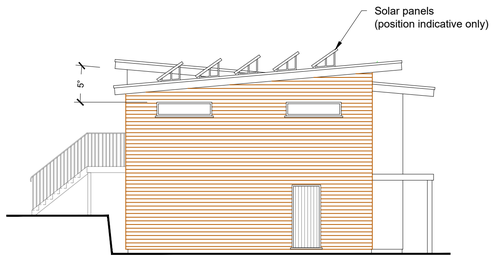
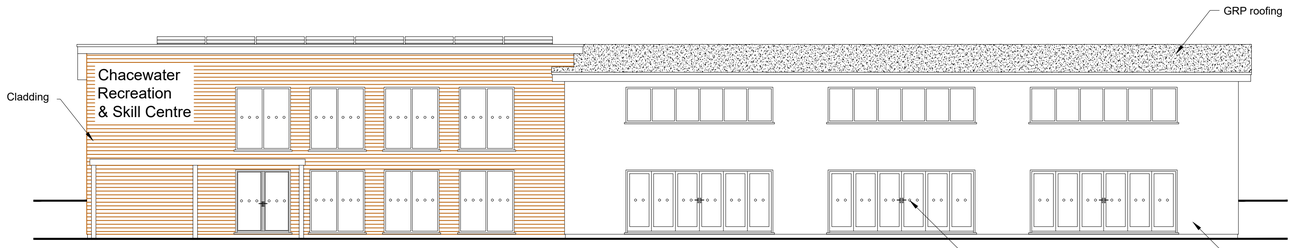
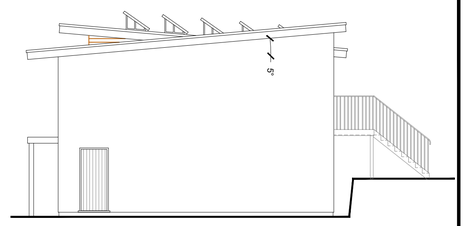


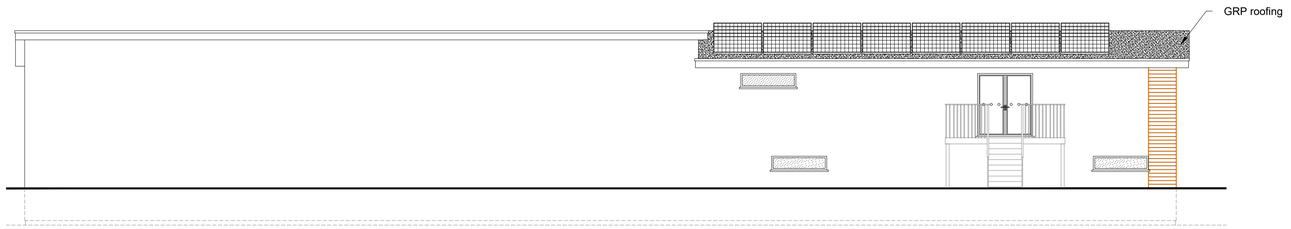
Side (East) elevation



Front (North) elevation



Side (West) elevation



Rear (South) elevation

Foundations:
Under external walls - Concrete foundations to be 450mm x 225mm C30 concrete strip to BS 5328 1997. (see dotted lines on plan) All at a depth to local authority approval upon site inspection but a minimum 600mm to 50mm below finished ground level or alternatively they shall be taken down below the invert of any adjacent drains within 1.0m of the excavations. Assured ground condition - shilleted.

Radon protection:
Radon grade membrane (a non-recycled) 400 micron (1,600g) barrier (dpm) to be installed over block and beam screed floor and carried through DPC to outer edge of footprint.

Ground floor:
70mm concrete screed to be laid on top of 500g polythene vapor barrier over 150mm PIR (Celotex flooring insulation) or similar. With 25mm PIR insulation 'up standing' insulation around perimeter to prevent 'cold bridging'. All to be sat upon the existing 150mm reinforced concrete slab.

Floor U value to achieve 0.10 W/M^{2}K or less

Rain water goods:
100mm uPVC guttering into 65mm down pipes (to roddable gullies) to 100mm PVC pipes and fitting into existing system. Soak-away to be 5M from any buildings or roads.

Wall Construction:
External walls will be the following standard make up with either type A, or type B (see details on Drg 2004-14). Construction from external finish in to be:finish: 9mm OSB of PLY boarding onto 140mm x 38mm CLS timber frame. Studs at 600mm. ACTIS Hybris 114 to be fitted the inside of the timber frame (leaving 35mm clearance) ACTIS H Control insulation fitted to inner face of timber frame. This will have all joints lapped and taped to create a vapor control layer (VCL) held in place using 38mm x 50mm battens to create a service void. Inner face to be finished with 12.5mm plaster-board and 5mm thick gypsum skim to receive decoration. Internal stud partitions: 90mm x 38mm CLS stud-work at 600mm centers with head and sole plates and half height noggins. 90mm Rockwool insulation to center (density of 10-60Kg/M3). Internal face to be finished with 12.5mm plaster-board and 5mm thick gypsum skim to receive decoration. All cladding must achieve B s3, d2, plus all external wall to achieve 60 minute fire resistance. Ensure Solid state (Intrumescent) cavity barriers are used at: around all window and door openings, and the head and foot of the cladding.

