# Leading Edge Consulting, LLC

## SITE VISIT REPORT No. 1

Date of Report:	1/24/12	Date Visited:	1/19/12
Project Name:	MSU Cooley Lab	Project #:	
Location:	Bozeman, MT		
Subject:	Mock-up Review of lab casework		
Conditions:		Prepared By:	Mark Osborn

The project nears half completion with most of the GWB in place. The mock-up was constructed on the Third floor of the project. Most of the mock-up items will be used in the project with the exception of casework not accepted or that will be changed.

#### Movable and Relocatable casework units

- The drawers are very hard to close and the effort required may move the units out of place.
  Treat all rubber catches with a non grease application of lubricant to ease the tension in the
  catch. If this isn't sufficient then the catch of the slide will have to be addressed or the
  rubber catch may have to be modified.
- 2. The narrow apron at the top of the casework unit is to be flush with the drawer faces.
- 3. When the apron was attached with screws from behind, the screws bowed the apron due to where the spacers (between the apron and the carcass) were located. This is to be avoided.
- 4. Wheels on the mobile unit are to have the lever type lock on them.
- 5. The base at the relocateable cabinet should match the height of the movable cabinet.
- 6. The top of the mobile cabinet is not flush to which would allow the plastic laminate to be adhered directly to the metal cabinet. Some type of substrate will have to be provided which can be mechanically fastened to the cabinet. The plastic laminate can be applied to the substrate with PVC edging. An alternate would be ½" thick black phenolic resin.
- 7. Provide a cost to add the same top to the relocatable cabinet.

#### **Mobile Bench**

- 8. Is it possible to get grey data receptacles for the mobile bench?
- 9. Use a 12" patch cord between under shelf lighting units per side linking two lighting units together.

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- 10. Locate grommet 6" off the back edge of the work surface and 5" off the edge (to centerline of grommet).
- 11. Provide cover plate at top channel where holes (and wiring) are exposed.
- 12. Seismic anchors use female threaded anchor flush with floor. Provide angle plate at base of upright such that it turns in towards the other standard. This is not how it is shown in the drawings. Submit seismic drawings and calcs.
- 13. The top edge of the shelf brackets was found to be rough. These need to be finished smooth to the touch.
- 14. The side cover plate at the standard was warped (damaged?); all cover plate need to be tight fitting, without gaps.
- 15. I have requested that the hex bolts be painted to match the mobile frame. Another option (will require approval from the University) is to use black allen cap screws.
- 16. The shop drawings rejected the cutting back of the aluminum raceway, sheet CD.14. This appears not to have been transferred into reality as the mock-up has the original design as does the revised shop drawings. Please review my comments of sheet CD.14 and let's see what we can do.

### Casework units - General

- 17. The color and grain of some faces were noticeably dissimilar in grain and color. Casework for this project is AWI Premium grade.
- 18. Acid cabinet provide a single piece liner per the specifications 11601, 2.2, N. Mounting of the hinge was discussed with no resolution. I would like to see photos of the proposed hinge and how it is intended to be mounted. Stainless steel fasteners are to be used. It is noted that the catch is not stainless can a plastic catch of some type be sourced?
- 19. Cecilia was going to verify if the lock on the acid cabinet was required. Being a zinc coated part rather than stainless it is prone to corrosion at the interior. This lock is easy to replace if it is found to be required. I will send an email around when we have the final work.
- 20. Shimming casework that is shimmed an amount greater that ¼" should have backing of some sort at the toe kick to support the bottom edge of the rubber base. This could be a continuous strip of wood under the base of the casework or 24GA steel (tin) applied to the face of the toe kick. I'm open to other ideas.
- 21. It was discussed that the casework under the fume hoods should be full height (without an apron) as the cup sink is in the rear of the fume hood. The cup sinks are at the side of the fume hood (ADA compliant) so an apron per the drawings and shops will be required. This apron should match the height of the adjacent apron.
- 22. Fume hood/acid cabinet the 2" filler/leg combination seems somewhat superlative. The casework unit (in this case the acid cabinet) with just the 1" wide leg should be sufficient.

#### Casework units - Sink

- 23. Sink apron and adjacent drawer/apron to be the same height.
- 24. At ADA sink cabinet the removable panel was acceptable as constructed. The "back" of the cabinet should be constructed as shown in detail 3/QL3.2 with a fixed panel below the removable one. The other option is to have the half back as a part of the removable one such that the entire panel comes out. The intention is that the valves are easily accessible.

#### Fume hood

- 25. The fume hood was not a part of the mock-up (required per section 12345, 1.4, E). Provide photos of the style and color intended for this project. Photos should include close-ups of the interior and all fixtures and elements of the fume hood including the monitor.
- 26. In reviewing the shop drawings again it appears that the work surface of the fume hood is an inch lower than the adjacent work surface. Is this so? ISEC, please respond.

### Miscellaneous

27. The contractor is concerned that the panel mounted pure water valve has no mechanical fastener attaching it to the wall. It is common that panel mounted fixtures rely on the tension provided by the plumbing nipple into the valve itself. Often this is accompanied my silicon applied to the back of the valve base.

It is the our concern that the pure water piping/rough out is not secured adequately inside of the wall and that a female threaded fitting was not used in the wall for connection of the pure water valve.

I would ask that two different forms of attachment be developed. One is the manufacturing of a stainless steel bracket (as shown to us on our visit) with a plastic grommet to accept the neck of the pure water valve. The bracket can be screwed to the wall. The other is a polypropylene washer, 2" in diameter and 3/8" thick with a hole in the middle just large enough for the valve piping. The washer can be attached to the valve and the wall with silicon.

- 28. Single shelf standard at the ends of the shelf run was accepted as constructed.
- 29. Pegboards Provide a 4" gap between the bottom of the drip tray to the top of the back splash. They will be at different heights depending if they are at the ADA bench or the standard bench. ISEC to verify that a minimum of three screws can be placed into the backing strip.
- 30. Faucets could we have left and right cartridges at all hot/cold faucets?
- 31. The PW2 pure water fixture was changed to the right angle unit L73100PP-F in the shop drawings. Please provide. I believe what I saw on site was the straight pattern one.

This communication constitutes our understanding of the items discussed and any conclusions reached. If there are any clarifications or corrections, please advise this author, in writing within four (4) working days of receipt.

Submitted by:

Mark Osborn, AIA