53 Regional Drive Concord, NH 03301



Tel: (603) 225-2978 Fax: (603)225-0095

CONFERENCE REPORT

PROJECT:	Dover-Somers (MJ Project No		DATE OF MEETING	ETING: September 15, 2022					
LOCATION:	Virtual (Teams	s)		TIME	11:00 AM				
SUBJECT:	Working Group	p Meeting #4							
ATTENDED	BY:								
NHDOT:	W. Johnson	T. Zanes							
COAST:	M. Williams								
Dover:	D. Benton	J. Semprini	K. Mavrogeorge						
Rochester:	M. Bezanson	R. O'Connor	S. Saunders						
Somersworth:	M. Mears	M. Bobinsky							
SRPC:	C. Lentz								
MJ:	G. McCarthy	S. Lister							

PROJECT DESCRIPTION:

This project involves the study of improvements to NH Route 108 from the vicinity of the intersection with Indian Brook Drive in Dover extending north to the vicinity of the intersection with Innovation Drive in Rochester, approximately 4.4 miles. The objective of the project is to develop an alternative that will improve the safety and mobility of all users by applying 'Complete Street' principles with the central goal of achieving an appropriate balance between the needs of non-motorized, transit, and motorized users of the corridor.

NOTES ON MEETING:

W. Johnson introduced the project and led a round of attendee introductions. The members from Dover indicated that Amelia DeGrace should be included in future working groups. G. McCarthy gave a PowerPoint presentation to the group to introduce the project to new members of the Working Group and update the continuing members on project progress as well as to receive feedback from the Working Group.

PLANNING, ENGINEERING AND CONSTRUCTION ADMINISTRATION CONSULTANTS

The following topics were presented, please see the attached presentation.

- o Project Limits/Status
- Purpose and Need
- o Traffic Analysis
- o Alternatives Development/Proposed Improvements
- Next Steps

Purpose and Need Statement

- C. Lentz stated that the language surrounding buses makes them seem like a hinderance to motorized travel and indicated that the language should recognize transit as an equal participant in a Complete Street. C. Lentz reiterated that bus pull offs are for the benefit of automobiles, not transit users.
- It was requested to consider transit vehicles in the bus pull off design. Bus pull offs delay transit.
- G. McCarthy stated that the language in the Purpose and Need statement comes from public comments but that a balance would need to be found to include transit as an equal partner.

Traffic Analysis

• G. McCarthy briefly explained the microsimulation model used to analyze traffic along the corridor for those who are new to the project.

Alternatives Development/Proposed Improvements

- G. McCarthy spoke to the alternative development process which has led the design team to the current alternative being progressed and displayed various typical roadway cross sections along the corridor which meet the needs of the respective segments.
- The question was asked if plans could be made available to the Working Group. *Plans were sent to the Working Group on September 18, 2022, with a list of questions to assist in the design.*
- C. Lentz added context to the project location by informing the Working Group that this project came out of a previous Exit 10 study and another Economic Growth/Development study is being planned for 2024 to study a possible connection from Route 16 to Route 108 by adding an exit to Route 16, creating Exit 10.
- An example of a bus pull off design was shown. M. Bobinsky stated he liked the pull off design and asked if there was space to add bus shelters. G. McCarthy stated that only pull offs have been designed at this time, no shelters have been designed yet, but that there is potential to include some shelters. W. Johnson clarified that if COAST provides a prioritized list of locations for shelters, NHDOT will review. M Williams stated that shelters are easier to add retroactively if they are included in the initial planning of the bus stop, i.e., include an open space for a future pad and shelter in the right-of-way (ROW) so COAST can pursue adding shelters when funding is available. W. Johnson indicated that space for shelters can be included in the design, but a maintenance agreement would need to be in place prior to the public hearing.
- M. Bobinsky asked whether the preferred alternative remains within the existing ROW. G. McCarthy responded that part of the design process is to identify property impacts and confirm locations where there are ROW impacts prior to a public hearing. Acquisitions will likely be required for roadway widening and the Best Management Practices (BMPs).
- M. Williams indicated that bus stops with low ridership (such as the one between Sherman Street and Lake Street in Dover) should be kept as in roadway stops in lieu of being removed, however bus pull offs at these locations would not be added.

CONFERENCE REPORT

- W. Johnson asked the Working Group to provide an opinion on the best course of action moving forward to create a clear physical and visual barrier between Route 108 and Old Rochester Road in Dover. The City of Dover may prefer to have guardrail or concrete barrier, or another solution at this location.
- W. Johnson asked the City of Somersworth if the City would like to create an urban compact for Route 108 in Somersworth. M. Bobinsky responded that the sidewalk and landscaping would be the extent of what the City can reasonably maintain and did not want to pursue an urban compact.
- G. McCarthy posed the question of traffic control devices at Willand Drive in Somersworth; a roundabout was previously mentioned as a possible solution. M. Bobinsky mentioned that a sports complex is proposed on Willand Drive and that some form of traffic control, a signal or roundabout, may need to be investigated.
- Tri-City Dodge is planning to expand with a new dealership opposite the current facility, this may conflict with the proposed BMP. *M. Mears sent these plans to MJ during the Working Group meeting on September 15, 2022.*
- Will Todd's Touch need to be a full acquisition? MJ responded that there is the possibility of a full acquisition for this parcel as some of the area the business is currently using is within the NH 108 Right-of-Way.
- M. Williams to review closely spaced bus stops with low ridership (such as Clarks Way) with a view to removing superfluous stops that will not negatively impact ridership.
- S. Saunders posed the question of adding pedestrian accommodations for safe crossing. G. McCarthy stated that pedestrian crosswalks are presently only included at signalized intersections and will include pedestrian signal heads. W. Johnson indicated that pedestrian signals and crosswalks at signalized intersections will be under the jurisdiction of NHDOT for maintenance and that should any mid-block crossings be established those would be the responsibility of the Cities to maintain. A prioritized list of mid-block crossing locations was requested for the DOT to review. A limited number of locations may be able to be included in the project. W. Johnson mentioned that pedestrian hybrid beacons (PHBs) and rectangular rapid flashing beacons (RRFBs) are costly to install and maintain.
- M. Williams stated that the proposed bus pull-off at the So'Field Apartments should be moved either further North away from the signalized intersection with Innovation Drive or south of the intersection. G. McCarthy stated the bus stop pull-off will be moved to the south side of the intersection.
- M. Bobinsky inquired about the limits of sidewalk on both sides on Route 108 in Somersworth. G. McCarthy confirmed the proposed limit of Work Way. M. Bobinksy will reaffirm this limit with the City of Somersworth.
- M. Bobinsky indicated that the City needed to consider the pros and cons of the grass panels. They are nice, but tough to maintain. He inquired as to what would be planted in the grass panel and if it would be no mow or at least drought resistant planting/grass. Streetscape features such as trees, landscaped islands, etc., are pending items and will be determined once a configuration is established. W. Johnson indicated that streetscape features would be reviewed once the limits of the grass panel are determined. Where and how much to be included will be discussed with the Cities at that time. Streetscape features will become the respective City's responsibility to maintain.
- S. Saunders informed the Working Group that the So'Field Apartments are planning an expansion of approximately fifty units, and that a new courthouse is planned to be built to the southeast of the intersection with Innovation Drive. C. Lentz also noted that a new warehouse will also be coming to Innovation Drive; Pella Windows already has a warehouse here.
- M. Williams suggested moving the bus stop located near Innovation drive for SB traffic to the south side of the intersection, the northbound stop at this location looked acceptable.
- C. Lentz asked the question of how the project will balance the available budget and the proposed improvements with respect to which items get cut first, and how that is determined. W. Johnson replied that before any items are cut a balance can be found within the project, i.e., reducing or removing the grass panel in certain areas to gain space for bus shelters or to remove ROW impacts to preserve the

sidewalk in those locations. Alternative funding sources may be available to supplement the existing budget for small quantities of certain items such as bus shelters. There may also be additional funding to account for the recent inflation.

Next Steps

- Cities to have comments on proposed improvements by the time of the next working group meeting.
- The next meeting is scheduled for October 27, 2022, at 1:00 PM, with a bus stop site review scheduled for 10:00 AM that same morning.

Action Items

- 1. Somersworth to confirm proposed sidewalk limits are acceptable.
- 2. COAST and Cities to provide prioritized lists of locations for mid-block crosswalks.
- 3. MJ to revisit traffic control (roundabout and signal) alternatives at Willand Drive/ Brenda Avenue.

Submitted by:

Scott Lister McFarland Johnson, Inc.

