

**Meeting Minutes
Modular Hybrid Pier (MHP) Phase 2
Kickoff Meeting**

8:30 AM Tuesday October 24, 2000
BERGER/ABAM Offices
33301 Ninth Avenue South
Federal Way, WA 98003

In attendance:

George Warren	NFESC
Bob Mast	Berger/ABAM
Markus Wernli	Berger/ABAM
Phil Birkeland	Berger/ABAM
Mike LaNier	Berger/ABAM
Larry Williams	Vansant and Gusler
Rennie Tisdale	Vansant and Gusler

1. Discussion of comments to Phase 1A Report

Extensive discussion of NFESC comments transmitted in writing plus additional comments from George Warren's mark up of the draft report. These comments are being addressed separately in finalization of the Phase 1A report. With this report we will transmit a listing of the comments received and an indication of how we responded to them.

2. Review of Scope of Work for Phase 2

General

Dr. Rizkalla of ISIS Canada has moved to North Carolina State University. His replacement as president of ISIS is Dr. Mufti at University of Manitoba. NFESC indicated an interest in continuing involvement of ISIS. We will explore getting input and review from Dr. Mufti at ISIS.

Dr. Warren indicated that there is resistance to the 20 percent premium cost for the initial MHP. The Navy feels that every new pier is going to be maintenance free. Thus there needs to be some significant difference in the maintainability of a MHP that is going to carry any cost premium at all.

The pier configuration and approach to mooring and access should consider security and anti-sabotage issues. Dr. Warren will discuss these issues with NFESC security people and provide input to us.

Along these lines it was felt that procurement approaches that foster high level of quality in construction are nearly as important as design details. Procurement objectives that lead to long low maintenance facilities need to be carefully determined and defined. We will add a section on procurement to the Phase 1A report to introduce the issue. Each of the tasks in the Phase 2 report will include a discussion of procurement issues and recommended procurement approaches or provisions. Discuss issues like pre-qualification of contractors, use of procurement models previously used by LANTDIV, PACDIV and EFA Northwest.

Include discussion of how the input of the ROICC should influence the project and how the Navy ROICC's can make use of Navy materials and construction experts for special projects.

A section on quality of life enhancements for ships crews will be included in the report. Plan drawings will show potential areas that can be developed as crew areas.

Task 1 – Development of MHP mooring provisions

Discussion of this task

The issue of whether storm bollards raised above the operations deck were needed was discussed. It was determined that we need to determine if the rationale for these bollards on fixed piers applied for floating piers. For example, is fire truck access required past storm mooring lines?

The assumptions relating to this task were discussed (see attached detailed agenda for meeting). There was general agreement that the assumptions were appropriate for this assignment.

It was agreed that once a baseline mooring dolphin is developed a parametric evaluation will be made for the dolphin design that considers variations in tidal range, variations in seismic conditions, and some variation in site soils. Site for mooring is assumed to the San Diego Southern Pier area in the areas of Piers 10, 11, 12, and 13.

Further input or questions

Summary of input and discussion

Dr. Warren will try to locate some soils borings for this area that can be used as a basis for the mooring dolphin design or provide a contact name for this information.

Proposal assumptions valid for this task, except as noted.

Task 2 – Development of structural joining concepts for modular sections

Discussion of this task

A rationale for setting the module length (preliminarily set at 350 ft) should be developed. It should consider:

- Other non-traditional uses of individual modules
- Delivery wave design effects
- Likely graving dock availability
- Joining cost per joint
- Mooring configurations
- Module usefulness for pier lengths other than 1400 ft.

It was agreed that if suitable corrosion resistant post tensioning duct joining methods could be identified that would allow a grouted joint joining approach this alternative would be described in the report.

Further input or questions

Summary of input and discussion

Proposal assumptions valid for this task, except as noted.

Task 3 - Development of utilities and utility connection methods across module joints

Discussion of this task

The Assumption A-7 should be revised to say that the utilities should allow a major mission change with requiring demolition of utility support provisions. The 15 year interval proposed should be challenged and a rationale for the mission change interval provided.

Discussion of vessels to be berthed lead to the conclusion that Dr. Warren will check to be certain that our assumptions for berthing are correct at.

- Guided Missile Cruisers (CG)
- Guided Missile Destroyers (DDG)
- Guided Missile Fast Frigates (FFG) – Two Abreast

It was agreed that the utilities would be configured to allow berthing of any of these vessels at any berth location on the MHP. Berthing for AOE's and Carriers should not be considered at this time.

The topic of putting electrical receptacles only at the utility mound with the switching located away from the bull rail was discussed. V&G to inquire with ship users to determine if there is any reason not to do this.

Routine utility maintenance should be possible without major equipment. Preferred maintenance methods in order of preference is:

- By hand
- With hand truck
- With fork lift
- Jack to dollies (wheeled or air bearing)
- Use crane

Other utility design criteria included:

- Provide vehicle access to utility deck – conventional vans

Configure to allow crane to get as close to ship as possible
Evaluate whether or not a bull rail is needed on the operations deck
If possible move fenders to the operations deck level to accommodate flare sided vessels.
Use fender system to provide the utility hose and cable access slots from the vessel to the utility deck.
On utility level provide headroom so that space can be used for training rooms or crew amenity space. (Evaluate this further if this is a controlling criteria.)

Objective should be that hose and cable management is much cleaner and neater than what is now done.

It is requested that as the utility layout is developed it be informally bounced off LANTDIV representatives for reaction and input.

High mast lighting will be used as carriers with large deck overhangs will not be berthed at this facility.

It is assumed that fire truck access is not required for utility level. Truck can access operational level and put hoses and men over the side or down stairwells to the utility deck level.

Further input or questions

The potential for future vessel fueling will be handled as provisions for future utilities. A design for fueling and all fuel handling provisions will not be developed for this preliminary design.

Summary of input and discussion

Dr. Warren to give a San Diego contact so V&G can determine what power is available on shore to service the pier.

Proposal assumptions valid for this task except as noted.

3. Task 4 - MHP access ramp concepts

Dr. Warren indicated that he was hopeful that funding for the ramp preliminary design would be forthcoming. Hopefully this funding will be made available early in the 2001 calendar year. He indicated that he has a funding level for FRP decks and he may task one of his other consultants with the development of an FRP bridge that could be used for service van access to the utility level of the MHP.

Discussion of this task

The idea of using lifts for vehicle access to the utility deck level was not well received. Discussion was to use 2 ramps. A heavy duty ramp that can carry a mobile crane to the operations deck and a lighter duty ramp for van service to the utility deck.

The ramp system should be kept simple. Assure that the ramp system doesn't become a high maintenance item. Minimize ramp length consistent with tidal variation. Also minimize dredging for both pier and vessels.

Consider a ramp system that can be adapted by changing ramp length for different tidal situations.

Further input or questions

The amount of personnel access between the operations deck and the utility deck needs to be determined to set the number of stairwells provided. It was decided to ask Howard Kelly of LANTDIV this question.

Summary of input and discussion

Proposal assumptions valid for this task, except as noted.

Dr. Warren to provide contact to determine San Diego yard elevation relative to water elevation.

Task 5 - Phase 2 Report

Discussion of this task

It was agreed to add some discussion of procurement approaches to achieve quality. It was agreed to add a section on possible crew amenities that could be included.

Further input or questions

Summary of input and discussion

Proposal assumptions valid for this task.

6. Review of project schedule

It was agreed that schedule end dates can be met if authorization to address access ramp is delayed until January/February time frame.