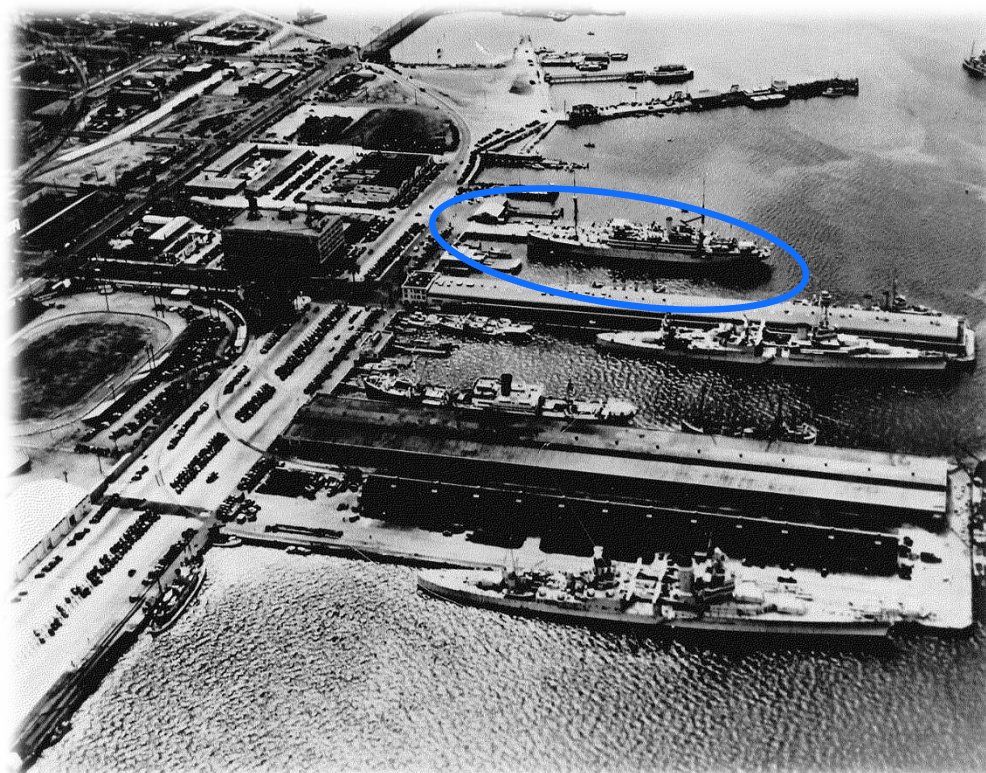




# Navy Pier Major Maintenance and Redevelopment



## History - 1928





## History - 1941

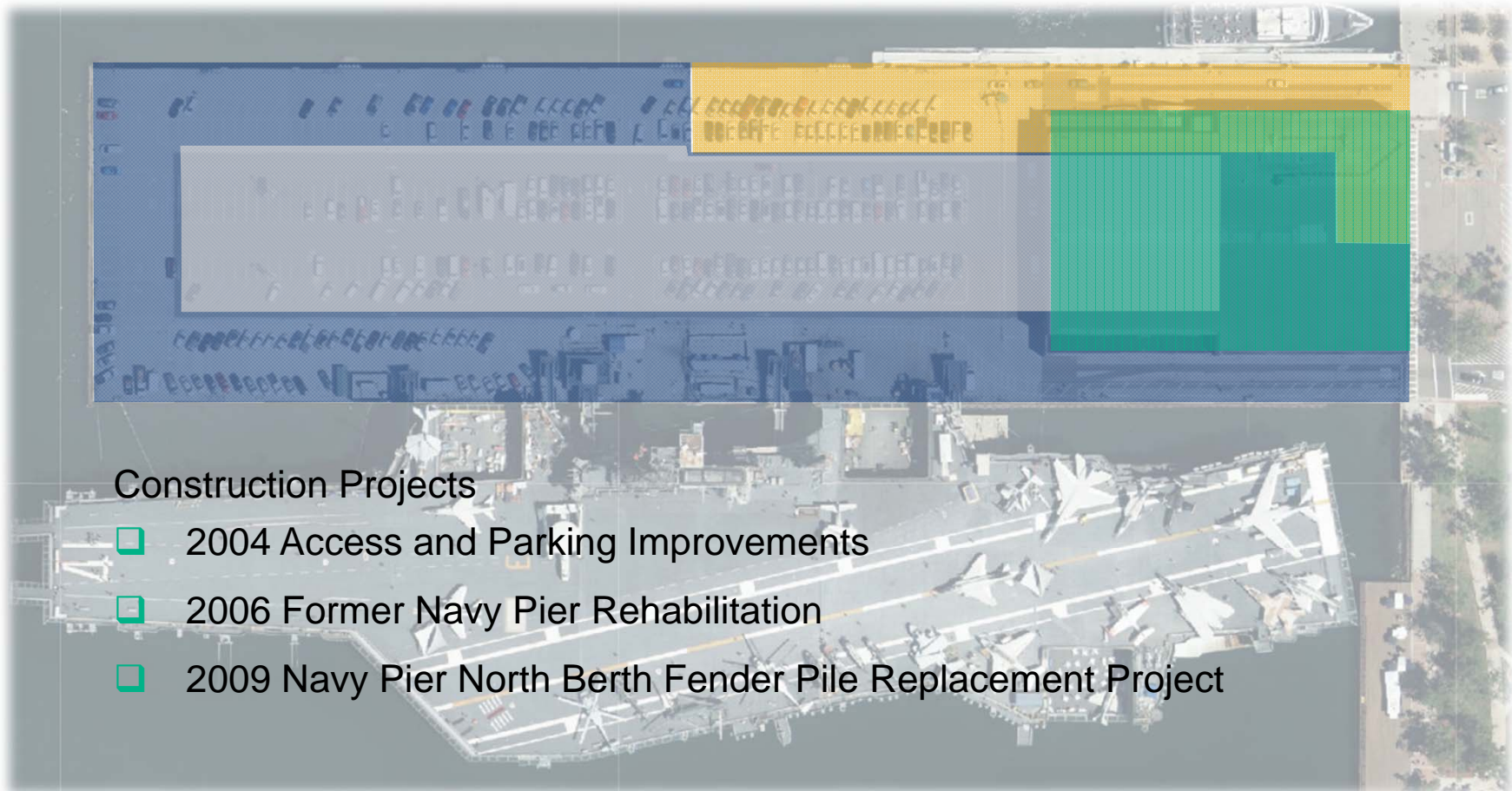




## 1995 - Present



# Projects



## Construction Projects

- ☐ 2004 Access and Parking Improvements
- ☐ 2006 Former Navy Pier Rehabilitation
- ☐ 2009 Navy Pier North Berth Fender Pile Replacement Project





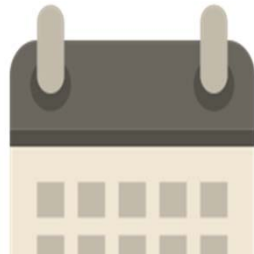
# Future Redevelopment of Navy Pier

Lesley Nishihira, Planning





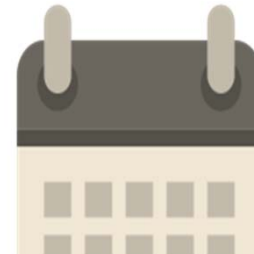
## Additional PMPU Policy Discussion Topics



### Special Board Meeting / Workshop

Oct 23, 2018

- Follow up on commercial fishing related policies
- Environmental justice related policies



