AT ISSUE

The Draft Environmental Impact Report Section 4.3.2 illustrates and describes the Bourne South Quadrant's shared use facility terminating at **an at-grade crossing of the Canal Service Road (Sandwich Road)** controlled only by a flashing beacon. This poses both environmental and safety/usage issues detailed here.

Figure 1 - Currently-planned (problematic) at-grade crossing

BACKGROUND

Environmental impact of at-grade crossing does not consider big impacts:

- **Multiple large-scale events will stop traffic constantly.** Pan-Mass Challenge: 3,700 riders; Best Buddies Challenge: 2,000+; Buzzards Bay Coalition: 1,000; P2P: 500+; and *more than a dozen* other organized rides. New bridge bike lanes will bring even more usage. Result: Material increase in CO2 from car stop/start; significant bike/car conflict.
- **Unnecessary land impact.** The current design requires broad removal of mature trees, and creation of berms and grade features to facilitate the long descent. Result: Constant runoff erosion means likely hillside nourishment, and road clearing costs.

But the safety issues are far more crucial:

- **Canal bikeway destination requires at-grade crossing every time.** A ***large and constant flow*** of cyclists / pedestrians will be crossing to the southern Cape Cod Canal Bikeway. Traffic stoppage will be nearly constant; accident risk is high.
- **Flashing beacon mismatch.** A flashing signal type is inadequate for the volume of both path users and vehicles. But the technically correct HAWK signal is itself a mismatch for traffic; a full stoplight is right for bikes/walkers but is a problem for cars.
- **Downhill approach hazards.** Inattentive riders failing to brake on descent risk rolling out into the road crossing or crashing into stopped riders ahead.
- **Youth access risks.** The extension of the paved walkway to the ice rink will encourage younger riders - but then make them cross a complex, fast-moving roadway.

SOLUTION

A light, ramped, grade-separated bike & walker overpass. It leverages existing site elevation, the already-planned retaining wall, and already-available land.

FEASIBILITY

The change leverages planned structures. Rework planned berm for southerly overpass approach to the overpass, continuing on a northerly descent via light, non-vehicular structure.[1]

No new property required. Northern end can descend into the existing Bourne Recreation Area and Cape Cod Canal District property. No property taking is required.

[1] An informal discussion with James Barnack, Project Manager at HNTB, indicated that leveraging the planned berm and existing elevation for a lightweight overpass is technically feasible and would require only modest additional engineering, with positive expected benefit.

ACTION REQUESTED

To support this, we respectfully request MassDOT **prepare a preliminary design and cost estimate (capital & operating) for this proposed lightweight overpass**. To assess its feasibility, we also request this be compared to the cost of the path with a HAWK signal, which is the only technically appropriate signal for the at-grade crossing at the anticipated volumes.

