

Qualicum Beach waterfront planning concepts November 2016

The waterfront planning process should only consider options that ensure the works and expenses are not washed away or damaged in the future. Any waterfront improvements either have to be protected from, or resilient too, the ravages of the sea.

The following concepts address several aspects of planning a revitalised waterfront. Important aspects that are addressed include:

1. Reducing shoreline damage with offshore sea defence
2. Eliminating the risk of damage or destruction, to some waterfront properties
3. Creating a continuous waterfront parkway with unobstructed views
4. Enhancing ecological marine and terrestrial biodiversity
5. Extending parkland, beaches and recreational opportunities
6. Reduced risk of substantial bank collapse on the 40 meter embankment on the south side of Highway 19 below Crescent Road West



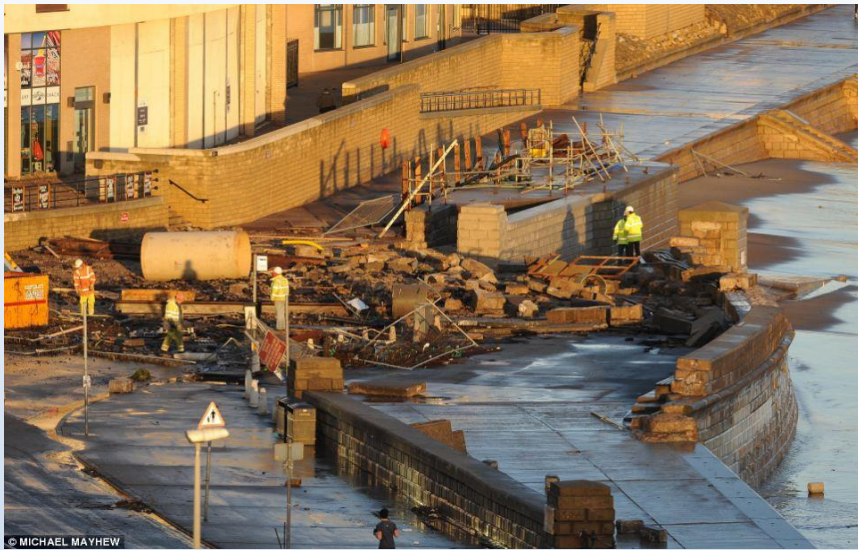
Trevor Wicks November 2016
TRENTEC INNOVATIONS
Web <http://www.innovationbc.com>
 <http://www.ouroceansidewater.com>



Pictures of the damage to waterfront properties caused by the sea



Properties or land situated directly on the waterfront and less than 4 meters above high tide level can be subject to severe damage.



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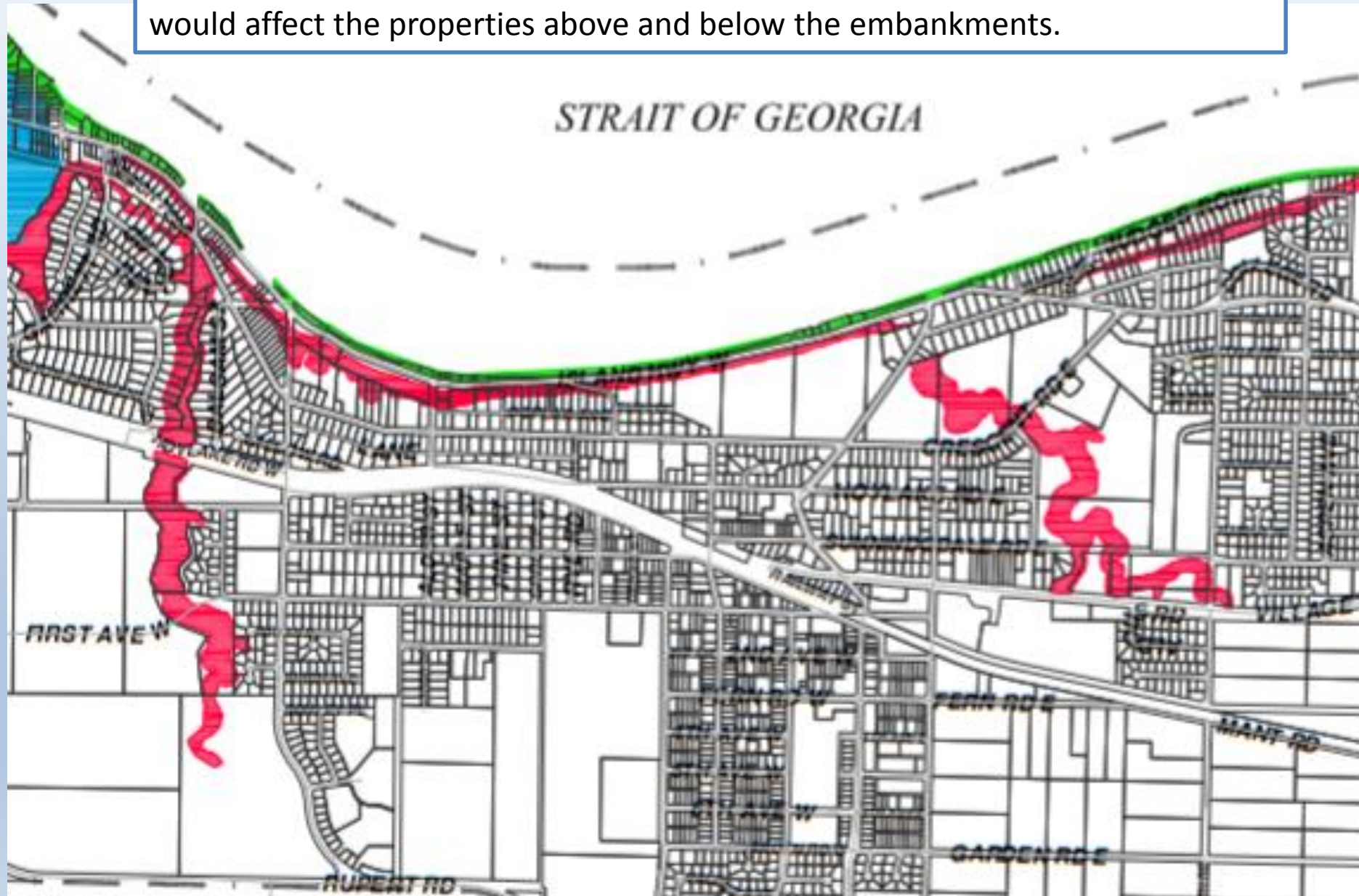
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Shoreline damage could occur in Qualicum Beach with storm surge, tsunami or earthquake

