

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

ALTERNATIVES PRESENTATION MEETING  
SEPTEMBER 26, 2022



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

## MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

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





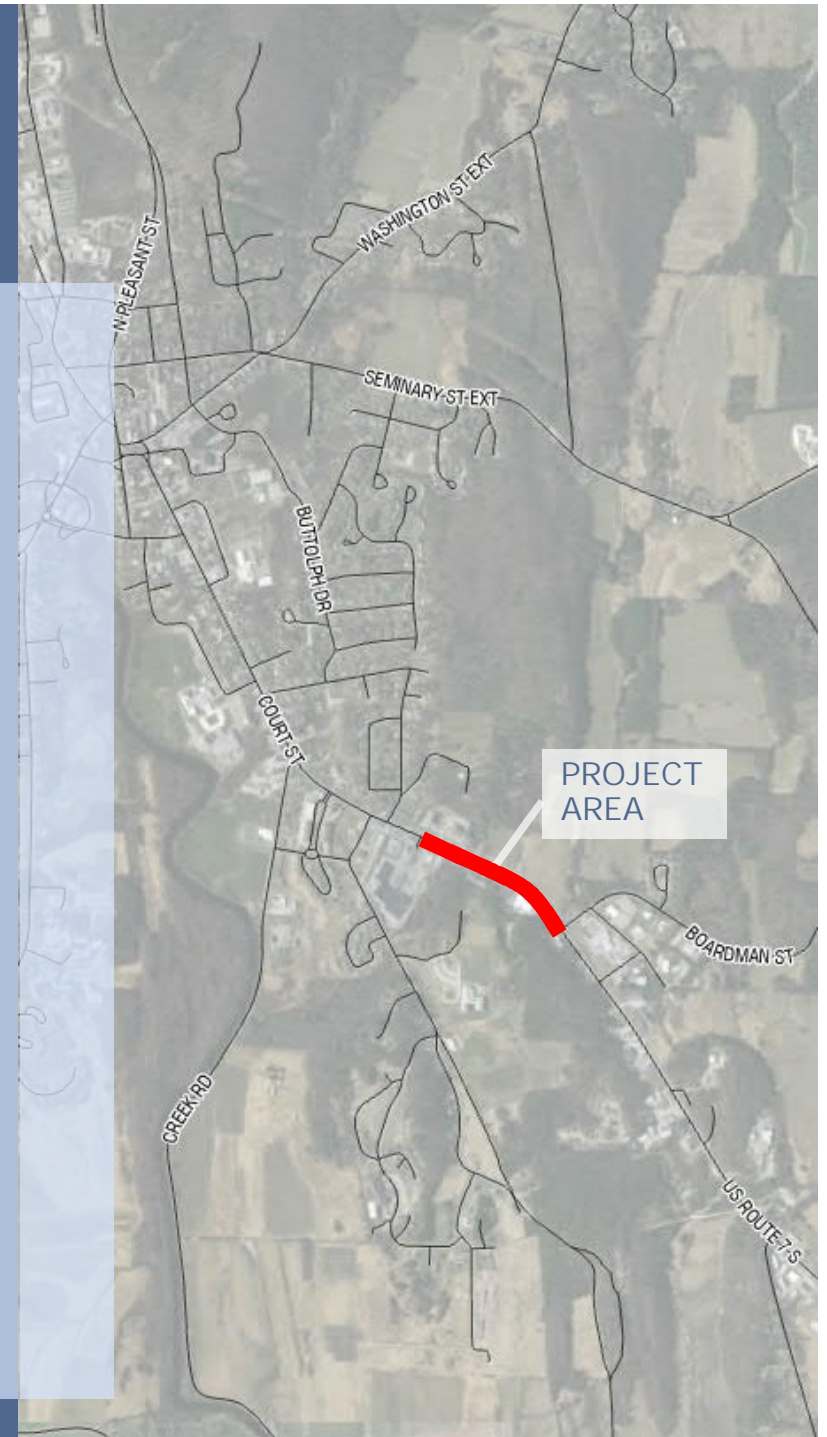
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### PROJECT GOAL:

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.

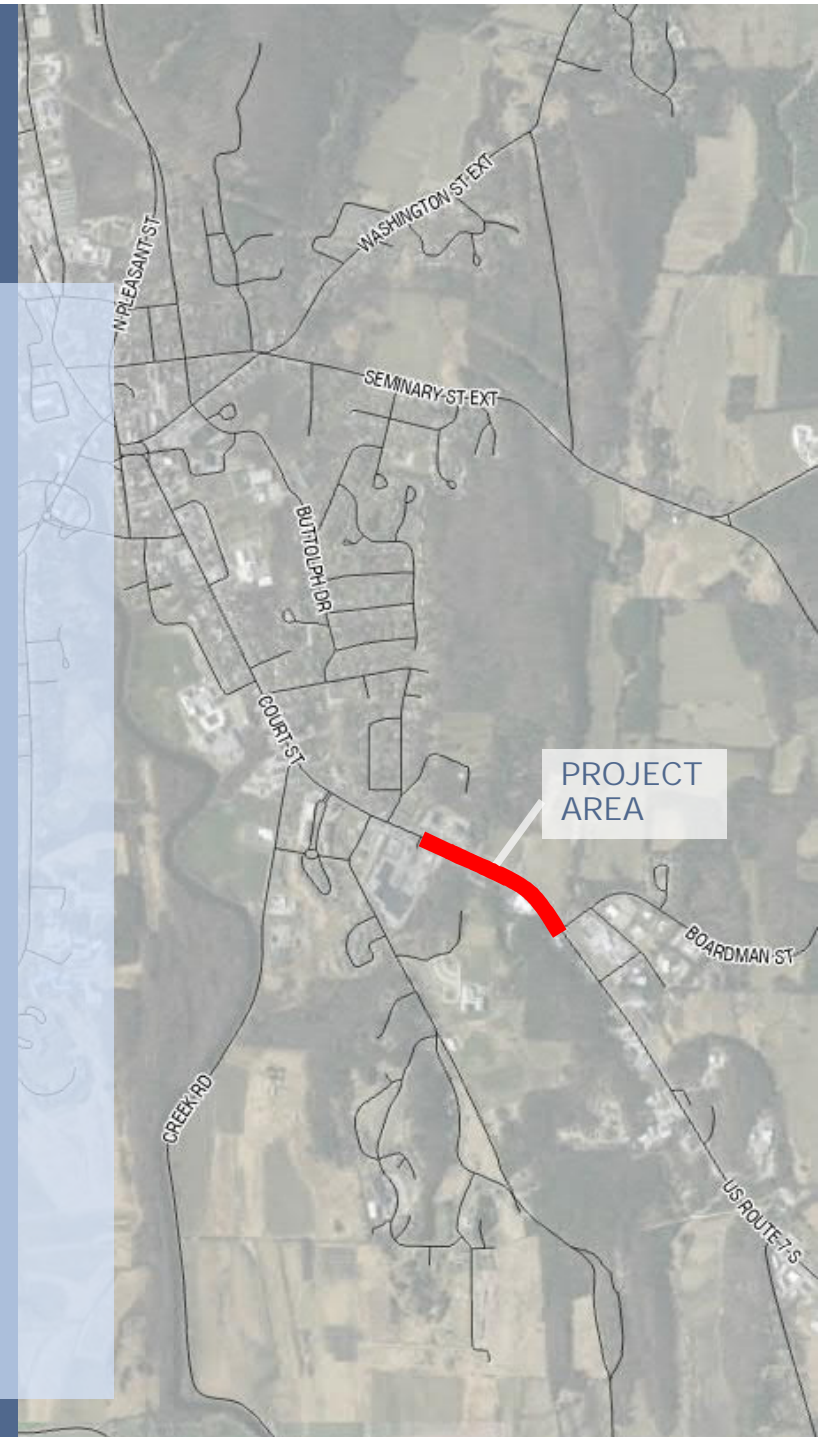


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### KICK-OFF MEETING:

