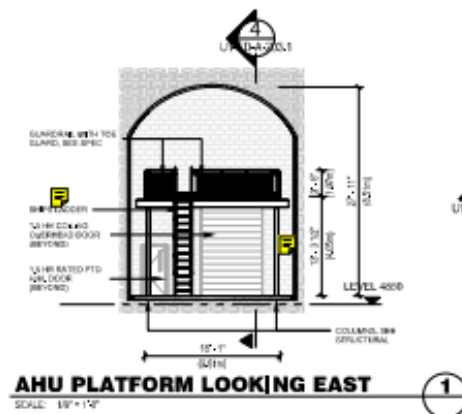
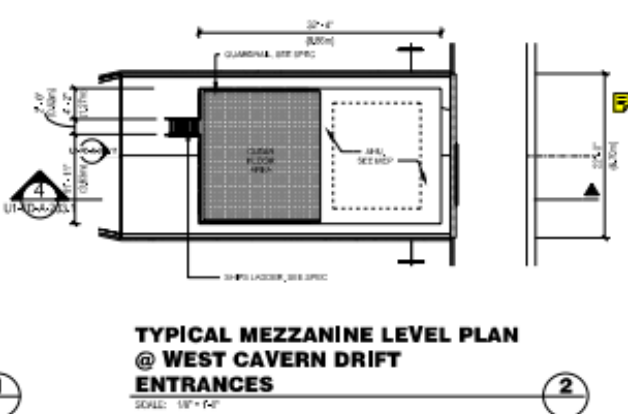


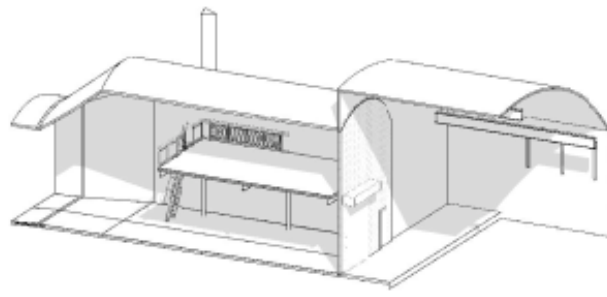
West cavern 1 access



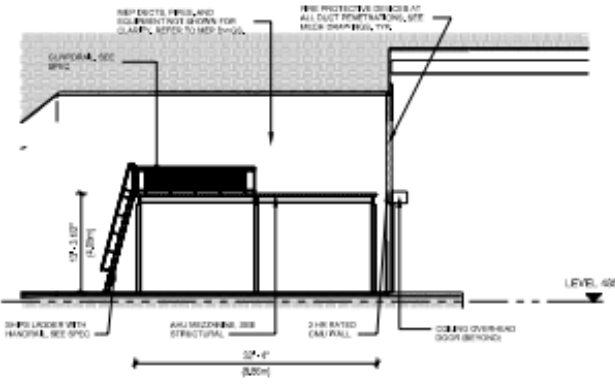
**AHU PLATFORM LOOKING EAST**  
SCALE: 1/8" = 1'-0"



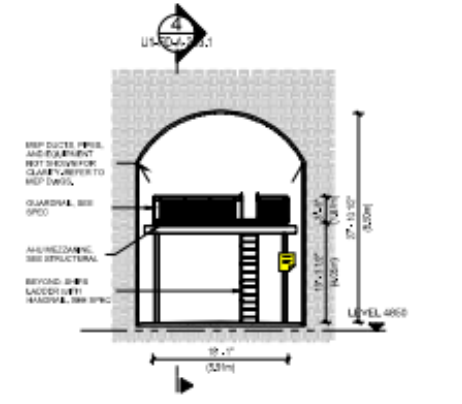
**TYPICAL MEZZANINE LEVEL PLAN @ WEST CAVERN DRIFT ENTRANCES**  
SCALE: 1/8" = 1'-0"



