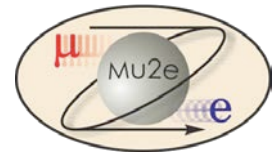




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WBS 475.04.01 Project Management

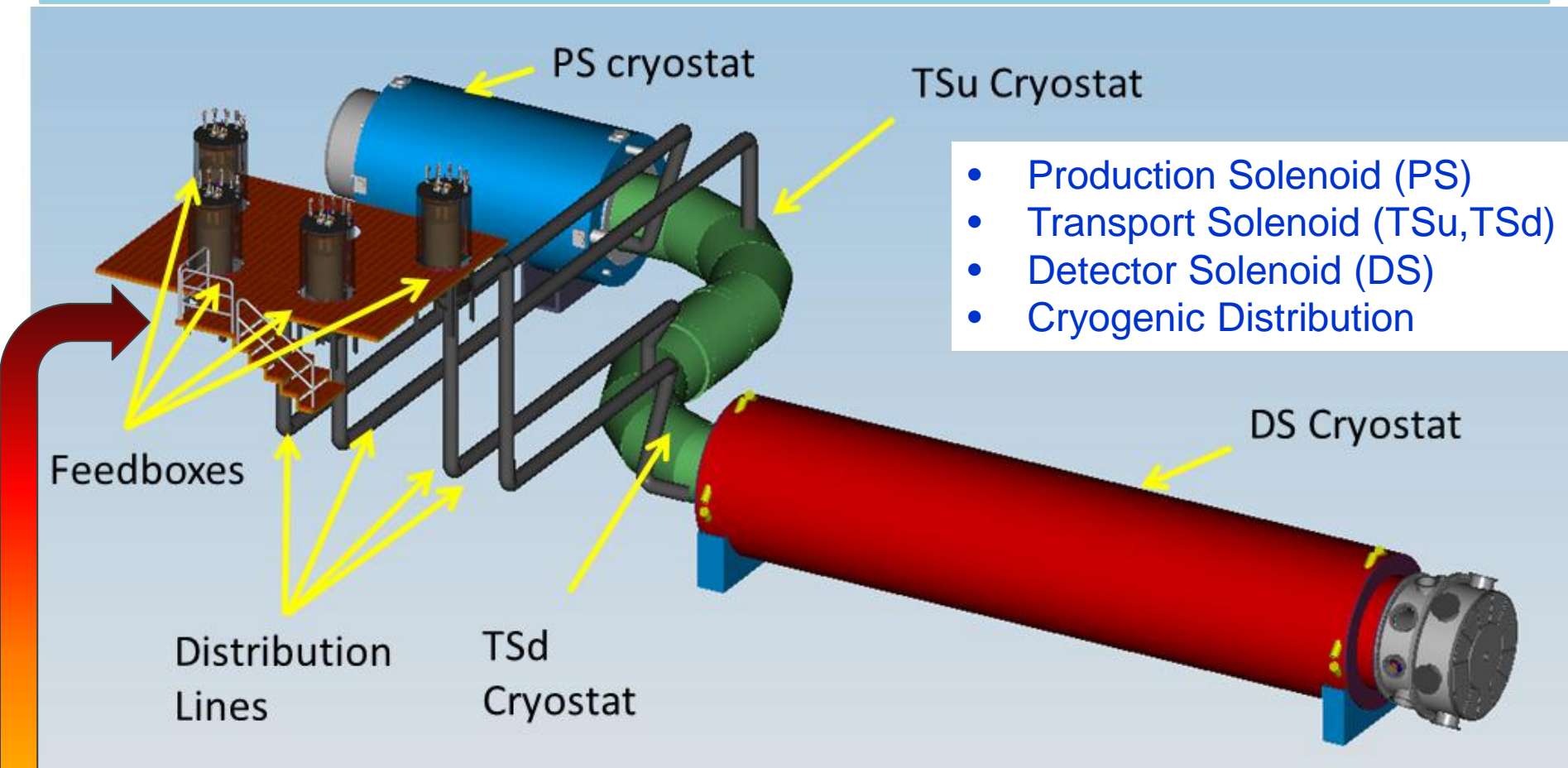
Michael Lamm
L2 Project Manager
08-Jul-2014



