PHENIX
WEEKLY PLANNING

6/12/2008

Don Lynch

Technical Support 2008

Shutdown '08 Schedule

Mu Trigger, RPC Prototype Installation, New Beampipe, CM Crane, Sta. 1 and MMN Scaffolding Reviews	All Done, Action Items in progress
RPC Prototype C tests (in tent)	in progress
Install/field fit CM access stairs	in progress
Build MMN scaffolding	in progress
Build Sta. 1 N. scaffolding	in progress
RPC Prototype D tests (in tent)	in progress
Design RPC installation fixtures & MuTrigger FEE platforms	in progress
Prep work for Mutrgr platforms (water/elec)	in progress
Fan Tray maintenance	in progress (fill-in)
Prep work for RPC proptotype install move (7) MuID pipes move gap 5 south cable tray	June
Prep RPC Proto, MuTrggr FEE N&S Racks	in progress
MuTr Decapacitations (Sta. 1 N and MMN)	July

Shutdown '08 Schedule, cont'd

RPC engineering & safety review	~mid July
MuTrigger FEE N Install	Aug.-Sep.
Install MuTrigger N cooling water & air	Aug.-Sep.
RPC prototype gas system	July - Aug
Move shielding for RPC prototype installation	July - Sep
RPC prototype cable routing & support	July - Aug
Modify crystal palace & vapor barrier	July - Aug
Install MuTrigger FEE N platform&Rack	July 15 – Aug 1
RPC prototype install	Sep.-Oct. (RPC2 – PHENIX) (RPC3 – C. Pearson)
Install RPC prototype rack in tunnel south	Sep.
Install Mutrigger FEE's in MMS for RPC test	Sep.
Install MuTrigger FEE South platform	Sep.
Install MuTrgr S rack cooling & electric	Sep.
HBD Install	Sep.-Oct.
Connect electronics/gas/water/air for RPC	Sep. – Nov.
PC1 west work (needs planning)	Sep. – Nov.
CM Crane Install	Oct.
DC East?/West Repairs	Oct. – Nov.
Replace tunnel shielding	Nov. (C. Pearson)

Shutdown '08 Schedule, cont'd

Remove all inst'n equipment(e.g. scaffolds)	Oct. - Nov
Gap 5 north piping and cable tray re-loc.	Oct. – Dec.
Gap 2 north cable tray & crate re-mounts	Oct. – Dec
Prep for shutdown 2009	Nov. - Dec
Prep for run 9	Dec
Close shield wall start shifts	Dec.
Start physics	Jan 1

MMN Scaffolding under construction

MMN Confined Space requirements

Confined space training is required regardless of lampshades

Atmospheric testing not required with 4 lamp shades off

Class 2A certification is required (see WP sheets)

Entry log is required.

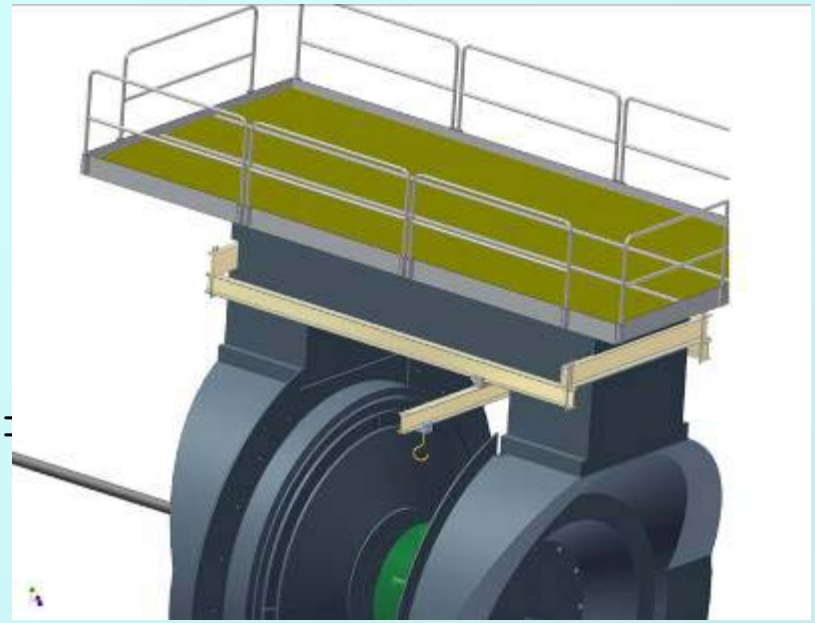
Trained back up watch person required.

Challenge exam is now available on the web. Only good for those who have previous BNL training. (Trying to get a waiver.)

No study guide available, but CA has compiled the applicable SBMS pages which I will make into a pdf and send to anyone who needs it.

If necessary we can set up as many special classes as we need.

