



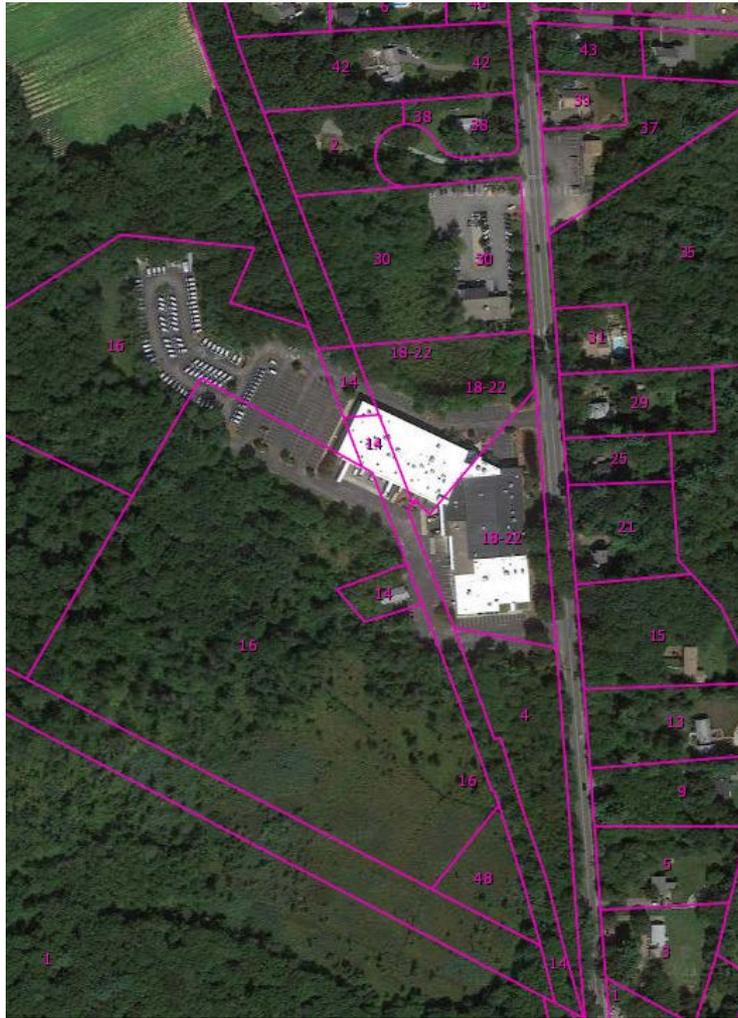
**Assabet River Rail Trail (ARRT)**  
Town of Acton Conservation Commission Hearing

April 1, 2015

# Project Description – 75% Design

- ARRT through Maynard and Acton is a 3.42-mile long segment of a multi-use recreational trail.
- Work includes;
  - *Construction of paved 8 to 12 foot wide multi-use recreational trail with one to two foot graded shoulders;*
  - *Construction of two parking areas/additional spaces at Sylvia and Maple Streets; and*
  - *Replacement of the bridge over Mill Pond with a 70' long prefabricated steel truss bridge.*

# Project Description – 75% Design



- The ARRT deviates from the ROW from Sta 129+00 to Sta 141+50 around an existing commercial land use requiring the construction of a 14' wide boardwalk structure over stormwater BMPs and a succeeding shrub swamp.

# Project History

- May 1997: The five ARRT communities (Marlborough, Hudson, Stowe, Maynard and Acton) received \$668,000 in state funding to acquire the rights-of-ways of the former rail line.
- May 2001: EarthLink (AECOM) introduces the concept of a boardwalk BVW crossing to the Town of Acton.
- July 2007: The Town of Acton acquires all necessary land rights to allow for the construction of the ARRT.
- November 2011: Maynard/Acton 25% Design completed by AECOM.

# Existing Resource Areas

# Existing Resource Areas – Pratt's Brook



# Existing Resource Areas – Stormwater BMPs



Images courtesy of Google Earth

# Existing Resource Areas – Shrub Swamp



Image courtesy of Google Earth

# Existing Resource Areas – RR Ditches/Intermittent Streams



- Jurisdictional Intermittent streams created along the edge of the historic railroad bed for stormwater conveyance.

