	nental Dashed Zebra	Ladder
<u>Dimensions</u>	Total Width (Edge t	to Edge): 7 ft	6in	
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplast 🗸	ic Other	
<u>Reflective</u>	Yes ✓	No		
Condition	Poor	Satisfactory	good	
Pedestrian Signals	Yes	No		
Audible Signal	<u> </u>	<u> No</u>		
radioic Signar		$\overline{\checkmark}$		
Countdown	Yes	No.		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 14C

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓	_	
Notes				
Lighting	Yes	No		
Number of Lights within	± 20ft: 2			
Distance & Direction to C	Closest Light: 16' Nort	neast (N side)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North 🗸	South	East	West
Condition	Poor 🗸	Satisfactory	Good	<del>_</del>
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5% ••••••••••••••••••••••••••••••••••••	N/A	
<u>Landing</u>	Yes	No 🗸		
ADA Detectable Strip	Yes	No		
Curb Ramp 2	N. a. urb la	South	Foot	\A/oot
Location	North	South 🗸	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No V		
ADA Detectable Strip	Yes	No V		

Other Notes
N/A
Recommendations
<ul> <li>Reconstruct curb ramps to add proper slope and ADA detectable warning strips.</li> <li>Completely remove existing pavement markings, stamped texture, and restripe.</li> <li>Realign pedestrian crossing signals on northern side. Consider replacing the signal.</li> <li>Add pedestrian crossing signals with audible and visual component (countdown) to both sides.</li> <li>Consider separating the curb ramps for the crosswalks.</li> <li>Reconstruct the sidewalks up to the pedestrian crossing signals and push buttons.</li> </ul>

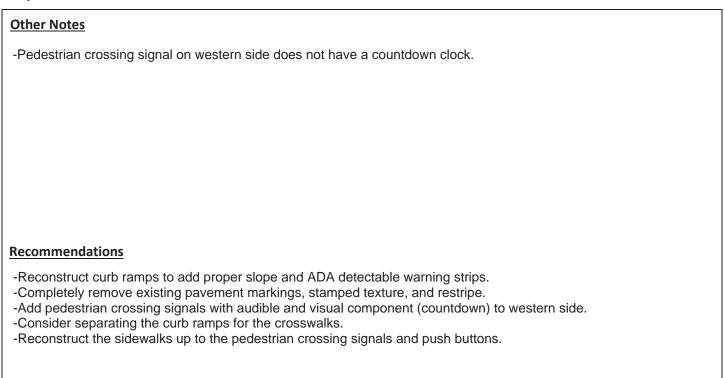
Crosswalk No. 14D

Location (Primary Stre	eet, Cross Street)	N. Main Street B	ridge Street/Union Street (South Cr	osswalk)
		Hasianalia ad	Cianalizad	
Crosswalk Type	Mi <u>dbl</u> ock	Unsignalized Inte <u>rsec</u> tion	Signalized Inte <u>rsec</u> tion	
			$\checkmark$	
Zone	Commercial	Residential	School	Other
	✓			
Marking				
Adjacent Parking	Yes	No ✓	Upstream	Downstream
Distance to Upstream	Parking: <sub>N/A</sub>			
Distance to Downstrea	am Parking: N/A			
Number of Vehicular L	anes 2			
<u>Pattern</u>	Solid	Standard Contin	ental Dashed Zebra	Ladder
		HE		
	-			
	_			
<u>Dimensions</u>	Total Width (Edge t	o Edge): 7 ft	6in	
Color	White	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic	Other	
<u>Reflective</u>	Yes	No		
Condition	Poor	Satisfactory	Good	
Pedestrian Signals	Yes	No		
Audible Cienel	<b>✓</b>	No		
Audible Signal	Yes	No ✓		
Countdown	Yes ✓	No		
Push Button	Yes	No		

# City of Rochester, NH – Crosswalk Assessment - Crosswalk 14D

Pedestrian Signs	Yes	No 🗸		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No ✓		
Notes				
Lighting	Yes	No ✓		
Number of Lights within	± 20ft: 0	_		
Distance & Direction to C	Closest Light: 28' West			
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North	South	East 🗸	West
Condition	Poor  V	Satisfactory	Good	_
Туре	Flared	Parallel 🗸	Returned Sides	Other On curve
Slope	<8.5%	>8/5%	N/A	
<u>Landing</u>	Yes	No 🗸		
ADA Detectable Strip	Yes	No 🗸		
Curb Ramp 2	NI o utilo	Courth.		\\/ +
Location	North	South	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No ✓		