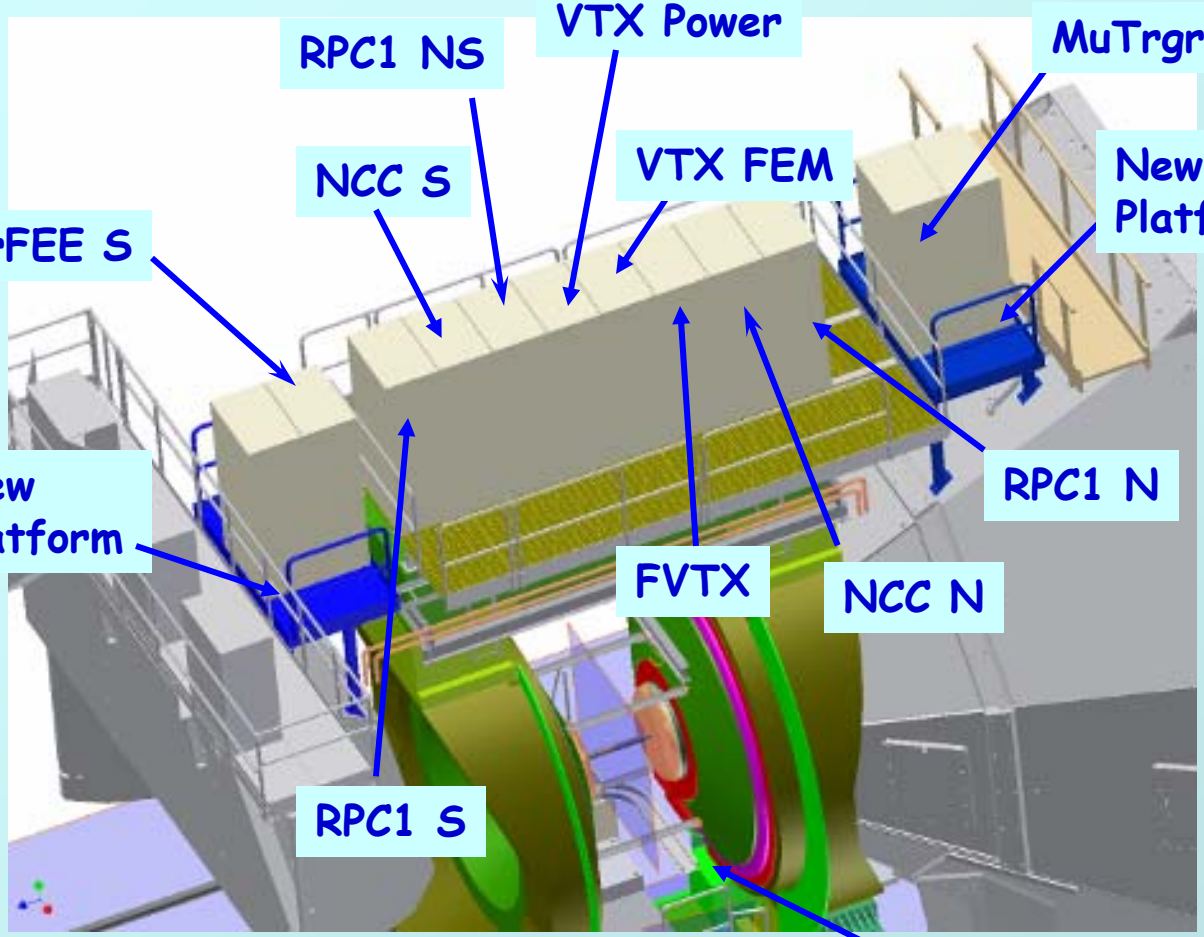
CM Crane, Station 1 scaffolding



CM Crane procurement postponed
Until FY09

Sta 1 scaffolding is here.

Detector upgrade Rack allotments



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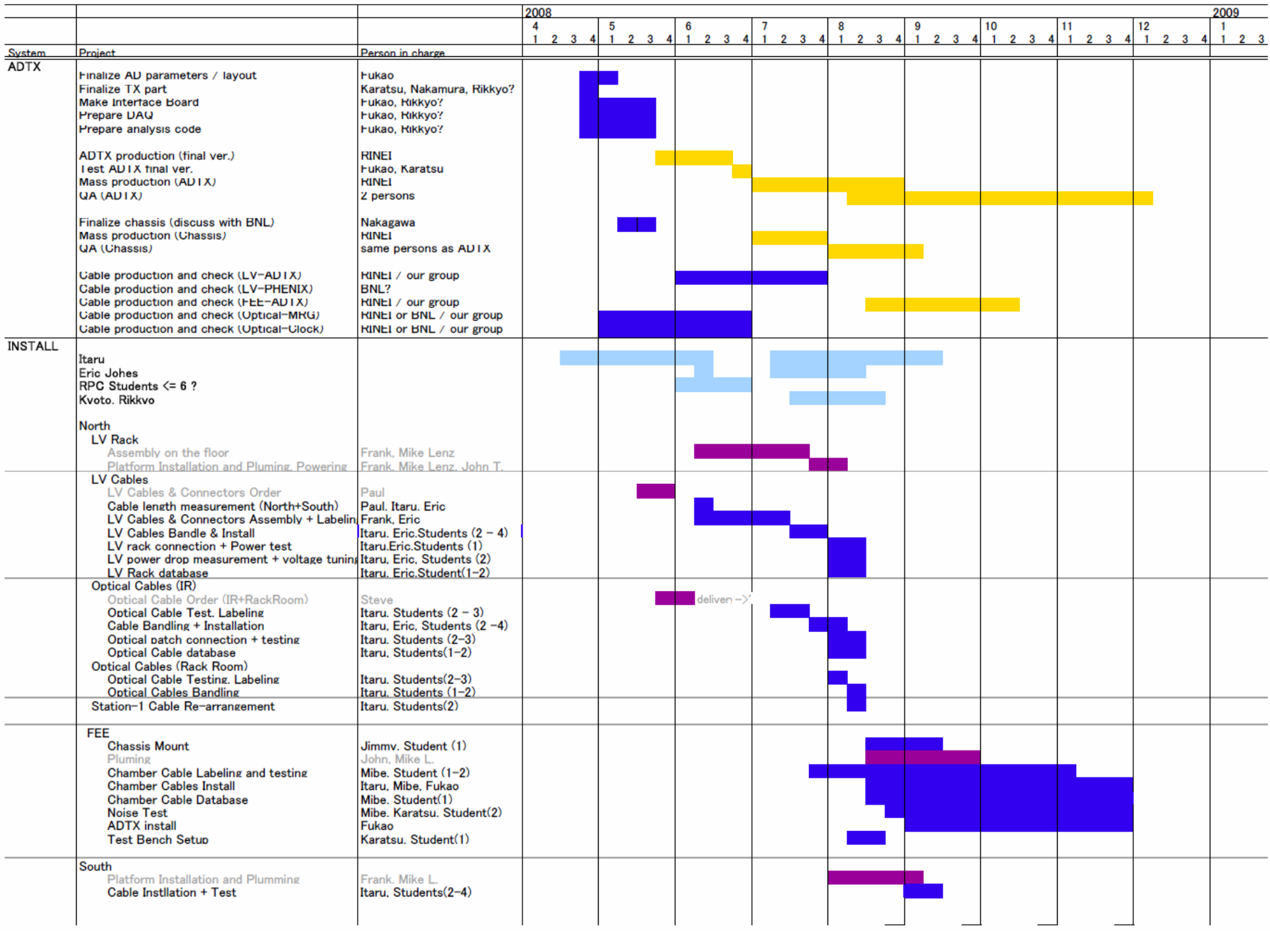
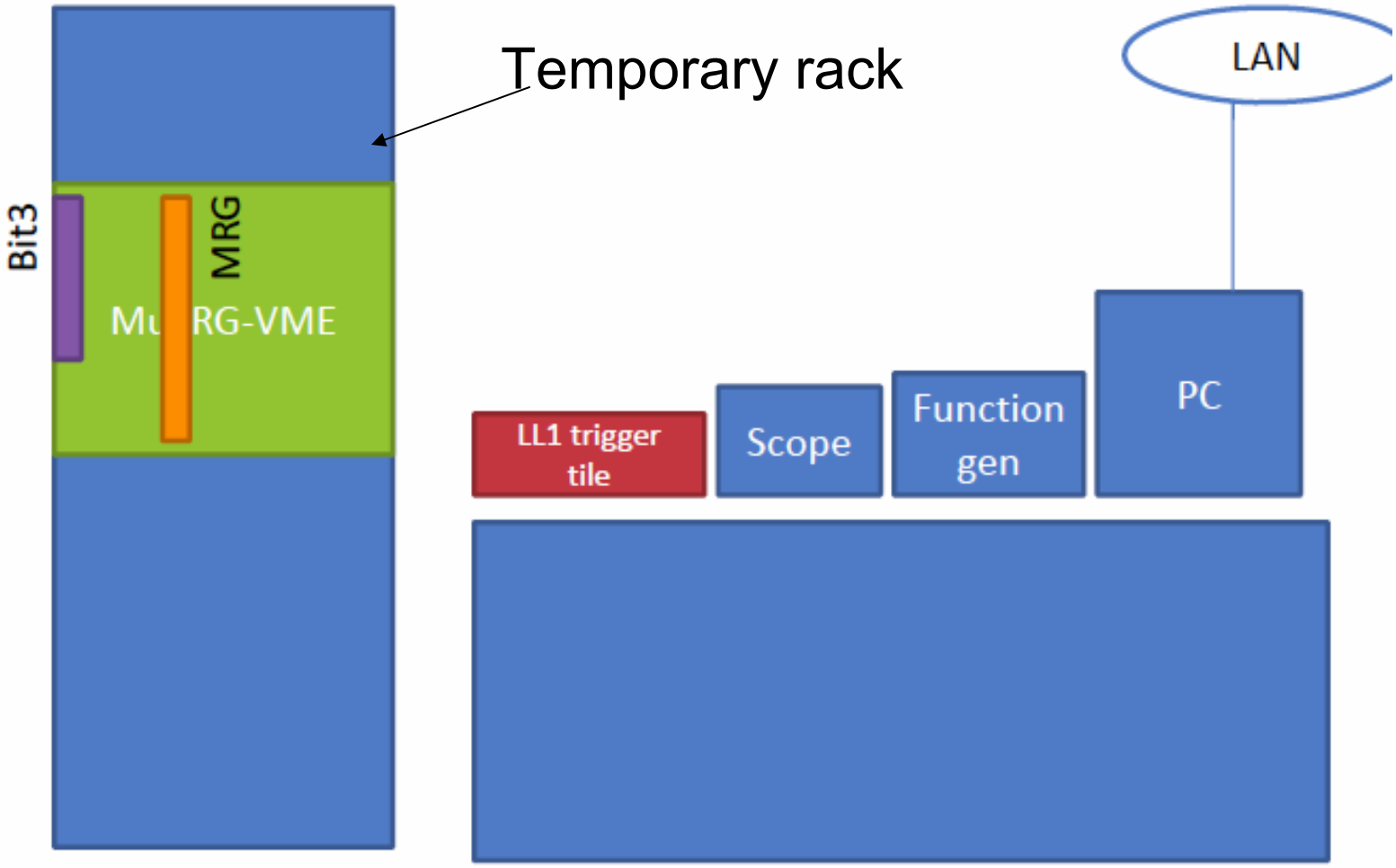