# Existing Resource Areas – Mill Pond





# Permit Requirements

# Permit Requirements

- **WPA – Process ongoing**
  - *MassDEP has issued File No. 085-1171*
- **Section 404 ACOE Individual Permit**
- **Section 401 Water Quality Certification**
- **Chapter 91 Waterways filed and pending**
- **MEPA – ENF Filed; Site walk with MEPA scheduled Wednesday April 8.**
- **Categorical Exclusion Checklist**
- **MassDOT Hazardous Materials Clearance**
- **Section 106 Clearance**



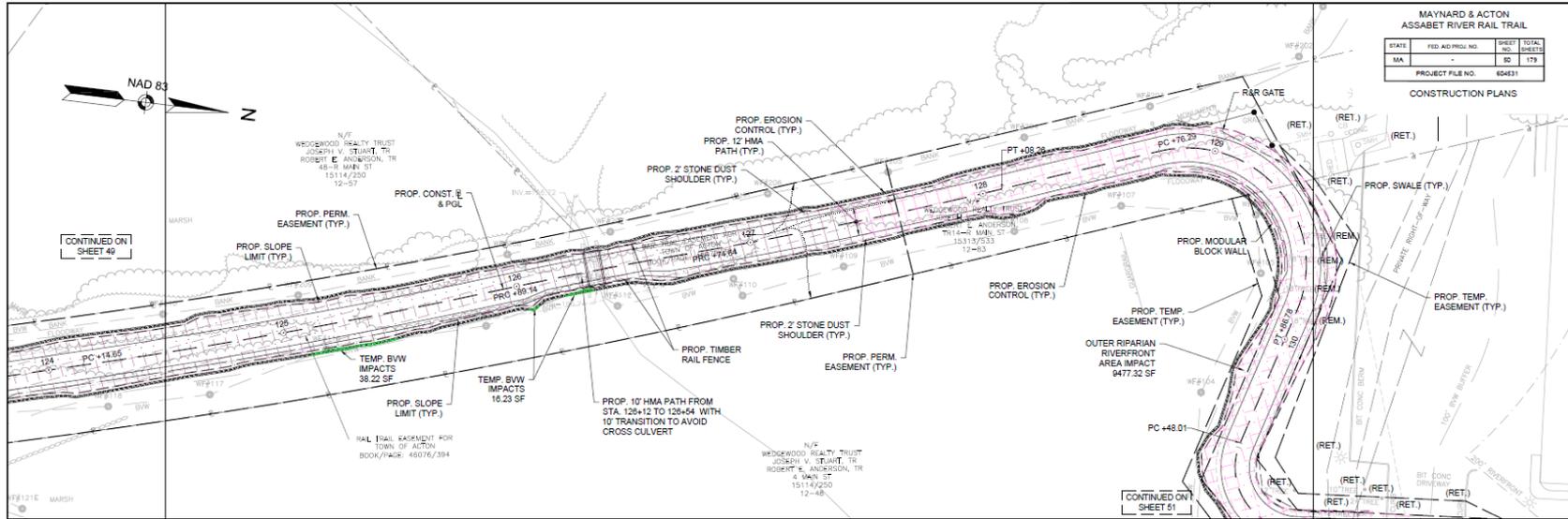
# Impact Summary

**Table 1: Wetland Resource Area Impacts - Acton - Assabet River Rail Trail**

ROW STA No. #	Brook Name	Wetland Resource Area Impacts							Comments
		BVW/VW		Bank(lf)	BLSF Sq. ft	BLSF c.f.	LUW/other Waters of the U.S.		
		Perm. (sf)	Temp. (sf)				Perm. (sf)	Temp. (sf)	
TOTAL		0.00	9129.41	129.80	0.00	0.00	254.04	765.82	

- Total temporary BVW alteration associated with boardwalk is 9,129 s.f. of which 5,426 s.f. is area directly beneath the 14' wide boardwalk and 3,703 s.f. is the 5' wide work zone area on either side of the boardwalk footprint.
- Temporary impacts are being considered alteration without a loss and are non-jurisdictional under Sections 401 and 404 of the Clean Waters Act.
- The boardwalk is a Limited Project per the Wetlands Protection Act 310 CMR 10.53(3)(e & j).
- Total Riverfront Area on the Project Site is 127,607 s.f. of which 19,978 s.f. will be impacted. Of the 19,978 s.f. of impacted RA, 12,482 s.f. is considered Previously Developed RA.

