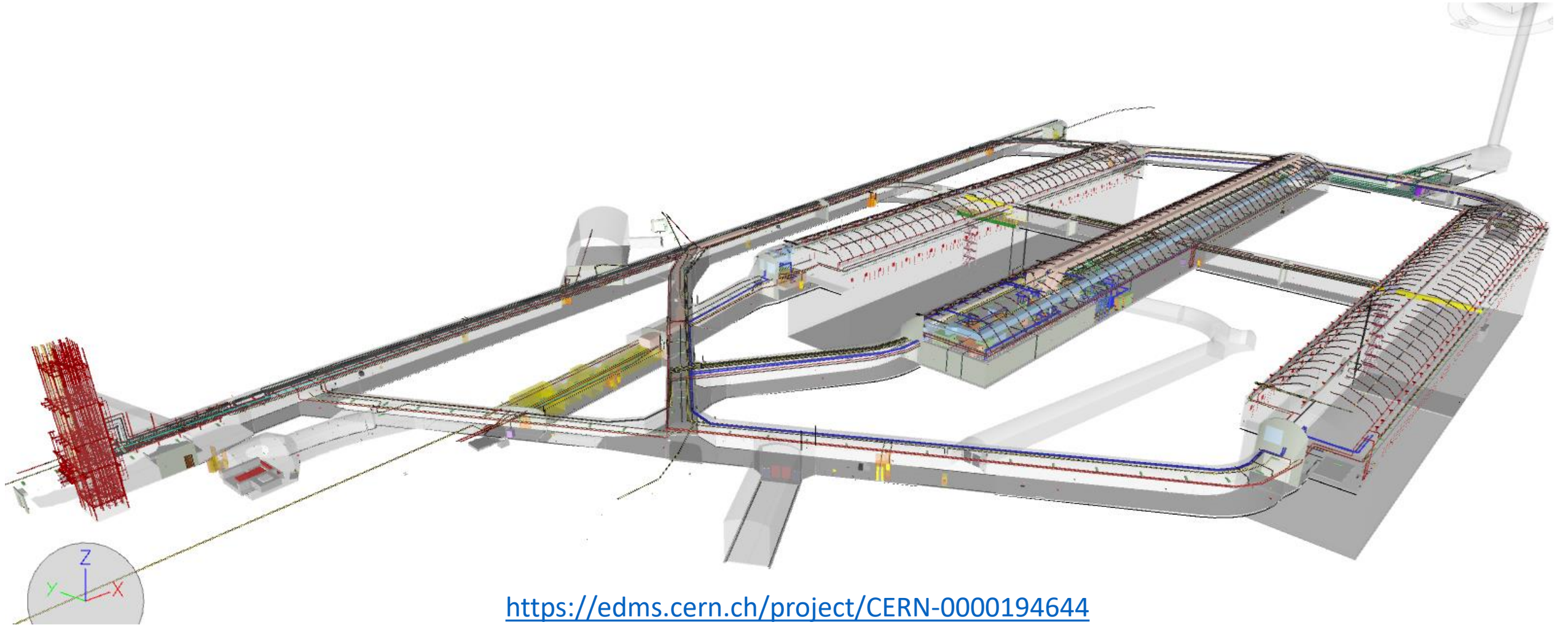


FS Facility Network

J Fowler