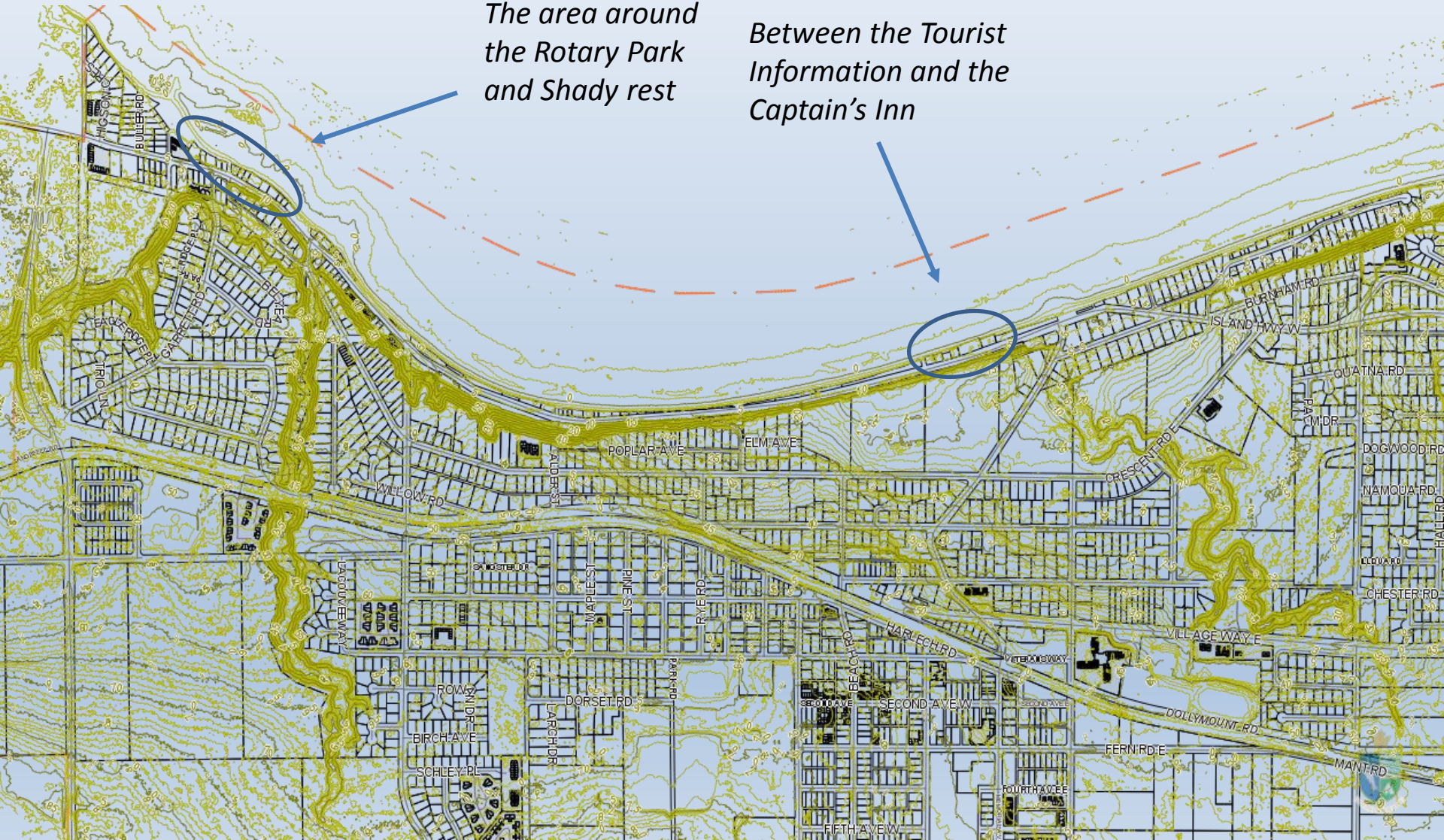
This map shows waterfront hazards with ocean vulnerability in green and steep slopes in red. The unstable banks are subsiding in places and a major collapse, would affect the properties above and below the embankments.



