



Pre-Design of Passenger Boarding Systems

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Cruise Conference 2007 – Cayman Islands
American Association of Port Authorities

Pre-Design Process – Adding Value

- ✓ When do you need a Gangway (or two)?
- ✓ Does a Gangway affect the design of the facility?
- ✓ How much should you spend?
- ✓ What's the best procurement method?

Gangways are integral to overall cruise port design, not merely equipment for subsequent Owner purchase

When to invest in gangways...

- ✓ Generally, turnaround ports with more than 50 ship days

- ✓ some Ports-of-Call with notoriously bad weather and a small terminal / first port of entry in country.

- ✓ Some Ports-of call with large tides

Alaska/BC, Maine/Atlantic Canada, N. Europe

- ✓ **Homeports**, in general. 2 gangways when 3,000 pax+

- ✓ When the cruise lines ask for one (or 2)



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24-Foot Tides



Plan 2002



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Port-of-Call Fixed Stairway



Does it Affect Design of Terminal

- ✓ One, two, or three level terminal?
 - ✓ A good gangway can save Terminal area and \$
- ✓ Types of vessels anticipated (possible to limit?)
- ✓ To Fantasy, or not to Fantasy?
- ✓ Purpose-built for Single Vessel? (Hint: NO)
- ✓ Relationship to Boarding Platform
- ✓ Multiple or Single access points?
 - Fixed, Semi-fixed, or Fully Mobile
- ✓ If mobile: Tracks or Wheels?
- ✓ Prominent site seen from City?

The logo for BEA International, featuring the letters 'BEA' in a large, bold, white sans-serif font, with the word 'INTERNATIONAL' in a smaller, white sans-serif font directly below it. The logo is set against a dark blue background that includes a faint image of a modern building's interior.

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Quebec

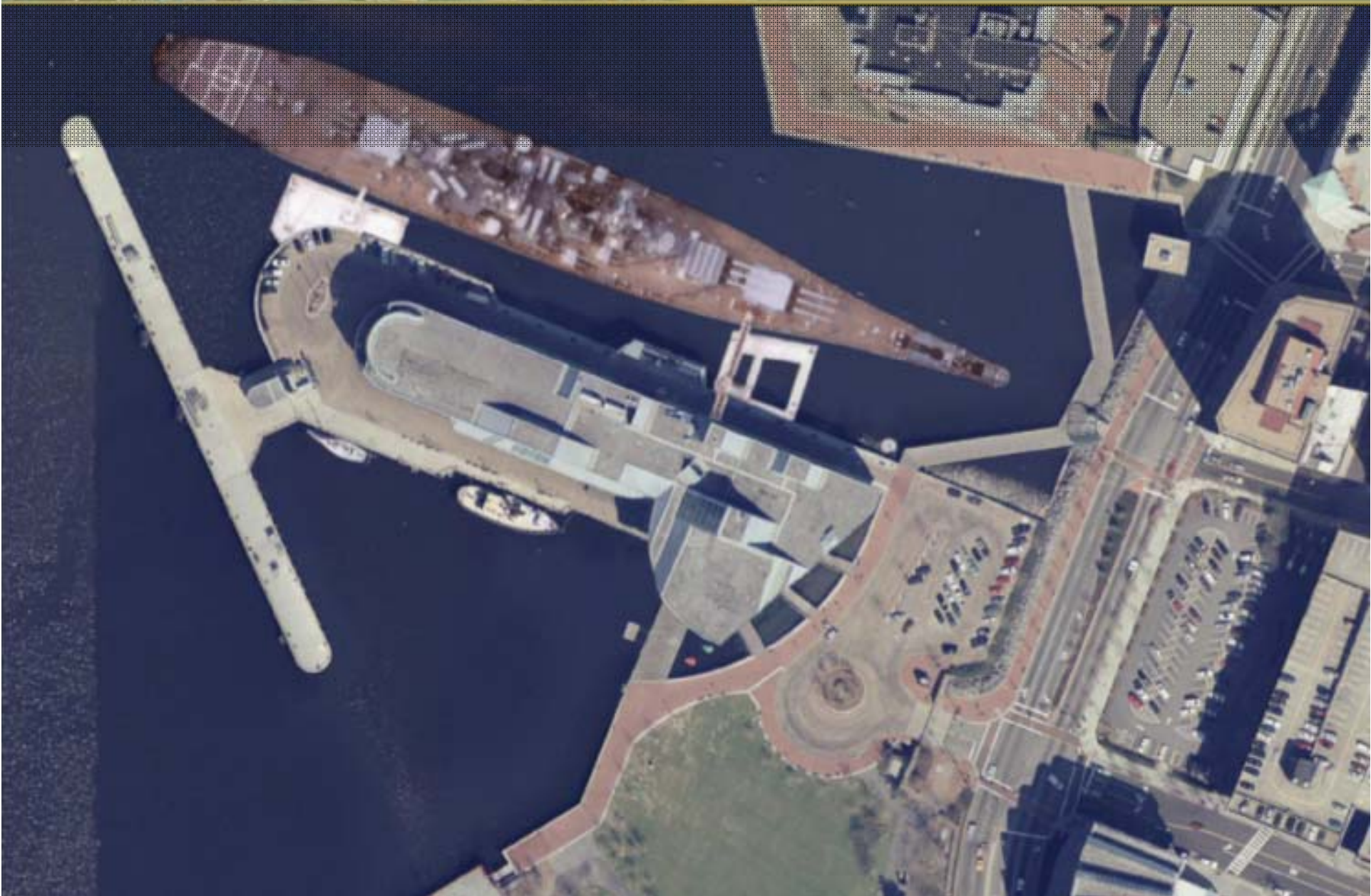




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Existing Maritime Museum

New Terminal/
Events Hall

New
Marina

Veterans' Memorial/
Riverfront Park

(No on-site parking)