**AHU PLATFORM 3D VIEW**  
SCALE: N/A



**DRIFT MEZZANINE SECTION**  
SCALE: 1/8" = 1'-0"



**AHU PLATFORM LOOKING WEST**  
SCALE: 1/8" = 1'-0"

**NOTES:**

- MEP DUCTS AND EQUIPMENT GENERALLY NOT SHOWN FOR CLARITY, SEE MEP AND STRUCTURAL DWGS FOR ALL EQUIPMENT, DUCT, CONDUIT LOCATION, AND FOR STRUCTURAL ELEMENTS.
- ALL PARTITIONS SHALL BE 1/2 HR RATED PTD. CONCRETE MASONRY LIKE TYPE WALL.
- ALL DOORS TO BE 1/2 HR RATED HOLLOW METAL, TYPE BUNG DOORS OR 1 1/2 HR RATED SOLID DOORS.
- SEALS OF DOORS OVER OPPOSIT DETECTOR SETS TO BE PROVIDED BY LEAD EXPERIMENT TEAM.
- ALL STRUCTURAL STEEL FRAMES FOR MEZZANINE STRUCTURES INCLUDING POSTS/COLUMNS, BEAMS, AND METAL DECKING TO RECEIVE 2 HR COVERAGE OF SPRAY INS PROTECTANT.

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NO.	DESCRIPTION	DATE

**ARUP**  
100 CANAL STREET SUITE 1400 NEW YORK, NY 10014-2698  
TEL: 212 904 7000 FAX: 212 904 7001  
www.arup.com

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SCALE: 1/8" = 1'-0"

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Long-Duration Neutron Facility

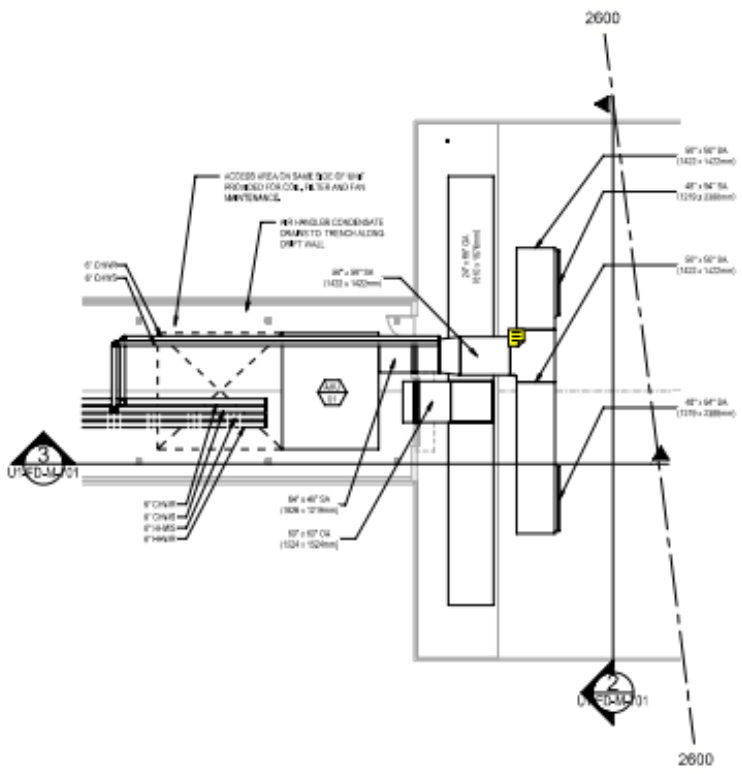
DESIGNED BY	D. MANTY, D. KLONIS	DOB
DRAWN BY	S. KLOKIS	DOB
CHECKED BY	D. MANTY	DOB

