Emergency Shutoffs for the LAPD Experiment Located at PC4

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Version 11.26.12
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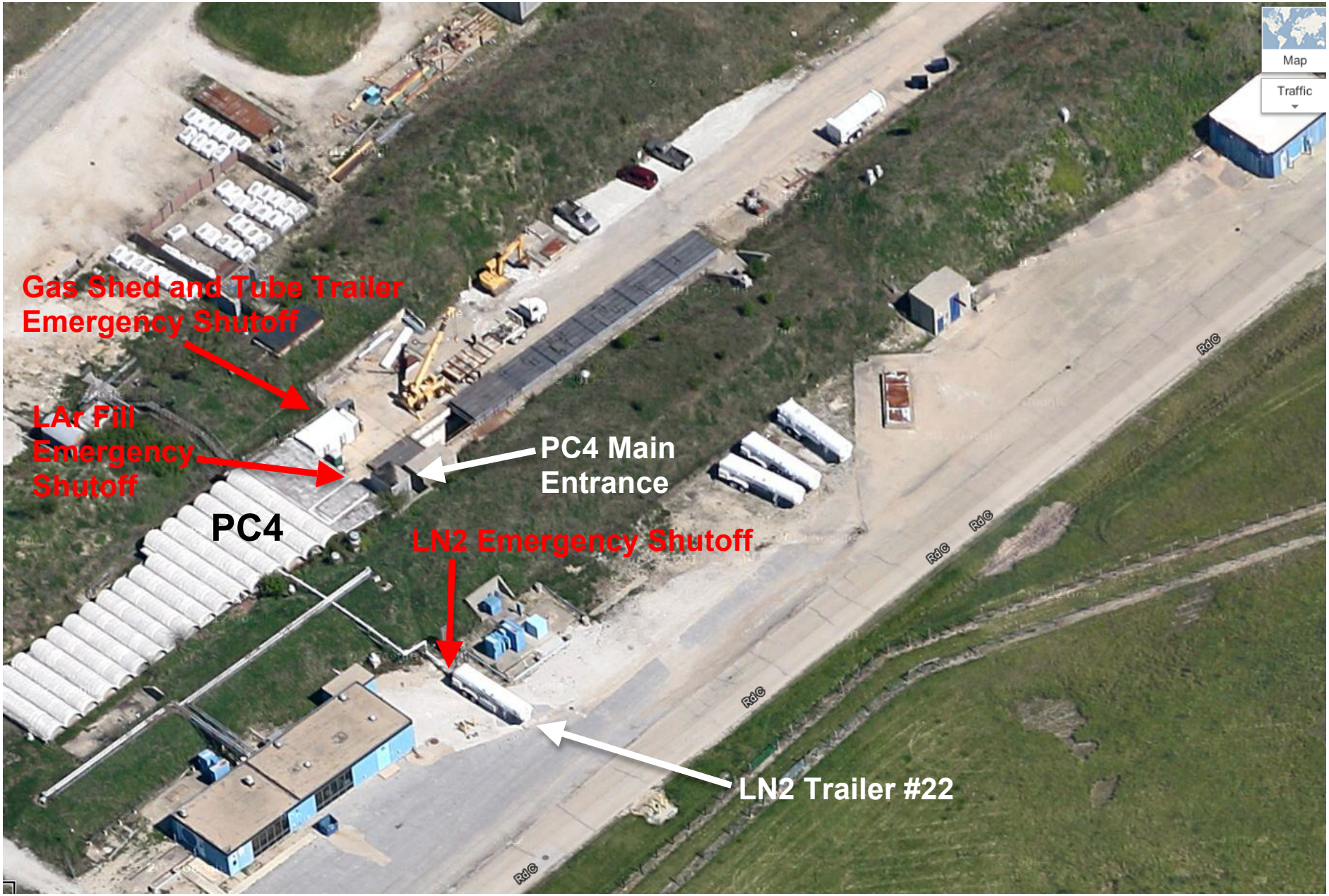
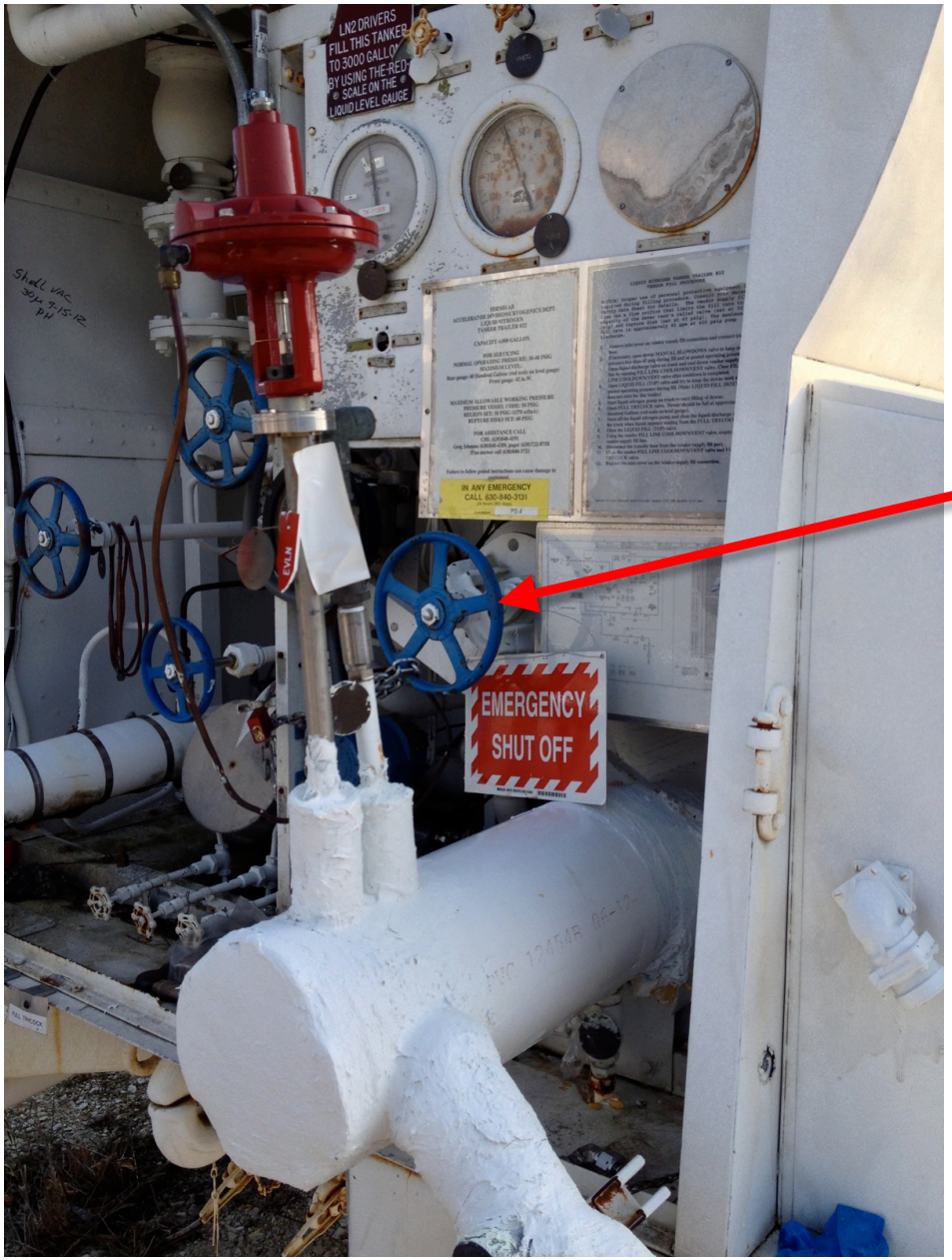


PC4 External Emergency Shutoffs

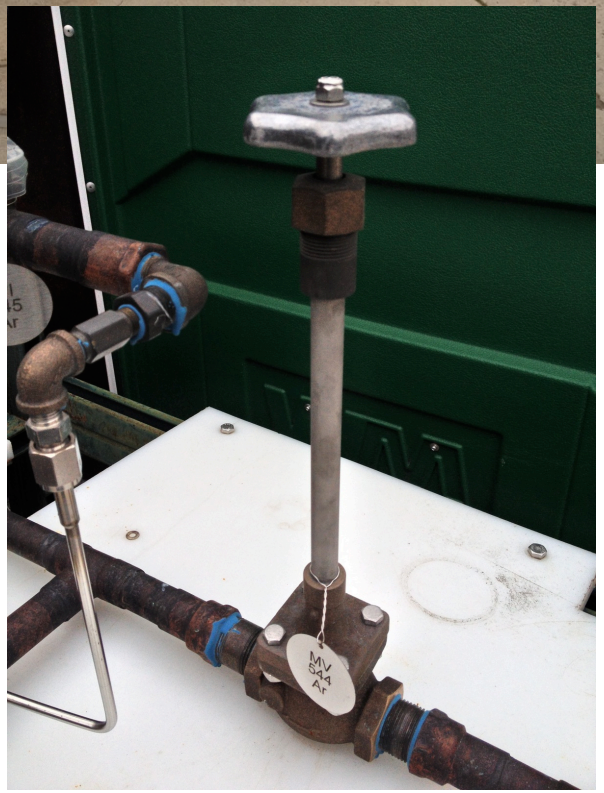
Liquid Nitrogen Trailer #22 parked next to PS4 on Road C supplies liquid nitrogen to PC4. The liquid nitrogen is piped across the berm. The emergency shut off valve is located at the back of the trailer and shown on the next page.

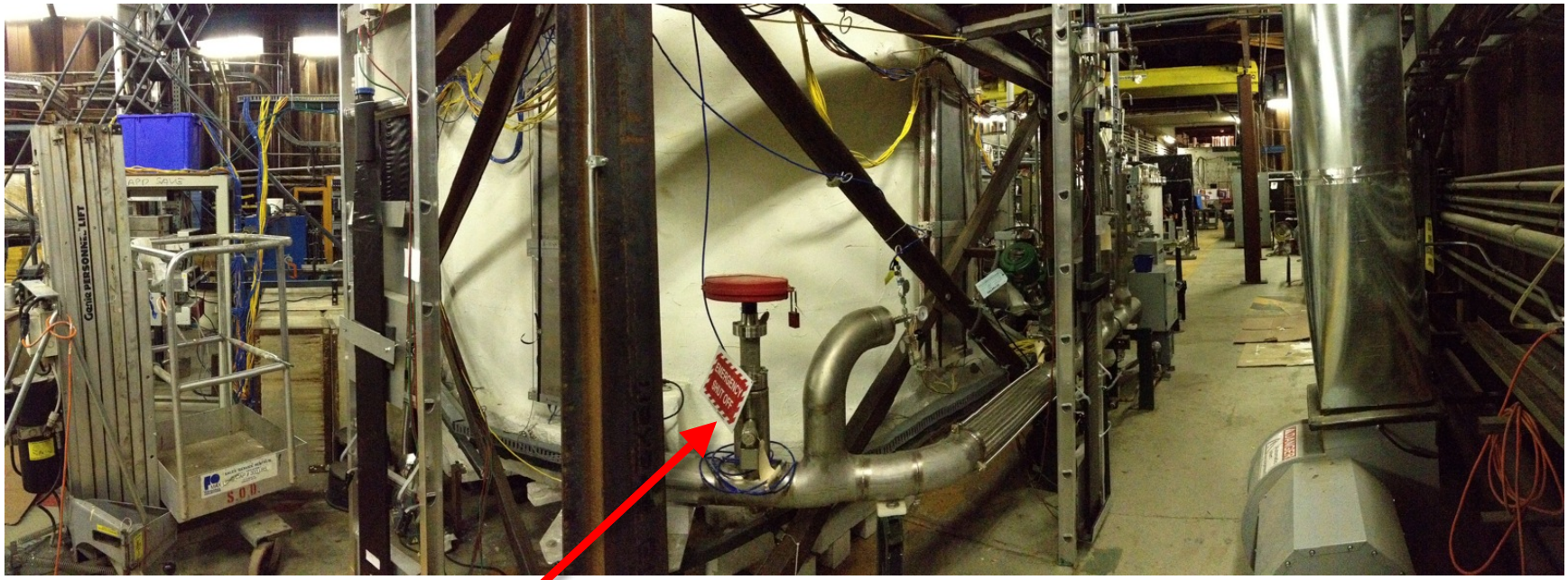


Close this manual valve located at the back of LN2 Trailer #22 to stop the flow of liquid nitrogen into PC4. This valve is tagged as HV-494.

