



Waterfront Design Strategies for Activating Marine Leisure & Tourism

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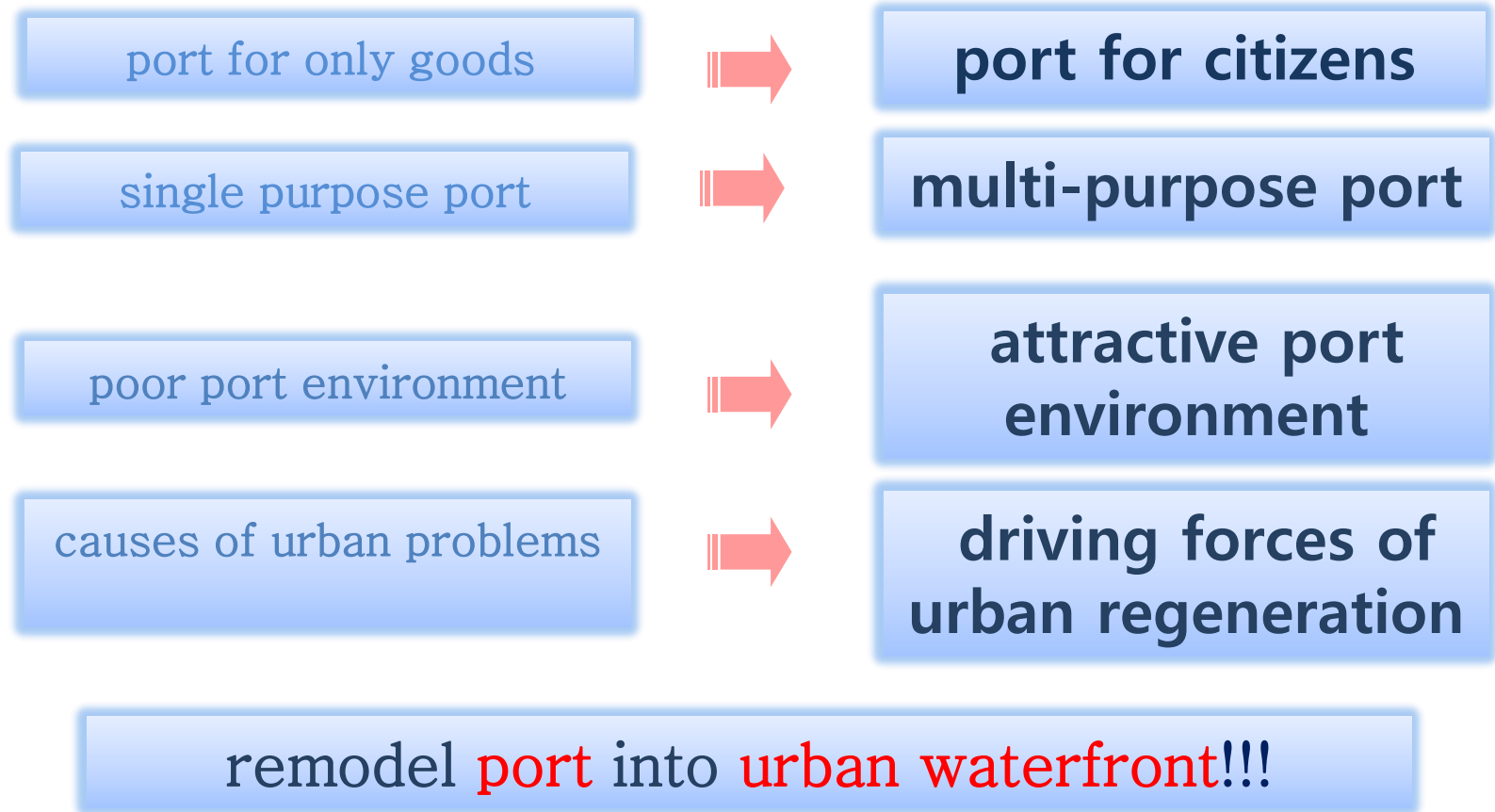


1. Port Remodeling





■ concept of Port Remodeling





■ Strategies of Port Remodeling

- remodel into citizens-friendly port
- remodel into clean & attractive port
- remodel into port for enjoying & learning
- remodel into sustainable & green port





■ Examples of Port Remodeling

1. Port of Shimizu, Japan

2. Port of Nagoya, Japan

3. Port of Seattle, U.S.A.

4. Port of Hamburg, Germany

5. Port of Marseille, France



Port of Shimizu

- make the most attractive port in the world through color planning (on a background of Mt. Fuji)





