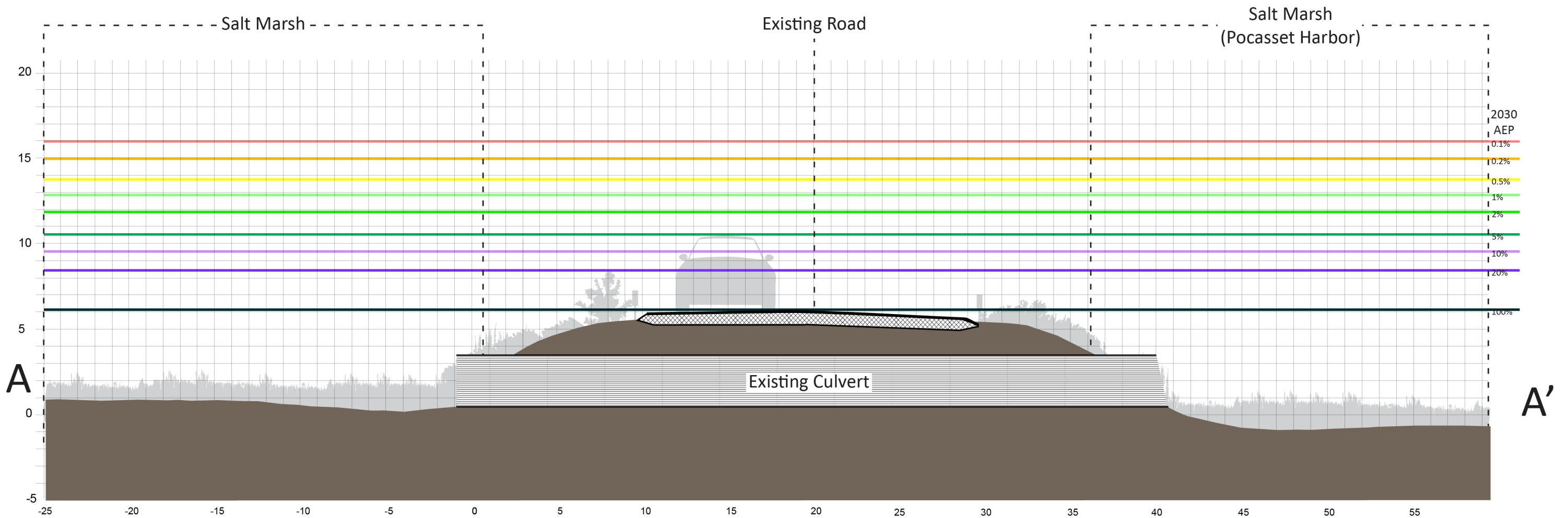
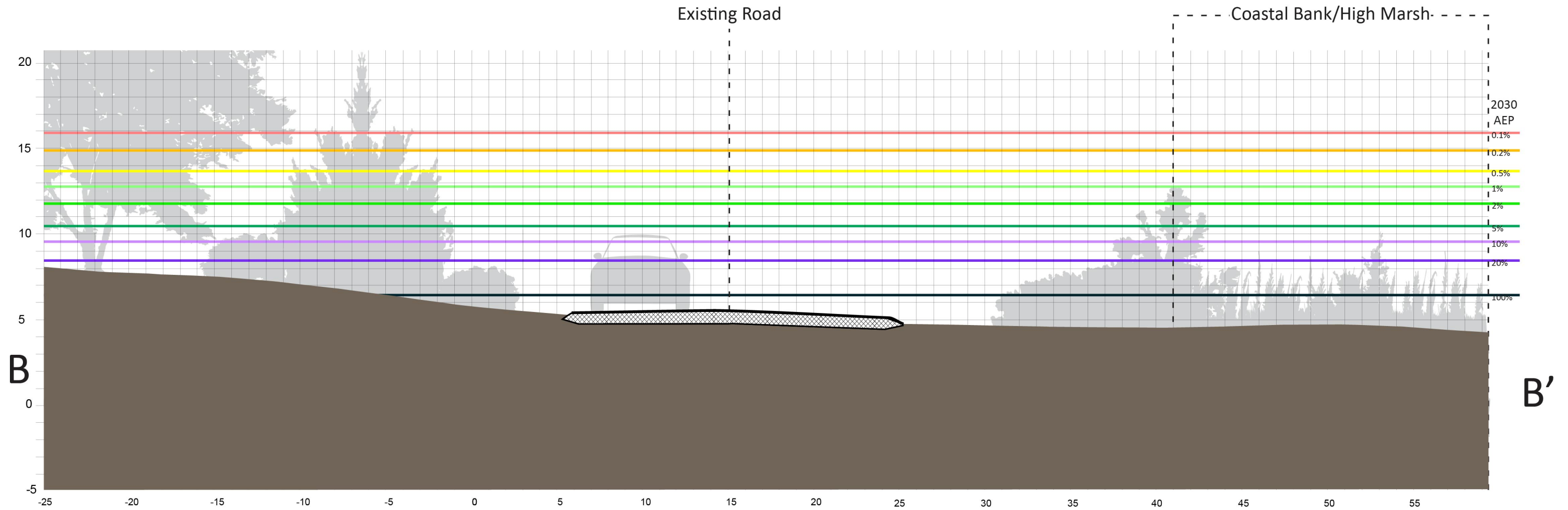
