

# STEERING COMMITTEE ALTERNATIVES WORKSHOP MEETING #1 MAY 22, 2018



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NEW HAMPSHIRE'S GATE CITY



## AGENDA

1. Review Input Received at Listening Sessions
2. Purpose & Need Statement
3. Existing Traffic Analysis
4. Proposed Alternative Discussion
5. Streetscape Alternative Discussion
6. Decision Matrix Discussion
7. Questions & Answers
8. Adjourn



# LISTENING SESSIONS

## Safety

- Vehicles
- Pedestrians
- Bicycles
- Merging Issues

## Traffic

- A lot of Traffic
- Side Road Cut-through
- Left Turns to Side Roads
- D Street Signal

## Access

- Northern Development
- Crown St. Area
- River

## Aesthetics

- Gateway
- Garden
- River walk
- Trees
- Green Space



# PURPOSE & NEED STATEMENT





# PURPOSE

A vertical line with five white circles at the top, middle, and bottom, and two diagonal lines extending from the top and bottom circles. The line connects five horizontal bars of different colors, each containing a purpose.

Improve Mobility of All Users

Improve Access

Facilitate Land Use

Not Adversely Impact Traffic

Provide Aesthetically Pleasing Gateway



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# *East Hollis / Bridge Street Intersection Improvement Project*

## NEEDS



Daily Traffic Congestion, Queues, & Delay

Lack of Bike & Ped Accommodations

Merging Vehicles Creates Safety Concerns

Limited Access to Crown St. & New Development

Not a Welcoming Gateway Into the City



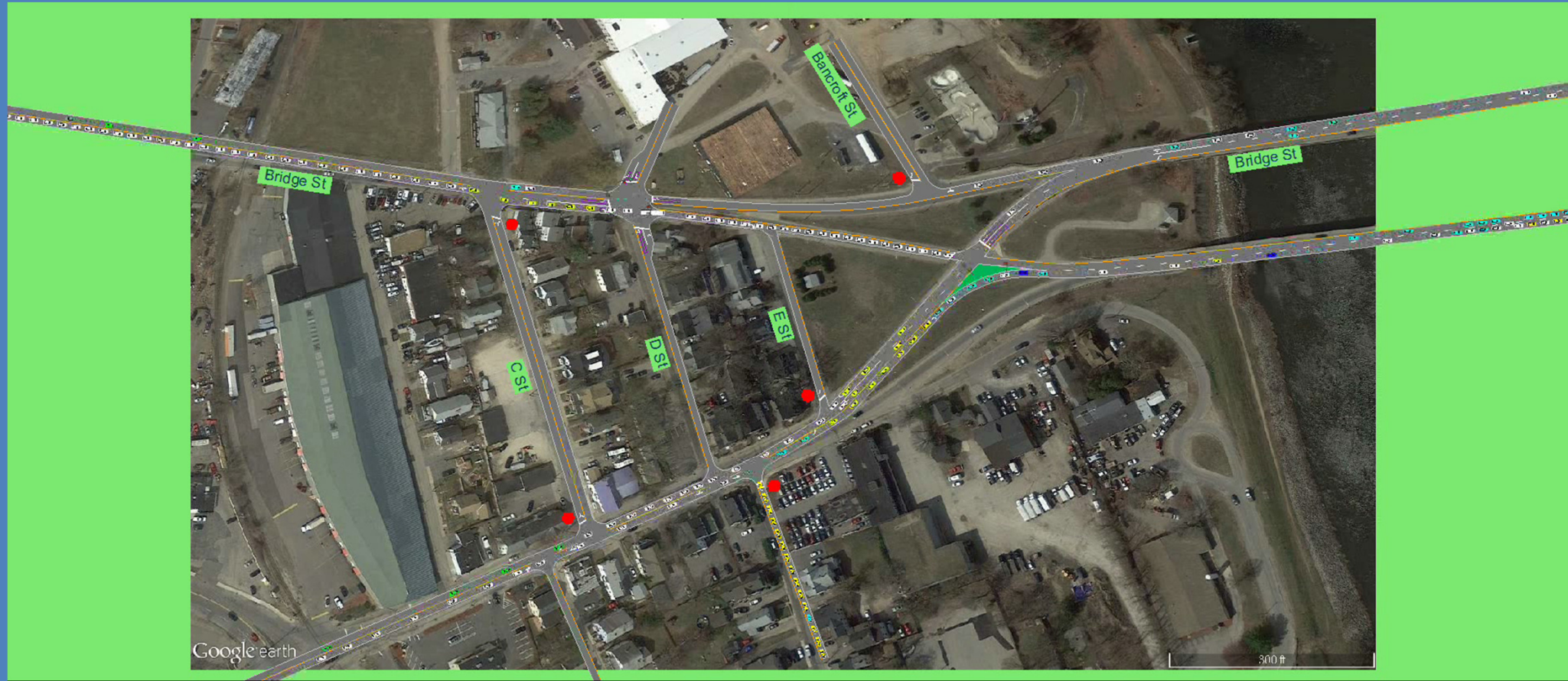
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## EXISTING TRAFFIC MODEL



