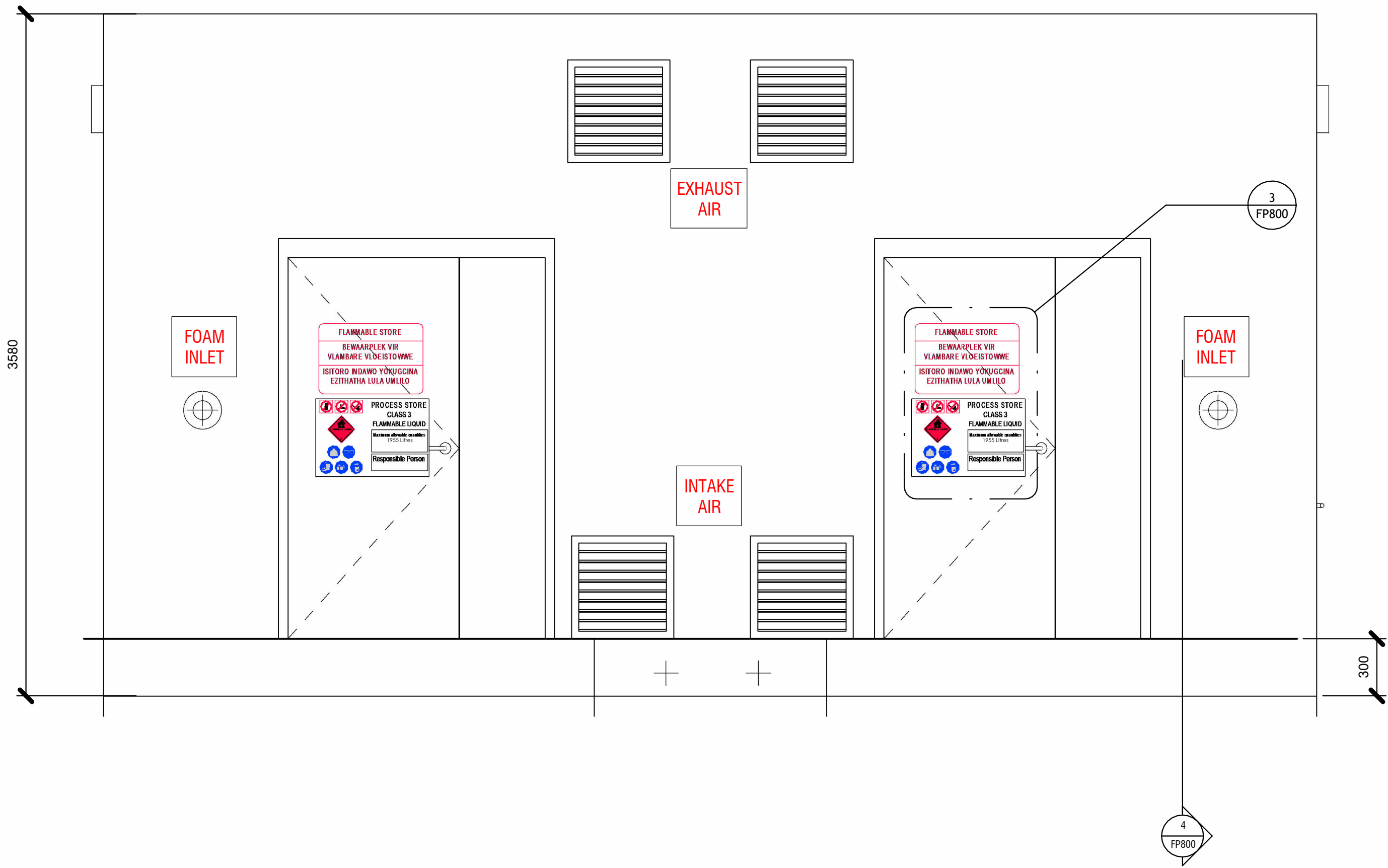