System	Project	Person in charge
ADTX	Finalize AD parameters / layout	Fukao
	Finalize TX part	Karatsu, Nakamura, Rikkyo?
	Make Interface Board	Fukao, Rikkyo?
	Prepare DAQ	Fukao, Rikkyo?
	Prepare analysis code	Fukao, Rikkyo?
	ADTX production (final ver.)	RIKEN
	Test ADTX final ver.	Fukao, Karatsu
	Mass production (ADTX)	RIKEN
	QA (ADTX)	2 persons
	Finalize chassis (discuss with BNL)	Nakagawa
	Mass production (Chassis)	RIKEN
	QA (Chassis)	same persons as ADTX
	Cable production and check (LV-ADTX)	RIKEN / our group
	Cable production and check (LV-PHENIX)	BNL?
	Cable production and check (FEE-ADTX)	RIKEN / our group
	Cable production and check (Optical-MRG)	RIKEN or BNL / our group
	Cable production and check (Optical-Clock)	RIKEN or BNL / our group
INSTALL	Itaru	
	Eric Johes	
	RPC Students <= 6 ?	
	Kyoto, Rikkyo	
	North	
	LV Rack	
	Assembly on the floor	Frank, Mike Lenz
	Platform Installation and Pluming, Powering	Frank, Mike Lenz, John T.
	LV Cables	
	LV Cables & Connectors Order	Paul
	Cable length measurement (North+South)	Paul, Itaru, Eric
	LV Cables & Connectors Assembly + Labelin	Frank, Eric
	LV Cables Bandle & Install	Itaru, Eric,Students (2 - 4)
	LV rack connection + Power test	Itaru,Eric,Students (1)
	LV power drop measurement + voltage tuning	Itaru, Eric, Students (2)
	LV Rack database	Itaru, Eric,Student(1-2)
	Optical Cables (IR)	
	Optical Cable Order (IR+RackRoom)	Steve
	Optical Cable Test, Labeling	Itaru, Students (2 - 3)
	Cable Bandling + Installation	Itaru, Eric, Students (2 -4)
	Optical patch connection + testing	Itaru, Students (2-3)
	Optical Cable database	Itaru, Students(1-2)
	Optical Cables (Rack Room)	
	Optical Cable Testing, Labeling	Itaru, Students(2-3)
	Optical Cables Bandling	Itaru, Students (1-2)
	Station-1 Cable Re-arrangement	Itaru, Students(2)
	FEE	
	Chassis Mount	Jimmy, Student (1)
	Pluming	John, Mike L.
	Chamber Cable Labeling and testing	Mibe, Student (1-2)
	Chamber Cables Install	Itaru, Mibe, Fukao
	Chamber Cable Database	Mibe, Student(1)
	Noise Test	Mibe, Karatsu, Student(2)
	ADTX install	Fukao
	Test Bench Setup	Karatsu, Student(1)
	South	
	Platform Installation and Plumming	Frank, Mike L.
	Cable Instllation + Test	Itaru, Students(2-4)

