

# Planning for Cruise Terminals

PRESENTED BY: **Larry Levis, AIA**  
**Principal, BEA International, Inc.**

The logo for the American Association of Port Authorities (AAPA), consisting of the letters 'AAPA' in a bold, stylized, teal-colored font with a white outline and a slight shadow effect. The logo is positioned in the lower center of the slide, overlaid on a background image of a cruise terminal pier with a large white geodesic dome structure and a cruise ship docked.

**AAPA**

**American Association of Port Authorities**

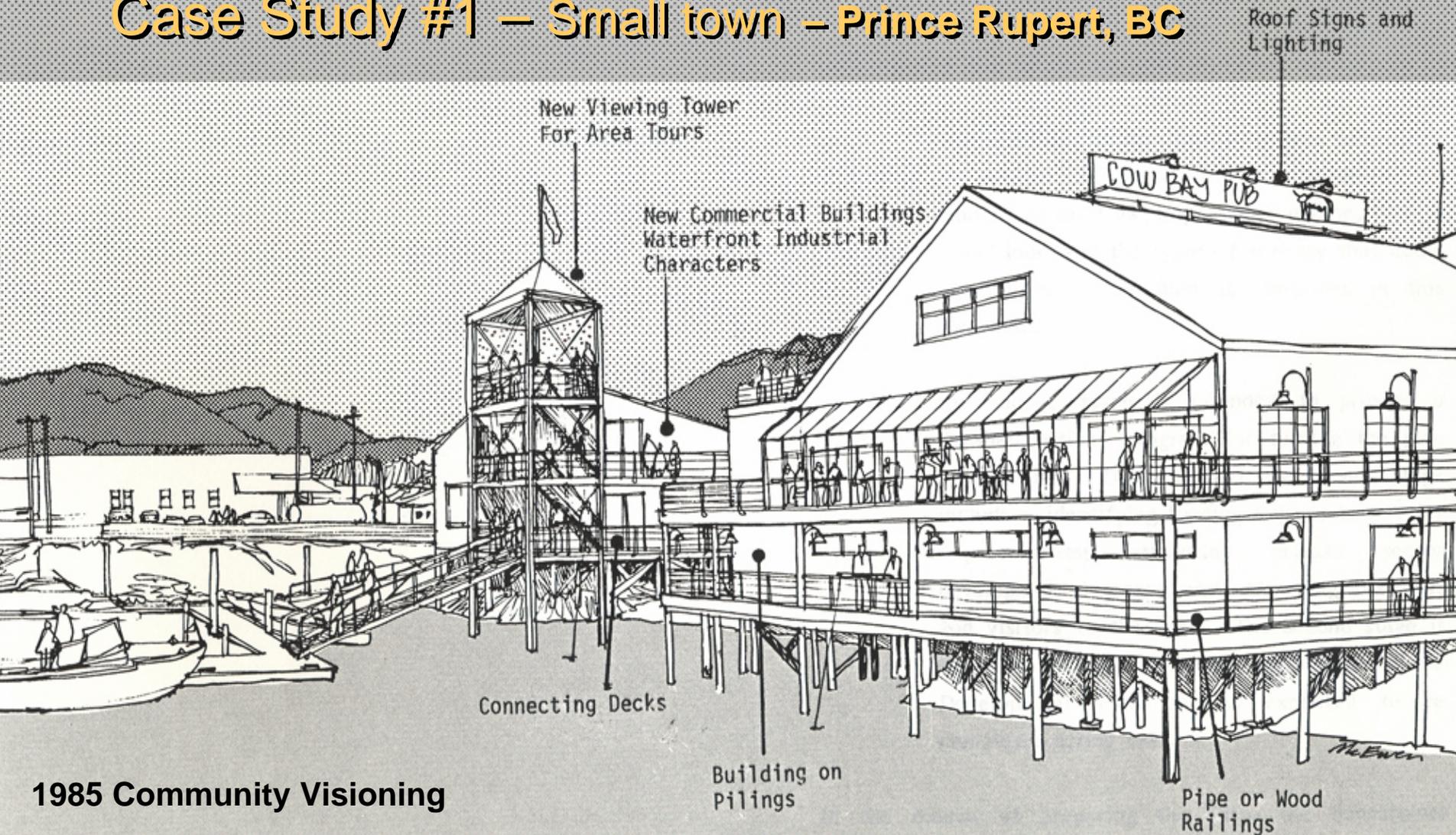
## Planning Process

- ✓ Community buy-in – Starts with Public Sector
- ✓ Public Involvement Program
- ✓ Visioning “Charrettes”
- ✓ Stakeholders’ Needs
- ✓ **BALANCE**



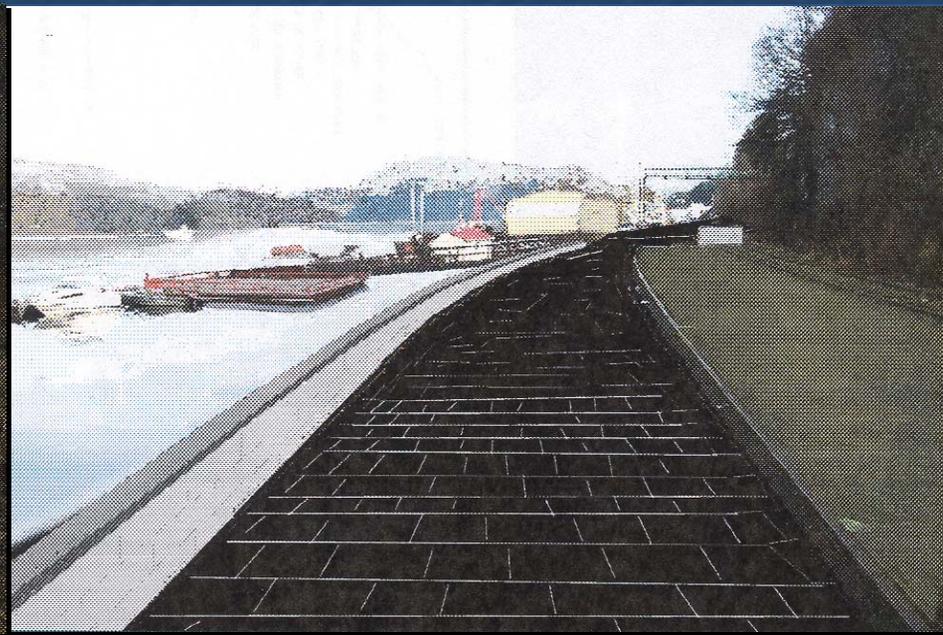
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INTERIOR DESIGN - CONSTRUCTION SERVICES