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

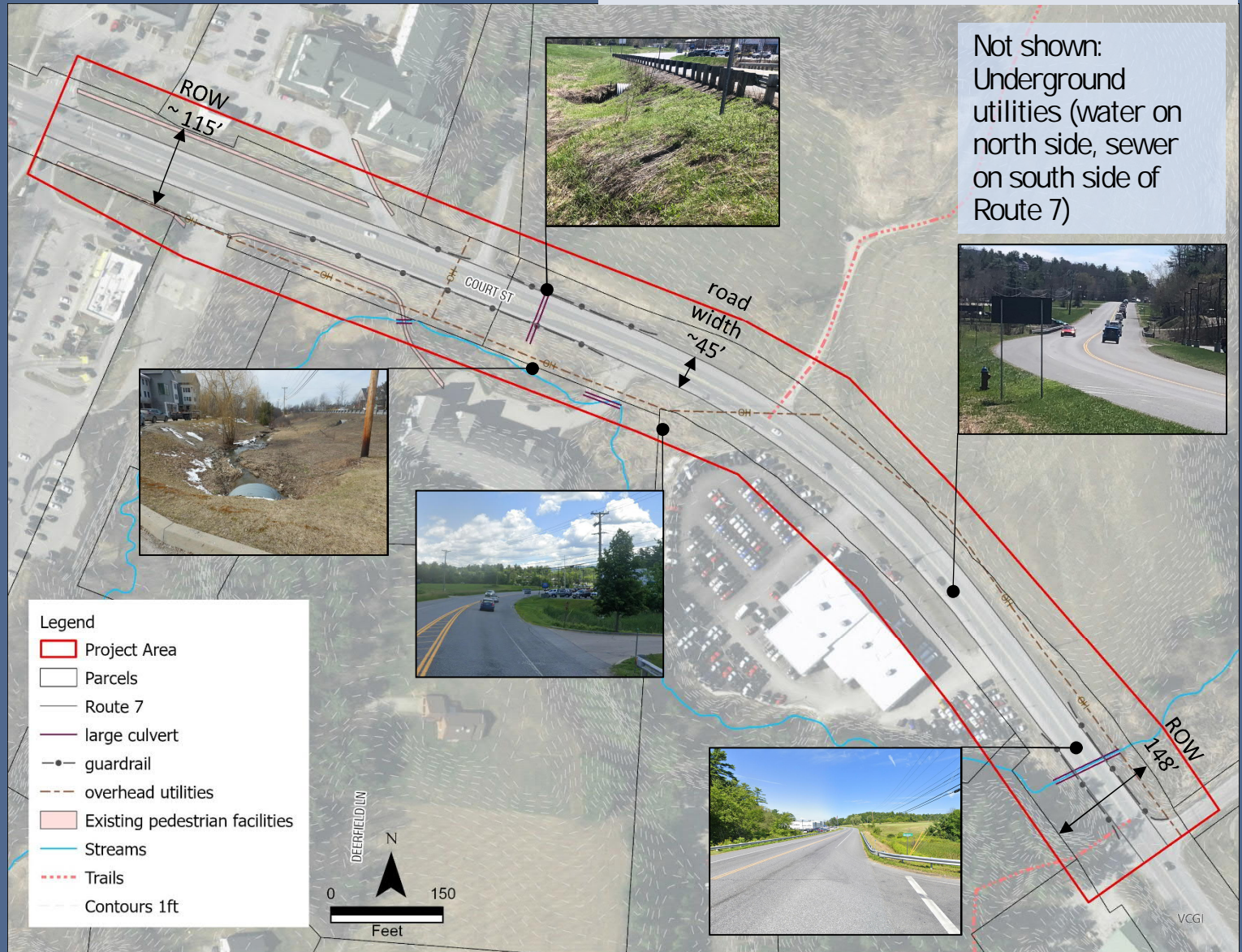




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## Existing Conditions: Overall Project Area

