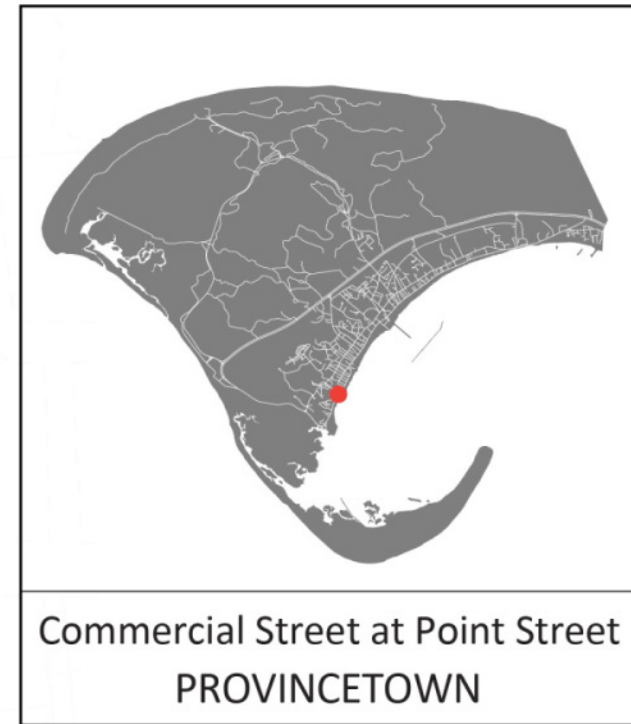


EXISTING CONDITIONS

Commercial Street at Point Street, Provincetown

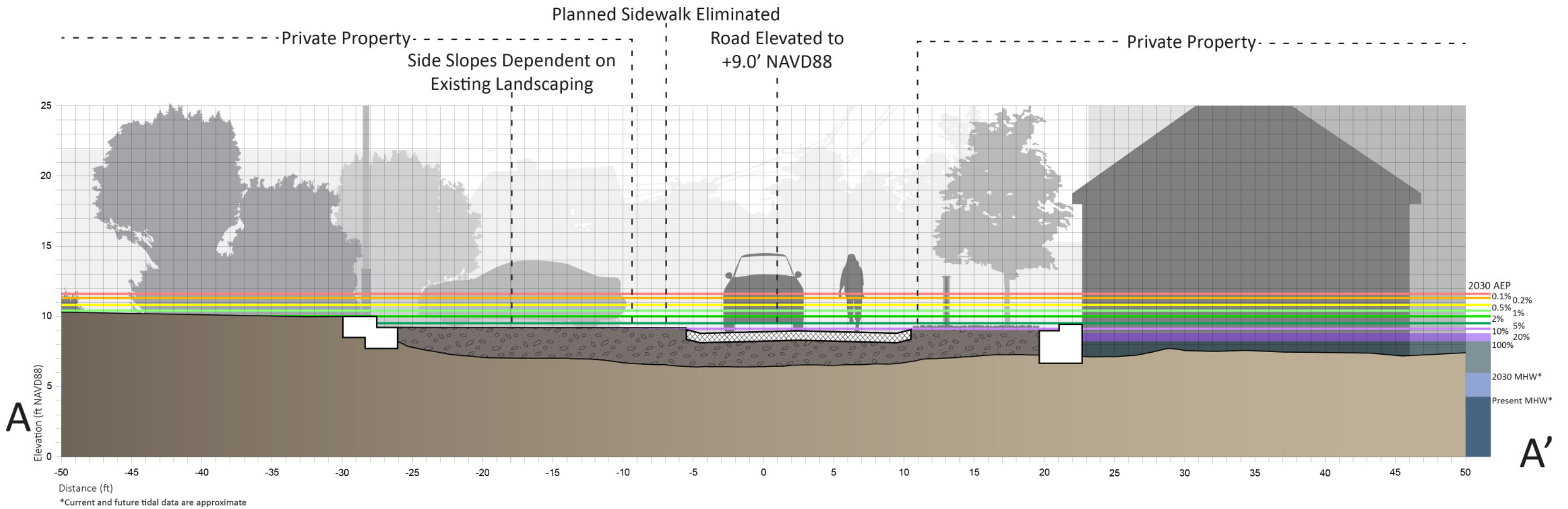


ALTERNATIVE 1: GRAY

373 linear feet of town-owned road are elevated from a lowest point of +6.7' NAVD88 to a lowest point of +9.0' NAVD88. Side slopes are blended with existing landscape where possible, and retaining walls are used where not. The planned sidewalk extension is eliminated, and signage and road markings indicate a shared street. Over time, the Town works with property owners to eliminate flood pathways, and a new standard bulkhead elevation of +11.0' NAVD88 is set.