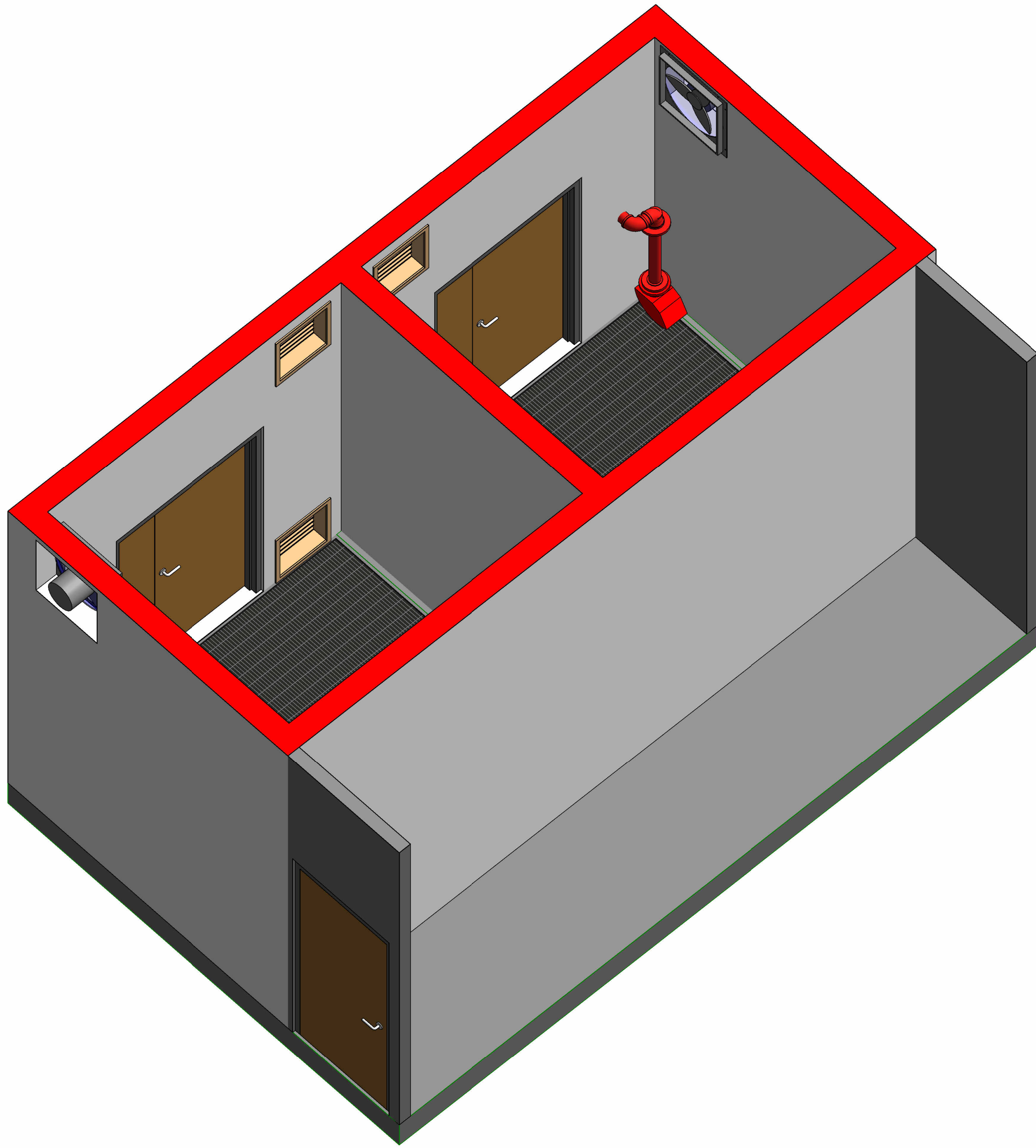