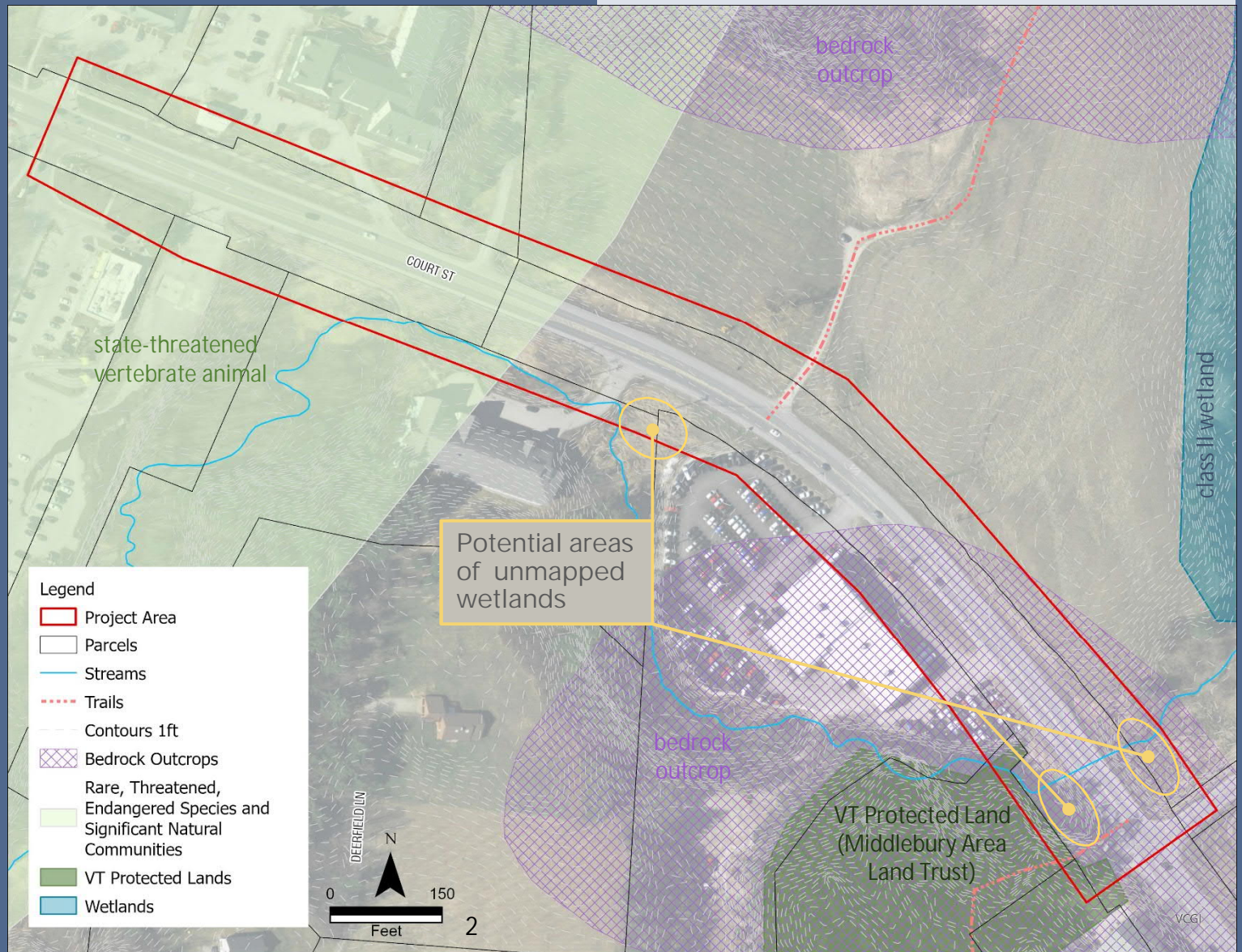




# MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

## Existing Conditions: Environmental Resources

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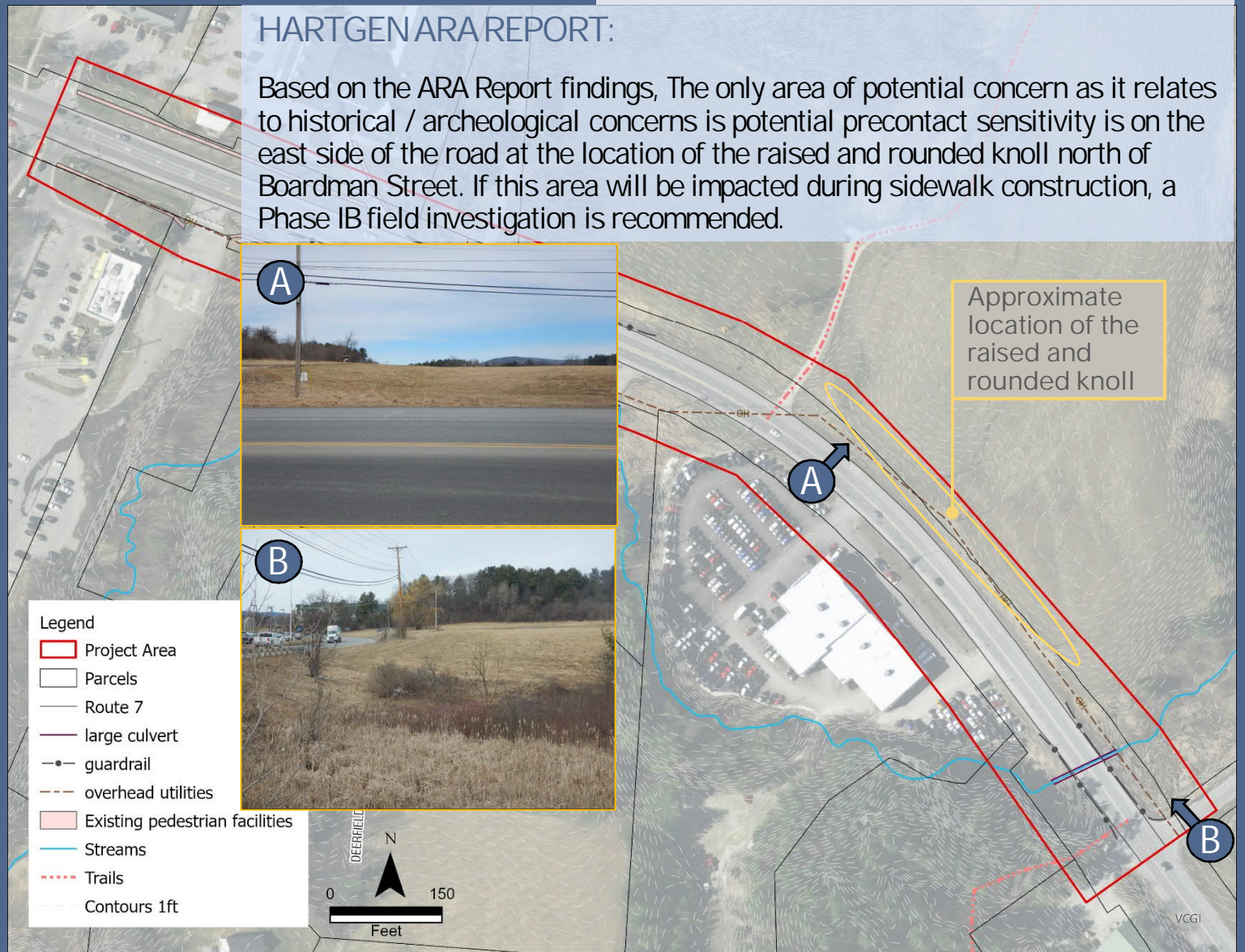
# MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

## Existing Conditions: Archeological Resource Assessment (ARA)

- Project Overview
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### HARTGEN ARA REPORT:

Based on the ARA Report findings, The only area of potential concern as it relates to historical / archeological concerns is potential precontact sensitivity is on the east side of the road at the location of the raised and rounded knoll north of Boardman Street. If this area will be impacted during sidewalk construction, a Phase IB field investigation is recommended.



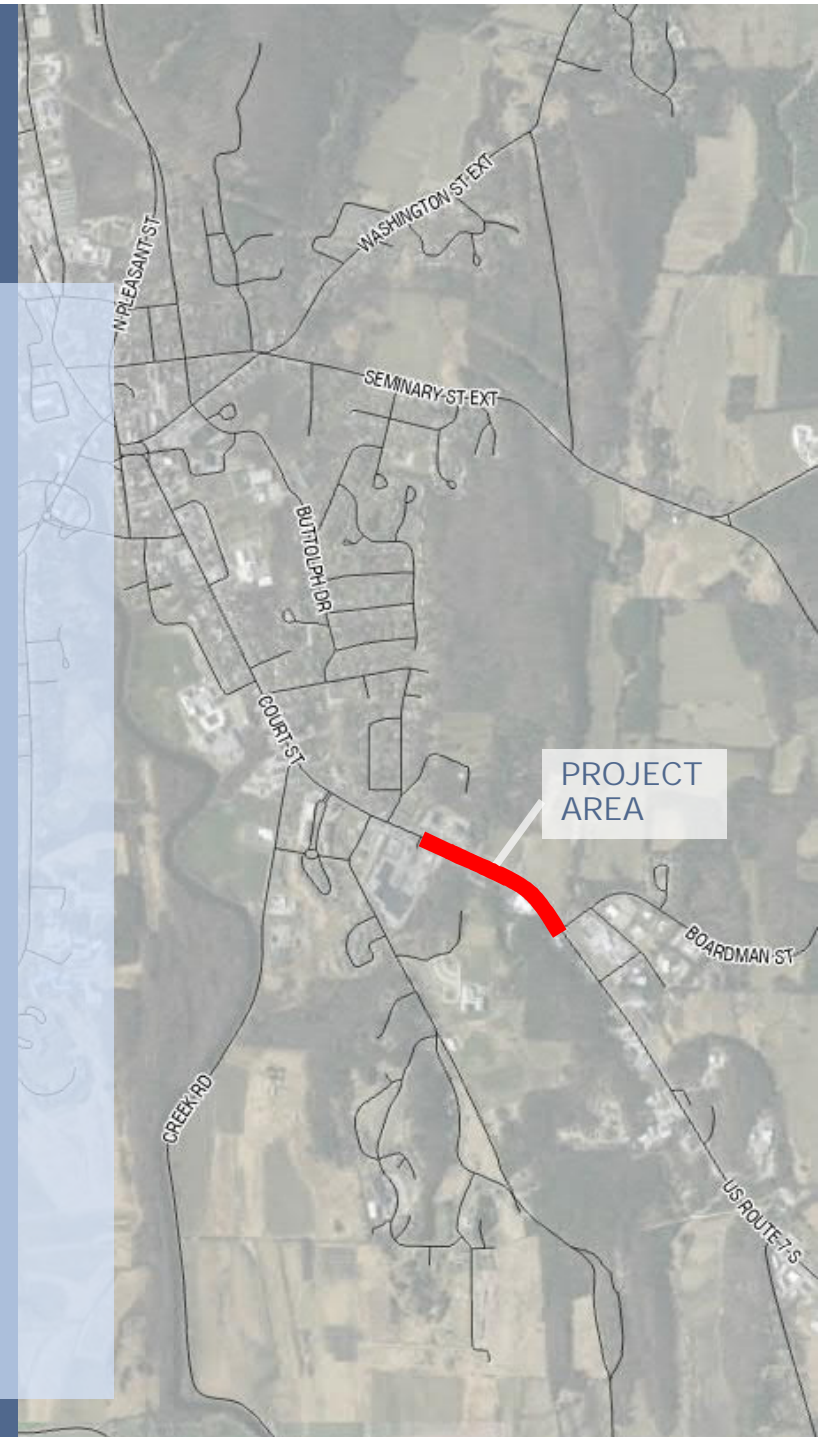
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### LOCAL CONCERNS MEETING:

Public meeting to solicit public input on the

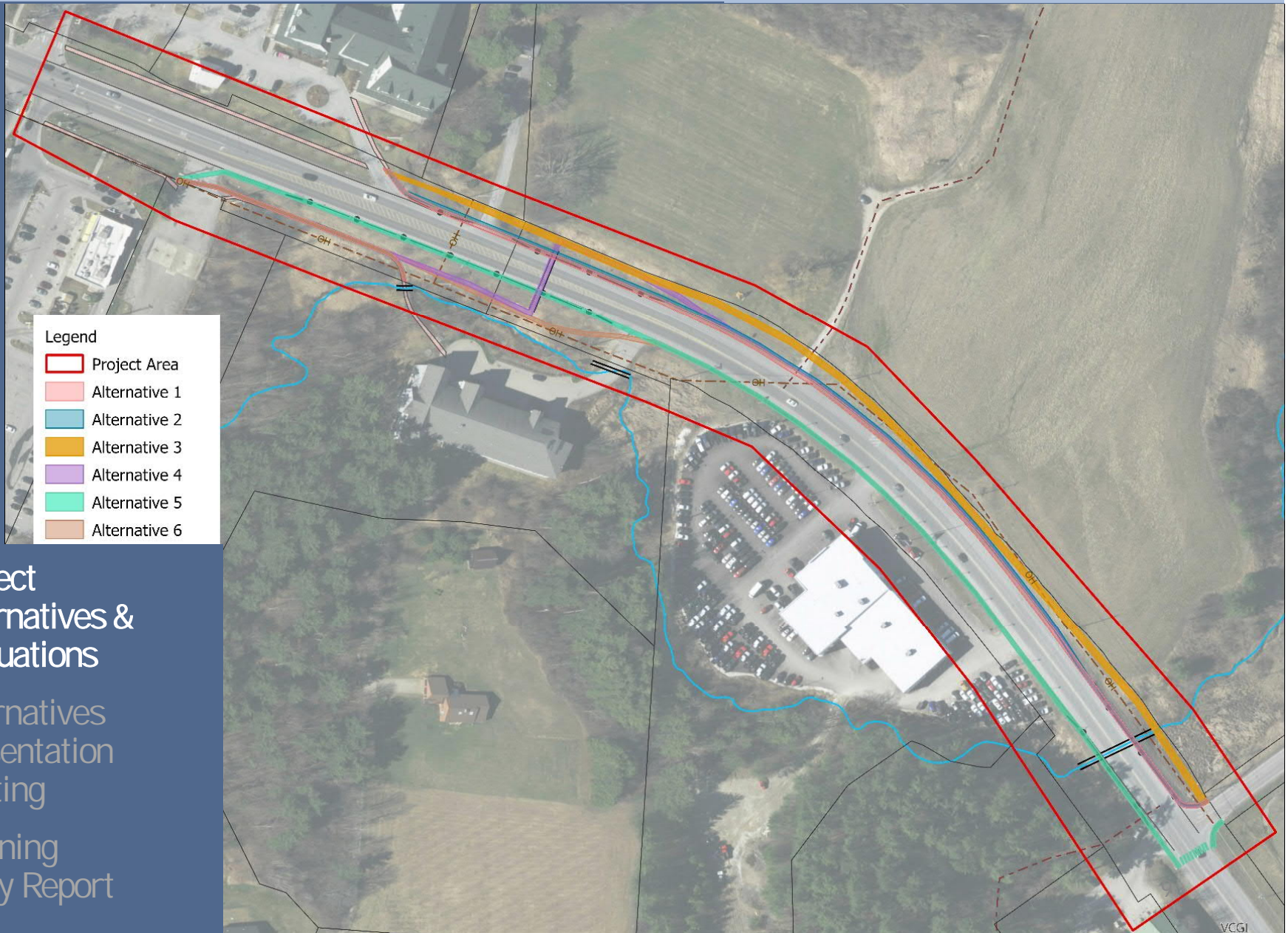
- interests,
- concerns, and
- thoughts on pros/ cons of the project area.





# MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

## ALTERNATIVES

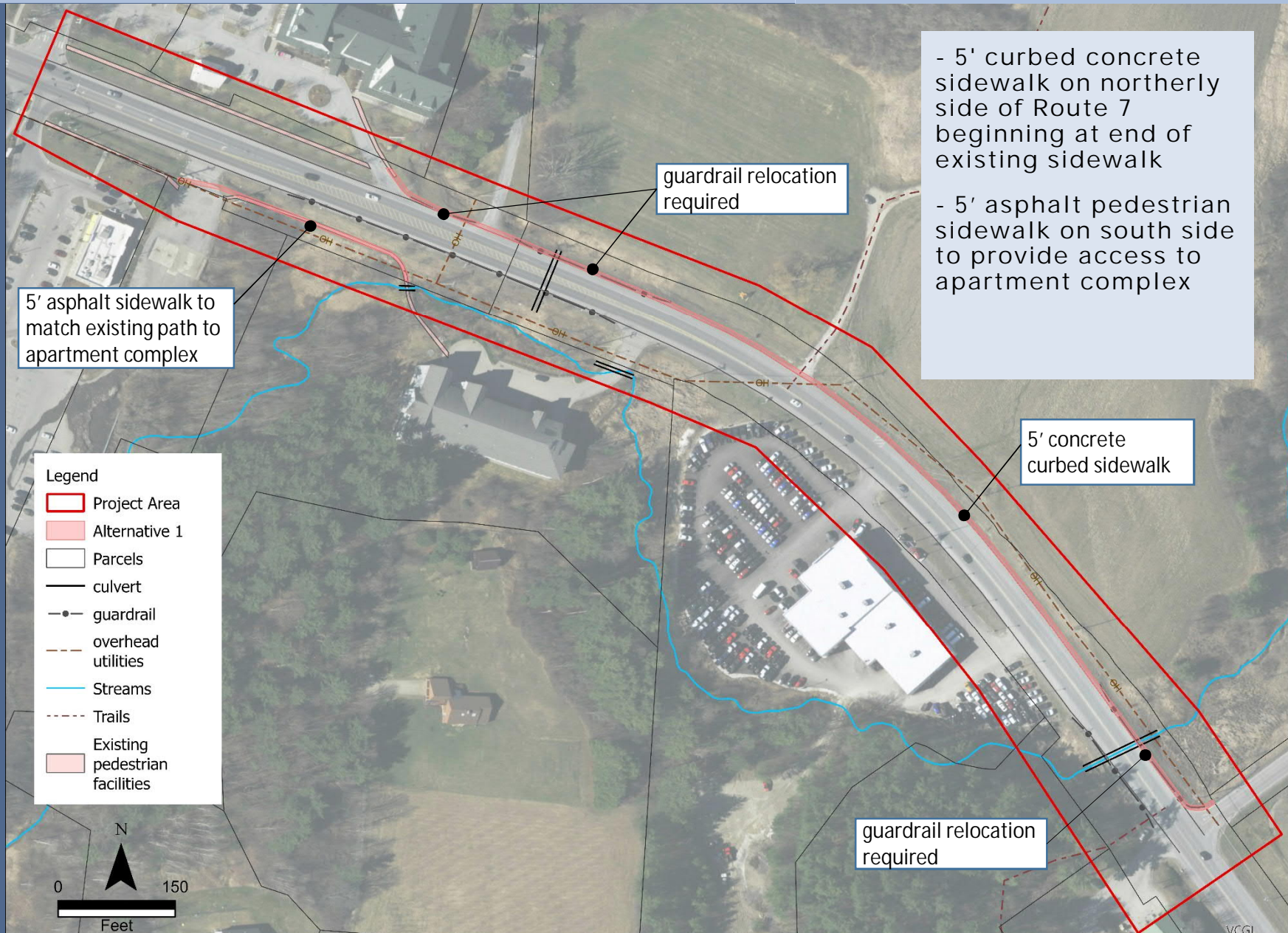


- Project Alternatives & Evaluations
- Alternatives Presentation Meeting
- Planning Study Report



MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING  
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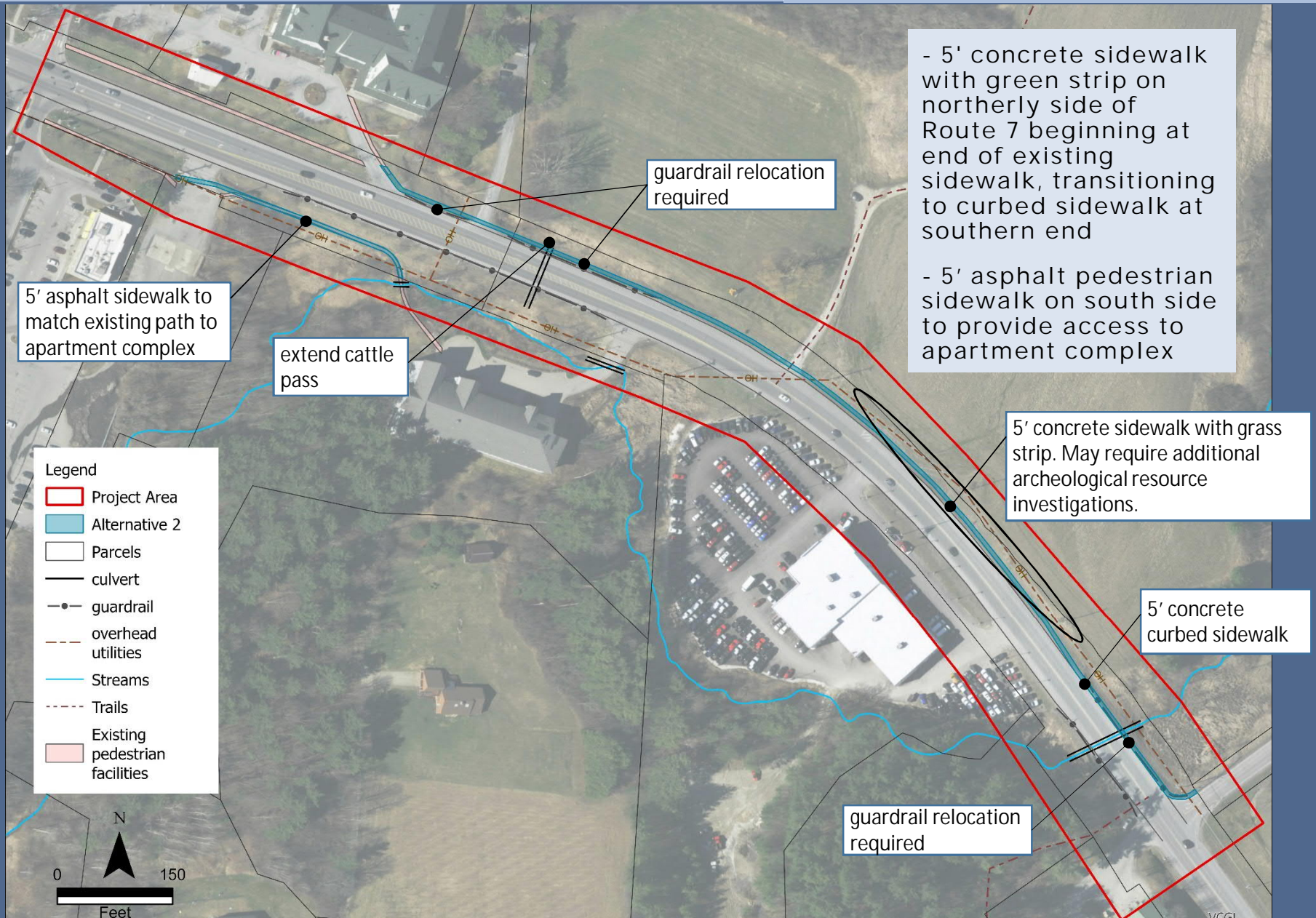
ALTERNATIVE 1





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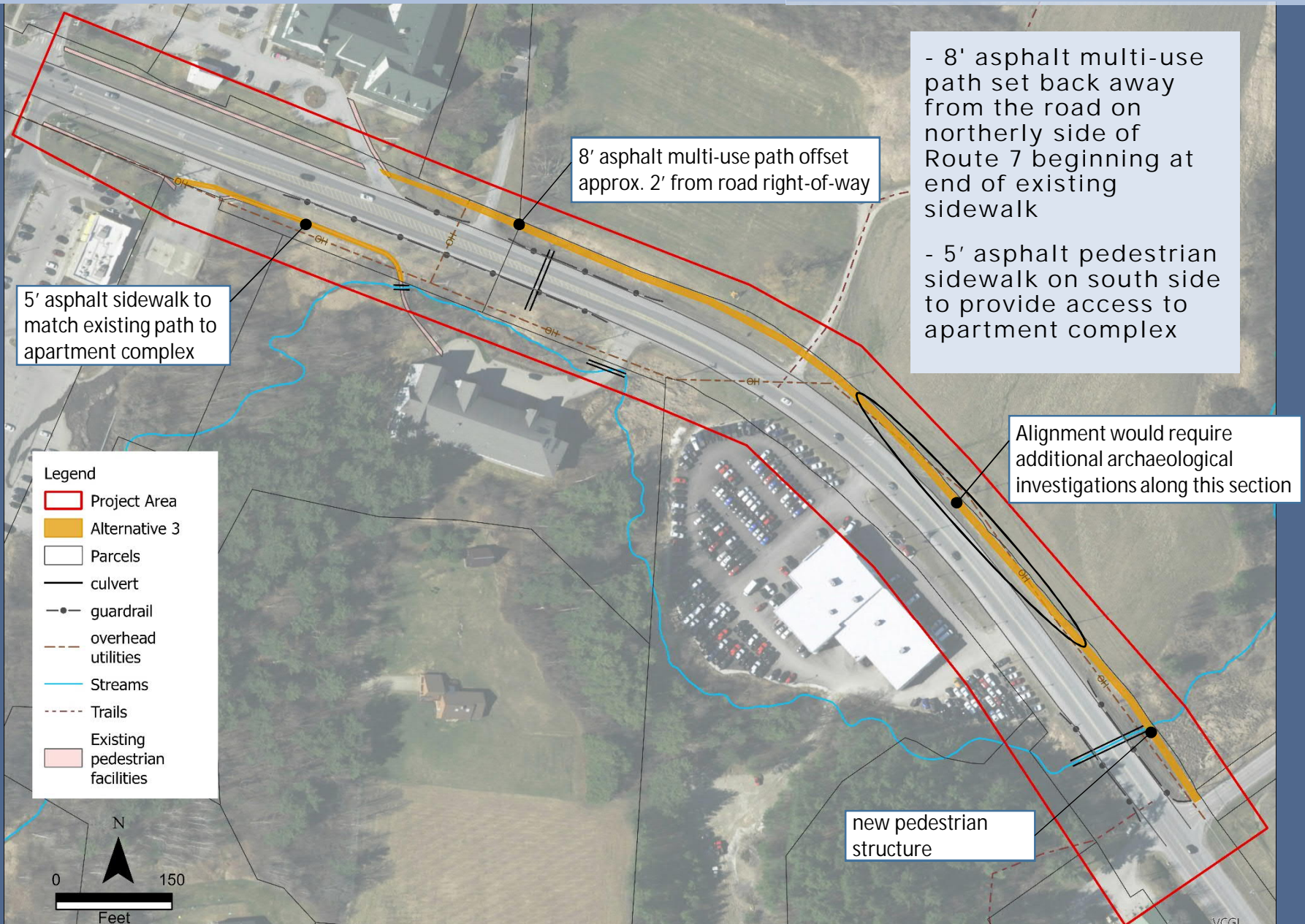
ALTERNATIVE 2





MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING  
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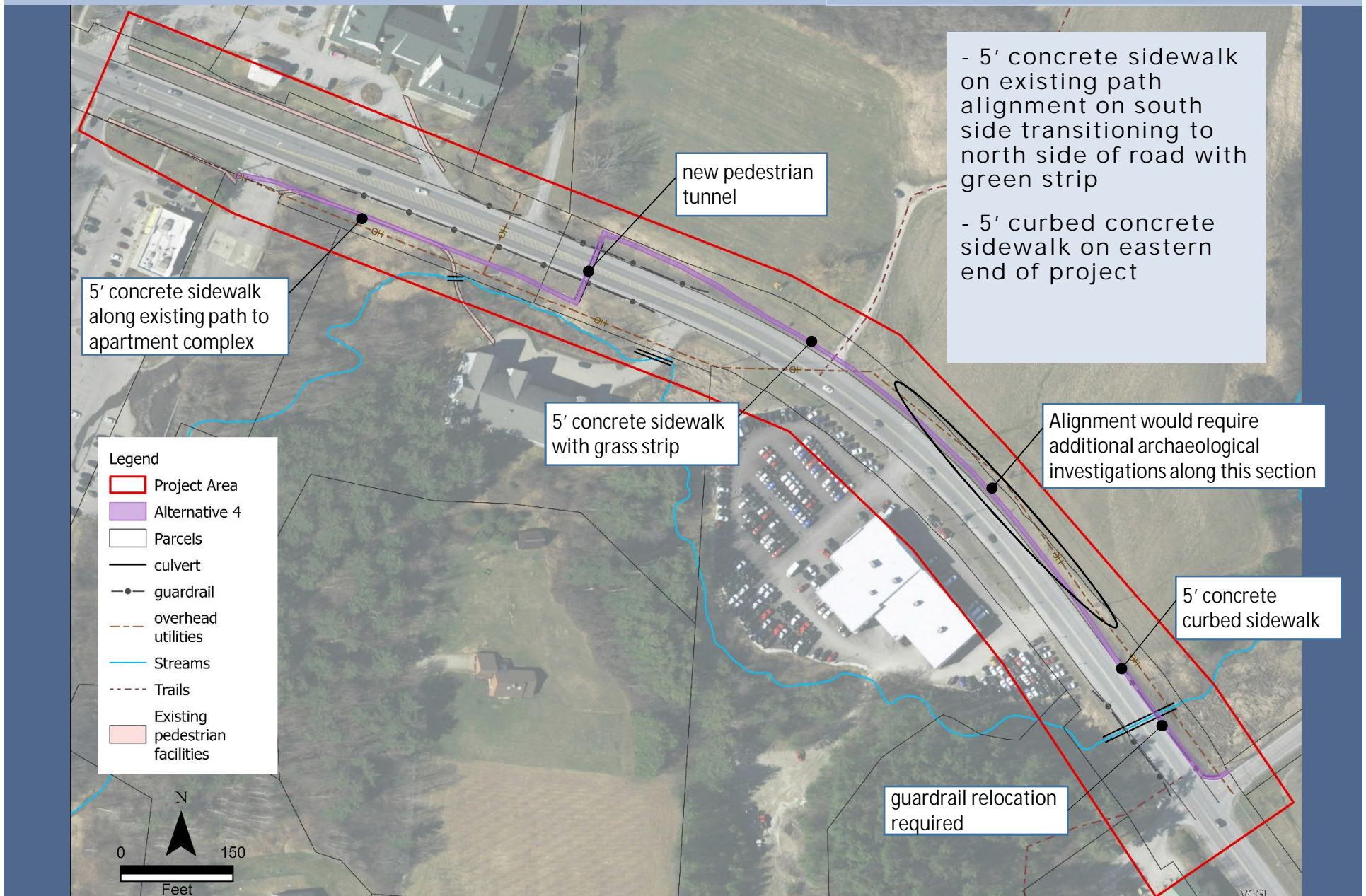
ALTERNATIVE 3





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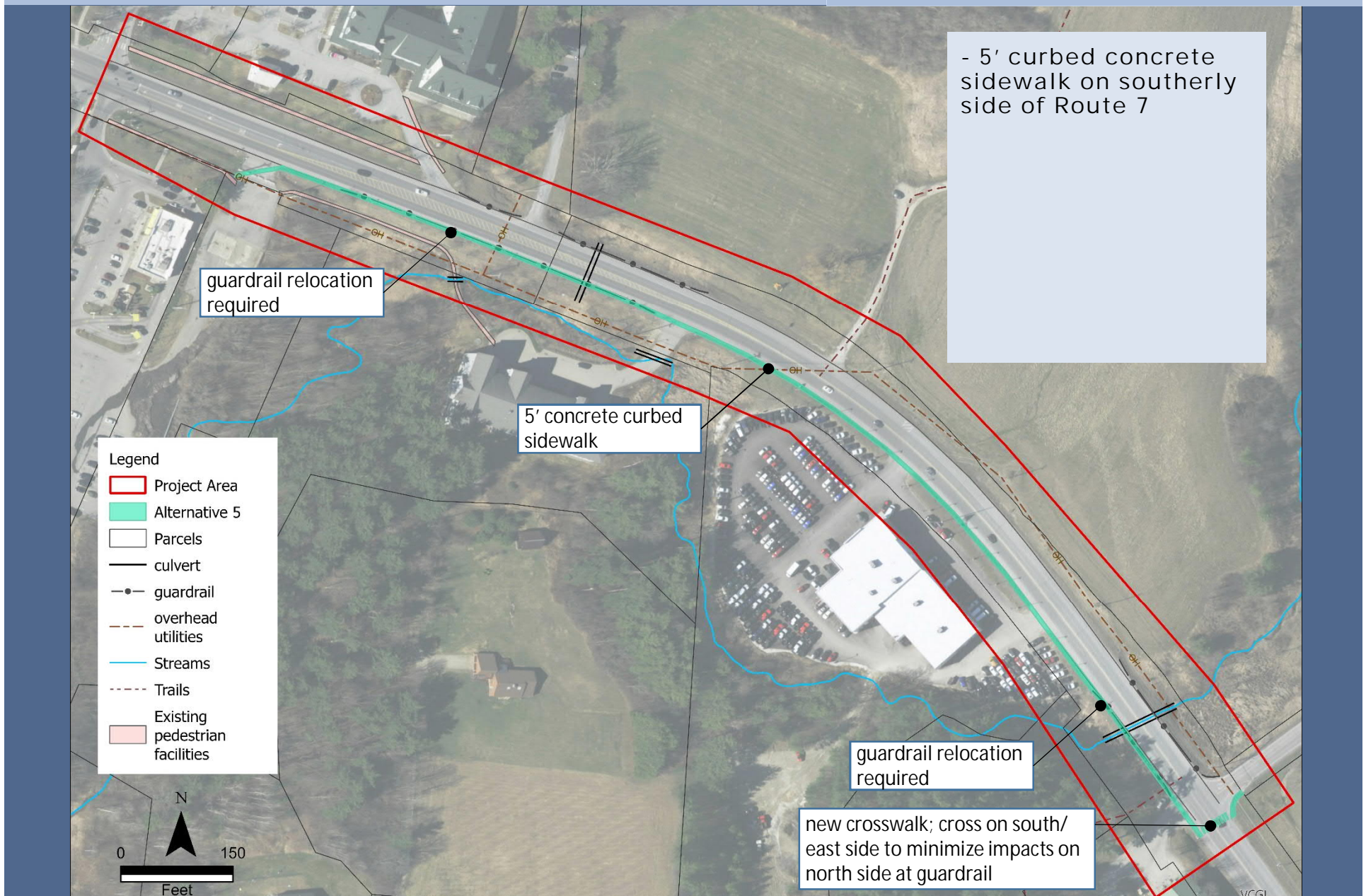
ALTERNATIVE 4





MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING  
STUDY (BOARDMAN STREET to HANNAFORD PLAZA):  
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ALTERNATIVE 5





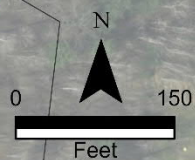
MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING  
STUDY (BOARDMAN STREET to HANNAFORD PLAZA):  
ALTERNATIVES PRESENTATION MEETING

ALTERNATIVE 6

- 5' concrete sidewalk  
on southerly side of  
Route 7 along existing  
path alignment,  
transitioning to curbed  
sidewalk on eastern  
end of project area

Legend

- Project Area
- Alternative 6
- Parcels
- culvert
- guardrail
- overhead utilities
- Streams
- Trails
- Existing pedestrian facilities



guardrail relocation  
required

new crosswalk; cross on south/  
east side to minimize impacts on  
north side at guardrail

VCGI

# MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

## OPINION OF PROBABLE CONSTRUCTION COSTS

Project cost estimates based on VTrans guidance for linear foot sidewalk costs plus additional site-specific cost estimates.

<b>VTrans Report on Shared-Use Path and Sidewalk Costs, 2020</b>	<b>Total Cost/Ft</b>
5-ft Wide Concrete Walk w/ No Curb	\$184
5-ft Wide Concrete Walk w/ Concrete Curb	\$277
5-ft Wide Bituminous Walk w/ No Curb	\$94
8-ft Wide Bituminous Concrete Path	\$297

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
	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
<b>Rounded Total Project Costs (Excluding ROW)</b>	<b>\$630,000</b>	<b>\$1,210,000</b>	<b>\$1,440,000</b>	<b>\$1,890,000</b>	<b>\$720,000</b>	<b>\$800,000</b>

### 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.



# MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

## EVALUATION MATRIX

	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	
	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	5' sidewalk on south beginning along existing path alignment and transitioning to curbed sidewalk	No Build
PROJECT GOALS							
Improved Pedestrian Safety	yes	yes	yes	yes	yes	yes	no improvement
PROJECT COSTS							
Construction	\$460,000	\$890,000	\$1,060,000	\$1,390,000	\$530,000	\$590,000	\$0
Engineering Design + Resident Engineer	\$170,000	\$320,000	\$380,000	\$500,000	\$190,000	\$210,000	\$0
Total Project Costs (excluding ROW)	\$630,000	\$1,210,000	\$1,440,000	\$1,890,000	\$720,000	\$800,000	\$0
LAND USE and LOCAL CONTEXT							
Bike / Ped Safety	curbed sidewalk adjacent to road	5' grass strip adjacent to road	path separated from road	curb / grass strip adjacent to road	curb / grass strip adjacent to road crosswalk at Boardman	curb / grass strip adjacent to road crosswalk at Boardman	no improvements
Local Context (drive crossings, local input, etc.)	improved, 1 drive	improved, 1 drive	improved, 1 drive, separated from road	improved, 1 drive	drive crossings, potential concern in front of car dealership, need for crosswalk at Boardman		no improvements
ROW and Utility impacts	minor	minor	potential	potential	unlikely	unlikely	-
ENVIRONMENTAL / CULTURAL							
Floodplains	-	-	-	-	-	-	-
Fish & wildlife	-	-	minor	-	-	-	-
Wetlands	unlikely/minor	unlikely/minor	potential	unlikely/minor	unlikely/minor	unlikely/minor	-
R/T/E Species; Wildlife; Conservation Areas	----- state endangered animal within project area (no permit anticipated) -----				Middlebury Area Land Trust near to ROW on south side at eastern end, but no anticipated impact. State endangered animal within project area.		-
Archaeological / Historic	unlikely	potential	potential	potential	-	-	-
Public Lands (Section 4f)	-	-	-	-	-	-	-
LWCF (Section 6(f))	-	-	-	-	-	-	-
Agricultural lands	----- prime statewide soil -----						-
Hazardous waste sites	-	-	-	-	car dealership shows as a hazardous site in GIS, but no anticipated impact		-
PERMITTING							
NEPA	----- Categorical Exclusion -----						-
Section 404 (wetlands) / State Wetlands Permit	potential	potential	potential	potential	potential	potential	-
Section 401 Water Quality	-	-	-	-	-	-	-
Stream Alteration Permit	----- likely for all alternatives -----						-
Stormwater Permitting (Construction & Operational)	----- unlikely -----						-
Lakes & Ponds	-	-	-	-	-	-	-
Section 1111 Permit	----- yes -----						-

# MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING STUDY (BOARDMAN STREET to HANNAFORD PLAZA): ALTERNATIVES PRESENTATION MEETING

## 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.

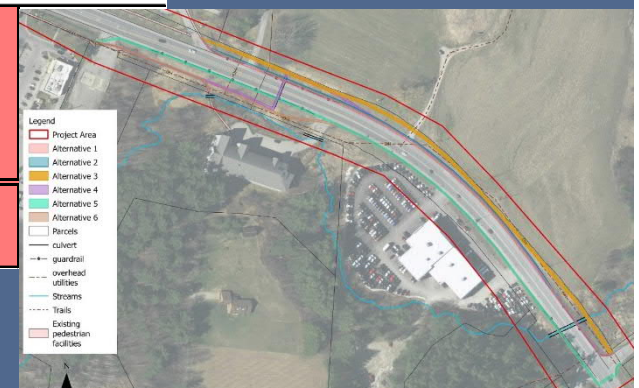
Alternative 3: Multi-use path on north side, and sidewalk section on south side to apartment complex.