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

*Element not included in costing, permitting, or flood reduction considerations.

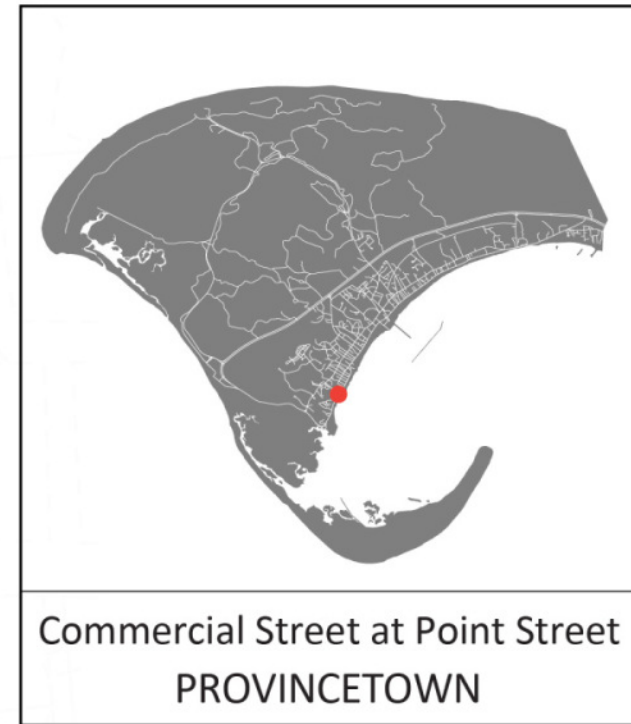


ALTERNATIVE 1: GRAY

Commercial Street at Point Street, Provincetown

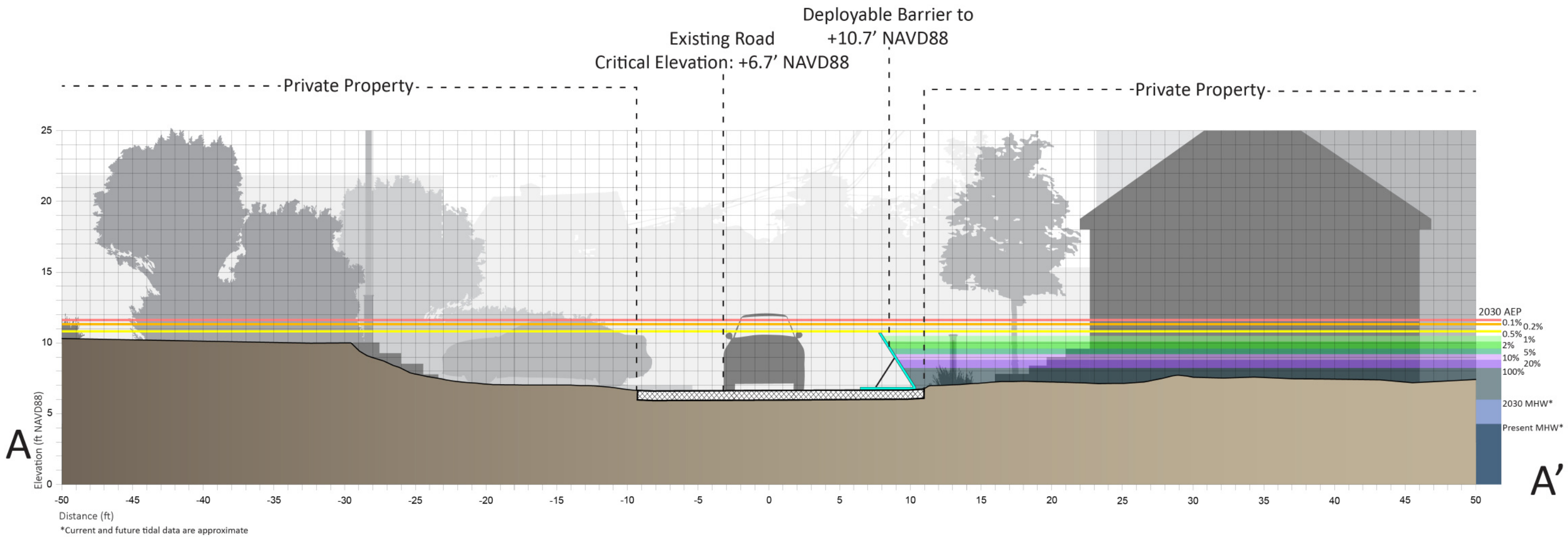


Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey
 *Element not included in costing, permitting, or flood reduction considerations.