## Case Study #1 – Small town – Prince Rupert, BC



1985 Community Visioning

# Aged Waterfront – formerly industrial



Community Vision – 1994



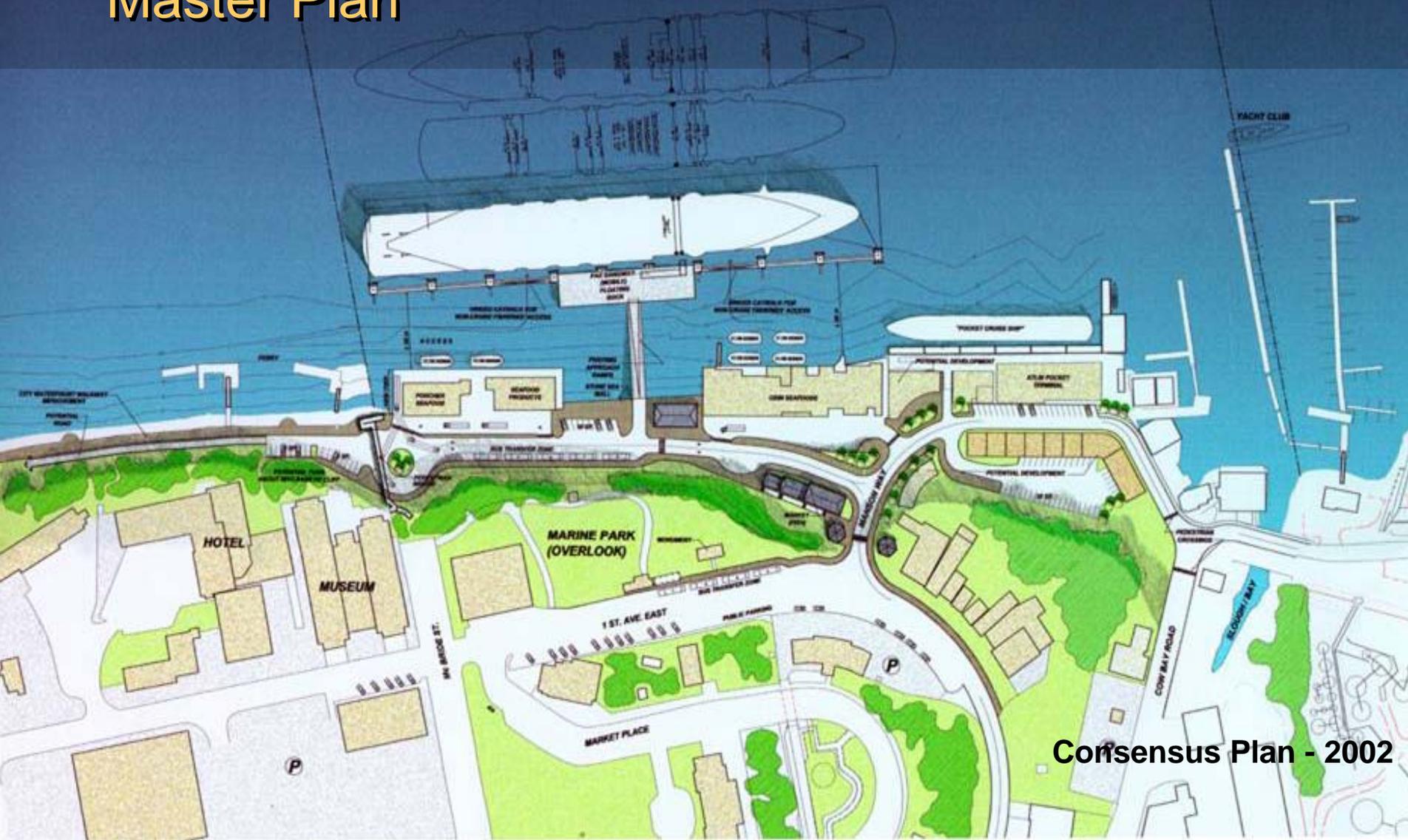
## Need to improve roads





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# Master Plan

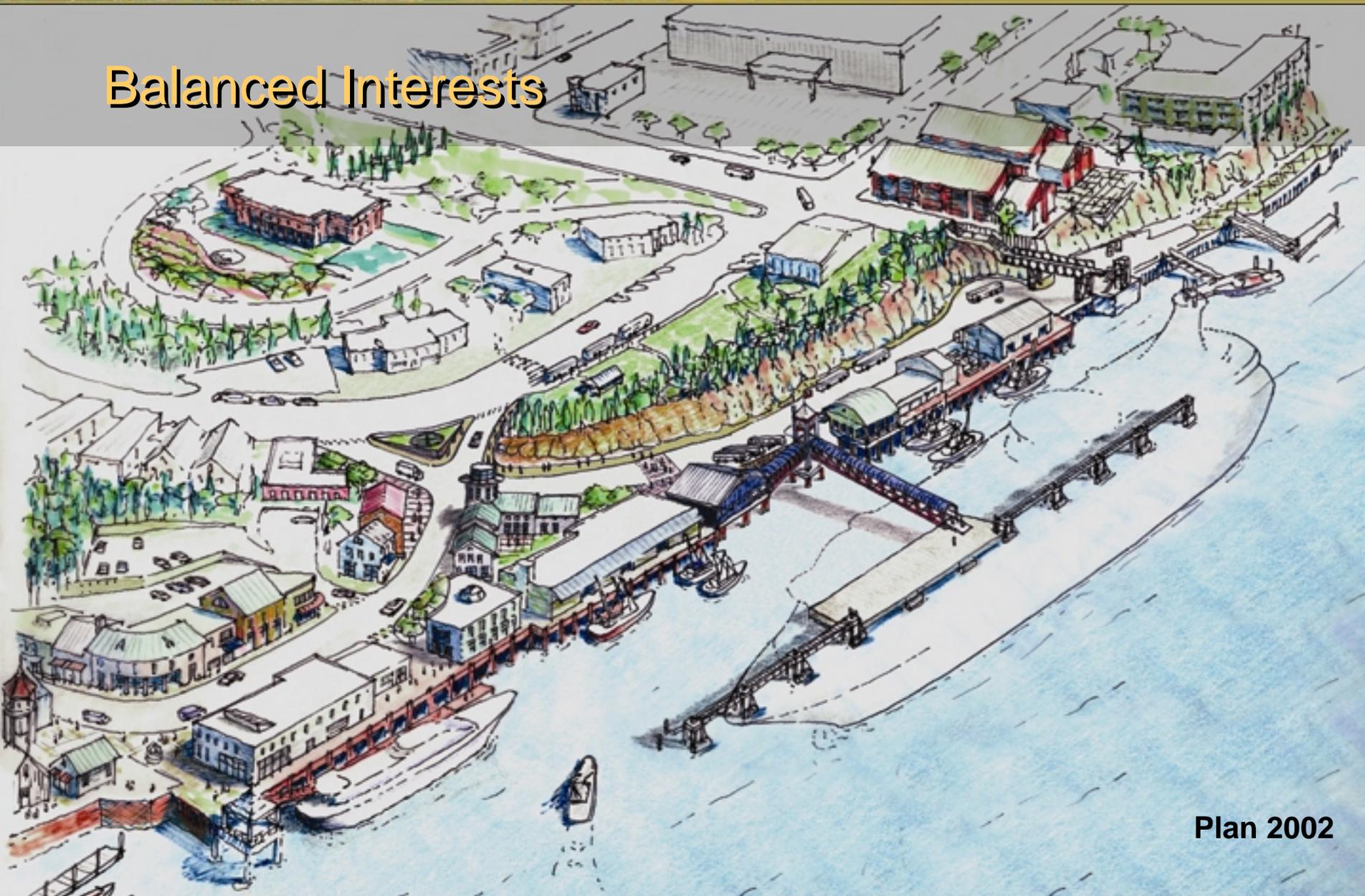


Consensus Plan - 2002



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## Balanced Interests



Plan 2002



## Minimal investment



Pieces of Puzzle come together....