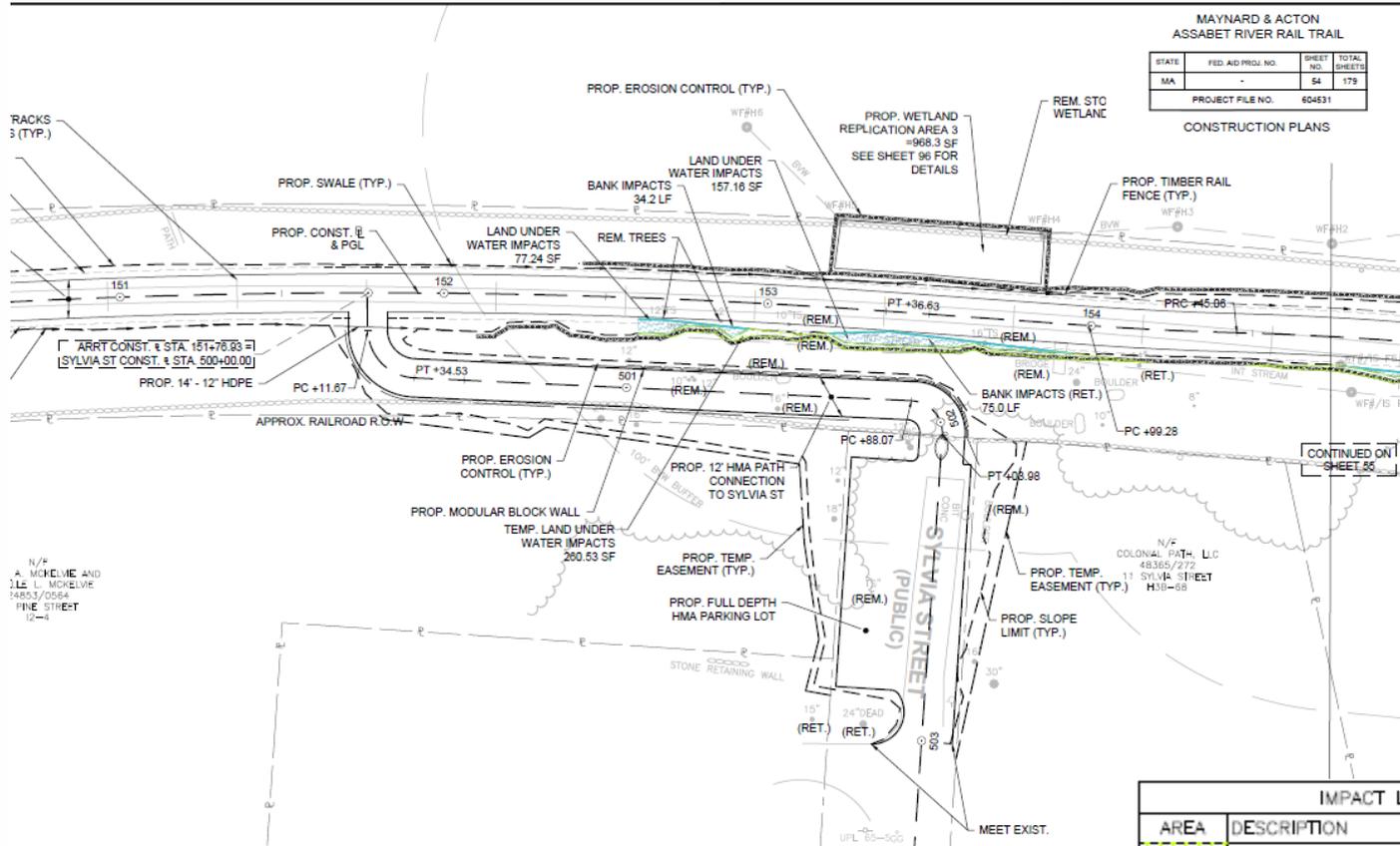
# Impact Summary – Pratt's Brook



IMPACT LEGEND	
AREA	DESCRIPTION
	TEMPORARY LAND UNDER WATER IMPACTS
	PERMANENT LAND UNDER WATER IMPACTS
	PERMANENT WETLAND IMPACTS
	TEMPORARY WETLAND IMPACTS
	100 FT RIVERFRONT IMPACTS
	200 FT RIVERFRONT IMPACTS
	BORDERING LAND SUBJECT TO FLOODING
	BANK IMPACTS



