



MAINE DEPARTMENT OF TRANSPORTATION  
American Council of Engineering Companies (ACEC)  
**Multimodal Subcommittee Meeting**

October 16, 2014 – 9:00 to 10:30  
MaineDOT Headquarters, Augusta – Conference Room 228  
Meeting Minutes

1. Attendees:

Jeff Tweedie, MaineDOT  
Nate Benoit, MaineDOT  
Sue Moreau, MaineDOT  
Tim Bryant, VHB  
Kathy Kern, TY Lin International  
Craig Morin, HNTB  
Paul Pottle, FST

2. Accepted the minutes provided by Peggy Duval of the first meeting.

3. Craig and Paul handed out list of various design guides (attached). Tim indicated that he would send along what VHB uses. All acknowledged that there were a number of different guides and publications and there are probably too many to list. The attached comprises many of the more common ones. There was a number of discussions around various elements and areas associated with marine facilities and they are captured as follows:

- Guides need to be listed first in any publication and user needs to be made aware to check for updates. Should have web sites identified if available and as applicable.
- There was discussion on security guidelines and it was acknowledged that this would be far different than design guides. Much depends on the type of facility and what drives the security requirements. You have Homeland Security which is different for passenger or cargo facilities, you can then add in Customs and Border Protection and they have different requirements than Homeland may have. You have site specific requirements based on an approved security plan and that will be different for each facility based on operations and protocols in place. Many of these are “need to know” and are not made public. We need a general statement about security needs and some of the agencies that drive these needs. Mainly deal with Homeland Security, US Coast Guard and US Customs and Border Protection.
- Guide will need to be as user friendly and useful as possible. May need to break out into various areas that identify type of facility as well as types of materials and appropriate use at the various facilities.
- There were a number of small discussions on things like coatings, timber treatment, use of cathodic protection, composites, fender systems, etc... We agreed that there are varying opinions out there and Paul indicated that he had concluded long ago that marine engineering was as much of an art as it was a science, based on all of the factors that must be considered as you design a facility and select the appropriate materials.

4. Discussion then was focused on the Process Flow Chart that had been developed at the last meeting and what it was comprised of. This led to how a guide might be developed and organized. We agreed that it may need to be set up with a delineation on the type of facilities (i.e. boat ramps, marina's, small piers, large piers, fender systems, wave fences, breakwaters, etc.) first and then on facility components (i.e. floats, piles, connections, decks, bulkhead materials, concrete, steel and coatings, composites, etc.). Key elements of that discussion are as follows:
  - Need to help develop guidance on design life and longevity issues, include in municipal/state agreements or grant applications.
  - Need to understand the ability to maintain and what is needed to assist in that area.
  - Need to evaluate type of training and input necessary to make informed decisions by a municipality. Can an incentive program be developed that rewards the community with a larger cost share by state for those facilities designed with a potentially longer life span.
  - Understand the need for aesthetics as well as longevity and how impacted with up-front costs and potential funding.
  - Help all to understand that this document provides sound guidelines and is not necessarily a design requirement. May want a way for community to explain why not following the guidelines.
  - Seek input from the industry, especially for unique products like composites. May need to indicate that some are proprietary and need to be evaluated carefully for their use.
  - Nate was most concerned about foundational structure and using the right materials with the right types of treatments. This would need to be covered in both the type of facility being considered and then the materials that may be used. An example used was piles and whether to use timber or steel, with site factors to consider like bottom condition, depth of overburden, potential for ice flows, size of vessels, imposed electrical conductivity of pier area, other environmental factors like CSO's or other pollutants that could affect material selection, and so on.
  - Should consider using chapters for one area (types of facilities and environmental elements) and appendices for other areas (like specific components and material types for).
  - Should have an area that discusses the various funding programs that are currently in place for communities to use like SHIP, BIG, TIGER, and any other program that may be available.
  - All agreed that we needed to develop an outline on what the guide should look like to include the chapter and appendices breakdown. Once we have something like that, we can break down the individual area to see what works best and then assign for various members to work on or gather industry data on. Craig volunteered to do a rough outline and welcomed input from anyone. We felt this needed to be done before the next sub-committee meeting so could discuss and refine at that point.
5. Action Items:
  - Develop outline for guide (Craig to make first attempt)
6. Next meeting is scheduled for January 15<sup>th</sup> at the MaineDOT building in conference room 228 from 9:00 AM to 10:30 AM.