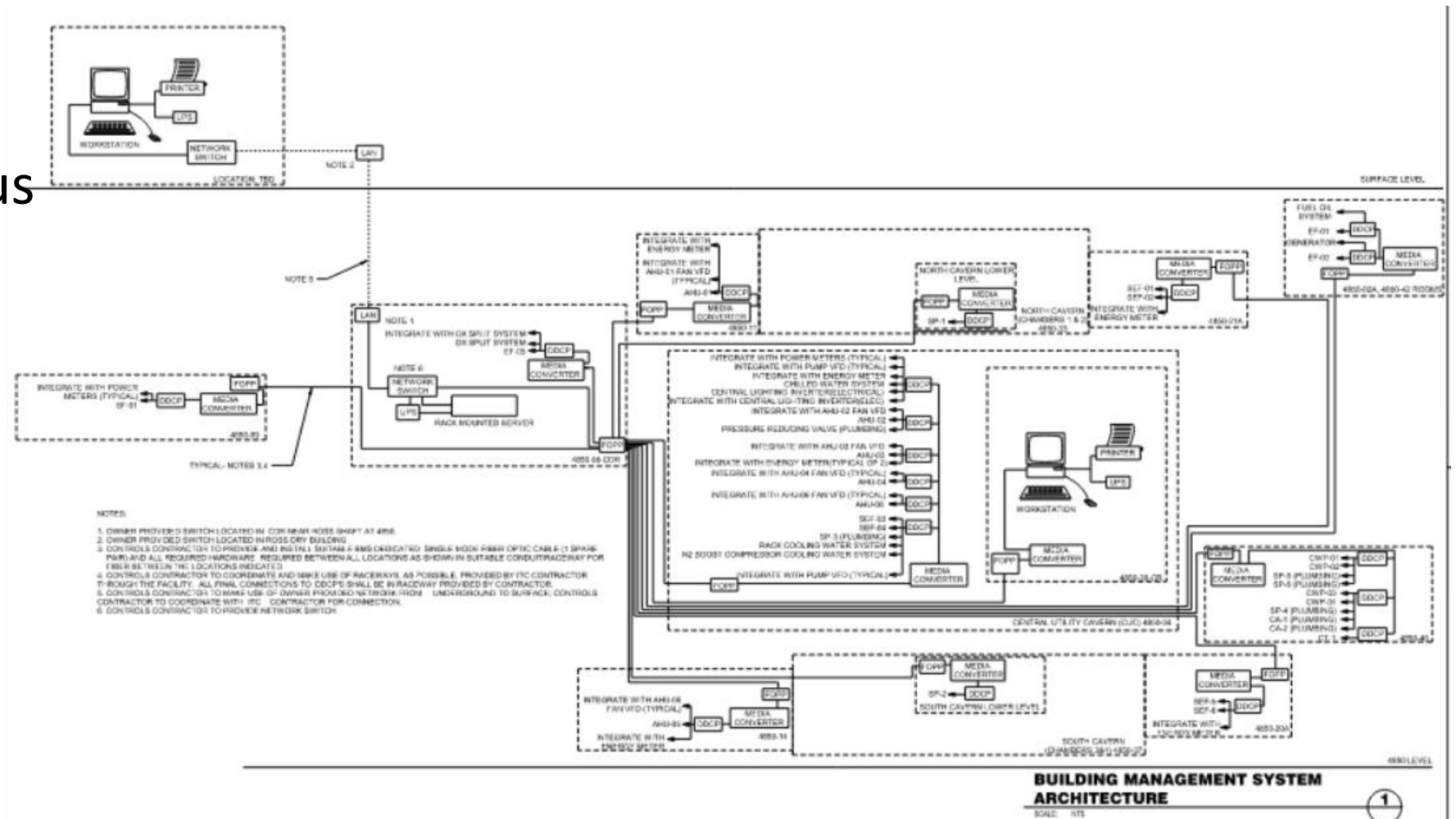
Current delivered caverns and infrastructure



