PLANNING STUDY TO IMPROVE PEDESTRIAN CONNECTIVITY BETWEEN BOARDMAN STREET & HANNAFORD PLAZA

Addison County Regional Planning Commission Transportation Advisory Committee (TAC) Meeting SEPTEMBER 21, 2022



Town of Middlebury | Addison County Regional Planning Commission | Dubois & King, Inc.

- Project Overview
- Kick-Off Meeting
- Existing Conditions
- Local Concerns Meeting
- Project Alternatives & Evaluations
- Alternatives Presentation Meeting
- Planning Study Report













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PROJECT GOAL:

Develop a Scoping
Study Report that
identifies and
evaluates
alternatives for
pedestrian
infrastructure
options along Rte 7
between Boardman
Street and
Hannaford Plaza for
the Town to consider
for future design
and construction.

Project funded through ACRPC Transportation Planning Initiative Grant.



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KICK-OFF MEETING:

- Attendees included representatives from the Town, ACRPC, VTrans, and D&K.
- Reviewed project scope, project area limits, schedule, and project logistics.



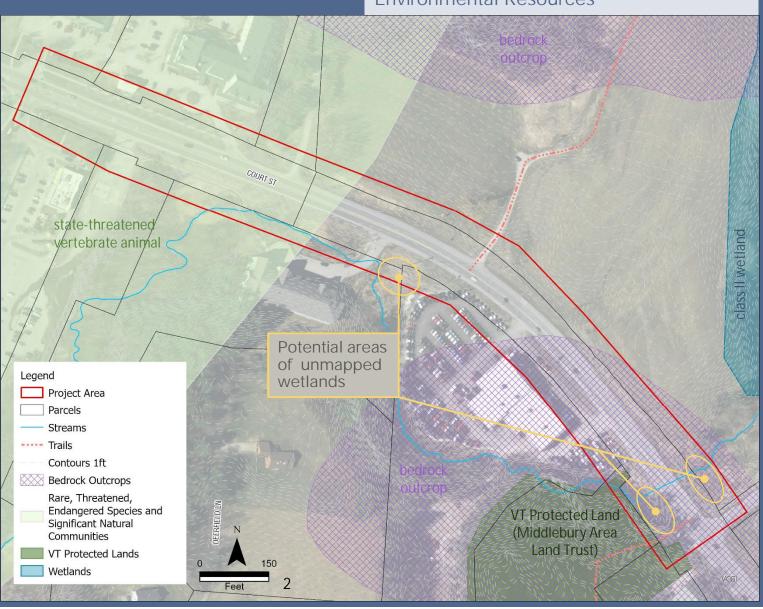
Existing Conditions: Overall Project Area

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Existing Conditions: Environmental Resources

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Existing Conditions: Archeological Resource Assessment (ARA)

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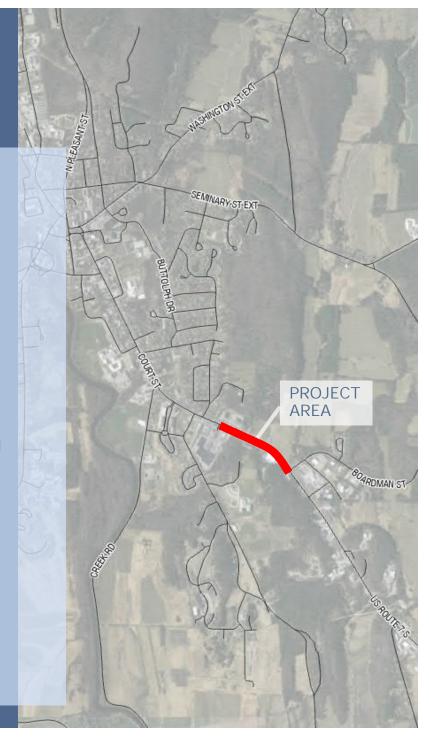