# Impact Summary – Intermittent Streams/Sylvia Street



MAYNARD & ACTON  
ASSABET RIVER RAIL TRAIL

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	54	179

PROJECT FILE NO. 604931

CONSTRUCTION PLANS

N/F  
A. MORELIVE AND  
J.L. MORELIVE  
14803/0564  
PINE STREET  
12-4

IMPACT LEGEND	
AREA	DESCRIPTION
	TEMPORARY LAND UNDER WATER IMPACTS
	PERMANENT LAND UNDER WATER IMPACTS
	PERMANENT WETLAND IMPACTS
	TEMPORARY WETLAND IMPACTS
	100 FT RIVERFRONT IMPACTS
	200 FT RIVERFRONT IMPACTS
	BORDERING LAND SUBJECT TO FLOODING
	BANK IMPACTS

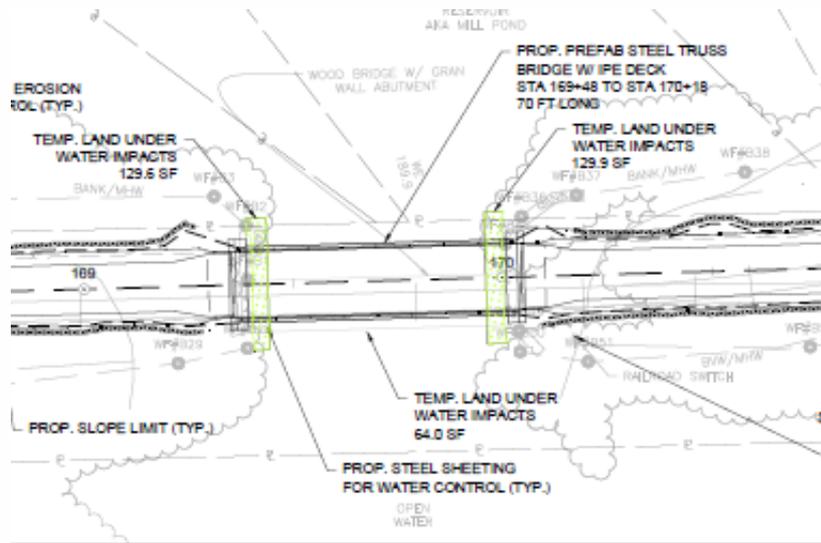
# Impact Summary – Intermittent Streams/RR Ditches

Table 1: Wetland Resource Area Impacts - Acton - Assabet River Rail Trail

ROW STA No. #	Brook Name	Wetland Resource Area Impacts							Comments
		BVW		Bank(lf)	BLSF Sq. ft	BLSF c.f.	LUW		
		Perm. (sf)	Temp. (sf)				Perm. (sf)	Temp. (sf)	
152 + 50	Railroad drainage swale						77.24		Permanent impacts to LUW will meet all performance standards detailed at 310 CMR 10.56(4).
152+75	Railroad drainage swale			34.20				260.53	Bank resotration proposed at impact location. Temporary LUW impacts to be restored at impact location.
153 + 25 to 153+50	Railroad drainage swale			75.00			157.16		Bank restoration proposed at impact location. Permanent impacts to LUW will meet all performance standards detailed at 310 CMR 10.56(4).
154+50 to 155+50	Railroad drainage swale			20.60			19.64	168.68	Bank restoration proposed at impact location. Temporary LUW impacts to be restored at impact location. Permanent impacts to LUW will meet all performance standards detailed at 310 CMR 10.56(4).
<b>TOTAL</b>		<b>0.00</b>	<b>0.00</b>	<b>129.80</b>	<b>0.00</b>	<b>0.00</b>	<b>254.04</b>	<b>429.21</b>	

- AECOM Appendix B Wildlife Habitat Evaluation reached a finding of “no substantial reduction in the capacity to provide important wildlife habitat functions identified within the Bank Impact Areas”.

# Impact Summary – Mill Pond



- 64 s.f. temporary impact to LUW for removal of timber bent support piles
- 259 s.f. of temporary LUW impact during reinforcement of existing concrete abutments
- Sheet piling will be driven to below the mud line for dewatering of work zone.
- Sheet piling will be cut to below the mud line and left it in place as a scour countermeasure.