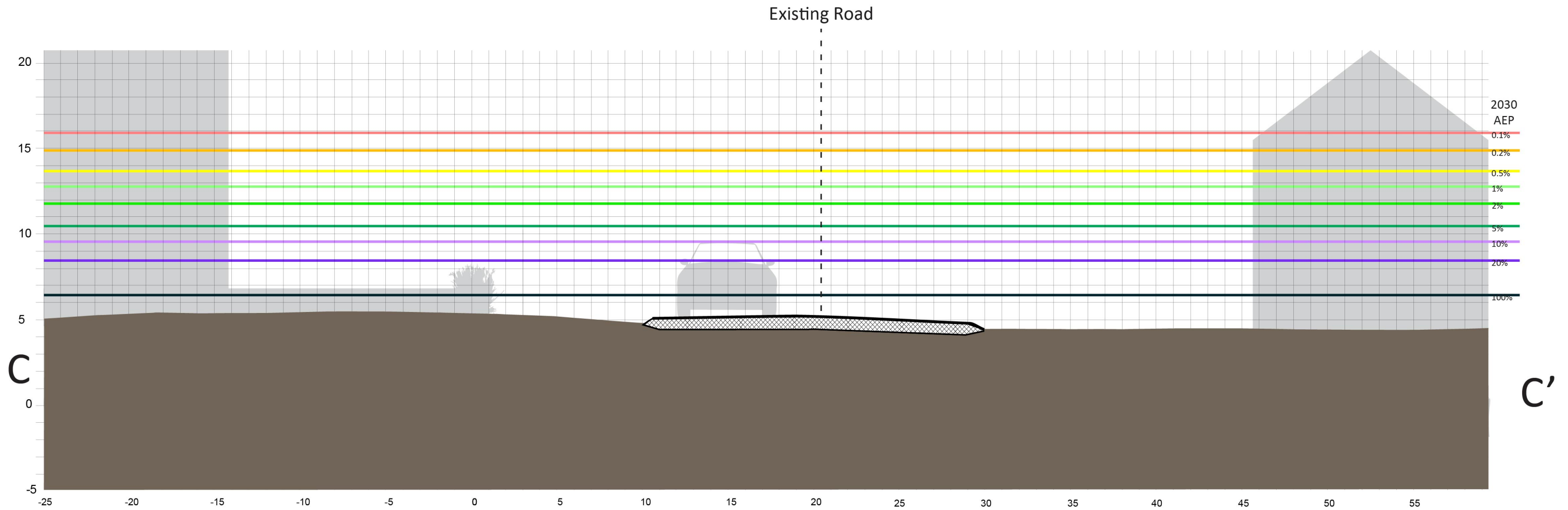