Attachments: Presentation General Plans

NH Route 108 Complete Streets Improvements Dover – Somersworth - Rochester 29604

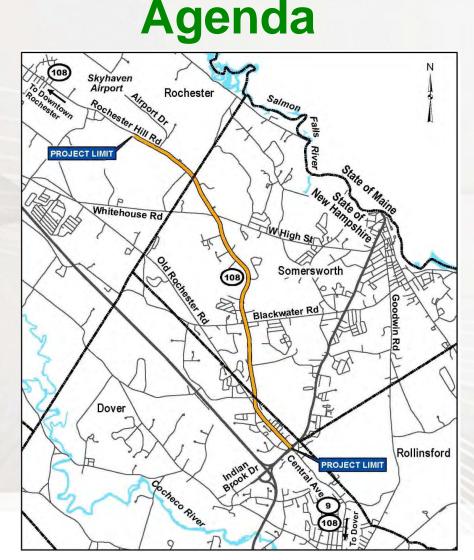
Working Group Meeting

September 15, 2022





- 1. Working Group
- 2. Project Limits / Status
- 3. Purpose and Need
- 4. Traffic Analysis
- 5. Alternatives Development
 - a. Conceptual Typical Sections
 - b. Intersection Concepts
- 6. Proposed Improvements
 - a. Corridor Concepts
 - b. Conceptual Cost Estimates
- 7. Next Steps



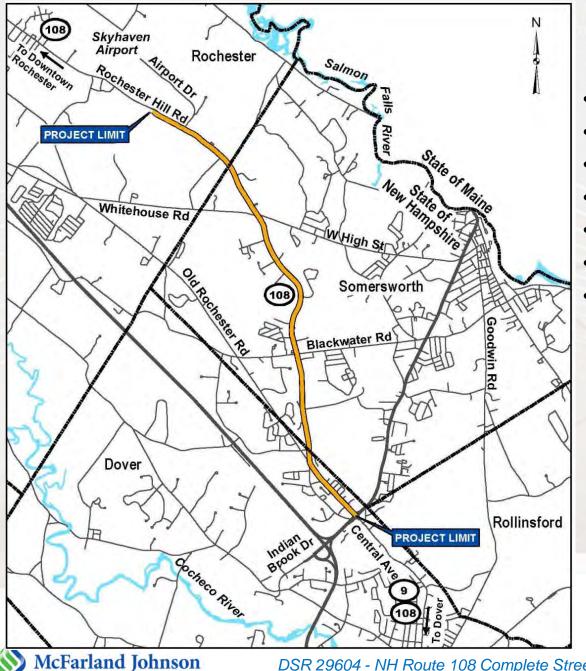




NH Route 108 Complete Streets Working Group								
Name/Position	Affiliation							
Rad Nichols, Executive Director	COAST Bus							
Michael Williams, Director of Operations	COAST Bus							
Christopher Parker	City of Dover							
Donna Benton , Director of Planning & Community Development	City of Dover							
Jill Semprini, City Planner	City of Dover							
John Storer, Community Services Director	City of Dover							
Ken Mavrogeorge, City Engineer	City of Dover							
Michelle Mears, Director of Planning & Community Development	City of Somersworth							
Mike Bobinsky, Director Engineering	City of Somersworth							
Amber Hall, City Engineer	City of Somersworth							
Peter Nourse, Director of City Services	City of Rochester							
Michael Bezanson, City Engineer	City of Rochester							
Shanna Saunders, Director of Development & Planning	City of Rochester							
Ryan O'Connor, Senior Planner	City of Rochester							
Jen Czysz, Executive Director	Strafford Regional Planning Commissio							
Colin Lentz, Sr. Transportation Planner	Strafford Regional Planning Commissio							
James Burdin, Sr. Regional Planner	Strafford Regional Planning Commissio							



McFarland Johnson Planning, Engineering & Construction Administration



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Project Limits

- 4.4 Miles
- 3 Cities (part Urban Compact)
- 2 / 3 Lanes
- Shoulders Vary
- Minimal Sidewalks
- Existing Concrete Slab
- COAST Bus Route 12





Project Status

- Project Working Group (WG)
- Public Listening Sessions & Walking Tour
- Developed Purpose and Need Statement
- Conducted Traffic Analysis > 3 Lane Recommendation
- Developed Various Typical Sections for Consideration
- Developed Various Intersection Concepts for Consideration
- Based on WG comments / preferences Proposed
 Improvements were developed







Purpose and Need

Purpose

The purpose of the NH Route 108 Complete Streets Improvements project is to provide a corridor that accommodates various modes of travel including cars, trucks, public transit, bicycles and pedestrians that incorporates safety improvements, while addressing daily congestion issues along the five-mile corridor in Dover, Somersworth and Rochester.





Purpose and Need

<u>Need</u>

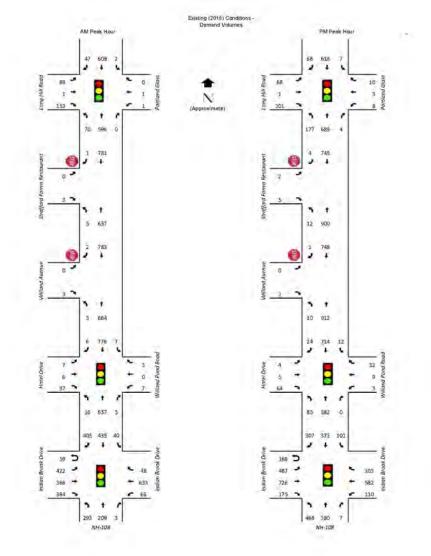
- Peak period traffic demand causes queuing and delays at key signalized intersections.
- Vehicles regularly travel at speeds above the posted limit throughout the corridor.
- Left turns from and to the corridor are difficult due to the high volume of traffic causing delays and safety concerns.
- Limited pedestrian facilities are present in the corridor.
- Formal Bicycle facilities are not present in the corridor.

d Johnson

- Buses stopping at the numerous bus stops along the corridor often block traffic, causing delays.
- Facilities for waiting passengers are not present at the majority of the bus stops.
- Streetscape and landscape elements are lacking along the corridor.



Traffic Information



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- Microsimulation Model
- AM/PM Peak Periods
- Vehicle Classifications
- Pedestrian Counts
- 2018 Existing Condition
- 2045 No Build
- 2045 Build



Traffic Analysis

A CARL AND A CARL AND A CARL AND A CARL	AM Peak Hour								_			
	20	18 No I	Build		45 No B			045 Bui		2	045 Bui	dB
ntersections	LOS	Delay	Queue	105	Delay	Queue	105	Delay	Queue	LOS	Delay	Queu
1. NH 108 & Innovation Drive							1.0			1.00		
Overall	A	9	8	A	10		В	10		В	10	- 3
EB	B	11	20	В	15	20	В	14	30	В	14	20
WB	В	12	50	В	13	60	В	13	60	В	13	60
NB	В	12	60	В	14	80	B	15	90	В	14	80
SB	A	7	60	Α	1	90	A	1	90	A	1	90
2. NH 108 & Haven Hill Road			1.11	1.5								
Overall	8	12	121	F	>100	- E.I	В	13		B	13	1.1
WB	E	47	200	F	>100	2180	C	15	140	C	15	130
NB	A	2	0	A	3	10	A	9	110	A	10	110
SB	A	1	30	A	2	70	B	14	200	8	14	210
3. NH 108 & Whitehouse Road/High Street				· · · · ·			1			100		
Overall	C,	23	(S)	¢	32	14	C	35		C	25	- 12
EB	В	18	60	C,	21	90	C,	32	140	C.	21	130
WB	C	28	110	D	40	180	D	50	170	С	34	130
NB	C.	27	180	C	33	200	C	28	220	C	26	100
SB	C.	21	240	C	32	360	C	34	430	C	22	160
12. NH 108 & Blackwater Road				1.1					_		-	
Overall	- C	34	-	TF.	>100	- e	D	51	14	C	23	
EB	C	21	120	C	30	190	D	35	150	C	23	100
WB	C	30	180	F	>100	660	F	82	290	C	31	160
NB	D	40	230	F.	>100	340	C	31	280	В	20	150
SB	D	40	340	F	>100	800	E	61	590	C	24	190
14. NH 108 & Willand Drive							1.0			1		
Dverall	A	8	-	D.	28	11	A	5		A	5	
WB	8	14	30	D	28	50	C	19	40	C	18	50
NB	A	5	0	C	17	20	A	6	0	A	5	Q
SB	8	11	170	E	38	450	A	4	40	A	4	40
16. NH 108 & Long Hill Road	1			1	_							
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EB	8	16	60	C.	20	80	C	28	110	C	28	120
WB	В	18	10	C	21	20	C	35	20	С.	32	20
NB	В	12	110	C	20	220	В	12	170	В	11	160
	8	15	190	C	32	250	В	18	220	G	20	220
19. NH 108 & Willand Pond Road	-	1.0		1.00	171		-					
Overall	A.	9	- 9	8	13	14.1	В	11	1.1	8	11	9
FB	В	12	50	В	14	60	B	12	60	8	12	60
WB	C.	28	30	C	32	30	6	17	30	C	21	20
NB	Α.	5	100	A	6	130	A	8	160	A	8	150
SB	В	15	190	C	24	230	В	16	220	В	15	190
20. NH 108 & Indian Brook Drive			1				1.00			1.4	1.0	
Overall	D	39		D	49	1	D	51		D	50	- 64
EB	C.	29	180	D	42	300	G	34	250	C	33	240
Ŵ B	D	45	210	Ε	64	350	F	85	450	Ē	82	430
NB	D	43	110	D	45	150	D	45	150	D	45	150
SB	D	55	190	E	65	260	E	59	240	E	59	240