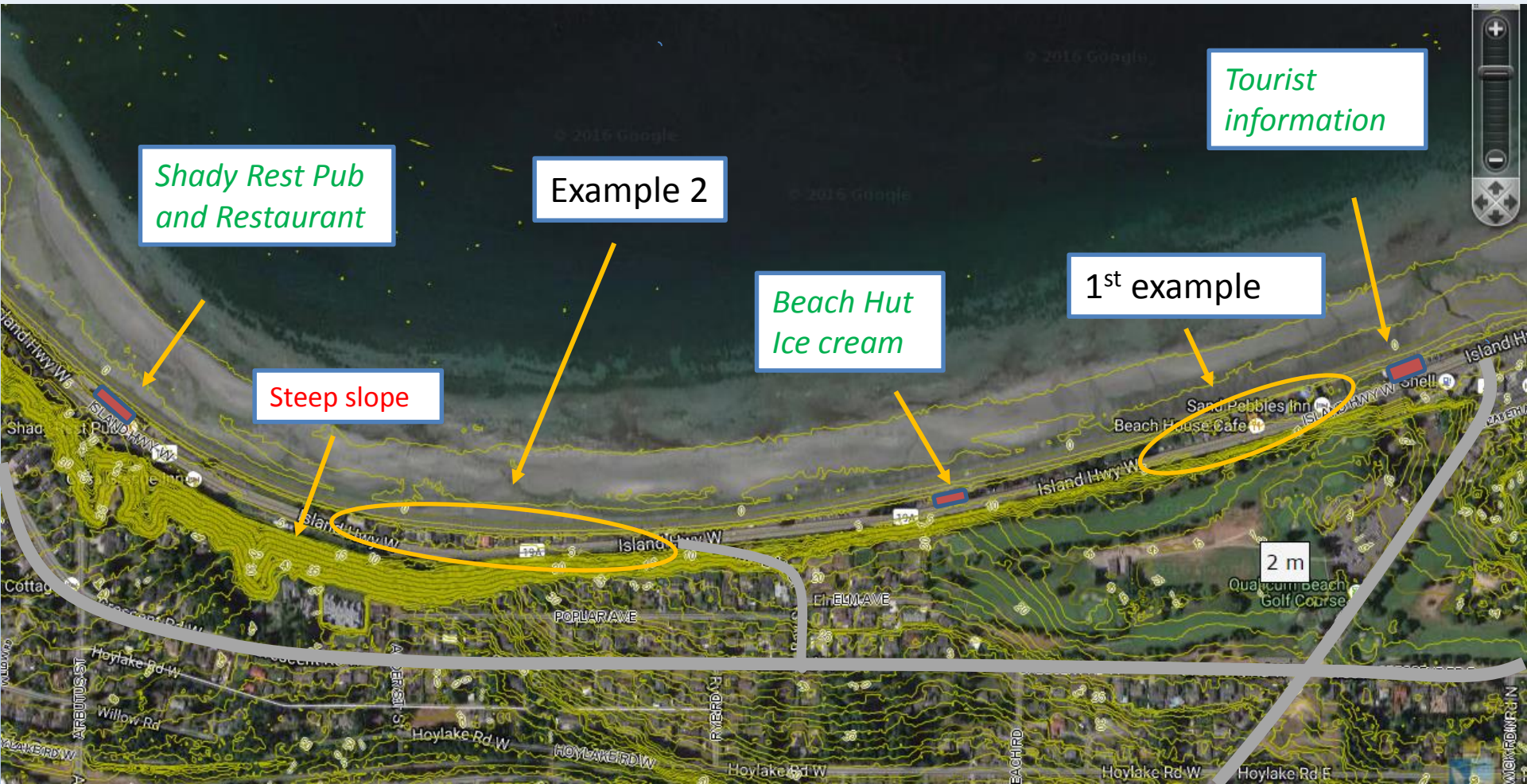
Qualicum Beach waterfront issues affecting the private properties on the side of Highway 19

