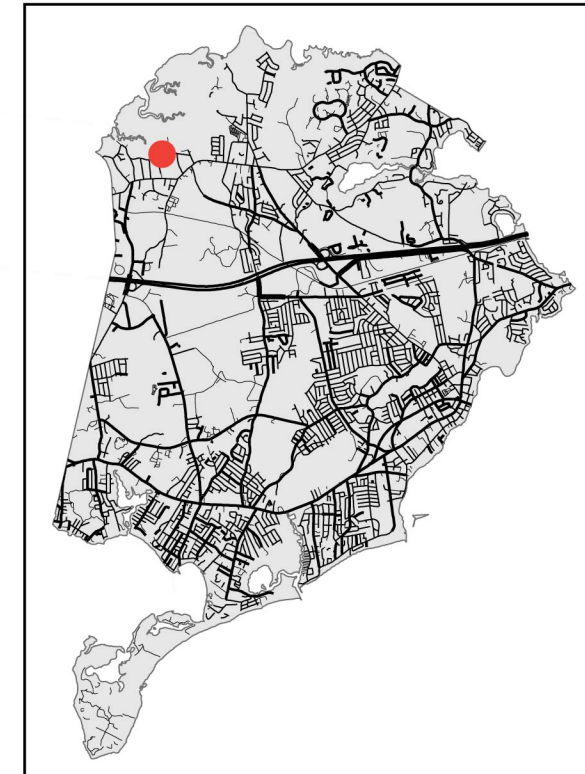


EXISTING CONDITIONS
Thacher Shore Road, Yarmouth

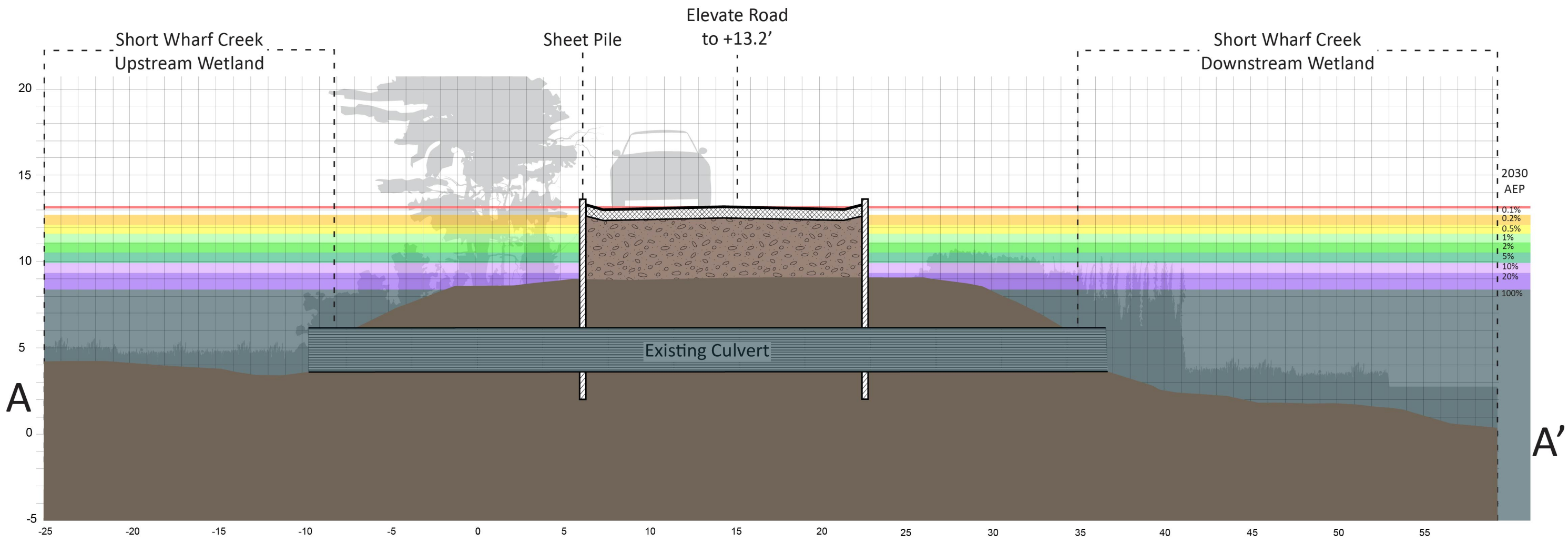


**Thacher Shore Road
YARMOUTH**

ALTERNATIVE 1: GRAY

