

CANOLFAN SOAR, MERTHYR TYDFIL
CURRENT CONDITION
FEBRUARY 2026



CURRENT CONDITION & FABRIC ISSUES

This section outlines the observations obtained from the assessment of the fabric to the lower ground floor of the Canolfan Soar building undertaken on Friday 3rd February and Friday 17th February 2023.

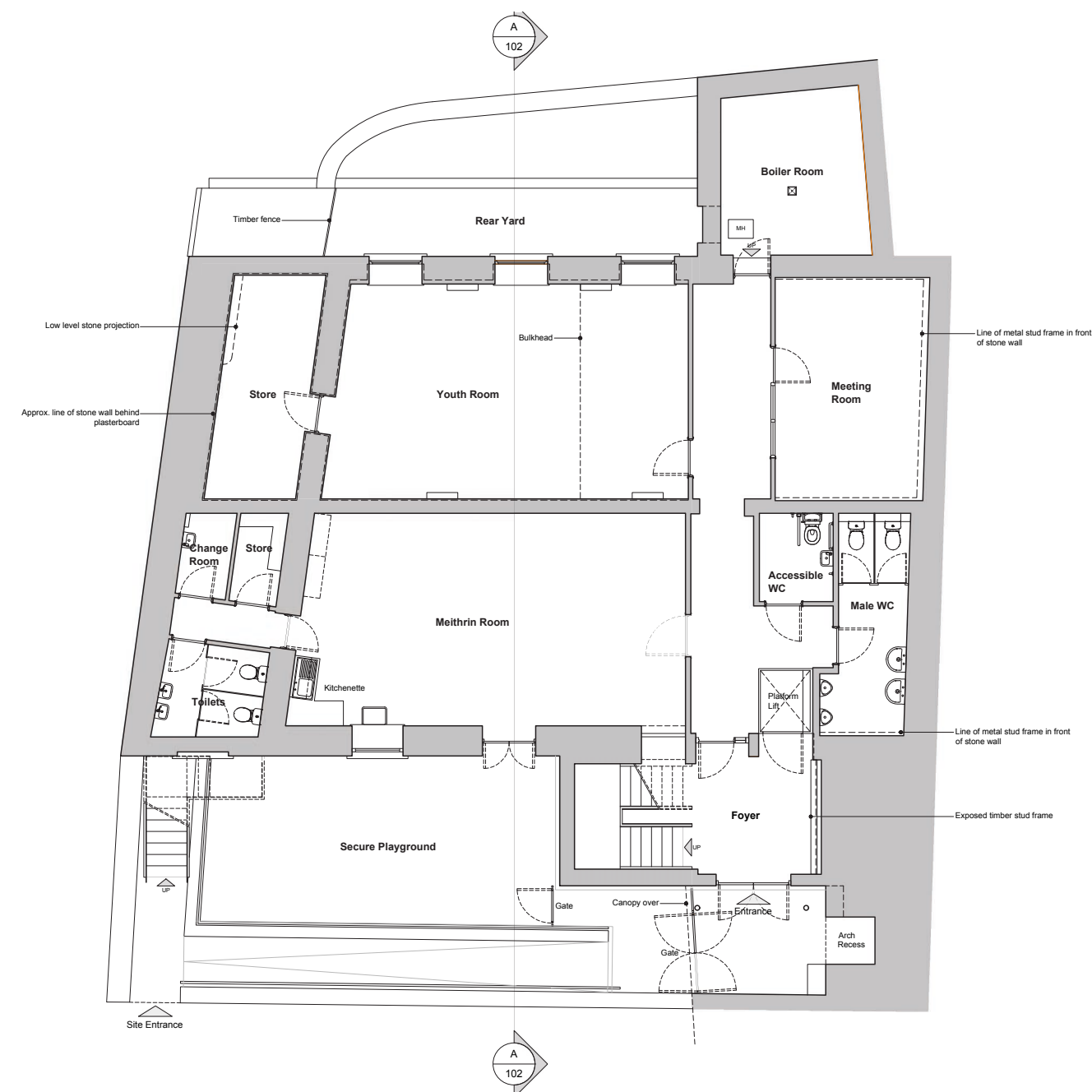
In summary, the facilities offered within the Canolfan Soar is formed over a complex of buildings, including the Theatre (the old Zoar Chapel), a single storey building (the former and original Sunday School) and the 1919 extended School building, which is referred to as the Canolfan Soar. The Canolfan hosts the leased meeting spaces within the venue, the cafe, toilets and the reception.