The area around the Rotary Park and Shady rest

Between the Tourist Information and the Captain's Inn



The concept suggestion is to move or replace the buildings on the seaward side of the highway and relocate them to the south side of the roadway.

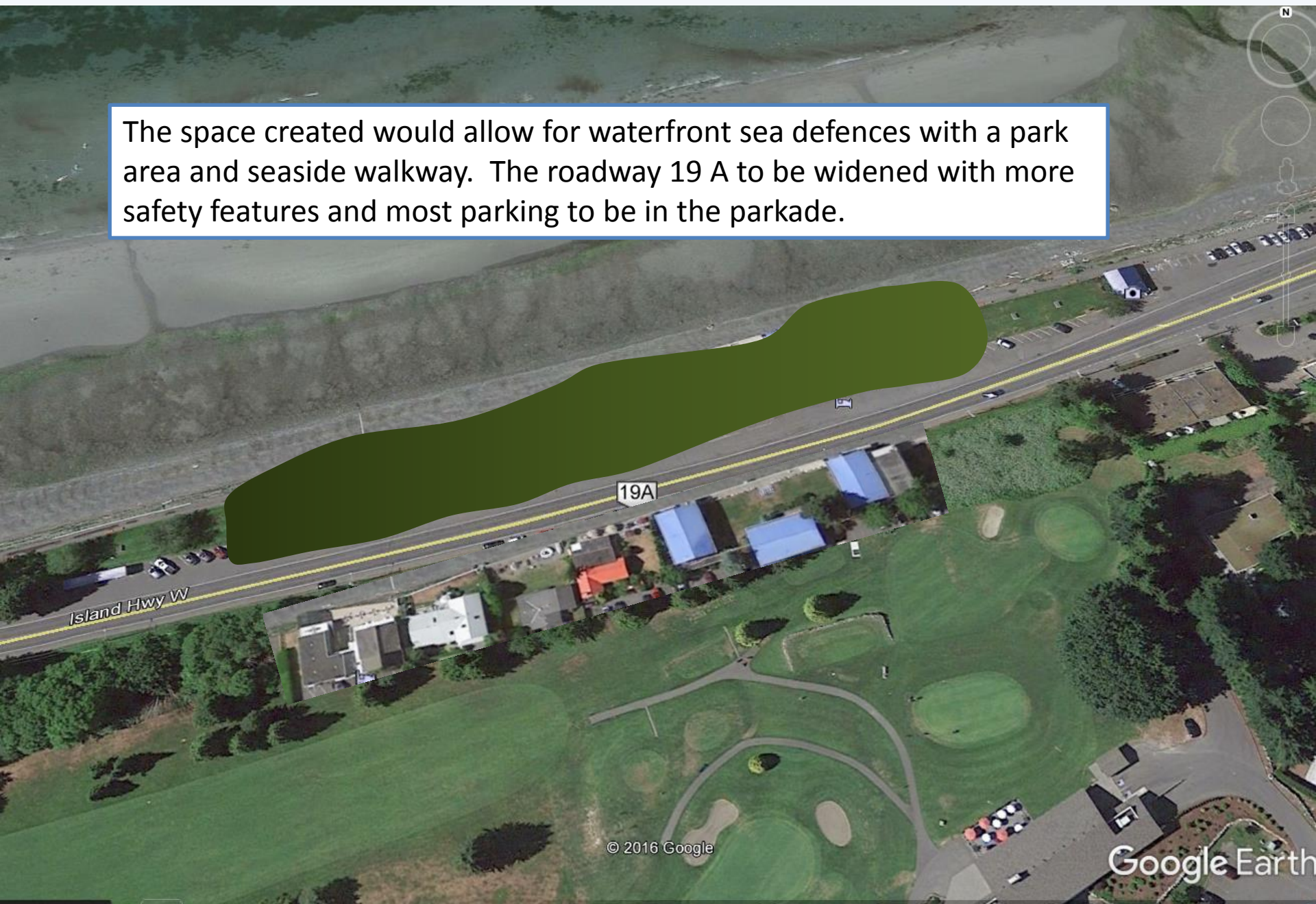


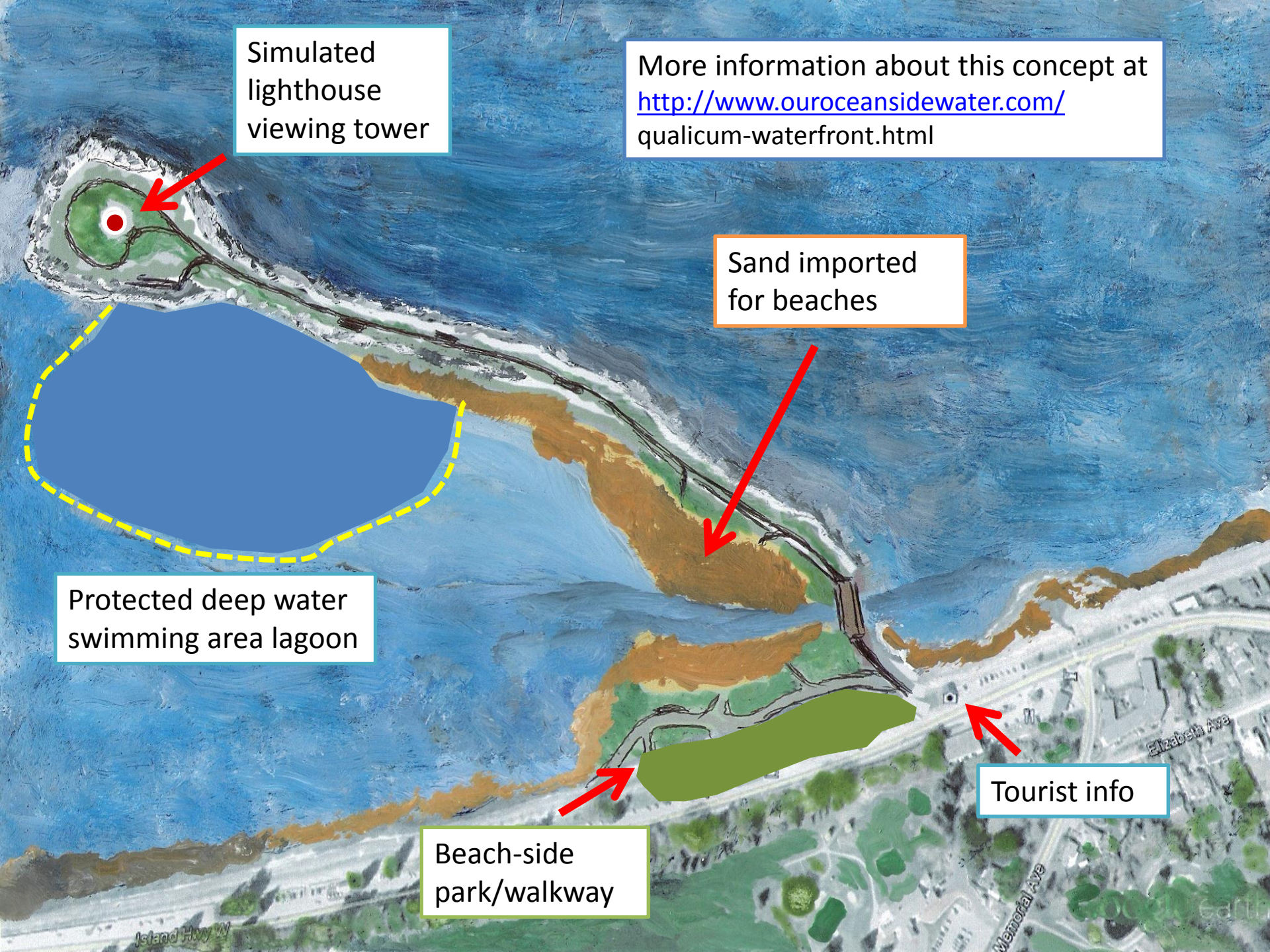
In the 1st example the two hotels, restaurant and houses would be relocated and next to the golf course and elevated above a single story parkade

The two hotels, restaurant and two homes are rebuilt or relocated to the south side of the road onto terraced land above a parkade



The space created would allow for waterfront sea defences with a park area and seaside walkway. The roadway 19 A to be widened with more safety features and most parking to be in the parkade.





Simulated
lighthouse
viewing tower

This is an aerial map of a coastal area, likely a peninsula or island. The map shows various development zones and infrastructure. A red dot on a small island at the top left is labeled 'Simulated lighthouse viewing tower'. A large blue area on the left is labeled 'Protected deep water swimming area lagoon'. A brown area along the coast is labeled 'Sand imported for beaches'. A green area at the bottom is labeled 'Beach-side park/walkway'. A red arrow points to a building on the right labeled 'Tourist info'. The map also shows roads like 'Island Hwy' and 'Memorial Ave'. The background is a textured blue, representing the ocean.