**LBNF - FSCF - BSI**  
**UNDERGROUND ARCHITECTURAL**  
**EXPERIMENT CHAMBER WEST DRIFT ENTRANCES**

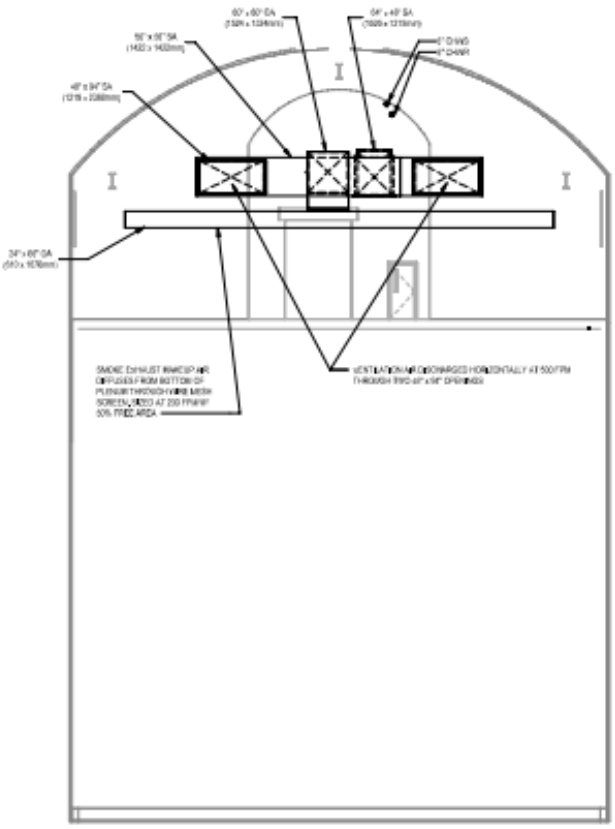
DRAWING NO. **15-1-6 K U1-FD-A-203.1** REV. 1

07/27/15

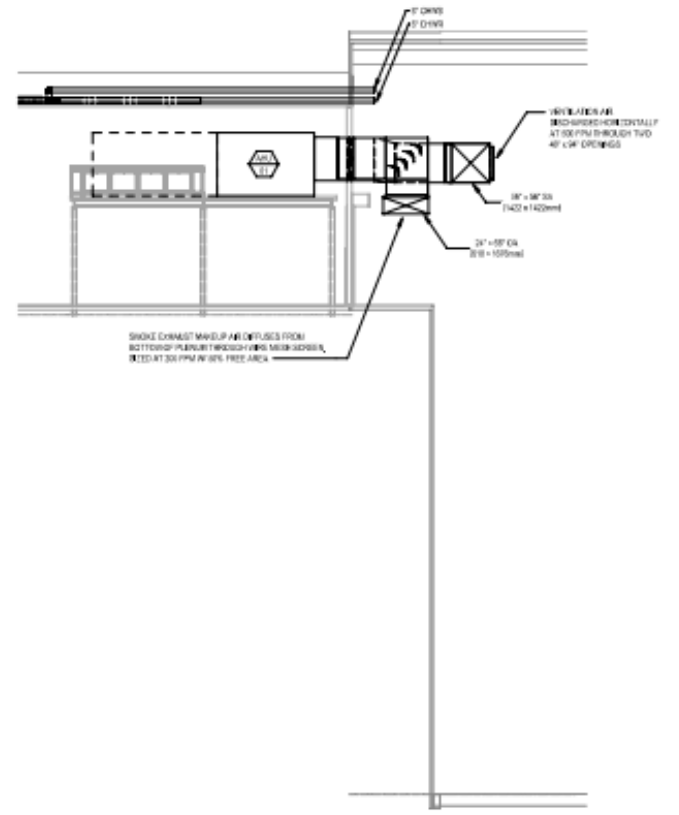
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**4850-11 PART PLAN**  
SCALE: 1/8" = 1'-0"  
1



**4850-33 CROSS SECTION**  
SCALE: 1/8" = 1'-0"  
2



**4850-33 LONG SECTION**  
SCALE: 1/8" = 1'-0"  
3

NO.	DATE	DESCRIPTION	BY	CHKD.

