

Waterfront Village

RISING SEA LEVEL - inevitable
 EMBARCADERO - charming
 FACT - In fifty years, the sea level will rise approximately 3 feet more than its current level.

WE MUST PROTECT AND ENHANCE THE MAGNIFICENT AND INTIMATE PICTURESQUE URBAN SHORE WE ALL LOVE.
 WE MUST RE THINK THE SITE DEVELOPMENT OF THE EMBARCADERO.

BIG OLD IDEA - If overflow happens, build **docks** or **piers** that will float with the sea level (buoyant), anchored securely to minimize movement.
 BIG OLD IDEA - SUSTAINABLE structures - commercial or residential.
 BIG NEW IDEA - Develop **HYDRAULIC duct pipe SYSTEMS** that will house utility lines that will work with rising sea level. Also serving as the walkway or pedestrian path for the new site.
 BIG NEW IDEA - **TIDAL and WAVE POWER**. Just like how solar power, there is potential in exploring these alternative power sources. There is now relative research being done in this regard.
 NOT SO BIG IDEA - A **step seawall** will be a subtle substitute to the existing balustrade to cope with the sea level rise and transition to a newly developed waterfront.

MY IDEA IS TO HAVE MINIMAL IMPACT TO THE CITY BY THE BAY. TO DO THE BEST AT HAND TO HAVE A LASTING LEGACY FOR THE FUTURE GENERATION TO APPRECIATE THE EMBARCADERO SKYLINE - THE WAY WE KNOW AT PRESENT.

LET INNOVATIONS OF ARCHITECTURE, ENGINEERING, RENEWABLE ENERGY AND SCIENCE TO MAKE THE DAMAGE TO OUR WORLD LESS FORCEFUL.