EXISTING CONDITIONS

Wings Neck Road, Bourne



EXISTING CONDITIONS

Wings Neck Road, Bourne



ALTERNATIVE 1: GRAY

4038 linear feet of Town-owned road are elevated from a lowest point of 3.9 feet to a lowest point of 10.0 feet with a 4:1 traditionally vegetated side slope. Sheet pile is used at the marsh crossing.

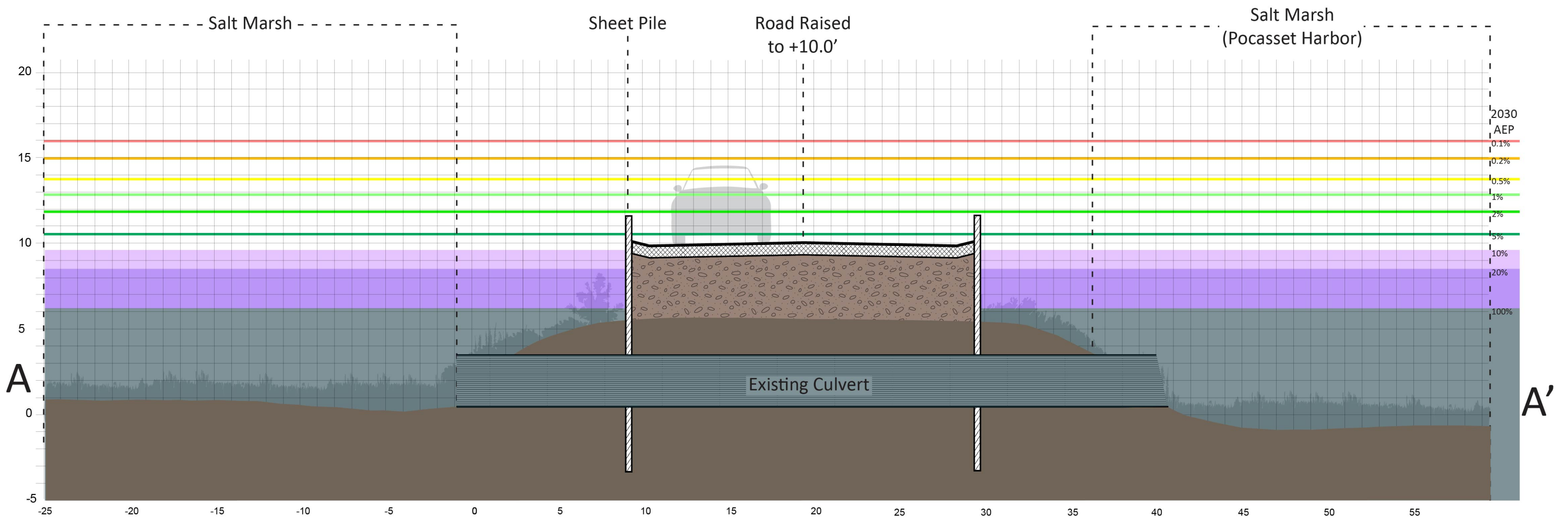


Wings Neck Road - East
BOURNE