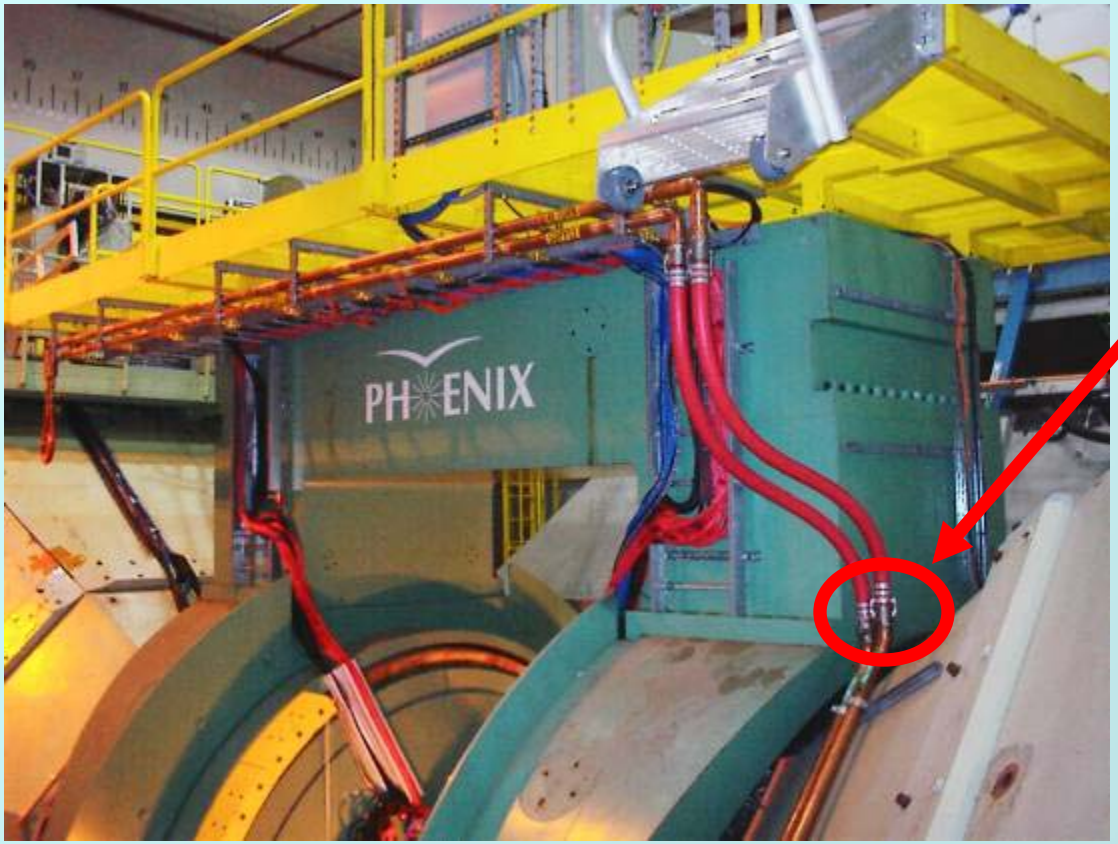
Space to setup test bench

- End of July
- QA boards
- MRG - LL1 test

MRG-LL1 test bench at BNL

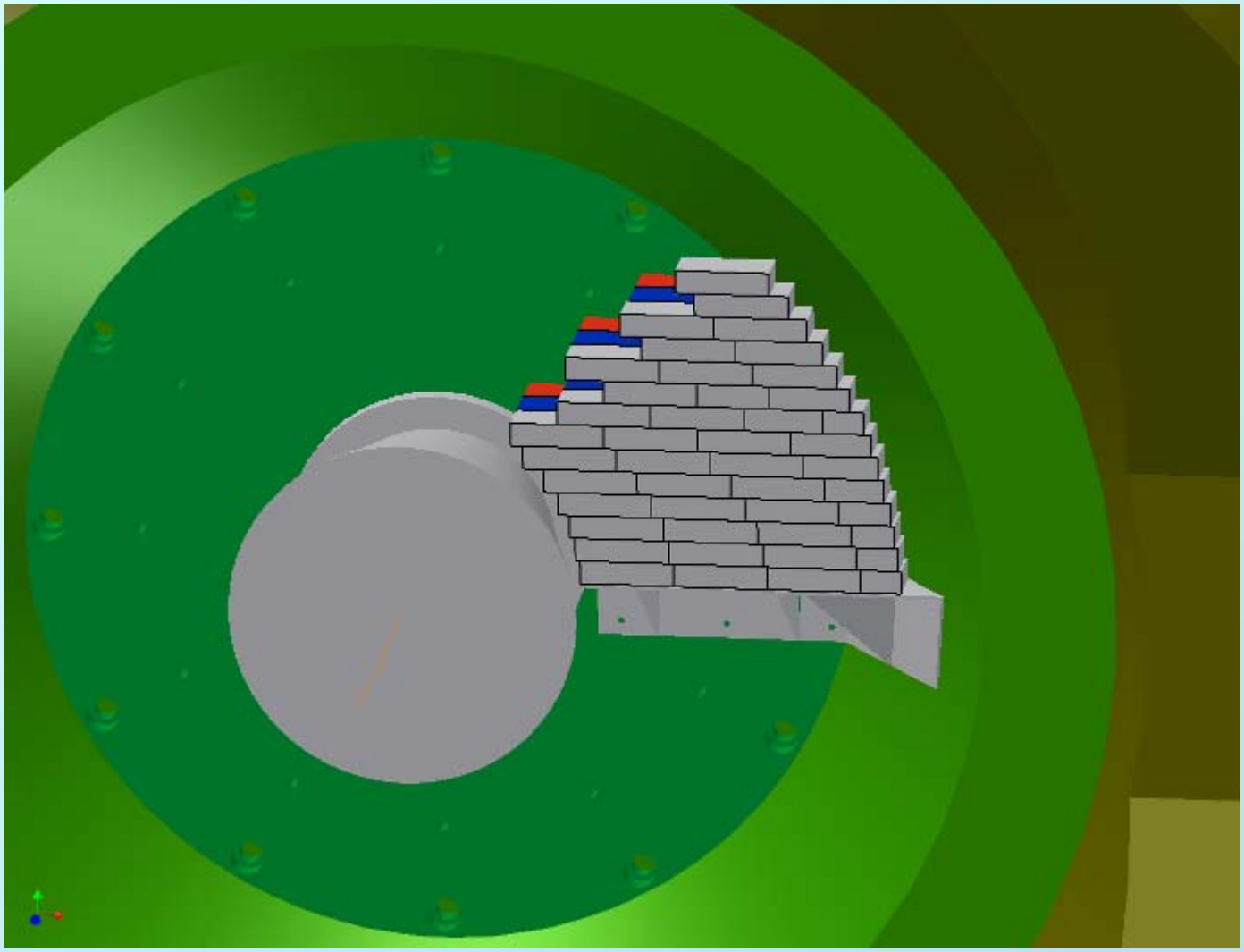


MuTrigger FEE Rack Utilities

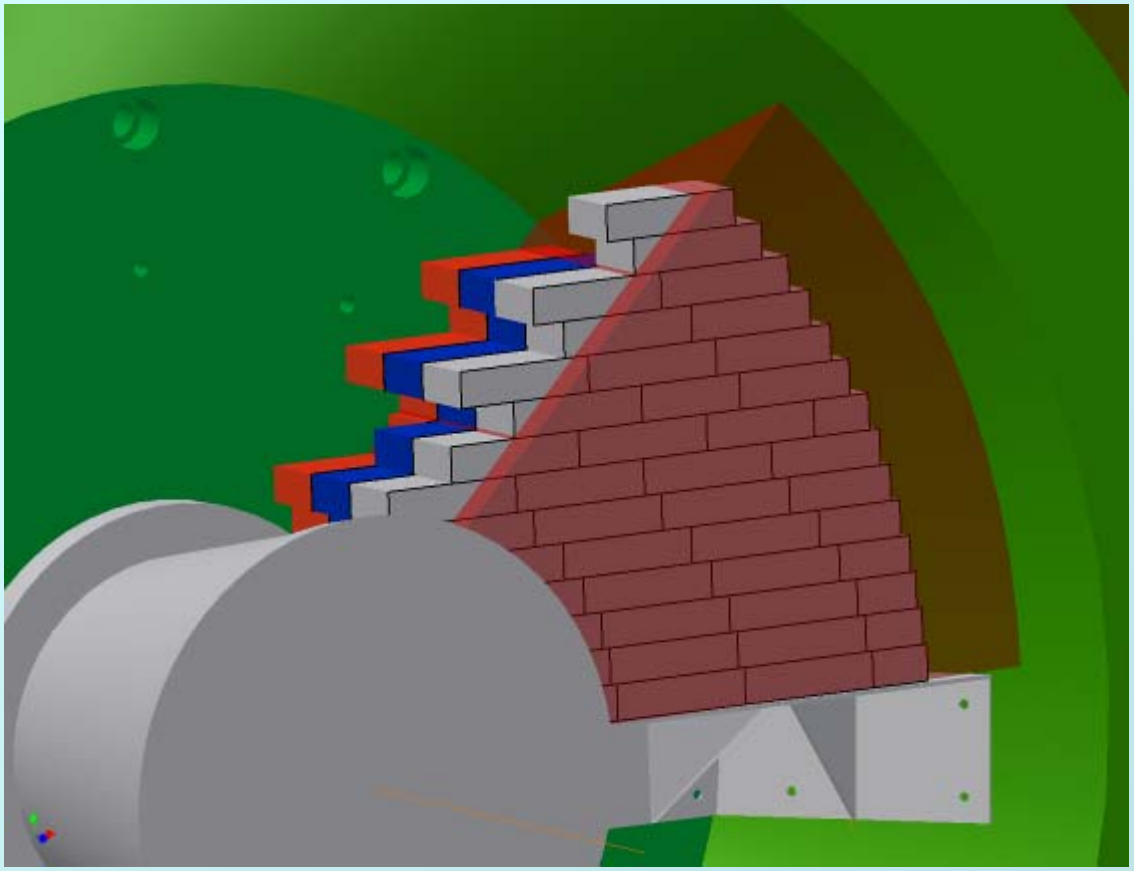


Need to install Tee's on supply and return lines: both s/b ¾ to supply Mu Trigger North rack and future rack