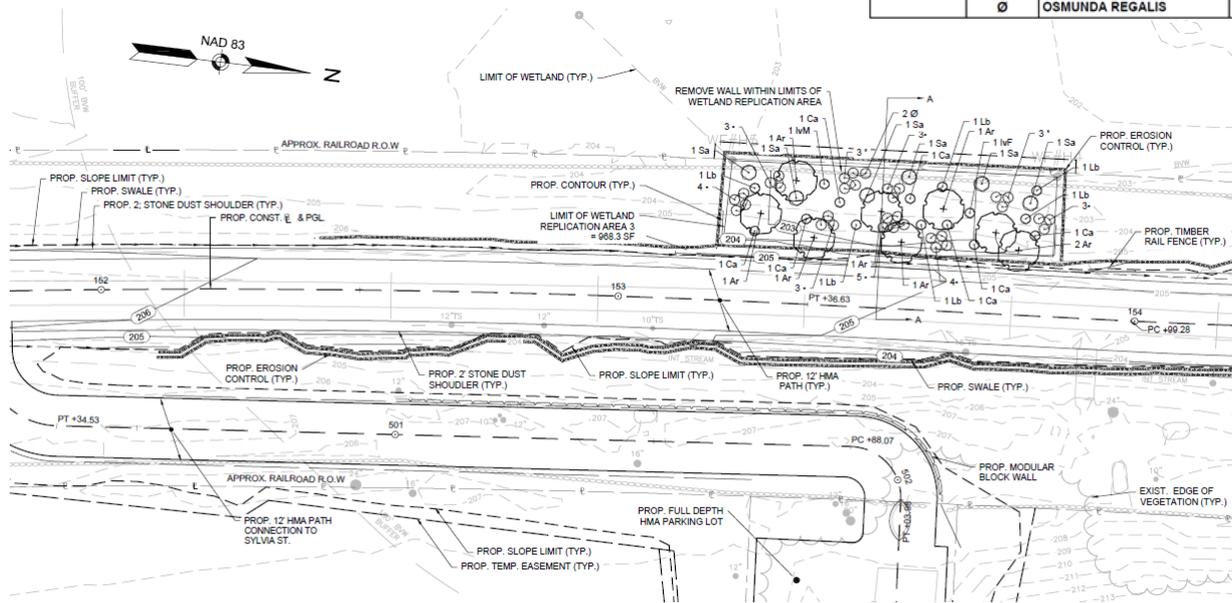


# Mitigation

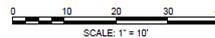
# Mitigation Area 3

- Located near Sylvia Street
- 968.3 s.f.

PLANTING SPECIFICATIONS: AREA 3					
PLANT TYPE	SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	QTY
SHRUBS	Ca	CLETHRA ALNIFOLIA	SUMMERSWEET SHRUB	18-24"	7
	IVF	ILEX VERTICILLATA	WINTERBERRY- FEMALE	24-30"	1
	IVM	ILEX VERTICILLATA	WINTERBERRY- MALE	24-30"	1
	Sa	CORNUS AMOMUM	SILKY DOGWOOD	2-3'	6
	Lb	LINDERA BENZOIN	SPICEBUSH	15-18"	6
TREES	Ar	ACER RUBRUM	RED MAPLE	1"-1.5" CAL	8
FERN/ HERB ACEOUS	•	OSMUNDA CINNAMOMEA	CINNAMON FERN	GALLON	25
	*	ONOCLEA SENSIBILIS	SENSITIVE FERN	GALLON	6
	Ø	OSMUNDA REGALIS	ROYAL FERN	GALLON	2