Port of Nagoya

- make port to be friendly to citizens and live together environment as the biggest industrial port in Japan





Port of Seattle

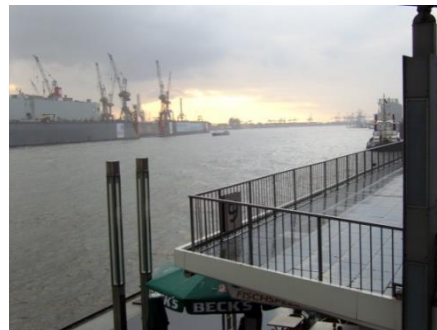
- make port to be friendly to waterfront and marine recreation





Port of Hamburg

- make port to be abundant in **art** & **culture** for citizens and visitors





Port of Marseille

- make port of antiquity giving life to long city history and cultural traditions





■ Elements of Port Remodeling

open spaces
in Port Area

- human-friendly port structures
- open spaces(promenade, parks, etc.)

cultural spaces
in Port Area

- multi-functional port tower (observatory, etc.)
- port museum, passenger terminal, visitor center, etc.

landscape plan
of Port Area

- plan of landscape, green spaces, and color
- facility design guidelines

festivals
In Port Area

- port tours
- port festivals



open spaces

- open spaces on port structures
ex.: breakwater, Takamatsu port
breakwater, Nagoya port
- eco-parks, wetlands
ex.: wild birds park, Osaka port
- parks, promenades, bike-roads
ex.: central park, Sendai port
marine park, Nagoya port
- marina, marine leisure spaces
ex.: marina, Seattle port





cultural spaces

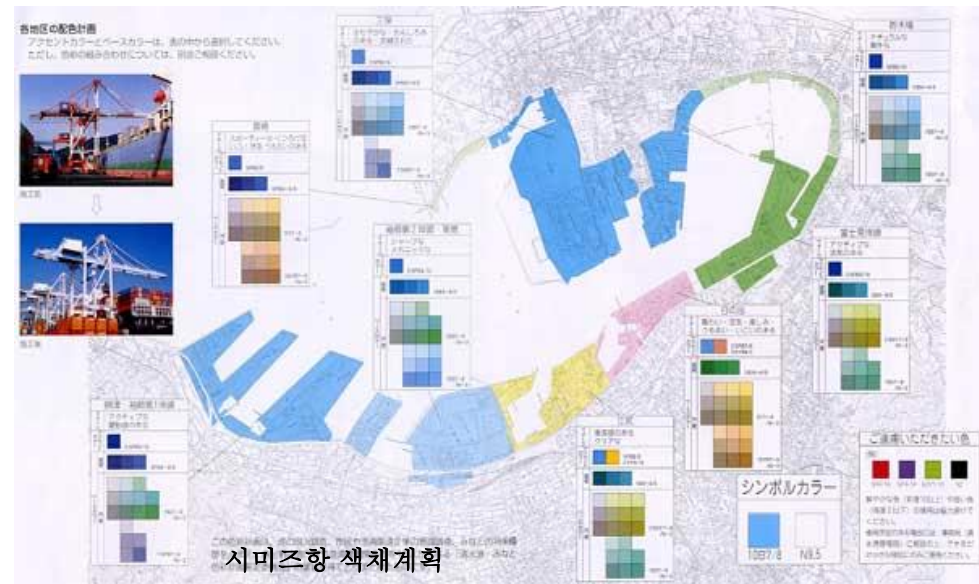
- port museum
ex.: Osaka port museum
- marine science museum
ex.: Tokyo marine science museum
- port tower & observatory
ex.: port tower, Nagoya port
Marine tower, Onahama port
- warehouse(converted to cultural & commercial spaces)
ex.: warehouse, Hakodate port
- passenger terminal
ex.: Baysideplace, Hakata port





Landscape plan

- port landscape plan
ex.: landscape plan, Nagoya port
- port green sapce plan
ex.: green plan, Nagoya port
- port color plan
ex.: color plan, Shimizu port
- landmark
ex.: port tower, Kobe port
red lighthouse, Takamatsu port
- viewing point
ex.: viewing point, Yokohama port







port festivals

- festivals: marine day festival, etc.
- events: port opening day, etc.
- tour: boat tour, etc.





2. Waterfront Design





■ What is waterfront?