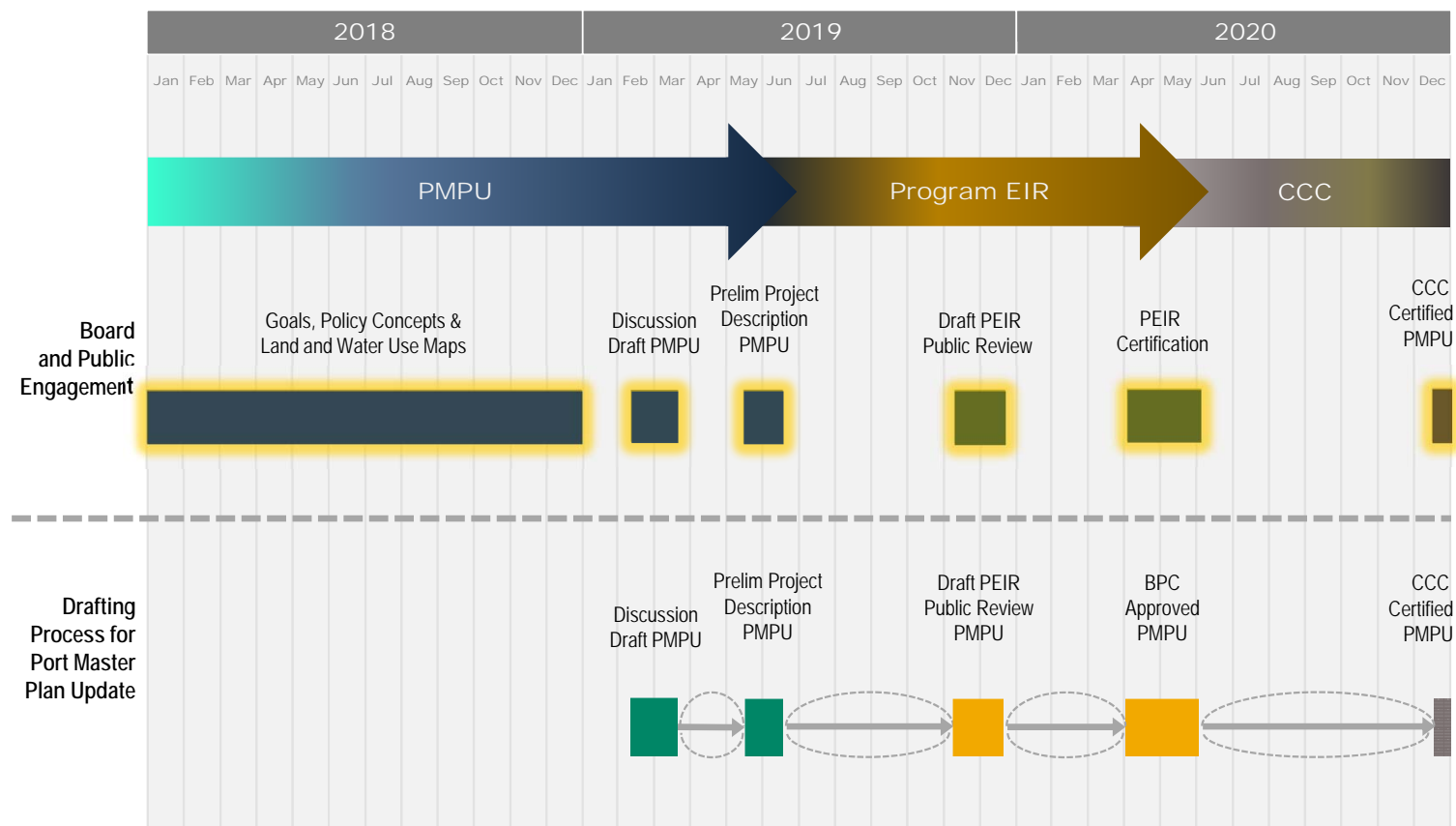
### Special Board Meeting / Workshop

Dec 18, 2018

- Follow up on Embarcadero Planning District policy concepts
- Confirmation to complete PMPU Discussion Draft