#### City of Rochester, NH - Crosswalk Assessment - Crosswalk 14D



# Crosswalk No. 15

Location (Primary Street, C	Cross Street)	N. Main Street (Mid-block)	)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes ✓	No	Upstream 🗸	Downstream 🗸
Distance to Upstream Park	ing: 15' northbou	nd lane		
Distance to Downstream P	arking: 5' northbound	d lane		
Number of Vehicular Lanes	2			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
<u>Dimensions</u> To	tal Width (Edge to	Edge): 7ft 0in		
Color	White 🗸	Yellow	Other	
<u>Type</u>	Painted 🗸	Thermoplastic	Other	
Reflective	Yes ✓	No.		
<u>Condition</u>	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes	No.		
Audible Signal	Yes	No ✓		
Countdown	Yes	No.		
Push Button	Yes	No ✓		

## City of Rochester, NH – Crosswalk Assessment - Crosswalk 15

Pedestrian Signs	Yes	No ✓		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No V	_	
Notes				
Lighting	Yes	No No		
Number of Lights within	± 20ft: 2			
Distance & Direction to 0	Closest Light: 5' south	bound lane		
Туре	Dark Sky	Non-Dark Sky ✓	Other	
Curb Ramp 1				
Location	North 🗸	South	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared 🗸	Parallel	Returned Sides	Other Driveway
Slope	<8.5%	>8/5%	N/A	
<u>Landing</u>	Yes	No 🗸		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2	Nowth	South	Foot	Mast
Location	North	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
<u>Type</u>	Flared	Parallel 🗸	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No		

#### City of Rochester, NH - Crosswalk Assessment - Crosswalk 15

#### **Other Notes**

- -No bump outs for pedestrians.
- -Pedestrian visibility reduced by parked cars.

#### Recommendations

- -Reconstruct curb ramps to add proper slope and ADA detectable warning strips.
- -Completely remove existing pavement markings, stamped texture, and restripe.
- -Add pedestrian crossing signage on both sides per MUTCD.
- -Consider relocating the curb ramps north approximately 10' to avoid driveways, provide a proper landing area, and move closer to existing street lighting.
- -Designated parking areas shall be relocated to 25ft away from the crosswalk.

Crosswalk No. 16

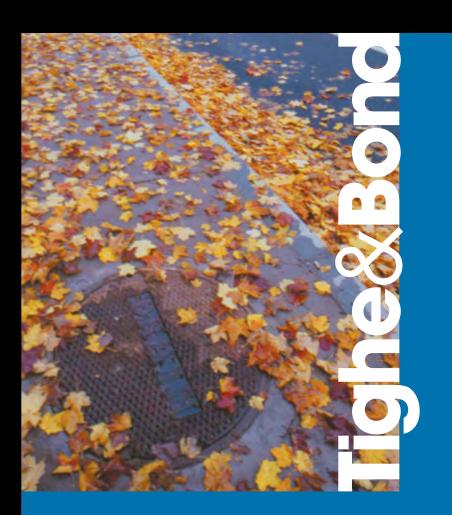
Location (Primary Stree	et, Cross Street)	Union Street (Mid-block	:)	
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial 🗸	Residential	School	Other
Marking				
Adjacent Parking	Yes	No ✓	Upstream	Downstream
Distance to Upstream P	arking: <sub>N/A</sub>			
Distance to Downstream	n Parking: N/A			
Number of Vehicular La	nes 2 (One-way)			
<u>Pattern</u>	Solid	Standard Continental	Dashed Zebra	Ladder
<u>Dimensions</u>	Total Width (Edge to I	Edge): 7ft 6in		
Color	White 🗸	Yellow	Other	
Туре	Painted 🗸	Thermoplastic	Other Stamped Asphalt	
Reflective	Yes ✓	No		
Condition	Poor 🗸	Satisfactory	Good	
Pedestrian Signals	Yes	No ✓		
<u>Audible Signal</u>	Yes	No ✓		
Countdown	Yes	No.		
Push Button	Yes	No ✓		