RPC Absorber Concept



RPC Absorber Concept



Uses 112 2x4x8 PB bricks, 22 need to be cut

12 inches deep (RPC group requsted 35 mm (13.8 in)

RPC Absorber Concept

Figures

FIGURE 1
Equivalent Stress

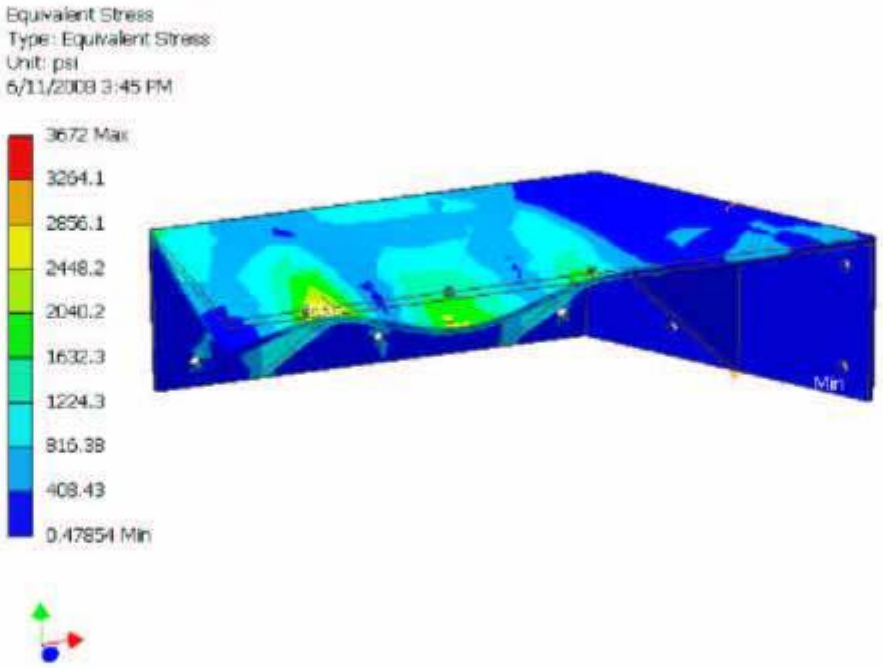
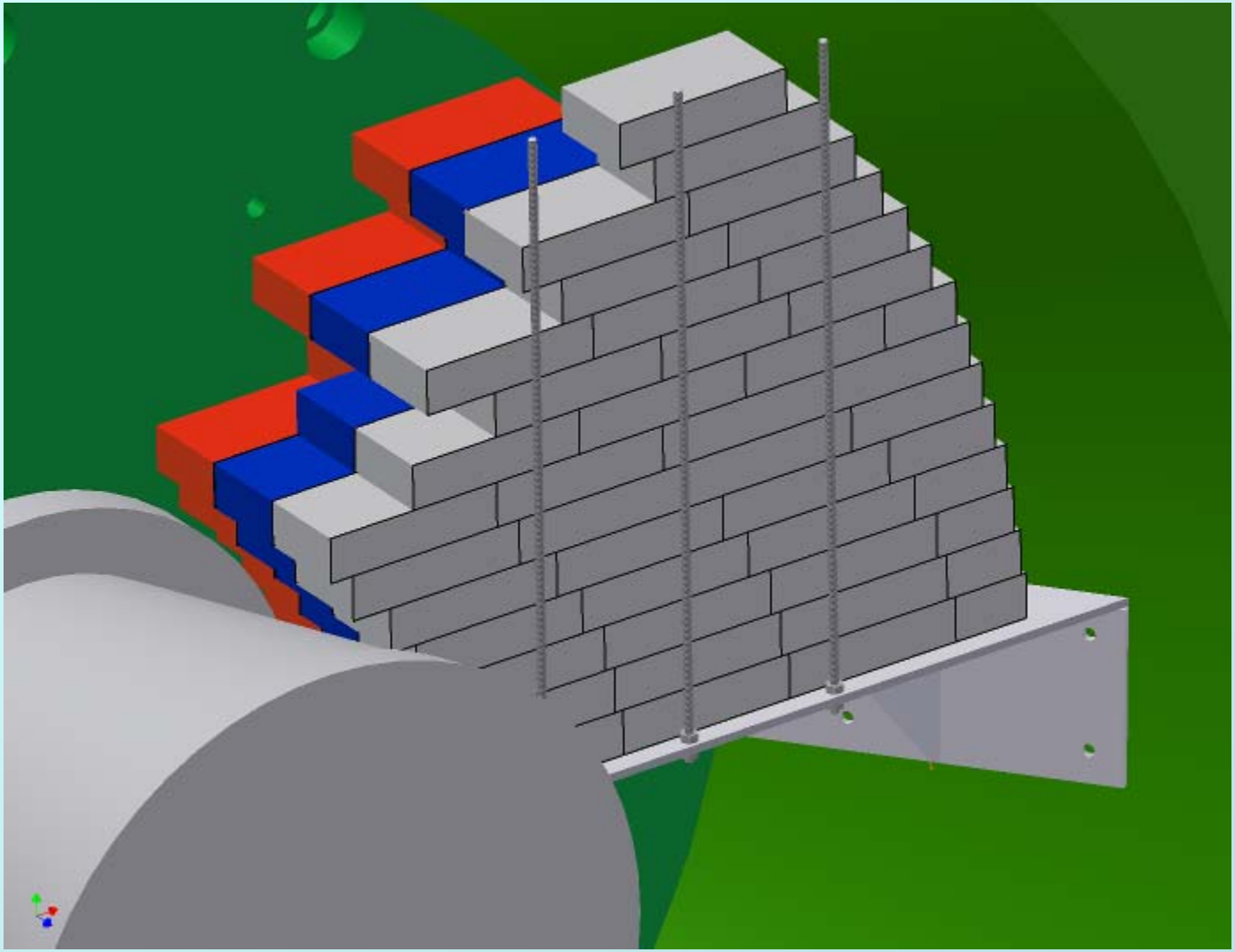
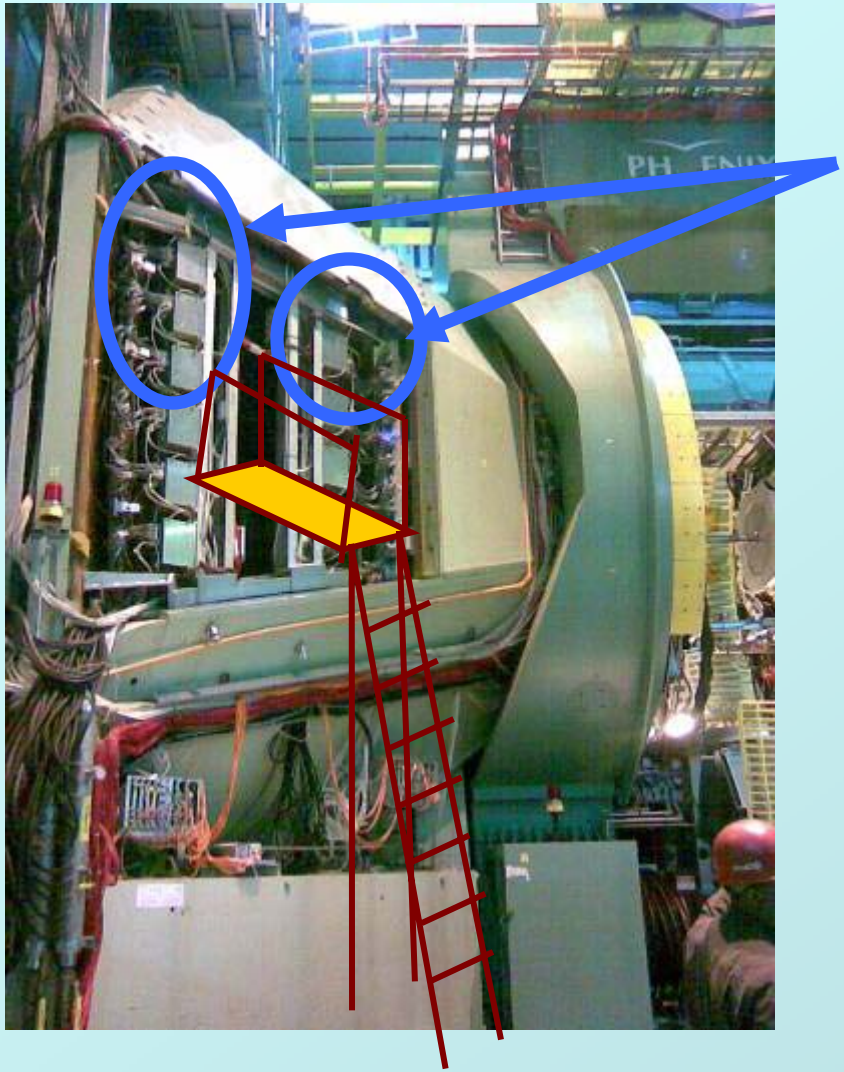