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# East Hollis / Bridge Street Intersection Improvement Project

## PREVIOUS STUDIES

- East Hollis Street Area Plan
- 2015 STV Traffic Study



	Existing Conditions		No-Build		"Minimal" Build		4-Legged Roundabout		5-Legged Roundabout		Asymmetrical Circle		4-Legged Signal		5-Legged Signal		Twin Signals		One-Way Couplet	
Delay (s)	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Ferry Street																				
Thru	15	12	20	26	15	13	6	8	(Similar to 4-legged roundabout)		198		25	25	26	32	25	24	[Multiple intersections affected. Delays typically in the 10-20 second range for each intersection. Additional travel time for Bridge Street and Ferry Street approaches due to out-of-direction travel]	
Left	2	1	5	4	3	2							13	12	34	41	12	10		
Right	25	19	31	41	21	21							35	36	44	47	35	34		
Bancroft Street							>685	52			380		35	48	35	43	39	44		
Thru																				
Left																				
Right																				
Bridge Street	15	50	19	30	17	16	>919	>566			100		32	35	27	37	40	41		
Thru													32	35	27	37				
Left													39	40	32	54	43	49		
Right													32	35	27	37	40	41		
E. Hollis Street	1	1	1	1	4	9	3	14			32		19	43	27	37	32	40		
Thru													34	52	27	35				
Left													34	52	39	56				
Right													19	42	27	35				
Crown Street											73				32	43	31	44		
Thru																				
Left																				
Right																				
Intersection total	12	19	19	19	12	13	128	102			140		26	34	27	35	30	34		
Access	Poor		Poor		Fair		Fair		Good		Good		Fair		Good		Good		Fair	
Delay	Good		Good		Good		Poor		Poor		Poor		Fair		Good		Fair		Fair	
Footprint	Fair		Fair		Fair or good		Fair		Fair		Fair		Poor		Poor		Poor		Good	
Notes	No access to Renaissance or Crown Street.		Same as existing with slight increase in overall delay.		Accommodates movements between Renaissance (west entrance) and E. Hollis.		Direct access to Renaissance. Not to Crown Street.		Provides access to Renaissance and Crown Street		Provides access to Renaissance and Crown Street		Provides access to Renaissance. Not to Crown Street		Provides access to Renaissance and Crown Street		Provides access to Renaissance and Crown Street		Provides access to Renaissance and Crown Street, but increases travel distances.	
	Low delay except for Bridge St in PM				Low delay for all movements		Unacceptable delays.		Unacceptable Delays		Unacceptable Delays		Acceptable Delays		Acceptable Delays		Acceptable Delays		Low control delay from signals, but increased travel time for out-of-direction travel	
	Minimal hardstriping but creates dead space in interior				Minimal hardstriping. Possible to reduce dead space in interior.		Moderate hardstriping, but creates dead space in interior		Moderate hardstriping, but creates dead space in interior		Moderate hardstriping, but creates dead space in interior		Intensive hardstriping		Intensive hardstriping		Intensive hardstriping		Minimal hardstriping	
																			Potential secondary impacts from conversion to one-way streets	