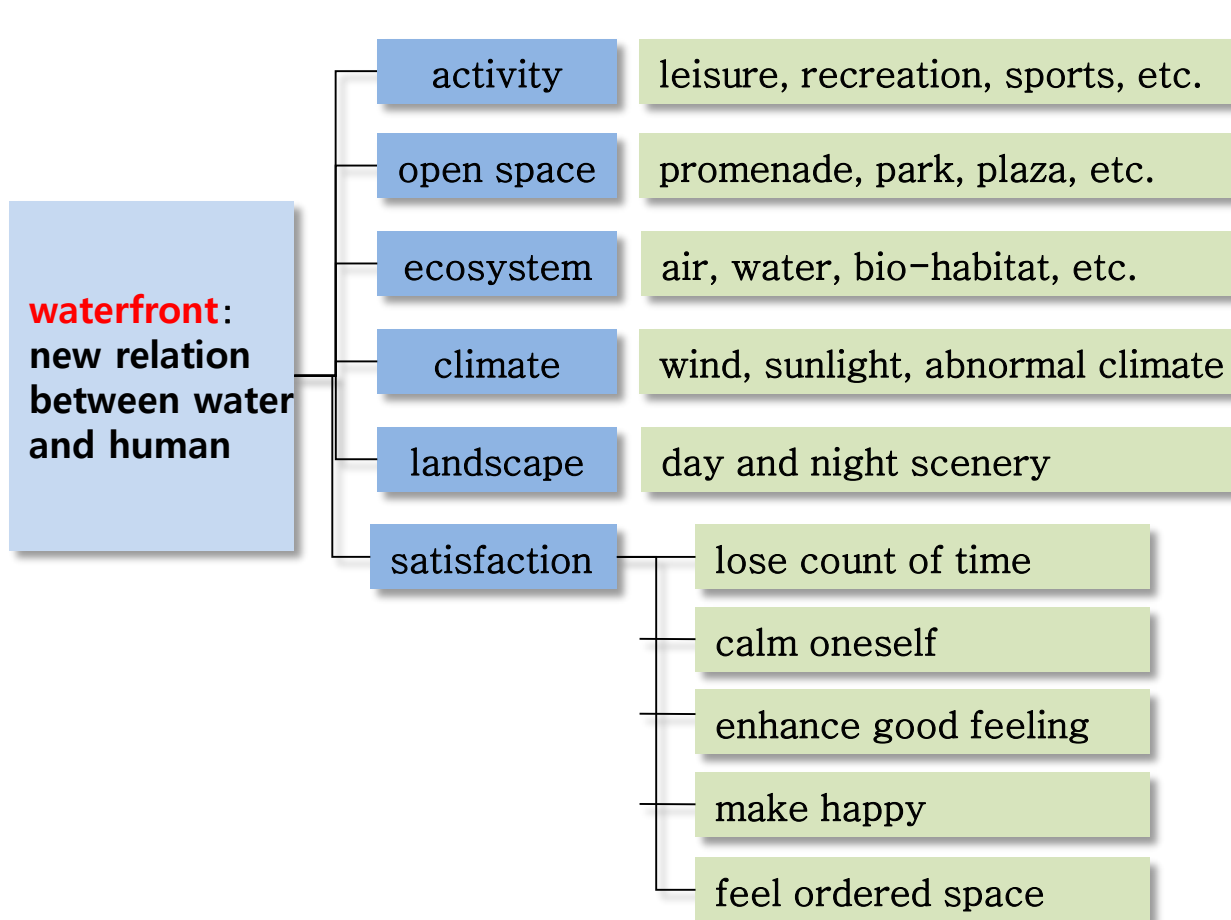
- public open spaces at seaside in urban area
 - 「water amenity」 abundant spaces
 - examples: promenades, parks, plaza, etc.
-
- 「water amenity(親水性)」 : the quality of spaces or places which makes human to enjoy and be intimate with water
 - important properties of waterfront & marine architecture
 - levels of 「water amenity」 : ‘high’ or ‘low’
 - 「water amenity」 is closely connected to the possibilities for ‘seeing’, ‘approaching’, ‘touching’ the water.





- To improve 「water amenity」 means to make better relation between human and water
 - High 「water amenity」 gives emotional pleasure and mental satisfaction which lead to the high regard for the quality of waterfront.
 - High 「water amenity」 needs water-friendly spaces and facilities, healthy and pleasant environment, good scenery in waterfront area.