FIGURE 11: AM PEAK HOUR LOS AND 95TH PERCENTILE QUEUE RESULTS

FIGURE 12: PM PEAK HOUR LOS AND 95TH PERCENTILE QUEUE RESULTS

	PM Peak Hour												
		2018 No Build			2045 No Build			2045 Build A			2045 Build B		
Intersections	LOS	Delay	Queue	105	Delay	Queue	105	Delay	Queue	105	Delay	Queu	
1. NH 108 & Innovation Drive									-				
1. NH 108 & Innovation Drive Overall	A	10	18	В	11		В	12		В	12	1.00	
EB		12	20	ß	13	20	В	12	20	В	11	20	
WB	В	12	60	В	14	70	В	13	60	8	14	70	
NB	В	12	70	В	13	80	В	15	100	B	15	90	
SB	A	6	70	A	7	80	A	7	80	A.	7	80	
a 2. NH 108 & Haven Hill Road						_					10		
Overall	A	3	1.2	A	7		E	13	20	B	14		
WB	C	21	60	E	50	120	C	16	60	C	17	70	
NB	10.000	<1	U	A	2	0	A	9	160	A	8	160	
SB	1.	4	90	A	7	170	c	18	240	C	22	280	
3. NH 108 & Whitehouse Road/High Street	<u> </u>	_					-			-		_	
Overall	C	24		D	36		c	32	1.4	C	23	-	
EB	1	18	40	B	19	60	c	27	70	c	22	70	
WB	c	29	80	č	33	110	D	42	120	c	33	10	
NB		28	250	D	47	420	D	35	360	č	23	14	
SB	10.000	18	140	č	23	210	c	23	210	B	19	10	
12. NH 108 & Blackwater Road	-			-			-			-			
Overal)	D	38	1.21	E	>100	1721	0	49	1.40	C.	24		
EB	1.11	51	200	Ť.	>100	600	F	81	200	D	36	10	
WB	- 10 C	78	290	F	>100	1620	E	56	190	c	31	13	
NB		31	250	E.	>100	300	D	48	320	B	18	17	
SB	1.	31	230	É	5100	630	D	54	520	ĉ	25	17	
14. NH 108 & Willand Drive	-			-		040	-	- af %		-			
Overall	8	12	1321	Ē	>100		в	11	1	B	10	1.3	
WB	B	30	100	F	>100	1520	1 P	65	200	F	57	20	
NB		4	0	A	9	30	A	4	10	A	4	10	
58	1.00	15	270	F	>100	1170	A	5	70	A	5	70	
16. NH 108 & Long Hill Road	-	- 40-	- 210	<u> </u>	P Ites	Lus	-		- 16				
16. NH 108 & Long Hill Road Overall	в	15	1.5	c	33	÷	в	17	1.14	c	20		
EB		15	50	c	23	70	C	29	80	1 c	20	8	
VB WB	1.1.1	19	30	c	23	40	D	40	80 50	c	34	51	
NB	11.00	19	120	c	28	180	B	40	160	B	34	16	
NB 58	1.	14	120	D	48	180	8	14	220	C	24	24	
19. NH 108 & Willand Pond Road	-		180	- U	40	204	-	16	220		24	2%	
	1 .	15	1	1	27	-	1 .	70		1	70	1.1	
	B	16		C	22		B	20	-	C	20		
EB W8		9 16	30 40	B	13 19	50 50	BC	13 20	40 50	BC	13 22	41	
S.F.	1.1.6												
NB		14	190	B	17	260	B	19	280	B	18	26	
SB	C	21	180	C	34	250	C	24	260	C	.24	25	
20, NH 108 & Indian Brook Drive	1.	-	I				1.	24		1			
Overall Overall	E	55		F	>100	1.5.	E	64	12.	E	64	1.2	
EB		44	320	F	>100	1120	E	60	480	E	59	48	
WB		62	250	E	68	330	E	71	350	E	70	34	
NB		66	260	F	>100	1160	E	67	290	E	65	30	
SB	E	70	190	E	78	240	E	75	230	E	75	25	

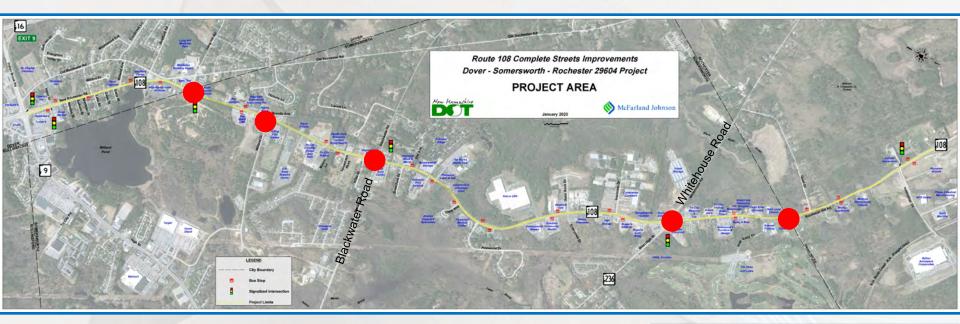
PM Peak Hour

AM Peak Hour





Alternatives Development

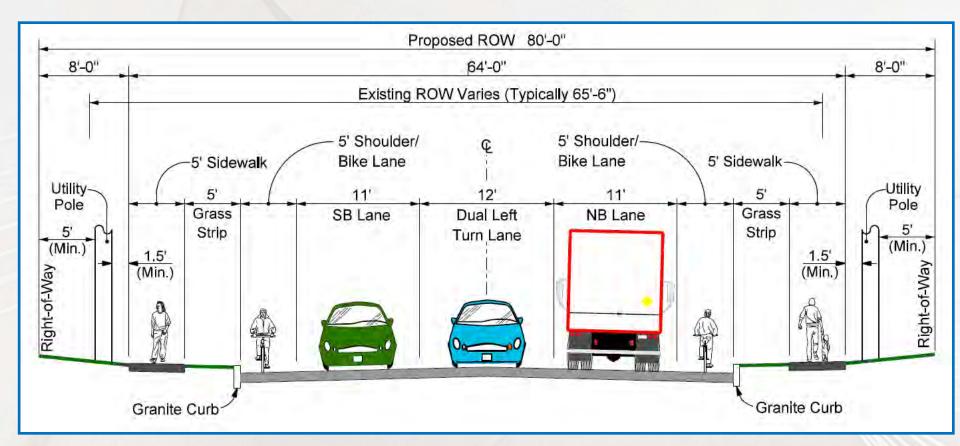


- Route 108 Lane Configuration
 - 2, 3, 4 & 5 Lanes
- Shoulder/Bike Lanes
- Sidewalk Accommodation
 - One vs Both sides of Route 108
- Intersection Configuration at Key Locations
 - Signalization
 - Roundabouts