The Canolfan Soar building is a three storey building, which consists of a lower ground floor, ground floor and first floor. The fabric of the upper two floors are not included within the condition assessment, with the survey focused on the lower ground floor.

The lower ground floor of the Canolfan Soar consists of:

- The Meithrin (the Nursery) and connection Storeroom, baby-change and Children's toilets
- The Youth Room and connecting Storeroom
- Meeting Room
- Boiler room
- Toilets (Male and Disabled Access WC)
- Central Corridor with internal and external lobby area with access to the stair and lift

The above list of spaces are discussed in this section.



Meithrin

The Meithrin was a space for an early learning setting for pre-school children. The establishment has moved to a different location and the space is now vacant.

The Meithrin features one large space (5m x 9m) and has ancillary spaces towards the west which comprise a store, changing room and toilets.

External Walls

The external walls formed around the Meithrin are the west and the south walls. Internally, the application of plasterboard on dot and dab is on the west wall of the WC and baby change area, with the substrate assumed to be original solid stone rubble wall (same conditions as the Storeroom to the north).

The west wall is partially subterranean with the finished floor level sitting lower than the adjacent car park tarmacadam surface abutting directly to the west wall. The level difference is not known; however, it is considered that the change in level is approximately 1m to 1.5m. The external treatment of the west wall is exposed rubble stone. The mortar to the pointing is hard and appears to be cementious.

The south wall to the Meithrin is not subterranean and has a level threshold between the ground and internal finished floor

levels. The south wall does not appear to be suffering from damp ingress. However, there are cracks present within the upper levels of the rendered finish, which is assumed to be a cementious render. As with the north elevation, there is a curious projection in the finish to the south elevation at lower ground floor level.

The north wall is an internal wall and is a solid stone rubble wall with plastered finish. It is understood that historically there was an opening between the Meithrin and the Youth room. This is no longer present, with this opening not detected during the survey.

The east walls are of solid construction but could be a contemporary block wall.



1. The Meithrin looking west towards the door opening that provides access into the corridor leading to the toilets, baby-change, and store. Kitchen type facilities are located to the SW corner of the space.
2. The Meithrin looking east towards the main central corridor.
3. The Meithrin looking south to the glazed blocks adjacent to the main Canolfan Soar stair and the external door which leads on to the south terrace.
4. The Meithrin has 1 no window located on the south wall.
5. The corridor that provides access to the ancillary spaces with the Meithrin beyond.

Youth Room and connecting Storeroom

The youth room is accessed from the central corridor and has a physical connection with the west Storeroom and is a large space (9m x 5m) which has received many modern interventions.

To the north wall there are three large windows which provide natural light into the space. These windows are fitted with top opening casement lights which are on restrictors and appear to be in fair working order.

The ceiling is a contemporary ceiling, assumed to be plasterboard with skim. To the face of the ceiling there are surface fitted light fittings, smoke detectors and fire escape lighting. To the east of the room there is a bulkhead which forms a change in the ceiling level. It is assumed that the bulkhead conceals a hidden structural beam.

There are several areas of investigation which have been carried out where surface materials have been removed. The investigations have revealed that there are historic materials to the structure which have been dressed over with contemporary materials. All walls are solid wall construction except for that of the east wall which is a modern stud wall with plasterboard and skim. It is assumed that the plasterboard wall to the east is made up of metal stud construction as these have been applied over the face of the north wall and around the window reveals.

There is a contemporary slab that has been laid over the floor which is complete with DPC. The wall is showing very little signs of decay.

The Storeroom is an irregular shaped room and follows the splayed wall to the west. The space is approximately 2m x 5.5m, and has an internal door installed in a central position on the east wall.

The ceiling to the Storeroom is like that in the Youth Room, modern plasterboard ceiling with surface fitted lighting and smoke detector.

There has been some recent investigation works carried out within the Storeroom which has required the modern contemporary materials to be removed which has exposed a mixture of substrates to the solid wall surfaces. There is a palette of substrate materials exposed within the Storeroom, which includes a solid masonry wall to the west and east. The east wall is an internal wall. There is evidence of modern block work walls to the north. All walls have been fitted with modern plasterboard materials. To the base of the west wall the wall is thicker for a few courses, with the top face irregular in profile.

The flooring appears to be a modern concrete floor which has evidence of a DPC installed below the slab. There is evidence of damp staining to the floor. The finishes have predominately been removed from the floor. However, carpet has been retained to the

south edge of the room. There are remnants of modern skirting board retained to the base of the wall.

Within the space there is an air conditioning unit which is fitted at high level on the west wall.



1. The Youth Room looking west where investigations have revealed that the walling is rubble stone wall, suggesting that the interior wall between the Youth Room and Storeroom is original. There is evidence of a modern block which suggests that the door opening location has been changed.

North Elevation – External Wall

The ground levels to the north elevation are at their highest point at the NW corner, the levels reduce as the land travels eastwards towards the boiler room’s external wall forming a ramped topography. The levels appear to be at the lower ground finished floor level at the west elevation of the boiler room, however this is not clear due to the amount of vegetation and objects located within the small strip of land located to the north. It is not clear if the ramped ground has been formed as part of the 2010 campaign of building works, indications suggest that it was implemented as part of these works as the ground material is consistent with other surface materials applied during these works.

The ramped ground appears to accept surface water drainage from the down pipe which collects rainwater from the north roof pitch. As a matter of record, there is another downpipe serving the north pitch, which is located at the NW corner, located on the north elevation.

It is also assumed that the ramped ground includes for ‘services’ in-connection with the boiler room as there is a manhole located within the internal floor of the boiler room.

The north spaces within the lower ground floor, which have a direct relationship with the north yard area are the Youth Room and connecting Store. Investigations by others have recently

been undertaken in this area to further understand the walling construction, which has generated a greater awareness of the problems within these areas.

The original wall construction of the school building was a solid masonry wall built with local random rubble stone. Evidence suggests that the internal finishes were plastered surfaces and decorated. Most recently within the 2010 campaign of building works, the north wall of the Youth room has been remodelled to form a contemporary aesthetic and assumed desire to reduce thermal loss. The works appear to have included the interior face of the walls being over-cladded with metal studs which were then friction fitted with insulation and overlaid with plasterboard and skim. Prior to the investigations, these walls presented a small level of moisture transfer. From this initial assessment, it is believed that the north walls of the Youth room had been subject to the process of wetting at low level due to the raised ground conditions, with the transfer of moisture moving to the drier and warmer environment, the interior space. As the moisture connects with the modern impermeable materials, a process of evaporation and condensation occurs which presented as damp to the interior walls/floors.

The Storeroom connecting to the Youth Room, has both the north and west wall partially submerged by ground levels. The conditions of surface treatment are different externally, as are the wall constructions. The north wall to the Storeroom is made up in contemporary block, which is assumed to have been added in the



1. North landscaped area to the north of the Youth Room.
2. View of the north landscaped area from the boundary wall.
3. Manhole located within the boiler room.
4. Investigations to the exterior north wall to the Youth room.
5. Investigation to the exterior north and west wall of the Storeroom.

2010 campaign of building works. The historic ordnance survey maps of this part of the building suggest that there was an historic entrance to this part of the building, which may suggest why there is modern block applied to the opening. The modern block was/ is surface finished with plasterboard on dot and dab to the internal face.

Externally, there is an external render applied to the surface of the wall, presumed to be a cementitious render, which has a curious offset in depth when applied to the lower ground floor walls.

Whilst the application of modern surface treatments to modern substrates is accepted, where there are raised ground conditions there should be an expectation that damp will migrate from the wet ground and through into the interior surfaces. However, where there is the application of modern impermeable materials on to solid stone masonry walls which are either partially submerged by the adjacent ground, or not, other defects will begin to arise as the solid masonry wall will not perform as originally intended.

West Elevation – External Wall

Internally, the application of plasterboard on dot and dab continues around the west wall of the Storeroom, with the substrate being the original solid stone rubble wall. The west wall is partially subterranean with the finished floor level of the store sitting lower than the adjacent car park tarmacadam surface abutting directly to the west wall of the Storeroom. The level

difference is not known; however, it is considered that the change in level is approximately 1m to 1.5m. The external treatment of the west Storeroom wall is different to the that of the north and is exposed rubble stone. The mortar to the pointing is hard and appears to be cementious.



1. North elevation of the building with the lower ground floor featuring an offset projection to the external walls. The projection also appears to the south elevation.
2. Drain-slot located to the north wall of the boiler room/ladies toilets.
3. Downpipe to the NW corner of the building discharges into a gulley.
4. Exposed rubble stone to the base of the west wall.
5. Exposed rubble stone to the base of the west wall with the offset projection to the lower ground floor as seen on the north wall mirrored on the south wall.

Meeting Room

The meeting room is in the northeast corner of the building. The north and east walls are of solid masonry construction which are fully below ground and are made up of rubble stones and earth with remnants of plaster and lime washes.