FIGURE 2
Maximum Principal Stress

RPC Absorber Concept



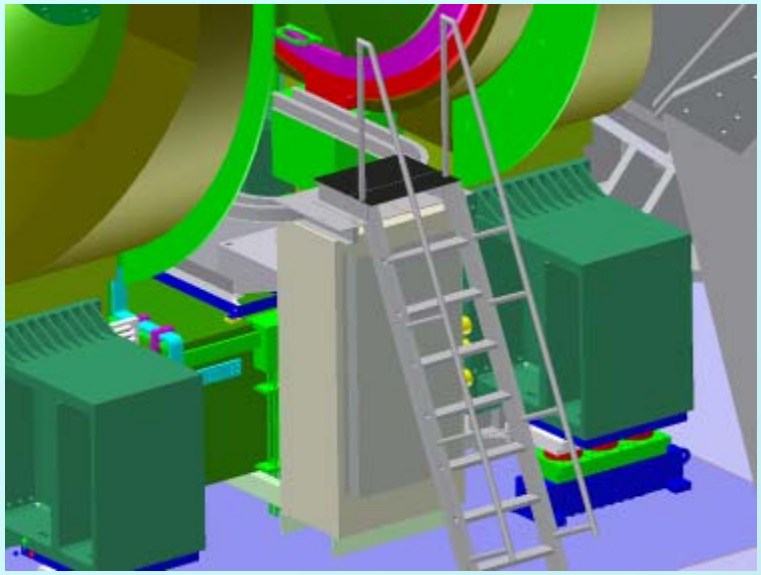
MuTrigger FEE upgrades in MMS in support of RPC prototypes

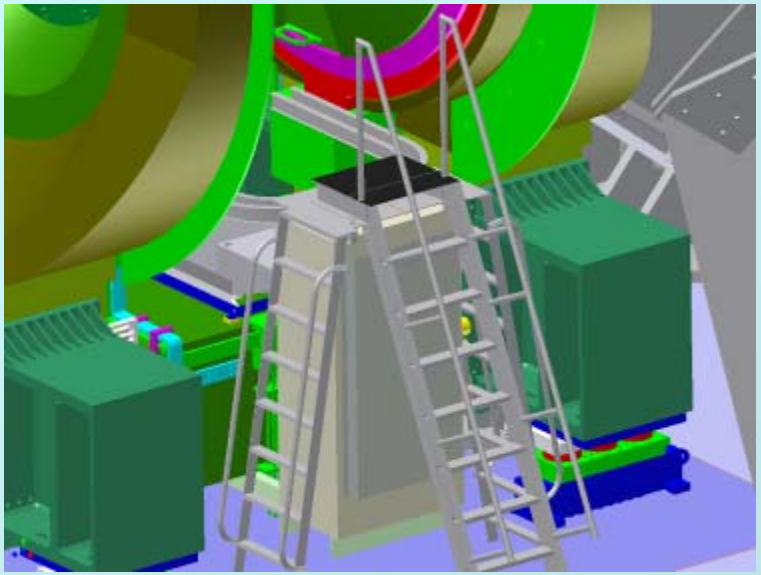


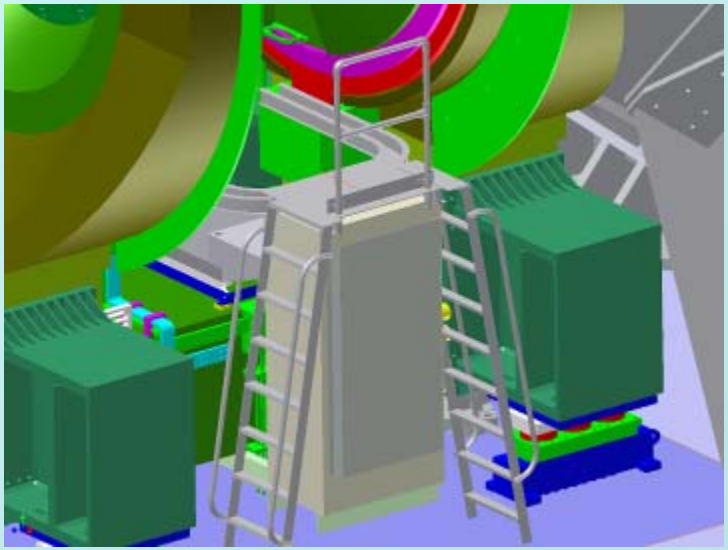
To match absorber and prototype RPC's, we need to install new FEE upgrades in these 5 MuTR FEE's

We will develop a plan to access these for installation and testing from a custom work platform (to be designed).

CM Access







Safety & Engineering Review Action Item Status

1. New Beampipe
2. Mu Trigger FEE upgrade installation
3. RPC Prototype Installation
4. MuTr MMN & Station 1 scaffolding
5. CM Crane

Shutdown '08 Electrician Work

1) Mixing house safety bucket rewiring

2) Install HVAC cooling and/or fan power circuits into RPC tent. Install fans/cooling units.

3) Run Power to new MuTrgr FEE racks on MMN and MMS

4) Install power and signal cable tray (ceiling suspended) for new DCM rack row – north of existing DCM racks.