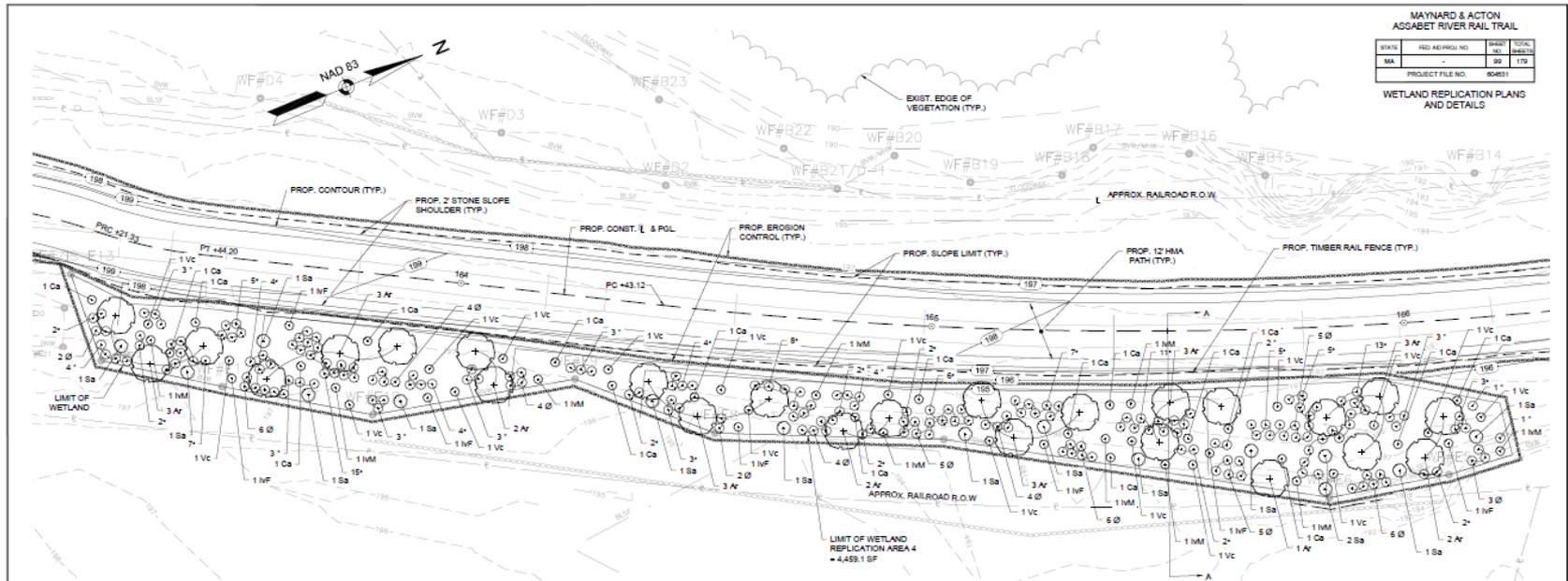
PLANTING PLAN



# Mitigation Area 4

- Located approximately 200 feet south of the Mill Pond Bridge.
- 4,459.1 s.f.
- 1:1 replacement for temporary BVW impact associated with boardwalk.

PLANTING SPECIFICATIONS: AREA 4					
PLANT TYPE	SYMBOL	SCIENTIFIC NAME	COMMON NAME	SIZE	QTY
SHRUBS	Ca	CLETHRA ALNIFOLIA	SUMMERSWEET SHRUB	18-24"	19
	IvF	ILEX VERTICILLATA	WINTERBERRY- FEMALE	24-30"	7
	IvM	ILEX VERTICILLATA	WINTERBERRY- MALE	24-30"	10
	Sa	CORNUS AMOMUM	SILKY DOGWOOD	2-5"	15
	Vc	VACCINIUM CORYMBOSUM	BLUEBERRY HIGHBUSH	18-24"	18
TREES	Ar	ACER RUBRUM	RED MAPLE	1"-1.5" CAL	25
	*	OSMUNDA CINNAMOMEA	CINNAMON FERN	GALLON	116
FERN/ HERB ACEOUS	*	ONOCLEA SENSIBILIS	SENSITIVE FERN	GALLON	30
	Ø	OSMUNDA REGALIS	ROYAL FERN	GALLON	57



# Boardwalk



# Boardwalk – Alternatives Analysis



Option 2

Option 1

Option 4

Option 5

Option 3

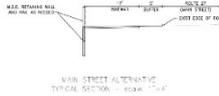
LEGEND

12' WIDE VIA JACKWAY OPTION 1	
12' WIDE VIA B-CORRY OPTION 2	
12' WIDE VIA TOWNWAY OPTION 3	
12' WIDE VIA B-CORRY OPTION 4	
12' WIDE VIA B-CORRY OPTION 5	
12' WIDE VIA B-CORRY OPTION 6	
PREFERRED OPTION	

SUBAREA

PROP. LAYOUT 1

NET AREA 1.00'



ASPHALT PAVED SIDE WALK  
 GRANULAR BASE COURSE  
 MASSACHUSETTS STATE HIGHWAY  
 MAP 1-1-2008

NATURAL STREET TO THE WALK STREET  
 OPTION 1-5

\*NOTE: OPTION 5 IS THE PREFERRED OPTION.





