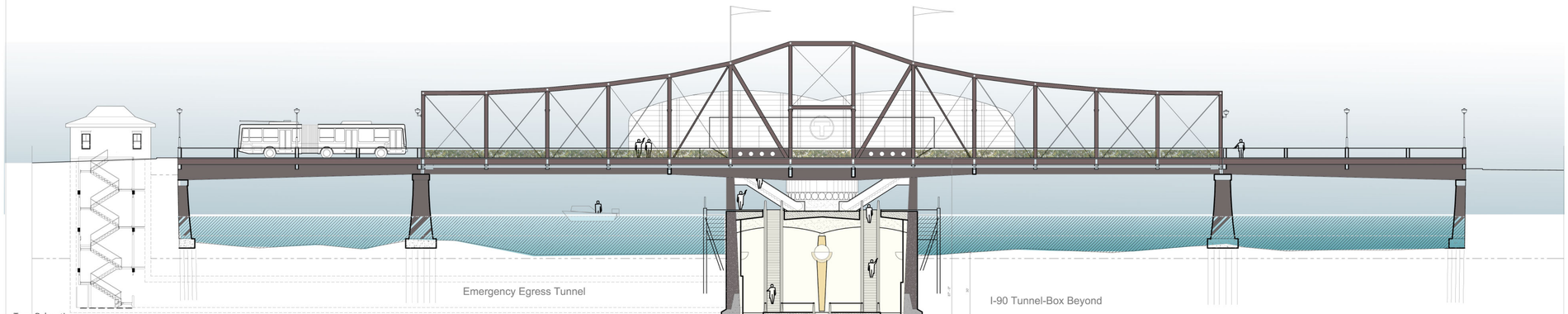


South Elevation of Swing-Span
with New Deck Girder Approaches

Truss Relocation

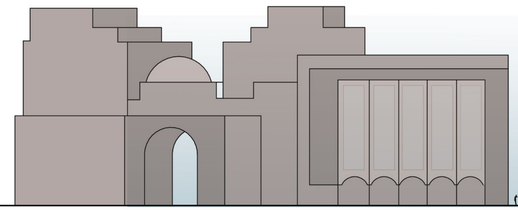
Our concept explores the relocating of the 280' swing-span truss of the Northern Avenue Bridge (NAB) up stream to the historic alignment of the lost Mt. Washington Street Bridge, and the future Fort Point Channel Mall. Projected in the BRA's Fort Point 100 Acres Plan, this open space will include a new footbridge connection to an expanded South Station Transportation Center. The existing approaches at the current NAB alignment would remain and be restored, and a new "state of the art" swing-span for pedestrians would be inserted. Re-situating the swing-truss upstream requires new piers to direct the dead and live loads of the refurbished bridge around subterranean Red Line tunnels running beneath Fort Point Channel. This design is similar in character to the adjacent Big Dig/I-90 tunnel box designed over the Red Line, and carrying thousands of vehicles daily beneath the F.P. Channel. Our station is a much smaller undertaking, but it features the same sub-aquatic construction and emergency access features necessary to build and sustain such a facility.

MBTA Red Line..."Boots, Buses and Bikes"

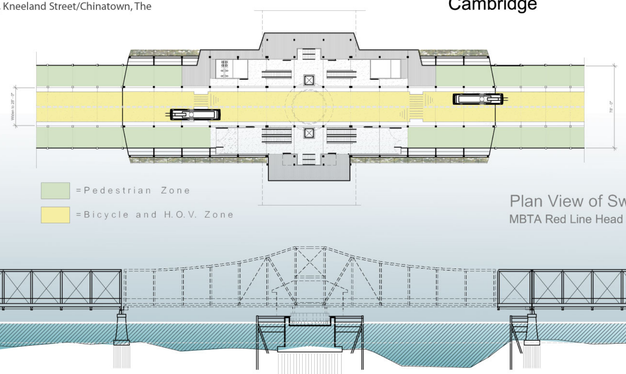
Given the increased need for transit to the Seaport/Fort Point area, we expanded our concept by using the bridge's new fender "footprint" to conceal an entirely new Red Line Transit Station similar in depth to Porter Square Station in Cambridge. In conjunction, the bridge would be rebuilt on an entirely new and widened substructure engineered to accommodate Silver Line surface transit. In effect, the opposing two-lanes in the bridge's center "barrel" would be an entirely new structure for buses and bikes. The side trusses would have their bottom chords replaced to provide a fully functional head house and pedestrian access armature. From a distance the overall transit ensemble will continue to appear as a singular thru-truss structure not unlike the Charlestown Bridge currently slated for demolition. However, the new bridge will help the Fort Point and Seaport District grow by alleviating congestion at South Station, and offer new Silver Line service on Dorchester Avenue, and across South Station toward the South Bay Air Rights parcels, Kneeland Street/Chinatown, The Theatre District, and onward to Back Bay.

Boat House and Place-making Amenities

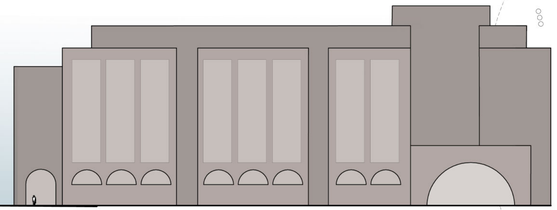
Inclusive to our vision is to complement the Bridge/Station -and its outer fender system in particular, with attractive public spaces, including cafes, galleries, and boating facilities. The intent is to take advantage of the more placid upper-channel locality for passive and active rowing and small-scale cultural programming.