Requirements

- Oversight of L2 Solenoids subproject
 - Through all phases of the project life cycle
- Travel Related to Management including Solenoid Procurements
- Tracking of uncosted scientists on solenoid subproject

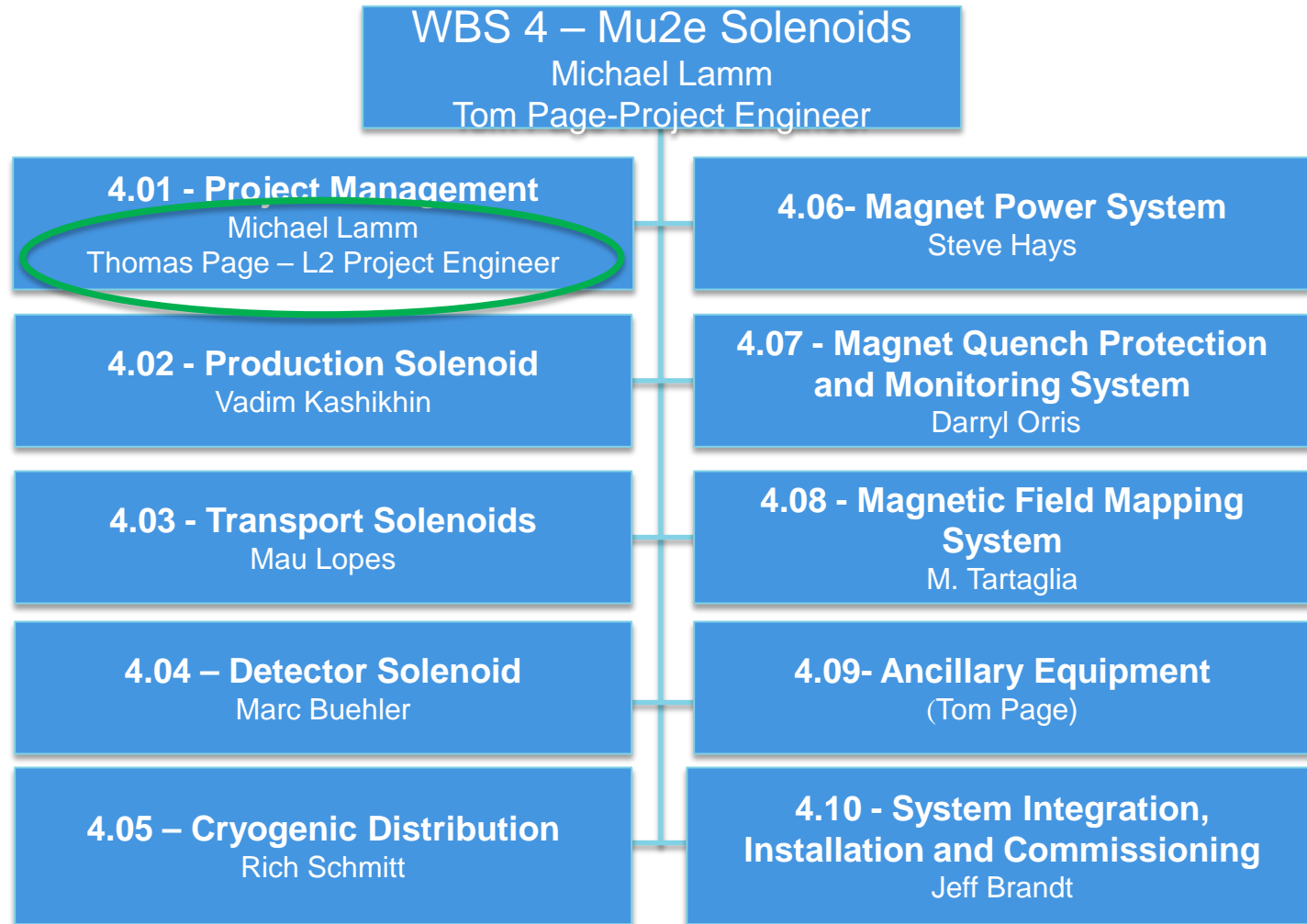
Mu2e Solenoids Scope



- Cryo distribution box
- Power Supply/Quench Protection

- Field Mapping
- Ancillary Equipment
- Installation and commissioning

Solenoid Organization



Vito Lombardo: Engineering oversight and coordination of superconductor acquisition and QA/QC

Changes since CD-1

- No changes to the L3 Structure since CD-1
 - Several refinements of WBS at the L4 level
- Some changes to L3 Leadership
 - For DS and TS, former L3's still have strong participation