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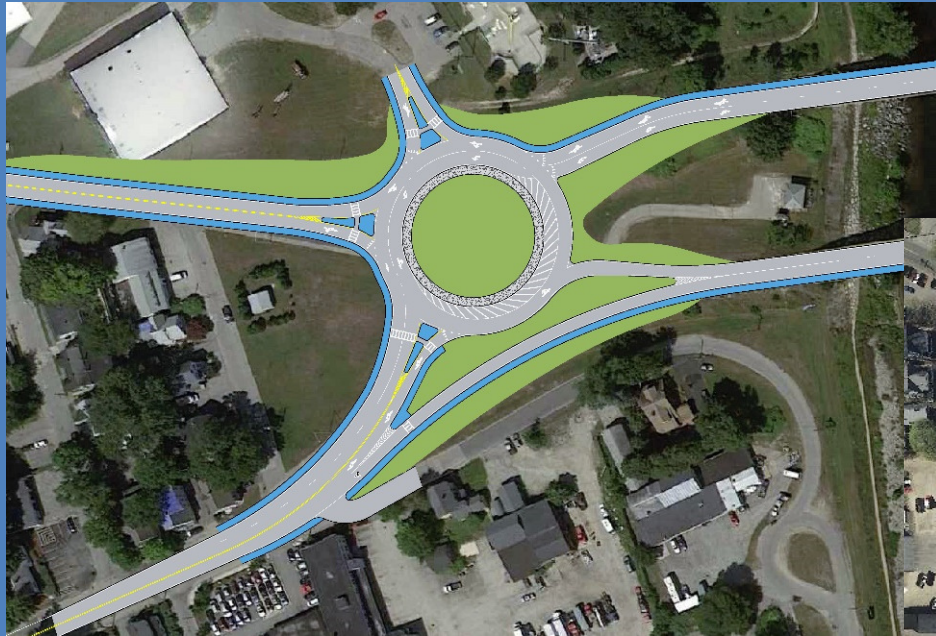
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## ALTERNATIVES DEVELOPMENT



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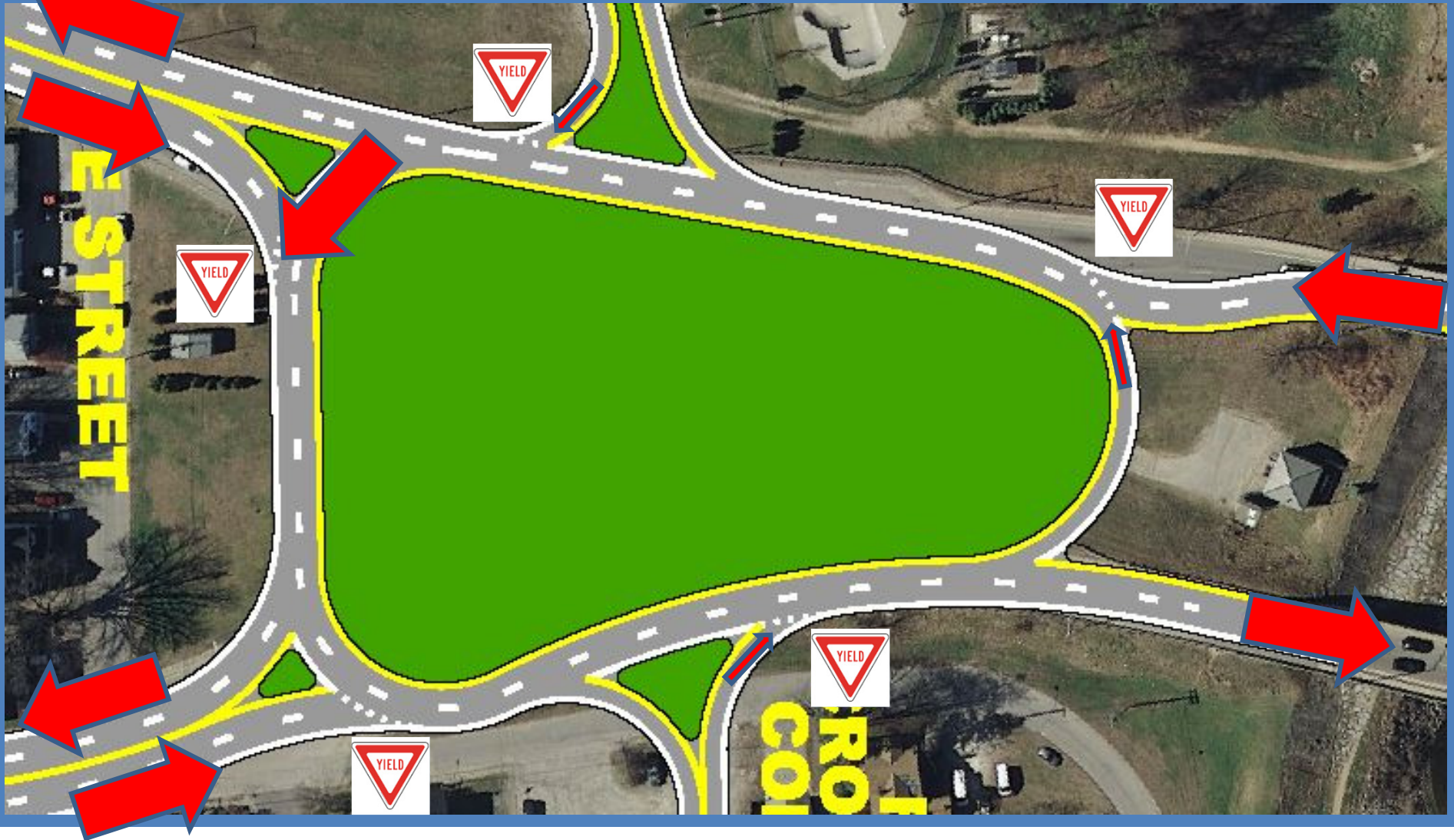
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## ROUNDAABOUTS