10 Department of Transportation

Alternatives Development – Typical Section

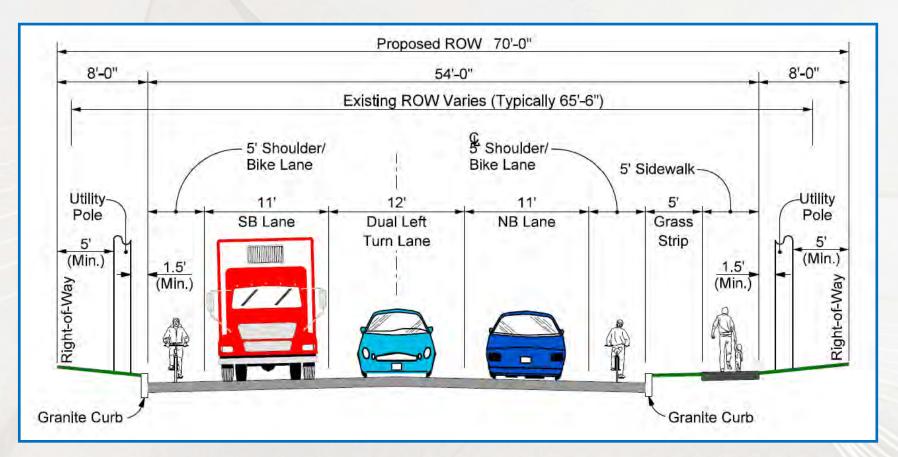


Typical Section – Three Lanes with Bike Lanes & Sidewalks on Both Sides (Willand Pond Road to Works Way – 2.0 mi)

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Alternatives Development – Typical Section



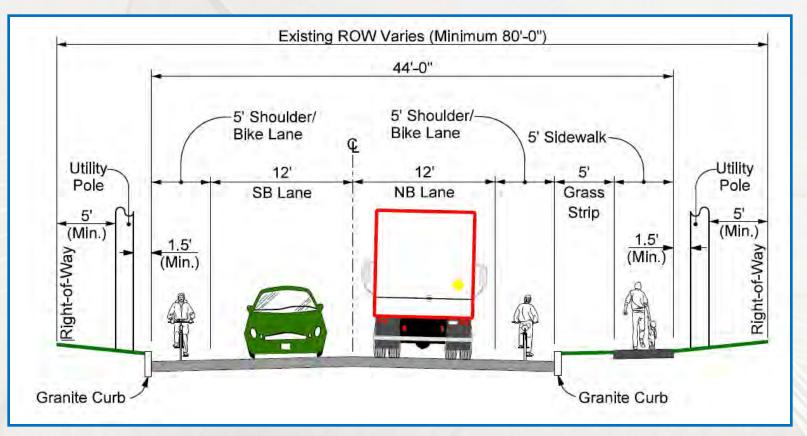
Typical Section – Three Lanes with Bike Lanes & Sidewalk on East Side Only (Works Way to Haven Hill Road – 1.8 mi)

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g. Engineering & Construction Administrat



Alternatives Development – Typical Section



Typical Section - Two Lanes with Bike Lanes & Sidewalk on East Side Only (Haven Hill Road to Innovation Drive – 0.6 mi)

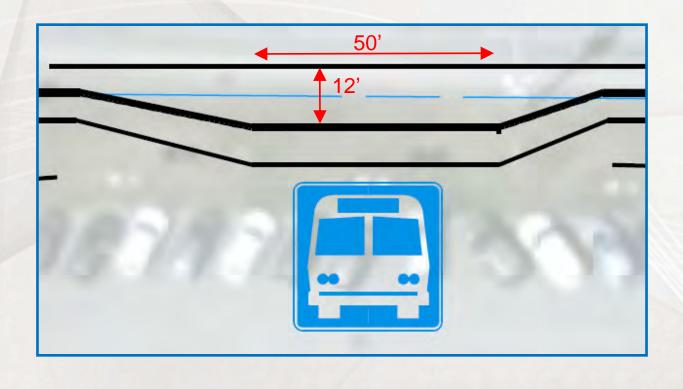


DSR 29604 - NH Route 108 Complete Streets Improvements



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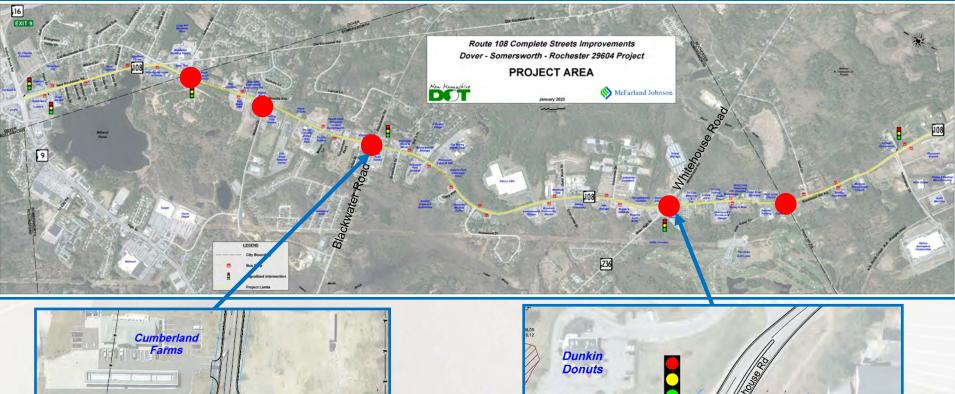
Proposed Bus Pull Out



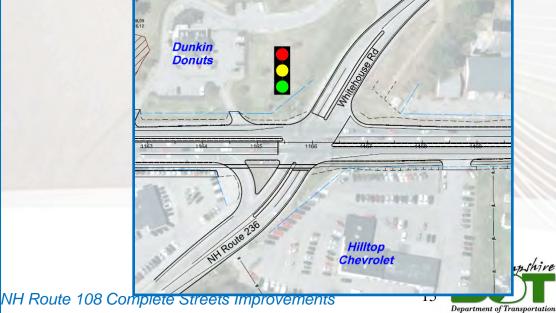




Alternatives Development – Intersections







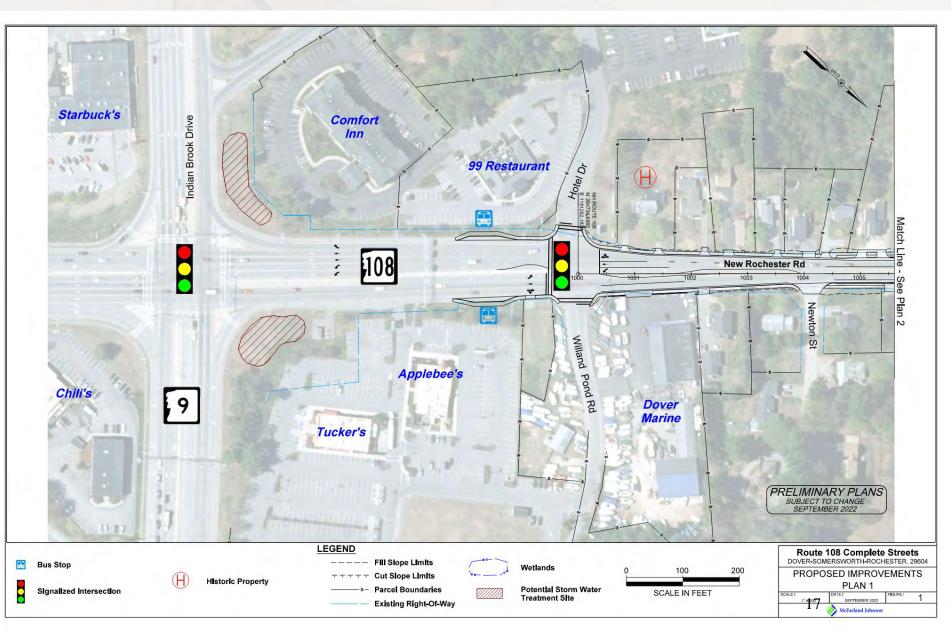
Alternatives Development – Corridor Concepts