 - Recently appointed new L3 leader for Cryo Distribution after several month vacancy

Remaining work before CD-3

- Oversee Solenoid project through the transition from Planning processes to Execution and Monitoring and Controlling processes
- As shown in the following L3 presentations, final designs need to be completed need to be completed prior to CD-3.
 - For PS and DS this final design will be performed in industry
 - Essentially all other final designs will be performed in house
- As with the superconductor we hope to receive CD-3 approval once a deliverable's final design is complete (and properly reviewed).

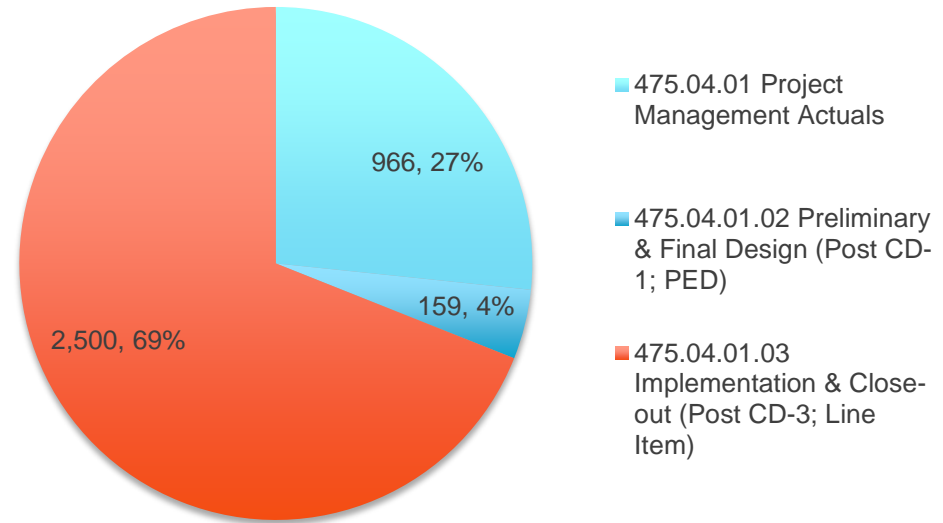
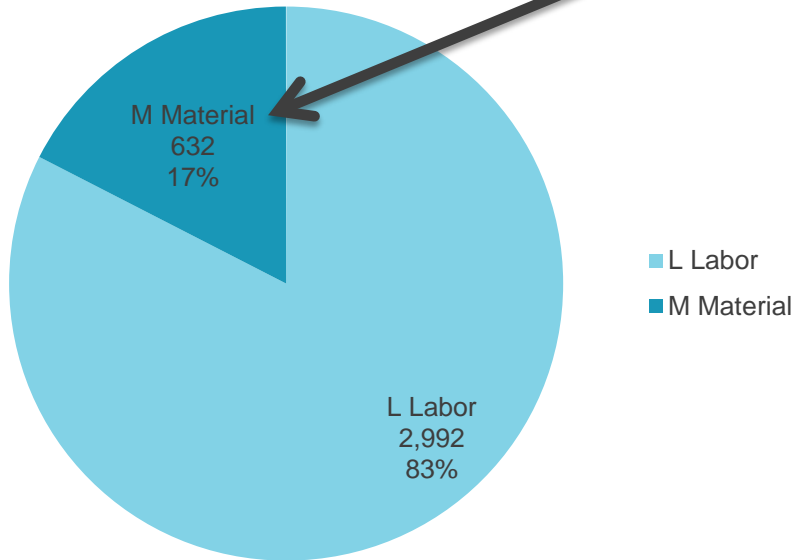
Cost Table