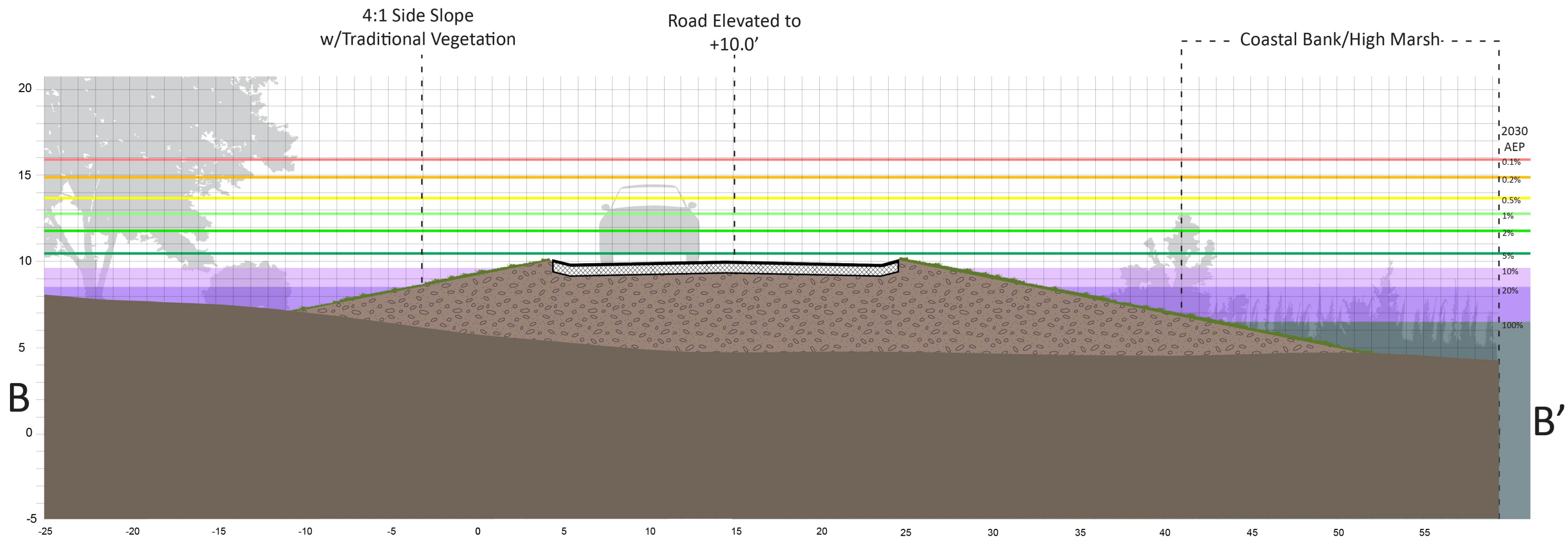
ALTERNATIVE 1: GRAY

4038 linear feet of Town-owned road are elevated from a lowest point of 3.9 feet to a lowest point of 10.0 feet with a 4:1 traditionally vegetated side slope. The side slopes encroach significantly on private property and overlap with existing structures.

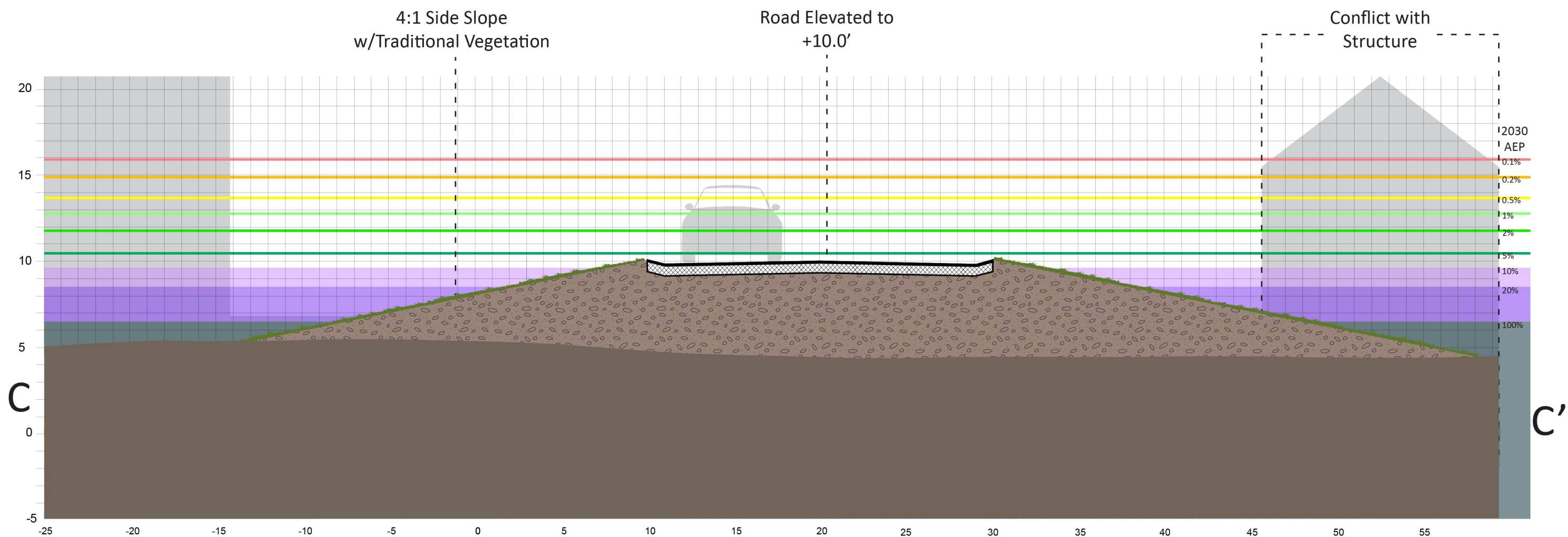
Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey



ALTERNATIVE 1: GRAY Wings Neck Road, Bourne

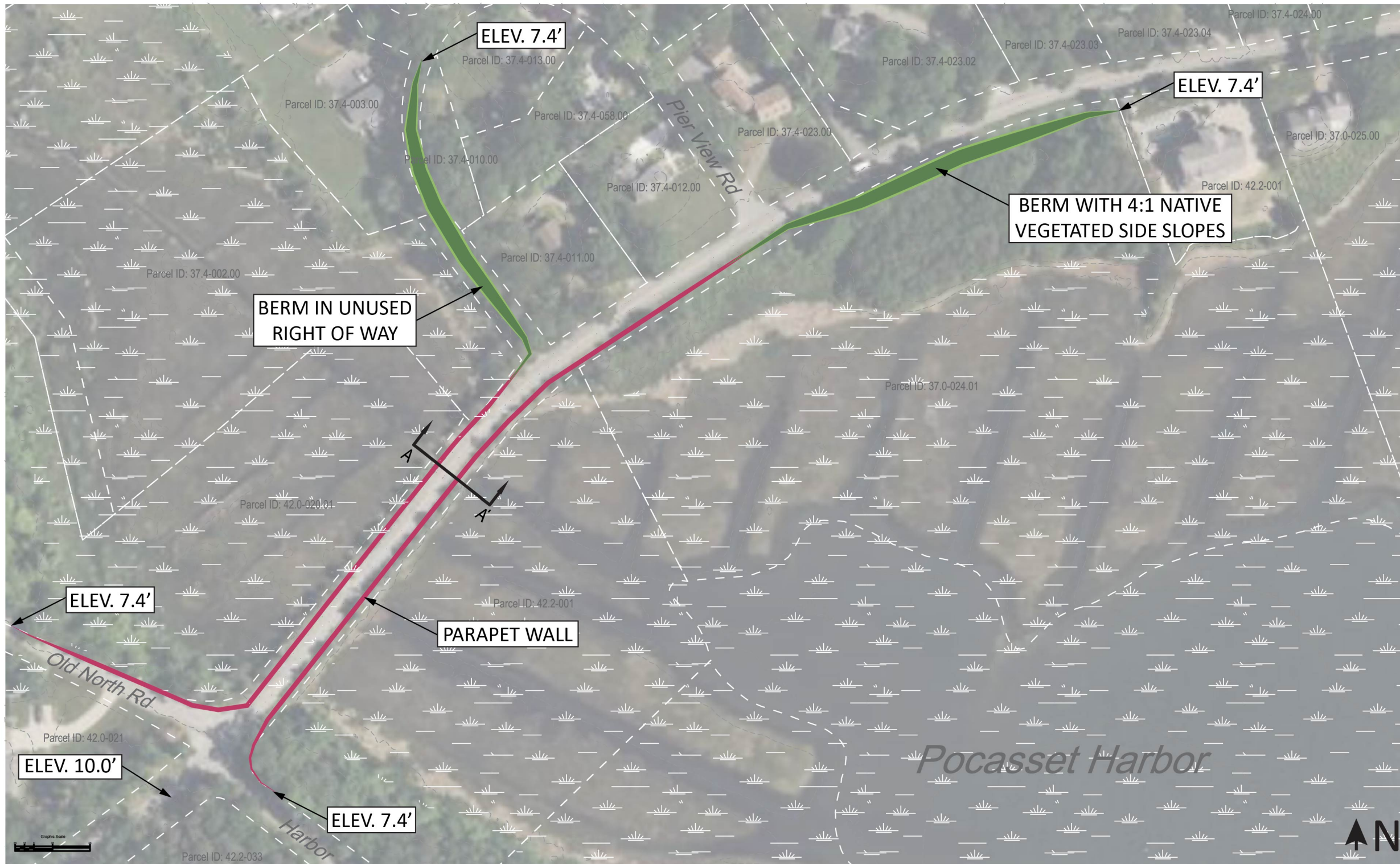


ALTERNATIVE 1: GRAY
Wings Neck Road, Bourne



ALTERNATIVE 1: GRAY

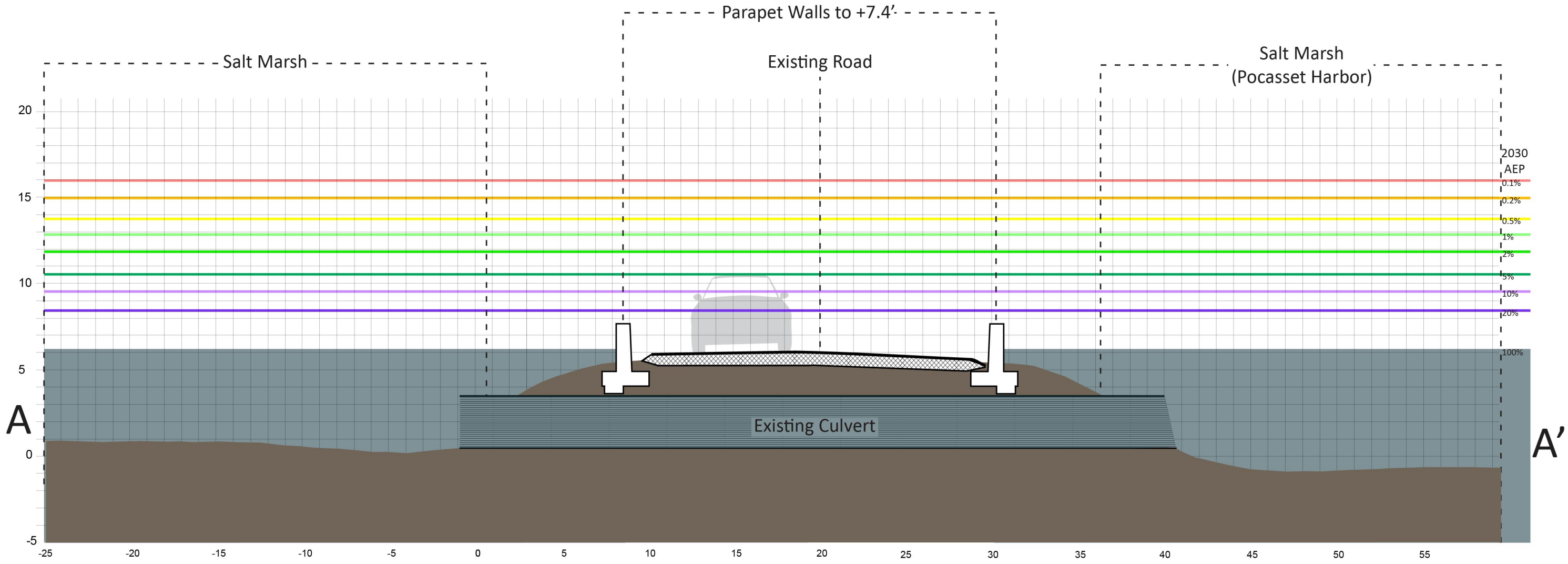
Wings Neck Road, Bourne



Wings Neck Road - West
BOURNE

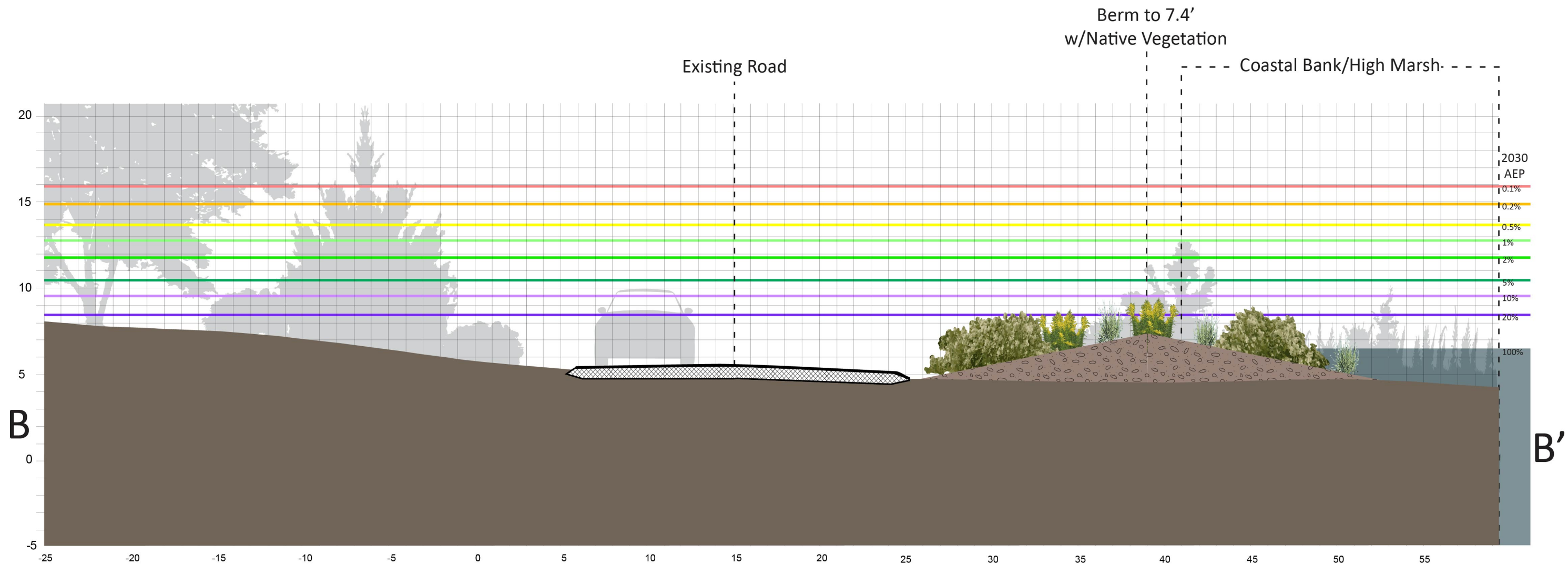
ALTERNATIVE 2: HYBRID

Parapet walls and berms protect the road to 7.4 feet without encroaching on private property.



ALTERNATIVE 2: HYBRID

Wings Neck Road, Bourne



ALTERNATIVE 2: HYBRID

Wings Neck Road, Bourne

WINGS NECK ROAD, BOURNE

Summary of alternatives

