• PXIE & General Infrastructure
  – Cave, alignment, electrical, water, compressed air, RF, Ion Source, LEBT, RFQ
• Cryoplant
  – Linde cryoplant commissioning, SLAC coldbox installation
• Cleanroom
• Control Room
• CMTS1
• **Cave**
  – Walls and penetration blocks of first half of cave are constructed and painted
  – Floor is epoxy coated
  – Radiation Safety has approved current design/plans
  – No additional work planned for this year

• **Alignment**
  – Alignment network established within building
  – Still need to densify network within cave (prior to roof installation) and install Deep Rod Monuments to monitor movement of building (as time and money permit)
• **Current Status**
  – Racks and power distribution on North and East side of cave in place
  – Ion Source power, wall outlets and tray for front-end of cave complete
  – Temporary power distribution for LEBT solenoids and RFQ RF system in place

• **FY14 Plans**
  – 1200A panel on West side of CMTF in progress (complete in Spring)
  – Power distribution to mezzanine and control room to follow
  – Installation of subset of racks on mezzanine and floor needed for LEBT and RFQ operation
  – Cable tray distribution from mezzanine to cave
Electrical Infrastructure

- East & North Side of Cave
- 1200A Panel and Distribution
- Inside Cave
- Racks on Mezz. & Floor
• PXIE Water
  – Ion Source chiller and manifolds installed and operating
  – Temporary LCW skid, chilled water pipes from NML, and piping to RFQ RF system for RFQ installed
  – LEBT manifolds installed and piped to temporary LCW skid

• LCW System
  – A few components (pumps, HX, O2 removal) for permanent LCW ordered
  – Remaining LCW components to be ordered this year (big chiller), and installation to begin
  – Plan is to have LCW system complete and operational by Feb. 2015 (to coincide with RFQ delivery)

• Compressed Air
  – Compressed air system installed and operational
  – Distribution along East and West walls of CMTF highbay this year
Chiller Lines from NML
Temp. LCW Skid & IS Chiller
PXIE Manifolds & Air System
RF System for RFQ

- Amplifiers due end of February
- Water (from temporary LCW skid) and power installed
Cryoplant

- **Linde Superfluid Cryoplant**
  - Installed and being commissioned (expected completion March, 2014)
  - On-going infrastructure work (electricians, new Linde chiller, backup generator, pit sump…)
- **SLAC Coldbox (CTI-4000)**
  - Being refurbished at MW9
  - Needs to be installed in pit (Feb.-March?) before floor racks and tray can be installed
• **New Cleanroom**
  – Class 10, 100, and 10,000 areas
  – External preparation area (ultrasonic tanks, rinse sinks, parts washer, DI water system, clean Nitrogen system)
  – Certification and ODH approval received (January, 2014)
  – A0 cleanroom activities and personnel in process of moving to CMTF
• Control Room/Office Area
  – New control room furniture installed
  – 5 offices, meeting area, kitchen, bathrooms, shower
CMTS1

- CMTS1 (Cryomodule Test Stand – 1)
  - Cryomodule test cave intended for cold RF testing of CM’s (no beam)
  - 1.3 GHz, 3.9 GHz, 650 MHz, 325 MHz, 162.5 MHz (CW and pulsed)
  - First customer is expected to be LCLS-II (Dec. 2015)
  - Begin installation of cave walls and minimal outfitting in FY14