Walls U value to achieve 0.14 W/M^{2}K or less

Flat roof (warm roof):
Flat roof to be of a ***'warm roof construction'*** using Posi-Joist (metal web) ceiling joists set @ 400mm centers as per specialist manufacturers design and specification. To this fix a VAPOR barrier and 18mm OSB T&G with 2 layers of 120mm thick (240mm total) PIR Celotex or similar. To this fit 18mm thick OSB T&G sheeting ply to top face, finished with GRP roofing supplied and fitted in accordance to manufacturers specification and instructions. GRP roof finish to Broof (t4) class fire rating. Internal ceiling to finished with 12.5mm Gyproc plasterboard skimmed to clients choice

Roof U value to achieve 0.12 W/M^{2}K or less

Lateral restraining:
Lateral retaining to gable wall to be provided by 30mm x 5mm thick galvanised mild steel straps at a maximum of 2,000mm center located over / under in-line noggins and fixed to min. 3 No. roof rafters using 50mm long No. 12 wood screws into each truss and noggin.

Electrical installations:
All electrical work must be carried out by a registered scheme member who will issue a certificate of conformance in accordance to BS7671. All lighting to be energy efficient compact fluorescent or LED. All switches, sockets and electrical outlets are to be set between 450mm and 1,200mm from FFL. Ensure that the building is equipped with high-speed-ready in-building physical infrastructure up to a network termination point for high-speed electronic communications network.

Smoke & Heat detectors:
Mains operated smoke and heat detector to BS EN 14604 2005 with battery backup to be fitted - See fire plan drawings. Smoke detector to cover minimum of 7.5M radius on each floor level. CD = Carbon Dioxide. All smoke and heat detectors must be interlinked.

Windows & Doors:
All external doors to be Aluminum and windows to be uPVC - colour to be Anthracite gray on white, with 28mm Low E Argon filled insulated and double glazed sealed units with 20mm air gap. Trickle vents equivalent to 8,000 sq. mm. Glazing to windows with a sill height less than 800mm to be fitted with toughened safety glass to BS 6206.
Additional mechanical ventilation to rooms in the following areas:-
Kitchen - 60 liters / second
WC - 15 liters / second
(extractor fans to run for a minimum of 15 minutes after room occupancy in rooms without windows) Ensure a 10mm air gap to WC doors. Extractor fans to be installed in accordance to Approved document F1v2 appendix E. All new windows and doors to be rebated minimum 25mm behind external cladding. Ensure all new windows achieve 1.6W/M$_2$K. Maximum sill height 1,100mm. Fixed mechanical ventilation and any associated controls must be commissioned and tested. Notice of test results are to be provided on completion. Ensure all new external doors achieve a minimum U value of:-

3.0W/M$_2$K for solid door up to 40% glassed
1.8W/M$_2$K for doors with 40% - 60% glassing
1.6W/M$_2$K of doors with more than 60% glassing

All doors to be fitted with toughened or laminated safety glass and any glazing within 300mm of a door to be toughened or laminated safety glass. All to BS 6206. All windows and doors to be 'Secured by design' - SBD or equivalent security standard, and installed in accordance with the manufacturers details. Intrumescent cavity closer's to be fitted around all window and door openings. D2, D3, D4, D5, D6 & W3, W4, W5, W12, W13, W14 & W15 must have some form of manifestation on glazing. This could be in the form of 'Chacewater Recreation Center' logo to prevent any collisions. This will be set between 850mm to 1,000mm and also between 1,400mm to 1,600mm

Electrical installations:
All electrical work must be carried out by a registered scheme member who will issue a certificate of conformance in accordance to BS7671. All lighting to be energy efficient compact fluorescent or LED. All switches, sockets and electrical outlets are to be set between 450mm and 1,200mm from FFL. Ensure that the building is equipped with high-speed-ready in-building physical infrastructure up to a network termination point for high-speed electronic communications network.

Means of access:
The approach to the proposed building will be on good firm and level ground. All access ramps and pathways will not be greater than 1 in 20. Steps to have a maximum riser of 150mm with a minimum going of 280mm. Handrails to be provided where there is three steps or more. All doorway thresholds will not exceed 15mm in height. All ground floor doorways and corridors to have a minimum clear width of 900mm. For electrical outlet positions - see electrical installation notes . All means of access to comply with Approved Document Part M. Doorway widths to be:

800mm minimum clear access width on all new builds
1,000mm minimum clearance on all entrance doors