To stop the flow of Argon gas from the gas shed dewars/bottles and non-flammable Argon/Hydrogen mixture from the tube trailer into PC4 close valves MV-230-HAr and MV-238-Ar. These valves are located on the backside of the gas shed and are accessible from the boardwalk.

When a liquid argon supply trailer is connected to the end of the piping, MV-544-Ar is the emergency shutoff to prevent the flow of liquid argon into PC4.





Liquid argon tank liquid withdrawal isolation at the tank southeast corner. Close to stop the flow of liquid argon from the tank to the piping north (downstream) of the tank. This valve is tagged as MV-368-Ar.

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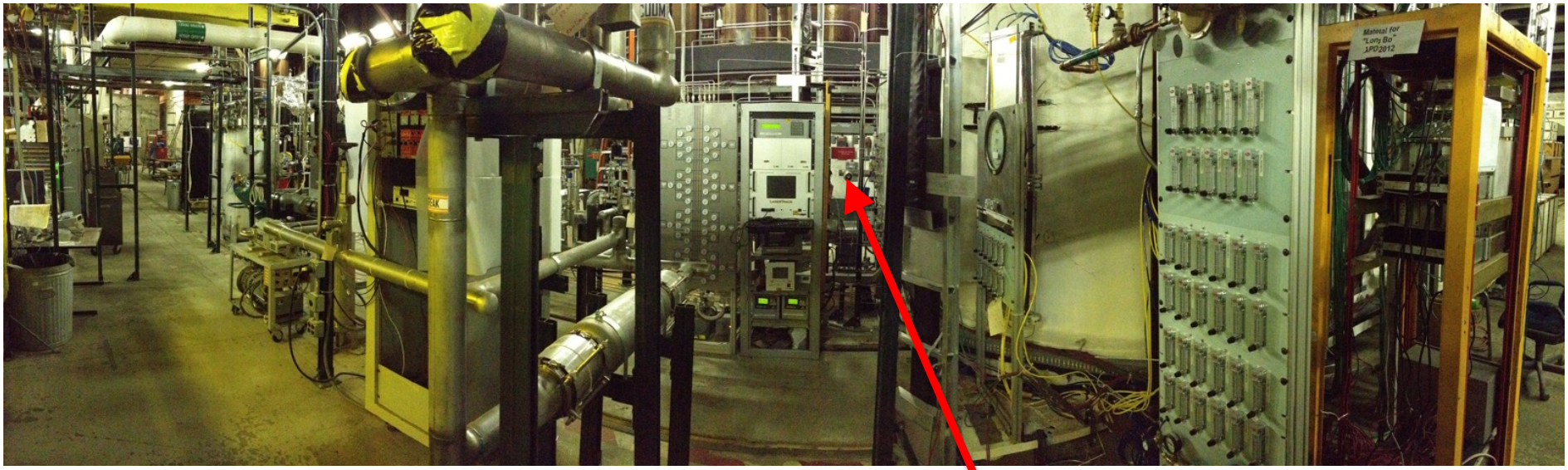


Hydrogen generator emergency shutoff. Unplug the 120 VAC cord labeled Hydrogen Generator Disconnect. This cord is plugged into the power strip on the side of the relay rack immediately north (downstream) of the liquid argon tank.