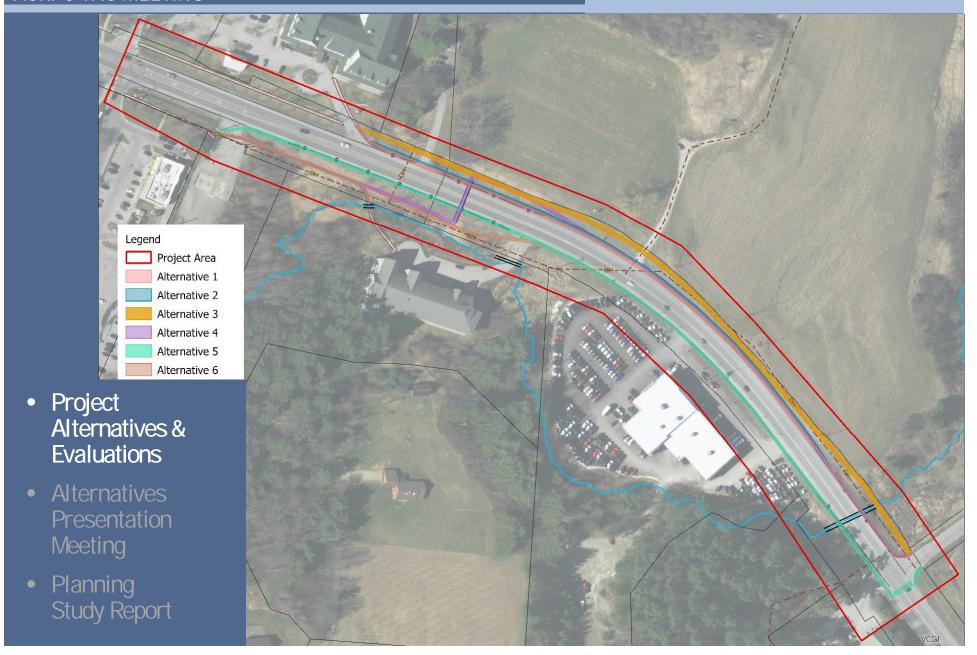
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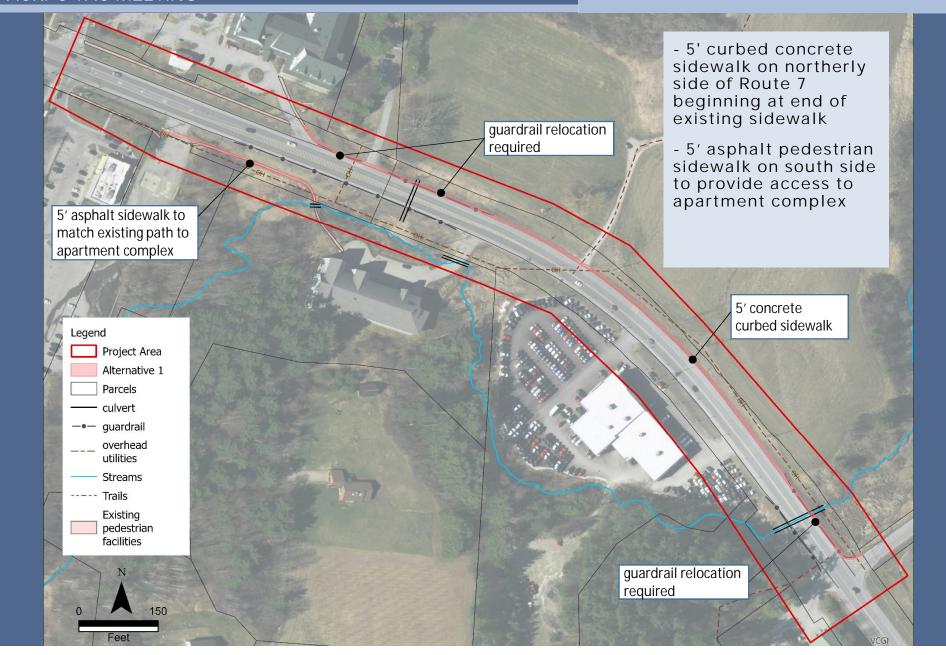
LOCAL CONCERNS MEETING:

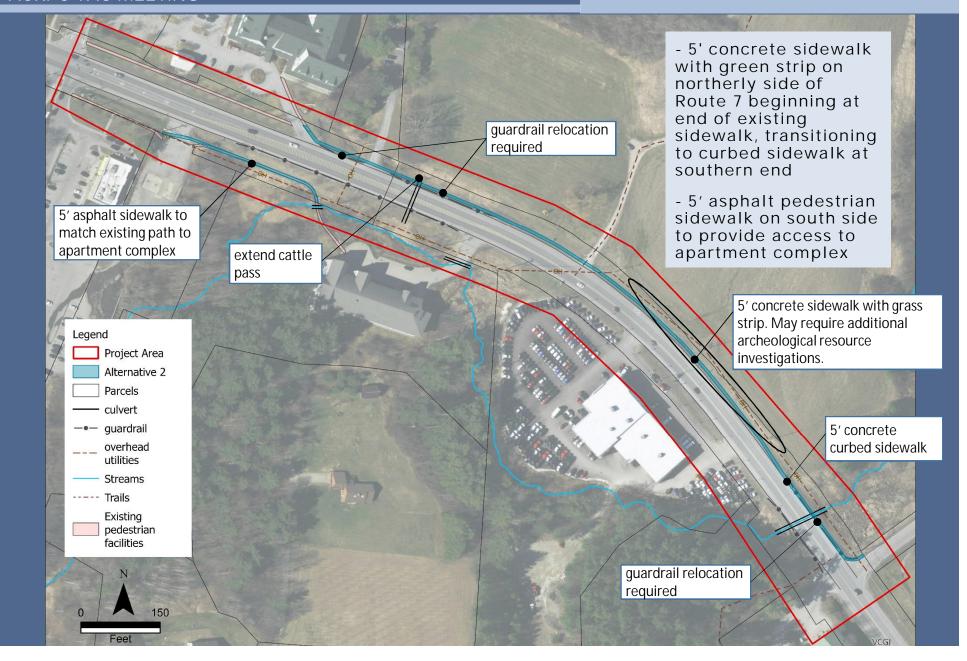
Public meeting to solicit public input on the

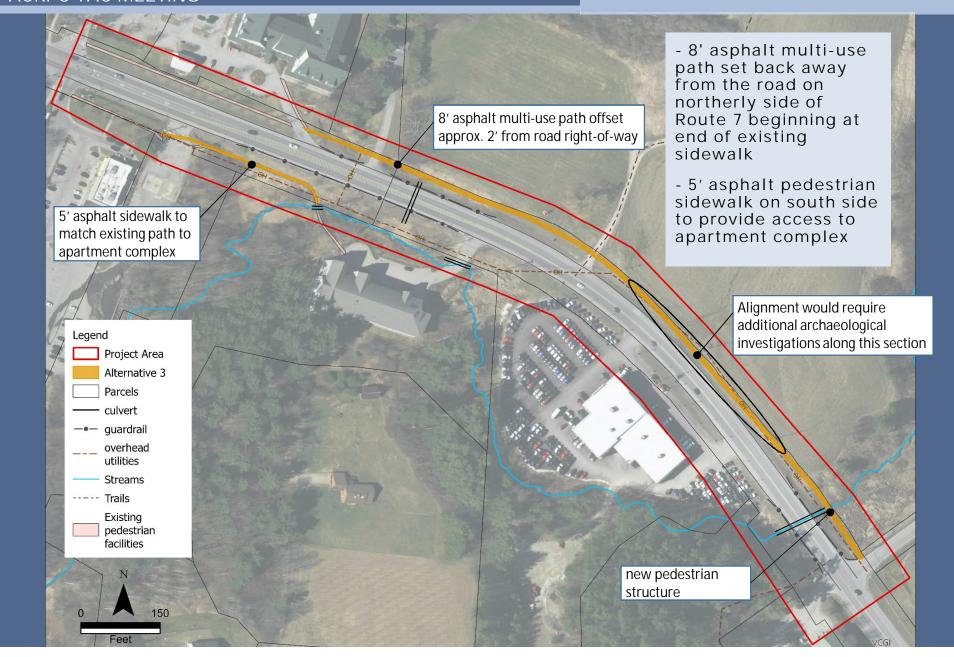
- interests,
- concerns, and
- thoughts on pros/ cons of the project area.