5) Install power feeds to RPC north & south tunnel racks from IR power panels.

NOTE: *MuTr north power panel has no available breakers to feed north tunnel racks (south panel has spare breakers for use). More engineering analysis is required to determine if the north power panel should be increased in size or for installation of a sub panel branch can be accomplished.*

6) Assist in signal cable installation for MuTr/RPC upgrades as necessary.

7) Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
   a) Remove existing 15KVA transformer and install 45KVA unit.
   b) Install new (larger size) power cable from rack room to Central Magnet distribution breaker panels.

8) Install 120 volt AC power drops into new control room annunciator alarm rack (rack room).

Work Permit Requirements

- CM Crane Installation
- RPC Prototype Installation
- HBD re-installation
- PC1 Repairs

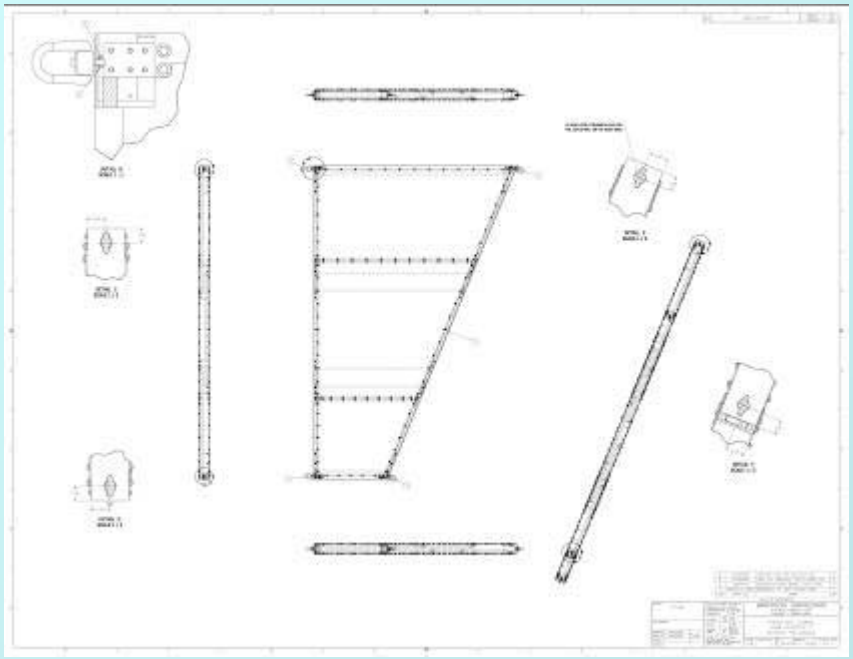
These WP's not needed until Sept.

(More will be needed – to be added to the list as appropriate)

RPC Prototype

Rec'd dim's and lifting points from Larry B.

Need to decide on prototype orientation and alignment for Sta 1 & 2 based on absorber location.



RPC Factory Support

(2) ~3 Ton thru-the-wall AC's available from CA-D

208V Need isolated electrical source

Supplemental portable 1-1/4 ton unit ordered

Storage Shelving: 2 additional sets rec'd. Assembly is done.

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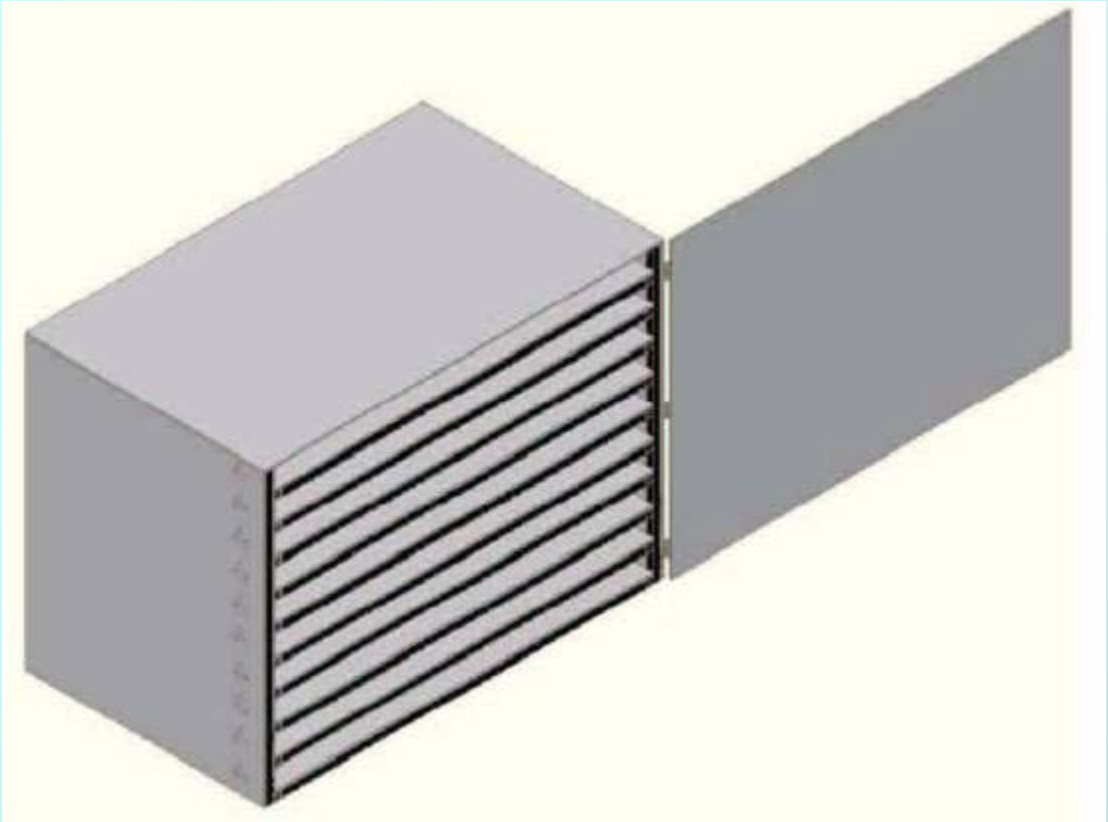
RPC Factory Support, cont.



Dark Current Test Stand

Specs:

Chamber gas flow (?)

