

Proposed Drainage to refurbished changing rooms WCs and Showers:
Layout of drainage for WC, wash hand basin and shower facilities
3 wcs and 2 wash hand basins connected to one 100 mm branch pipe, in one changing room and the same layout in the second changing room with both branch pipes connected with swept Y junctions into an open soil and vent pipe (Vented through the roof open to atmosphere), with 2 showers with floor gullies into 75 mm branch pipes connected to the SVP at a lower level than the branch pipes. The Soil Pipe then runs straight under the concrete floor to the outside and is connected to the existing foul drains at a new inspection chamber used as a rodding point for the new drains (Avoid sharp 90° bends by using a long radius). The new soil pipe to have proper bedding and surround under the slab.

Pipe work
The proposed foul drainage arrangement comprises a single 100 mm soil and vent pipe (SVP) vented to atmosphere above roof level in accordance with Approved Document H and BS EN 12056-2. Two 100 mm branch pipes each serve the two WCs and four wash hand basins, with branch lengths kept short and connected to the SVP using swept junctions. Four showers discharge via trapped floor gullies connected to the SVP at a lower level than the WC branches to minimise surcharge and trap seal loss. The SVP continues vertically to a rest bend and runs beneath the concrete floor slab to connect to the existing foul drainage system, with rodding access provided at the base of the stack or externally. The system loading is within the discharge capacity of a 100 mm fully vented stack and is suitable for the proposed sports changing room use.

Wash hand basins to discharge via 40 mm wastes, combined to 50 mm where applicable, and connected to the 100 mm WC branch pipe using swept junctions. Basin waste lengths to be limited to 4.0 m maximum and laid to a fall of 1:40 minimum.”

Drain penetration detail

Existing slab and DPM to be locally cut and carefully opened. New drainage pipe to pass through slab within a sleeve. A new local polythene DPM and/or liquid-applied DPM to be installed around penetration to maintain damp protection, forming a reasonable upgrade to the existing floor construction.

Saw-cut one trial area

Check:
slab thickness
presence and type of DPM
sub-base condition

Pipe sleeve
160 mm sleeve through slab
110 mm drain pipe inside
Compressible filler between pipe and sleeve

Local DPM upgrade
Cut slab back 300–450 mm around penetration
Lay new 1200-gauge polythene DPM over exposed sub-base
Lap under slab edge and turn up around sleeve
Seal with butyl tape
This creates a new, reliable local DPM zone, regardless of what the old one does.

Recast slab
Concrete to match existing thickness
Light A142 mesh if depth allows
Avoid bonding to the pipe or sleeve
Maintain falls in wet areas

Apply a liquid-applied DPM over:
the reinstated slab and entire changing room floor.

Floor finishes in changing room WCs and Showers to be Slip resistance.
Floor finishes to be suitable for wet areas.
Falls to drains.

Works comprise localised breakout and reinstatement of the existing ground-bearing slab to accommodate new drainage; no replacement of the floor as a thermal element is proposed and no change is made to the existing floor build-up.

Building Regulations – Approved Document B (ADB, Vol 2 for non-domestic buildings).
Assembly and Recreation
Fire escape

One exit for each changing room , max travel distance = 18m Distance to furthest point
shower to final exit = 12.8 m therefor acceptable

New External Doors and windows
The proposed external doors significantly improve means of escape from the existing changing rooms and ensure compliance with Approved Document B.

Fire detection and alarm provision ,will be upgraded as necessary to comply with Approved Document B and BS 5839-1,
In each changing room provide:-
1 heat detector
1 manual call point at exit
Sounder audible in changing room & showers.
Emergency lighting in changing room. Battery-backed LED units.

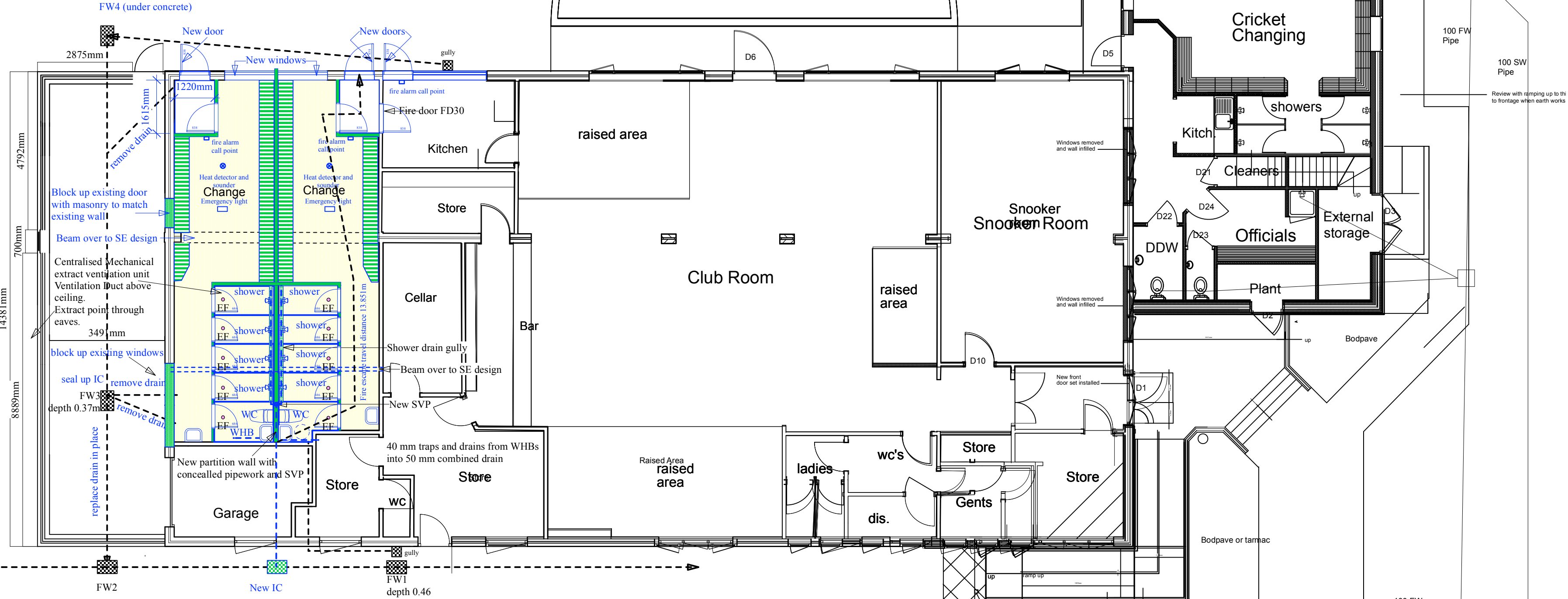
The existing fire alarm system serving the pavilion will be extended to cover the refurbished changing rooms.
To be installed tested and certified by qualified fire alarm engineers

KEY

- Changing rooms subject to refurbishment
- Structural walls to be removed
- Non Structural walls to be removed
- New partition walls
- Existing walls keep

EF Extract Fan in WC = 6l/s
Extract fan in shower = 15l/s

Doors and windows
To match existing
3 New outward opening doors to changing rooms and kitchen fire exits
Doors: Double glazed fully glazed insulated steel or aluminium, $U \leq 1.8 \text{ W/m}^2\text{K}$
manifestations on glazed doors
Windows: double-glazed units, $U \leq 1.6 \text{ W/m}^2\text{K}$
Safety glazing where required (Part K)



Proposed Floor PLANS

Part C – Moisture & Ventilation (fabric)

In showers:
Tankling to wet areas
Floor falls to drains
Adequate ventilation to avoid condensation
Damp-proof continuity at new door thresholds

Part F – Ventilation

For refurbished WCs/showers:
Mechanical extract fans:
Showers: ~15 l/s per shower
WCs: 6 l/s (intermittent) or 3 l/s (continuous)
Fans to run-on timers for 15 - 30 minutes
one Passive wall air vent for each changing room with damper for condensation control.

Part G – Sanitation, hot water & water efficiency

Building Control will check:
Adequate number of WCs and showers for use
Hot and cold water supplies
Scald protection:
TMVs on showers and basins (max ~41–43°C)
Drainage falls and traps hot water

Part K – Protection from falling, collision & impact

Manifestation to glazed doors
All glazed doors and screens to incorporate manifestation in accordance with Part K of the Building Regulations, provided at two levels.
Safety glazing (toughened / laminated)
Thresholds and level changes

Part P – Electrical safety

For:
New lighting
New power
Fans, alarm extensions
Zoned correctly in the wet shower areas.
Works must be: Installed by qualified Electrician, tested and Certified.

Part L – Conservation of fuel & power

Requirements when External doors are replaced or added
Doors to meet current U-values
Doors: insulated steel or aluminium, $U \leq 1.8 \text{ W/m}^2\text{K}$
Windows: double-glazed units, $U \leq 1.6 \text{ W/m}^2\text{K}$
Safety glazing where required (Part K)
Draught sealing
Controls on heating (timers / TRVs)

Part M – Access to and use of buildings

For sports pavilions (public buildings):
At least one accessible changing room / WC required
Door clear widths compliant
Level access where reasonably practicable
Changing bench and circulation clearances

Accessible WC facilities are already provided within the existing pavilion and will remain available following the refurbishment. No reduction in accessibility provision will occur.

Horsham DC Ref: DC/18/0292
Amending the approved plans condition to allow a modification ie to give permission for the 3 new entrance doors, 2 replacement windows, and the replanning and refurbishment of the existing changing rooms with no increase in allocated floor area.