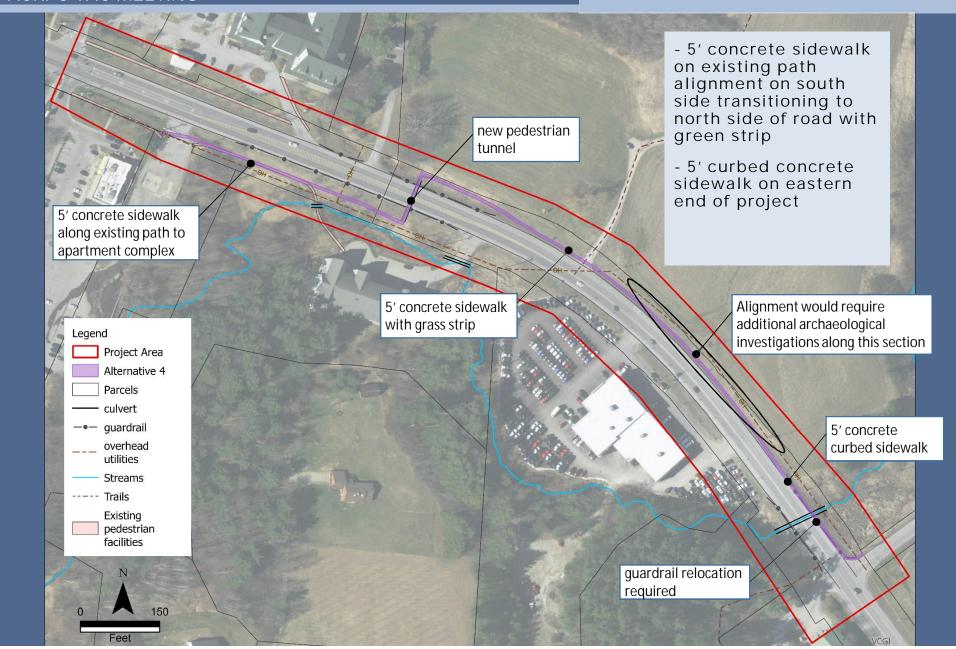


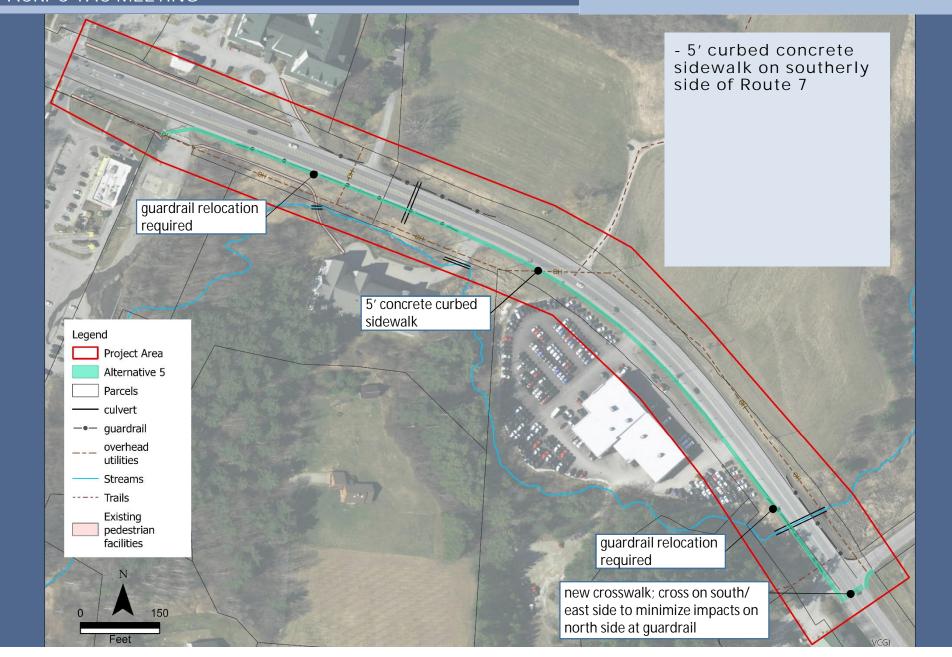


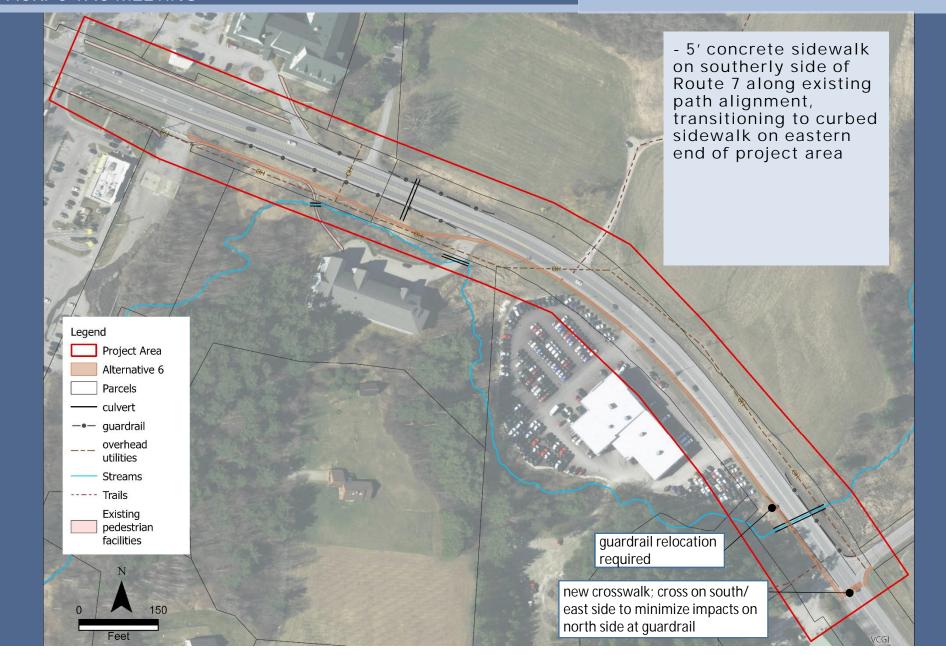












OPINION OF PROBABLE CONSTRUCTION COSTS

Project cost estimates based on VTrans quidance for linear foot sidewalk costs plus	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
additional site-specific cost estimates. VTrans Report on Shared-Use Path and Sidewalk Costs, 2020 5-ft Wide Concrete Walk w/ No Curb 5-ft Wide Concrete Walk w/ Concrete Curb 5-ft Wide Bituminous Walk w/ No Curb 8-ft Wide Bituminous Concrete Path \$297	5' curbed sidewalk on north w/ pedestrian access to apartment complex	5' sidewalk with green strip on north w/ pedestrian access to apartment complex	8' shared use path on north w/ pedestrian access to apartment complex	5' sidewalk on south transitioning to 5' sidewalk with green strip on north	5' curbed sidewalk on south	Alt. 6: 5' sidewalk on south beginning along existing path alignment and transitioning to curbed sidewalk
Sidewalk / Path Base Cost	\$411,820	\$305,790	\$433,680	\$311,200	\$445,970	\$558,675
Additional earthwork beyond typ. sidewalk const.	\$16,200	\$23,100	\$20,460	\$6,680	\$39,000	\$11,100