HV supply 10,000 V

Hold time 72 hrs

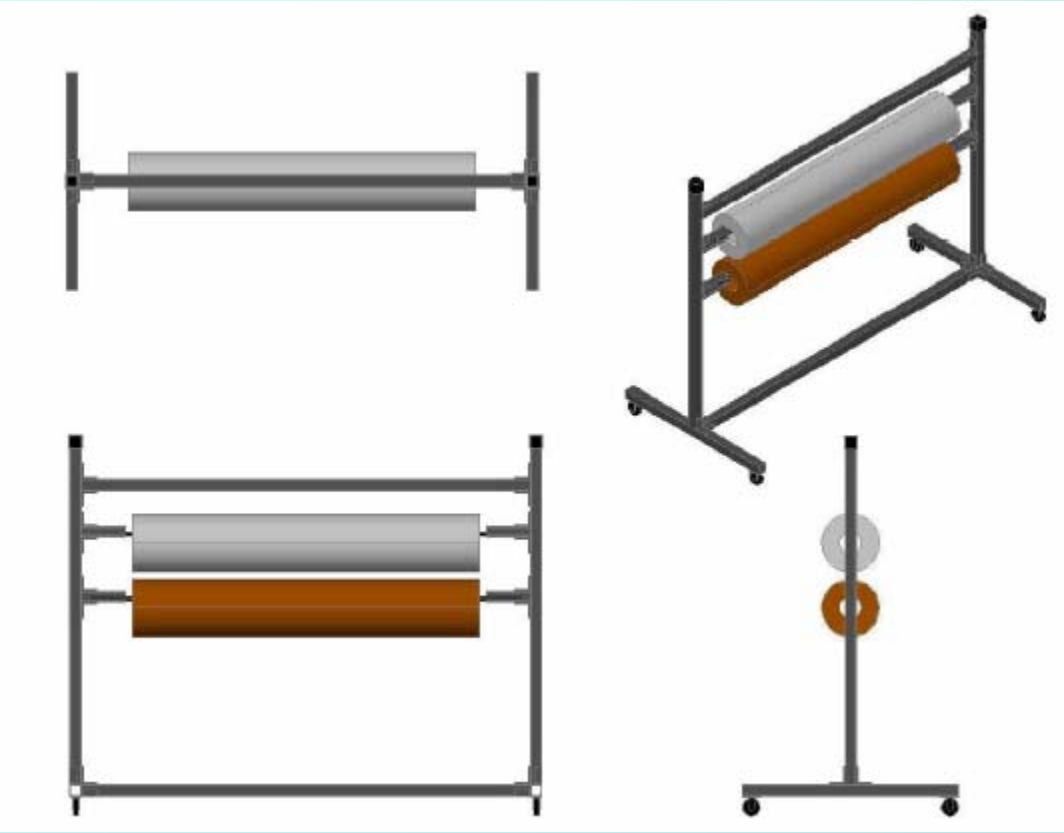
10 shelves each to hold a 76" x 50" (approx. max.) Gap module.

Trip points <20 μA

Current <1 μA

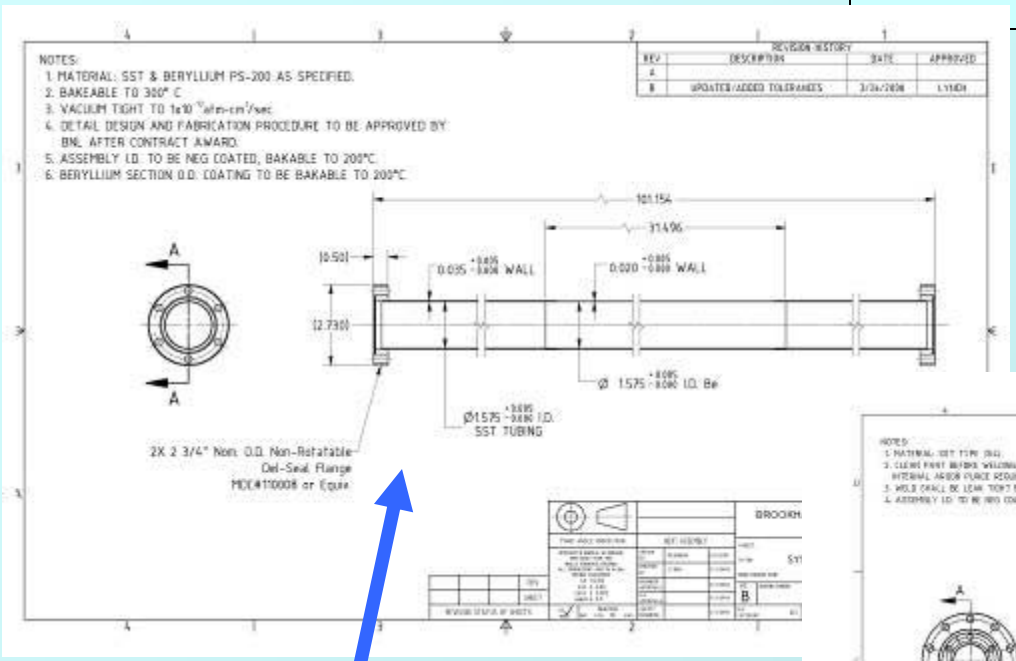
Shelf surface: flat and non-conductive

RPC Factory Support, cont.



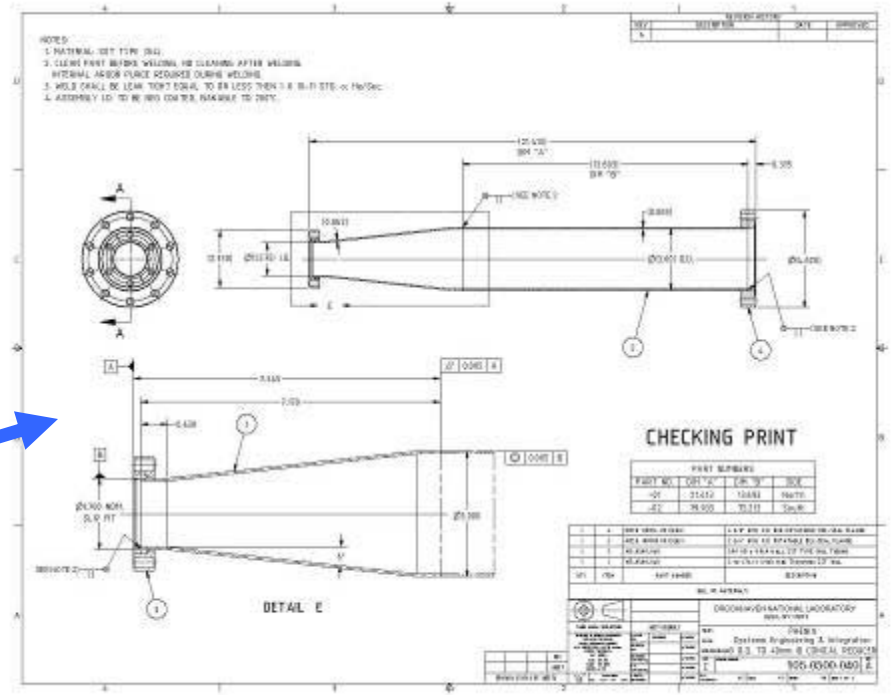
Foil dispenser

New Beampipe Design & Review



BP designs at SAES for NEG quote. Meet w/ Brush Wellman 5/19

SS/Be central beampipe



1-5/8" to 3" transitions

Drawings Done, C-A getting Quotes for NEG coating

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Safety, Security, etc.

1. During June and July DOE will be auditing BNL's Emergency Management. We all must be familiar with the actions we're expected to take should an emergency occur on site. BNL's Office of Emergency Management has developed a brochure containing basic information on roles, responsibilities, and actions that can help us respond appropriately when an unexpected event takes place. The brochure also includes a map showing the Lab's various evacuation zones, as well as a handy tear-out card where you can list your zone, your Local Emergency Coordinator, and other important information. Every employee will receive a copy of this brochure this week, and a pdf version is available online now at:
http://www.bnl.gov/oem/files/pdf/EmergBrochure.pdf

2. The following NY State website reviews methods to prevent Lyme's Disease:
http://www.health.state.ny.us/diseases/communicable/lyme/

3. ORPS declared yesterday: hydraulic oil spill ~15 gallons by road cleaner.

Where To Find PHENIX Engineering Info

He's Back!

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm