

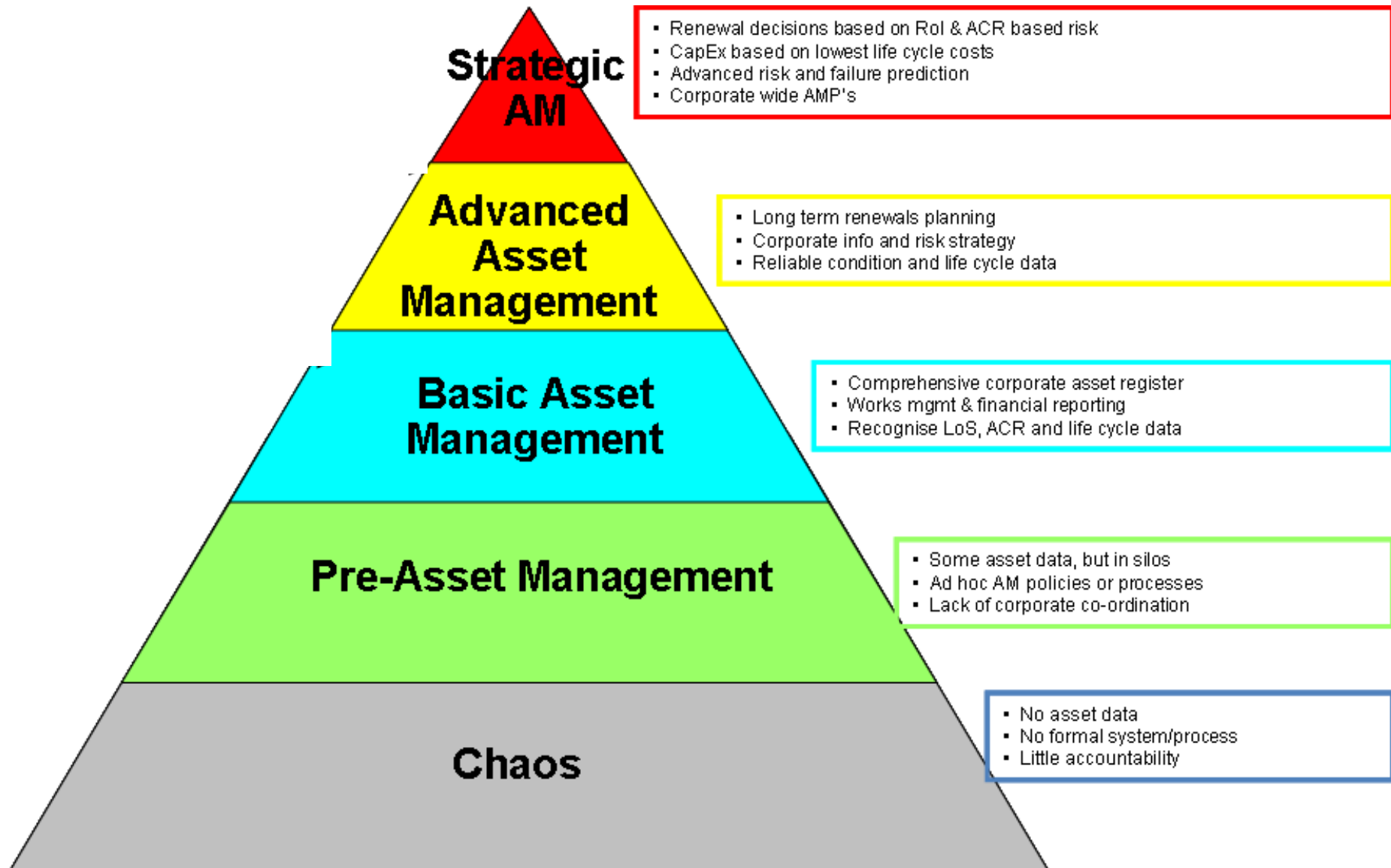
Berth 607

Asset Condition Case Study

The impacts of limited asset condition information on capital improvements

Tim Van Wormer
Port of Portland Oregon

Asset Management Pyramid



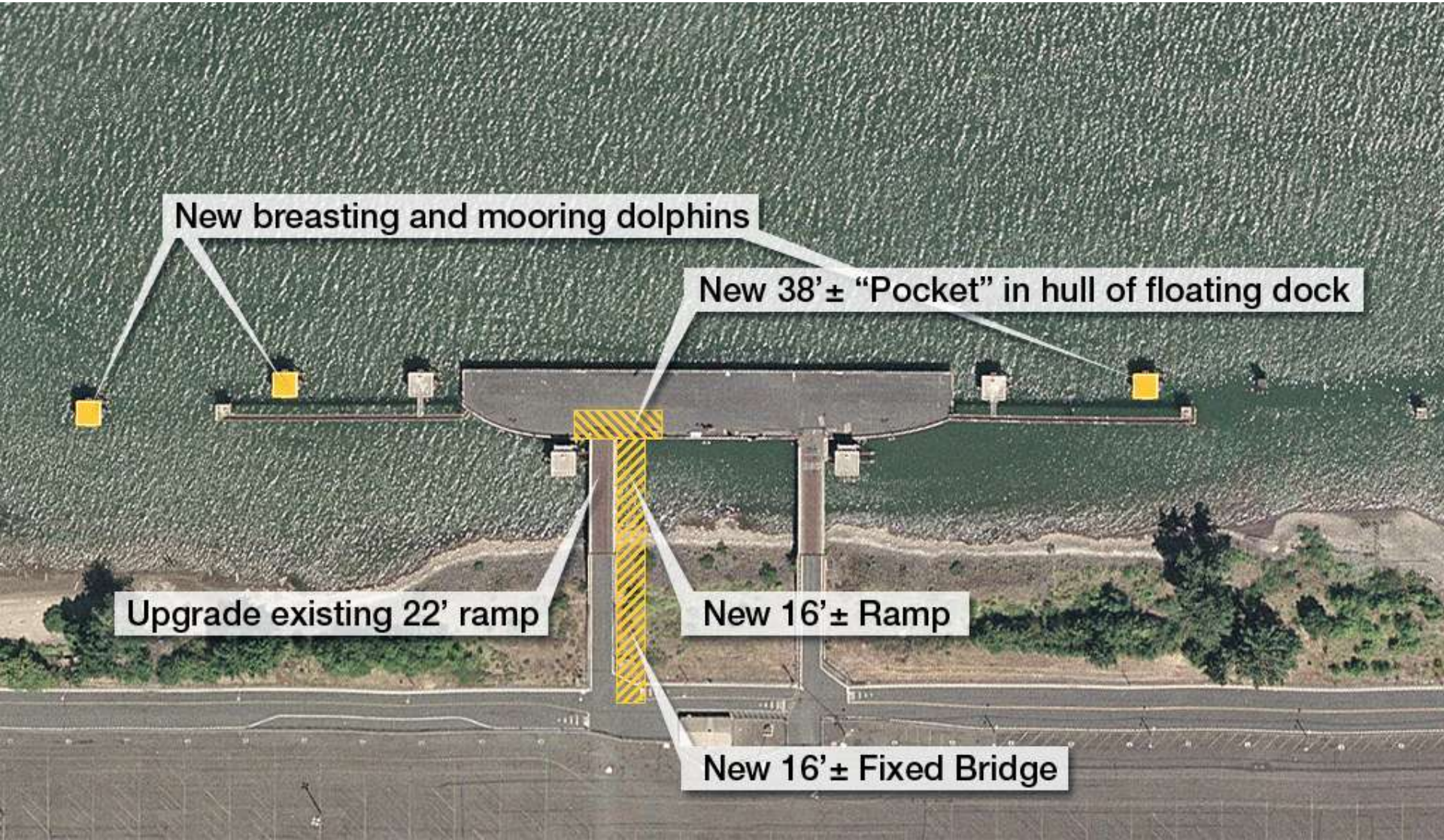
Existing Asset Management

- Roofs
- Fender Pile
- Pavement
- In-water wood structural piling

Terminal 6 Berth 607 Facility



2006 Project Scope





FEB 16 2007





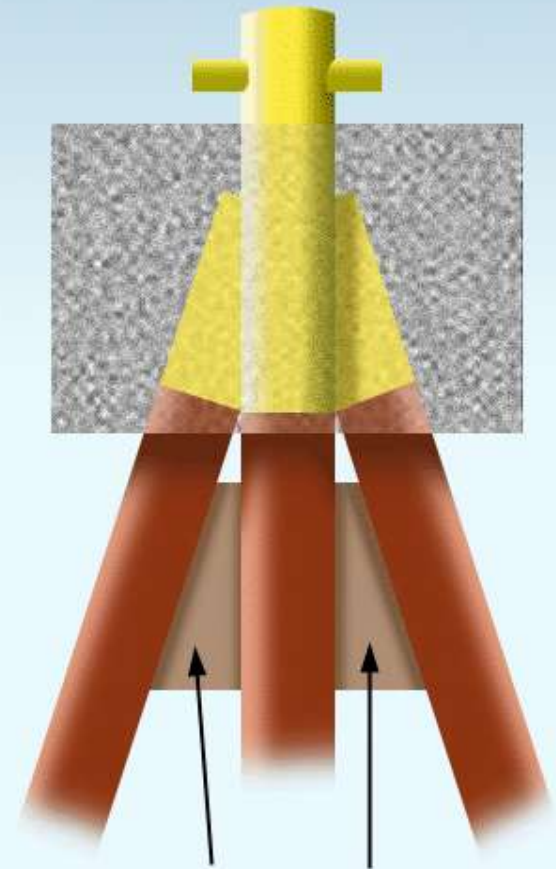