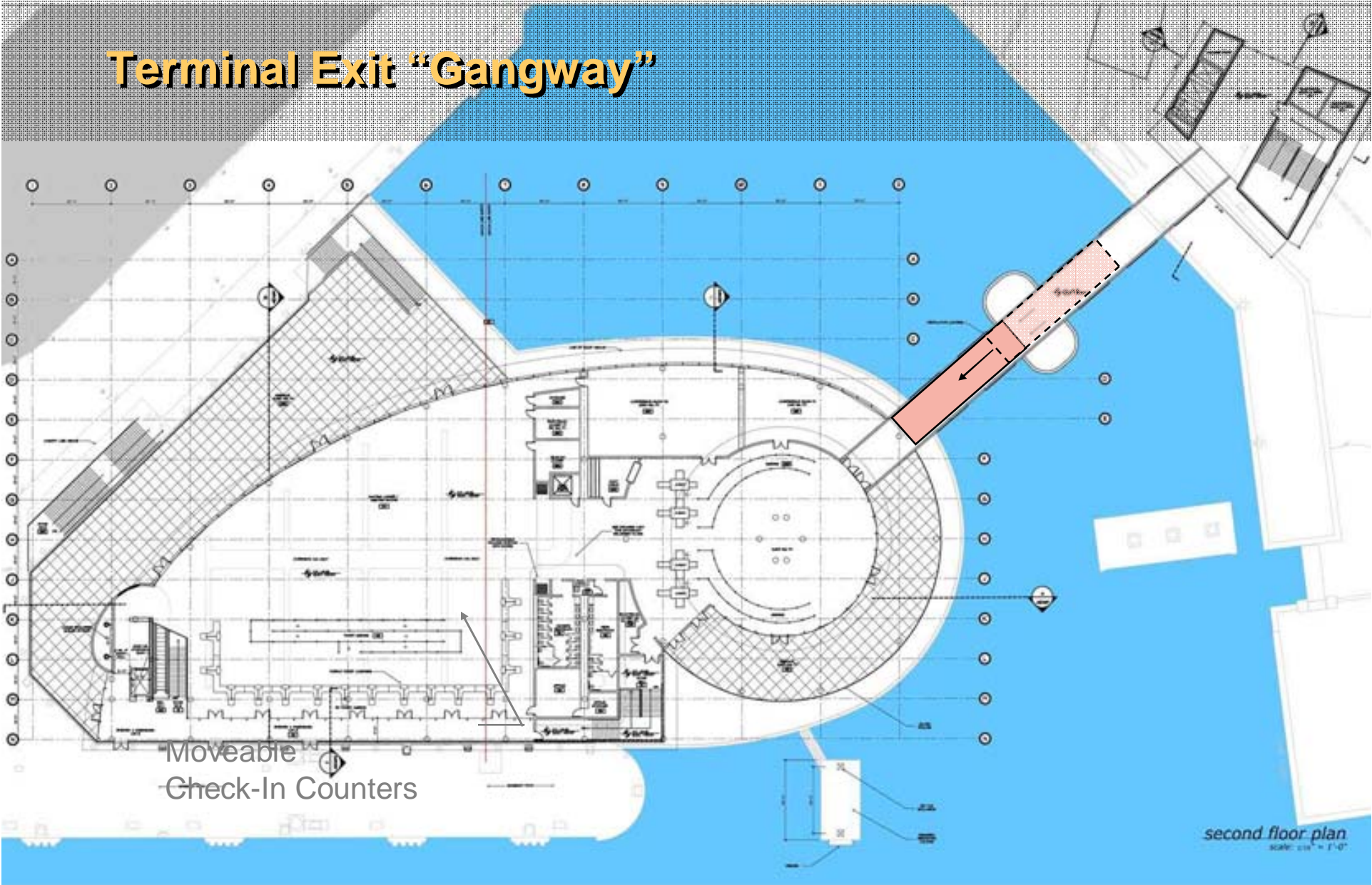
Main Street

Integrated Site



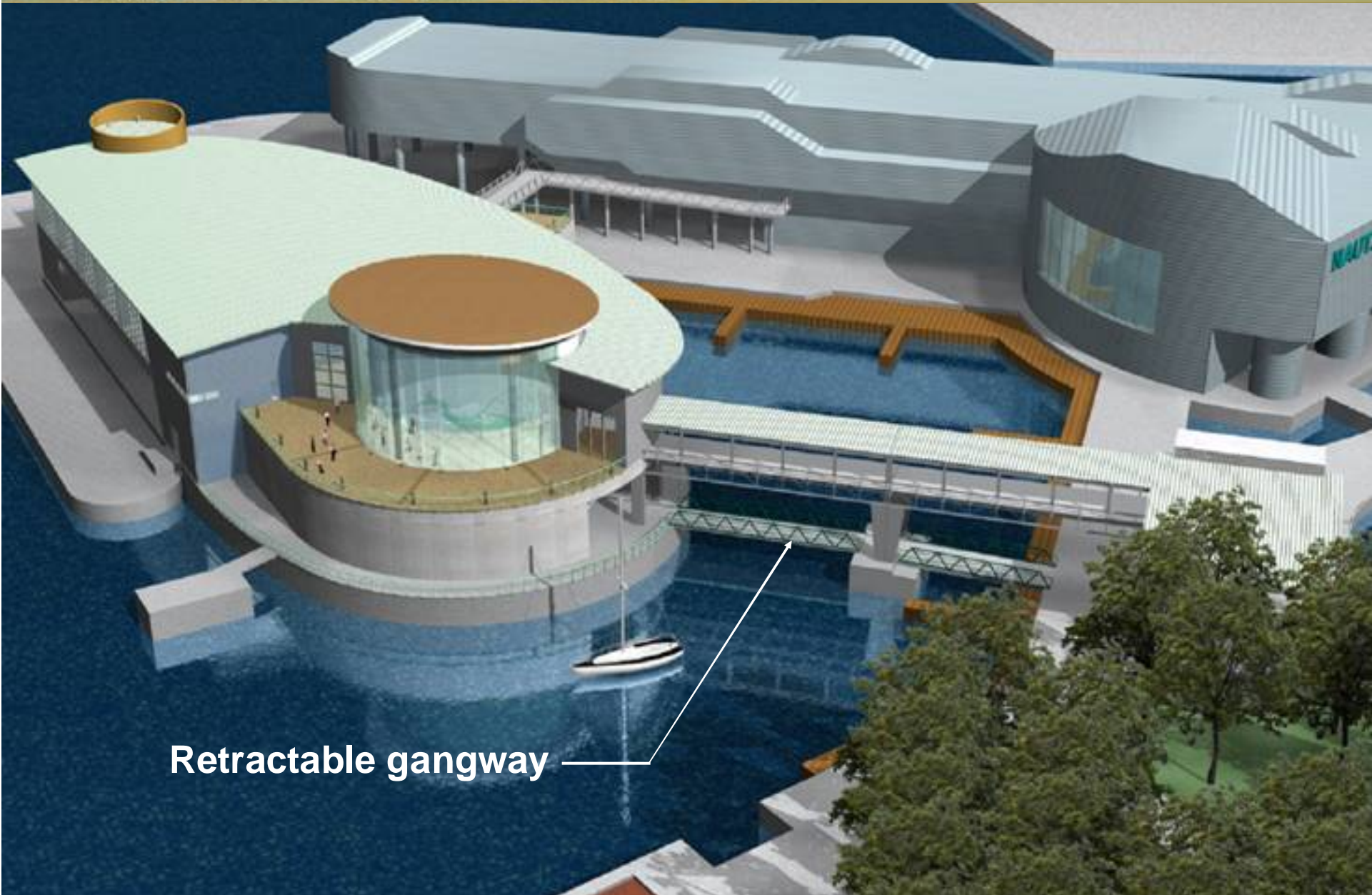
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Terminal Exit "Gangway"



Moveable
Check-In Counters

second floor plan
Scale: 1/4" = 1'-0"