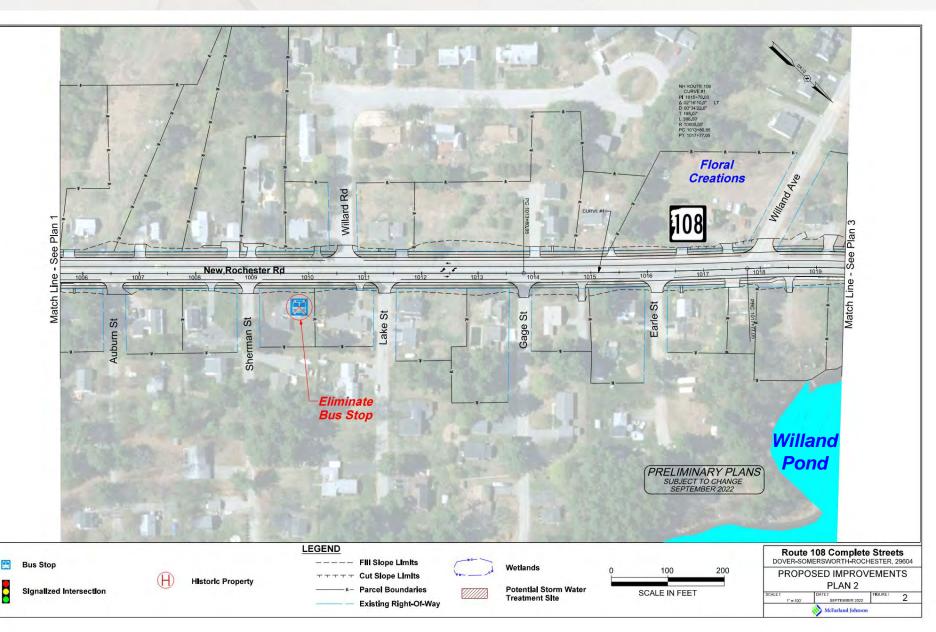


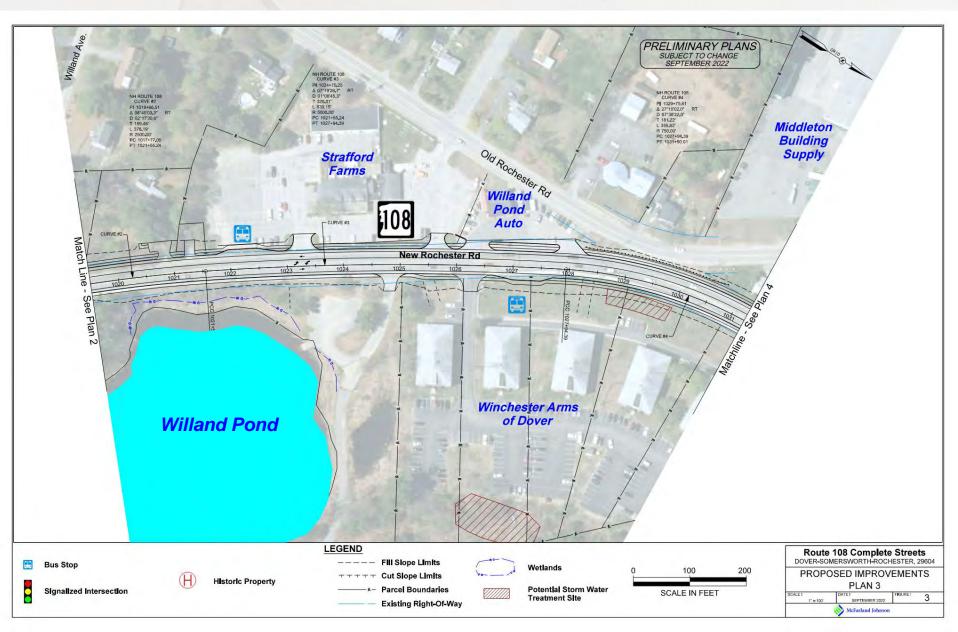
- Developed Corridor Layout based on Typical Sections
- Identified Bus Stop Locations with Pull-Outs
- Conducted a Stormwater Evaluation Identified Treatment Sites
- Prepared Conceptual Cost Estimate

