

HIGHWAY DESIGN REQUIREMENTS

Project Name: State-Beech Active Transportation and Infrastructure Project

WIN: N/A

PROJECT DATA

Roadway Segment: 1 (State Rd: Pine Ave to Old Rd)

Town(s):	Eliot	Project Scope: <input checked="" type="checkbox"/> New Construction/Reconstruction <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Preservation
Route(s):	State Rd	
WIN:	N/A	
Federal/State Project No.:	N/A	
Project Location:	Beginning on State Road 0.18 of a mile west of Old Road and extending east to Old Road. Beginning again 0.30 of a mile west of Beech Road and extending east 1.31 miles to Bolt Hill Road. Beginning on Beech Road at State Road and extending north 0.97 of a mile to Route 236.	
Corridor Priority (1-5):	4	Urban/Rural Nature: <input type="checkbox"/> Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Low Speed Urban
Design Life:	20	
20XX AADT (Current):	2257	
20XX AADT (Design):		

DESIGN CRITERIA

Design Element	Reference	Required Standard	Proposed Typical Section
		<i>(List range when appropriate)</i>	<i>(Team input may be required)</i>
Design Speed	El C3	Posted Speed(30mph)	
Lane Width	El C1	10'-12	10'
Shoulder Width	El C1	3'-4'	6' (1)
Cross Slope (Travelway)	El C4	2.0% (Desirable)	Match Existing (2)
Minimum Radius	El C7	250'	
Superelevation (Emax)	El C6	4.0%	Match Existing (2)
Stopping Sight Distance	El C8	200'	
Maximum Grade (%)	El C5	10%	
Vertical Clearance	El C9	15'	
Clear Zone	El C2	10'	
Side Slopes	Design Guidance	4:1 or 3:1	4:1

HIGHWAY DESIGN REQUIREMENTS

Project Name: *State-Beech Active Transportation and Infrastructure Project*

WIN: *N/A*

COMMENTS – Provide any comments necessary to clarify information presented above.

1. 6' shoulders to provide a minimum combined lane and shoulder width of 16' per MaineDOT Engineering Instruction C1. 6' is greater than the 5' recommended minimum bicycle lane width per *Guide for the Development of Bicycle Facilities 2012 Fourth Edition*.
2. Proposed project typical section is for reconstruction of the roadway shoulders only. Travelway pavement treatment, cross slope, and superelevation improvements will be coordinated with MaineDOT prior to a planned pavement preservation project scheduled for 2024.

HIGHWAY DESIGN REQUIREMENTS

Project Name: *State-Beech Active Transportation and Infrastructure Project*

WIN: N/A

PROJECT DATA

Roadway Segment: 2 (State Rd: Grange Hall to Old Rd)

Town(s):	Eliot	Project Scope: <input checked="" type="checkbox"/> New Construction/Reconstruction <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Preservation
Route(s):	State Road	
WIN:	N/A	
Federal/State Project No.:	N/A	
Project Location:	Beginning on State Road 0.18 of a mile west of Old Road and extending east to Old Road. Beginning again 0.30 of a mile west of Beech Road and extending east 1.31 miles to Bolt Hill Road. Beginning on Beech Road at State Road and extending north 0.97 of a mile to Route 236.	
Corridor Priority (1-5):	4	Urban/Rural Nature: <input type="checkbox"/> Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Low Speed Urban
Design Life:	20	
20XX AADT (Current):	2213	
20XX AADT (Design):		

DESIGN CRITERIA

Design Element	Reference	Required Standard	Proposed Typical Section
		<i>(List range when appropriate)</i>	<i>(Team input may be required)</i>
Design Speed	El C3	Posted Speed (30 mph)	
Lane Width	El C1	10'-12	10'
Shoulder Width	El C1	3'-4'	6' (1)
Cross Slope (Travelway)	El C4	2.0% (Desirable)	Match Existing (2)
Minimum Radius	El C7	250'	
Superelevation (Emax)	El C6	4.0%	Match Existing (2)
Stopping Sight Distance	El C8	200'	
Maximum Grade (%)	El C5	10%	
Vertical Clearance	El C9	15'	
Clear Zone	El C2	10'	
Side Slopes	Design Guidance	4:1 or 3:1	4:1

HIGHWAY DESIGN REQUIREMENTS

Project Name: *State-Beech Active Transportation and Infrastructure Project*

WIN: *N/A*

COMMENTS – Provide any comments necessary to clarify information presented above.

1. 6' shoulders to provide a minimum combined lane and shoulder width of 16' per MaineDOT Engineering Instruction C1. 6' is greater than the 5' recommended minimum bicycle lane width per *Guide for the Development of Bicycle Facilities 2012 Fourth Edition*.
2. Proposed project typical section is for reconstruction of the roadway shoulders only. Travelway pavement treatment, cross slope, and superelevation improvements will be coordinated with MaineDOT prior to a planned pavement preservation project scheduled for 2024.