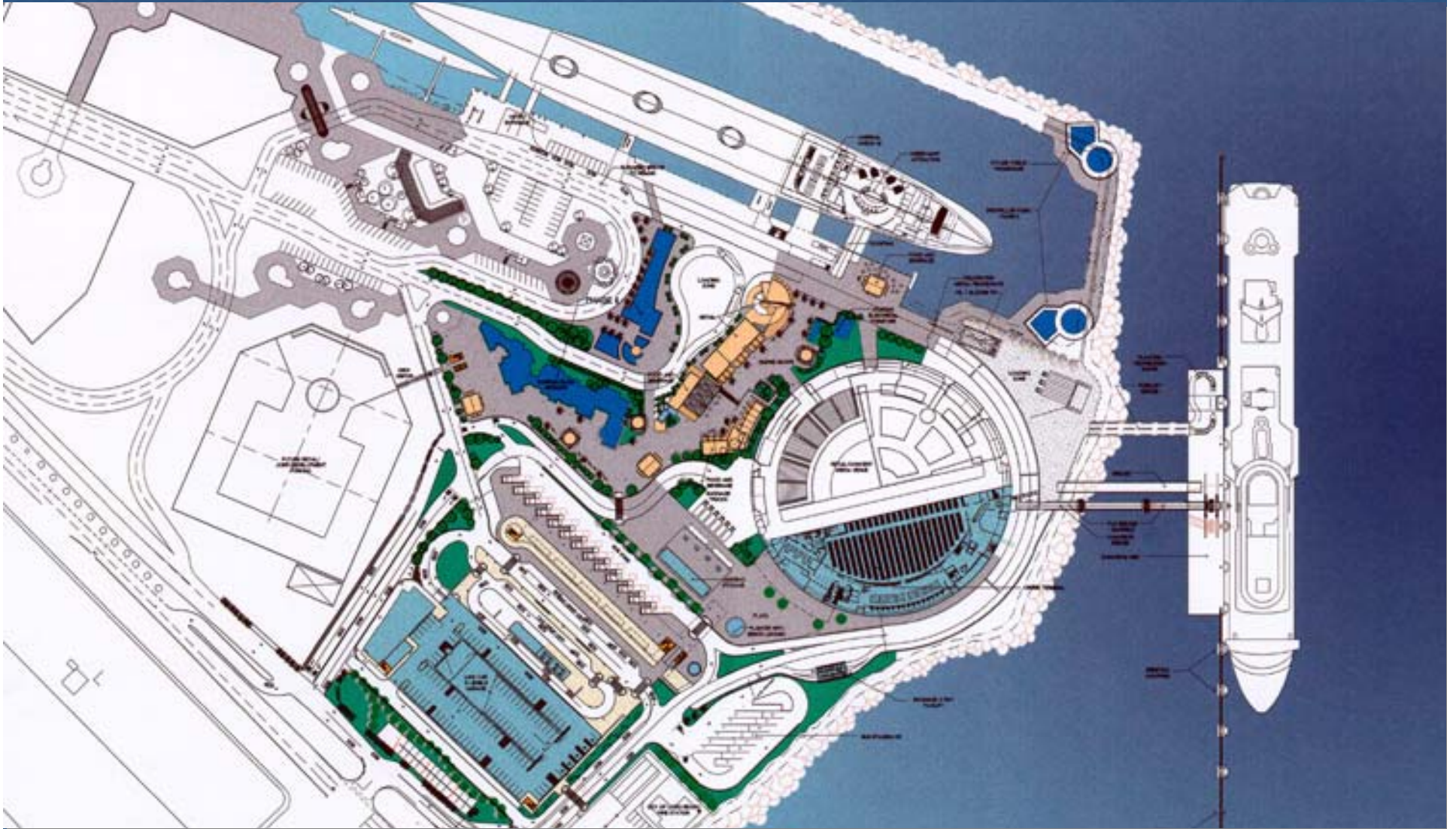


Retractable gangway

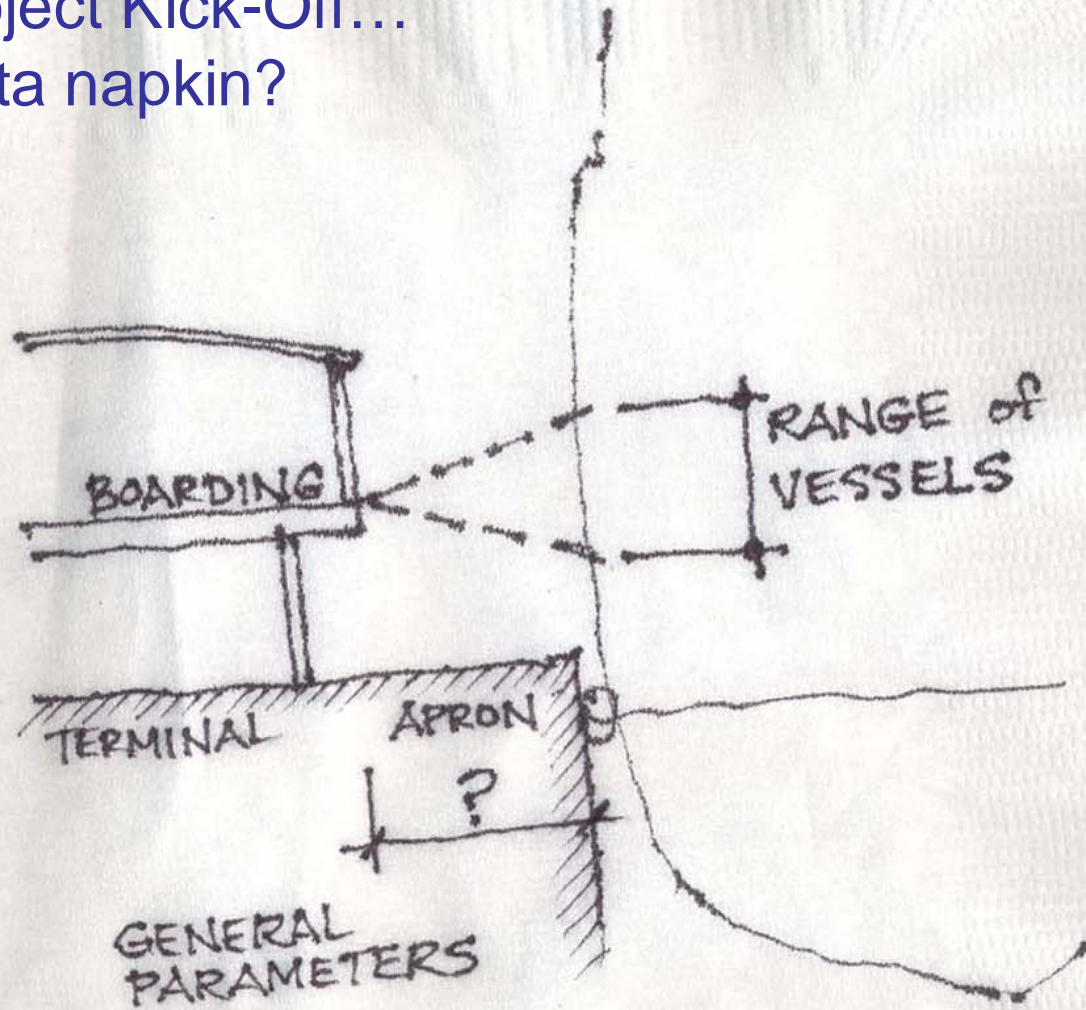


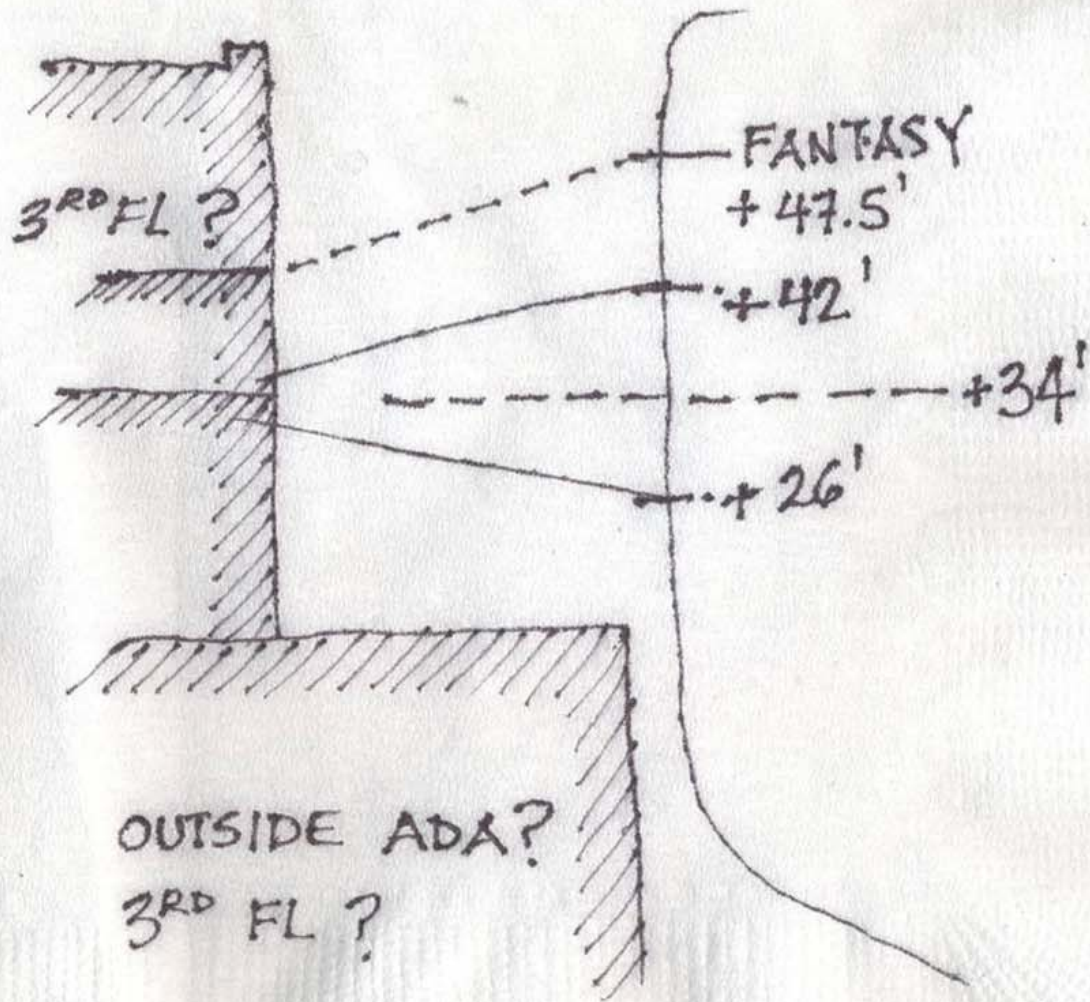
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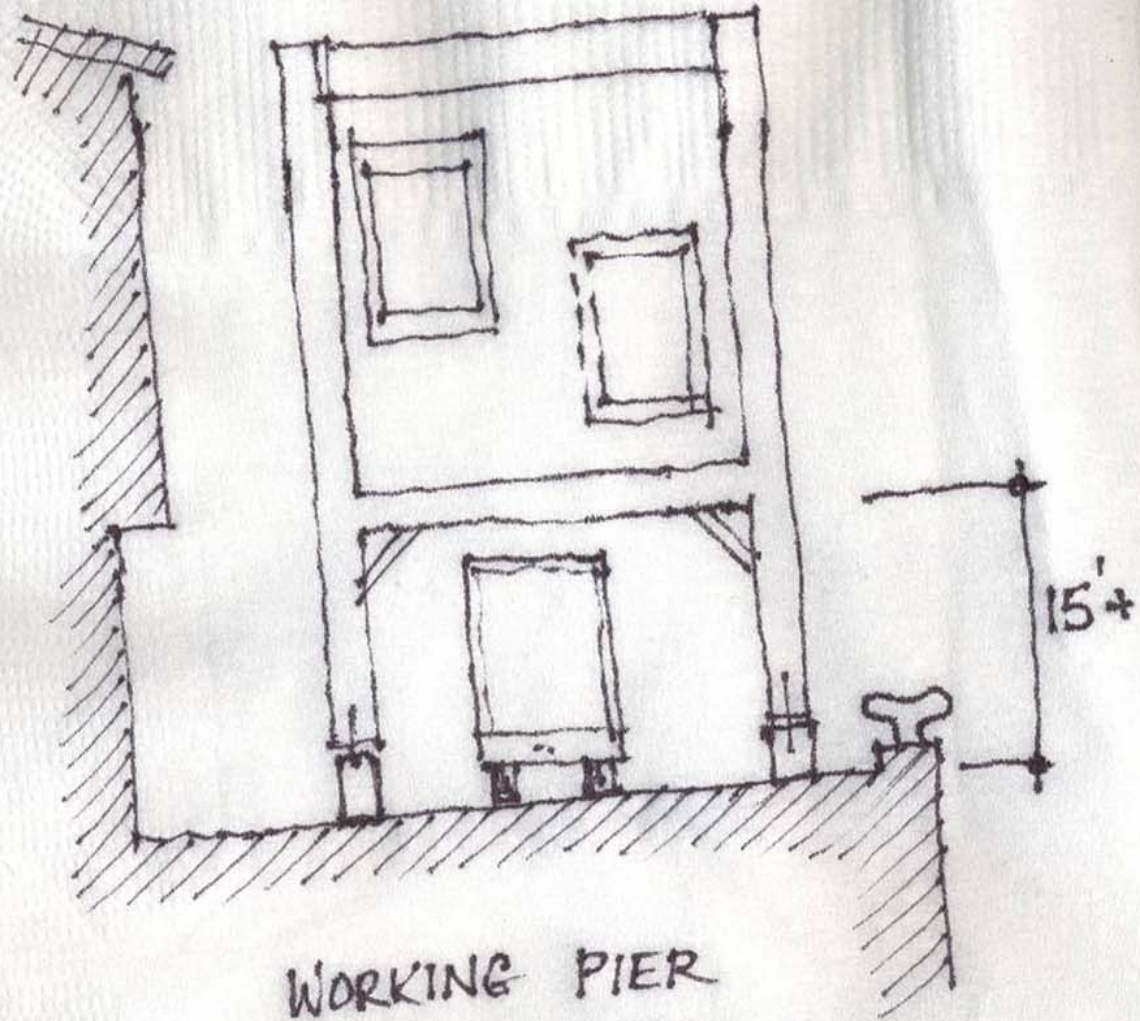
300-ft ADA Hinged ramp