## City of Rochester, NH – Crosswalk Assessment - Crosswalk 16

Pedestrian Signs	Yes ✓	No		
<u>Type</u>	Yield to Pedestrian	Pedestrian Crossing	Advanced Warning	Other
<u>Downward Arrow</u>	Yes	No V		
<u>Notes</u>	Pedestrian signs	located approximately 25' prior	to crosswalk on southern side of	of road.
Lighting	Yes ✓	No		
Number of Lights within	± 20ft: 1			
Distance & Direction to C	Closest Light: 5' South	(S side)		
Туре	Dark Sky	Non-Dark Sky	Other	
Curb Ramp 1				
Location	North  V	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other Driveway
Slope	<8.5%	>8/5%	N/A	
<u>Landing</u>	Yes	No 🗸		
ADA Detectable Strip	Yes	No ✓		
Curb Ramp 2		Carrella		
Location	North	South	East	West
Condition	Poor 🗸	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
Landing	Yes	No No		
ADA Detectable Strip	Yes	No V		

## City of Rochester, NH – Crosswalk Assessment - Crosswalk 16

Other Notes
N/A
Recommendations
<ul> <li>-Reconstruct curb ramps to add proper slope and ADA detectable warning strips.</li> <li>-Completely remove existing pavement markings, stamped texture, and restripe.</li> </ul>
-Add additional pedestrian crossing signage per MUTCD.
-Consider relocating the curb ramps north approximately 10' east to avoid driveways and provide a proper landing area.



NOTE:

THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

THIS CROSSWALK, SIDEWALK, AND LIGHTING FIXTURES ARE SCHEDULED TO BE RECONSTRUCTED AS PART OF WAKEFIELD STREET RECONSTRUCTION.

CROSSWALK 1

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN

EXHIBIT 2

www.tighebond.com

NOTE:

1. THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

2. THIS CROSSWALK, SIDEWALK, AND LIGHTING FIXTURES ARE SCHEDULED TO BE RECONSTRUCTED AS PART OF WAKEFIELD STREET RECONSTRUCTION.

CROSSWALK 2

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN

EXHIBIT 3

Tighe&Bond
www.tighebond.com

Mar 31, 2017-1:26pm Plotted By: EDoremus

1. THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET

0 20' 40'

GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 4 Tighe&Bond
www.tighebond.com

THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 5



1. THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET

O 20' 40'

GRAPHIC SCALE

CROSSWALK 4B

 $\frac{\text{CROSSWALK ASSESSMENT}}{\text{ROCHESTER, NH}}$ 

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 6

1. THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET

0 20' 40'