	Base Cost (AY \$)			Estimate Uncertainty (on remaining costs)	% Contingency on ETC	Total Cost
	M&S	Labor	Total			
475.04 Solenoids						
475.04.01 Project Management						
475.04.01 Project Management	99	867	966			966
475.04.01.02 Preliminary & Final Design (Post CD-1; PED)	12	147	159	32	47%	191
475.04.01.03 Implementation & Close-out (Post CD-3; Line Item)	522	1,978	2,500	502	20%	3,001
Grand Total	632	2,992	3,624	533	21%	4,158

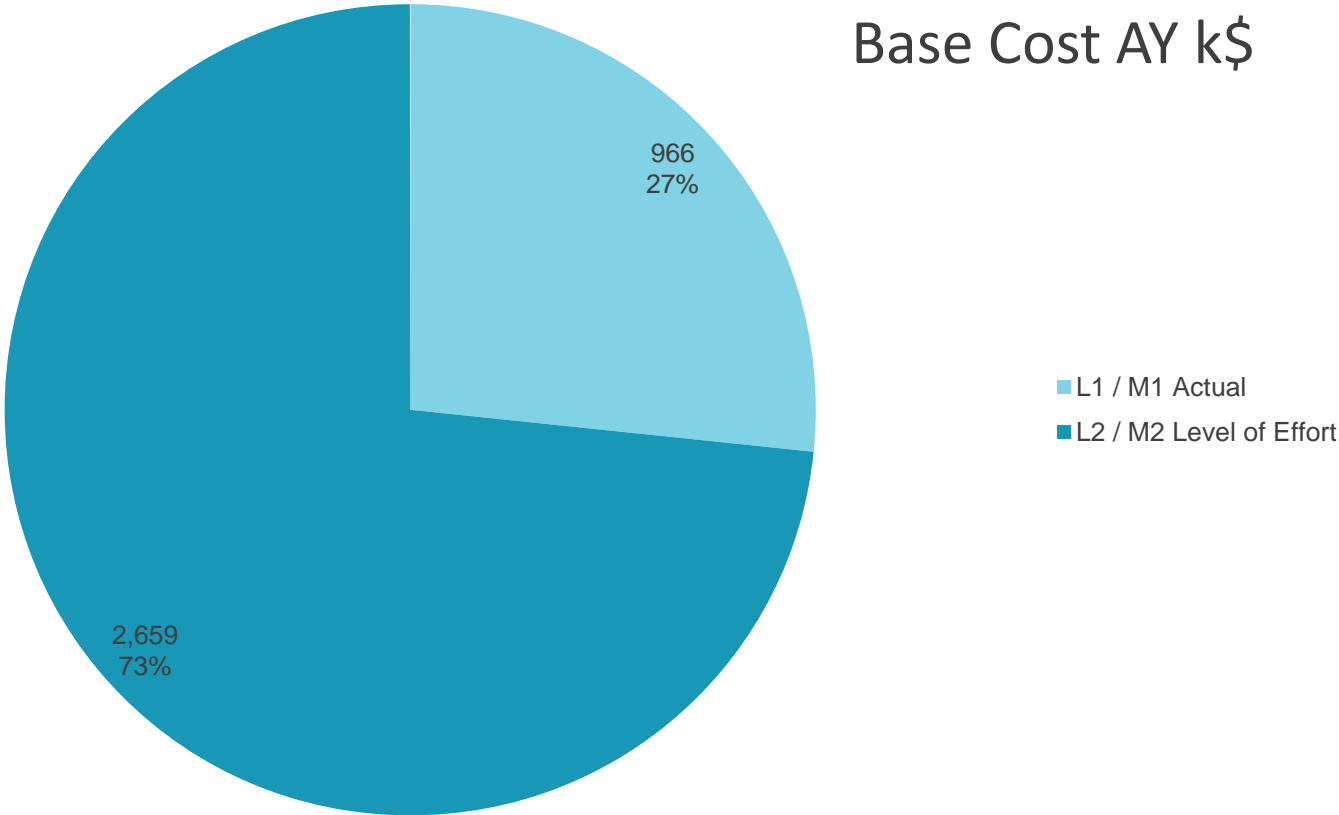
Cost Breakdown

Base Cost AY k\$

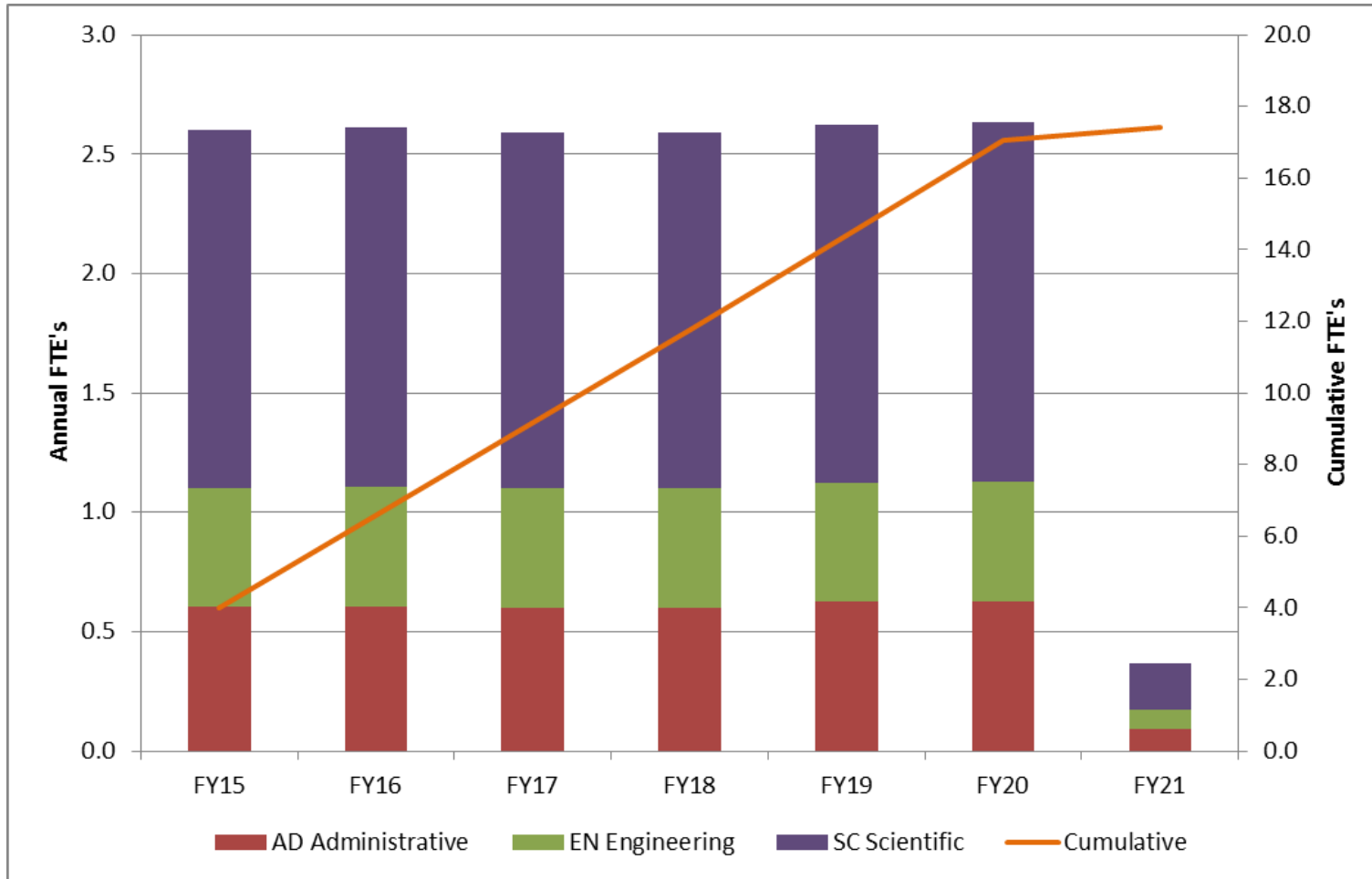
Travel expenses



Quality of Estimate



Cost Breakdown by FY



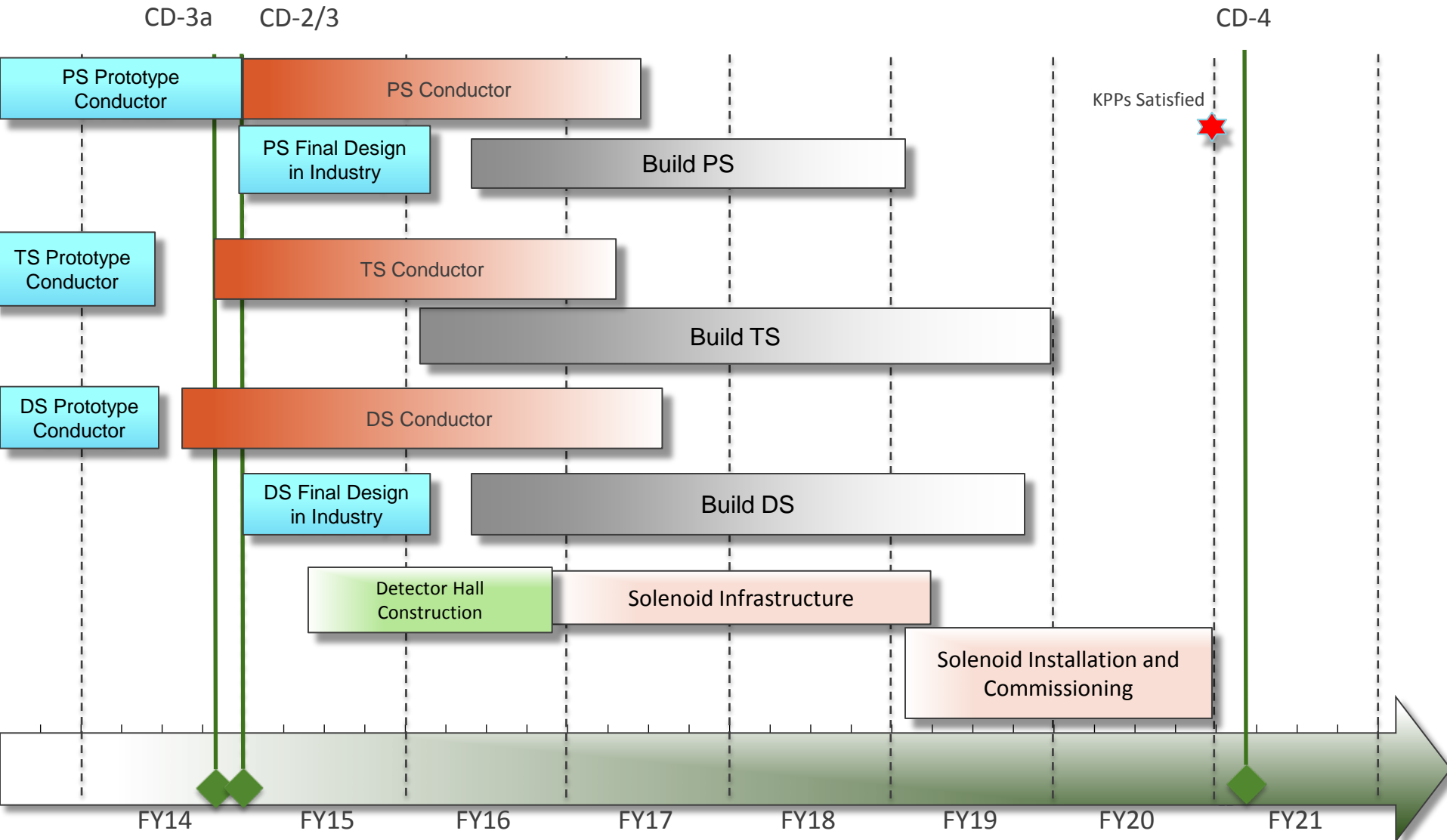
Major Milestones

Complete set of Solenoid Milestones in Milestone Dictionary (Docdb-4301).