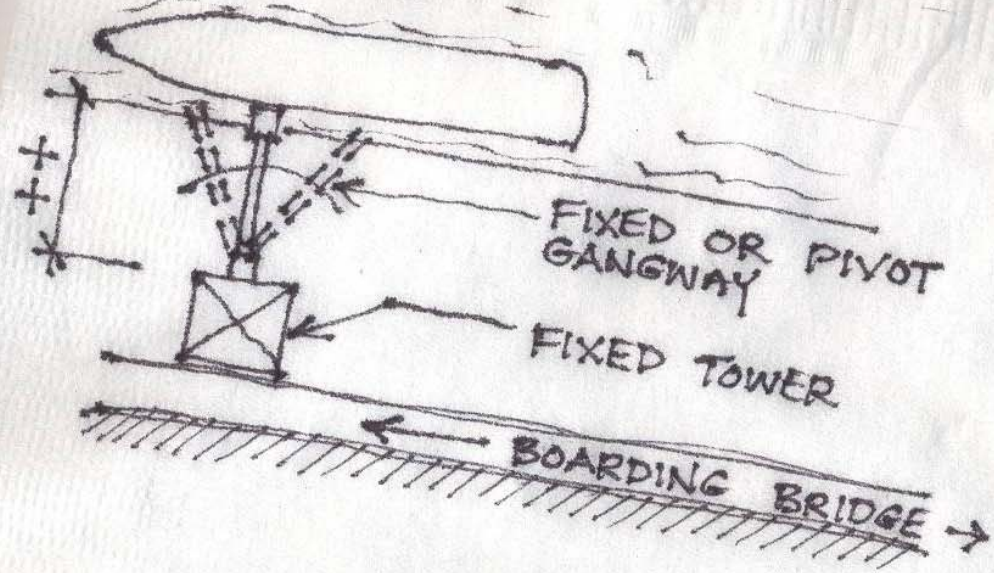
Sitting at the Bar w/Port Authority @
Project Kick-Off...
gotta napkin?