**ARUP**  
15200 Ave. Q  
 77 North Street, New York, NY 10038, 212 904 8600  
 arup.com

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**SCALE:**  
 1/8" = 1'-0"

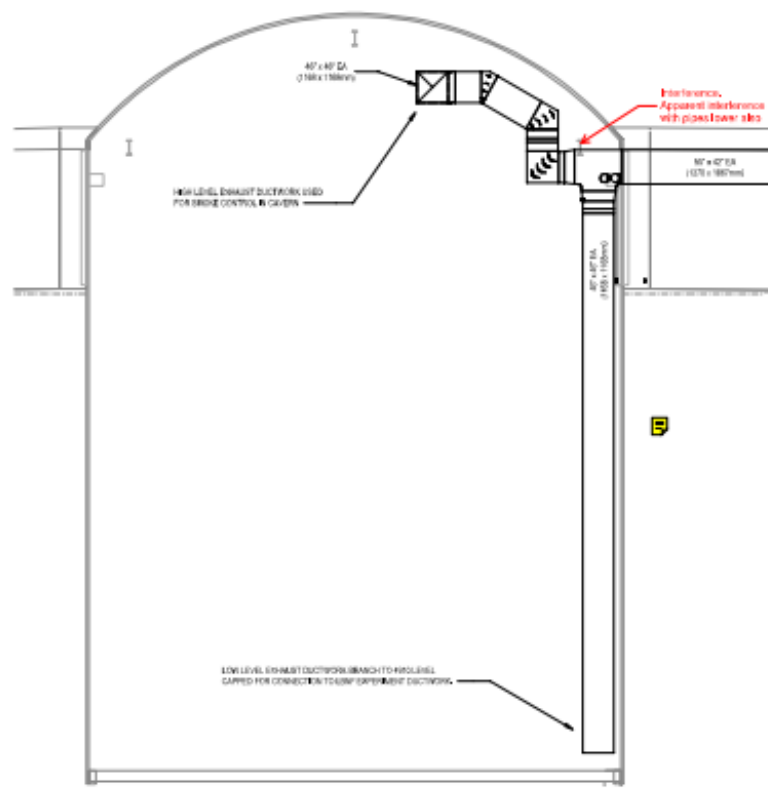
<b>Fermilab</b> Long-Baseline Neutrino Facility		
DESIGNED	CB	ARUP
DRAWN	SS	ARUP
CHECKED	RP	ARUP

**LBNE-FSCF-BSI**  
**UNDERGROUND, MECHANICAL**  
**PART PLANS SHEET 1**  
**PHASE 1**

DRAWING NO. **15-1-6K U1-FD-M-701** REV. 1

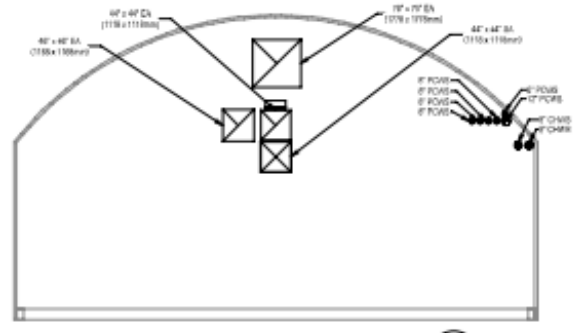
07/27/16

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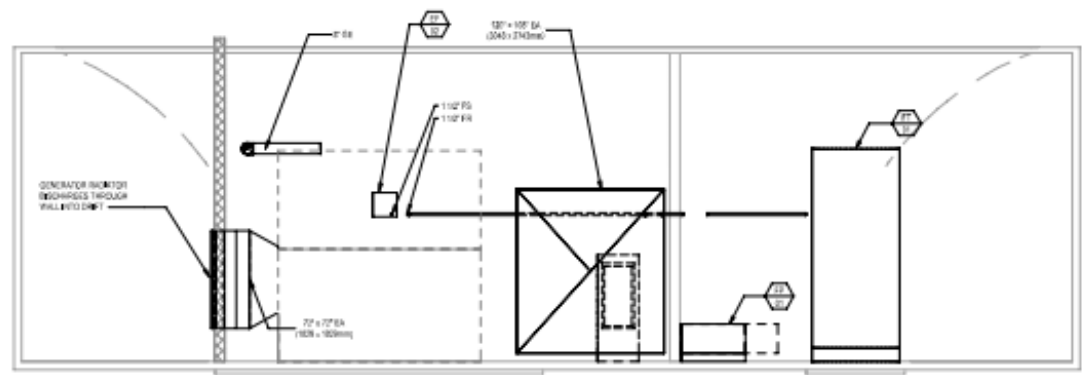
**4850-33 SECTION**  
SCALE: 1/8" = 1'-0"