Guardrail removal / reset / new	\$14,872	\$14,872	\$120	\$6,149	\$17,875	\$5,005
Seeding and topsoil items	\$2,220	\$2,262	\$2,813	\$2,498	\$2,566	\$937
Extend Cattle Pass		\$400,000				
Pedestrian Structure			\$450,000			
Pedestrian Tunnel				\$800,000		
Mobilization / Demobilization (beyond typ. sidewalk const.)	\$5,000	\$45,000	\$45,000	\$85,000	\$5,000	\$5,000
20% Contingency on Alternative Specific Items	\$9,888	\$98,976	\$102,927	\$178,473	\$14,589	\$9,283
Conceptual-Level Opinion of Probable Construction Cost	\$460,000	\$890,000	\$1,060,000	\$1,390,000	\$530,000	\$590,000
Engineering, Construction Resident, and Admin	\$170,000	\$320,000	\$380,000	\$500,000	\$190,000	\$210,000
Rounded Total Project Costs (Excluding ROW)	\$630,000	\$1,210,000	\$1,440,000	\$1,890,000	\$720,000	\$800,000

Assumptions:

- 1. Average base sidewalk construction cost value from the VTrans Report on Shared-Use Path and Sidewalk Costs, January 2020.
- 2. Estimates for engineering, construction resident, and administration based on VTrans Report on Shared-Use Path and Sidewalk Costs guidance, adjusted for rounding.
- 3. Utility company will pay for costs associated with required relocation of utility poles.

