



# TSIB HPT Lab Layout

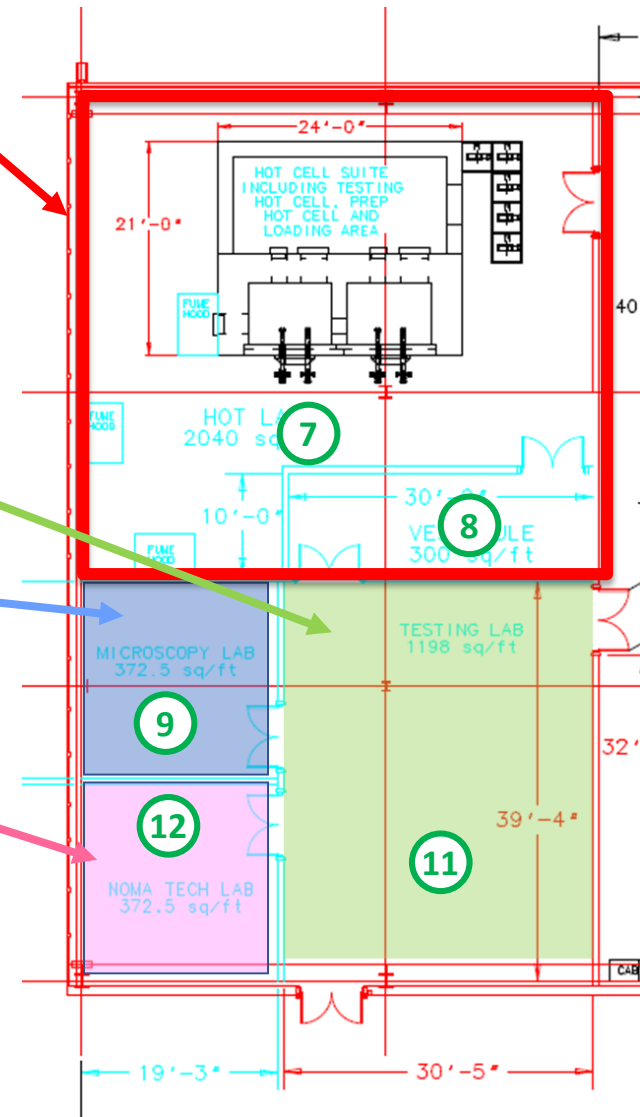
Frederique Pellemoine

TSIB HPT Lab Conceptual Design Review

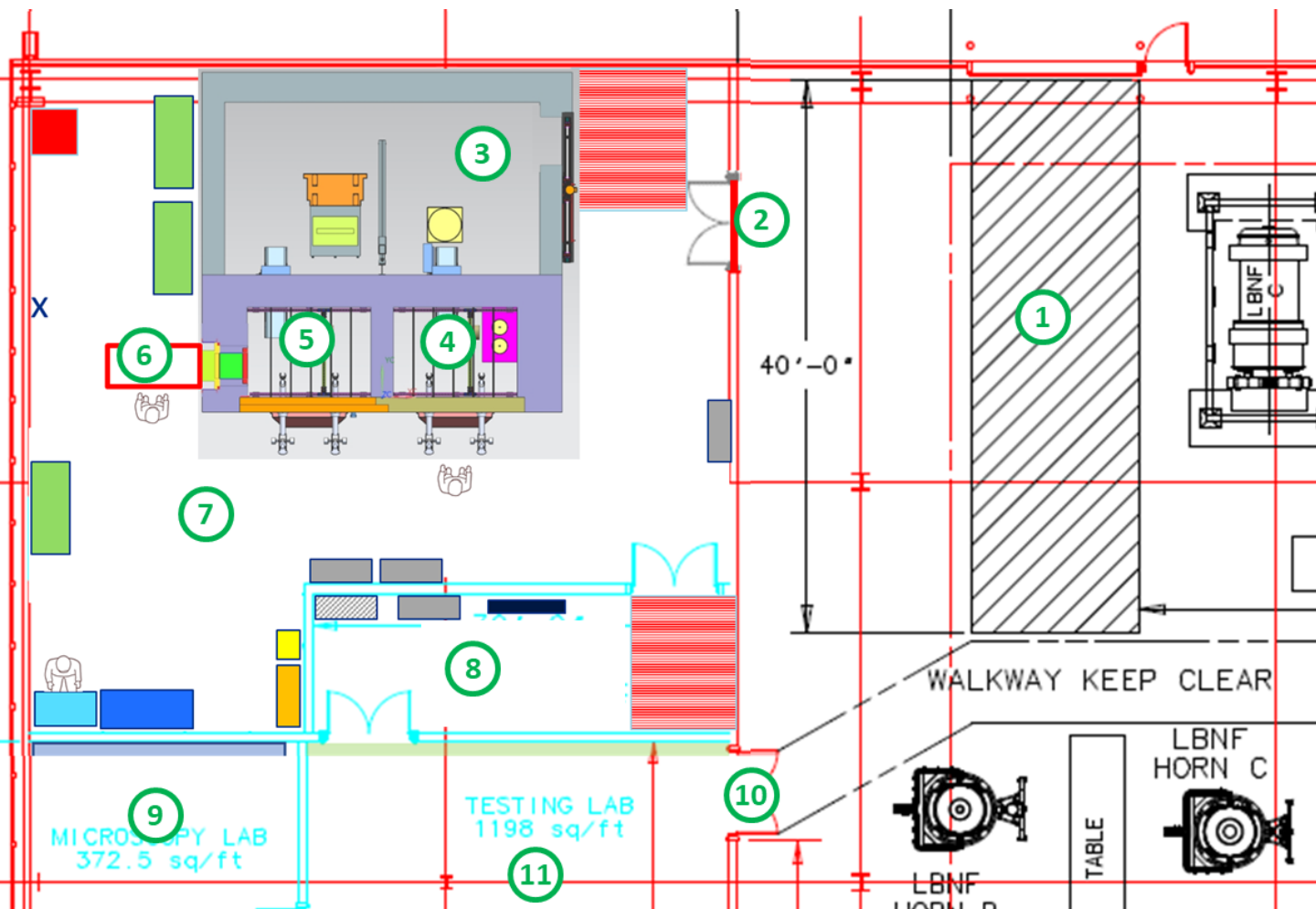
01 April 2021

# TSIB HPT Lab to support R&D Program

- Hot Lab Area including Hot cell suites
- Cold Testing Lab
- Microscopy Lab
- Novel material and technology development area (NOMATech lab)