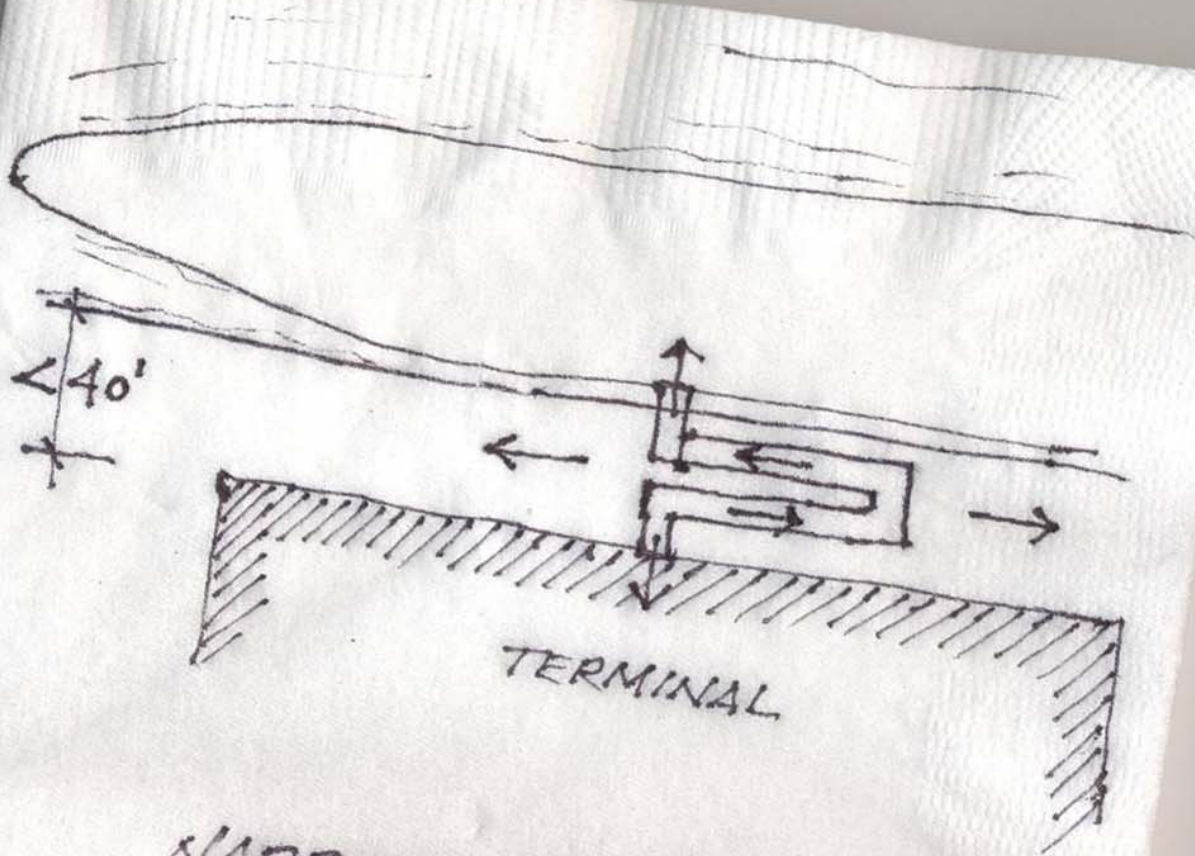




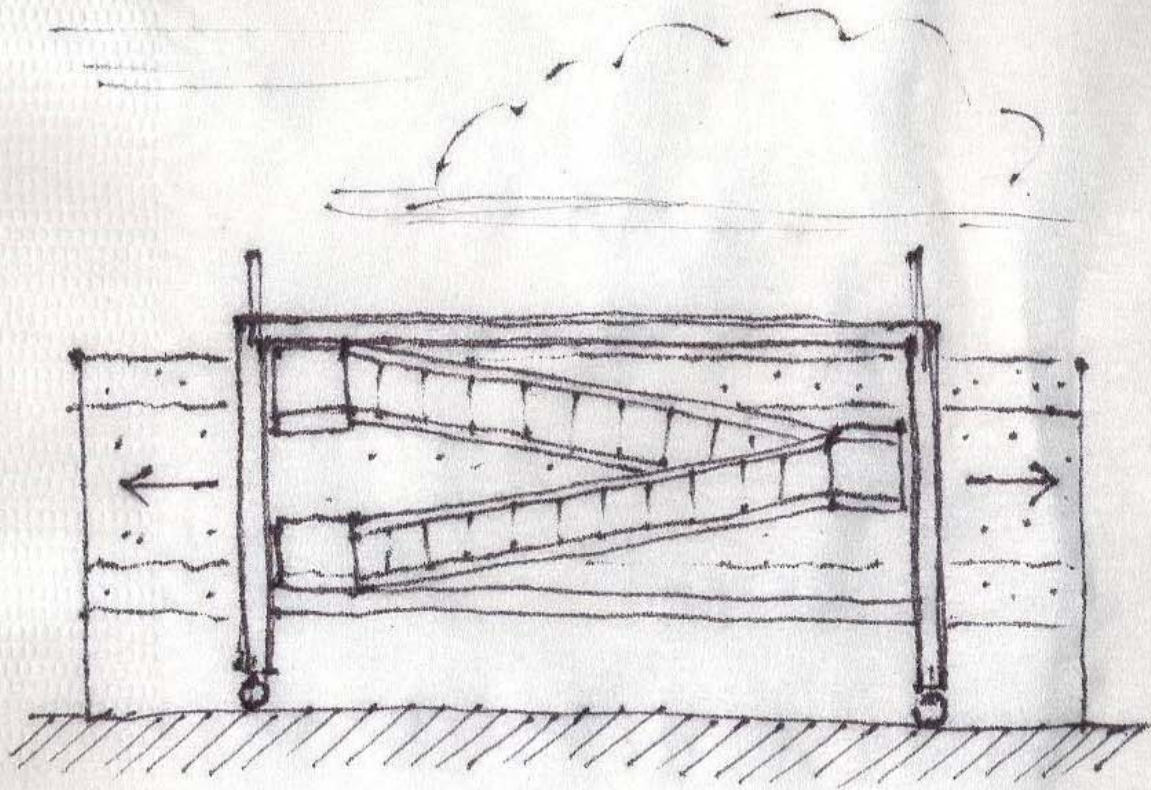
WORKING PIER
- CLEARANCE



EARLY VERSIONS
(PRE-MOBILE)

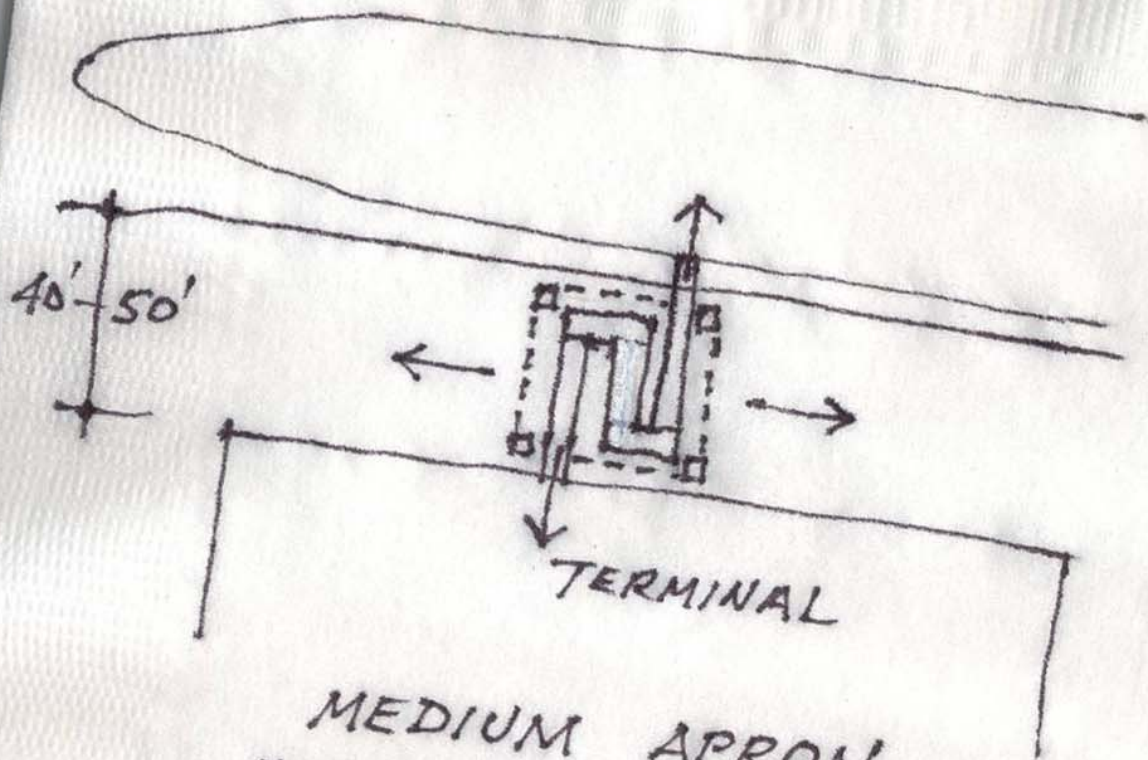


NARROW APRON
"SWITCHBACK"