1



**4850-36 SECTION**  
SCALE: 1/8" = 1'-0"

2



**4850-42 SECTION**  
SCALE: 1/8" = 1'-0"

3

NO.	DATE	DESCRIPTION
1	02/27/18	ISSUE FOR SUBMISSION

**ARUP**  
250 Madison Avenue, New York, NY 10017-1000  
 Davis Brody Bond  
 Architects and Planners

SCALE:  
 1/8" = 1'-0"

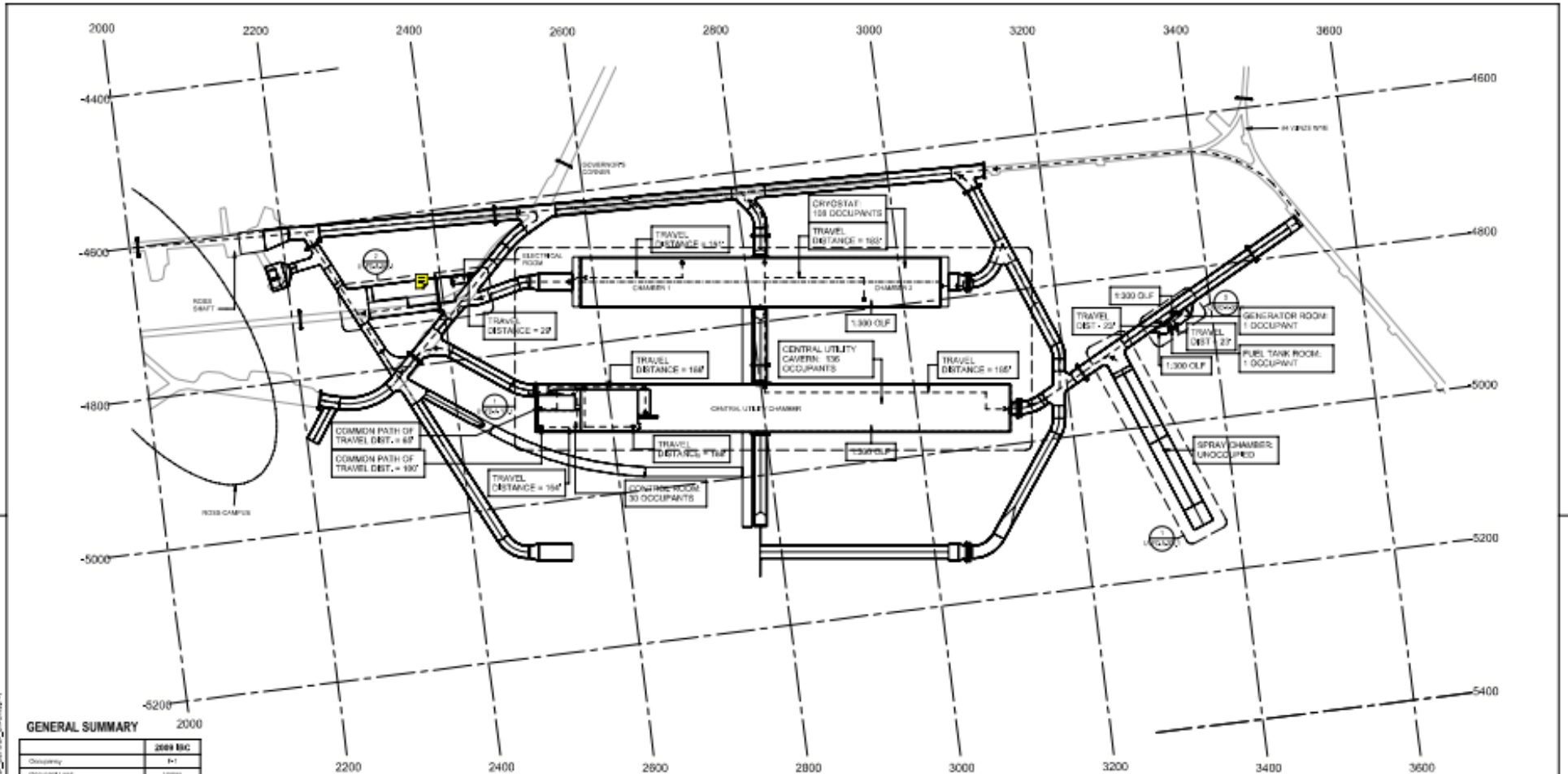
**Fermilab**  
 Long-Baseline Neutron Facility

