

2.5 Near Detector Installation

2.5.1 Infrastructure

2.5.1.1 EDIA : includes Input to footprint Design, Tunnels & Halls Liaison, and Ongoing MINOS Underground Areas Oversight; also includes Outfitting Liaison, MINOS Service Bldg Liaison, Shaft Lifting Equip Specifications; Detector Support Structure Liaison; Power & Cooling Integration, Rack & Cables Integration with the outfitting, Coil Power Supply Integration

2.5.1.2 Near Hall Infrastructure Installation

2.5.1.2.1 Install Support Structure

2.5.1.2.2 Install Racks

2.5.1.2.3 Install LCW System

2.5.1.2.4 Install Ethernet & Acnet

2.5.1.2.6 Install Coil Power Supply

2.5.2 Plane Assembly

2.5.2.1 EDIA ; includes Assembly Fixtures Liaison, Module Mounting Oversight, New Muon Assembly Area Liason,

2.5.2.2 New Muon Assembly Area Setup

2.5.2.2.1 Setup Steel Storage Area

2.5.2.2.2 Setup Scintillator Storage Area

2.5.2.2.3 Setup Workspace Environment

2.5.2.2.4 Install Strongbacks & Fixtures

2.5.2.2.5 Install Plane Support Structures

2.5.2.2.6 Receive Material Deliveries

2.5.2.3 Assembly of Detector Planes - One Shift

2.5.2.3.1 Assemble 1st Half of Full Planes

2.5.2.3.2 Assemble 2nd Half of Full Planes

2.5.2.3.3 Assemble 1st Half of Partial Planes

2.5.2.3.4 Assemble 2nd Half of Partial Planes

2.5.3 Detector Installation

2.5.3.1 EDIA; includes Coil Design Liaison, Detector Electronics Installation Liason, Plane Mounting Procedure Planning & Review, Transport Fixtures Oversight,

2.5.3.2 Hall Tech Area Setup

2.5.3.2.1 Purchase Misc Tools & Storage

2.5.3.2.2 Setup Hall Tech Area

2.5.3.2.3 Deliver Transport Frame/Cart to Underground Area

2.5.3.2.4 Purchase Survey Equipment

2.5.3.3 Spectrometer Plane Installation

2.5.3.3.1 Transport 1st Half Spectrometer Planes

2.5.3.3.2 Mount 1st Half Spectrometer Planes

2.5.3.3.3 Transport 2nd Half Spectrometer Planes

2.5.3.3.4 Mount 2nd Half Spectrometer Planes

2.5.3.4 Calorimeter Plane Installation

2.5.3.4.1 Transport 1st Half Calorimeter Planes

2.5.3.4.2 Mount 1st Half Calorimeter Planes

2.5.3.4.3 Transport 2nd Half Calorimeter Planes

- 2.5.3.4.4 Mount 2nd Half Calorimeter Planes
- 2.5.3.5 Detector Electronics Installation
 - 2.5.3.5.1 Install Hardware
 - 2.5.3.5.1.1 Install Crates & Power Supplies
 - 2.5.3.5.1.2 Install Rack Protection Monitors
 - 2.5.3.5.1.3 Install DCS Hardware & Computers
 - 2.5.3.5.1.4 Install DAQ Hardware & Computers
 - 2.5.3.5.1.5 Install 1st Half Spectrometer Electronics
 - 2.5.3.5.1.6 Install Alner Boxes for 1st Half Spectrometer
 - 2.5.3.5.1.7 Install 2nd Half Spectrometer Electronics
 - 2.5.3.5.1.8 Install Alner Boxes for 2nd Half Spectrometer
 - 2.5.3.5.1.9 Install 1st Half Calorimeter Electronics
 - 2.5.3.5.1.10 Install Alner Boxes for 1st Half Calorimeter
 - 2.5.3.5.1.11 Install 2nd Half Calorimeter Electronics
 - 2.5.3.5.1.12 Install Alner Boxes for 2nd Half Calorimeter
 - 2.5.3.5.2 Install Cables
 - 2.5.3.5.2.1 Install GPS Cable from Surface to Underground
 - 2.5.3.5.2.2 Install all HV Cables
 - 2.5.3.5.2.3 Install Cables from VME Racks to DAQ Racks
 - 2.5.3.5.2.4 Install DCS Cables
 - 2.5.3.5.2.5 Install Cabling for 1st Half Spectrometer Readout
 - 2.5.3.5.2.6 Install Cabling for 2nd Half Spectrometer Readout
 - 2.5.3.5.2.7 Install Cabling for 1st Half Calorimeter Readout
 - 2.5.3.5.2.8 Install Cabling for 2nd Half Calorimeter Readout
- 2.5.3.6 Magnet Coil Installation
 - 2.5.3.6.1 Install Coil Support
 - 2.5.3.6.2 Deliver Coil Segments
 - 2.5.3.6.3 Install Coil Segments
 - 2.5.3.6.4 Weld Connections
 - 2.5.3.6.5 Checkout & Commissioning of Coil