Figure 2 - Location of proposed overpass versus existing path plan

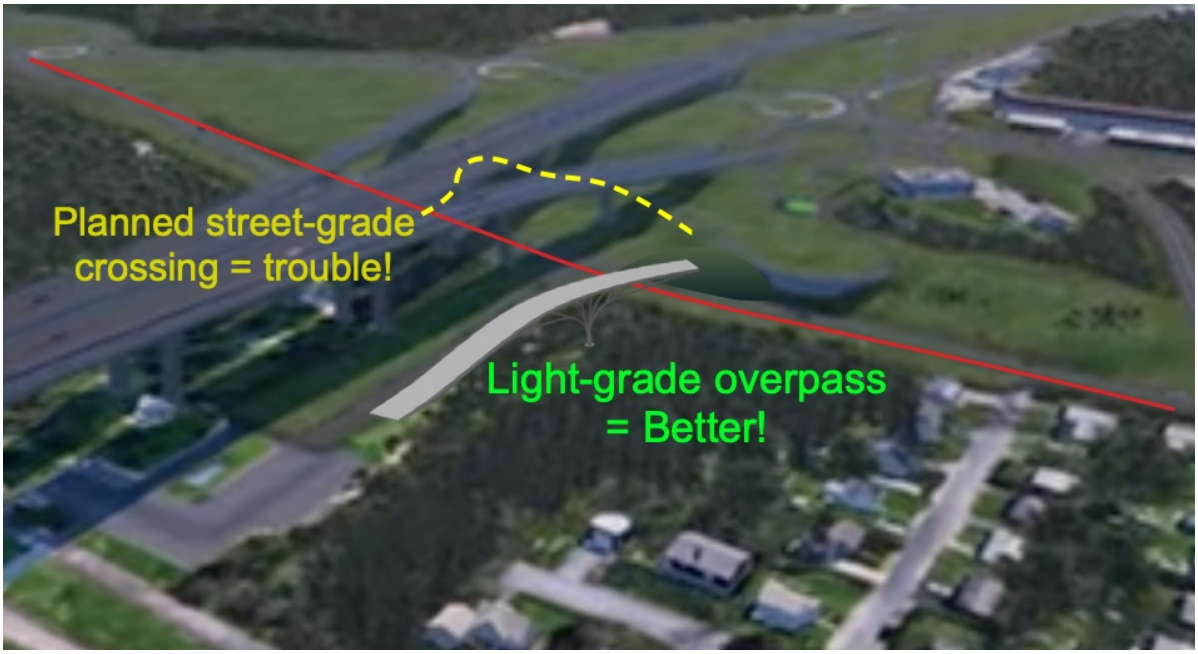


Figure 3 - Descent Ramp into existing public property

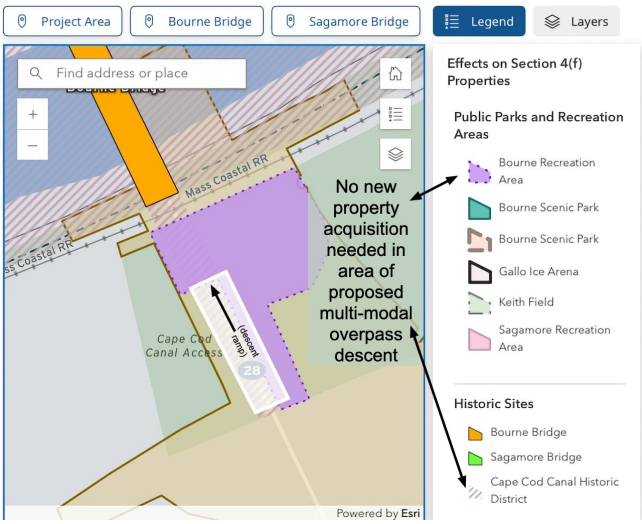
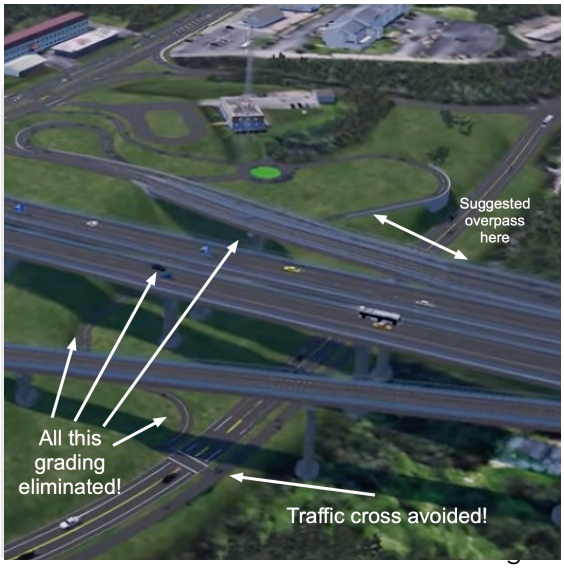


Figure 4 - Descent grade eliminated



ADDITIONAL EXHIBITS

Photo 1: Location of current at-grade exit

Photo 2: Location of proposed upper-end of light-grade overpass

Photo 3: Available overpass descent area