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2004



# Context



**Contextual Mindset**

**Portland, ME**



**Industrial Marine & Emerging Leisure Waterfront**

Portland, ME



Early Visioning – 1997 Urban Design Emphasis

## 3 Public "Charrettes"

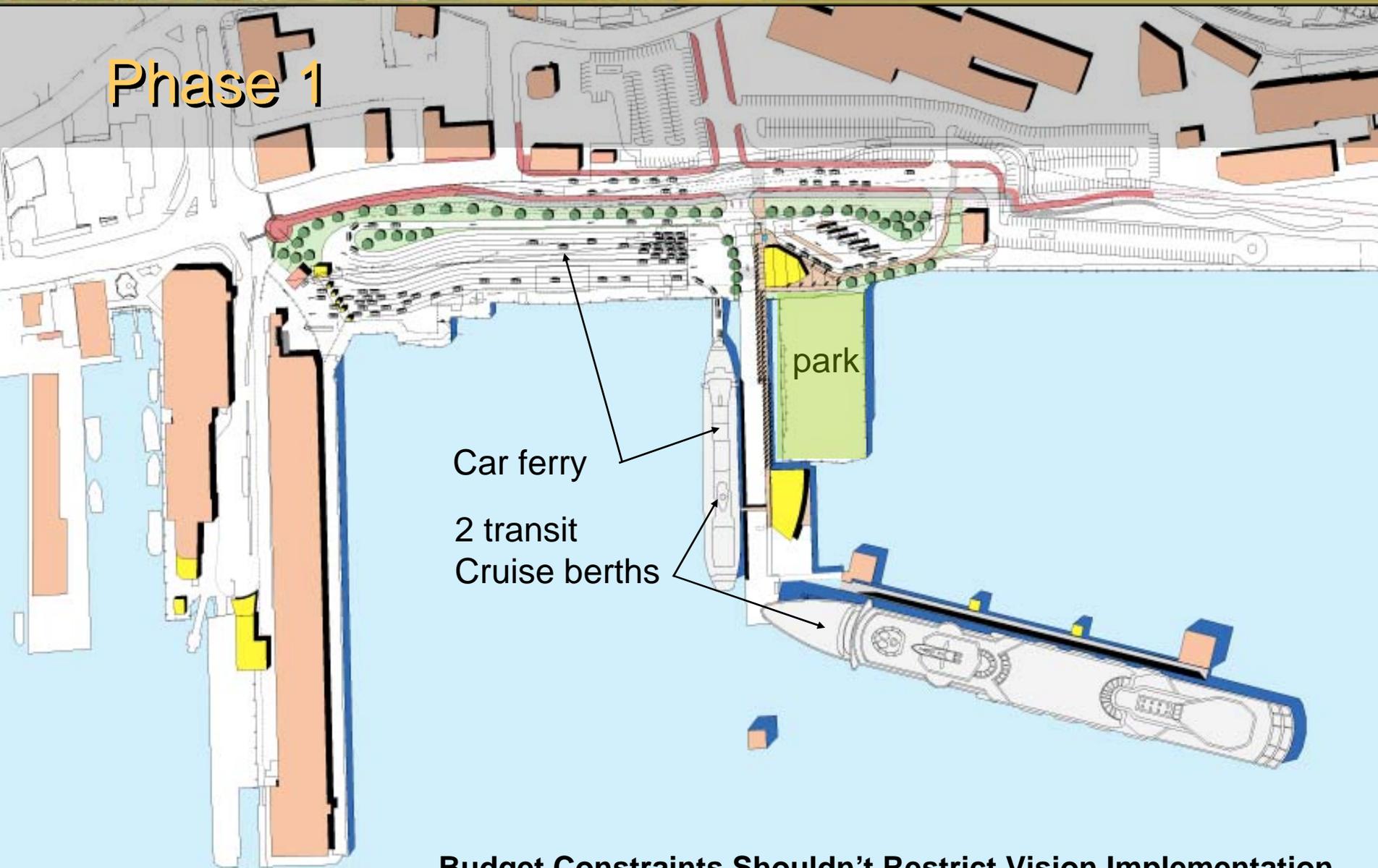
Future Joint Development



Access  
Bikes  
Parks

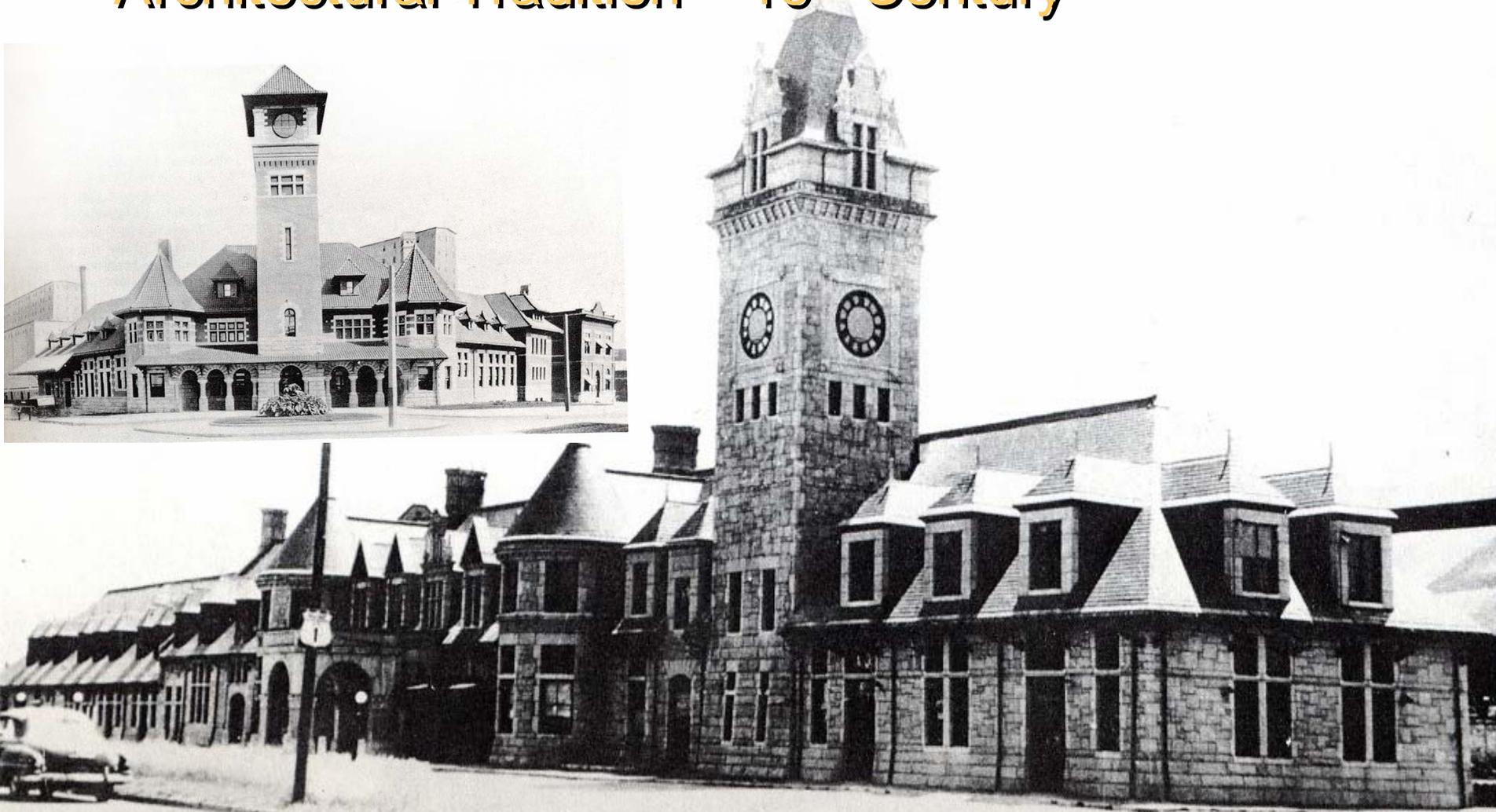
Community Visioning – 2001 (w/ferry + cruise)

## Phase 1



**Budget Constraints Shouldn't Restrict Vision Implementation**

## Architectural Tradition – 19<sup>th</sup> Century



Lost Landmark Terminals...

