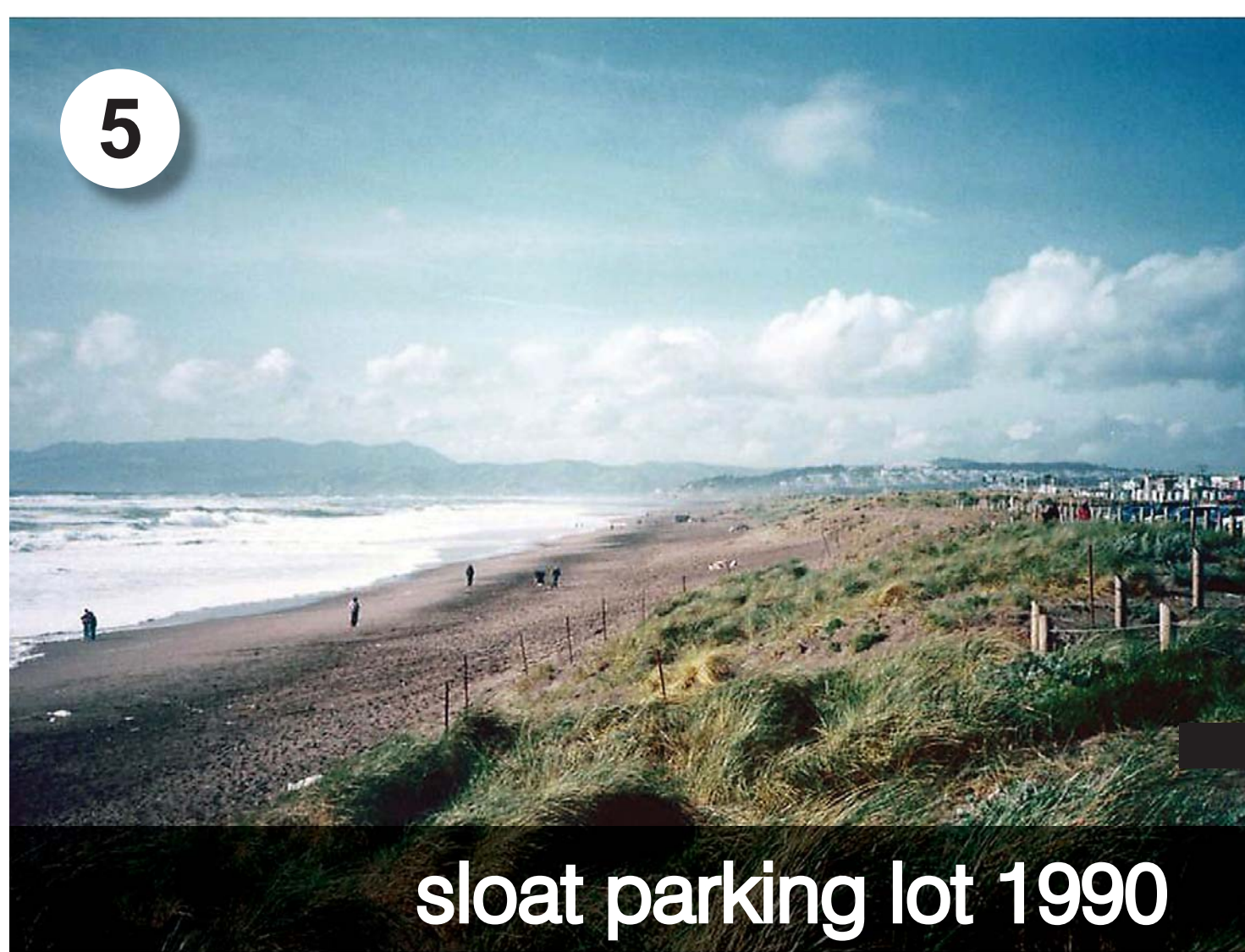


1.5 coastal dynamics

erosion + emergency revetments



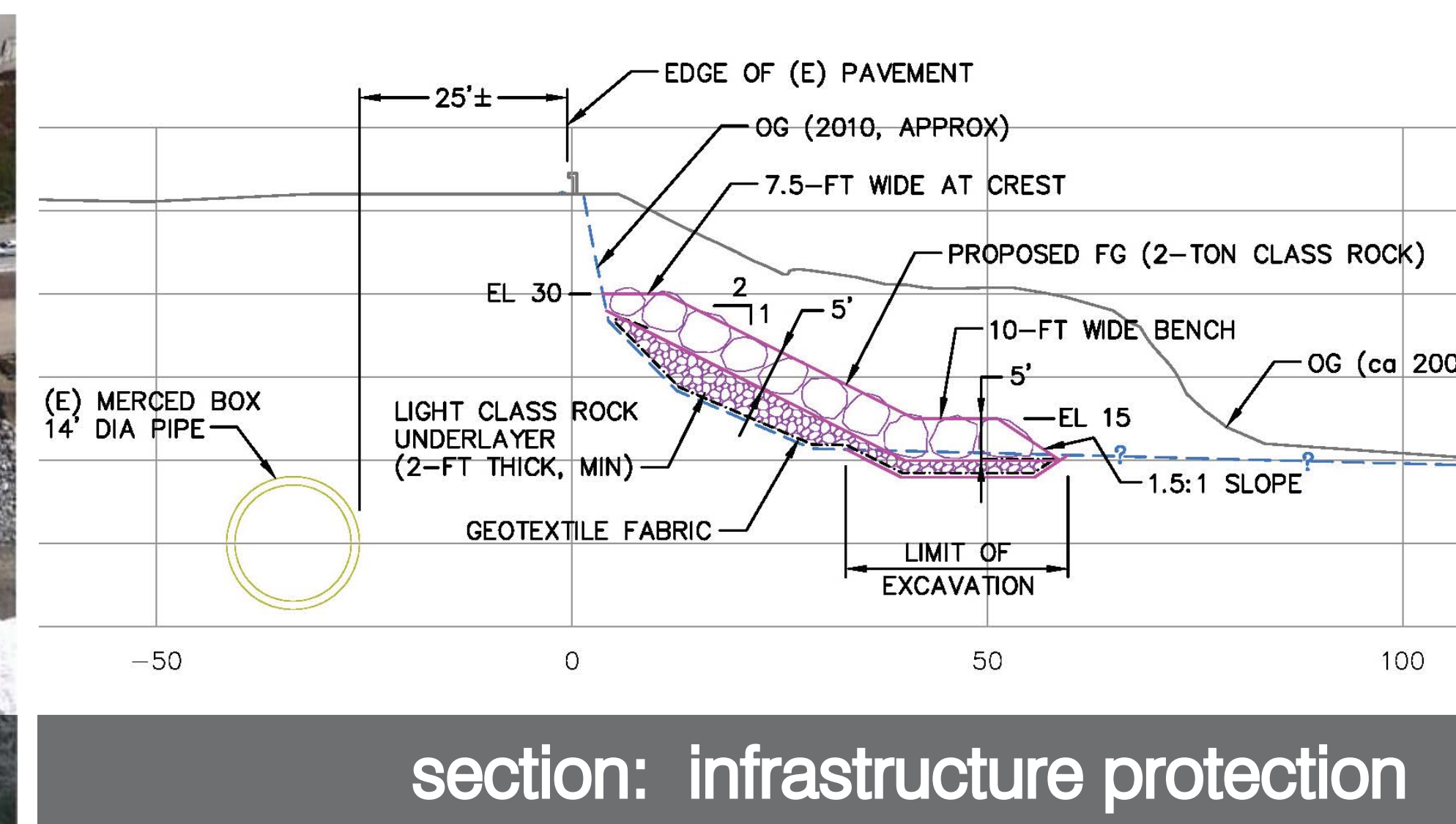
sloat parking lot 1990



erosion early 2000's



emergency repair area 2010



section: infrastructure protection

beach enlargement - north end



1972



4 sand accretion/beach widening 2009

shoreline interventions

- 1 fill
shore has been filled 200ft seaward from 1800 to 1930 to construct the Great Highway & SF Zoo
- 2 armoring
13,000 ft of shore (seawalls + revetments) out of 20,000 ft of total shore

- 3 dredging
sand dredged for shipping channel is deposited for currents to transport onshore

- 4 beach nourishment
5million cubic yards of sand added since 1970's

- 5 retreat
city has tried to maintain barrier sand dune to buffer waves and erosion since 1980's

the Great Highway south of Sloat was recently rebuilt farther east, in a median designed for retreat

map legend

- PROJECT BOUNDARY
- HISTORIC SHORELINES
 - CURRENT SHORELINE
 - SHORELINE (1992)
 - HISTORIC SHORELINE (1873)
 - HISTORIC SHORELINE (1850-1853)
- THE GREAT HIGHWAY
 - THE GREAT HIGHWAY (1929)
- SEAWALLS
 - NORIEGA SEAWALL (1988-1993)
 - TARVAL SEAWALL (1940)
 - O'SHAUGHNESSY SEAWALL (1915-1922)
- REVETMENTS
 - RUBBLE
 - EMERGENCY REPAIR AREA

shoreline interventions