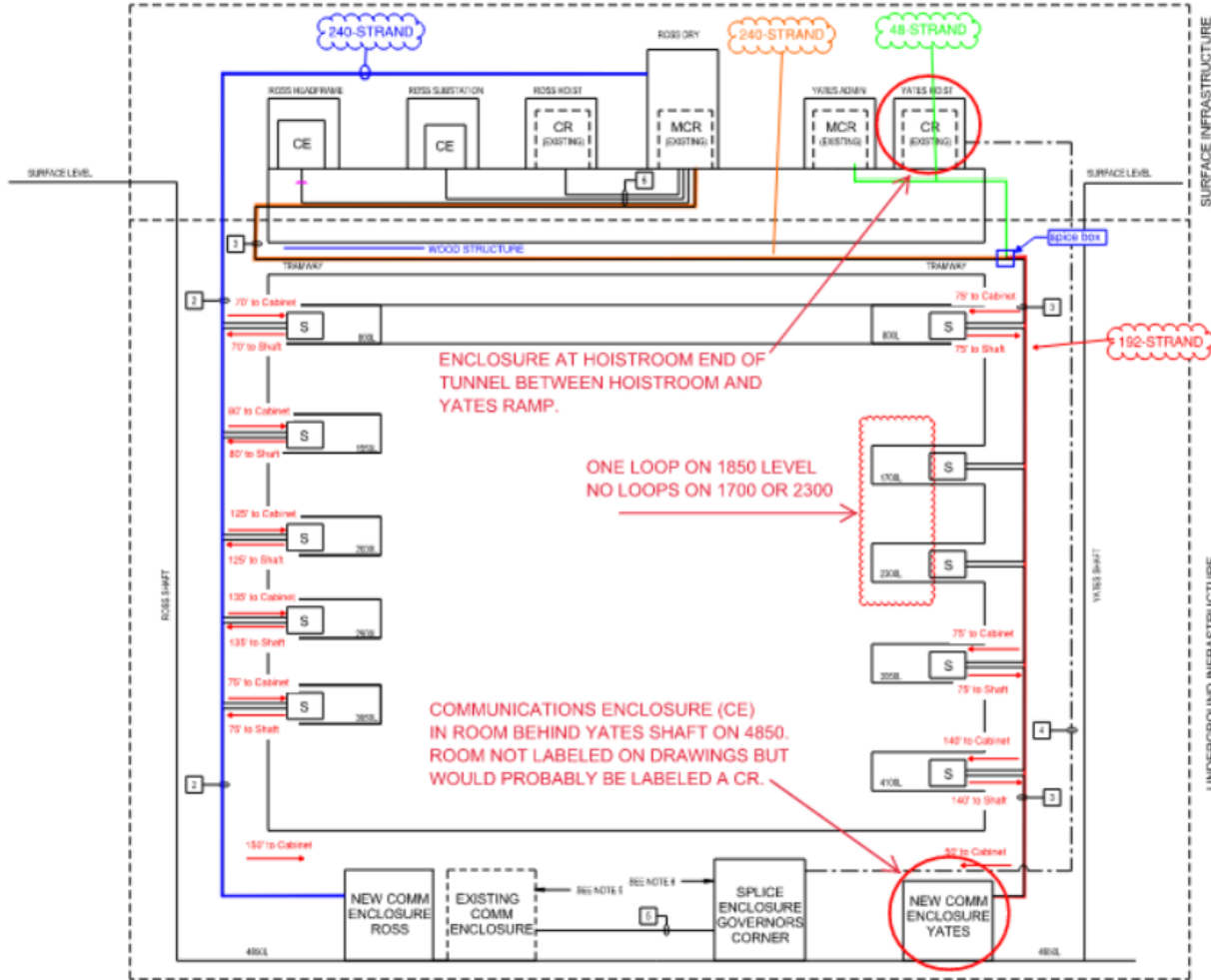
<https://edms.cern.ch/project/CERN-0000194644>

FS Facility network

- The FS network is mainly for electrical and mechanical controls of the various systems
- Will also be linked to FLS
- Specifications are available, but the specific equipment will not be fully understood until the contract is in place