	Segment	Description	Critical Elevation	Annual Exceedance Probability			Vulnerable to Tidal Flooding	Impacts to Wetlands	Impacts to Private Property	Estimated Cost*
				2030	2050	2070				
EXISTING	EAST	A segment of 20ft wide road with a culvert crossing.	3.9 feet	100%	100%	100%	2050	N/A	N/A	N/A
	WEST		5.0 feet	100%	100%	100%	2070			
ALTERNATIVE 1: GRAY	EAST	4038 linear feet of Town-owned road are elevated from a lowest point of 3.9 feet to a lowest point of 10.0 feet with a 4:1 traditionally vegetated side slope, except at the marsh crossing, where sheet pile is used.	10.0 feet	5%	20%	20%	N/A	Minimal	Significant	\$16,529,000
	WEST		10.0 feet	5%	20%	20%	N/A	Negative	Minor	
ALTERNATIVE 2: HYBRID	EAST	Parapet walls and berms protect the road to 7.4 feet. Negotiation with property owners and selective acquisitions are required, along with a deployable barrier at the dock at the end of Richmond Road.	7.4 feet	20%	20%	100%	N/A	Negative	Significant	\$1,177,000 (excluding easements and acquisitions)
	WEST		7.4 feet	20%	20%	100%	N/A	Minimal	None	

*Installed material cost +20% contingency. Excludes design, permitting, mobilization, stormwater and wastewater infrastructure, and site controls. Costs based on RSMeans 2021 cost book and adjusted for inflation and region.