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	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	NB	Total Possible Points
Project Goals	20	20	20	20	20	20	0	20
Project Costs	25	13	11	8	22	20	25	25
Land Use and Local Context	16	16	27	22	11	13	5	30
Env'l / Cultural / Permitting	20	16	13	17	20	20	22	25
Total Points and Ranking per Alternative	81 1	65 6	71 4	67 5	73 2	73 3	52 7	
Ranking Without Cost Factor	3	5	1	2	6	4	7	



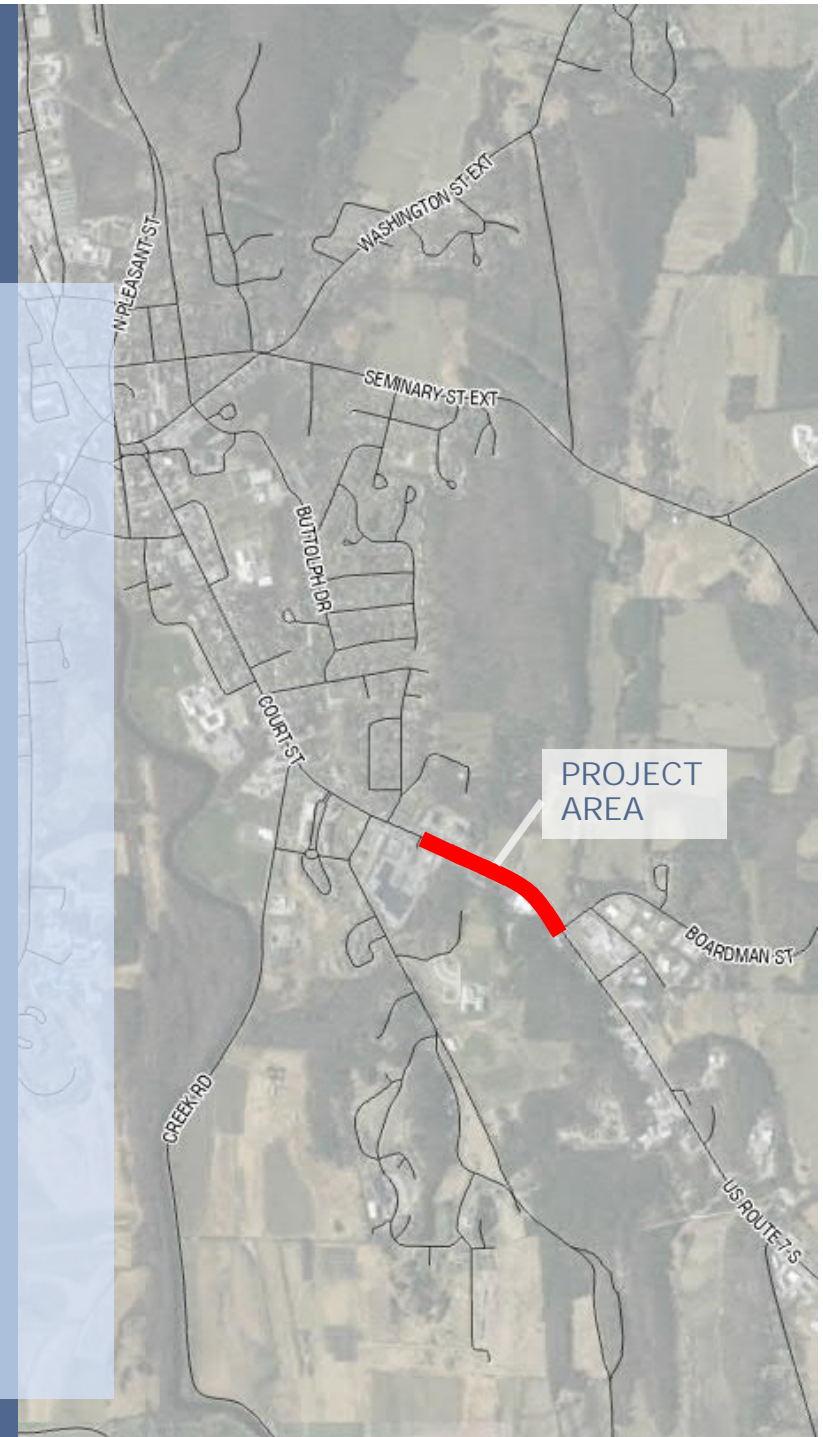


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### ALTERNATIVES PRESENTATION MEETING:

- 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.



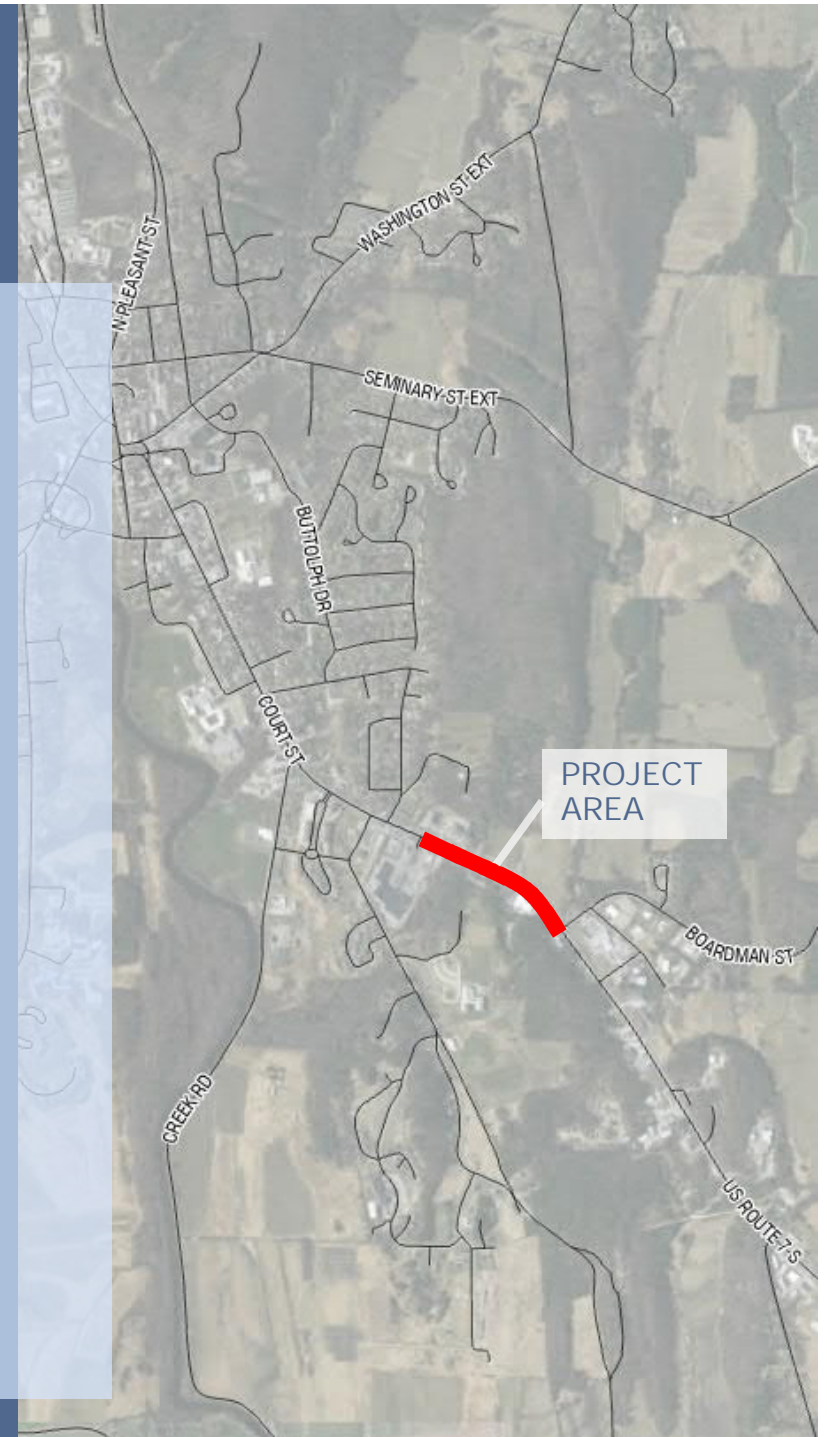


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### NEXT STEP:

- Finalize Scoping Study Report





MIDDLEBURY PEDESTRIAN CONNECTIVITY PLANNING  
STUDY (BOARDMAN STREET to HANNAFORD PLAZA):  
ALTERNATIVES PRESENTATION MEETING

COMMENTS? QUESTIONS?

Kathleen Ramsay  
Town Manager

Jennifer Murray  
Town Planning & Zoning  
Director

Mike Winslow  
Addison County Regional  
Planning Commission

Jenny Austin, P.E.  
DuBois & King, Inc.