GRAPHIC SCALE

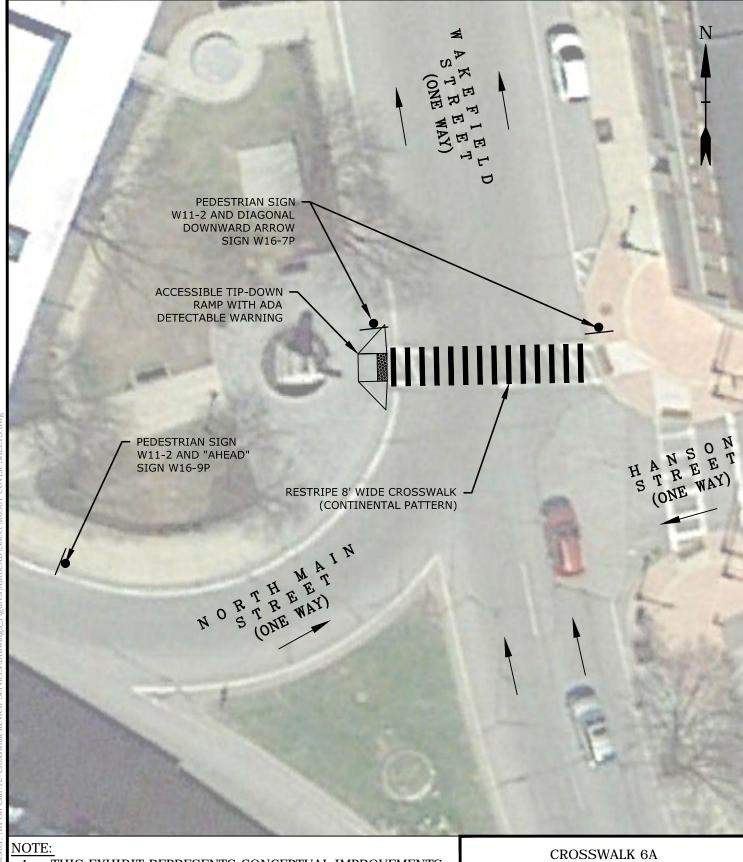
CROSSWALK 5

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN

SCALE: AS SHOWN
EXHIBIT 7





SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

 $\frac{\text{CROSSWALK ASSESSMENT}}{\text{ROCHESTER, NH}}$ 

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 8



THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET

O 20' 40'

GRAPHIC SCALE

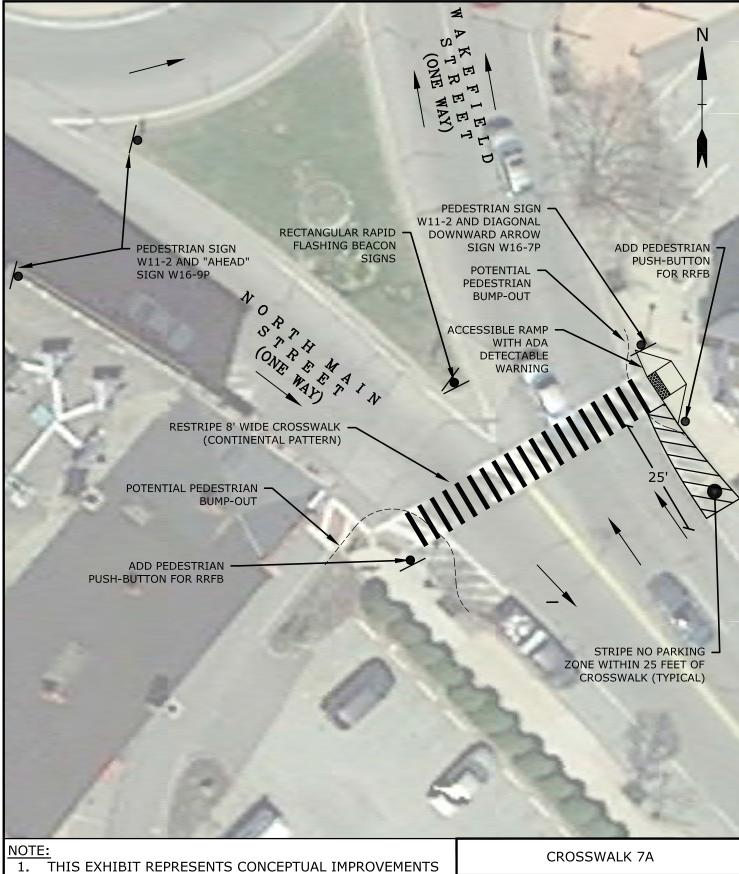
CROSSWALK 6B

 $\frac{\text{CROSSWALK ASSESSMENT}}{\text{ROCHESTER, NH}}$ 

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 9



Mar 31, 2017-1:27pm Plotted By: EDoremus Tirke & Bond The TARNEO301 Bochester NH On Cally 19-Crosswall Revi



SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 10

SCALE IN FEET GRAPHIC SCALE **CROSSWALK 7B** 

CROSSWALK ASSESSMENT ROCHESTER, NH



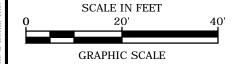
SCALE IN FEET

O 20' 40'

GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH

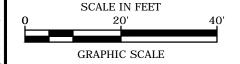




 $\frac{\text{CROSSWALK ASSESSMENT}}{\text{ROCHESTER, NH}}$ 

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 13

SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.