▪ goals of waterfront Design

- Waterfront integrated with urban space
 - symbolic place for establishing identity of city
 - educational place for young people of city
 - waterfront-belt all over the city
 - linkage between city center and waterfront
(river, access road, etc.)





- Waterfront for the citizens & visitors
 - cultural spaces & tourist attractions
 - facilities of playing & relaxing for citizens
 - multiple places to overcome seasonality
 - utilization of the body of water for marine leisure





- Waterfront of high prestige
 - high-quality open spaces(promenade, parks, etc.)
 - facilities & buildings of high standard
 - good natural scenery & nighttime lighting
 - viewing points for enjoying waterfront scenery





➤ waterfront design principles

★ 10 Principles for waterfront design

(by Urban Task Force, U.K.)

- Respect the site & setting.
- Recognize the context, scale & character around it.
- Priority to the public realm.
- Ease of access & "permeability".
- Optimize land use & density.
- Mix the activities.
- Mix the housing tenures.
- Build to last.
- Build environmentally-sustainable buildings.
- Enhance & respect the surrounding environment.





➤ waterfront design principles

★ 10 Principles for Sustainable Urban Waterfront Development (by Waterfront International Network)

- Secure the quality of water and the environment.
- Waterfronts are part of the existing urban fabric.
- The historic identity gives character.
- Mixed use is a priority.
- Public access is a prerequisite.
- Planning in public and private partnership
- Public participation is an element of sustainability.
- Waterfronts are long term projects.
- Revitalization is an ongoing process.
- Waterfronts profit from international networking.





➤ waterfront design principles

★ Urban Waterfront Manifesto (by The Waterfront Center)

- It is essential to keep in mind the inherent public interest in waterfronts.
- Waterfront planning should be long-range, comprehensive and holistic.
- Meaningful community involvement is integral to valid waterfront planning and development.
- Waterfront work is a fusion of related disciplines
- We encourage communities to think long-term in waterfront work.
- Every waterfront is an integral part of a watershed consisting of creeks, rivers, estuaries or bays.





➤ waterfront design principles

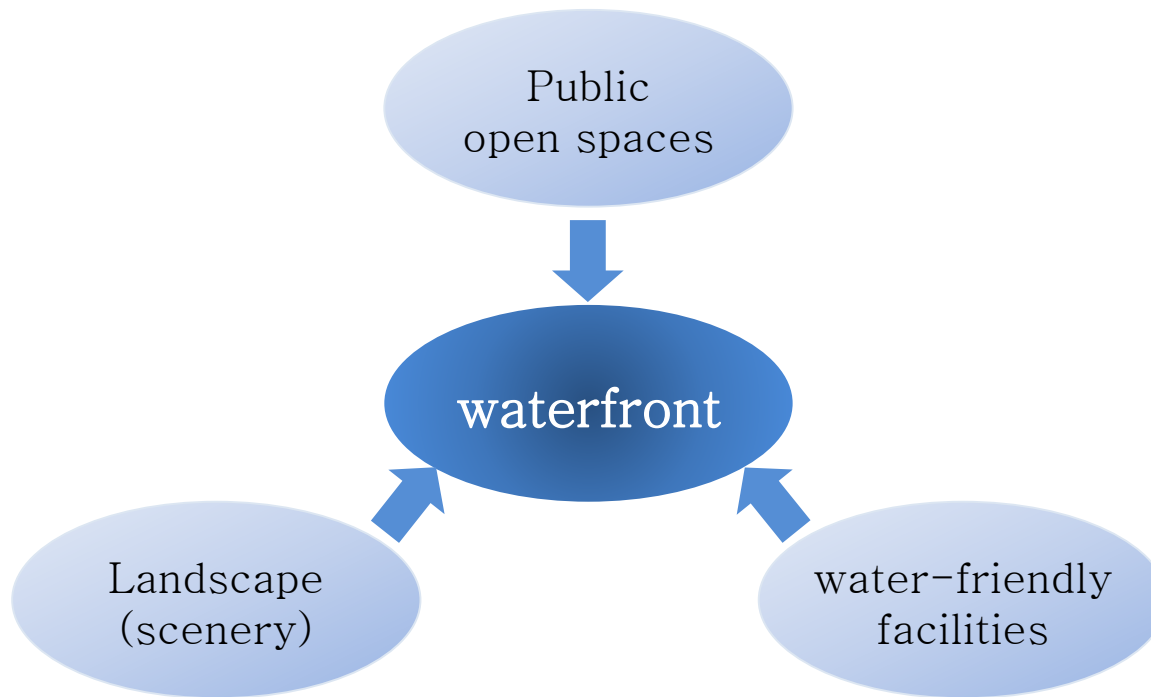
★ Urban Waterfront Manifesto (by The Waterfront Center)