PD / PC4 Enclosure

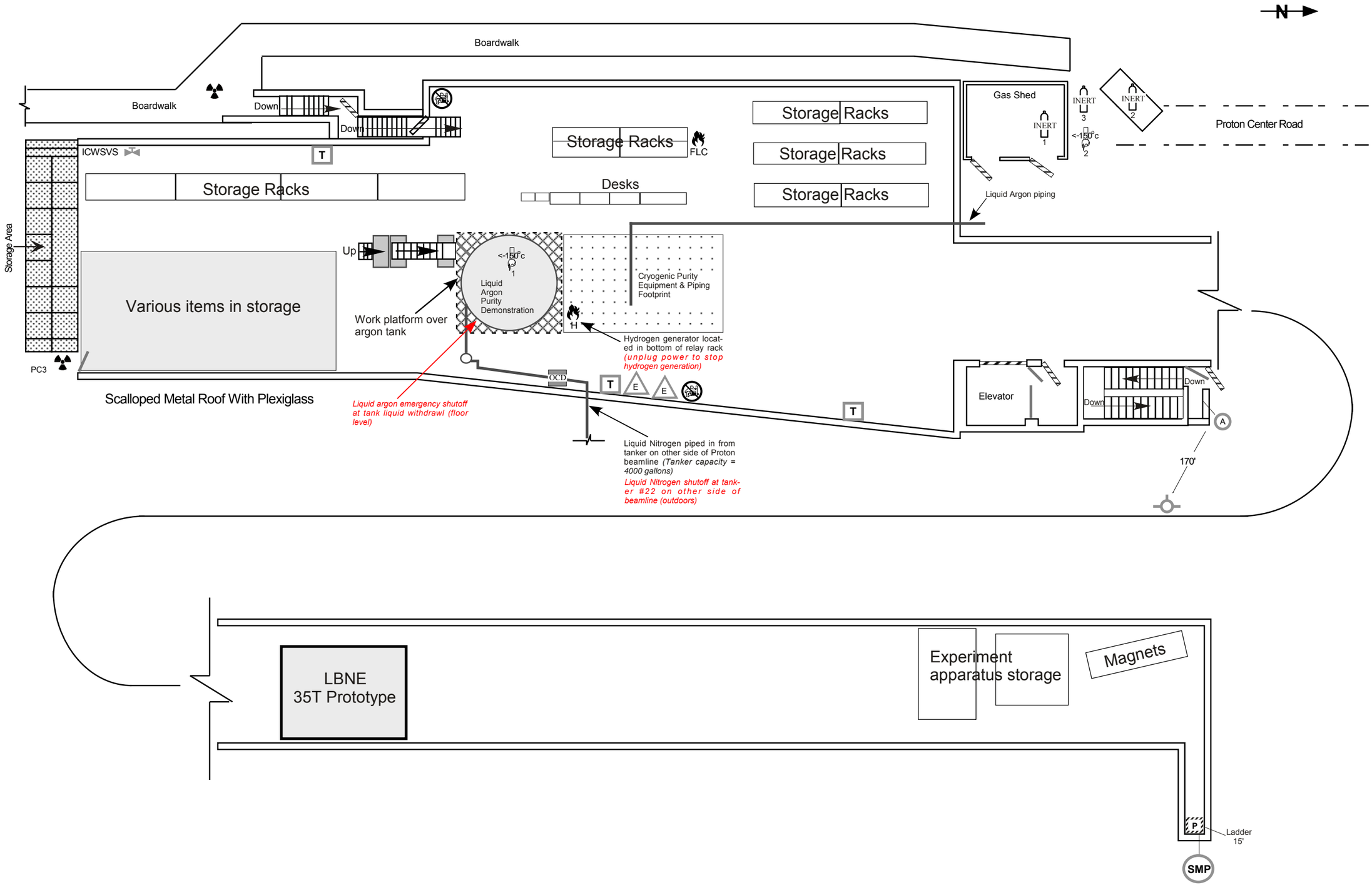
Hazard Map — Page 1 of 1

Address (or location): Proton Center Road

FIMS no.	Occupancy	Roof Type
701030125	0	Metal

SCALE 0 — 7.5' — 15' (1")

Overall Dimensions 69' Wx 332' L



SYMBOL KEY

- Area Ventilation Control
- Gate (oriented in direction of travel)
- Confined Space
- Inert Gas Bottle(s)
- Cryogenic Hazard
- Overhead Crane Disconnect
- Door (oriented in direction of travel)
- Radiological Hazard
- Electrical Panel (480V)
- Roof Hatch (personnel)
- Fire Panel
- Sump Pit
- Fire Hydrant
- Transformer
- Flammable Material
- Valve

HAZARDOUS MATERIALS

INERT 1	Argon UN 1006	9 cylinders
INERT 2	Argon (97.5%)/ Hydrogen (2.5%)	Tube trailer 40,000 scf
FLC	Flammable Liquids Cabinet	
H	Hydrogen generator	Makes hydrogen on demand (less than 100 cc/min flow)
INERT 3	Inert gases, assorted	12 cylinders
<-150°c 1	Liquid Argon UN 1951	6500 gallons
<-150°c 2	Liquid Argon UN 1951	4-160 liter dewars

Layers shown
- Structural
- Hazards