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# ROUNDBABOUTS w/ METERING



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Improve Mobility of All Users

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# SIGNALIZED INTERSECTIONS



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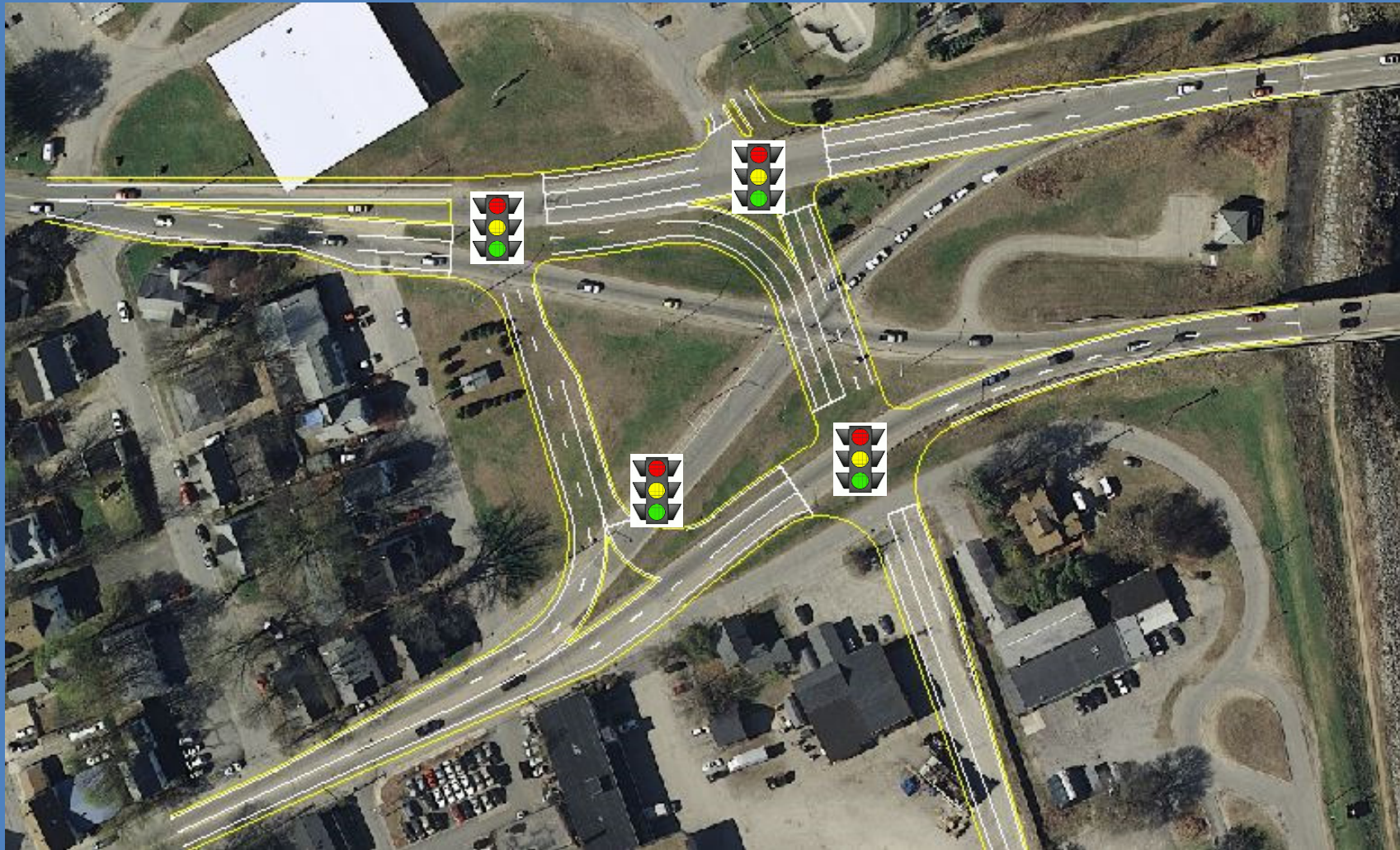