More information about this concept at
[http://www.ouroceansidewater.com/
qualicum-waterfront.html](http://www.ouroceansidewater.com/qualicum-waterfront.html)

Sand imported
for beaches

Protected deep water
swimming area lagoon

Beach-side
park/walkway

Tourist info

Benefits of an offshore causeway with protected beaches and park area

Funding could be generated with a Foundation / Legacy Trust

Wildlife viewing

Aquatic opportunities

Wave and storm surge protection from south east winds

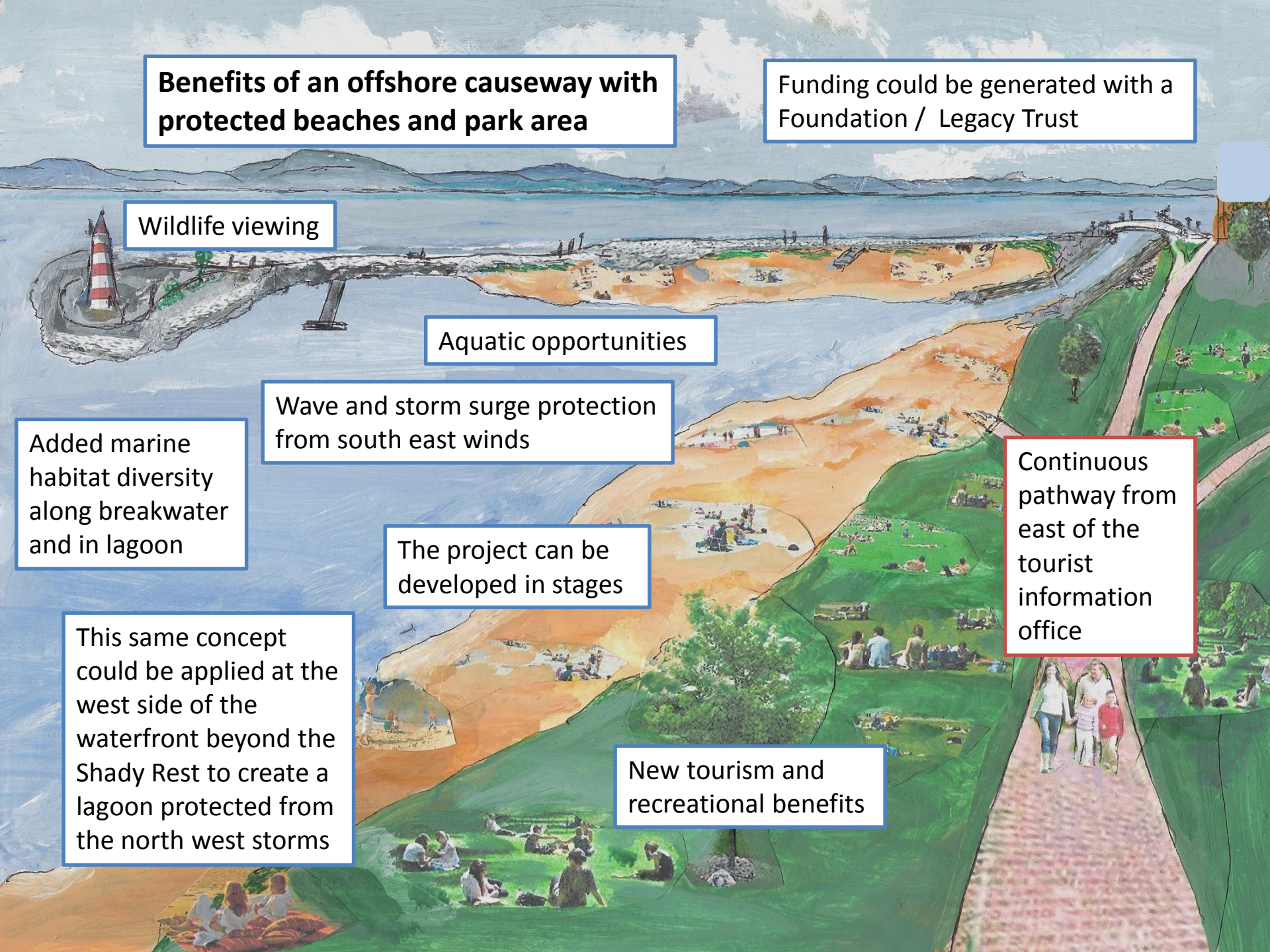
Added marine habitat diversity along breakwater and in lagoon

The project can be developed in stages

Continuous pathway from east of the tourist information office

This same concept could be applied at the west side of the waterfront beyond the Shady Rest to create a lagoon protected from the north west storms