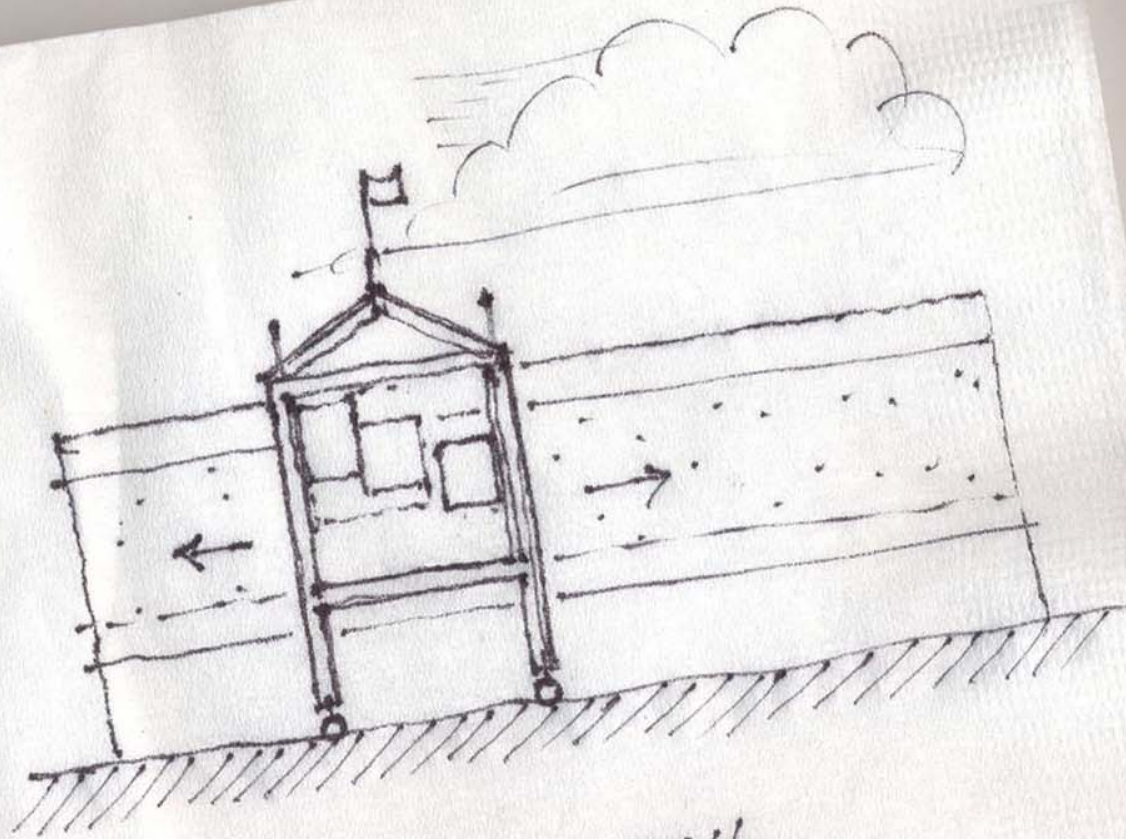


SINGLE SWITCH

- wide
- industrial

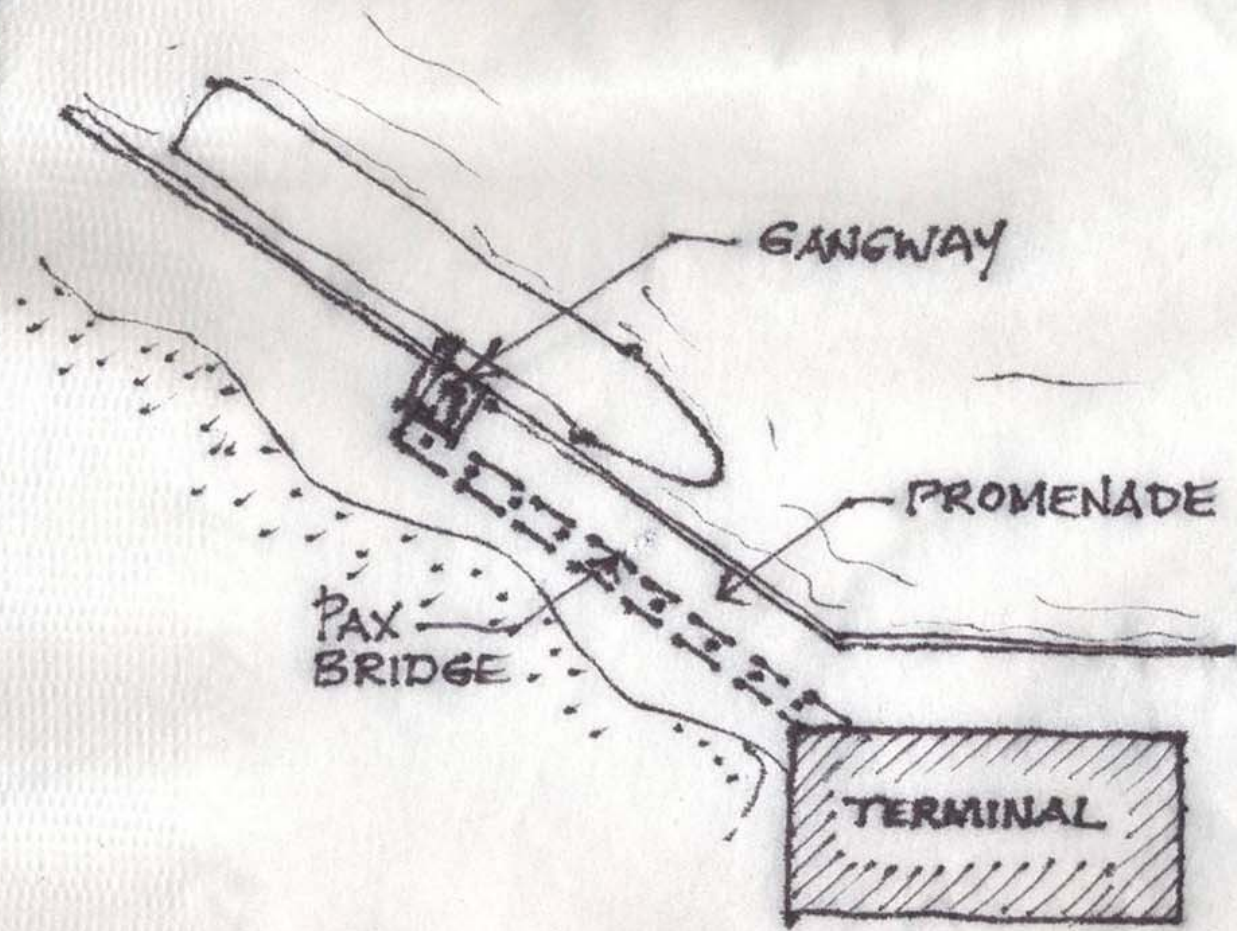


MEDIUM APRON
"DOUBLE SWITCHBACK"



