# **NEW LOCK AT THE SOO: PROJECT UPDATE**

# WEDA MIDWEST CHAPTER MEETING

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24 March 2022

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### **SOO LOCKS FACILITY**



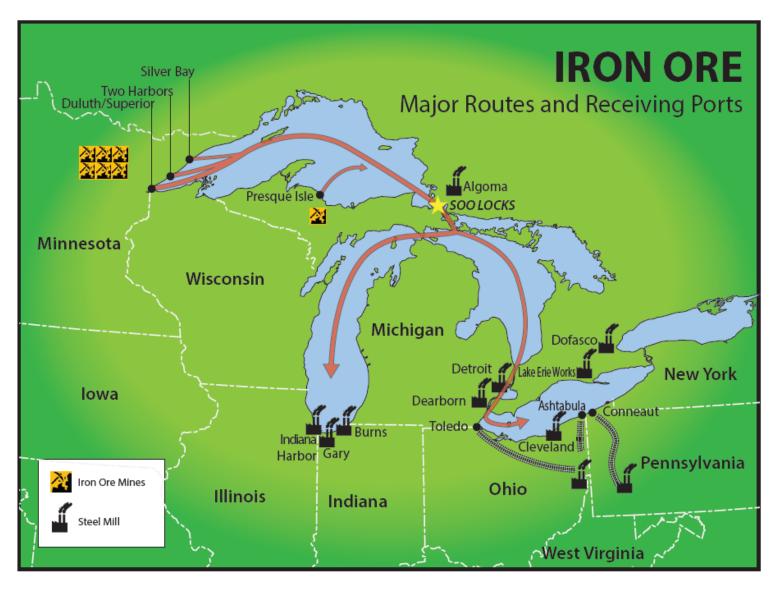




#### IMPORTANCE OF THE SOO LOCKS



- Nearly ALL domestically produced high strength steel used to manufacture products like automobiles and appliances is made with iron ore that transits the Soo Locks.
- Of the iron ore that transits the Soo Locks 89% of it is restricted to the Poe lock due to vessel size.





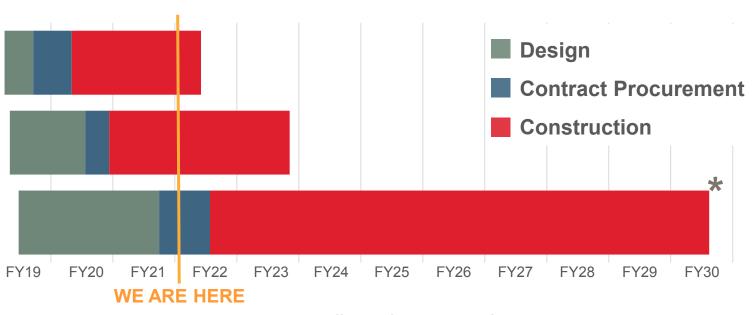
#### **NEW LOCK AT THE SOO - STATUS**



**Phase 1: Upstream Channel Deepening (UCD)** 

Phase 2: Upstream Approach Walls (UAW)

**Phase 3: New Lock Chamber (NLC)** 



\* Early completion could be realized with efficient funding, and favorable weather conditions





#### **NEW LOCK AT THE SOO - CAPABILITIES & ALLOCATIONS**



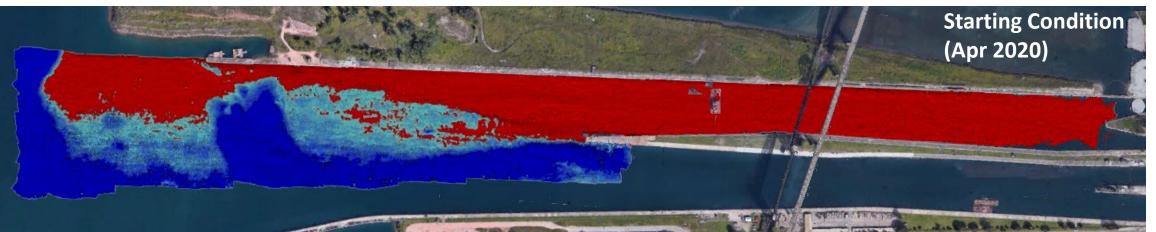


\*\$478.9M Funded in Infrastructure Investment and Jobs Act (IIJA) & \$480M funded in FY22 President's Budget