- The best undertakings involve a partnership between the private sector, the public entities and the citizens.
- Public access to and along the urban waterfront should be the hallmark of all projects.
- Learn from good examples of waterfront planning and development elsewhere but never blindly copy them.
- A diversity of uses wants to be included along waterfronts, from parks to vibrant attractions.
- Waterfronts present unparalleled opportunities for interpretation and education.
- The tendency to clean up waterfronts should be approached carefully.
- The active participation of each city's arts community should be sought from the outset.





- waterfront design elements





■ waterfront design elements

➤ how to approach

- from city center- through pedestrian circulation
- from nearby area- through river or access ways
- from ocean- through shuttle ships or boats





■ waterfront design elements

➤ shoreline & revetment

- remain existing shorelines as much as possible.
- design shorelines using soft curves.
- design promenades along the shorelines.
- design step curved revetments with natural materials.

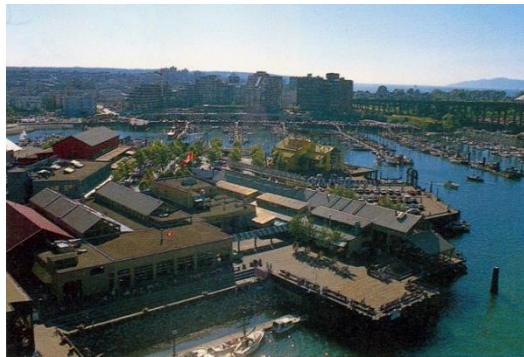




■ waterfront design elements

➤ sites & roads

- design sites adjacent to waters small.
- cut sites adjacent to waters as square as possible.
- design roads approaching waters as view corridors.
- design roads parallel to shorelines narrow for linkage between city & waterfront.

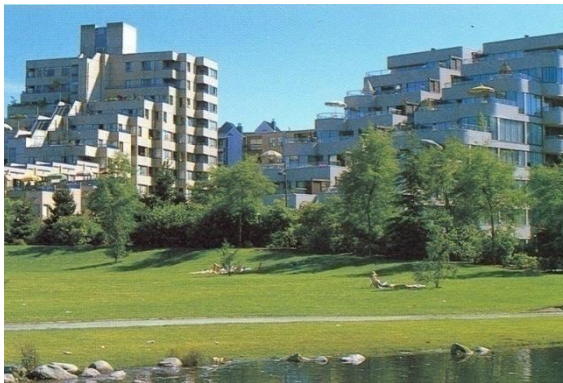




■ waterfront design elements

➤ buildings

- design high-rise buildings in tower type at waterfronts.
- create the voids as many as possible between buildings.
- design the top of buildings as viewing points.
- place small buildings in the vicinity of waters.
- mix a diversity of buildings and design multipurpose buildings





■ waterfront design elements

➤ promenades & public squares

- use barrier-free design or universal design for promenades.
- place public squares as many as possible along the promenades

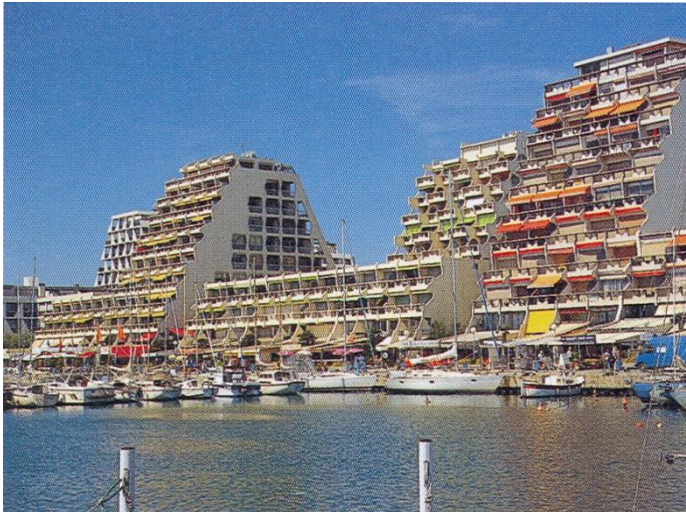




■ waterfront design elements

➤ human scale spaces

- design buildings & facilities on the human scale.
- develop sense of unity among artifacts & natural objects.
- create a little exceptions outside the sense of unity(landmarks).