3 Section AA  
1 : 20



2 North East Elevation  
1 : 20



4 3D Isometric

#### FLAMMABLE LIQUID STORE REQUIREMENTS:

##### CAPACITY

Type of flammable liquids with volumes  
Storage volume = TO BE CONFIRMED BY CLIENT  
Room area = 7.24 m²  
Bund capacity = 7.24 m² x 0.3m  
= 2,172 ℓ  
Max storage volume = Bund - 10%  
= 1955 ℓ

##### DANGER NOTICES IN STOREROOM

- The Flammable store must be identified by words, "Flammable Store - Bewaarplek vir Vlambare Vloeistowwe - Isitoro Indawo Yokugcina Izikhobo Edithatha Lula Umilo", and the permissible quantity allowed within the flammable store, indicated in 50mm block letters on both the inside
- Symbolic safety signs prohibiting open flames and smoking, at least 290 mm x 290 mm in extent, manufactured in accordance with the provisions of SANS 1186, are affixed internally and externally to the storeroom;

##### CONSTRUCTION OF THE FLAMMABLE LIQUID STOREROOM

- The construction of the store room must be in accordance with the following requirements:
  - The walls must be of brick or concrete.
  - The floor must be of concrete.
  - The roof must be of reinforced concrete of which the composition must offer fire resistance of at least 240 minutes.

##### DOORS

- Flammable liquid store must be designed and constructed so that the floor of the room is recessed below the level of the door sill to form a catch pit: Provided that -
  - The catch pit formed by such recessed floor or sill must have a capacity capable of accommodating the total quantity of hazardous substances able to be stored in the room, plus 10%;
  - The catch pit must, at its lowest level, have a non-corrosive drainage valve for cleaning purposes and for product recovery.

##### VENTILATION

- The Flammable store must be so designed and constructed to ensure that the collection of fumes of hazardous substances is effectively ventilated, whether naturally or mechanically, in all parts of the room. The fumes must be released into the open air at a place or places where the fumes are not likely to come into contact with any source of ignition, which may ignite such fumes.

##### MECHANICAL VENTILATION

- Ventilation fan to be rated Ex 'd' and ventilation rate shall be at least 30 air changes per hour.
- Operation of fan to be monitored with air flow switch interfaced with the fire alarm system.
- Fan to operate continuously.
- Provide back-up fan.
- Provide a green light above the door to confirm operation of fan, light to be switched via airflow switch.
- If battery charging can take place via emergency electric supply, fan shall also be connected to switch emergency supply to ensure that the fan will operate whenever charging is taking place.
- Ventilation to be designed to allow for effective cross ventilation of room.
- Inlet air openings as high as possible to roof level.
- Ventilation inlet to be fitted with closely-wooven, non-corrodible wire gauze of at least 1 100 meshes per metre on the inside and outside of openings.
- The fan extraction point must be nominally above bund sill level and must discharge through a vertical metal duct terminating at least 1m above roof height or at least 3,6m above ground level, whichever is the greatest.

##### ELECTRICAL EQUIPMENT

- The owner or person in charge of a storeroom must ensure that -
  - All electrical apparatus, fittings and switchgear used or installed in any storeroom are protected and installed in accordance with the equipment of the appropriate class and division type for the particular area in terms of the provisions of SANS 10108: This store is a Zone 1 classification.
  - All switchgear, distribution boxes, fuses and any other electrical equipment not in compliance with the provisions contained in SANS 10108 must be situated outside the storeroom and positioned so as not to come into contact or possibly come into contact with fumes escaping from the storeroom;
  - All metal parts and electrical fittings and any device in or in connection with a storeroom are earthed effectively with each other and the ground;
  - Switches actuating any mechanical ventilation system are situated outside the storeroom;
  - Any mechanical ventilation system is on at all times, except whenever the system is switched off for repairs and/or replacement purposes: Provided that if the mechanical ventilation system breaks down, the system must be repaired without delay, and if the system breaks down irreparably, the system must be replaced without delay; and
  - Whenever the flammable liquid storeroom is not staffed, all electrical apparatus and fittings, with the exception of the mechanical ventilation system, are switched off.

##### ELECTRICAL INSTALLATIONS INSTALLED BY QUALIFIED ELECTRICIANS

- All electrical installations must be installed and certified by a suitably qualified electrician: Provided that the certificate must be submitted to the Service for record purposes immediately after installation.

##### Occupancy Legend

J1

0 2024-06-04 Issued for Tender

Rev Date Description

##### Revision Schedule

If drawing status = construction, a signed copy of this drawing (either in hardcopy or electronic format) is available at the office of origin and at the office of issue.

