SHELL LA MOTEMS

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AECOM PM LA MOTEMS PROJECT
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Shell LA MOTEEMS Presentation Sequence

- Shell Mormon Island Tour
- MOTEEMS Timeline
- Project Challenges
- Phased Project Execution
- Model Snap Shot
SHELL MORMON ISLAND TERMINAL
Shell Mormon Island MOTEMS Project Timeline

- **Jan 2006**: Initial MOTEMS Audit identified structural and seismic improvements
- **2008**: Installation of berthing dolphins and dock piping relocation to shore
- **2010**: Dolphins and Piping Complete
- **2010**: Ground improvements, wharf replacement and topside equipment
- **2016**: Extension granted to 2020 due to need to perform an EIR NOP issued 4/2016
- **Apr 2017**: New approach to manage ground issues
- **Jan 2018**: Design Complete
- **4Q 2021**: Construction Complete

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- **Apr 2017**: Define Phase Engineering start
- **Aug 2017**: EIR revisions for new design and schedule
- **Nov 2017**: CSLC approved BoD
- **Jan 2018**: Design complete
- **Mar 2018**: Additional permit applications
- **Apr 2018**: CSLC Engineer Identified Work Package approved
- **Aug 2018**: Target Site Mobilization
- **Oct 2018**: Target Phase I Construction Start
- **Nov 2018**: Target Phase II Construction Start
- **June 2019**: Target Phase III Pre-Fab & Construction Start
- **Nov 2019**: Target Phase IV/V Construction Start
- **Feb 2021**: Target Phase IV/V Construction Start
- **4Q 2021**: LA MOTEMS Project Completion

**Extension granted to 2020 due to need to perform an EIR NOP issued 4/2016**
Project Challenges

• Future Uncertainty
• Significant Capital Investment
• Lack of benchmarks for these types of projects in the LA Basin
• Onerous CEQA process
• Design Parameters
  • Meeting the seismic stability
  • Fit for purpose design scope
  • Vessel Fleet turnover and wharf/mooring/berthing design
  • Phased construction – Shell and POLA executing separate projects and the need for continued operation during construction
Facilities to be Installed

- Jetty Platform- Concrete deck with steel piles
- 2 new mooring dolphins, revisions to a 3rd
- Catwalks for mooring access and jetty egress
- Marine Loading Arms
- Gangway Tower
- Dock House
- Product piping and a new shore side manifold supported on piles
- Dock Safety Unit (DSU) and vapor piping
- Utilities (firewater, power, plant air, potable water, oily water, propane)
Phase I:
Decommissioning and demolition of Berth 168 topside equipment by Shell

Phase II:
Demolition of existing Berth 168 wharf and construction of new Jetty by POLA

Phase III:
Construction of topside and shoreline piping improvements by Shell

Phase IV:
Decommissioning and demolition of Berth 169 topside equipment by Shell

Phase V:
Demolition of B169 wharf and completion of catwalks by POLA

Phase VI:
Paving by Shell
THANK YOU