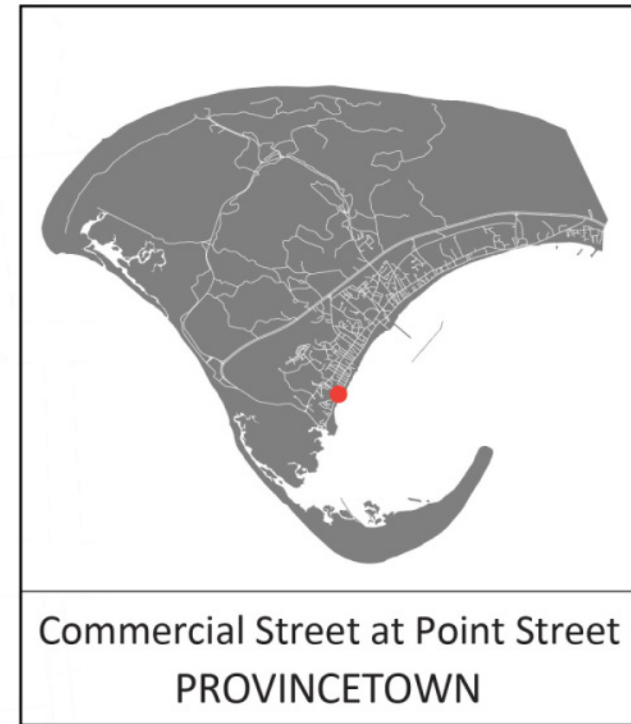
ALTERNATIVE 2: DEPLOYABLE

380 linear feet of 48" tall deployable barriers protect the road to an elevation of +10.7' NAVD88. Parking is restricted during storm events in order to maintain a full travel lane while accomodating the barriers. In the long-term, segments of fixed wall and permanent gates reduce the amount of time and effort required to deploy barriers before storms. Additional barriers across the beach parking lot could reduce wave runup and overtopping impacts. Some walls and gates may be located on private property and require coordination with owners.



ALTERNATIVE 2: DEPLOYABLE

Commercial Street at Point Street, Provincetown



ALTERNATIVE 3: GREEN

In the long term, 16 low-lying waterfront and inland properties are acquired to facilitate a dune and beach restoration and stormwater storage park. Future regulatory changes and storm impacts may provide opportunities for community-driven change in waterfront land use.

Note: Project overlap with wetland areas, rights of way and property lines is approximate and needs confirmation with a site survey
 *Element not included in costing, permitting, or flood reduction considerations.

COMMERCIAL STREET AT POINT STREET, PROVINCETOWN

Summary of alternatives

	Description	Critical Elevation (NAVD88)	Annual Exceedance Probability			Vulnerable to Tidal Flooding†	Permitability Concerns	Impacts to Private Property	Estimated Cost*
			2030	2050	2070				
EXISTING	Primarily residential stretch of Commercial Street near Dog Beach.	6.7 feet	100%	100%	100%	2050	N/A	N/A	N/A
ALTERNATIVE 1: GRAY	373 linear feet of town-owned road are elevated from a lowest point of +6.7' NAVD88 to a lowest point of +9.0' NAVD88. Side slopes are blended with existing landscape where possible. Bulkhead gaps are closed, and a new standard bulkhead elevation of +11.0' NAVD88 is set.	9.0 feet	10%	100%	100%	2070	Eliminates sidewalk	Moderate	\$273,000
ALTERNATIVE 2: DEPLOYABLE	380 linear feet of 48" tall deployable barriers protect the road to an elevation of +10.7' NAVD88. Parking is restricted during storm events in order to maintain a full travel lane while accommodating the barriers.	10.7 feet	0.5%	20%	100%	2050	N/A	Temporary	\$155,000
ALTERNATIVE 3: GREEN	In the long term, 16 low-lying waterfront and inland properties are acquired to facilitate a dune restoration and stormwater storage park.	10.0 feet	2%	20%	100%	No	Resource area restoration, buyouts	Severe	\$187,000+ (cost of buyouts and demolition not included)

*2023 installed material cost +40% escalation (through 2029) and 15% contingency. Excludes design, permitting, mobilization, stormwater and wastewater infrastructure, and site controls. Costs based on experienced contractor opinion and MassDOT costing data.

†Future tidal data are approximate.