DRAWING STATUS:



CLIENT:

IZIKO MUSEUM

ARCHITECT:

OSMOND LANGE ARCHITECTS

PROJECT:

FLAMMABLE STORAGE

TITLE:

Fire Protection Ground Floor

SCALE @ A1:

As indicated

CHECKED:

JS

APPROVED:

KR

DESIGN:

QM

DRAWN:

QM

DATE:

2024-06-04

PROJECT No:

240047

DRAWING No:

FP600

REV:

0

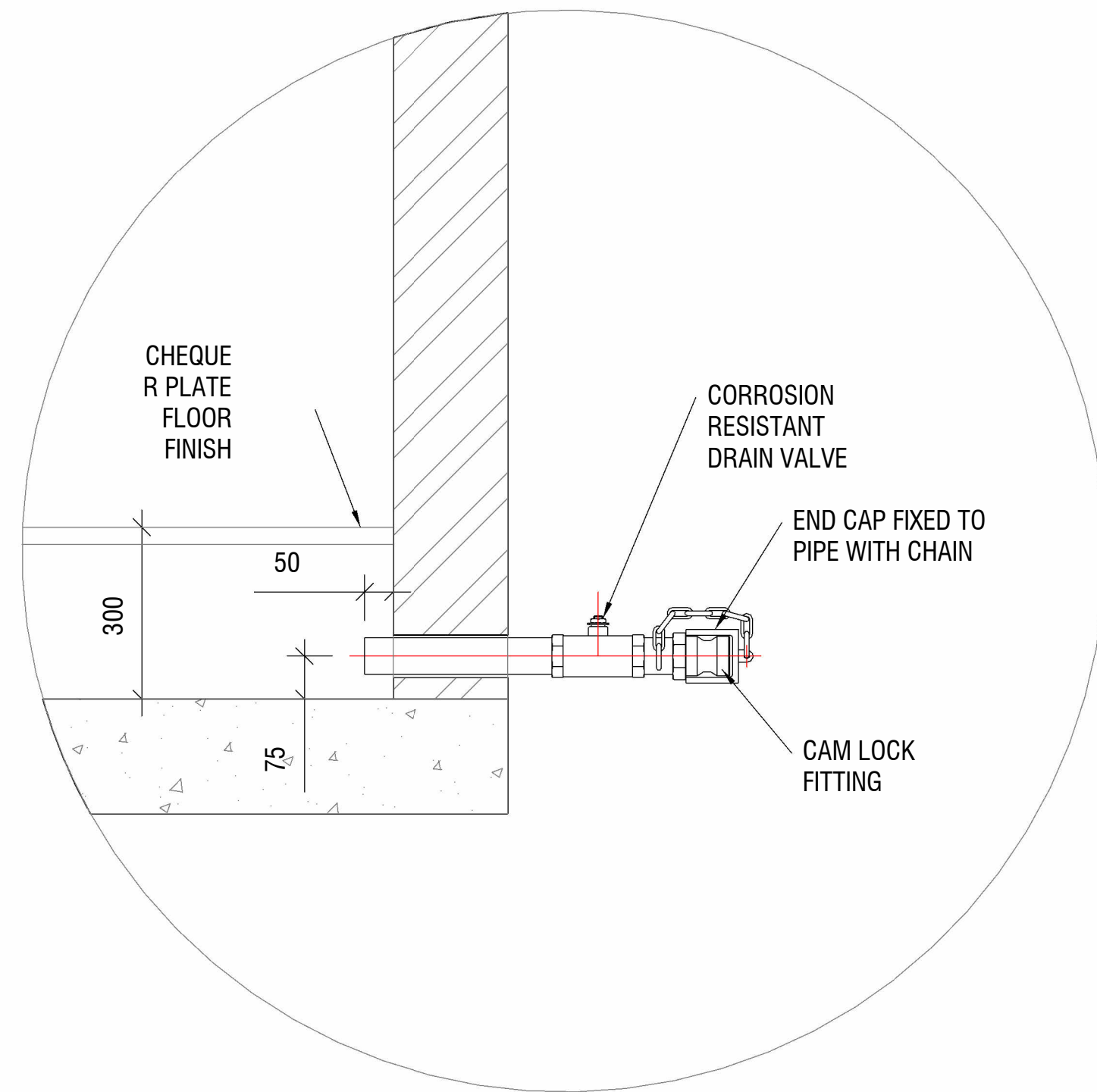
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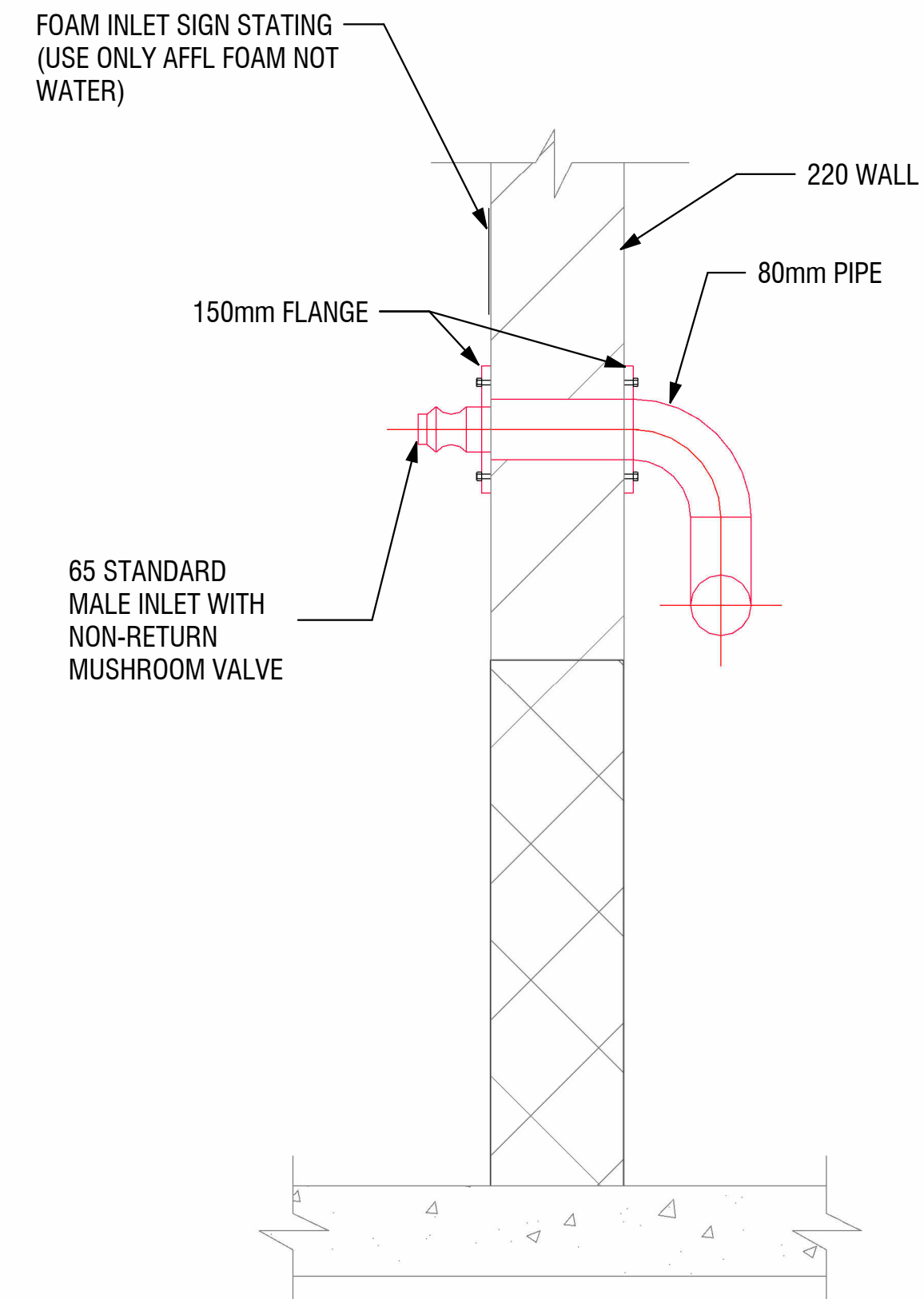
