

DSG-EIC DIRC Meeting

Date: October 10, 2022

Time: 11:00 AM – 12:00 PM

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Greg Kalicy, Tyler Lemon, Marc McMullen, and Beni Zihlmann

1. Safety documentation for test area

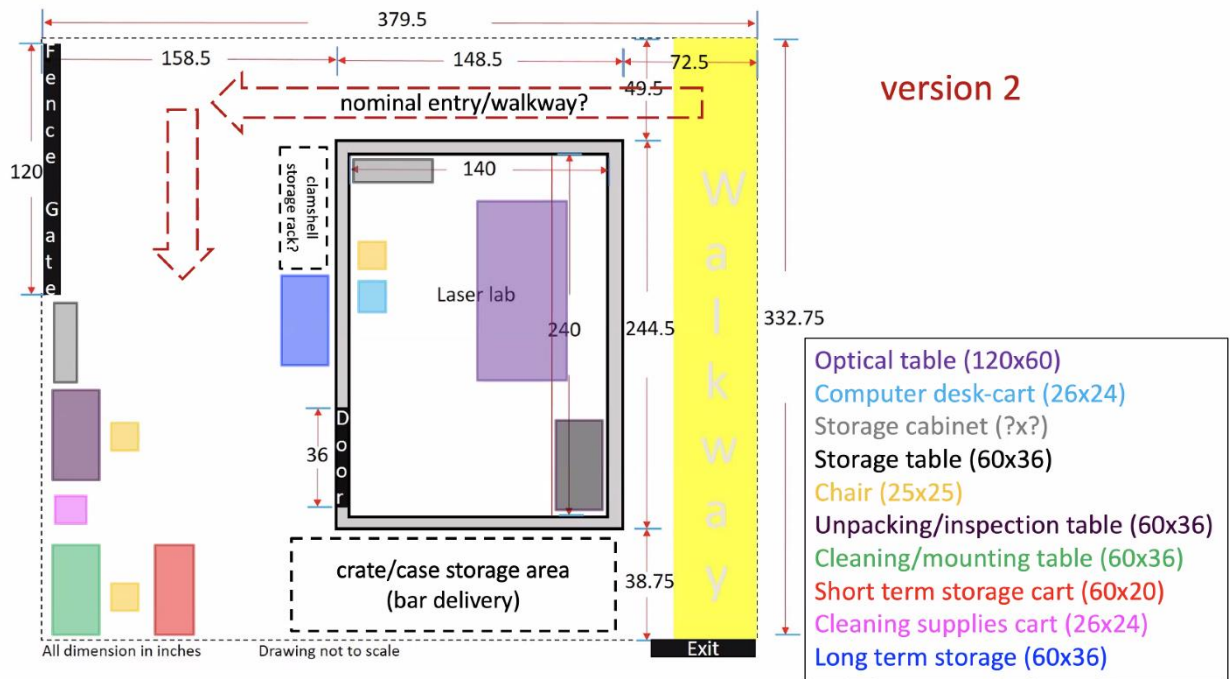
Greg Kalicy, Marc McMullen, and Beni Zihlmann

1. Training required for entering the laser lab
 - SAF1140 – Laser safety training
 - External training modules from DOE
 - Contact Jennifer Williams (jennifer@jlab.org) for link and directions to access training
 - MED02 – Laser user eye exam
 - Contact JLab Occupational Medicine to arrange exam
2. First draft of Task Hazard Analysis (THA) is complete
 - THA will be amended as needed once procedures are refined
3. Greg Kalicy will send a diagram showing optical table layout

2. Reviewed long- and short-term storage options for bars and layout of test area

Greg Kalicy

1. All storage should include, at a minimum, a cover to prevent dust from collecting on bars
2. Long-term storage can be an enclosed set of shelves that support bars along their length
3. Short-term solution should be on wheels to allow it to be easily moved from cleaning area to laser controlled area



Screenshot of layout provided by Greg Kalicy and discussed during meeting.

3. Photodiode tests

Tyler Lemon

1. [Link to slides presented in meeting](#)
2. Tested DIRC photodiode to see how best to read its output
 - A resistor in series with photodiode allows voltage to be read across the resistor that can then be converted into a current response
3. Attempt to determine DIRC photodiode responsivity for 442-nm wavelength light
 - Used monochromator to provide low power, 442-nm wavelength light
 - Used other, on hand, calibrated photodiodes to determine power of light
 - Used current response of DIRC photodiode and calculated power of incident light to calculate DIRC photodiode responsivity
 - Calculated DIRC photodiode responsivity was ~30% lower than its specified value

4. Design of interlock system for laser area is in progress

Tyler Lemon and Marc McMullen

5. Other business

1. Beni Zilhmann will provide charge code for project's procurements
2. Greg Kalicy will send analysis program for test data
3. Next meeting will be Monday, October 24, 2022 at 11:00AM
 - Tyler Lemon will set up a bi-weekly, recurring meeting on Zoom