New tourism and recreational benefits

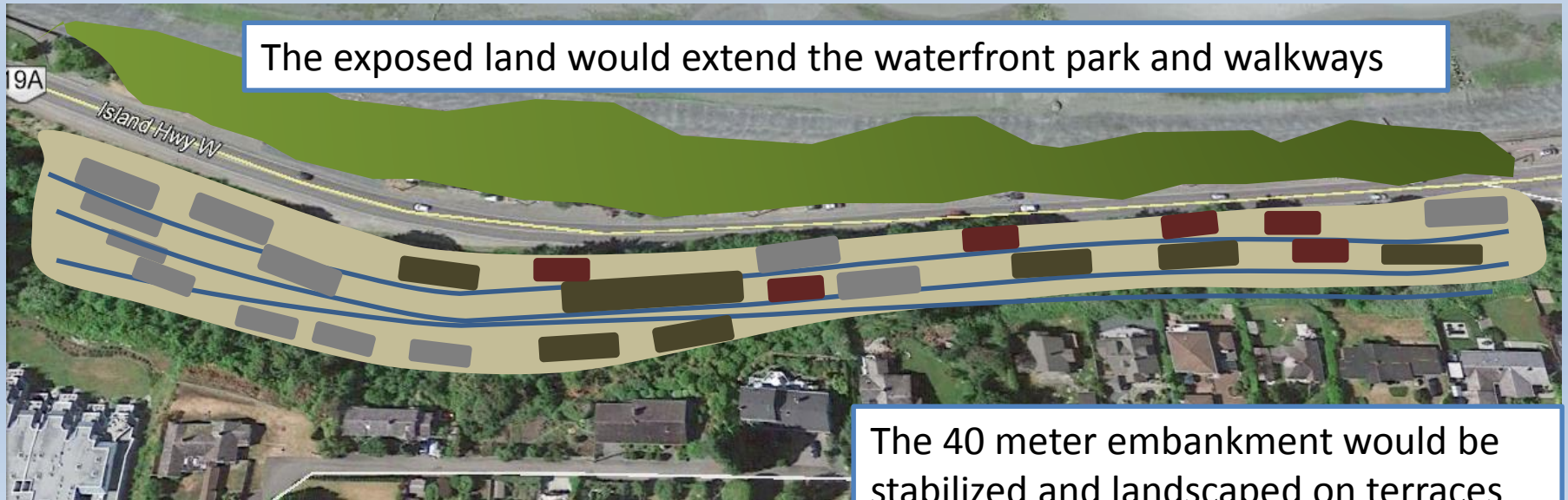


In example 2, the homes and buildings on the seaward side of 19A are removed

These homes are rebuilt or relocated to the south side of the road, onto terraced land above a parkade