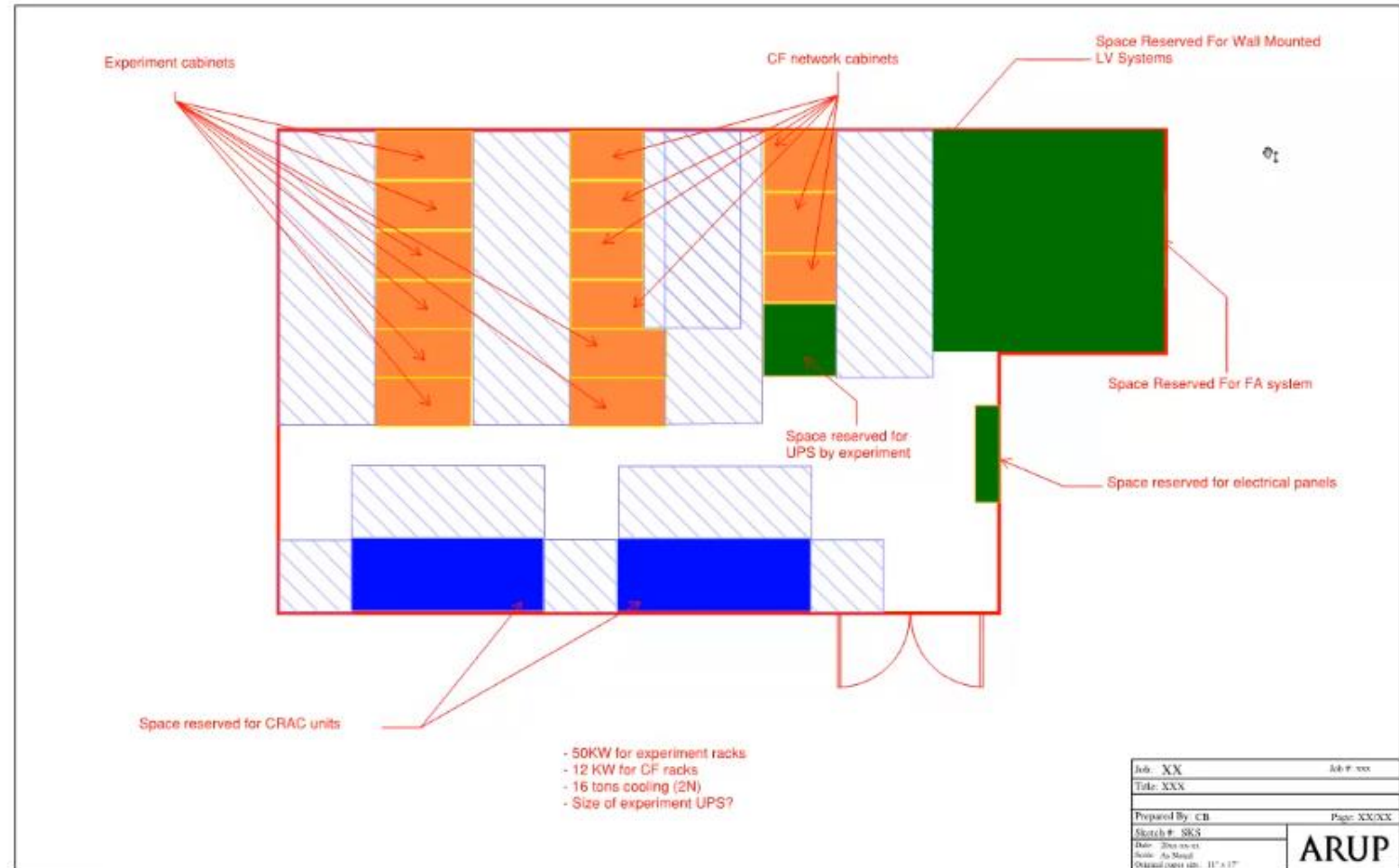
Fibers provided



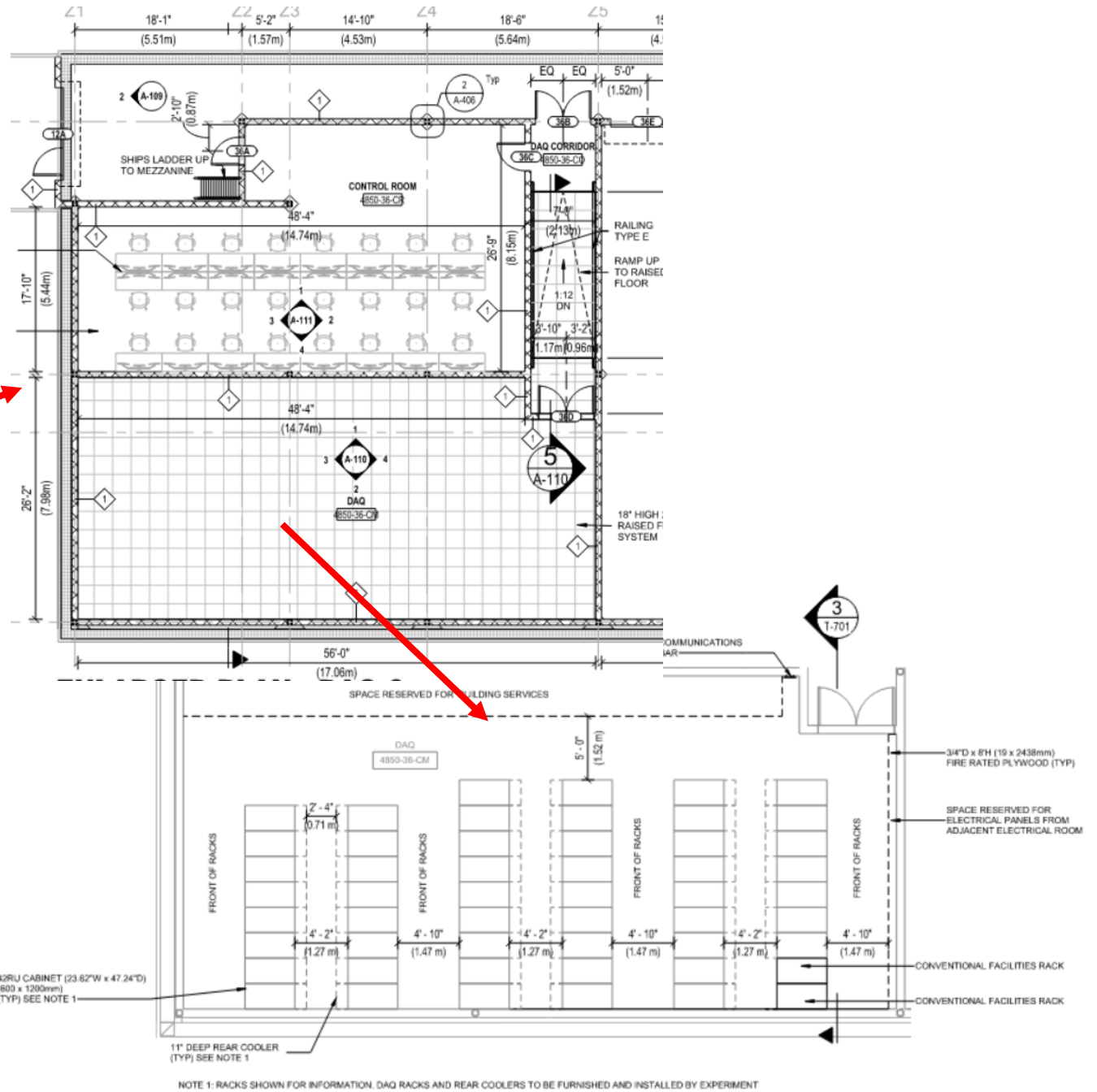
| CABLING SCHEDULE | | | |
|------------------|--|-----------|--|
| TAG # | CABLE NAME | UL RATING | CABLE TYPE |
| 01 | PRIMARY EXISTING LBNF FIBER OPTIC BACKBONE | - | (1) 192-STRANDS LSZH ARMORED RISER RATED SM FO CABLE |
| 02 | SECONDARY EXISTING LBNF FIBER OPTIC BACKBONE | - | (1) 192-STRANDS LSZH ARMORED RISER RATED SM FO CABLE |
| 11 | SM BACKBONE (FOR STRUCTURED CABLING SYSTEM) BETWEEN EXISTING COMM ENCLOSURES AT ROSS AND YATES SIDES AND CDR | CMP (FT6) | (1) 192-STRANDS LSZH ARMORED RISER RATED SM FO CABLE |
| 12 | SM BACKBONE (FOR STRUCTURED CABLING SYSTEM) EXTENSION BETWEEN CDR AND DAQ ROOM | CMP (FT6) | (2) 96-STRANDS LSZH SM FO CABLES |
| 13 | SM BACKBONE (FOR STRUCTURED CABLING SYSTEM) EXTENSION BETWEEN CDR AND TELECOMMUNICATIONS ENCLOSURES | CMP (FT6) | (1) 12-STRANDS LSZH SM FO BACKBONE |
| 31 | HORIZONTAL CABLING (FOR STRUCTURED CABLING SYSTEM) | CMP | CATEGORY 6A CABLE, NUMBER OF CABLES/JACKS AS INDICATED BY OUTLET ON PLAN |
| 32 | TWO-WAY STATION DEVICES CABLING | CMP | 2-PAIR UTP AWG 16 CABLES |
| 41 | SM PATCH CORD | CMP | 2-STRAND SM FIBER CORD PER REQUIRED ACTIVE CONNECTION |
| 42 | COPPER PATCH CORD | CMP | CATEGORY 6A, 4-UTP CORD PER REQUIRED ACTIVE CONNECTION |