# Integrated Planning: Port Master Plan Update

## Drafting Process







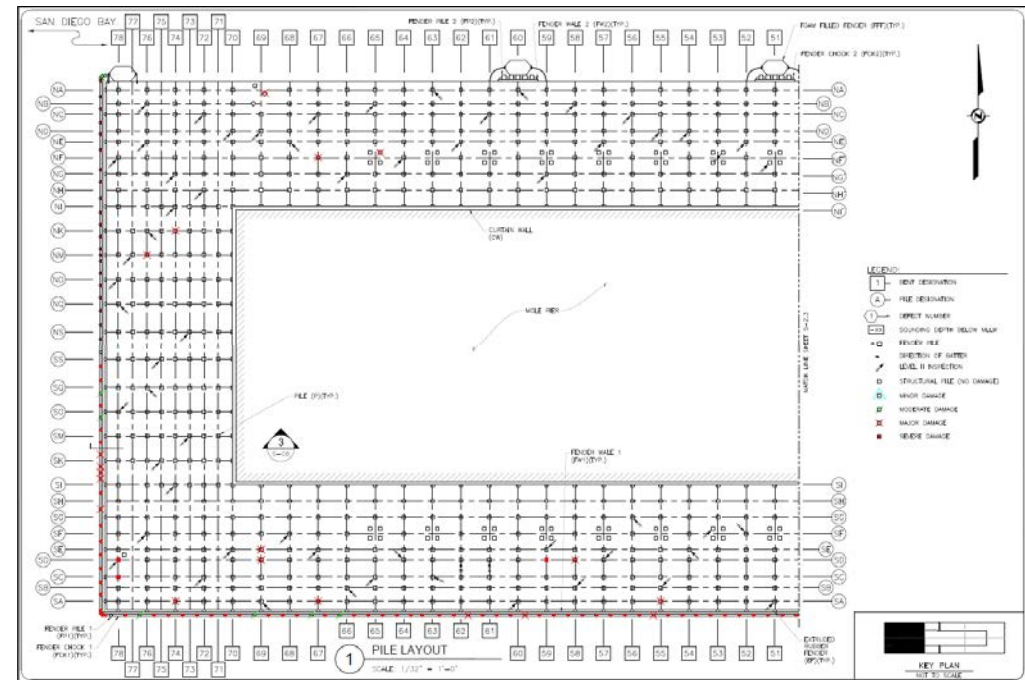
# Asset Management Program

Christopher McGrath, Engineering-Construction



# Structural Condition Assessment Survey

- ❑ Asset Management Program data development
- ❑ Collins Engineering performed a structural condition assessment in 2015
- ❑ Inspection process followed Underwater Investigations Standard Practice Manual
- ❑ Defined key parameters of each asset
- ❑ Data evaluated by planning software, IRIS





# Asset Management Program 10-Year Plan

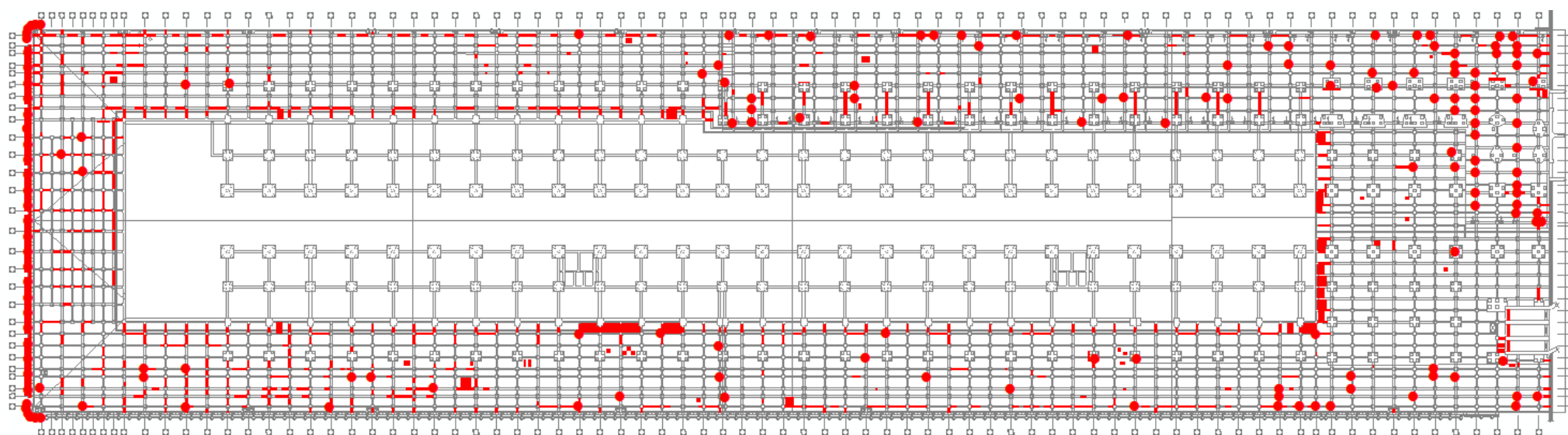


- ☐ The 10-year major maintenance program will address approximately \$10M worth of assets.
- ☐ Estimate is based on 2018 dollars and includes soft cost such as design and construction management.\*
- ☐ Project need will be evaluated if a redevelopment plan is approved prior to 2024. \*\*