**Context**



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## Portland, ME



Modernity meets tradition

SOUTH ELEVATION

# Ocean Gateway



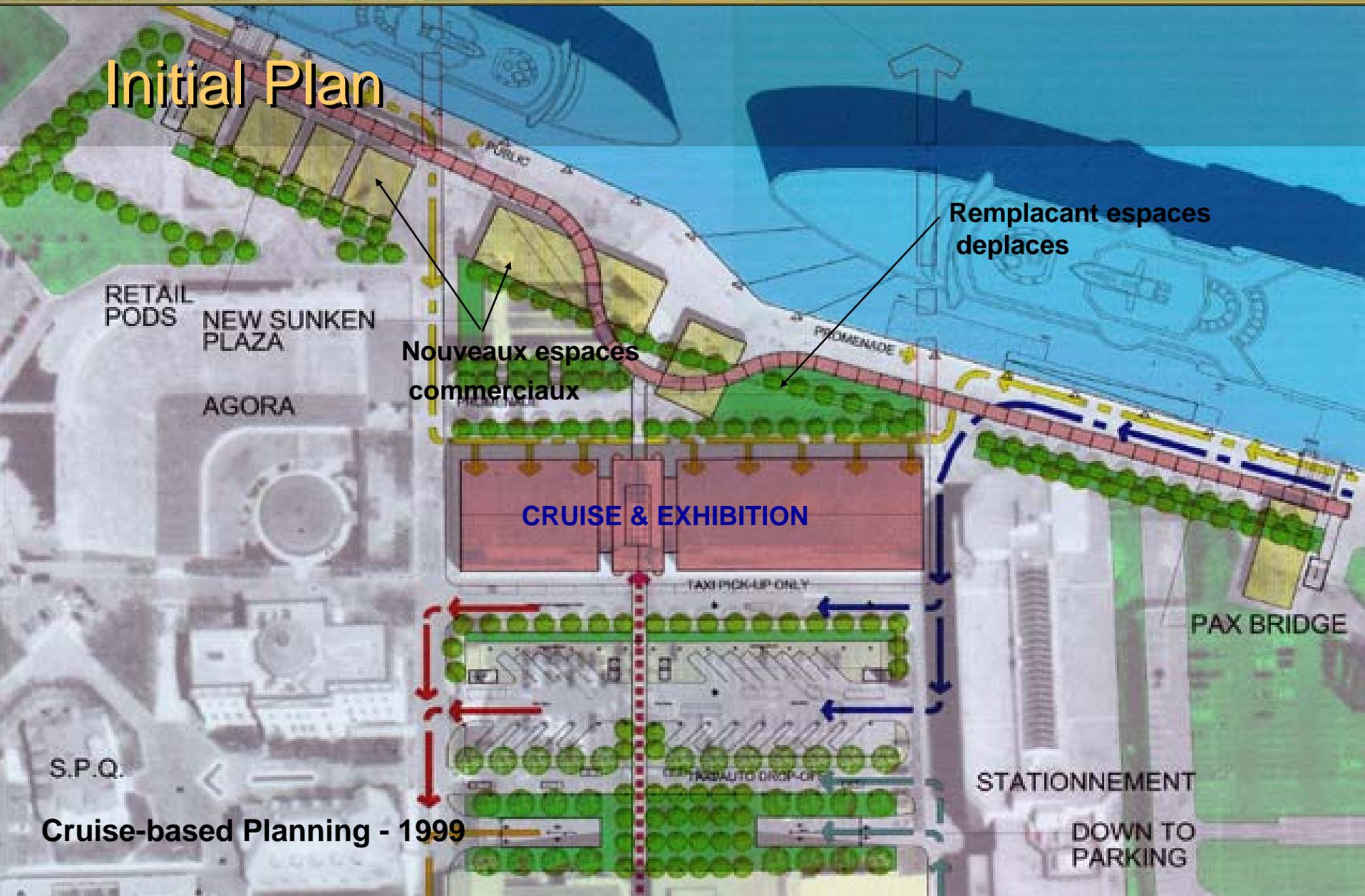
**New England motifs**

## Case Study #3 – Larger City: 700,000 - Quebec



Context

## Initial Plan



Cruise-based Planning - 1999

Balance...



...public waterfront  
access with ship access and  
security

**Public Involvement**

## Seasonal Port - Mixed-Use



# Flexible Space — (independent operator)



Ground Level — Exhibition Space



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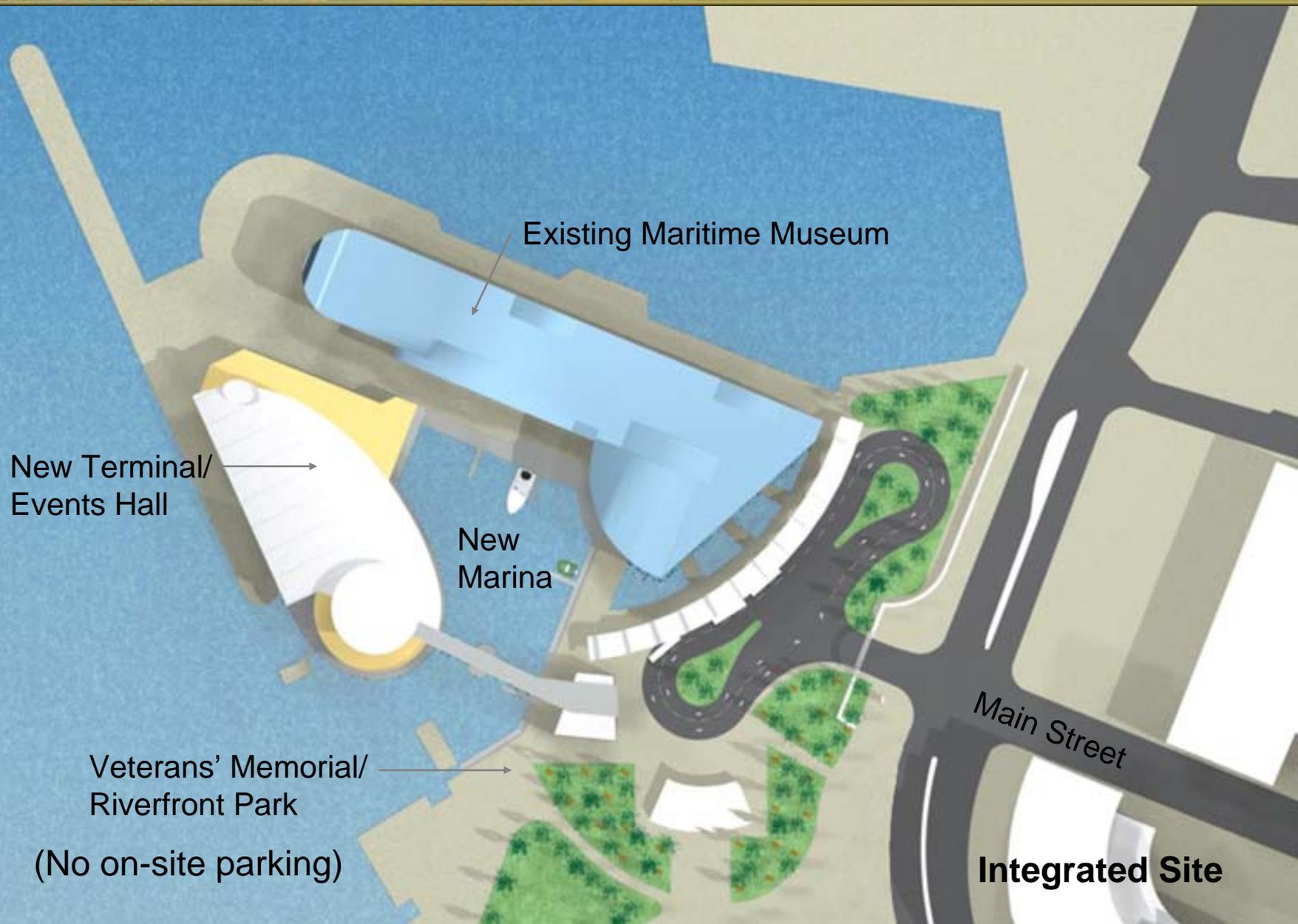
# Case Study #4 – Larger City: 1,000,000 + )