DESIGNED	CB	ARUP
DRAWN	SS	ARUP
CHECKED	RP	ARUP

**LBNF-FSCF-BSI**  
 UNDERGROUND, MECHANICAL  
 SECTIONS SHEET 2  
 PHASE 1

DESIGN NO. **15-1-6K U1-FD-M-705** REV. 1

07/27/18



**GENERAL SUMMARY**

	2000 BIC
Occupancy	B-1
Occupant Load	Various
# of Exits from Space	Various
Exit Signation	NO*
Travel Distance	257'
Clear Exit	87'
Common Path	557'
Corridor Width	46" - 60"
Door Width	32" - 48"
Door Width	48" - 60"
Ramp Width	1-12'

**FIRE PROTECTION SUMMARY**

	REQUIRED	PROVIDED	SOURCE
Automatic Fire Alarm System	NO	YES	MC 2000 Section 007
Smoke System	NO	YES	MC 2000 Section 003
Portable Fire Extinguisher	YES	YES	MC 2000 Section 006

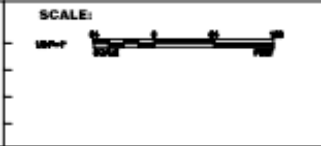
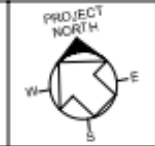
**NOTES:**

- SEE NOT ON-SITE FOR ALL EQUIPMENT, EXCIT. CONDUIT LOCATIONS.
  - ALL WALLS SHALL BE 2 HR RATED PTC/200 TYPE WALLS.
  - ALL DOORS TO BE 1.5 HR RATED HOLOW METAL TYPE SWING DOORS OR 1 HR RATED ROLL UP DOORS.
  - ALL DOORS OR EXITS OVER CRYOSTAT OBSERVATION YES TO BE PROVIDED BY LBNF EXISTING BY TOWER.
  - THE OCCUPANT LOADS SHOWN HERE ARE BASED ON THE 2000 BIC, THE ACTUAL OCCUPANT LOADS DURING NORMAL OPERATION ARE TO BE PROVIDED BY LBNF.
- EXPRESS PATH
  - - - - - 2 HOUR RATED WALL
  - 2 HOUR RATED DOOR
  - EXISTING BLAST RESISTANT DOOR
  - EXISTING BLAST RESISTANT WALL
  - EXISTING FIRE DOOR
  - EXISTING SECURITY DOOR

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NO.	REVISION	DATE	DESCRIPTION
1	ISSUED FOR TENDER		

**ARUP**  
ARCHITECTS  
 11 FLOOR, 1100 N. ZEEB ROAD, SUITE 1100, CHICAGO, IL 60614  
 DAVIS BRODY BOND  
 Architects and Planners



**Fermilab**  
 Long-Duration Neutron Facility

DESIGNED	D. MARTY, D. KLOKIS	DOB
DRAWN	B. KLOKIS	DOB
CHECKED	D. MARTY	DOB

**LBNF - FSCF - BSI**  
 UNDERGROUND  
 ARCHITECTURAL  
 EXCAVATION AND EGRESS PHASE 1

DRAWING NO. **15-1.6K U1-FD-A-003.1** REV. 1

07/27/18