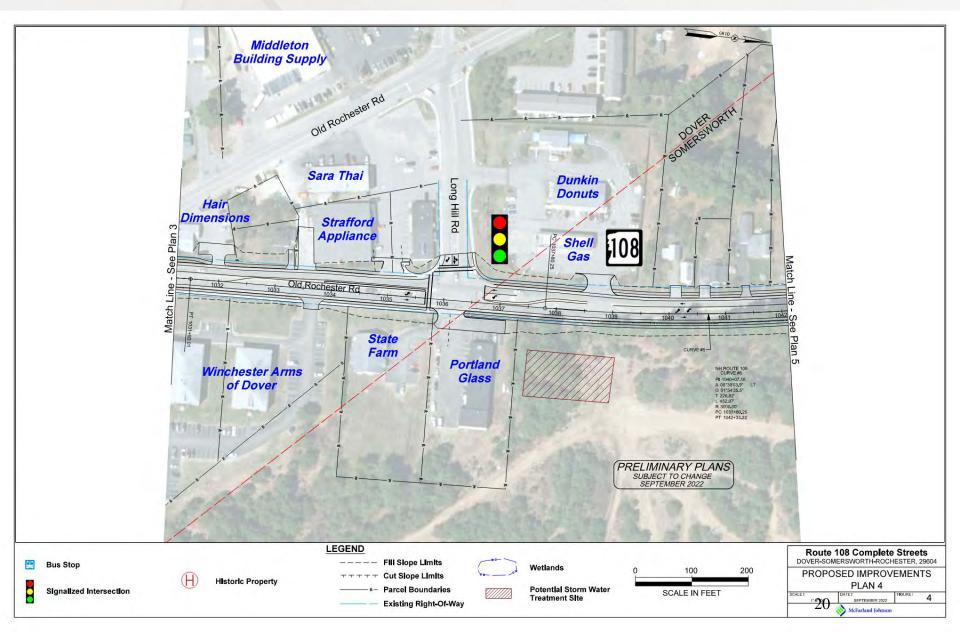


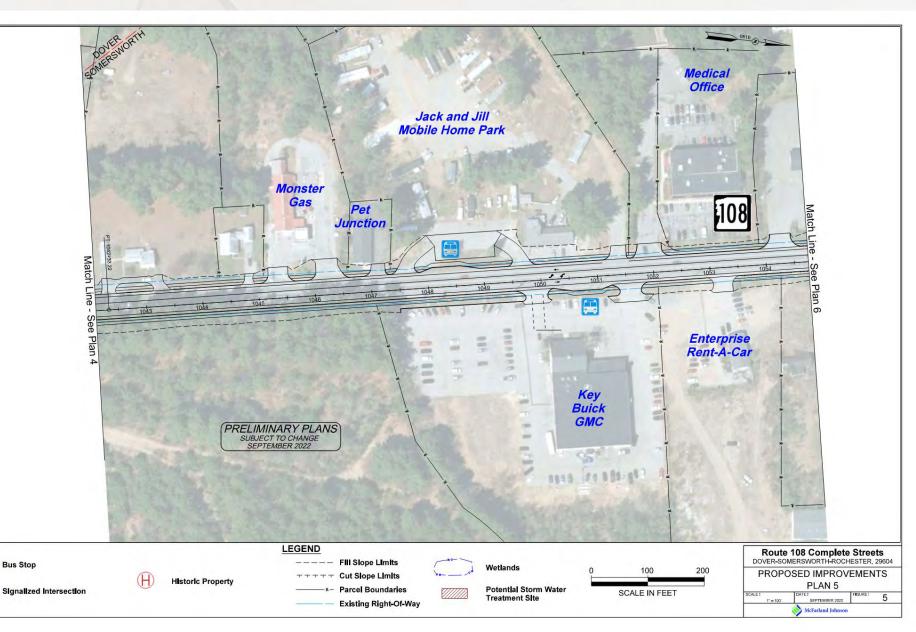


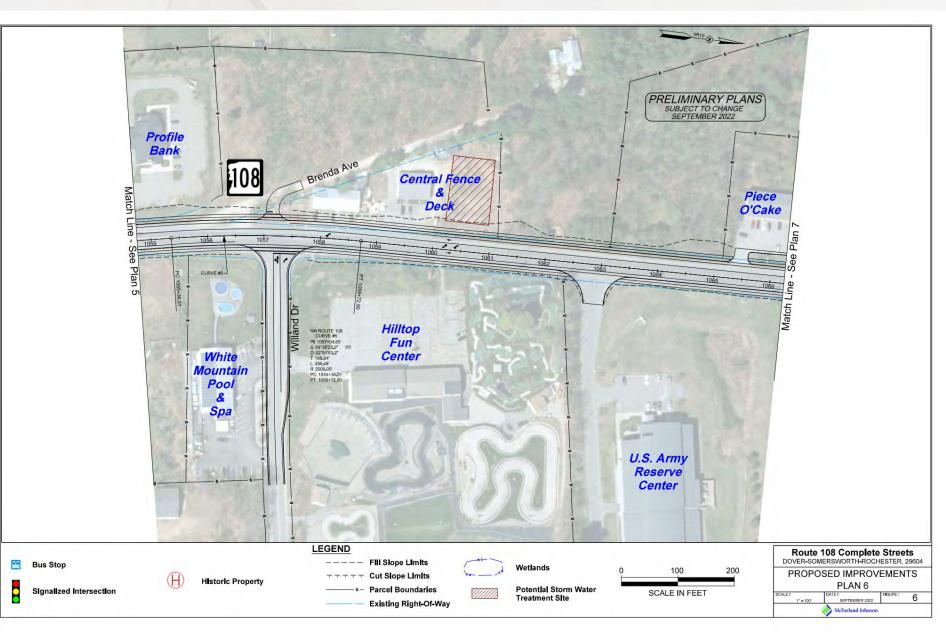


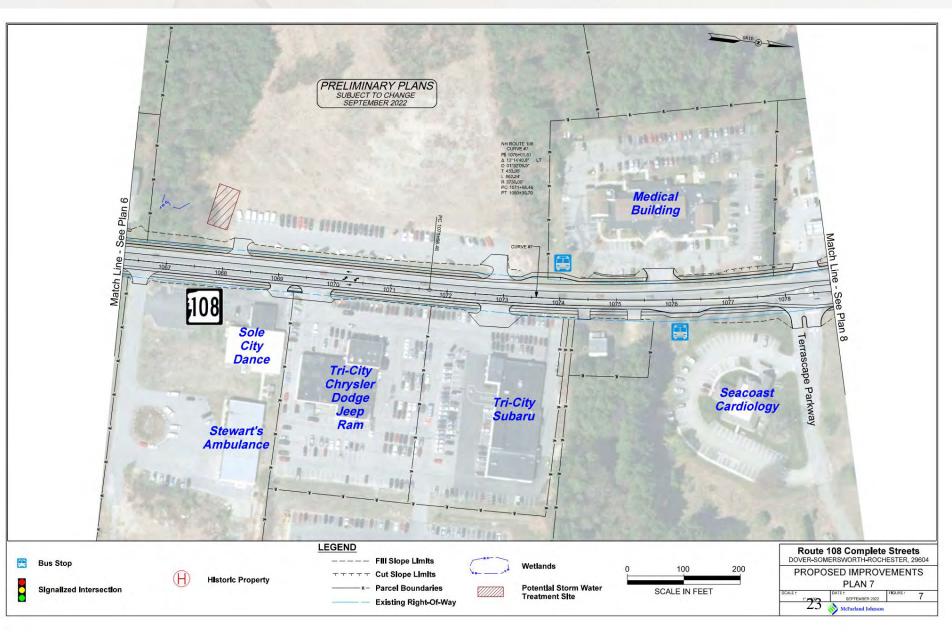


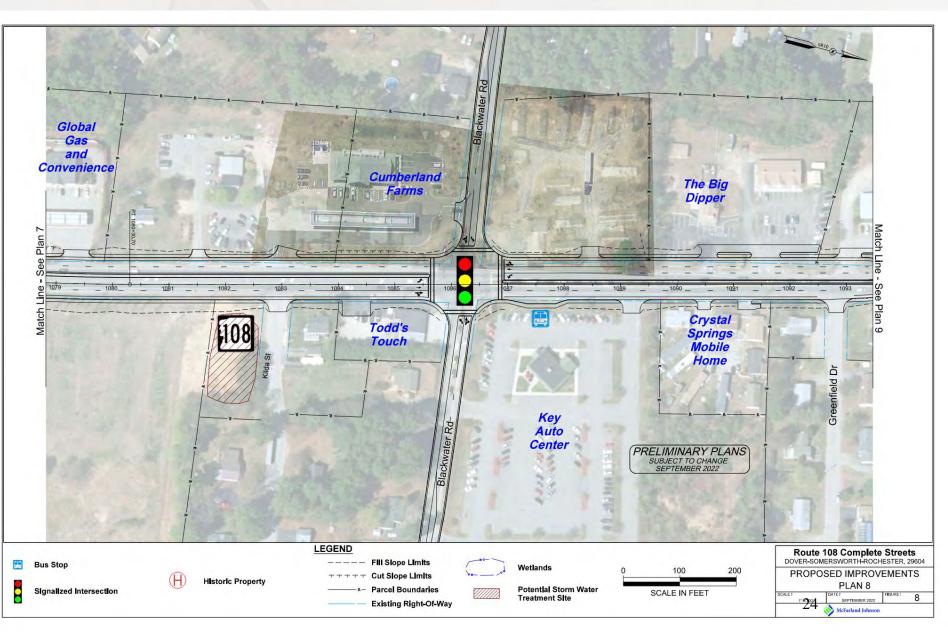


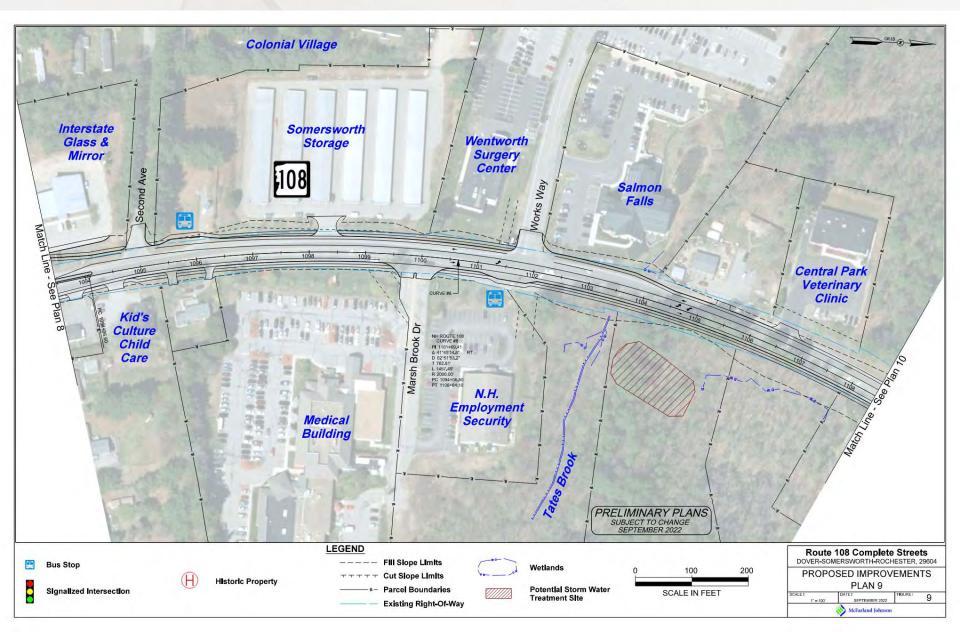


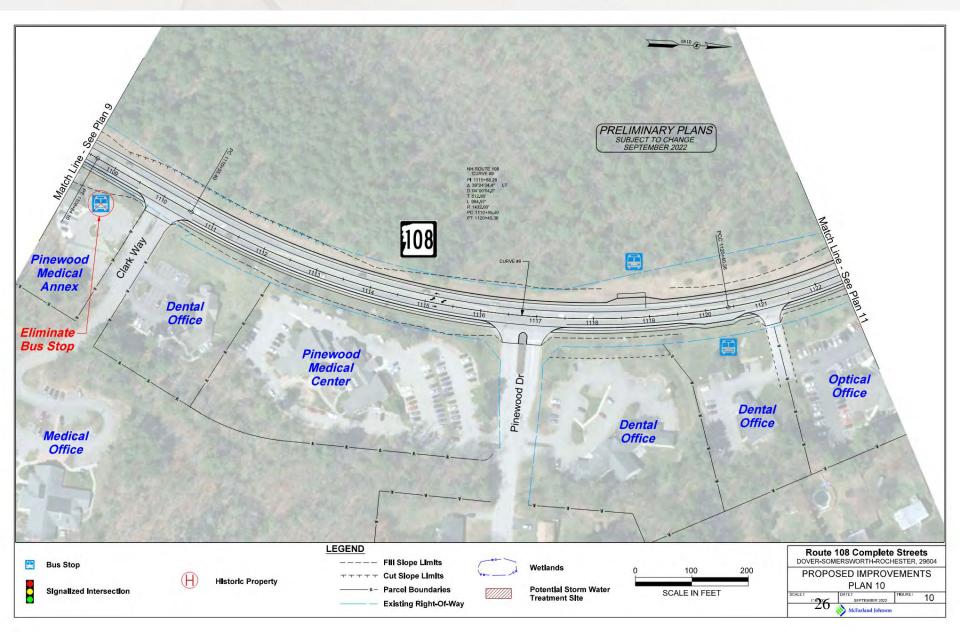


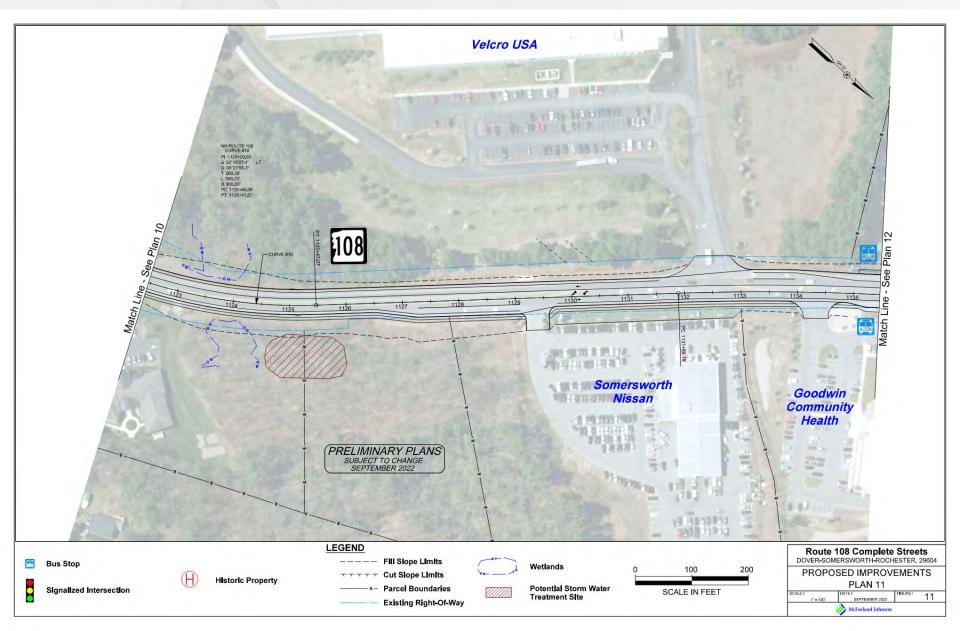


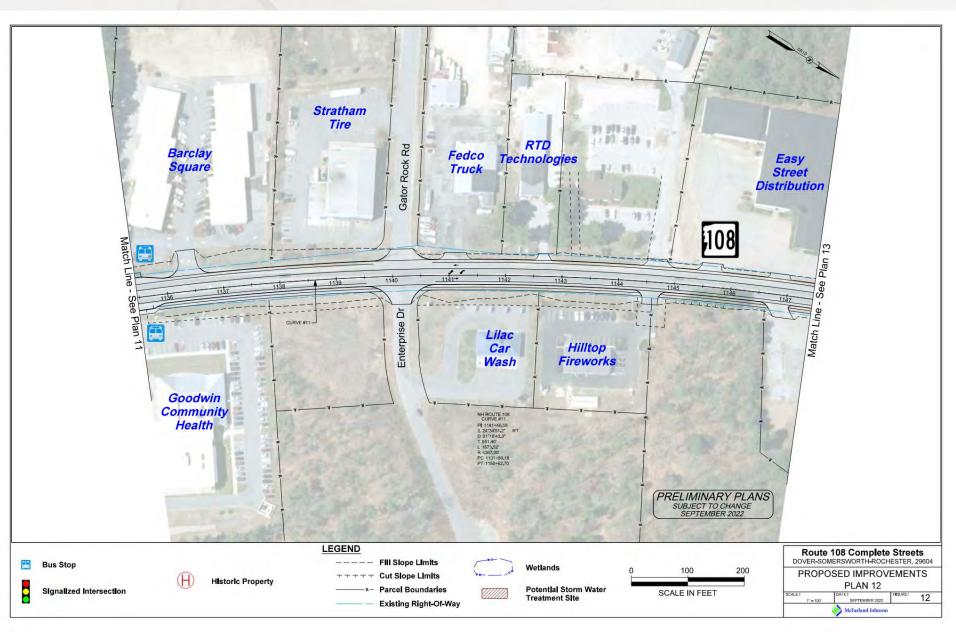


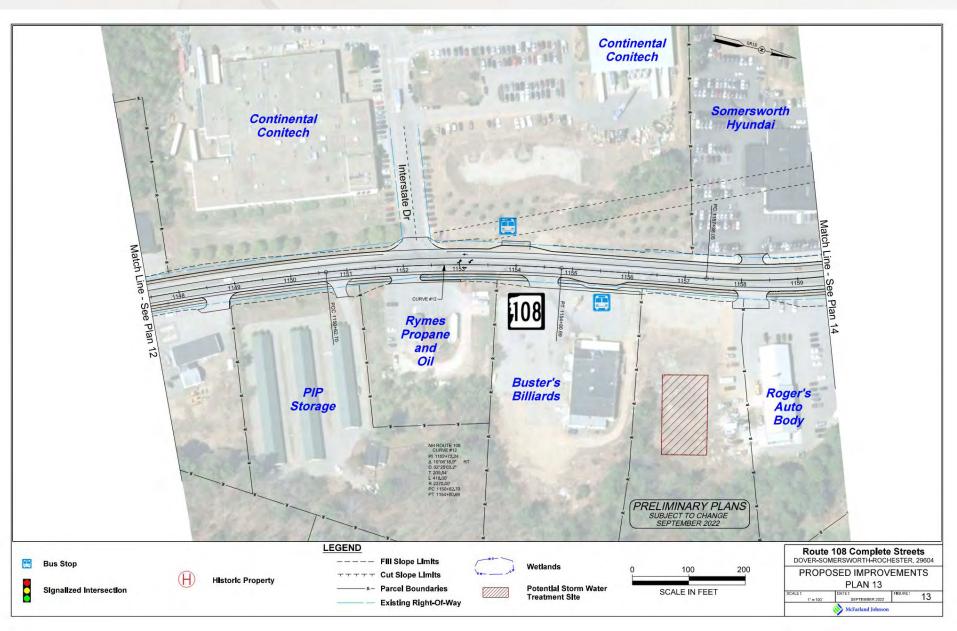


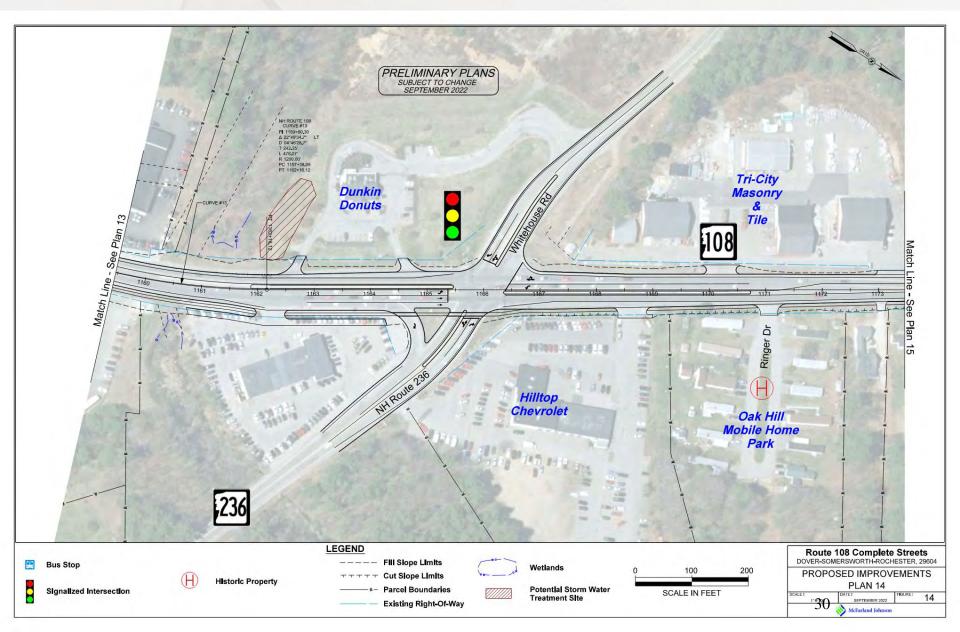


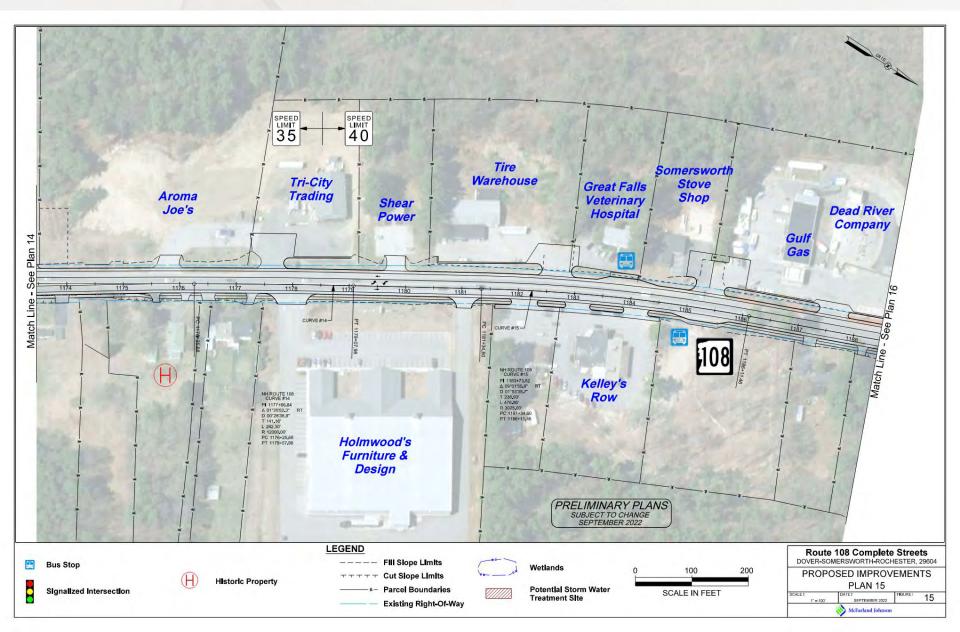