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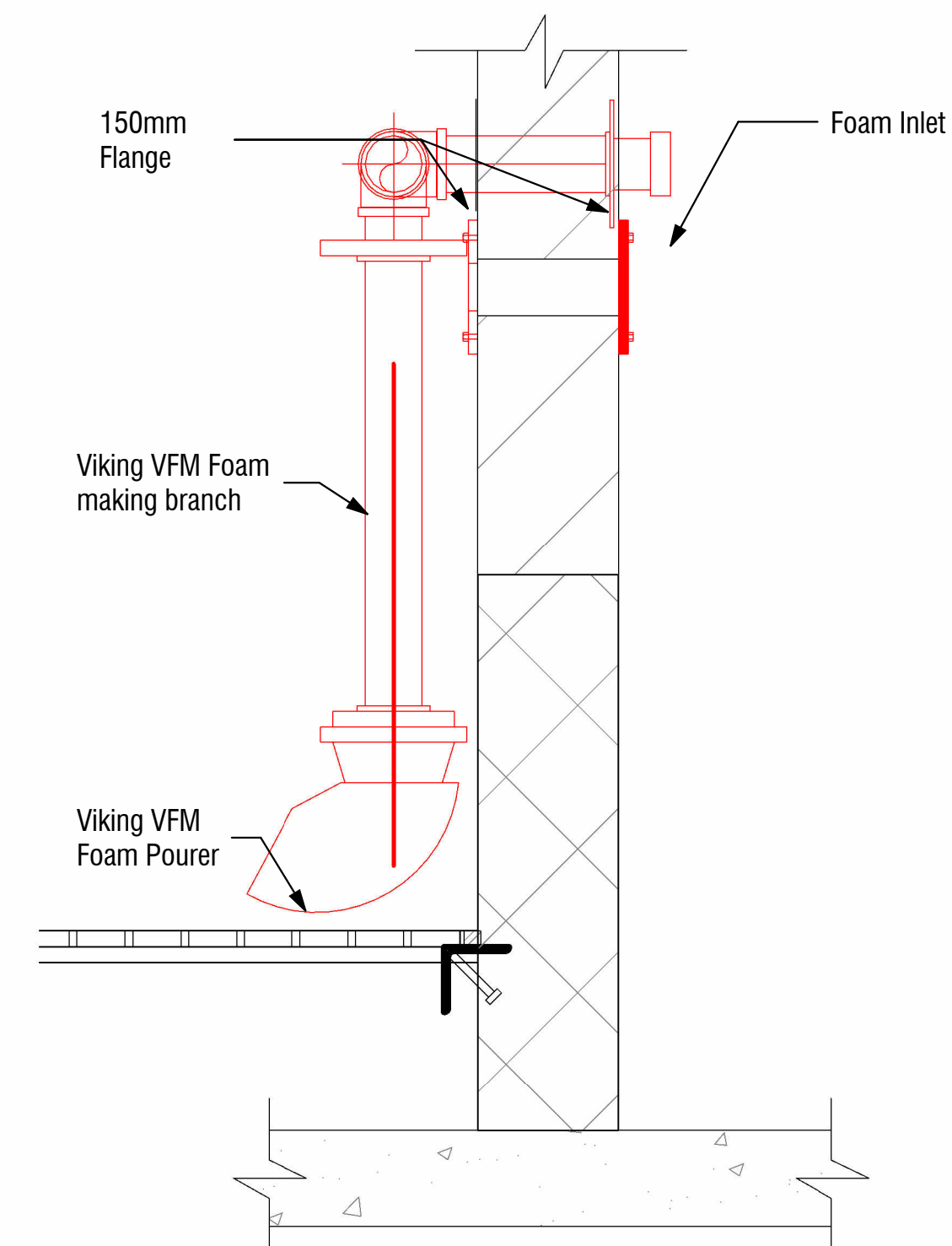
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0	2024-06-04	Issued for Tender
Rev	Date	Description

### Revision Schedule

### Revision Schedule

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DRAWING STATUS:



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CLIENT:

IZIKO MUSEUM

ARCHITECT:

OSMOND LANGE ARCHITECTS

PROJECT:

## FLAMMABLE STORAGE

TITLE:

### Fire Protection Ground Floor

SCALE @ A1 : As indicated	CHECKED: JS	APPROVED: KR PR No.: 201170364
DESIGN: QM	DRAWN: QM	DATE: 2024-06-04

PROJECT No:	DRAWING No:	REV:
240047	FP800	0

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PLOT DATE: 2024/06/04 16:39:52

TEMPLATE VERSION October 2019