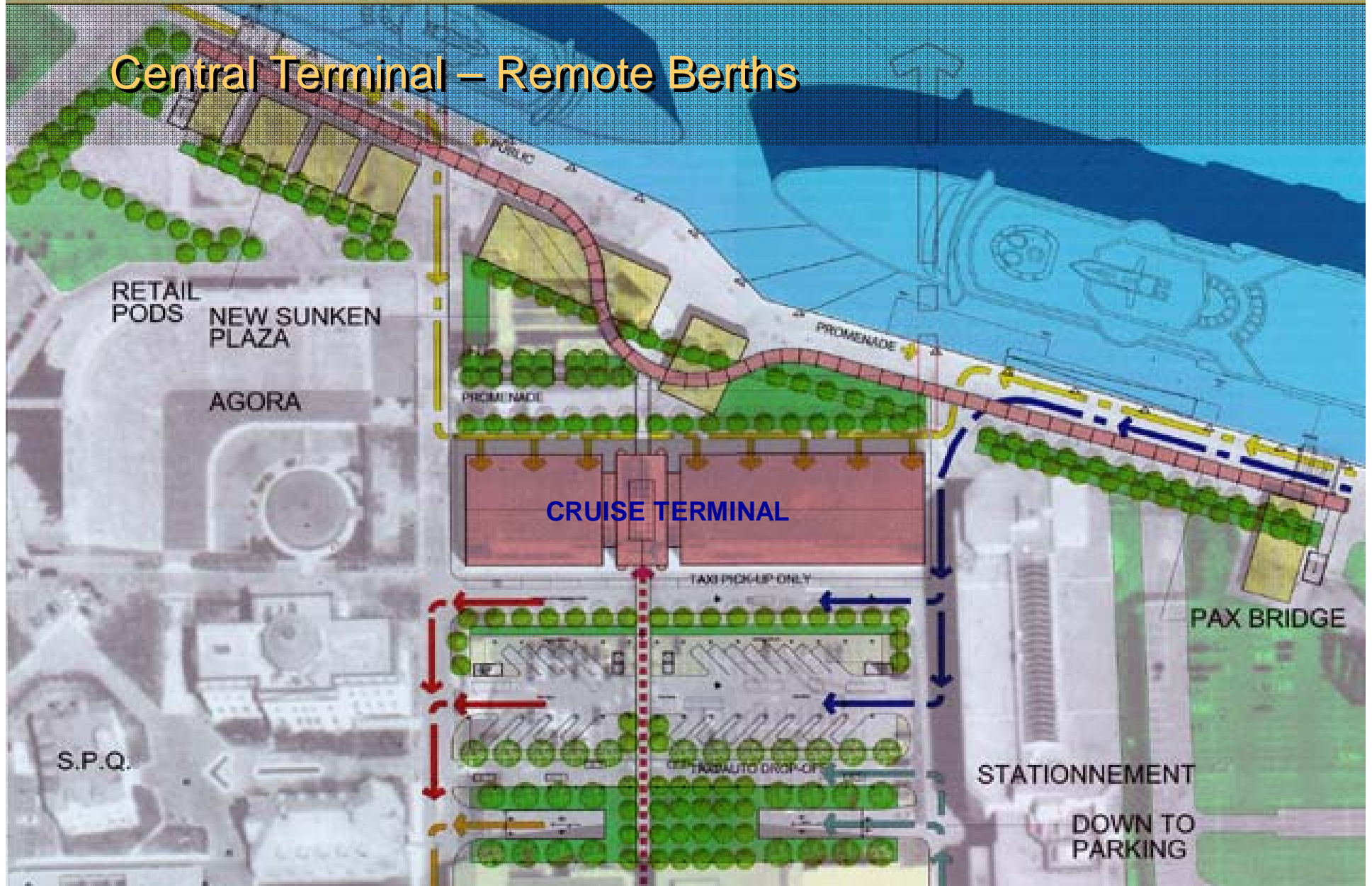
DOUBLE SWITCH

- compact
- architectural



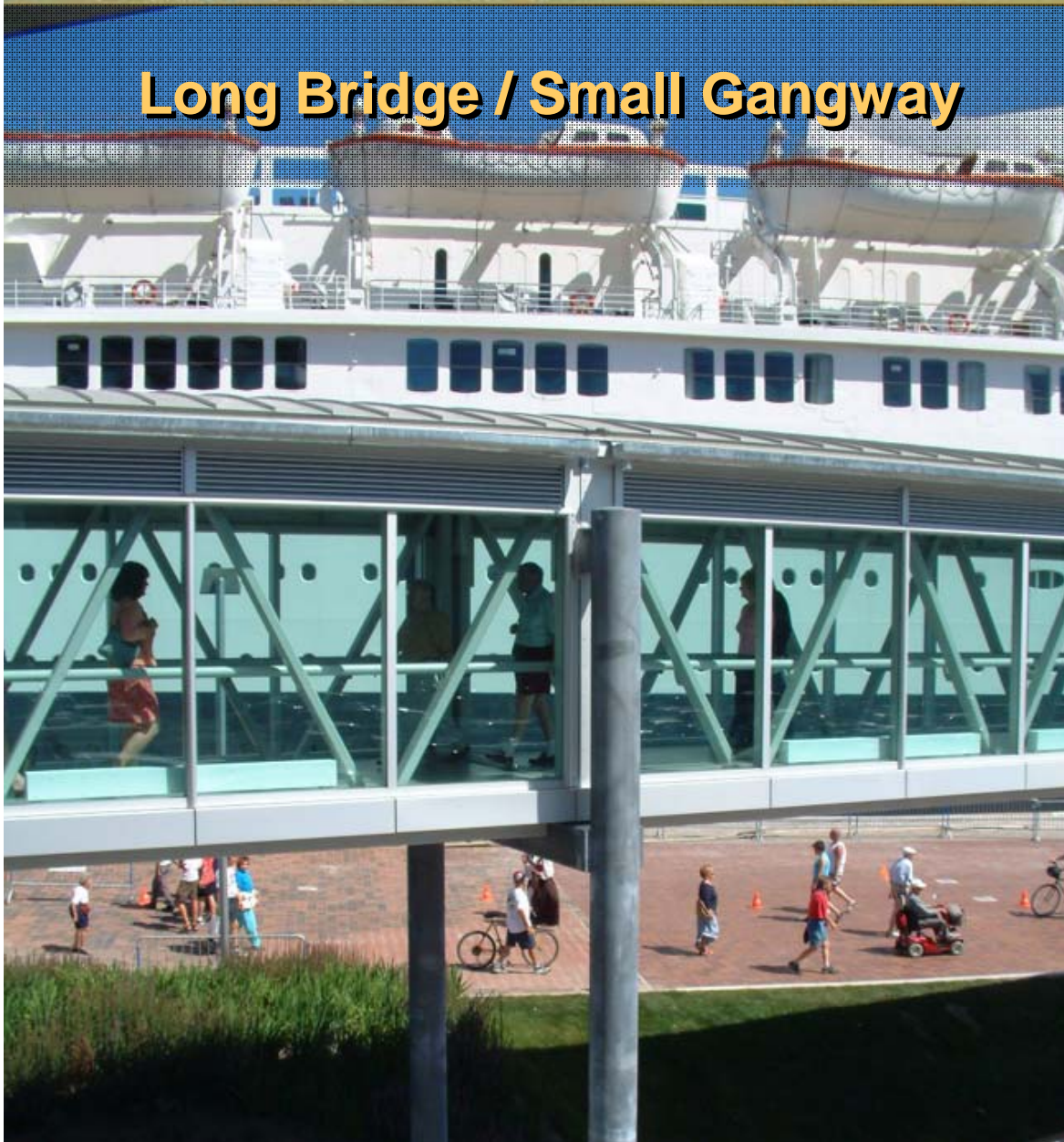
REMOTE CONDITION

Central Terminal – Remote Berths

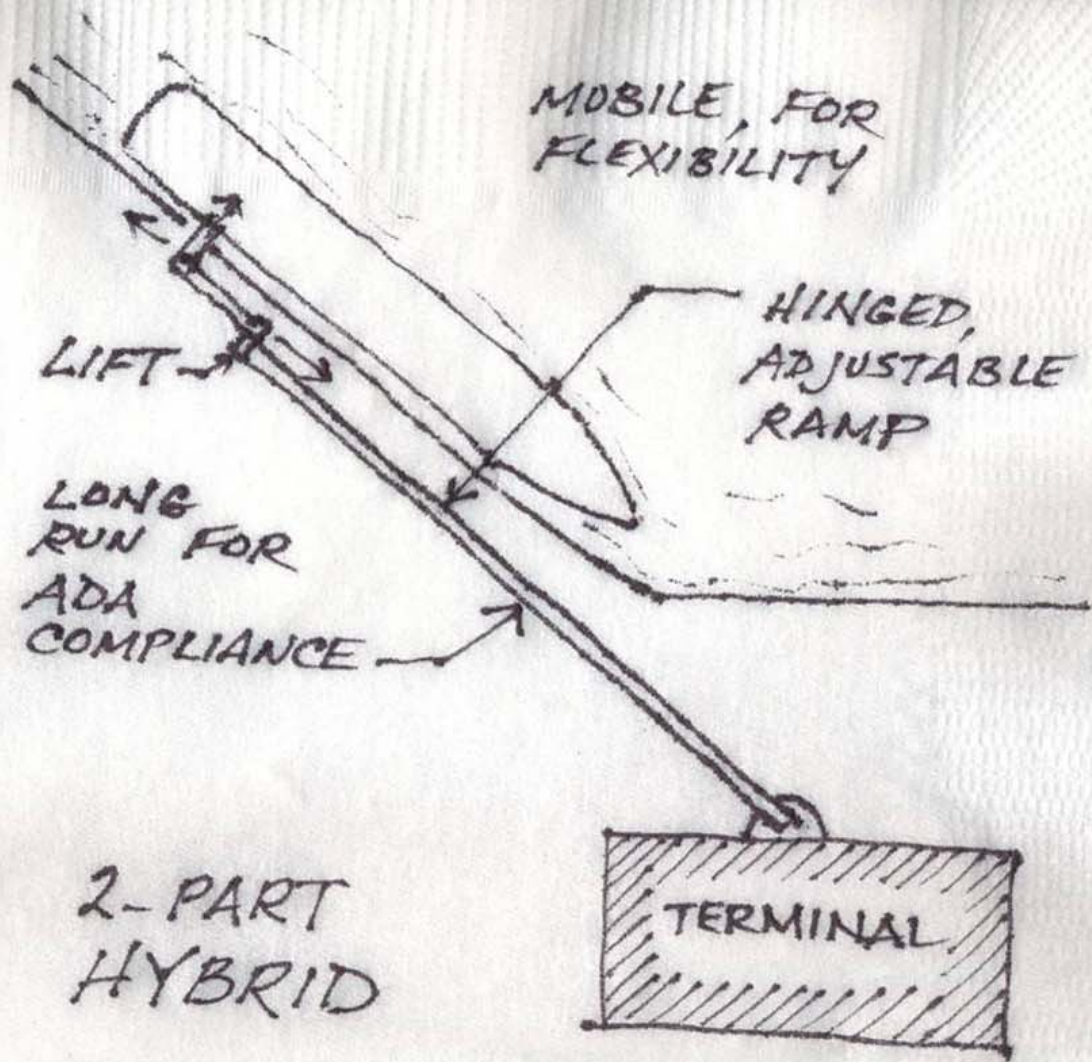




Long Bridge / Small Gangway



...public waterfront access with ship access and security



2-PART
HYBRID

LARGE TIDES



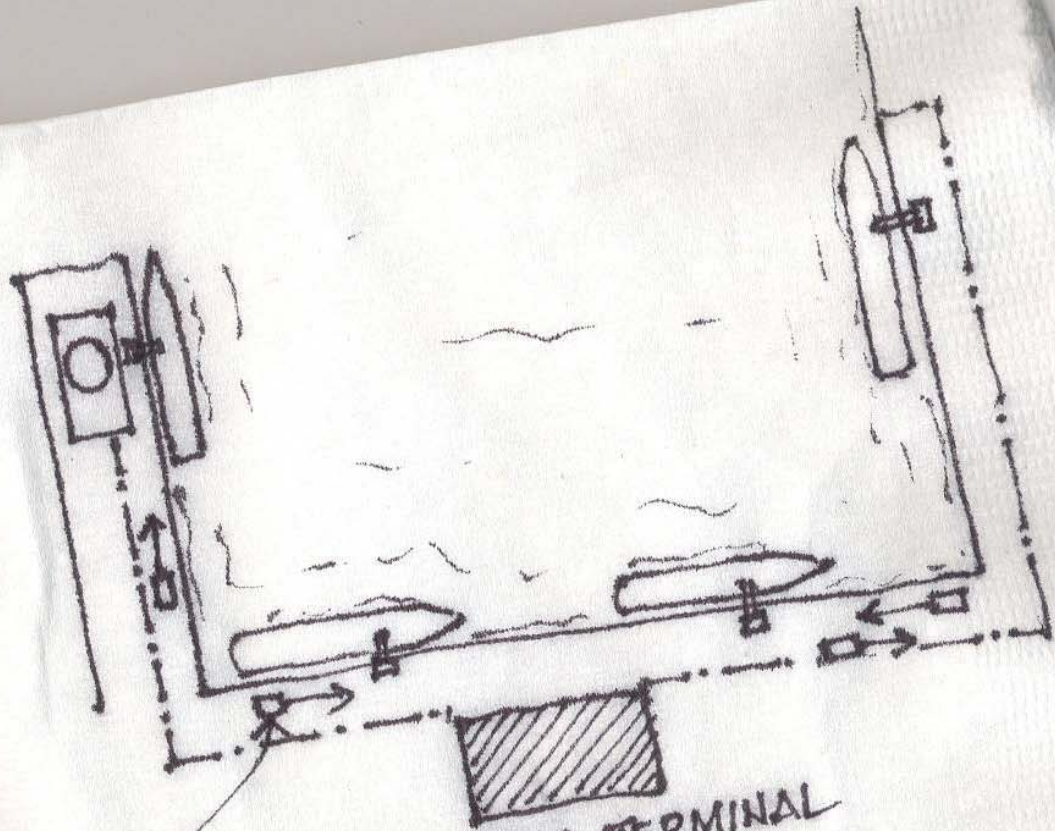
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Gangway at "T"

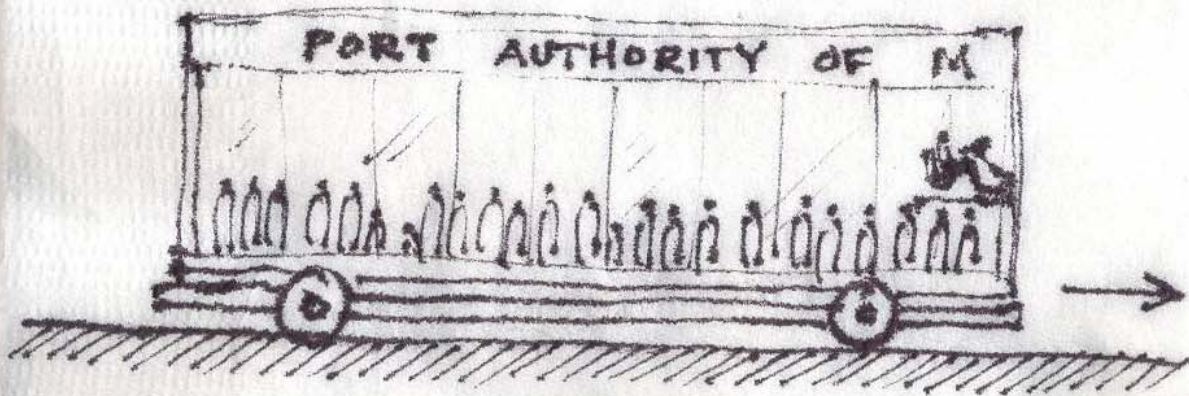


Fully adjustable and ADA-compliant bridge / part of gangway

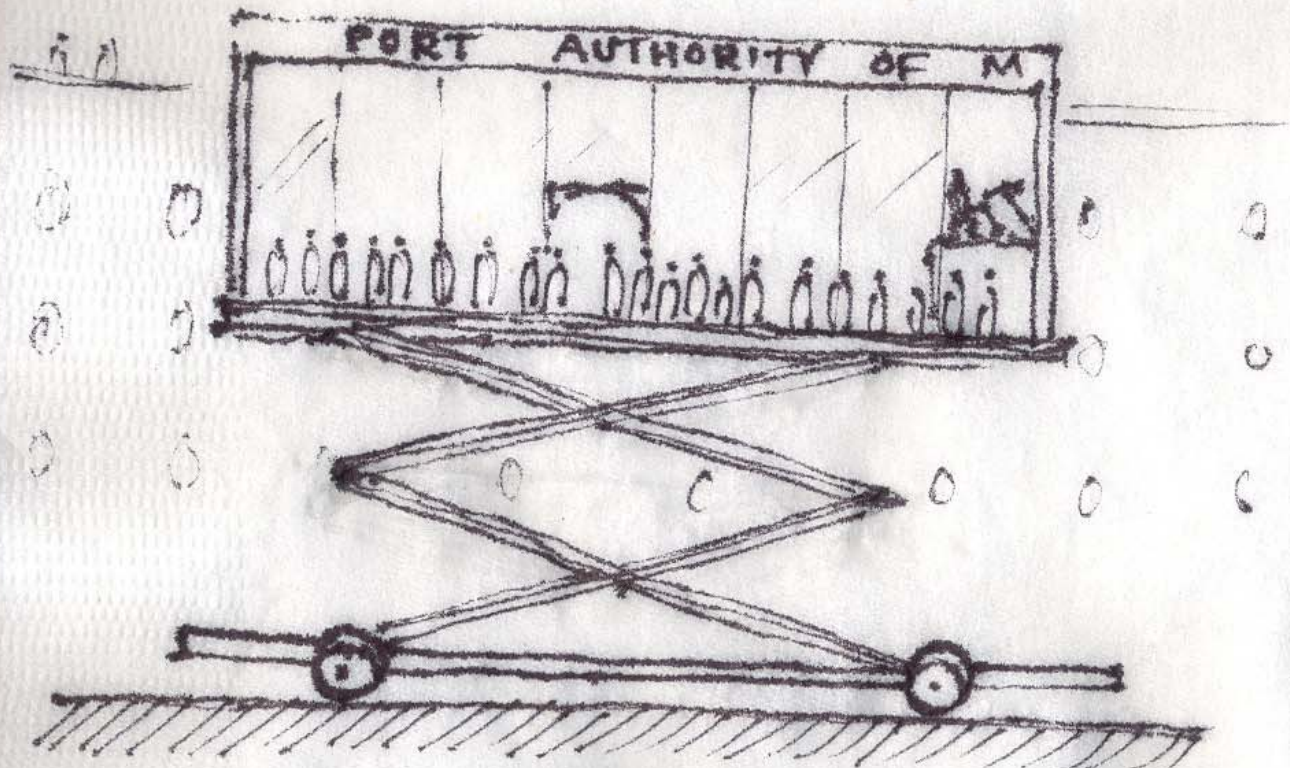
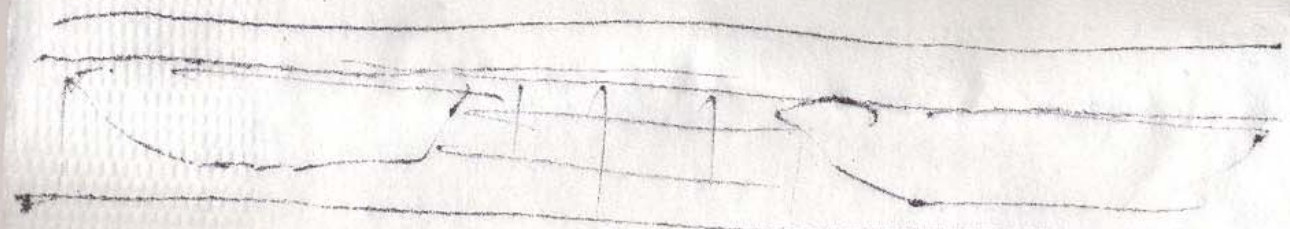


100-150 pax
DOUBLE DECKER
GANGWAY VEHICLES

THE
FUTURE?



VERY HIGH CAPACITY BUS...



... BECOMES PAX BOARDING

\$65,000

BASE MODEL: FIXED, OPEN

OPTIONS

- A/C, Glazing
- Automatic Adjust
- Mobile
- Remote Control
- Remote Diagnostic

LOADED

\$203,000 MSRP

Procurement Method

- Separate Tender from Terminal GC
- May be bundled w/ Pax Bridge (same finishes)
- Same Project Budget / Funding (FF&E)
- Issue Tender Docs 14-16 mos. in advance
- Minimum 3 invited Bidders (2 mo bid period)
- Tender Docs must set Parameters – not limit creativity of Tenderer!

Summary of A/E's Role to Add Value

- Gangway is part of Cruise Port Pre-Design
- Discuss options w/Port Developer & cruise lines
- Discuss operation with Building/Fire Officials
- Budget Appropriately
- Prepare Design-Build Bid Package
 - Parameters, Warranties, Training, Spare Parts...
- Help evaluate Proposals
- Help Coordinate installation



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