CROSSWALK ASSESSMENT ROCHESTER, NH



THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET GRAPHIC SCALE CROSSWALK 8D

CROSSWALK ASSESSMENT ROCHESTER, NH



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EXHIBIT 16

GRAPHIC SCALE

SCALE IN FEET GRAPHIC SCALE CROSSWALK 9B

CROSSWALK ASSESSMENT ROCHESTER, NH



FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET GRAPHIC SCALE CROSSWALK ASSESSMENT ROCHESTER, NH



GRAPHIC SCALE

SCALE: AS SHOWN

EXHIBIT 19

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SCALE IN FEET

O 20' 40'

GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH



SCALE IN FEET

O 20' 40'

GRAPHIC SCALE

 $\frac{\text{CROSSWALK ASSESSMENT}}{\text{ROCHESTER, NH}}$ 



SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN

EXHIBIT 22

THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET 40' **GRAPHIC SCALE** 

CROSSWALK 14B

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN

EXHIBIT 23

www.tighebond.com

SCALE IN FEET 20' GRAPHIC SCALE

CROSSWALK ASSESSMENT ROCHESTER, NH

DATE: 3/30/2017 SCALE: AS SHOWN EXHIBIT 24

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1. THIS EXHIBIT REPRESENTS CONCEPTUAL IMPROVEMENTS TO THIS CROSSWALK. FIELD VERIFICATION OF EXISTING FEATURES AND ENGINEERING DESIGN OF CURB RAMPS SHOULD BE PERFORMED PRIOR TO CONSTRUCTION.

SCALE IN FEET

0 20' 40'

GRAPHIC SCALE

CROSSWALK 14D

 $\frac{\text{CROSSWALK ASSESSMENT}}{\text{ROCHESTER, NH}}$ 

DATE: 3/30/2017 SCALE: AS SHOWN

EXHIBIT 25



SCALE IN FEET

0 20' 40'