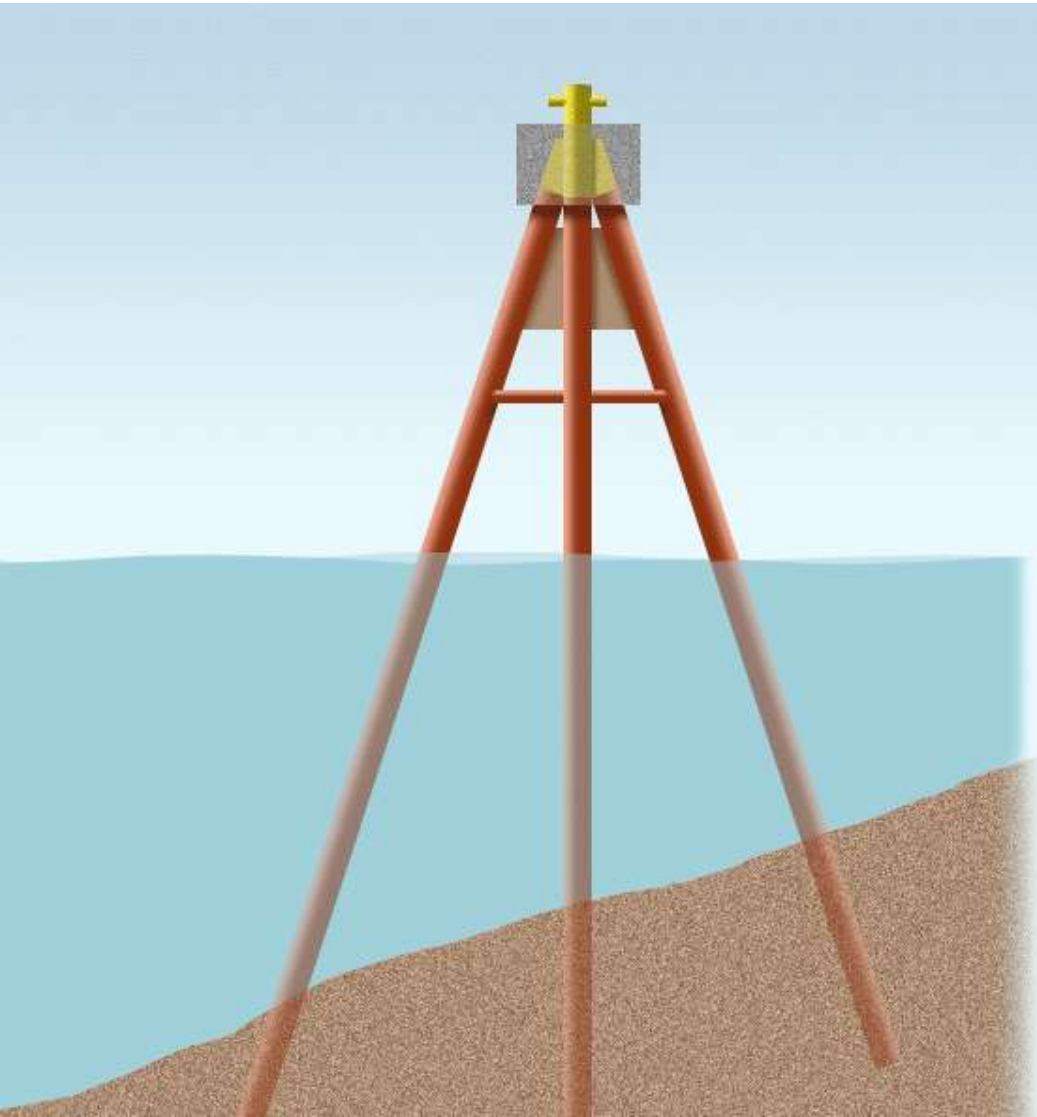
Visual Survey by PM

- During design PM conducted walk through of floating berth
 - Undersized mooring cleats attached to cantilever deck
 - Wooden pile bridge supports, condition?
 - Unique mooring dolphin configuration