HIGHWAY DESIGN REQUIREMENTS

Project Name: State-Beech Active Transportation and Infrastructure Project

WIN: N/A

PROJECT DATA Roadway Segment: 3 (State Rd: Old Rd to Moses Gerrish Farmer Rd)

Town(s):	Eliot	Project Scope: <input checked="" type="checkbox"/> New Construction/Reconstruction <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Preservation
Route(s):	State Rd	
WIN:	N/A	
Federal/State Project No.:	N/A	
Project Location:	Beginning on State Road 0.18 of a mile west of Old Road and extending east to Old Road. Beginning again 0.30 of a mile west of Beech Road and extending east 1.31 miles to Bolt Hill Road. Beginning on Beech Road at State Road and extending north 0.97 of a mile to Route 236.	
Corridor Priority (1-5):	4	Urban/Rural Nature: <input type="checkbox"/> Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Low Speed Urban
Design Life:	20	
20XX AADT (Current):	3390	
20XX AADT (Design):		

DESIGN CRITERIA

Design Element	Reference	Required Standard	Proposed Typical Section
		<i>(List range when appropriate)</i>	<i>(Team input may be required)</i>
Design Speed	EI C3	Posted Speed (30 mph)	
Lane Width	EI C1	10'-12	10' (2)
Shoulder Width	EI C1	3'-4'	5' (2)
Cross Slope (Travelway)	EI C4	2.0% (Desirable)	2% (3)
Minimum Radius	EI C7	250'	
Superelevation (Emax)	EI C6	4.0%	6% (3)
Stopping Sight Distance	EI C8	200'	
Maximum Grade (%)	EI C5	10%	
Vertical Clearance	EI C9	15'	
Clear Zone	EI C2	10'	
Side Slopes	Design Guidance	4:1 or 3:1	4:1

COMMENTS – Provide any comments necessary to clarify information presented above.

- Proposed work for this segment will be limited to striping and ADA landing improvements

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WIN: *N/A*

2. Existing as built section: 11' travelway, 4' shoulders. Proposed striped 10' travelways to provide 5' shoulders which will be striped as a bike lane. 5' is the recommended bicycle lane width per *Guide for the Development of Bicycle Facilities 2012 Fourth Edition*.
3. Existing as built section cross slopes: 2% travelway, 4% shoulders, and superelevation max of 6%

HIGHWAY DESIGN REQUIREMENTS

Project Name: State-Beech Active Transportation and Infrastructure Project

WIN: N/A

PROJECT DATA Roadway Segment: 4 (State Rd: Moses Gerrish Farmer Rd to Bolt Hill Rd)

Town(s):	Eliot	Project Scope: <input checked="" type="checkbox"/> New Construction/Reconstruction <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Preservation
Route(s):	State Road	
WIN:	N/A	
Federal/State Project No.:	N/A	
Project Location:	Beginning on State Road 0.18 of a mile west of Old Road and extending east to Old Road. Beginning again 0.30 of a mile west of Beech Road and extending east 1.31 miles to Bolt Hill Road. Beginning on Beech Road at State Road and extending north 0.97 of a mile to Route 236.	
Corridor Priority (1-5):	3	Urban/Rural Nature: <input type="checkbox"/> Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Low Speed Urban
Design Life:	20	
20XX AADT (Current):	2914	
20XX AADT (Design):		

DESIGN CRITERIA

Design Element	Reference	Required Standard	Proposed Typical Section
		<i>(List range when appropriate)</i>	<i>(Team input may be required)</i>
Design Speed	EI C3	Posted Speed(30mph)	
Lane Width	EI C1	10'-12	10'
Shoulder Width	EI C1	3'-4'	6' (1)
Cross Slope (Travelway)	EI C4	2.0% (Desirable)	Match Existing (2)
Minimum Radius	EI C7	250'	
Superelevation (Emax)	EI C6	4.0%	Match Existing (2)
Stopping Sight Distance	EI C8	200'	
Maximum Grade (%)	EI C5	10%	
Vertical Clearance	EI C9	15'	
Clear Zone	EI C2	10'	
Side Slopes	Design Guidance	4:1 or 3:1	4:1

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HIGHWAY DESIGN REQUIREMENTS

Project Name: State-Beech Active Transportation and Infrastructure Project

WIN: N/A

PROJECT DATA

Roadway Segment: 5 (Beech Rd: State Rd to Route 236)

Town(s):	Eliot	Project Scope: <input checked="" type="checkbox"/> New Construction/Reconstruction <input type="checkbox"/> Rehabilitation <input type="checkbox"/> Preservation
Route(s):	Beech Street	
WIN:	N/A	
Federal/State Project No.:	N/A	
Project Location:	Beginning on State Road 0.18 of a mile west of Old Road and extending east to Old Road. Beginning again 0.30 of a mile west of Beech Road and extending east 1.31 miles to Bolt Hill Road. Beginning on Beech Road at State Road and extending north 0.97 of a mile to Route 236.	
Corridor Priority (1-5):	4	Urban/Rural Nature: <input type="checkbox"/> Rural <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Low Speed Urban
Design Life:	20	
20XX AADT (Current):	2715	
20XX AADT (Design):		

DESIGN CRITERIA

Design Element	Reference	Required Standard	Proposed Typical Section
		<i>(List range when appropriate)</i>	<i>(Team input may be required)</i>
Design Speed	EI C3	Posted Speed (30 mph)	
Lane Width	EI C1	10'-12	10'
Shoulder Width	EI C1	3'-4'	6' (1)
Cross Slope (Travelway)	EI C4	2.0% (Desirable)	Match Existing (2)
Minimum Radius	EI C7	250'	
Superelevation (Emax)	EI C6	4.0%	Match Existing (2)
Stopping Sight Distance	EI C8	200'	
Maximum Grade (%)	EI C5	10%	
Vertical Clearance	EI C9	15'	
Clear Zone	EI C2	10'	
Side Slopes	Design Guidance	4:1 or 3:1	4:1

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