# NHESP Mapped Vernal Pool

# NHESP mapped Vernal Pool

- **NHESP Mapped Potential Vernal Pool (PVP #173) located at approximately 100 Martin Street.**
- **Limit of MAHW is approximately 70 feet from Project Limit of Work.**



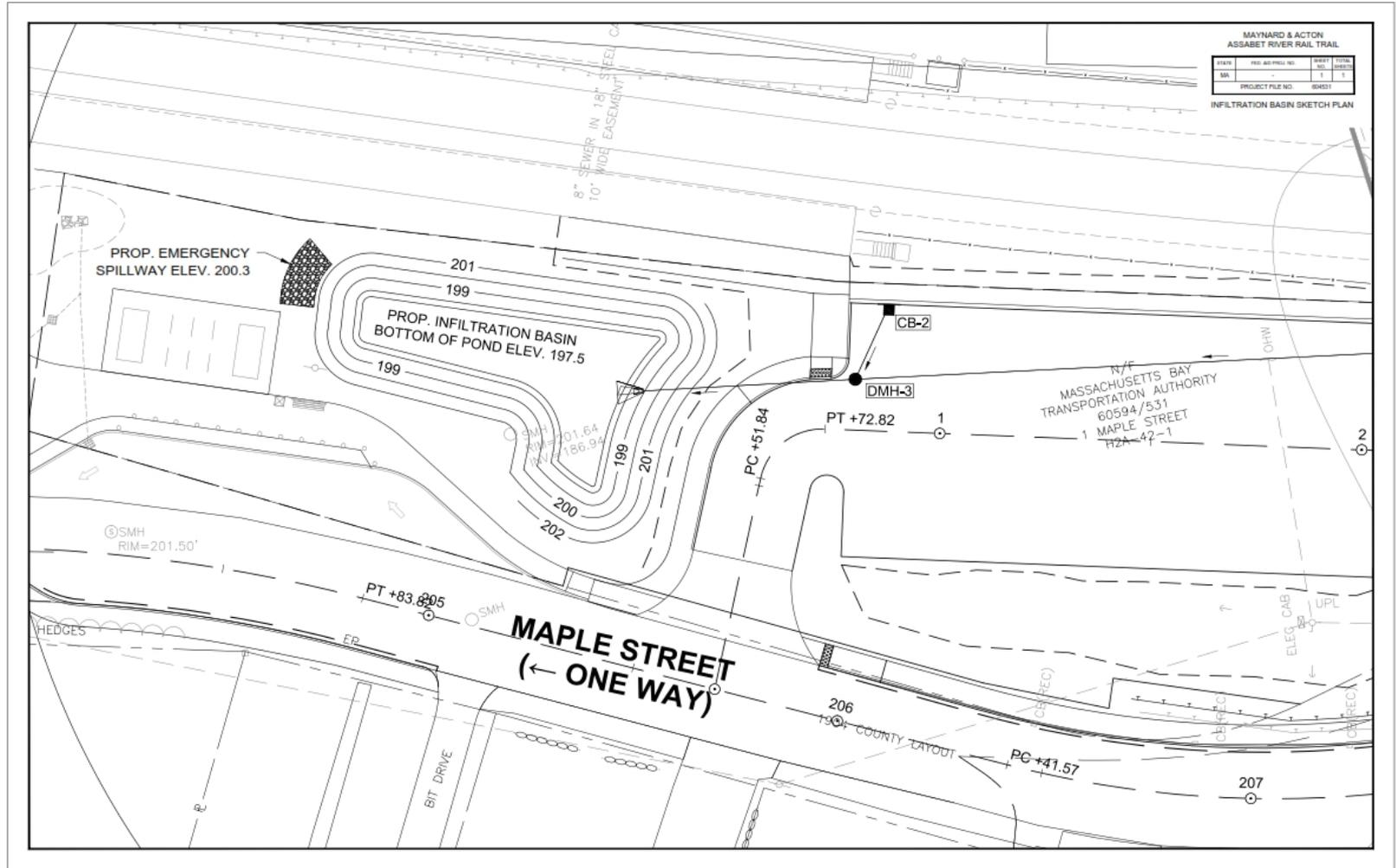


# Stormwater

# Stormwater Compliance

- The Project will meet the Stormwater Standards at M.G.L.c.131, Sec. 40 to the ***maximum extent practicable*** as required by all footpath, bikepath and path for pedestrian and/or non-motorized vehicle Projects.
- Meets Stormwater Standards 1,2,3,6,7,8,9
- Meets Stormwater Standard 4 to the extent practicable
- Stormwater Standard 5 not applicable

# Maple Street - Parking Lot Drainage Design





**Q&A**

**Thank You**