860 feet of town-owned road are elevated to 13.2 feet using sheet pile and 4:1 traditionally vegetated side slopes.

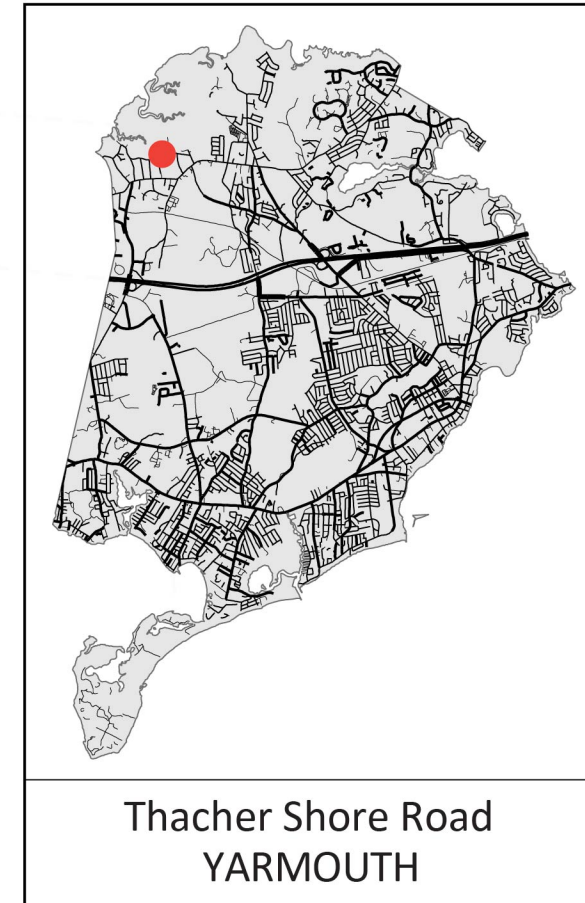
Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey



ALTERNATIVE 1: GRAY
 Thacher Shore Road, Yarmouth

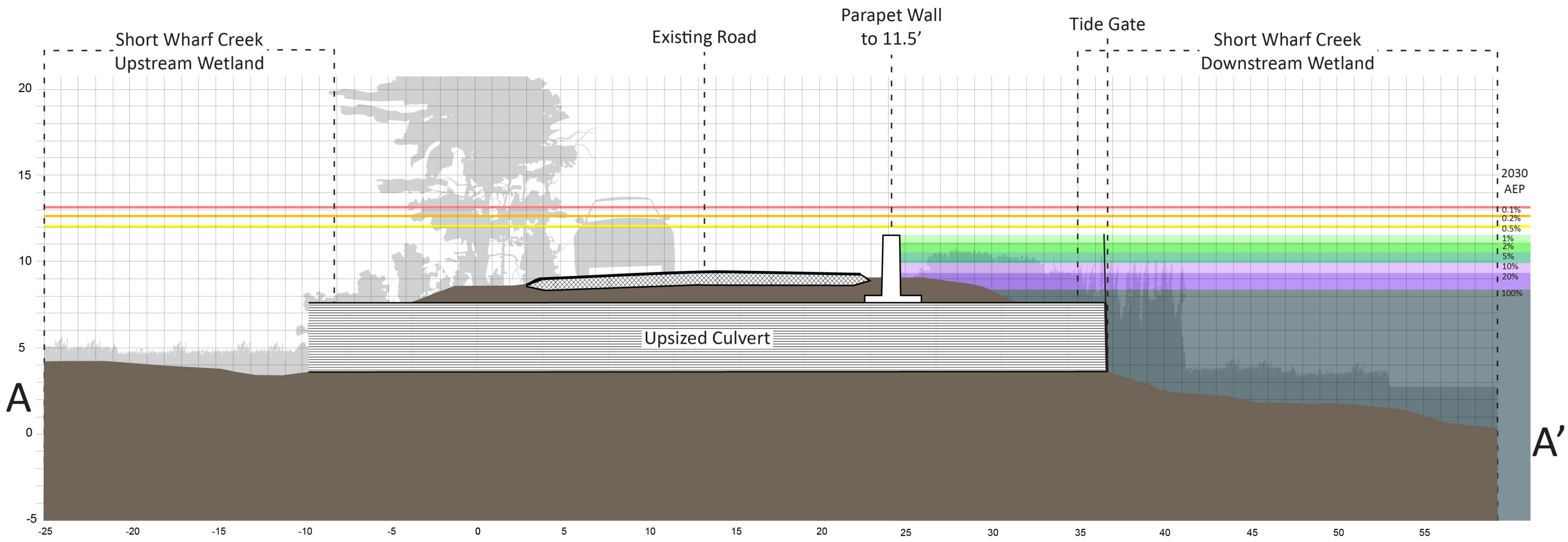


Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey



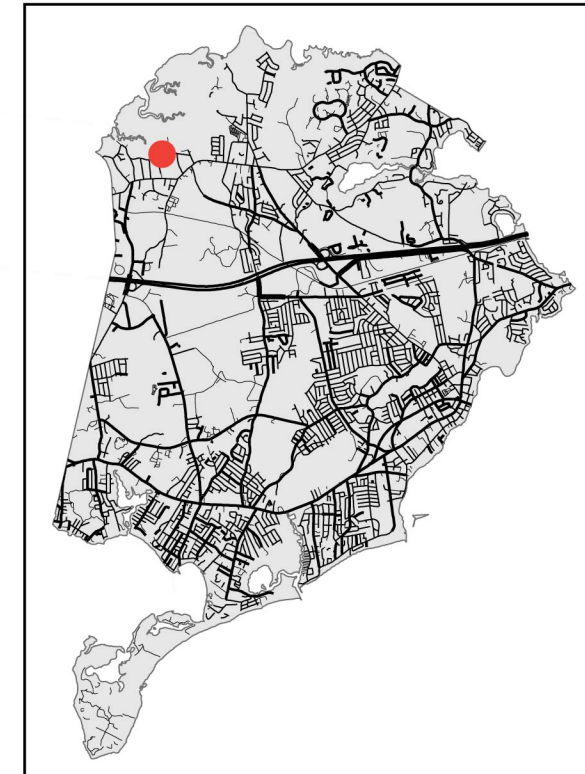
ALTERNATIVE 2: HYBRID

A parapet wall to 11.5 feet is added on the seaward side of the road. The culvert is replaced with a larger culvert, and a tide gate is added to manage flanking.