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# East Hollis / Bridge Street Intersection Improvement Project

## Landscape Improvements Concept 1



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# East Hollis / Bridge Street Intersection Improvement Project

## Landscape Improvements Concept 2



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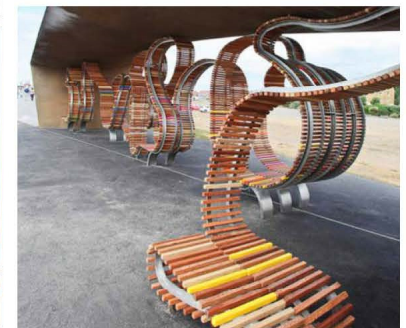
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Gateways / Art Elements / Historical Features



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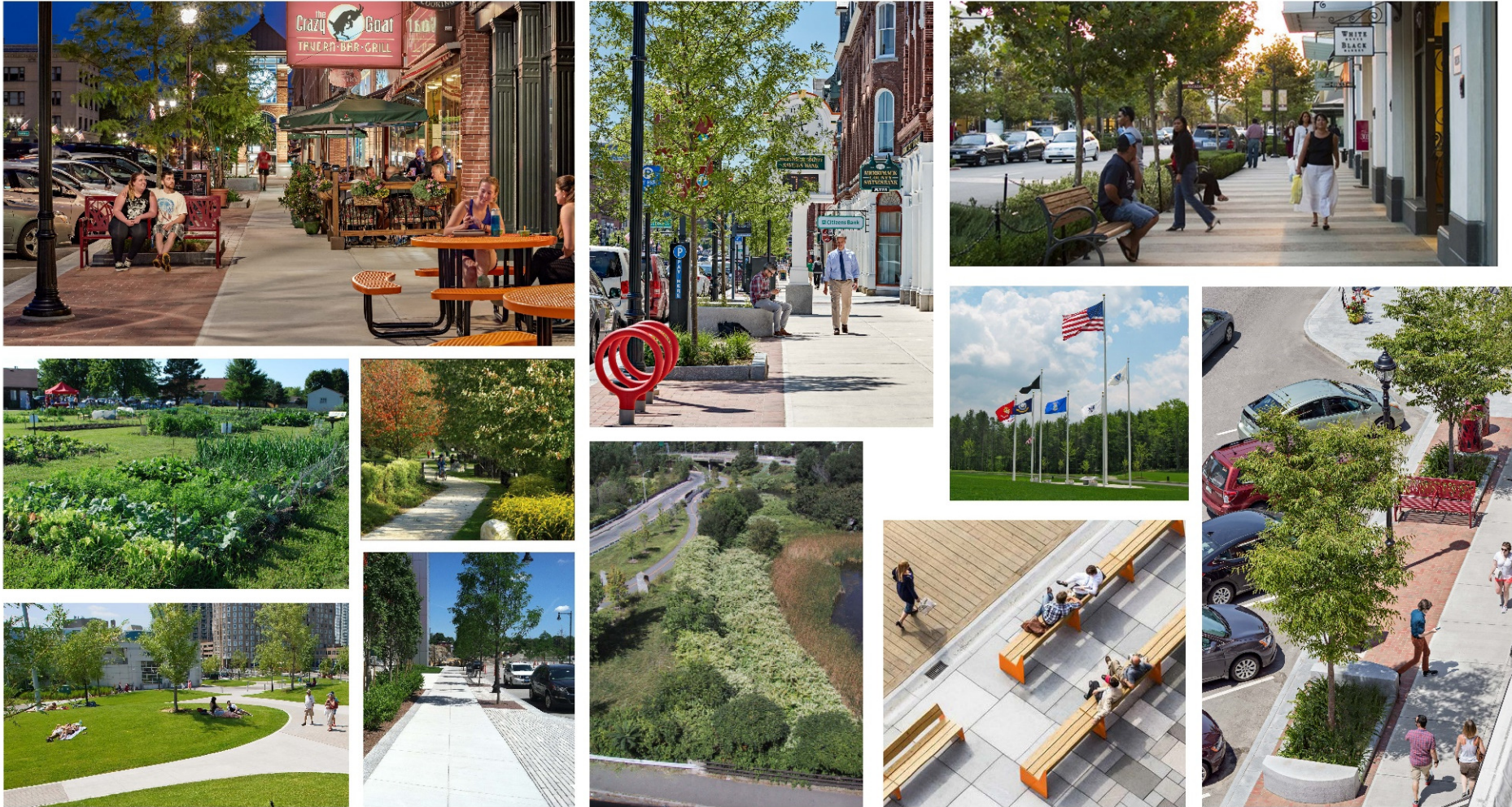
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# East Hollis / Bridge Street Intersection Improvement Project

## Streetscape and Park Imagery



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# East Hollis / Bridge Street Intersection Improvement Project

## Typical Street Trees and Planting



*Acer x freemanii*



*Acer x freemanii*



*Honey Locust*