Downtown Context



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Existing Maritime Museum

New Terminal/  
Events Hall

New  
Marina

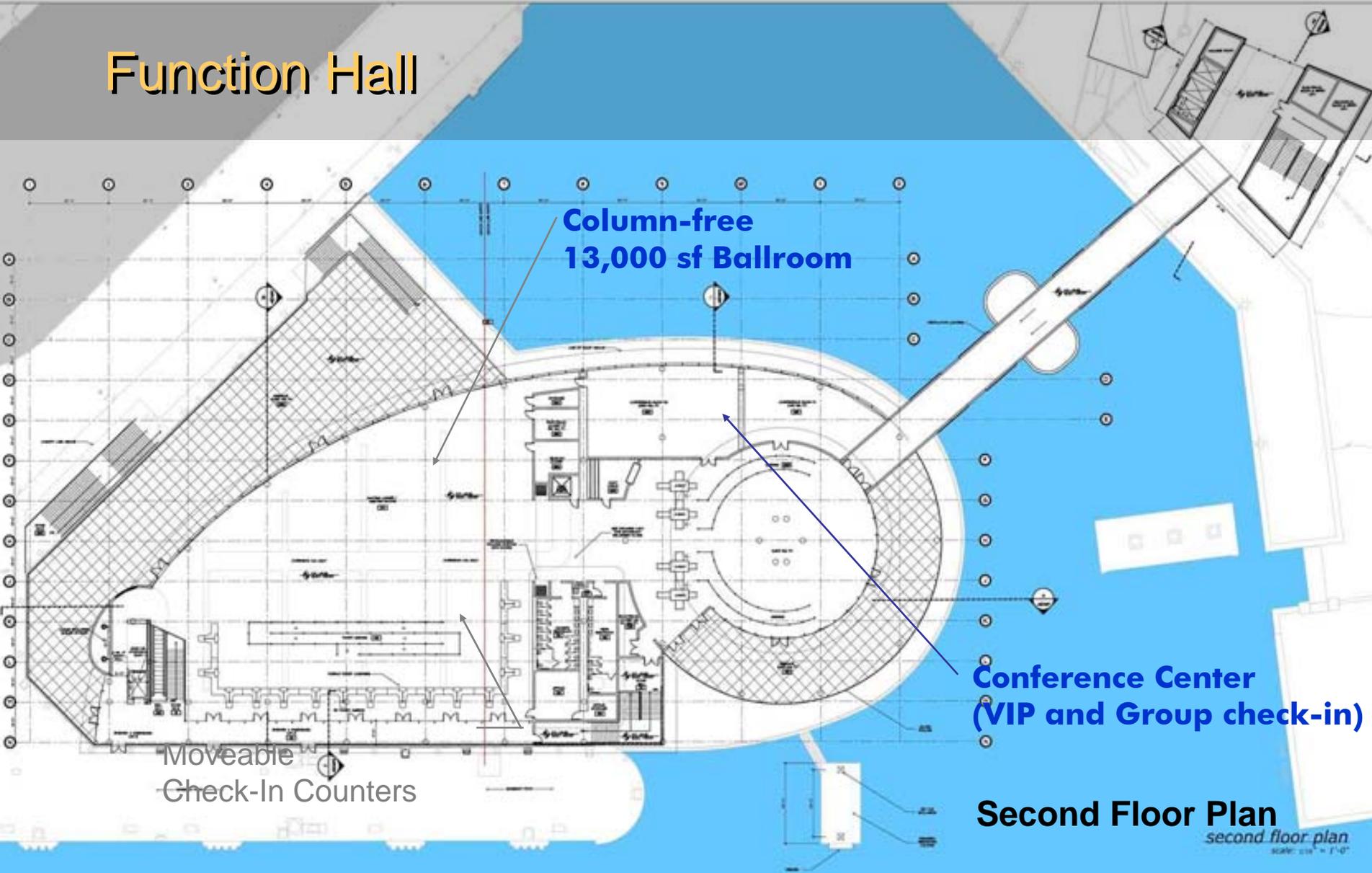
Veterans' Memorial/  
Riverfront Park

(No on-site parking)

Main Street

Integrated Site

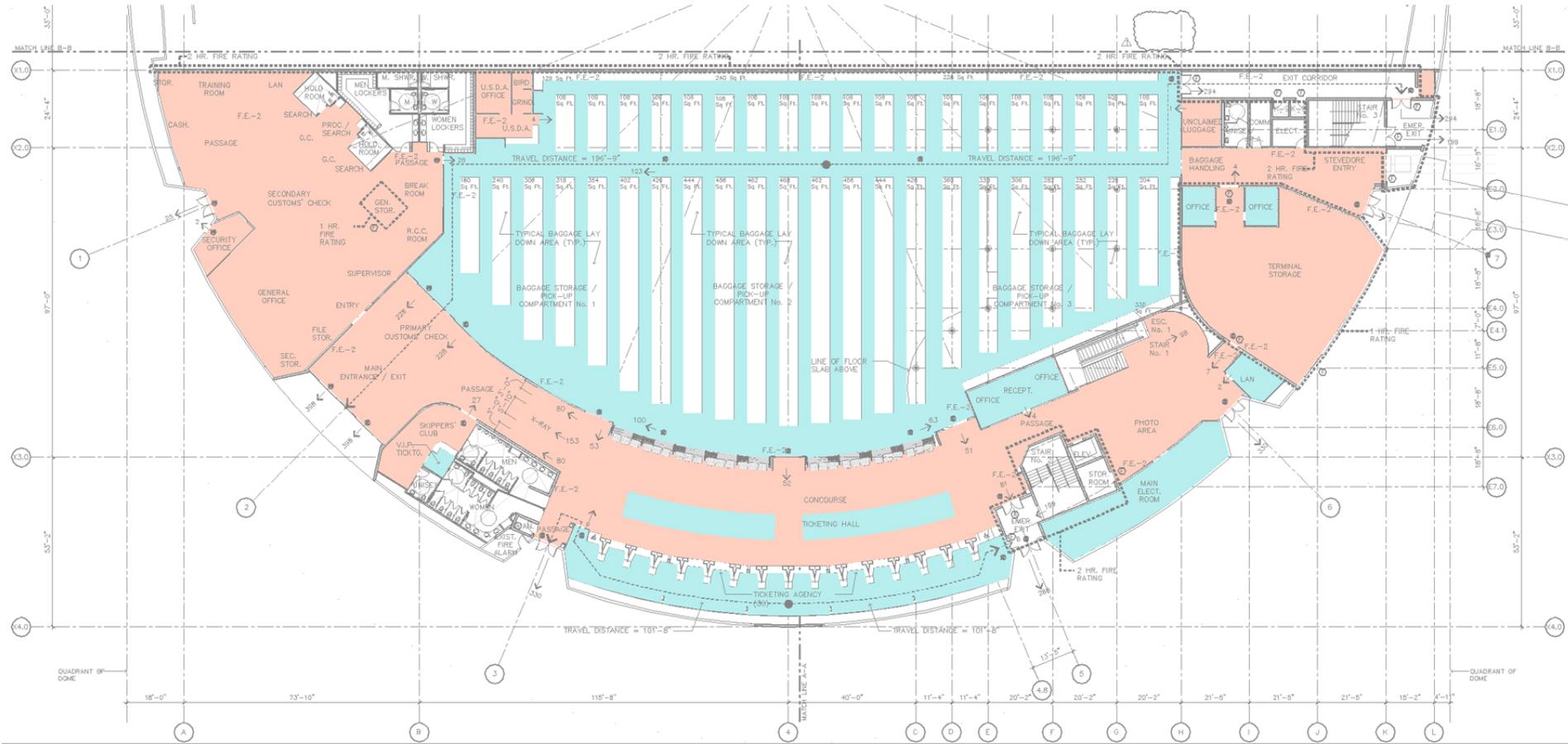
# Function Hall







# Terminal Typologies



# Temporary

15,000 – 20,000 sf    \$10,000 / call



Port of Quebec, Norfolk, etc...

# Entry-Level



POM CT-10

# Entry-Level Terminal



POM CT-10



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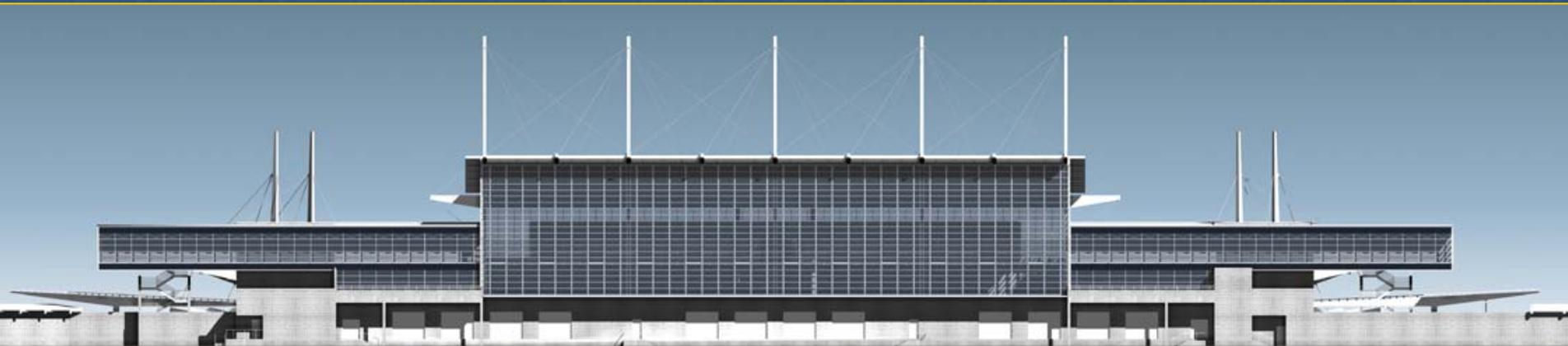
# Occasional Use Terminal