ALTERNATIVE 2: HYBRID

Thacher Shore Road, Yarmouth

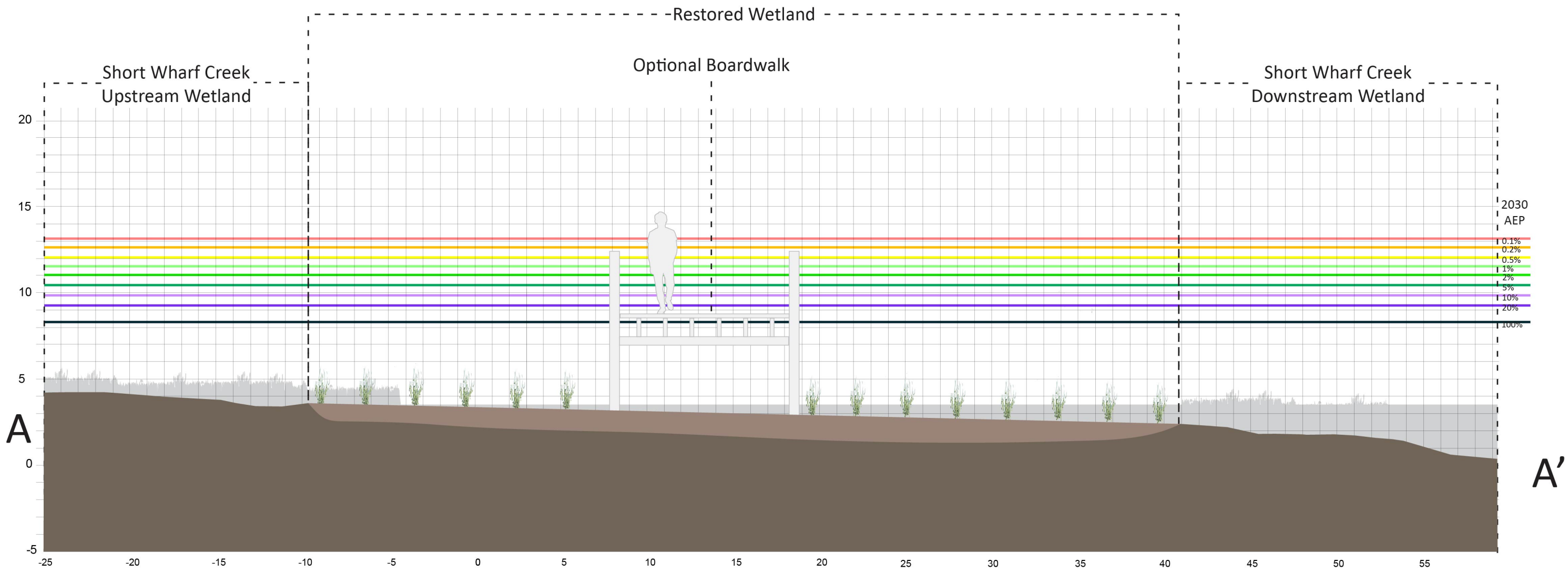


**Thacher Shore Road
YARMOUTH**

ALTERNATIVE 3: GREEN

200 linear feet of town-owned road are removed, and the road bed is excavated. The soil is replaced and native wetland plants are installed. A boardwalk could be installed to preserve the pedestrian connection. An overlook, kayak launch, and other recreational amenities could also be added.

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



ALTERNATIVE 3: GREEN
 Thatcher Shore Road, Yarmouth

THACHER SHORE ROAD, YARMOUTH

Summary of alternatives

	Description	Critical Elevation	Annual Exceedance Probability			Vulnerable to Tidal Flooding	Impacts to Wetlands	Impacts to Private Property	Estimated Cost*
			2030	2050	2070				
EXISTING	A segment of 20 foot wide road with a culvert crossing.	8.8 feet	20%	100%	100%	2070	N/A	N/A	N/A
ALTERNATIVE 1: GRAY	860 linear feet of town-owned road are elevated to 13.2 feet using sheet pile and 4:1 traditionally vegetated side slopes.	13.2 feet	0%	1%	5%	N/A	N/A	Yes	\$297,000
ALTERNATIVE 2: HYBRID	A parapet wall to 11.5 feet is added on the seaward side of the road. The culvert is replaced with a larger culvert, and a tide gate is added to manage flanking.	11.5 feet	1%	5%	20%	N/A	Possible Positive	Yes	\$251,000
ALTERNATIVE 3: GREEN	200 linear feet of town-owned road are removed, and the road bed is excavated. The soil is replaced and native wetland plants are installed. A boardwalk, overlook, and other recreational amenities could be added.	N/A	0%	0%	0%	N/A	Positive	N/A	\$94,000

*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.