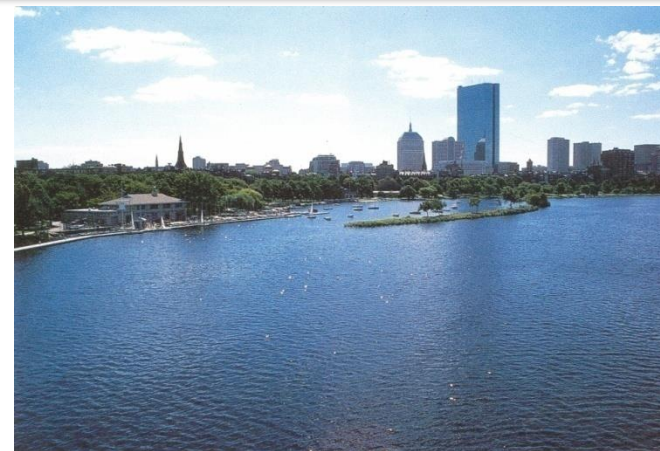
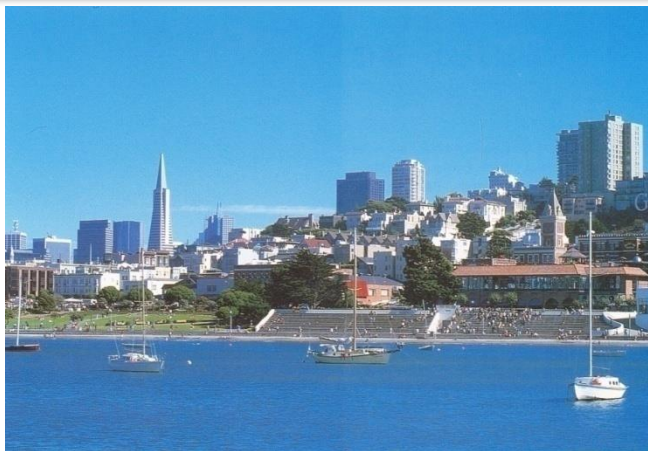




■ waterfront design elements

➤ skylines

- respect existing skylines.
- recognize skylines as important tourist attractions.
- do not break natural background skylines.
- create harmony between low-rise & high-rise buildings.

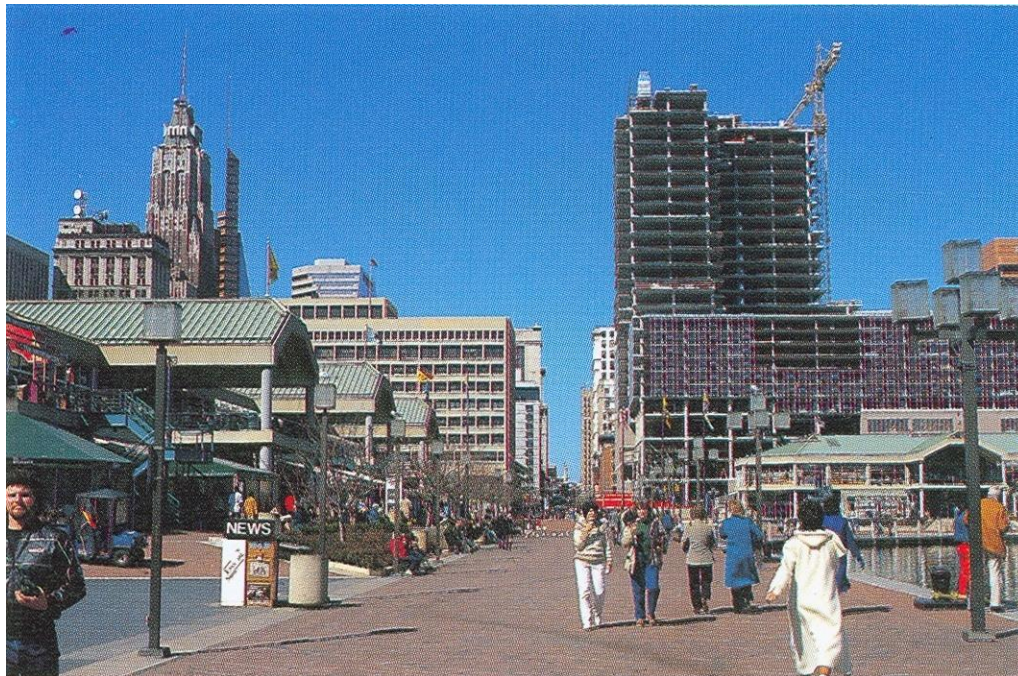




- waterfront design elements

- access routes

- secure diverse access routes from city center to waters.