EVALUATION MATRIX

Alt 1 S Alt 2 Alt 3 Alt 4 Alt 5 S Alt 6 S Alt 6 S Alt 6 S Courted diseases in access to apartment or support of the petition access to apartment or support or support								
Souther stewards on complex materials access to apartment access to apartment production apartment access to apartment production access to apartment product access to apartment production access to apartment production access to apartment production access to apartment acc		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	
Improved Pedestrian Safety		north w/ pedestrian access to apartment	strip on north w/ pedestrian access to	north w/ pedestrian access to apartment	transitioning to 5' sidewalk with green		beginning along existing path alignment and transitioning to curbed	No Build
PROJECT COSTS Construction S460,000 S890,000 S1,000,000	Project Goals							
Construction	Improved Pedestrian Safety	yes	yes	yes	yes	yes	yes	no improvement
Engineering Design + Resident Engineer S170,000 S20,000 S180,000 S190,000 S210,000 S00,000 S00,000,000 S00,000 S00,0	PROJECT COSTS							
Total Project Costs (excluding ROW)	Construction	\$460,000	\$890,000	\$1,060,000	\$1,390,000	\$530,000	\$590,000	\$0
LAND USE and LOCAL CONTEXT ROW and Utility impacts Local Context (drive crossings, local input, etc.) Improved, 1 drive crossings, potential concern in front of car dealership, need for crosswalk at Boardman ENVIRONMENTAL / CULTURAL FISOADIaline FISH & wildlife Wetlands Local Context (drive crossings, local input, etc.) Local Context (drive crossings, local infort of a calcalership, need for crosswalk at Boardman Local Context (drive crossings, local infort of a calcalership, need for crosswalk at Boardman Local Context (drive crossings, local infort of a calcalership, need for crosswalk at Boardman Local Context (drive crossings, local infort of a calcalership, need for crosswalk at Boardman Local Context (drive crossings, local infort of a calcalership, need for crosswalk at Boardman Local Context (drive crossings, local infort of a calcalership, local i	Engineering Design + Resident Engineer	\$170,000	\$320,000	\$380,000	\$500,000	\$190,000	\$210,000	\$0
ROW and Utility impacts minor minor minor potential potential unlikely unlikely improved, 1 drive impr	Total Project Costs (excluding ROW)	\$630,000	\$1,210,000	\$1,440,000	\$1,890,000	\$720,000	\$800,000	\$0
Local Context (drive crossings, local input, etc.) improved, 1 drive potential concern in front of car dealership, need for crosswalk at Boardman ENVIRONMENTAL / CULTURAL	LAND USE and LOCAL CONTEXT							
Improved, 1 drive Impr	ROW and Utility impacts	minor	minor	potential	potential	unlikely	unlikely	-
Floodplains Fish & wildlife Wetlands Unlikely/minor Wetlands Like Species; Wildlife; Conservation Areas State endangered animal within project area Archaeological / Historic Public Lands (Section 4f) Like F (Section 6f)) Agricultural lands Hazardous waste sites PERMITTING PERMITTING NEPA Section 404 (wetlands) / State Wetlands Permit Section 401 Weter Quality Section 401 Weter Quality Section 401 Weter Quality Section 401 Phase Stormwater Permit Operational Phase Stormwater Permit Likes & Ponds R, T, E Species On permit likely to be needed On minor propential Unlikely/minor unl	Local Context (drive crossings, local input, etc.)	improved, 1 drive	improved, 1 drive	improved, 1 drive	improved, 1 drive	potential concern in f	no improvements	