# Asset Management Program 10-Year Plan

2016-2019

Structural Repairs at Navy Pier  
\$3.8M-\$4.1M



- ☐ Pile Repair – 81 locations
- ☐ Beam/Soffit/Pile Cap Repair – 2,500 cubic feet
- ☐ Fender System Replacement – 250 linear feet



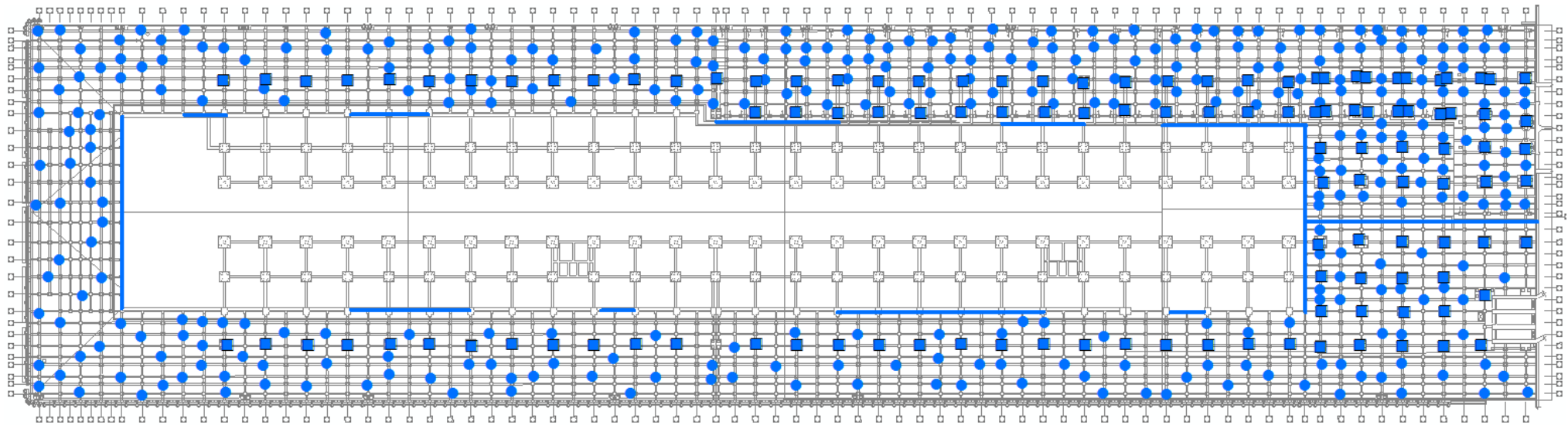


# Asset Management Program 10-Year Plan

2020-2023

Vertical Pile Repairs at Navy Pier  
\$6.0M-\$7.0M \*

NOTE: Scope of Work is preliminary and will be finalized and confirmed in a future Preliminary Engineering Report.



- ☐ Pile Repair – 334 locations
- ☐ Pile Cap Repair – 791 locations
- ☐ Beam Repair – 217 locations