SITE LOCATION



STREET SECTION



TYPE OF BOAT & HOUSEBOAT



SUSTAINABLE BUILDING BY MINIHOME

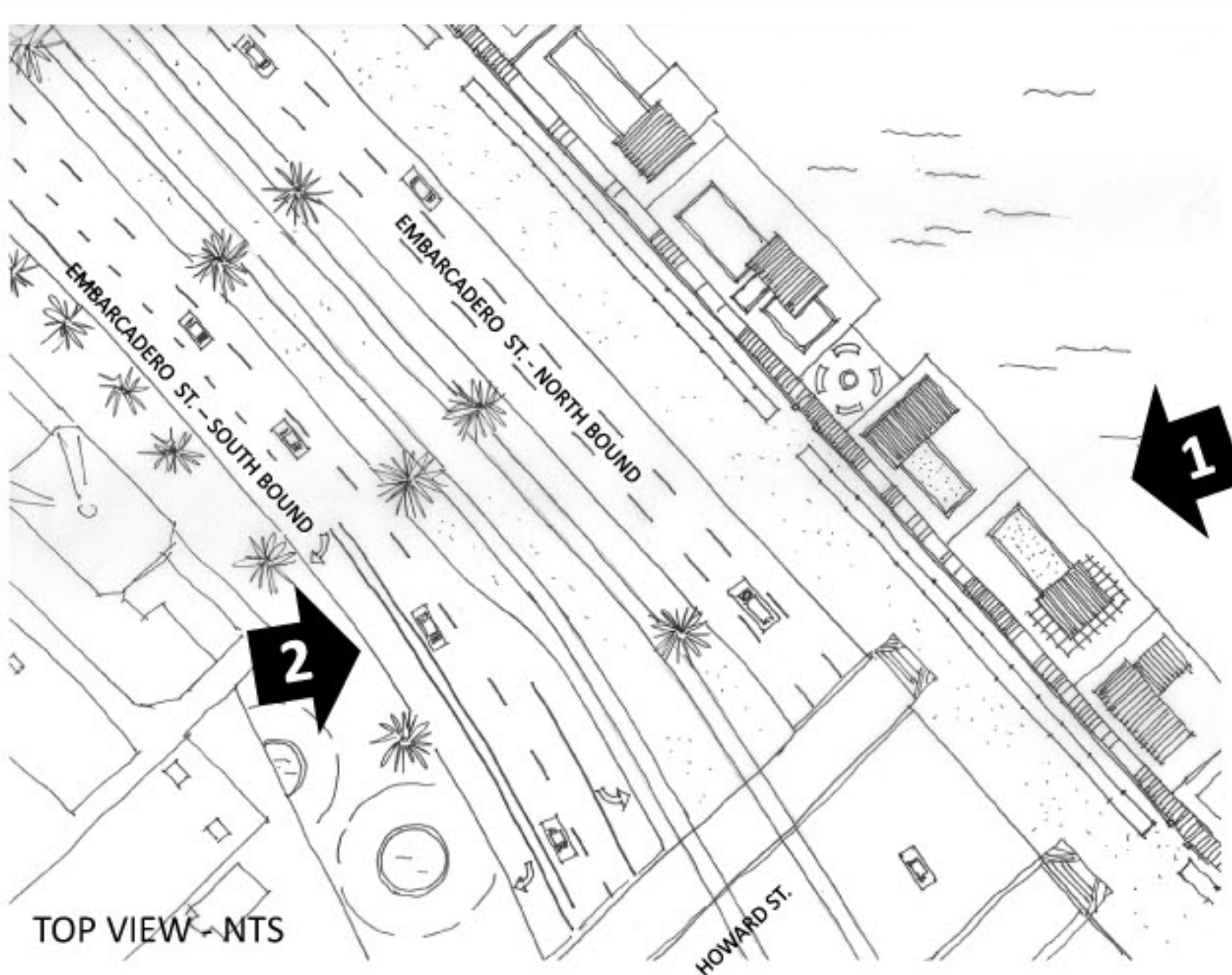


POTENTIAL RENEWABLE ENERGY & STRUCTURAL CONSIDERATION

Tidal power
 From Wikipedia, the free encyclopedia
 Tidal power, sometimes called **tidal energy**, is a form of **hydropower** that converts the energy of tides into electricity or other useful forms of power. It is rarely the gift of nature here if anybody from s.v.c.s reads this message can they please reply on this page. Although not yet widely used, tidal power has potential for future electricity generation. Tides are more predictable than wind energy and solar power. Historically, tide mills have been used, both in Europe and on the Atlantic coast of the USA. The earliest occurrences date from the Middle Ages, or even from Roman times.^[1]

Wave power
 From Wikipedia, the free encyclopedia
 Wave power is the transport of energy by ocean surface waves, and the capture of that energy to do useful work — for example for electricity generation, water desalination, or the pumping of water (into reservoirs). Wave power is a renewable energy source.
 Though often co-mingled, wave power is distinct from the diurnal flow of tidal power and the steady gya of ocean currents. Wave power generation is not currently a widely employed commercial technology, although there have been attempts at using it since at least 1890.^[1] The world's first commercial wave farm is based in Portugal^[2] at the Aguçadoura Wave Park, which consists of three 750 kilowatt Pelamis devices.^[3]

Hydraulic structure
 From Wikipedia, the free encyclopedia
 A **hydraulic structure** is a structure submerged or partially submerged in any body of water, which disrupts the natural flow of water. They can be used to divert, channel or completely stop the flow. An example of a hydraulic structure would be a dam, which slows the normal flow rate of river in order to power turbines. A hydraulic structure can be built in rivers, a sea, or any body of water where there is a need for a change in the natural flow of water.
 http://ichl.weds.usace.army.mil/hydraulicstructures/ United States Corps of Engineers
 [1]



DESIGN PROCESS

PREFAB ARCHITECTURAL STYLE



ADJUSTABLE HYDRAULIC STRUCTURE DUCT/PIPE THAT WILL HOUSE UTILITY LINES AND STRETCHED ALONG THE SEAWALL. THE DUCT ALSO HAS THE POSSIBILITY OF GENERATING RENEWABLE ENERGY THAT NEED TO BE EXPLORED, SUCH AS WAVE AND TIDAL ENERGY.