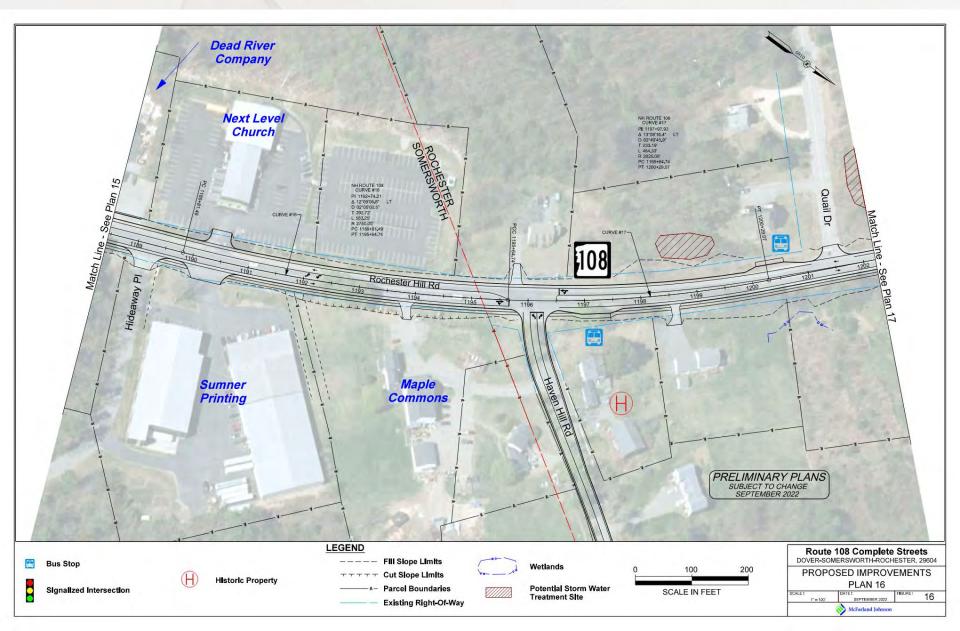


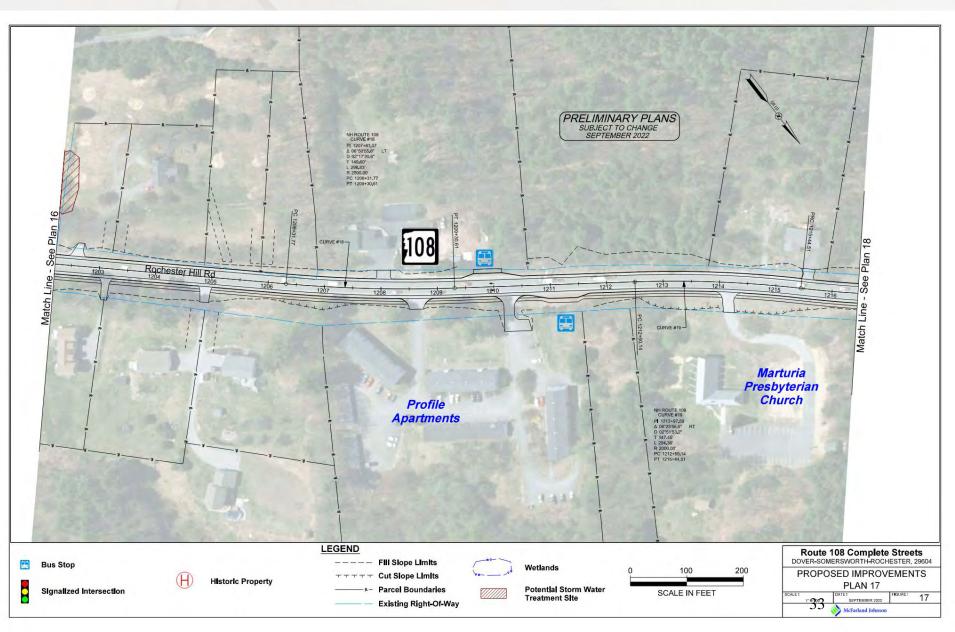


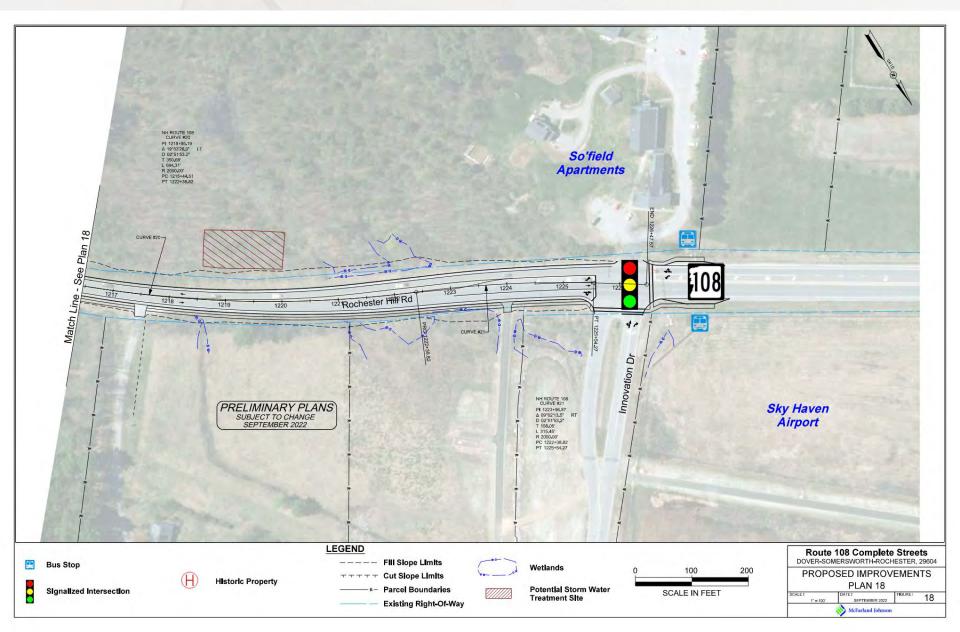












Cost Estimate Elements

- Removal of Existing Concrete Slab (3.5 mi about 18' wide)
- Full Box Reconstruction and Widening
- TCP challenging to remove slab and maintain traffic
- New Closed System Drainage
- Stormwater Treatment
- New Sidewalks
- New Traffic Signals (4 Sites)
- Bus Pull Outs
- Bus Shelters





Cost Estimate (2022\$)

 Construction Sub-Total 	=	\$31.0 M	Progrm.
(Includes Construction Engineering)			
- Mitigation / ARM	=	\$ 0.3 M	
 Utility Relocation (Unknown) 	=	\$ 0.0 M	
Construction Total	=	\$31.3 M	\$22.6 M
 Design Engineering 	=	\$3.4 M	\$ 3.4 M
 Right-of-Way 	=	\$1.3 M	\$ 1.3 M
TOTAL PROJECT	=	\$36.0 M	\$27.3 M





Next Steps

- Gain Consensus from the Working Group on the Proposed Improvements (September 2022)
- Working Group Meeting (October 2022)
- Hold Public Informational Meeting (Winter 2022/2023)
- Public Hearing (Spring 2023)





Questions/Comments