Port Everglades CT-29 Cruise/cargo joint use



Cruise Terminal 29

## Regular Use Terminal



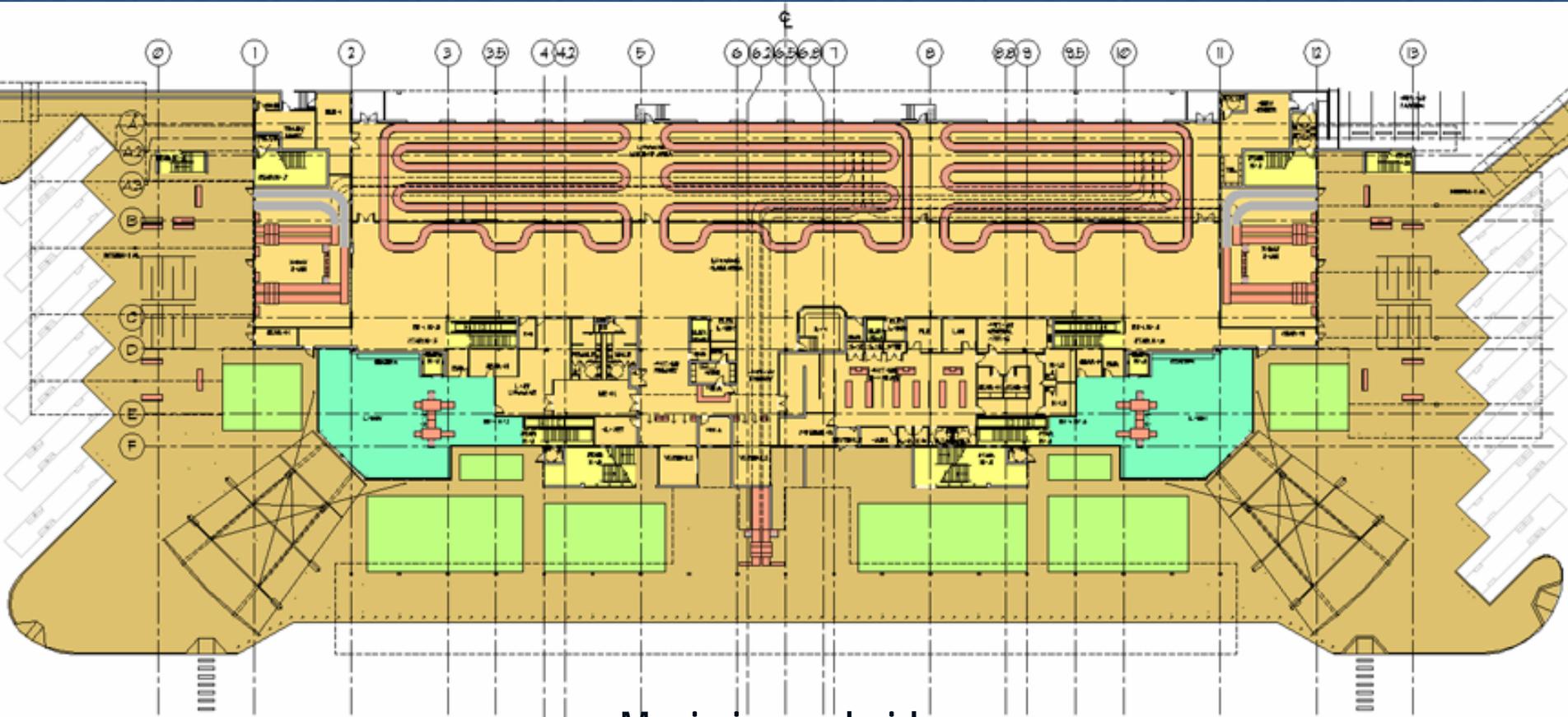
North Elevation



South Elevation

Miami Cruise Terminal D & E

← Disperse and separate flows to minimize congestion →



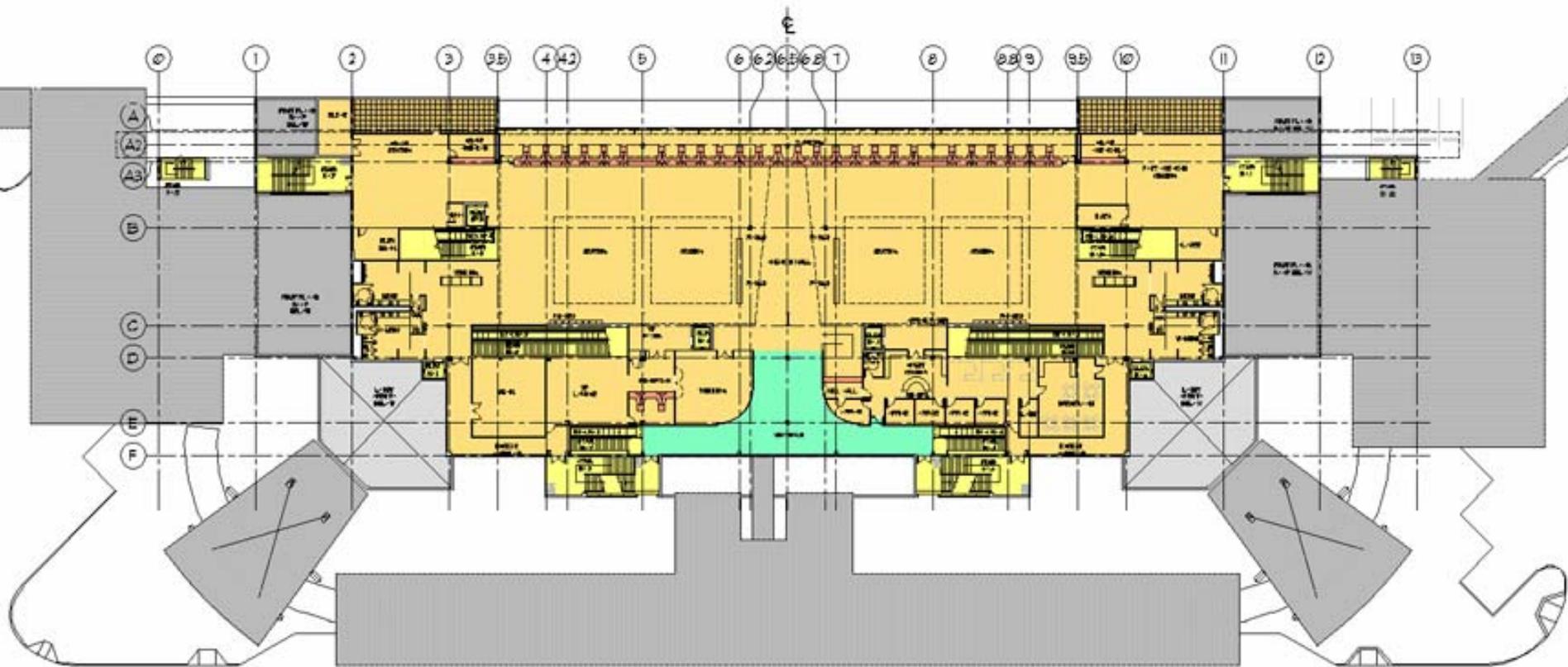
Maximize curbside

POM D&E – Ground Plan



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← Multiple check-in areas to separate people →