### DECIDUOUS TREES -

*Acer x freemanii*: Armstrong Red Maple

*Ginkgo biloba*: Ginkgo

*Gleditsia triacanthos* "Skyline": Skyline Honeylocust

*Platanus x acerifolia*: London Plane Tree

### ORNAMENTAL TREES-

*Cercis canadensis*: Eastern redbud

*Cornus florida*: Dogwood

### GROUNDCOVER AND PERENNIALS-

*Juniperus Horizontalis* 'Wiltonii': Blue Rug Juniper

*Liriope Muscari*: Blue Lilyturf

*Heemerocallis*: Daylilies

*Pennisetum alopecuroides*: Fountain Grass

*Rudbeckia fulgida* 'Goldstrum': Blackeyed Susan



*Ginkgo biloba*



*Ginkgo biloba*



*Cornus florida*



*Gleditsia triacanthos* fall color



*London Plane tree*



*Cercis canadensis*



*Juniperus Horizontalis* 'Wiltonii'



*Heemerocallis*



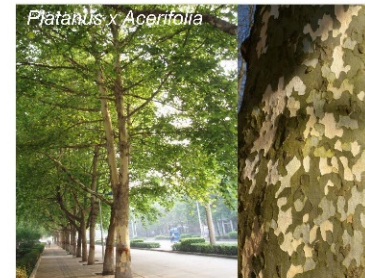
*Liriope muscari*



*Fountain Grass*



*Rudbeckia fulgida*



*Platanus x Acerifolia*



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# East Hollis / Bridge Street Intersection Improvement Project