- ☐ Sheet Pile Wall Repair – 11 locations
- ☐ Curtain Wall Repair – 34 locations

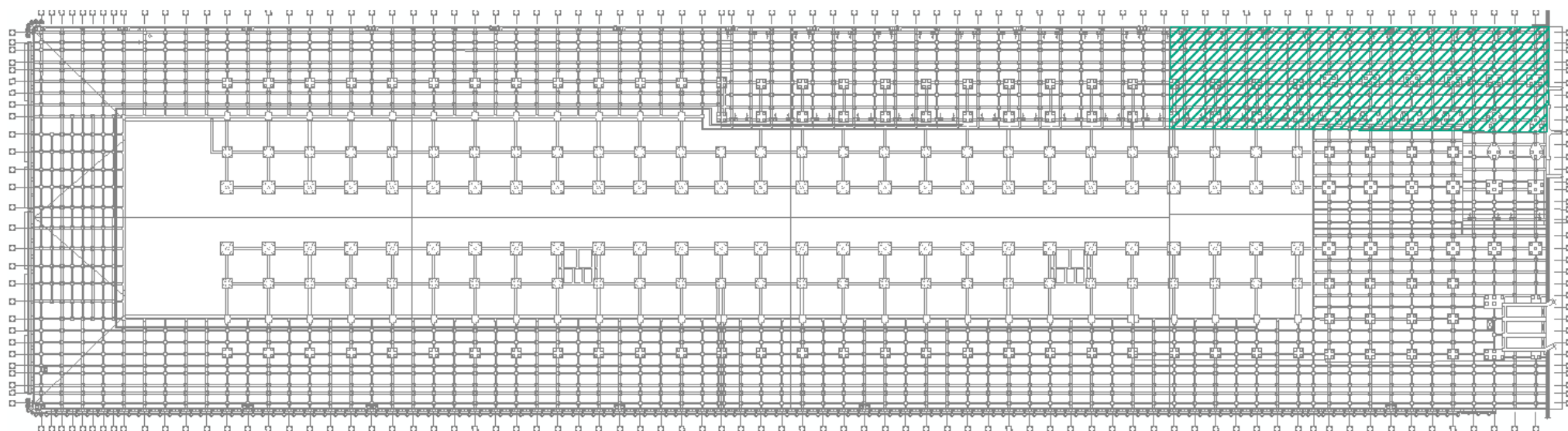


# Asset Management Program 10-Year Plan

2024-2026

Surface Repairs at Navy Pier \*\*  
\$0.9M-1.2M \*

NOTE: Scope of Work is preliminary and will be finalized and confirmed in a future Preliminary Engineering Report.