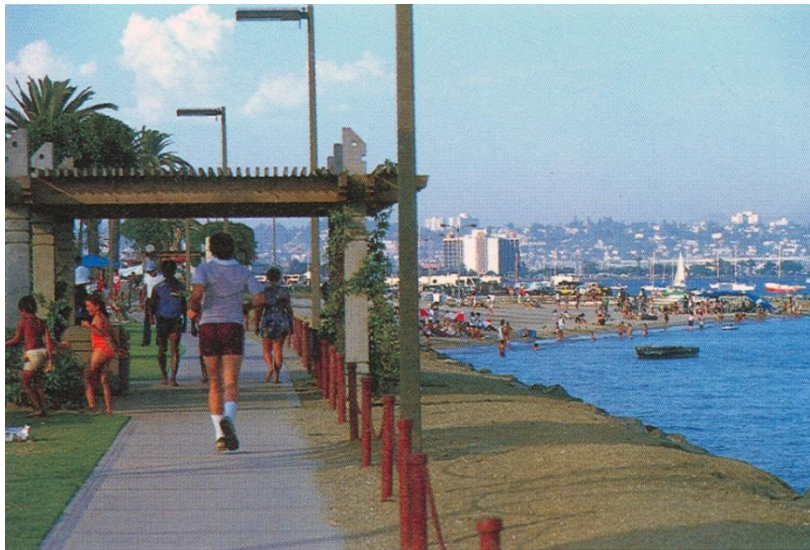




■ waterfront design elements

➤ natural spaces

- place diverse green spaces as many as possible.
- link up all green spaces with green ways.

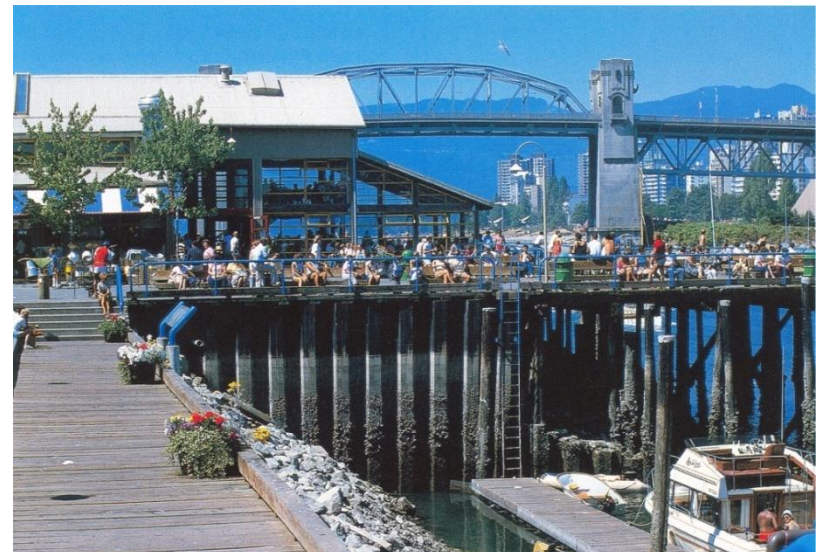




■ waterfront design elements

➤ open spaces

- design pedestrian networks linked to urban area.
- create integrated networks of open spaces.
- endow open spaces with water amenity & spontaneity.





■ waterfront design elements

- view corridor & viewing sequence
 - create view corridors from city to waters & landmarks.
 - design viewing sequences along the access to waters.
 - avoid damaging existing view corridors or viewing sequences.

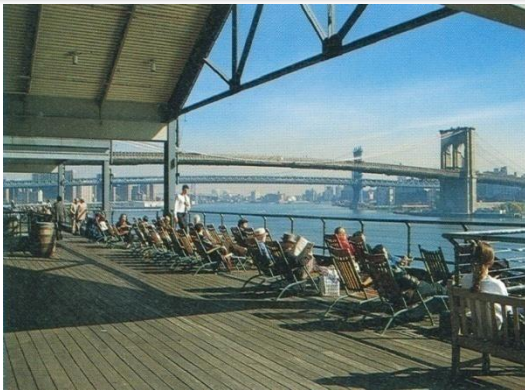




■ waterfront design elements

➤ viewing points

- create good viewing points inside or outside waterfronts.
- design viewing points to look waters as wide as possible.
- get obstacles out of view lines from viewing points.
- place interesting viewing points near waters.