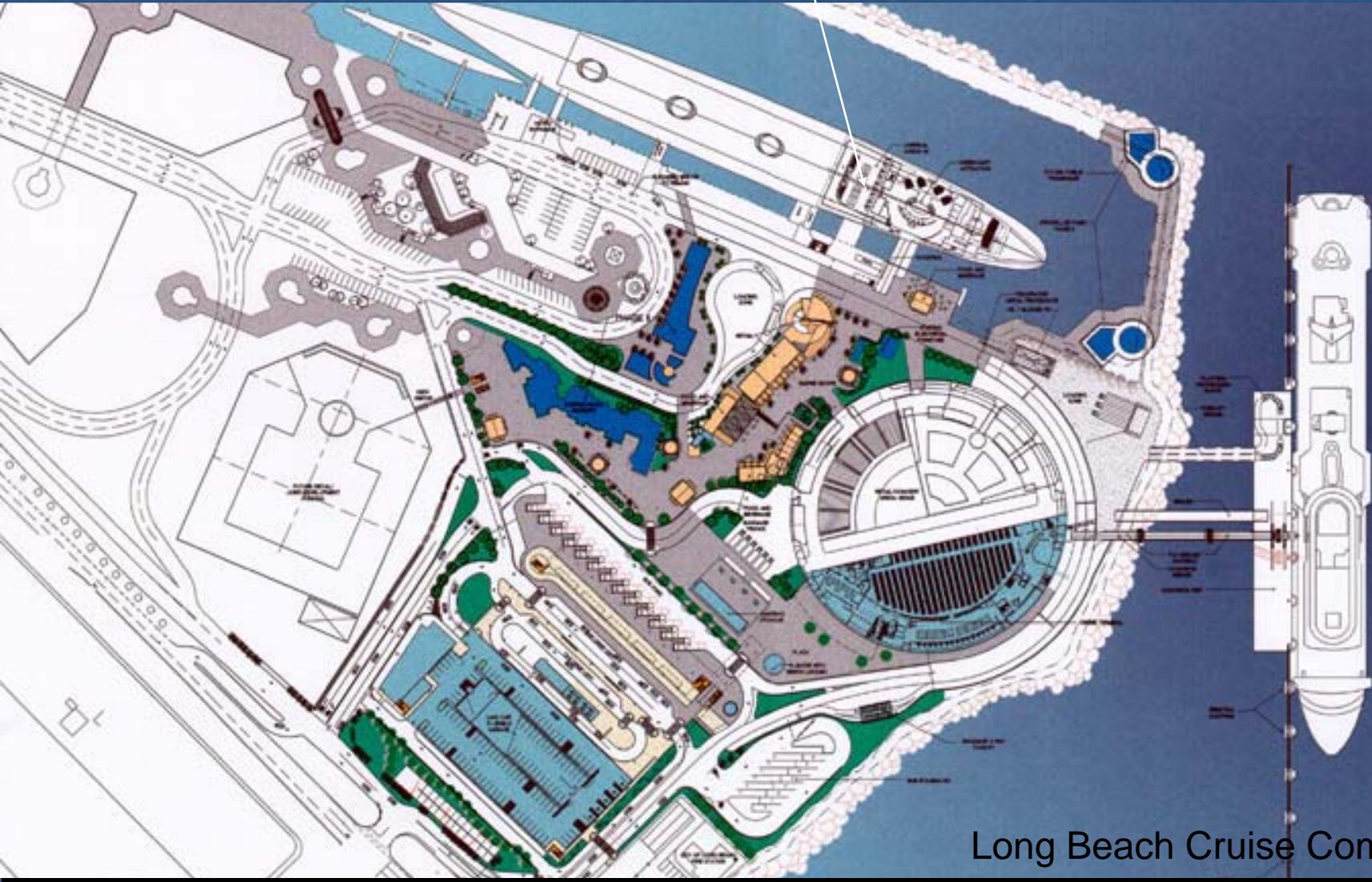
POM CT D&E - 2<sup>nd</sup> Floor Plan



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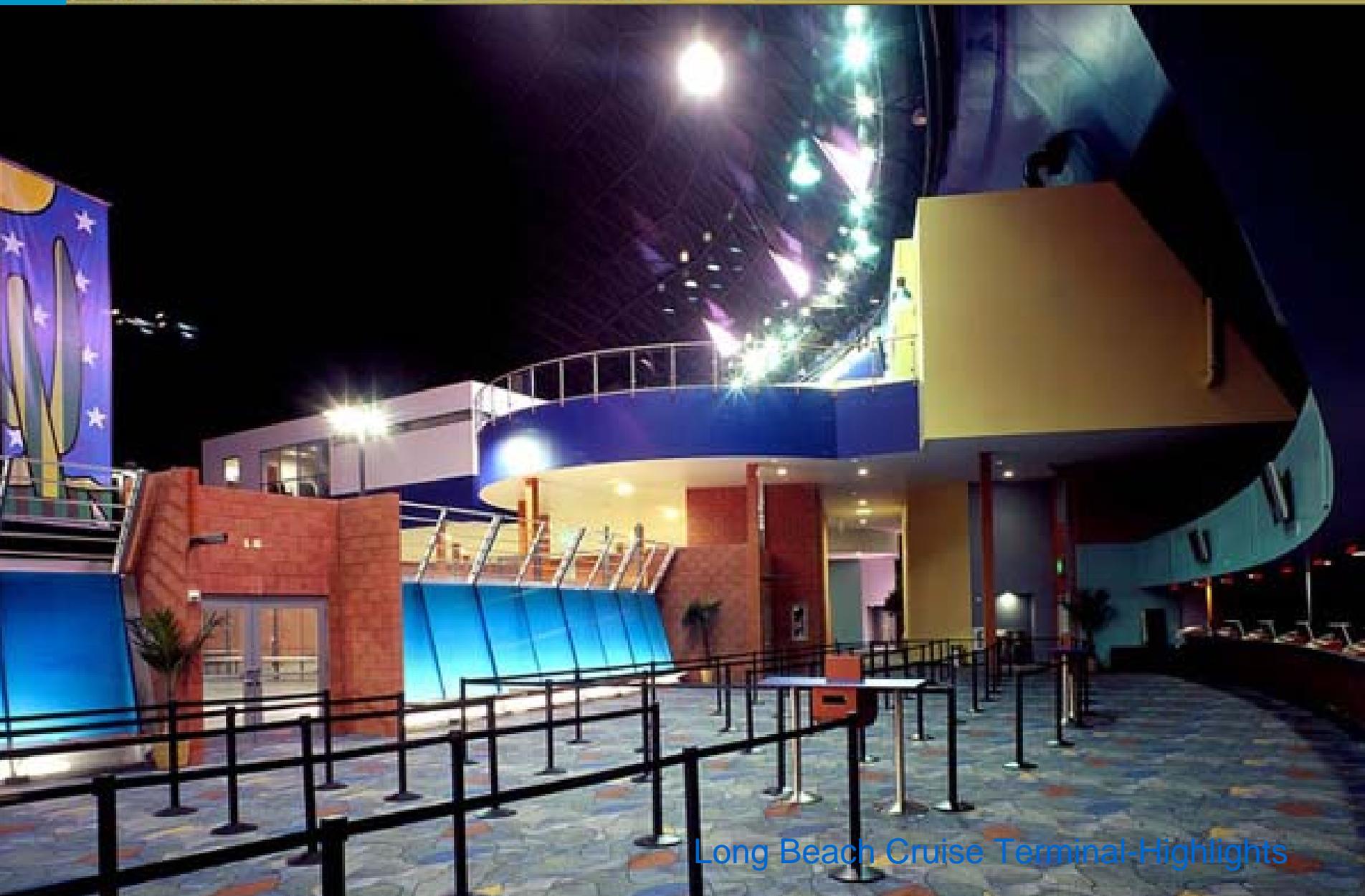
## Mixed-Use Terminal