Surface Main Communication Room

- There have been concerns regarding the space in the surface MCR in the Ross Dry Basement
- Some space has been added and the equipment rearranged



Current DAQ in CUC



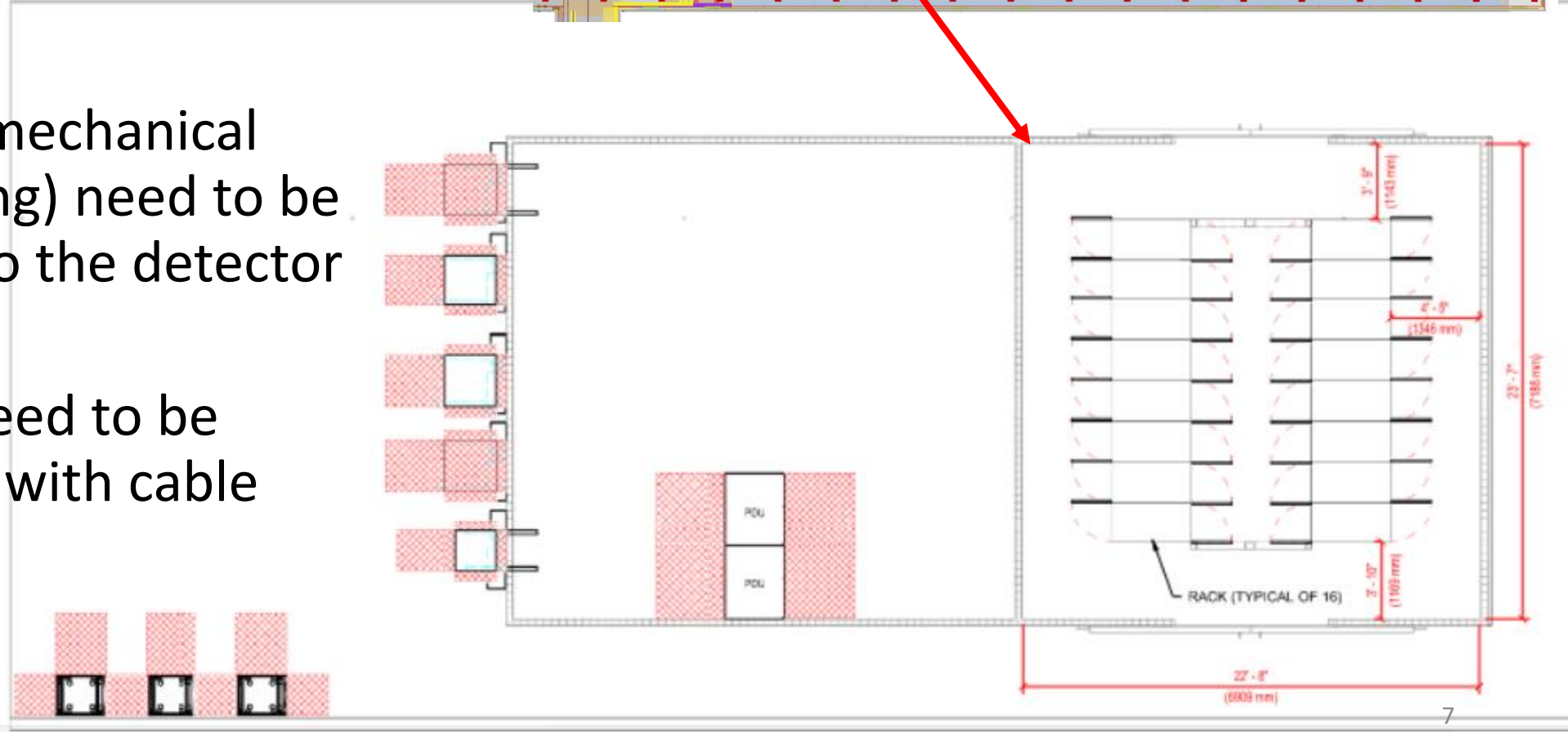
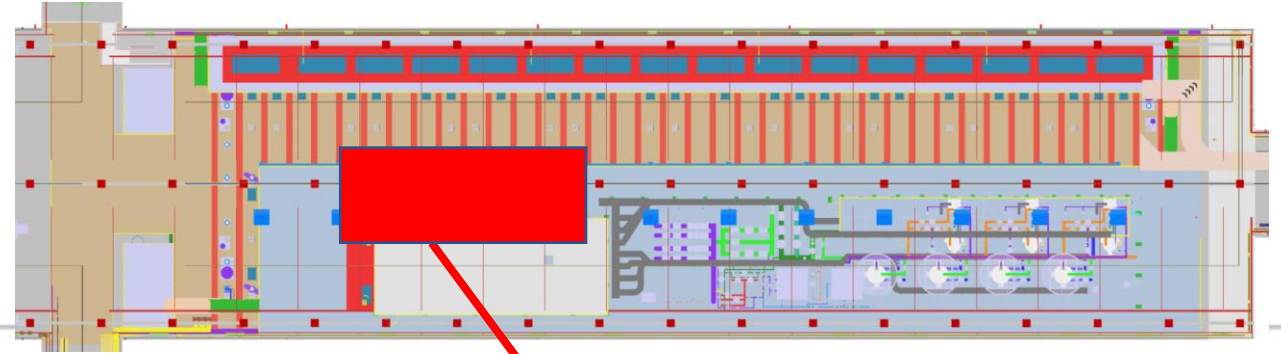
DAQ ROOM LAYOUT