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Wetlands unlikely/minor unlikely unlikely/minor unlikely unlikely/minor unlikely unlikely/minor unlikely/minor unlikely/min	Floodplains	-	-	-	-	-	-	-
state endangered animal within project area Archaeological / Historic Public Lands (Section 4f) LWCF (Section 6f)) Agricultural lands Hazardous waste sites PERMITTING NEPA Section 404 (wetlands) / State Wetlands Permit Section 401 Water Quality Section 401 Water Quality Section 401 Water Quality Section 402 Water Quality Section 403 Water Quality Section 404 (wetlands) / State Wetlands Permit Construction Phase Stormwater Permit Coperational Phase Stormwater Permit Lakes & Ponds R, T, E Species State endangered animal within project area. State endangered animal within project animal within project area animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to road RoW on south state anticipated impact. State endangered animal within project area. Middlebury Area Land Trust is adjacent to animal within project area. Middlebury Area Land Trust is adjacent to animal within project area. Middlebury Area Land Trust is adja	Fish & wildlife	-	-	minor	-	-	-	-
State endangered animal within project area severally state endangered animal within project area state endangered animal within project area severally animal within project area state endangered animal within project area severally animal within project area severally animal within project area state endangered animal within project area severally animal within	Wetlands	unlikely/minor	unlikely/minor	potential	unlikely/minor	unlikely/minor	unlikely/minor	-
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LWCF (Section 6(f)) -	Archaeological / Historic	unlikely	potential	potential	potential			-
Agricultural lands prime statewide soil car dealership shows as a hazardous site in GIS, but no anticipated impact PERMITTING NEPA Section 404 (wetlands) / State Wetlands Permit potential poten	Public Lands (Section 4f)	-	-	-	-	-	-	-
Hazardous waste sites PERMITTING NEPA Section 404 (wetlands) / State Wetlands Permit potential potentia	LWCF (Section 6(f))							-
PERMITTING NEPA Section 404 (wetlands) / State Wetlands Permit potential po	Agricultural lands	prime statewide soil					-	
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Section 404 (wetlands) / State Wetlands Permit potential	PERMITTING							
Section 401 Water Quality Stream Alteration Permit Construction Phase Stormwater Permit Operational Phase Stormwater Permit Lakes & Ponds R, T, E Species	NEPA	Categorical Exclusion						-
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Lakes & Ponds - <		·						-
R, T, E Speciesno permit likely to be needed	· · · · · · · · · · · · · · · · · · ·	unlikely						-
	Lakes & Ponds						-	
Section 1111 Permit	· · · ·							-
	Section 1111 Permit	yes					-	

ALTERNATIVES: SUMMARY

Alternative 1: Curbed sidewalk on north side, and sidewalk section on south side to apartment complex.

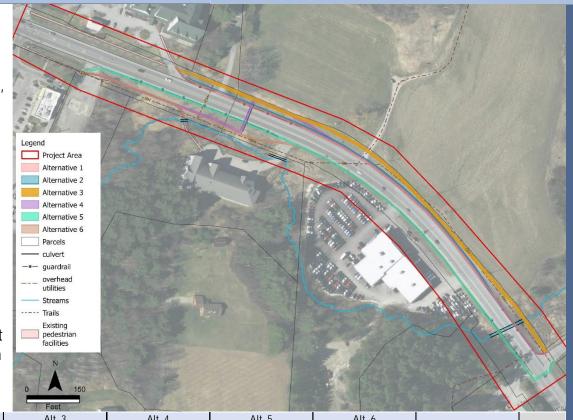
Alternative 2: Sidewalk on north side with grass strip, and sidewalk section on south side to apartment complex.

Alternative 3: Multi-use path on north side, and sidewalk section on south side to apartment complex.

Alternative 4: Sidewalk on south side along existing path alignment and transition to north side (through new pedestrian tunnel).

Alternative 5: Curbed sidewalk on south side with crosswalk at Boardman Street.

Alternative 6: Sidewalk along existing path alignment on south side and transition to curbed sidewalk, with crosswalk at Boardman Street.

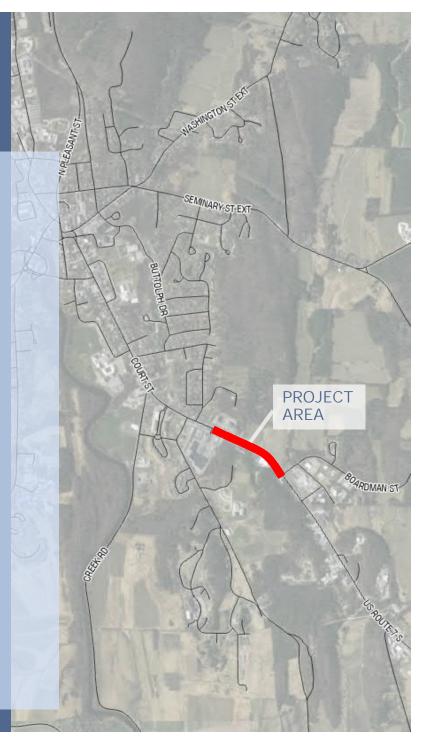


Points Value Per Criteria	north w/ pedestrian	Alt. 2 5' sidewalk with green strip on north w/ pedestrian access to apartment complex	Alt. 3 8' shared use path on north w/ pedestrian access to apartment complex	Alt. 4 5' sidewalk on south transitioning to 5' sidewalk with green strip on north	Alt. 5 5' curbed sidewalk on south	and transitioning to	No Build	Total Possible Points
						curbed sidewalk		
Project Goals	25	25	25	25	25	25	0	25
Project Costs	25	13	11	8	22	20	25	25
Land Use and Local Context	24	24	21	23	15	15	5	25
Env'l / Cultural / Permitting	19	18	14	22	19	19	22	25
Total Points and Ranking per	93	80	71	78	81	79	52	100
Alternative		3	6	5	2	4	7	150

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ALTERNATIVES PRESENTATION MEETING:

- Scheduled for Sept. 26th
- Public meeting to present project alternatives to the public.
- Input to date suggests preference for an alternative on the north side of the road.



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NEXT STEP:

- ACRPC TAC Meeting
- Finalize Scoping
 Study Report