Early check-in @ attraction



Long Beach Cruise Complex

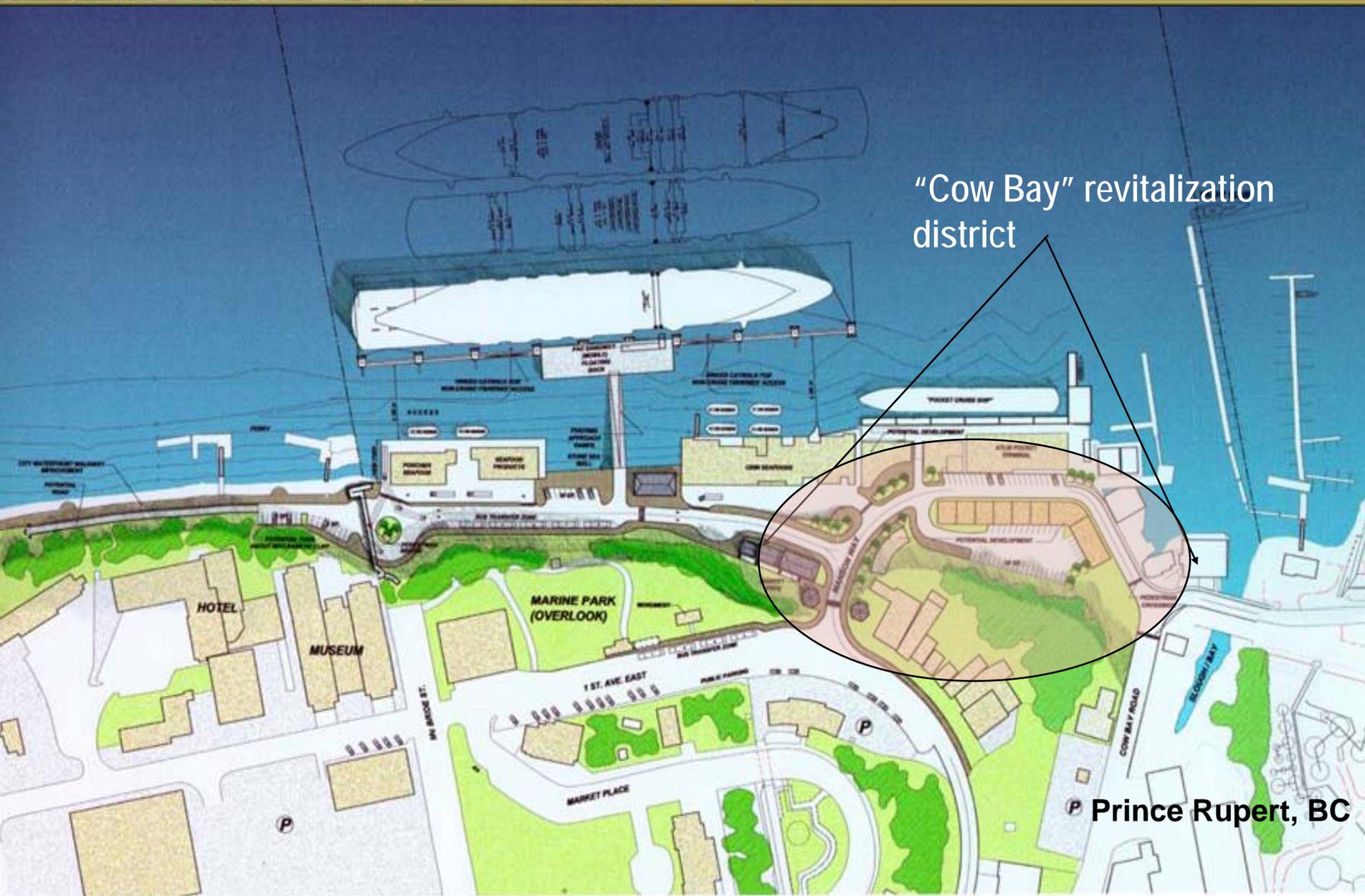
# Adjacent Activities Relieve Burden on Terminal



Long Beach Cruise Terminal-Highlights



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"Cow Bay" revitalization district

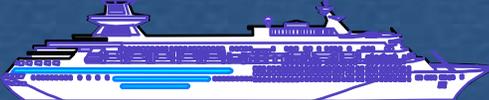
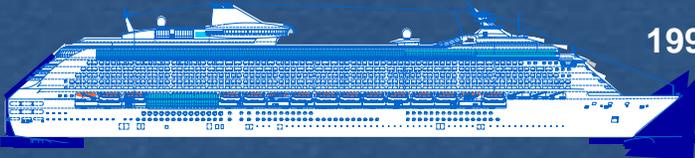
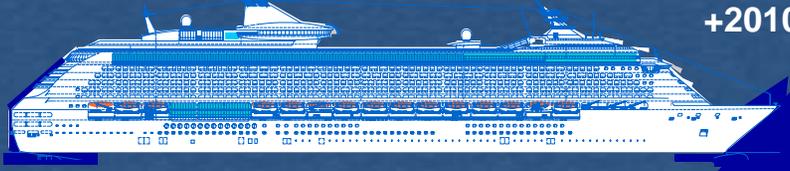
Prince Rupert, BC

# Types

	<i>Cost ( in million )</i>	<i>Size ( in sf )</i>	
<i>Temporary Facility</i>	- \$ 10,000 / call - \$ 1.5 m infrastructure	3,000 – 20,000	Seasonal or Emergency turnarounds
<i>Entry-Level Terminal</i>	\$ 3.0m – \$10.0m	20,000 – 60,000	Entering Cruise Market in Seasonal or Limited Growth Area
<i>Occasional Use Terminal</i>	\$ 7.0m – \$14.0m	50,000 – 80,000	Seasonal or Year-round turnaround in Growth Port
<i>Regular Use Terminal</i>	\$ 12.0m – \$35.0m	80,000 – 120,000	Established Cruise Homeport
<i>Mixed-Use Terminal</i>	\$ 12.0m – \$35.0m	80,000 – 120,000	Port of Call / Downtown / Attraction

## Trends: Vessel Sizes

(Pinnacle / Genesis Class)

	<i>Passengers</i>	<i>Drafts</i>	<i>Air Drafts</i>	<i>Ship Displacement (In Thousands Grt.)</i>
 <p>1970 ' s</p> <p>500 FEET</p>	600	20-36	-	20
 <p>1980 ' s</p> <p>800 FEET</p>	1200-2000	26-30	140-175	80
 <p>1998+</p> <p>900-1050 FEET</p>	2600-3800	26-34	160-180	90-150
 <p>+2010' s</p> <p>960-1250 FEET</p>	4200-6000	26-34	200- 220	180-220

## Embark

- ✓ Security
  - ✓ 4-6 Hours Process
  - ✓ Peak Period **1.5 Hours – 2400 PAX**
  - ✓ 12 Metal Detectors / Scanners
- ✓ Managing Check-in 5400-6000 pax
  - ✓ Break Up Ship into Smaller Groups
    - ✓ General / VIP / Groups (3-4)
    - ✓ Use Airline Check-in for Cruise Marshalling
- ✓ Remote Check-in via Internet
- ✓ Kiosks (self check-in)
- ✓ Photo ID @ Counter (minimize # of bottlenecks)
- ✓ Maximize curb length & Sidewalk width

## Debark

- ✓ Luggage
  - ✓ 12,000 Pieces = two 30,000 sf halls
  - ✓ 5 Shifts of 2400 Bags (4 Conveyors @ 600p/conveyor)
- ✓ Conveyors
  - ✓ Speed (Customs clearance)
  - ✓ Real Estate (reduced building size)
  - ✓ Operation Cost (maintained in union ports)
- ✓ CBP
  - ✓ Single Face Inspections
  - ✓ Separate Primary into Two Inspection Areas with Secondary Between Primaries
- ✓ Parking 1000 – 1500/ship
- ✓ Buses 16 – 20 at a time
- ✓ Increased Remote Staging Areas
- ✓ Traffic Management / Engineering

## When do conveyors make sense?

- Considerations:
- Cost amortization
  - Airlift sensitivities
  - Pax Experience
  - Unionized?
  - Curbside check-in?



Design Solutions	Bags / s.f.	Speed	Hard Capital Improve Cost
Traditional Lay Down (with & without Luggage Tables)	6 – 8 s.f. / Bag	5.5 hrs	\$ 5.6 – \$ 9.0 m
Compartmentalized Baggage Lay Down Access	4 – 5 s.f. / Bag	4.5 hrs	\$ 3.0 – \$ 5.0 m
Conveyor	5 – 5.5 s.f. / Bag	3 hrs	\$ 5.0 – \$ 6.0 m

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## Urban Design for the Cruise/Ferry Industry

- ✓ Ascertain *if* there is a market for cruise or ferry
- ✓ Local/Regional Government Support
- ✓ Local & Community Planning Workshops (1-2 yr process)
  - ✓ Integrate with Existing Urban Master Plan
  - ✓ Solicit Joint Private Development
  - ✓ Maximize Public Access to Water's Edge
  - ✓ Be able to create Security during ship days
  - ✓ Create Long-term (20-yr +) Vision
- ✓ Make terminals multi-use (Exhibition or Function Hall)
- ✓ Create programs with other attractions for early arrivers