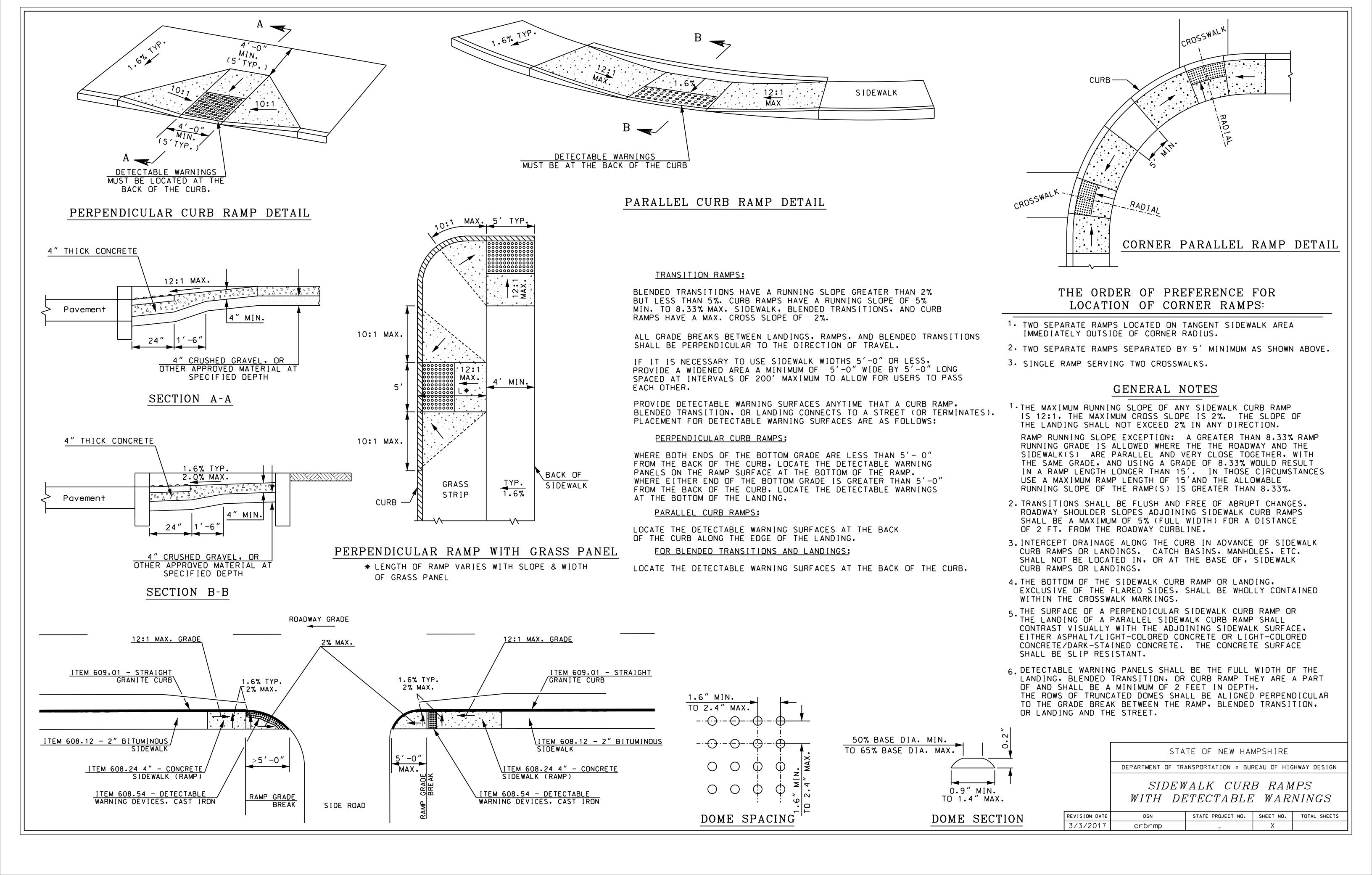
GRAPHIC SCALE

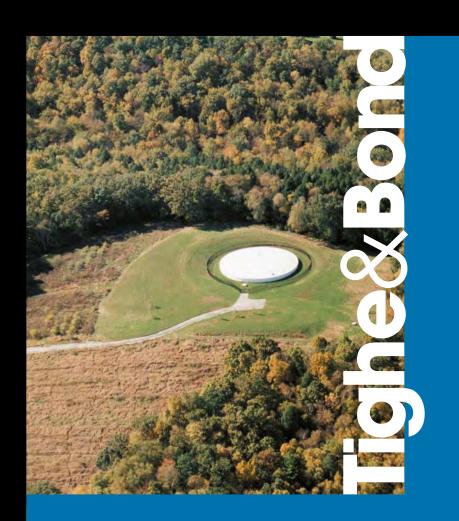
CROSSWALK ASSESSMENT ROCHESTER, NH



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EXHIBIT 27





## City of Rochester, NH – Crosswalk Assessment

## Crosswalk No.

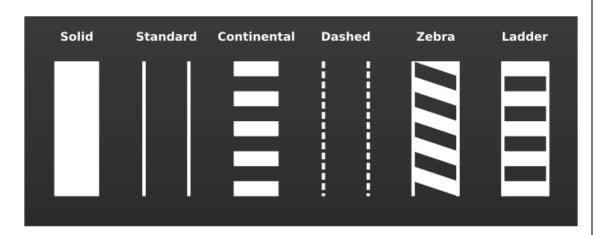
Location (Primary Stre	et, Cross Street)	and		
Crosswalk Type	Midblock	Unsignalized Intersection	Signalized Intersection	
Zone	Commercial	Residential	School	Other
Marking Adjacent Parking	Yes	No	Upstream	Downstream

Distance to Upstream Parking:

Distance to Downstream Parking:

Number of Vehicular Lanes:

## <u>Pattern</u>



<u>Dimensions</u>	Total Width (Edge to Edge	): ft	in	
Color	White	Yellow	Other	
<u>Type</u>	Painted	Thermoplastic	Other	
Reflective	Yes	No		
Condition	Poor	Satisfactory	Good	
<u>Notes</u>				

Pedestrian Signals	Yes	No		
Audible Signal	Yes	No		
Countdown	Yes	No		
Push Button Accessibility	Yes	No		
Lighting	Yes	No		
Number of Lights within ±	20ft:			
Distance & Direction to Cl	osest Light:			
Туре	Dark Sky	Globe Style	Other	
Notes				
Curb Ramp 1				
Location	North	South	East	West
Condition	Poor	Satisfactory	Good	
Туре	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8/5%	N/A	
ADA Detectable Strip	Yes	No		
<u>Notes</u>				
Curb Ramp 2				
Location	North	South	East	West
Condition	Poor	Satisfactory	Good	
<u>Type</u>	Flared	Parallel	Returned Sides	Other
Slope	<8.5%	>8.5%	N/A	
ADA Detectable Strip	Yes	No		
Notes				

Observation Summary	
Recommendations	