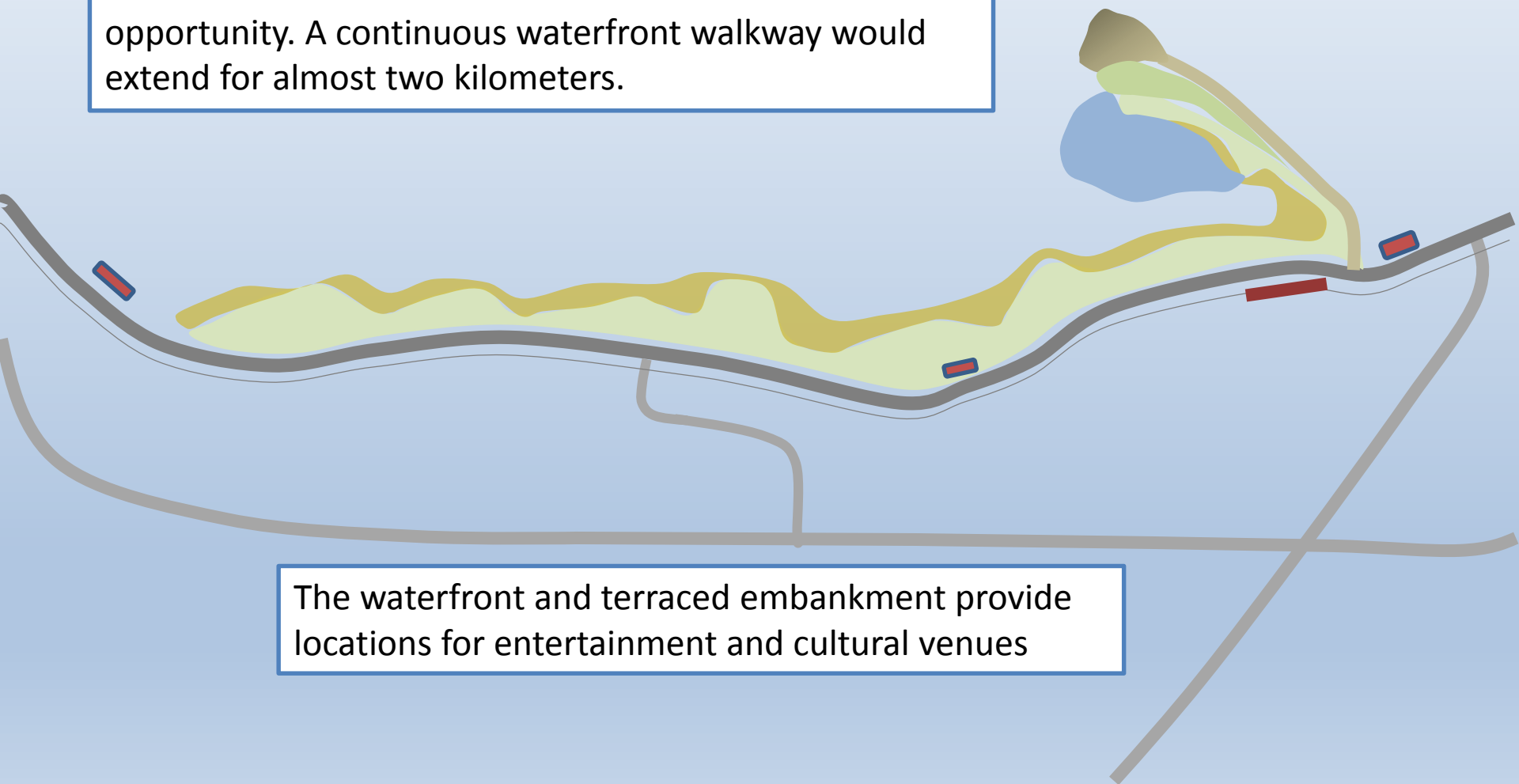


The exposed land would extend the waterfront park and walkways



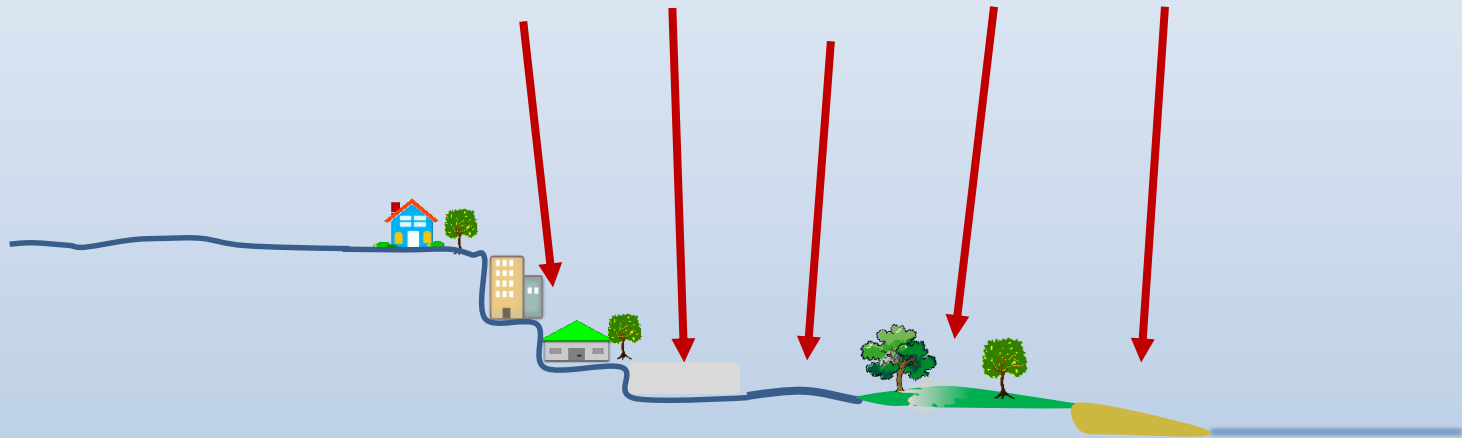
The 40 meter embankment would be stabilized and landscaped on terraces

Over a twenty year period the waterfront would be resistant to sea level rise and storm damage. The shoreline would offer a wide variety of topography and ecological diversity. The steep bank would be stabilized and become a valuable residential and commercial opportunity. A continuous waterfront walkway would extend for almost two kilometers.



The waterfront and terraced embankment provide locations for entertainment and cultural venues

This schematic shows the cross section of a part of the embankment showing terraces, parkade, roadway, park and beach



The dwellings and other building moved or rebuilt on the other side of the road would potentially have more land and a stunning view with covered parking and no risk of sea impact