Subproject	Activity ID	Milestone Name	Milestone Description	Milestone Tier	Milestone date
Solenoids	47504.1.2.001105	DOE Approval of CD-3a	Approval to order production lengths of conductor.	L3	6/24/2014
Solenoids	47504.2.051630	Vendor for PS Final Design and Build selected	Vendor for PS Final Design and Build selected	L4	6/10/2014
Solenoids	47504.2.051890	Production Solenoid ready for installation	Production Solenoid ready for installation.	L4	10/10/2018
Solenoids	47504.3.2.3.021450	Vendor for module fabrication selected	Vendor for module fabrication selected	L4	2/25/2015
Solenoids	47504.3.2.3.021480	TSu Modules Completed	TSu Modules Completed	L6	3/6/2017
Solenoids	47504.3.2.3.021488	TSd Modules Completed	TSu Modules Completed	L6	1/17/2018
Solenoids	47504.3.4.1.001840	TSu magnet ready for installation	Transport Solenoid (upstream) magnet ready for installation	L4	9/19/2018
Solenoids	47504.3.4.2.001630	TSd magnet ready for installation	Transport Solenoid (downstream) magnet ready for installation	L4	9/6/2019
Solenoids	47504.4.051610	Detector Solenoid magnet ready for installation	Detector Solenoid magnet ready for installation	L4	8/19/2019
Solenoids	47504.5.2.001336	Vendor for Feed Boxes Fabrication selected	Vendor for Feed Boxes Fabrication selected	L6	8/9/2016
Solenoids	47504.10.000950	Building ready for Solenoid installation	Mu2e Experimental Hall is complete and ready for installation of Mu2e solenoid system and	L5	5/2/2017
Solenoids	47504.10.002850	Transfer line from Cryoplant to Mu2e Detector Building complete (by GPP)	Transfer line from Cryoplant to Mu2e Detector Building complete (by GPP)	L4	7/17/2017
Solenoids	47504.10.002900	Cryoplant Operational (by GPP)	Cryoplant Operational (by GPP)	L4	7/17/2017
Solenoids	47504.10.005950	Solenoid system installation complete and ready for cooldown	Solenoid system and supporting equipment is installed and magnets are ready to be cooled down	L2	3/5/2020
Solenoids	47504.10.006850	On Project Solenoid Commissioning complete	Key Performance Parameter: Solenoid system has been cooled down and powered and demonstrated to run at nominal field strength.	L3	11/16/2020

Solenoid Schedule

Project Management is “level of effort” over duration of project



Summary

- Resources have been allocated to management of Mu2e Solenoids based on experience to date.
- Strong L3 leadership in place to carry out project