# PHASE 1: UPSTREAM CHANNEL DEEPENING





DEPTH BELOW LOW WATER DATUM

0.0

30.0

30.5

31.0

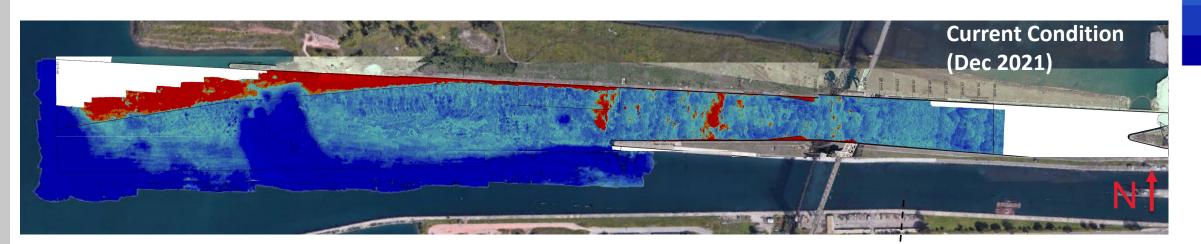
31.5

32.0

32.5

33.0

50.01



**Scope**: Remove 300,000 CY of bedrock and overburden to deepen the Approach Channel to depth of 30 feet **Construction Status**:

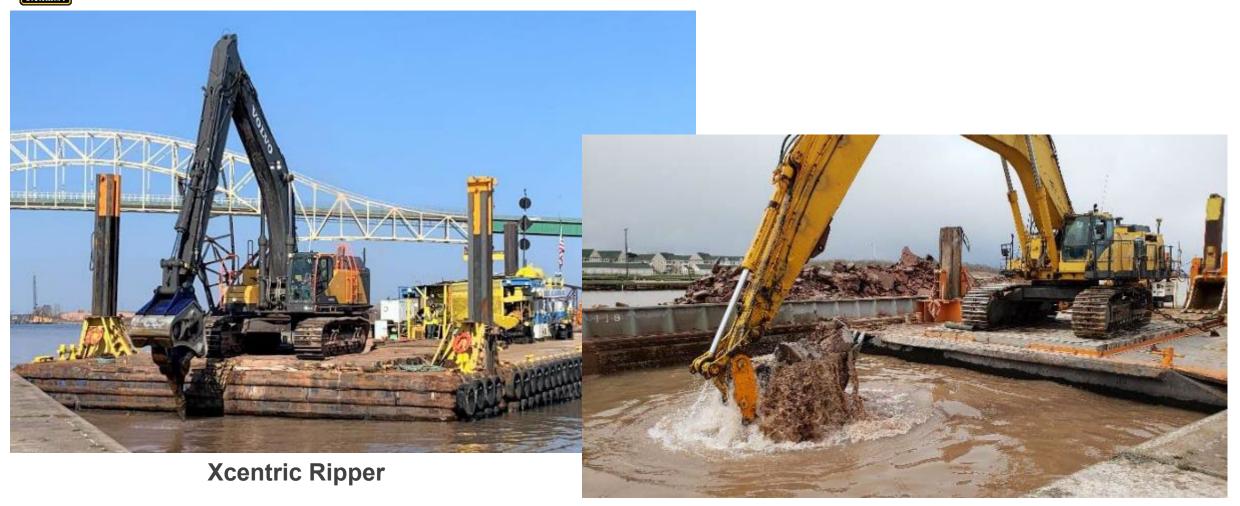
- \$52.6M Contract awarded in January 2020 to Trade West Construction Co. of Nevada.
- Contractor has completed roughly 95% of the required contract work.