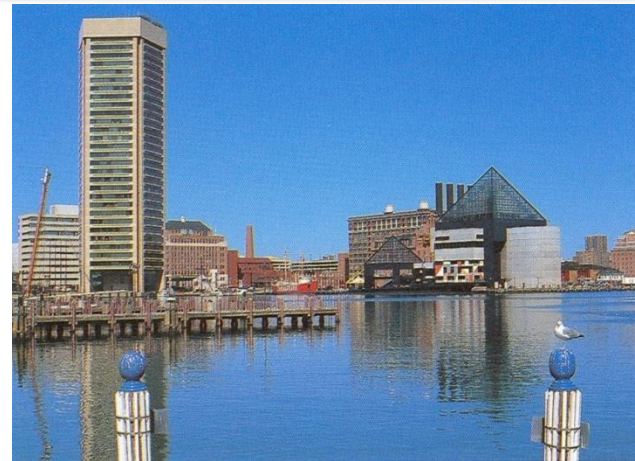
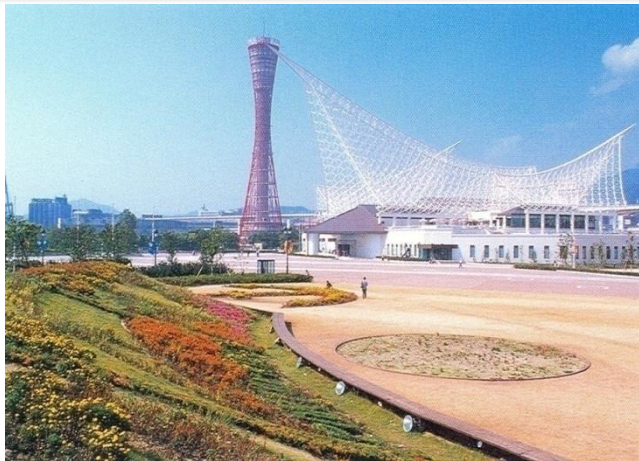




■ waterfront design elements

➤ landmarks

- design landmarks as symbols of waterfronts.
- place landmarks at appropriate places.
- design landmarks attractive and for mixed use.
- link landmarks to waters visually and physically.

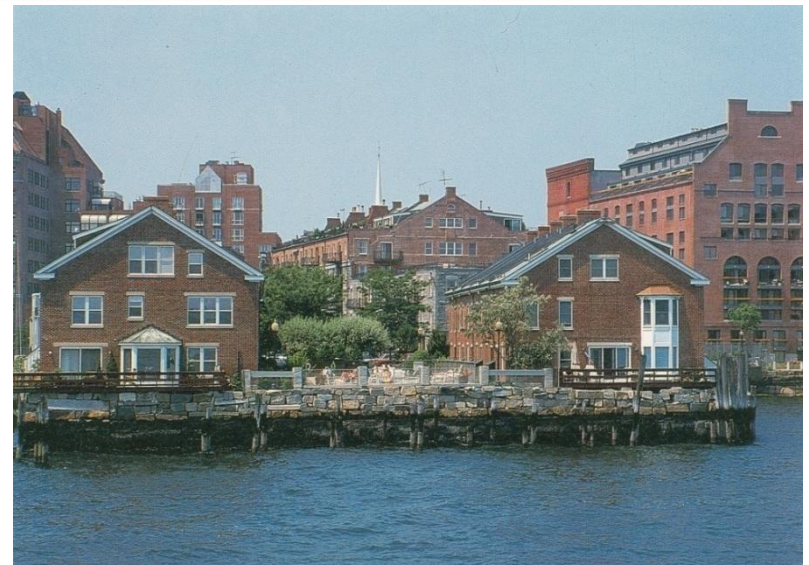




■ waterfront design elements

➤ color coordination

- design color contrast between buildings and their background.
- make harmony among main-, secondary-, and accent- colors.
- design color coordination along with texture of materials.





■ waterfront design elements

➤ nighttime Lighting

- design lighting for security and attractiveness.
- make design guidelines of nighttime lighting.
- pay attention to lighting of landmarks & big buildings.
- consider on reflection of lights from the surface of water.





Thank you!

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