 Deck Repair

 Parking Space Improvement

 Conduit & Conduit Support Repairs

 Pipe Support Repairs



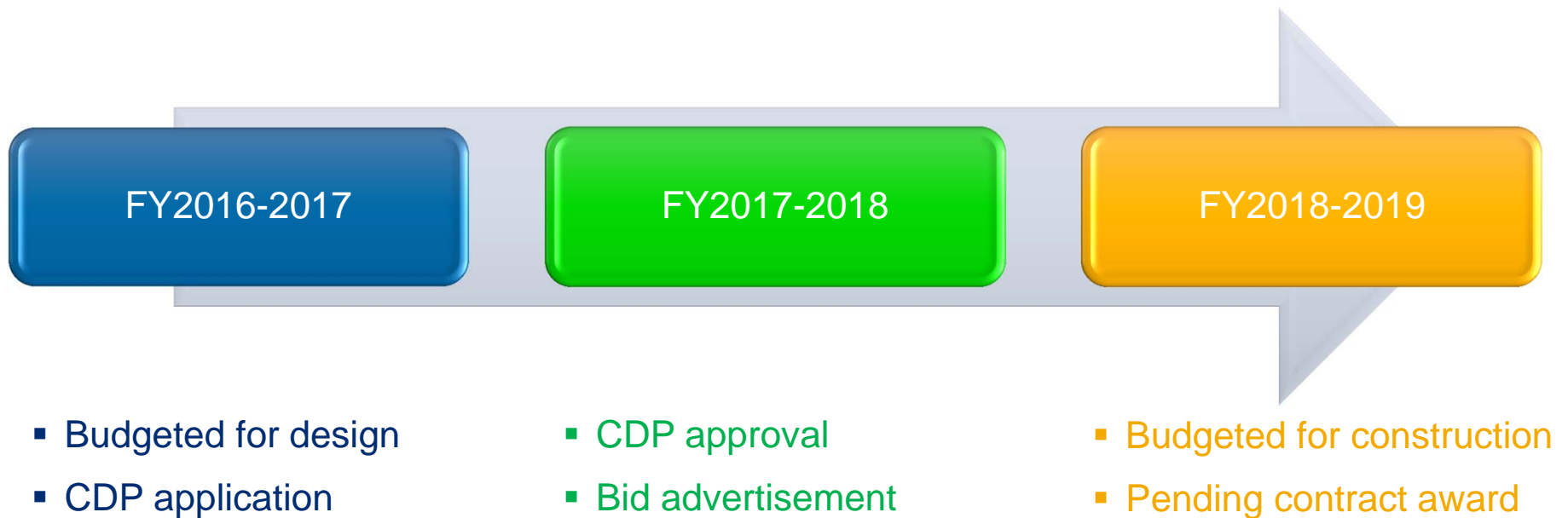




# Structural Repairs to Navy Pier

Noemi Aquino, Engineering-Construction

## Project Background



## Existing Timber Fender System



Fenders held by chain



Missing fender piles



Rotten timber fender piles

- ❑ Project will remove and dispose of existing west end timber fender system and install 250 linear feet of fiberglass fenders.



## Existing Pier Underdeck



Major loss in cross-sectional area



Severe corrosion of reinforcing steel

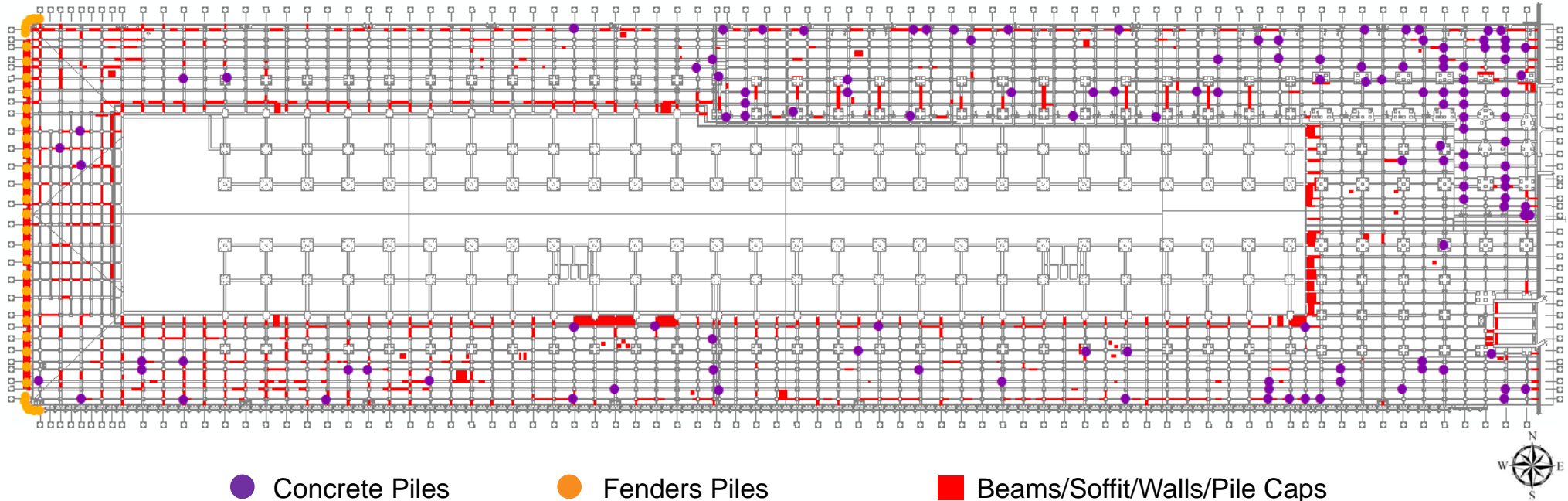


Major corrosion of reinforcing steel

- ❑ Project will repair concrete damages to structural elements such as piles, piles caps, beams and soffits with approximately 2,780 cubic feet of concrete.

# Project Purpose

- ☐ Mitigate further concrete deterioration
- ☐ Maintain the pier's structural serviceability

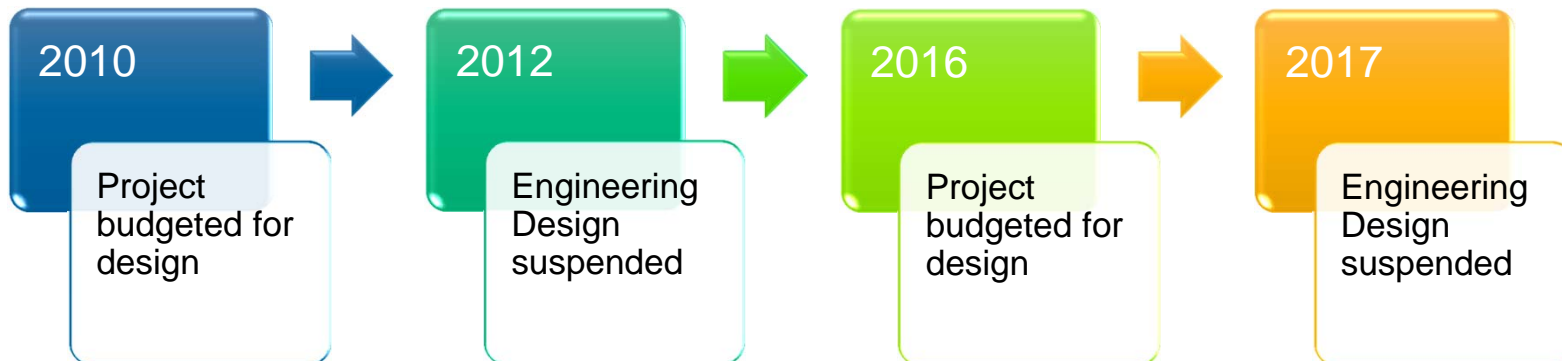




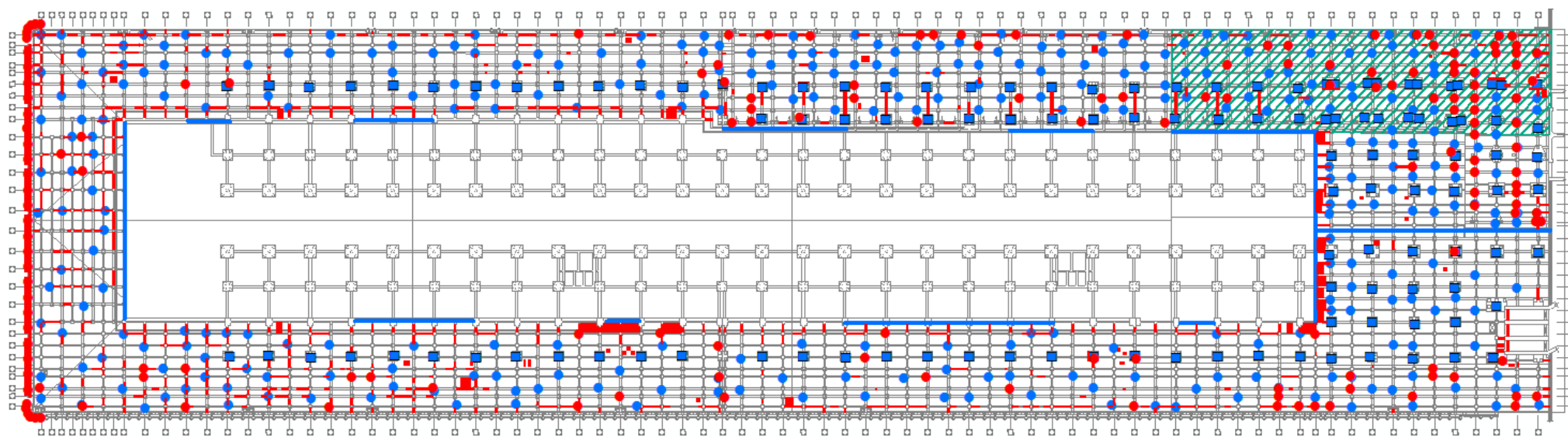
Thank you!



# Navy Pier Head House



# Asset Management Program 10-Year Plan



2016-2019

Structural Repairs at  
Navy Pier  
\$3.8M-\$4.1M

2020-2023

Vertical Pile Repairs at  
Navy Pier  
\$6.0M-\$7.0M \*

2024-2026

Surface Repairs at  
Navy Pier \*\*  
\$0.9M-1.2M \*