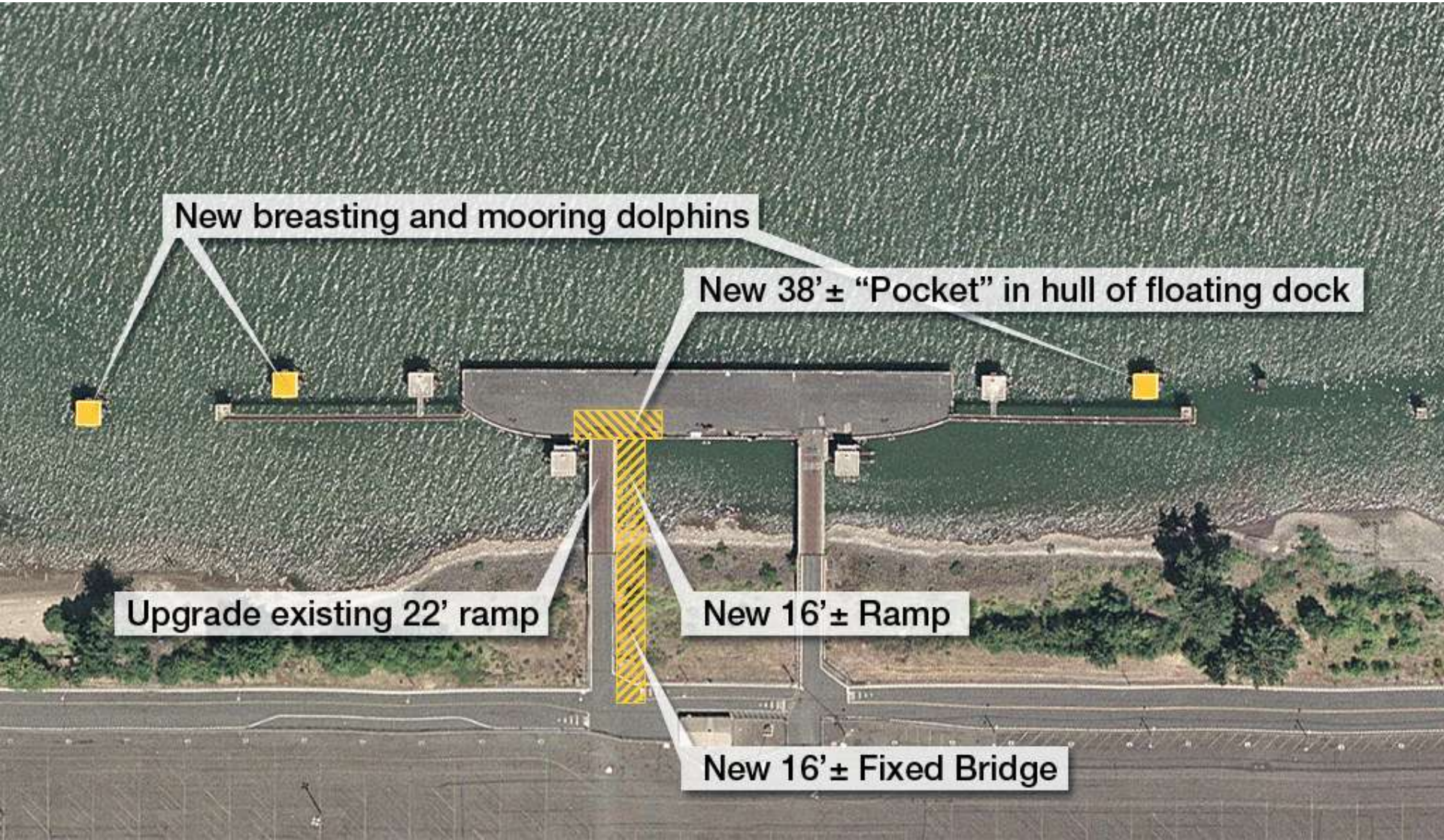
Dolphin Shear Plate Repair



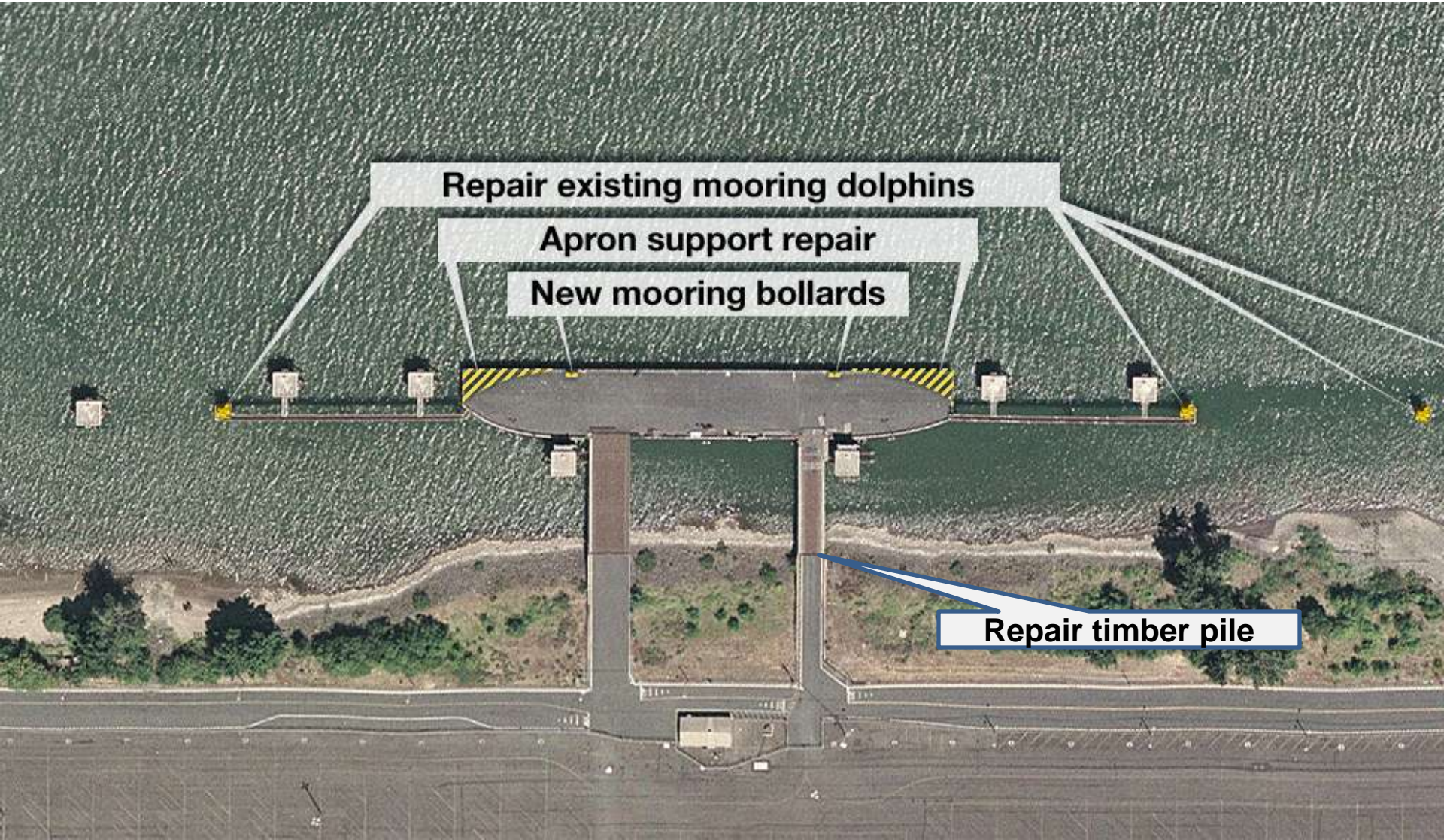
New Shear Plates

Conducted Condition Survey

- Extended engineering design contract
- Designed and estimated necessary improvements
- Re-initiated capital improvement process

[illegible]

2007 Project Scope



BUDGET - B607

Apron Bollard, and Dolphin Repairs

Item	Cost
<u>2006 project - construction complete</u>	
Construction	\$2,700,00
Engineering, Admin, Inspection, and Testing	800,000
Permits and Environmental	140,000
Port Maintenance	60,000
subtotal	<u>\$3,700,000</u>
<u>2007 project estimate</u>	
Construction	\$635,000
Engineering, Admin, Inspection, and Testing	270,000
Permits and Environmental	50,000
Contingency	150,000
subtotal	<u>1,105,000</u>
TOTAL ESTIMATED COST	<u>4,805,000</u>
BUDGET ESTABLISHED 2005 (basis of lease amend)	\$5,231,000

Lessons Learned and Impacts

- Conduct contract negotiations only when facility conditions are known
- Conduct Level 3 facility condition inventory as part of site analysis when making improvements to existing infrastructure
- Caused re-initiation of commission capital improvement approval process
- Created in-water-work permit issues

Unknown Asset Condition Impacts