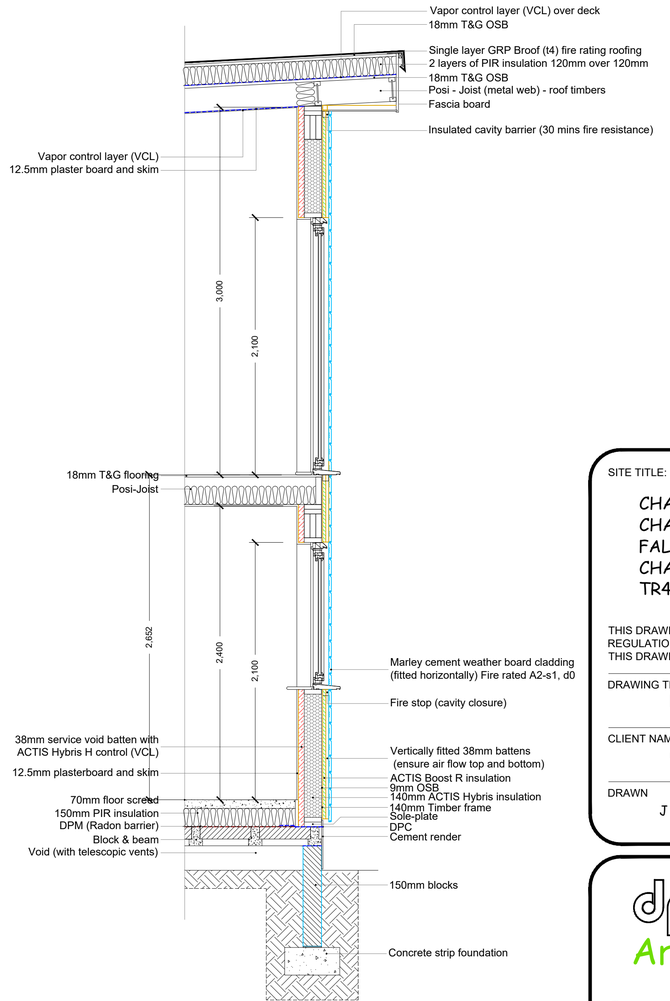
Fire protection:
All steel beam are to be fire protected to a minimum 30mm fire resistance by cladding with 15mm Gypsum Glasroc F Fire-case fire-board. To be installed as per manufacturers data sheet.

Drainage & Plumbing:
Foul - above ground waste sizes, shower 40mm dia. hand basin 32mm dia. all with 75mm deep seal traps and rodding access at all connections and change in direction. Hot taps to be on the left of all sanitary appliances. 110mm dia. soil and vent pipe to en-suite shower vented to external air a minimum 1.0M above eaves level. All other soil pipes to be fitted with air admittance valves sited 450mm above hand basin level. - below ground - 110mm Osma drain laid to fall a minimum 1 in 70 on a bed of pea gravel or shallower than than 450mm to be concreted. Where pipes penetrating walls, the opening must be masked both sides with a rigid sheet material to prevent entry of fill or vermin (Diagram 7 of Approved Document H). Osma plastic manholes to connect manholes to connect into existing foul sewer on saddle connection in accordance with SWW specification and supervision. Hot water supply from taps must NOT exceed 48°C. Water storage vessels should not allow water to exceed 100°C

Stairs:
Design is to conform to BS 5395-5 and constructed as follows:-
Rise to be 16 @ 165.60 mm
Going between 250mm with 25mm nosing
Width - 1,000mm minimum clear between strings. Headroom - minimum 2M measured vertically above nosing. Guard-rail to landing - 1.1M high and non-climbable. No space in the construction to exceed 99mm. Maximum pitch of stair case to be 42°. Stairs to have a handrail on both sides. Handrail to extend min 300mm at bottom of stairs. Stairs should be of limited combustibility ie: manufactured from galvanized steel.

Heating:
Air-to-water air source heat pump to feed under floor heating. Design, specification and installation as per manufacturers recommendation. Details to follow.

Ambulant disabled steps:
The approach to the proposed steps will be on good firm and level ground. The gradient must not exceed 1 in 20. The width will be no less than 900mm. The flight will be unobstructed and the rise of a flight between landings is not more than 1.8M. Each flight will have a top and bottom and intermediate landings if necessary. The rise of each step must be uniform and between 75mm and 150mm. The going of each step must not be less than 280mm. If the flight contains three or more steps, a continuous hand rail will be provided on one side and be between 850mm and 1.0M in height and will extend a minimum of 300mm beyond the top and bottom nosing.



Typical section (scale 1:25)

Preliminary drawing awaiting Building Control final approval

SITE TITLE:

CHACEWATER RECREATION CENTRE,
CHACEWATER RECREATION GROUND,
FALMOUTH ROAD,
CHACEWATER.
TR4 8LP

THIS DRAWING IS FOR THE PURPOSES OF TOWN PLANNING AND BUILDING REGULATIONS APPLICATION ONLY. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.

DRAWING TITLE:
BUILDING REGULATIONS - SHEET 2

CLIENT NAME:
CHACEWATER RECREATION CENTRE

DRAWN	DATE	SCALE
J MURCH	01.04.2024	1:50 SHEET SIZE A1

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DRAWING NO 2004 - 12 REVISION NO - B