**Estimated Completion: Summer 2022** 



# PHASE 1: UPSTREAM CHANNEL DEEPENING OPERATIONS





PC1250 with 6.5 CY Bucket



# PHASE 1: UPSTREAM CHANNEL DEEPENING OPERATIONS











**Overburden from Upstream Approach Channel** 

#### PHASE 2: UPSTREAM APPROACH WALLS





Scope: Rehabilitate approach walls upstream of New Lock including reconstruction of walls, concrete caps, mooring bollards, electrical, and lighting.

H-Pile & Concrete Panel Walls - 570'

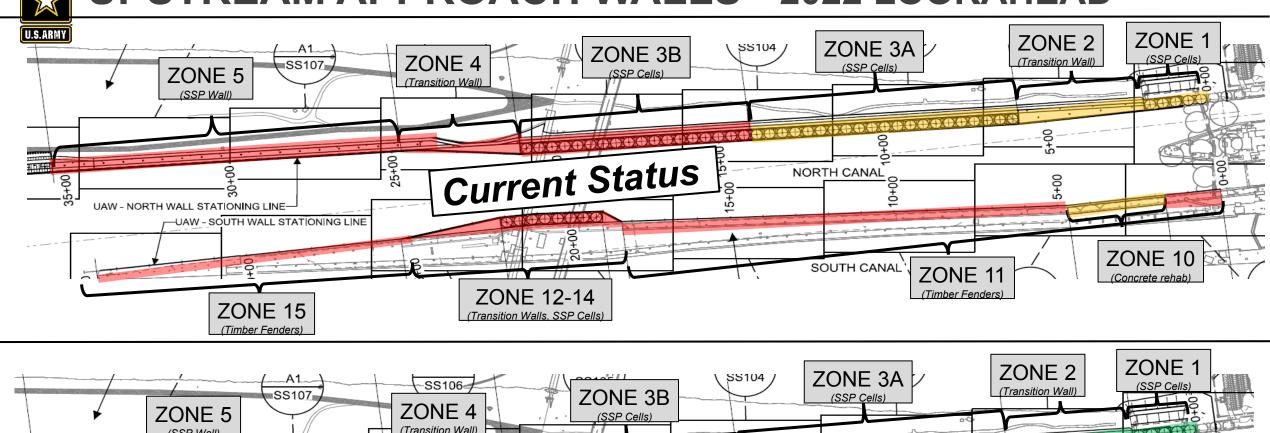
- West Center Pier Rehab

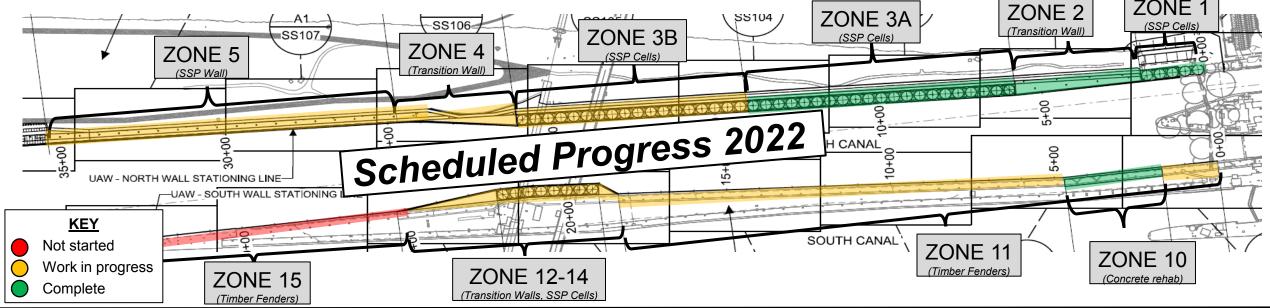
#### **Project Status:**

- \$111.3M Contract awarded to Kokosing Alberici in September 2020
- Contractor arrived on site in April 2021
- Contractor has left the site for the winter and will return when the ice clears in the spring.

**Estimated Contract Completion:** Fall 2023

# **UPSTREAM APPROACH WALLS - 2022 LOOKAHEAD**





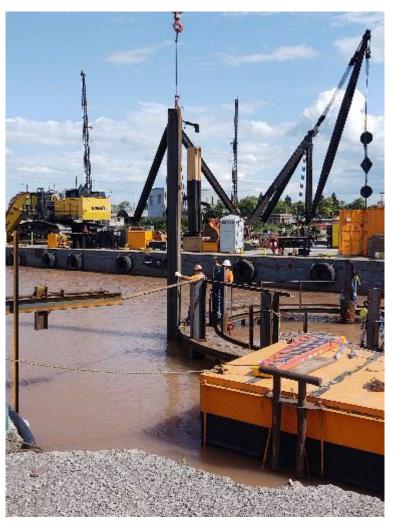
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#### **PHASE 2: CELL CONSTRUCTION**





Template to be used to construct circular steel sheet pile cells

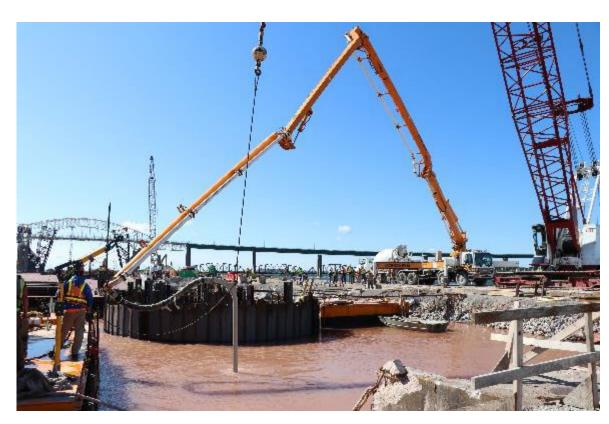


1<sup>st</sup> sheet pile, sheet piles are 30' strips of steel placed within the coffer cell template



# **PHASE 2: CONCRETE PLACEMENT**







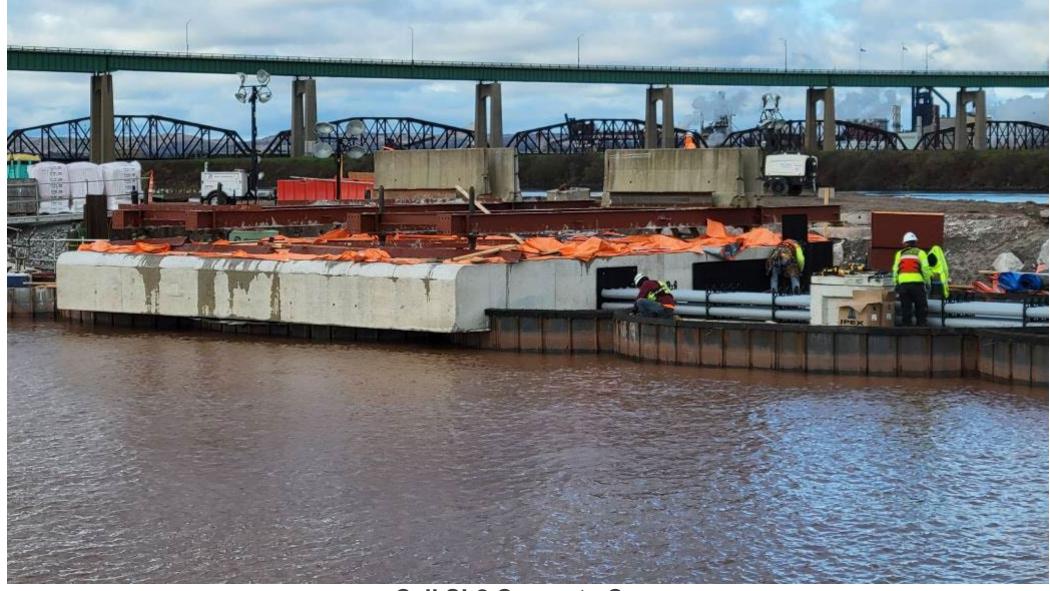
First tremie concrete placement

First concrete placement in cell



# **PHASE 2: CONCRETE CAP PLACEMENT**



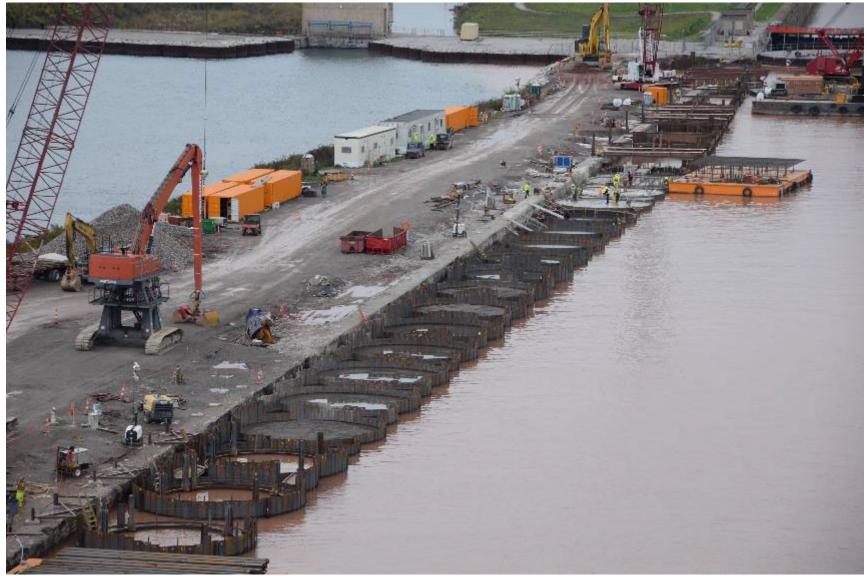


**Cell SL2 Concrete Cap** 



# PHASE 2: NORTH STEEL SHEET PILE CELLS





UAW Cells N1 - N19



#### PHASE 3: NEW LOCK CHAMBER UPDATE



- Constructing new "Poe sized" Lock in footprint of existing Sabin Lock
- Proposals received Nov 2021, review of proposals in progress, contract award scheduled for late spring 2022
- Construction completion by Fall 2030
- Key Features:



Chamber Monoliths

Miter Gates

Ship Arrestors

Filling & Emptying System

Hands Free Mooring





#### PROJECT'S ECONOMIC IMPACT



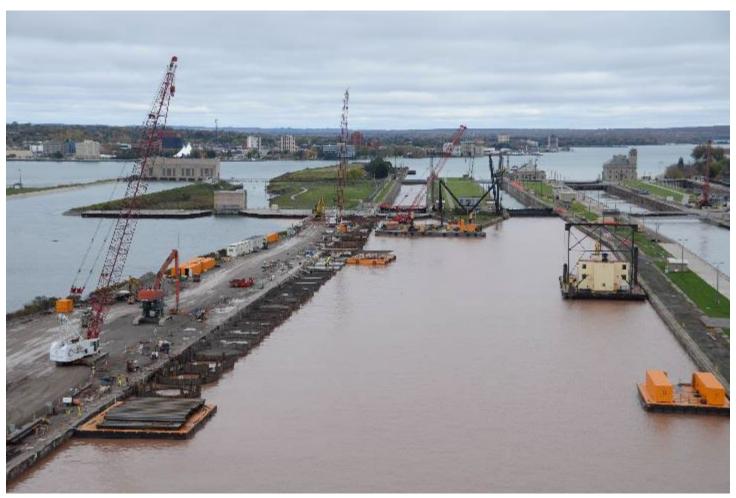
- 1,240 jobs created on an annual basis
  - 600 direct jobs
  - 210 indirect jobs
  - 430 induced jobs
- 1,400,000 tons of limestone or granite
- 112,000 tons of American-made cement
- **25,000** tons of American-made steel



**Upstream Approach Wall Tremie Concrete Placement** 



# **QUESTIONS**



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