During 2021, investigations have been carried out due to the interior surfaces presenting signs of significant moisture ingress. The investigations involved the removal of contemporary materials which included friction fitted insulation between the metal stud walls, and plasterboard & skim finishes.

The removal of contemporary materials exposes several areas of hollows/ voids within the surface of the east wall and there is friable material within the northeast corner. There are also several cracks within the surface of the wall which should be investigated by a structural engineer.

The ventilation to this space is neither natural or mechanical and given that the space is below ground and is deep within the footprint of the building the lack of ventilation needs to be addressed.

To the west wall there is a modern stud partition with screen.

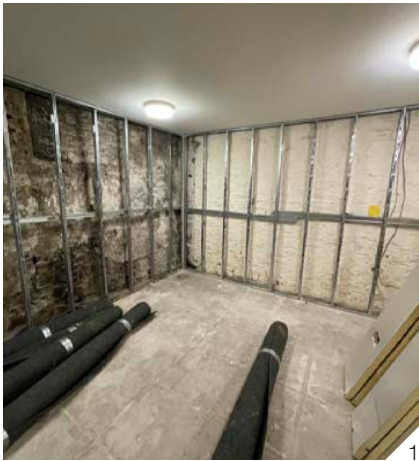
To the south wall there is a solid rubble stone wall construction which has received a decorated finish, which appears to have a

decorated finish. Most recently this wall has been over clad with a metal stud partition, insulation, and plasterboard.

The floor to the meeting room is a new concrete floor which is complete with DPC. The floor finish has been removed from this area.

Previous visits to the lower ground floor indicated that this room was in very poor environmental condition with a build-up of moisture ingress and condensation. Modern materials have been removed from this space to allow the historic structure to breathe which has greatly benefited this space, which now appears to be drier.

This space has evidence of electric wall panel heating but there is no evidence of a means of air conditioning to this area.



1. Meeting Room looking towards the SE corner of the space with exposed metal stud frame with original rubble stone wall behind. The south internal wall appears to be treated different in construction which may suggest a different date range. The east wall is a ground retaining wall and is below ground.
2. Meeting Room looking towards the NE corner of the room, There is a small amount of mortar/stone dust on the floor which is suggestive that the mortar is friable which may be related to the process of condensation/evaporation and general moist conditions.
3. Meeting Room looking towards the north wall which is in-between the boiler room and meeting room.

Boiler Room

The internal space of the boiler room is a small space (3.5 x 4m) which contains the equipment in connection with the ground heat recovery boiler system. It is recommended that a services engineer is appointed to inspect the existing services and how these connect with the upper floors and bore holes within the car park.

There is evidence of a historic doorway opening to the west elevation, which has since been blocked-up.

The slab is a modern construction and has a central floor gully, which is assumed to connect with the adjacent manhole.

North Elevation – External Wall

The north elevation of the lower ground floor boiler room is fully sub-merged in the ground, with the topography of the Old Mill Lane falling at its greatest point approximately in this location. The ground levels appear consistent as they travel to the east towards the High Street but do naturally fall when travelling towards the Morlais Brook in a westerly direction. Above the boiler room, the Ladies' toilets that serve the Canolfan Soar are positioned at upper ground floor level with the finished floor levels appearing to break the adjacent ground levels. At the base of the exposed north elevation of the Boiler room there is a drain slot which falls short of the adjacent rainwater downpipe which accepts the

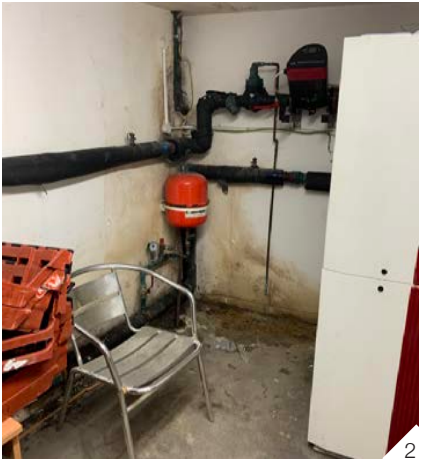
rainwater from the east face of the Ladies toilet room roof and the adjacent recently regenerated neighbouring building. There is a back gutter concealed from view which is located at high level between the Ladies' toilet and the adjacent building, the condition and form of which is uncertain.

It is noted that the architectural drawings from the 2010 campaign of building works note that the storey above the boiler room was added within this phase of works. The wall construction above the boiler room is a cavity wall construction.

West Elevation – External Wall

The west elevation to the Boiler room is partially subterranean, with the ground gaining height towards the north (Old Mill Lane). The external wall finish is rendered, which matches the wall forming the Ladies toilet above.

The internal finish to the boiler room appears to be a wet plaster system, which is indicating the presence of damp with the surface of the plaster and decorated finish spoiling, particularly on the north wall.



1. View of the equipment within the boiler room with the north wall to the background of the photograph. There is wet plaster applied over the stone and is showing minimal signs of disrepair.
2. Looking towards the NW corner of the boiler room with evidence of a dusting of debris to the floor slab.
3. Close-up image of the debris on the floor slab - it is not clear what this is caused by. It is assumed that there has been a leak within the system.
4. View of the equipment within the boiler room with the east wall to the background of the photograph. There is wet plaster applied over the stone and is showing minimal signs of disrepair.
5. Manhole cover in the slab.

Toilets

The disabled toilet is located adjacent to the Meithrin and is largely constructed with solid walls, it is not clear if the solid walls are historic. The southern wall is a plasterboard construction. Internally the disabled WC has all modern fixtures and fittings including new application of surface materials. The flooring is covered in vinyl and is assumed to be laid over a solid floor construction which may have been applied within the 2010 campaign of building works.

The male toilets are located to the east of the building. Two of the walls (east and south) are of solid wall construction and are below ground. There has been recent investigation to reveal the original structure which is of rubble construction without finish. In the 2010 campaign of building works these have been concealed with a DPM, metal stud frame, insulated and plaster board.

On previous investigations the walls in this area were particularly damp and upon inspection exposure the metal stud frames are corroding which is a significant sign of moisture ingress. The pointing to the solid walls is poor and requires repair.

The wall to the east is below ground and appears to have received a modern construction applied to the front of this, although this is not clear. To the other walls within the male toilets the modern materials have been retained.

To the north wall there is a boxing formed within one of the cubicles, which is possibly where the soil and vent pipe is located.

It is not clear where this pipe drains to which pick up the foul drainage, but it is assumed to follow in the build-up of the east wall as the wash hand basins also connect with the east wall.

This room has no means of natural ventilation. There is an extractor fan at ceiling level and a heating/cooling system applied at high level.

Corridor, Lobby & External Area

The lobby is a new structure which was applied in the 2010 campaign and provides means of level access into the building via the stairs which travels up to the upper floors. The lobby also provides access into the lift which also provides access up to the upper floors. Most of the material is expected to be of contemporary construction.

To the east wall, which is below ground, there is exposed construction which reveals a modern block wall which has evidence of moisture ingress. This area requires significant investigation to determine how the drainage has been managed. It is understood that the surface water drainage to the upper floor discharges in this location and makes it way to the lower level within the car park, it is not clear where this route of travel is but requires a greater level of understanding to understand the issues and how to rectify this.

The corridor travels centrally within the lower ground floor and is an enclosed space with no access to natural ventilation.

The corridor provides access to the two large spaces including the Meithrin and the Youth room. The corridor also provides access to the meeting room located in the northeast corner of the lower ground floor.

Towards the end of the corridor there is the boiler room, which is to the very north of the building.

The corridor has contemporary stud walls, all of which are constructed from modern metal stud partitions. However, the wall which forms the west wall to the Meithrin appears to be of solid construction, as does the adjacent wall which forms the enclosure to the disabled toilet.

Previously the corridor has presented significant levels of moisture ingress and evidence of condensation. Within the corridor there is one conditioning unit fitted at upper level, this unit can also provide heating.

Currently, the corridor is not performing as an internal space. The environment is suffering from dampness and has poor levels of ventilation.

The external foyer area is to the south of the entrance to the lower ground floor, sitting below the external entrance stair that provides

access to the upper ground floor area. The east walls are fully below ground, and there is an arched recessed feature within this wall constructed in rubble stone and may have provided a means of historic vertical access between the two buildings. The recess to the arch has a lime washed finish which has varying levels of performance.

The south wall to the external foyer is showing signs of salt migration and defective finishes to the rendered areas.

The south terrace which is linked to the Meithrin is a sunken yard with stone boundary walls formed to the west and south. The south accommodates the ramped approach, which provides means of level access from the car park to the upper ground floor level, which passes through the internal lobby to obtain access to the lift.

There is a large tarmacadam car park which wraps around the south-west of the site which provides vehicular parking at the lower ground floor levels as illustrated on the adjacent aerial image.