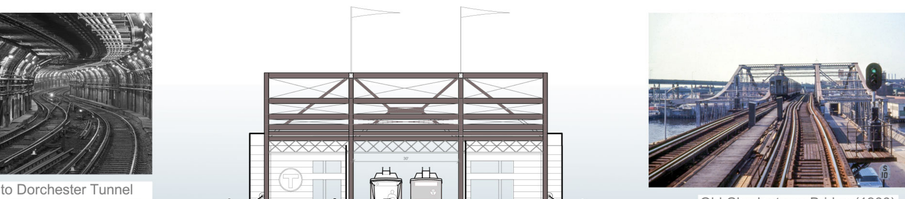
Rowe's Wharf
and U.S. Coast Guard



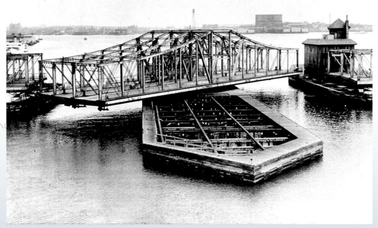
Plan View of Swing-Span
MBTA Red Line Head House



U.S. Federal Courthouse



Elevation of Approaches to Remain

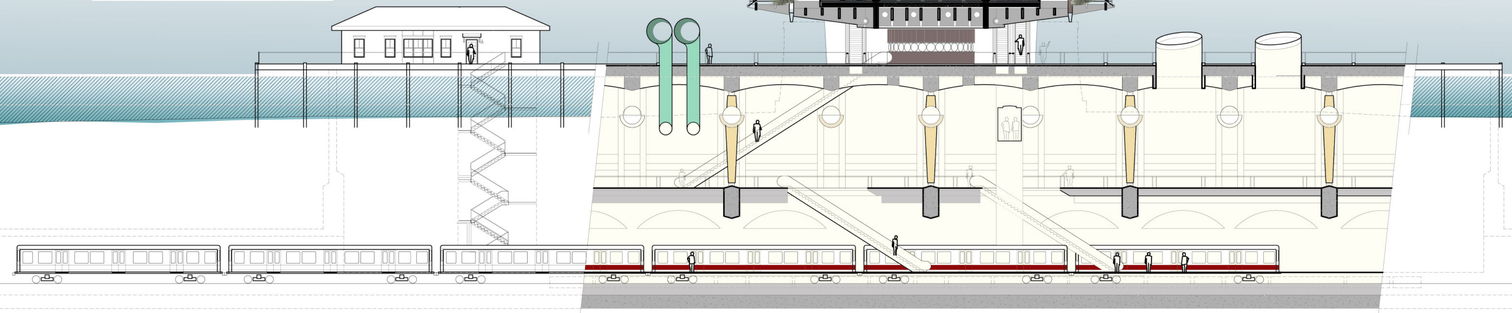


Swing-Span Truss to be Repurposed

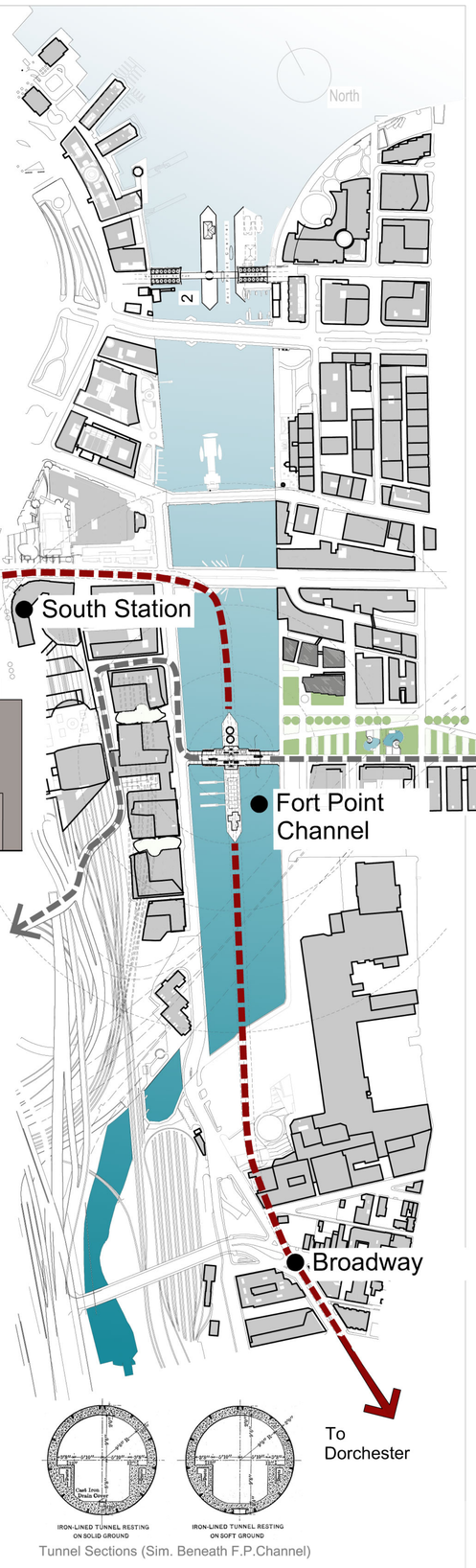
Approach to Dorchester Tunnel

Old Charlestown Bridge (1900)

Fort Point 100 Acres Mall
and projected Foot Bridge



Cross Section at Swing-Span



Tunnel Sections (Sim. Beneath F.P.Channel)

Channel Mall Station