SCALE: 3/16" = 1'-0"

1

New DAQ location on cryogenics mezzanine

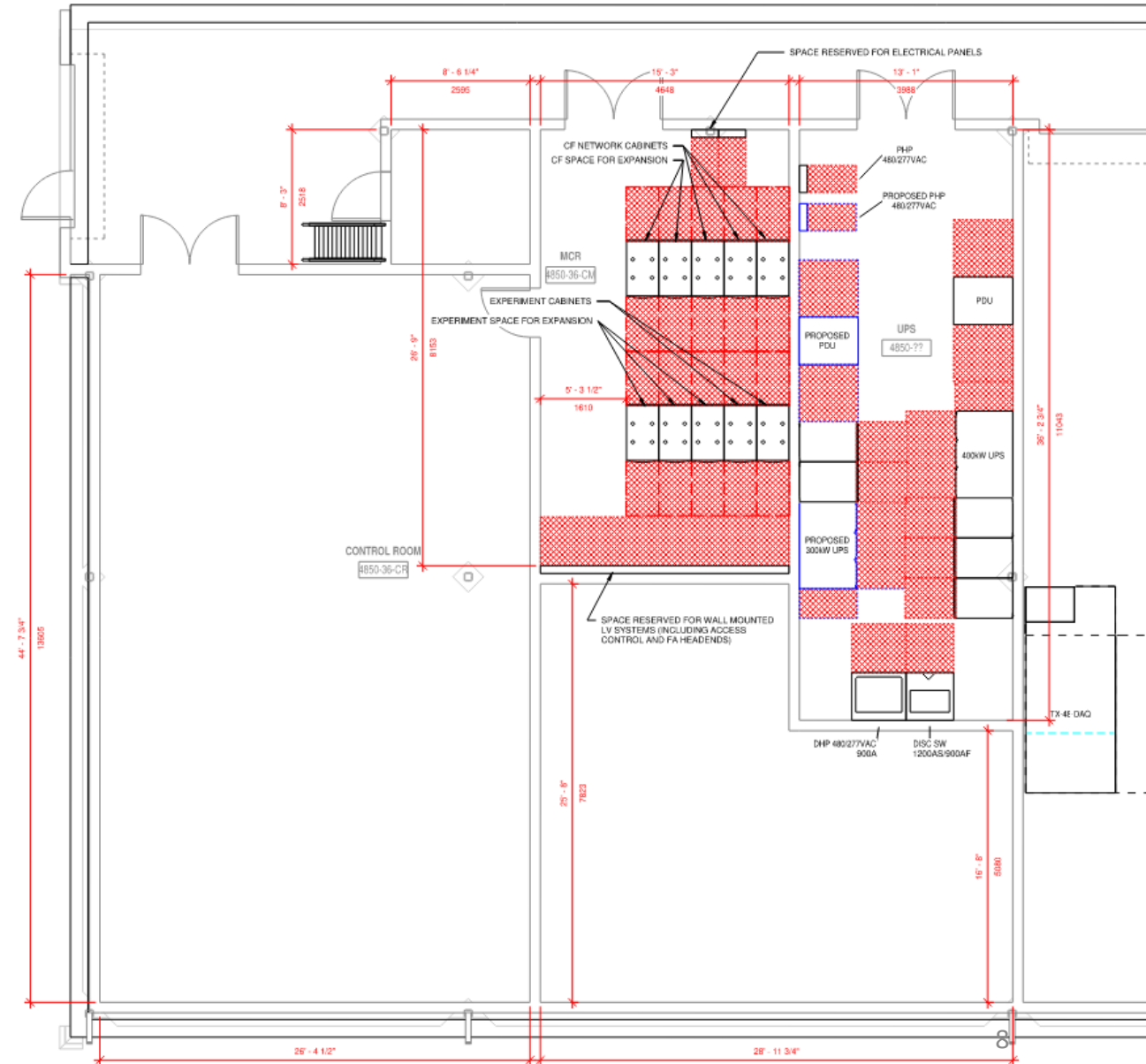
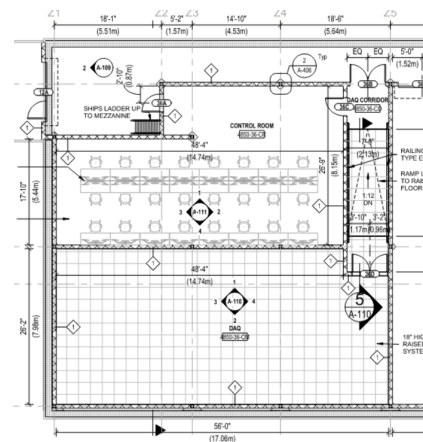
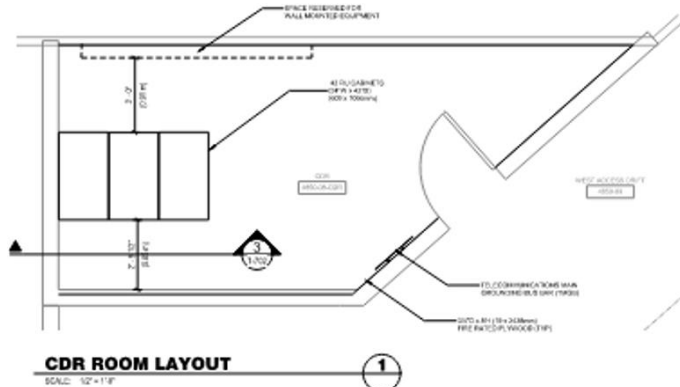
- DAQ racks will be reallocated to the barracks on the cryogenic mezzanine for each detector
- Electrical and mechanical services (cooling) need to be redistributed to the detector caverns
- Fiber counts need to be updated along with cable trays



Redesign of CUC DUNE space

- Centralization of all networking equipment into the CUC space
- Unifies facility networking with experiment networking equipment
- Separate room for UPS for DAQ

Underground CDR



Back ups

Approximate footprint of rearranged DUNE space in CUC