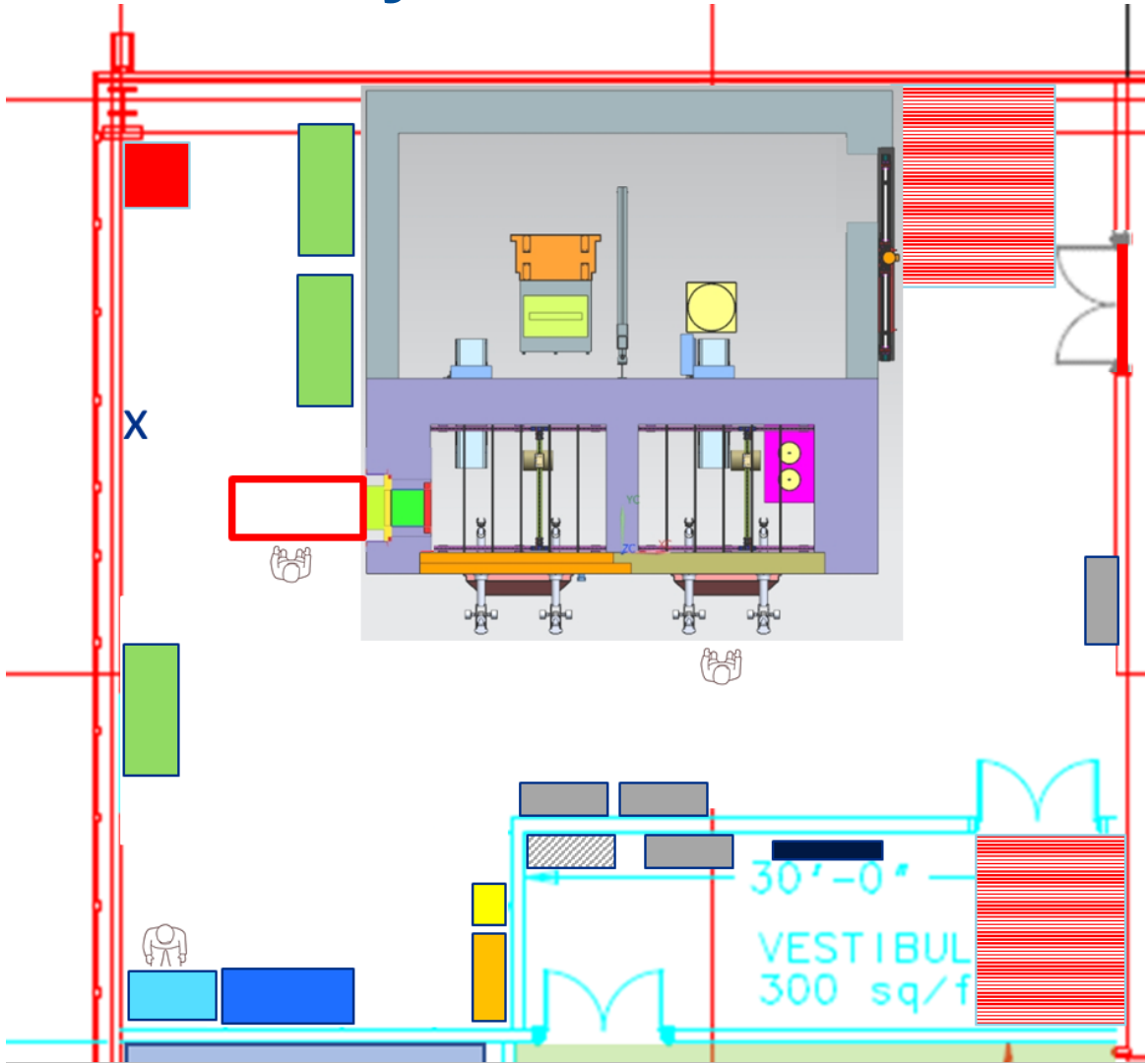













# Hot Lab Layout



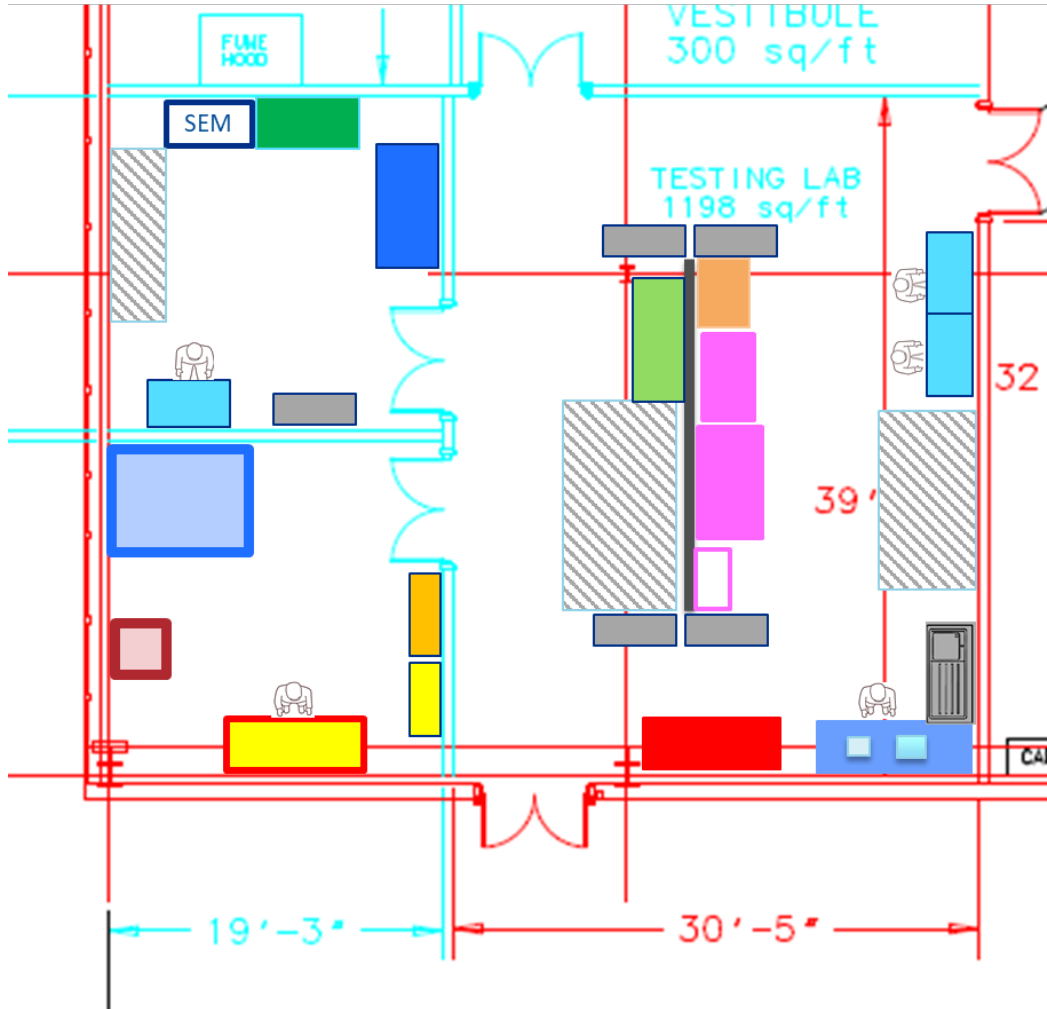
- ① Truck bay
- ② Material Access door
- ③ Unloading/loading area
- ④ Prep hot cell
- ⑤ Testing hot cell
- ⑥ Fume hood
- ⑦ Hot Lab
- ⑧ Vestibule
- ⑨ Microscopy lab
- ⑩ Personnel Access door
- ⑪ Testing Lab
- ⑫ NOMATech Lab











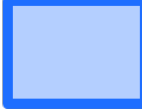




# Hot Lab Layout



-  Fume hood
-  fireproof cabinet for flammable chemicals (~24 gallons)
-  storage cabinet for other chemicals / hazardous products
-  storage cabinet
-  Test bench w/ outlets
-  Keyence microscope on test bench
-  Workstation/desk with computer
-  Low activated sample shielded storage
-  Locker bench
-  Locker
-  Frisker station and designated step-off area

# Non – Activated Material Area Layout



-  Dilatometer
-  Grinding/Polishing and sectioning station
-  Sink
-  FNAL Fatigue Machine
-  Mechanical load frame
-  Workstation/desk with computer
-  Keyence microscope on test bench
-  Nano-indenter
-  Fume Hood
-  HT furnace
-  Nanofiber electro-spinner
-  storage cabinet
-  fireproof cabinet for flammable chemicals
-  storage cabinet for other chemicals / hazardous products
-  Test bench w/ outlets

 Space for future equipment

 SEM