## SITE AMENITIES - Contemporary



### BENCH -

Landscape Forms: Neoliviano Bench

### TRASH/RECYCLING RECEPTACLE -

Landscape Forms: FGP Trash Receptacle

### BIKE RACK -

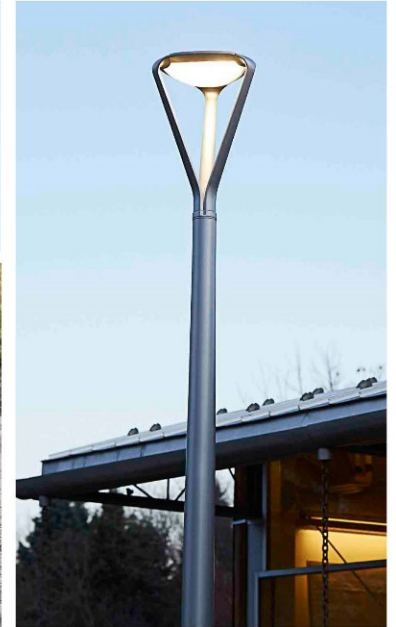
Landscape Forms: MultipliCITY Bike Rack

### TREE GRATE -

Urban Accessories: Jamison Tree Grate

### LIGHT -

Landscape Forms: FGP Pedestrian Light



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# East Hollis / Bridge Street Intersection Improvement Project

## SITE AMENITIES - Traditional / Contemporary



### BENCH -

Landscape Forms: Scarborough Bench

### TRASH/RECYCLING RECEPTACLE -

Landscape Forms: Scarborough Trash Receptacle

### BIKE RACK -

Forms + Surfaces: Trio Bike Rack

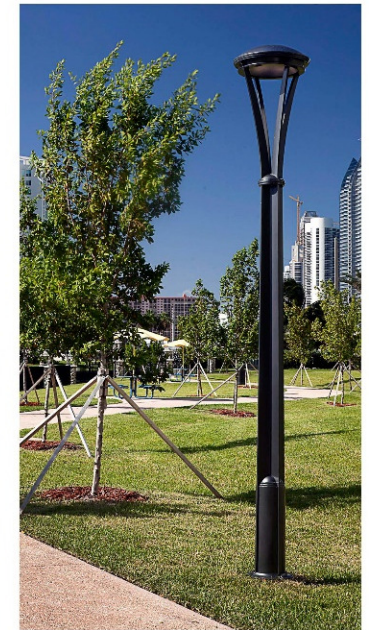
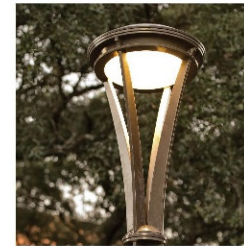
### TREE GRATES -

Urban Accessories: Coho Tree Grate



### LIGHT -

Landscape Forms: Alcott Pedestrian Light



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# East Hollis / Bridge Street Intersection Improvement Project

## SITE AMENITIES - Traditional



## BENCH -

Landscape Forms: Plainwell Bench

## TRASH/RECYCLING RECEPTACLE -

Landscape Forms: Plainwell Litter

## BIKE RACK -

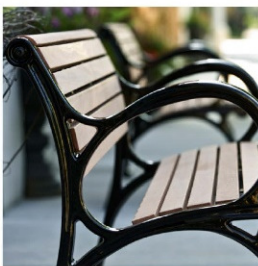
Victor Stanley: BK - 4

## TREE GRATE -

Urban Accessories: Fan Tree Grate

## LIGHT -

Sentry Electric: SBP Battery Park



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# East Hollis / Bridge Street Intersection Improvement Project

## DECISION MATRIX DISCUSSION

### Mobility

- Bicycle & Pedestrian Facilities Enhanced

### Access

- Connections to North & South of Intersection

### Land Use

- Improvements Support Future Vision

### Traffic

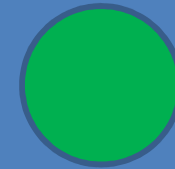
- Impact to Delay, Queues, & LOS

### Aesthetics

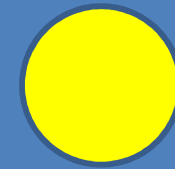
- Improved Gateway
- Additional Greenspace

### Cost

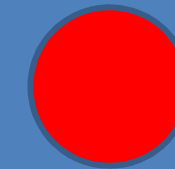
- What is Total Estimated Cost?
- Within Budget



Good



Fair



Poor



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# QUESTIONS / COMMENTS

[www.nashuagatewayproject.com](http://www.nashuagatewayproject.com)



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