

Construction Notes :-

All work to conform to current Building Regulations and allied legislation together with current codes of practice. All dimensions to be checked on site, do not scale from drawings. All works to be under the supervision of qualified persons and the Building Control Officer. All works to be conducted under current HSE guidelines. All works to conform to BS8000 parts 1 to 15. Any changes to be agreed with all parties prior to construction. If in doubt ask. Structural elements to be checked and specified by qualified Structural Engineer prior to commencement of works. All drawings owned by Dyfi Architecture Limited, do not copy without written permission. Refer to any other documentation issued, particularly Schedules and Specifications.

- Access :- Contractors and all other persons involved must familiarise themselves with access to the site and the restrictions involved. Adequate care must be taken when turning, parking, etc. Affected neighbours to be informed of start date and anticipated timescales.
- Demolition :- Provide adequate shoring, strutting, needling, propping and other supports necessary for taking down or breaking through the structure. The stability of the structure must be considered at every stage with consultation with suitably qualified personnel. The structure must be protected from deterioration throughout. Any hazardous materials must be dealt with appropriately with Consultation with Specialists if necessary. Any Damage to Buildings, garden, land, neighbouring property and Council areas to be recorded and reported to Client. Clients and Neighbours to be informed of all expected affected areas beforehand. All items, rubble, spoil, debris and rubbish to be separated for re-use / recycling and properly stored or removed from site at regular intervals. Council and Private Permissions and Permits to be the responsibility of the main Contractor. Refer to any Planning Conditions and Ecology or other reports prior to commencement of works.
- All contractors and site personnel to observe HSE guidelines for safe working practices.
- All Contractors to provide evidence of adequate insurance cover.
- All relevant notifications to be issued before start of works, ie. Building Control.
- Specifications, if issued, overrule drawings and drawing notes and must be referred to before tendering and during construction.
- Materials :- Joinery and second fix materials to Clients requirements. Timber to be C24, s/w, pressure treated unless stated otherwise. All bought in and supplied materials to be fit for purpose and as agreed with Clients and BCO. Oak to be D40 grade, BS5756.
- Marking out site :- Clients to agree on exact positions of (new) structures once marked out and before excavating. Levels to be determined thereafter.
- Tanking :- If ground cannot be effectively reduced to ensure 150mm between FFL and GL then tanking methods should be discussed.
- Levels and excavations :- Accurate levels to be ascertained on site before, during and after excavations. Care to be taken around any existing drainage, electrical and water supply systems which should be noted and recorded. Existing walls are assumed to have minimal footings and must be properly supported throughout. The height of all levels may need to be determined by the depth of excavations and subsequent landscaping, which must take into account the drainage of surface water.
- Note : The use of concrete and other cement based products is to be minimal in order to reduce CO2 footprint to the absolute minimum. (Cement is the source of around 8% of the world's carbon dioxide (CO2) emissions).
- Sub-Structure :- Foundations are shown nominally and shall be adjusted to suit conditions and comply with the recommendations of the BCO and Structural Engineer. Blockwork walls to be laid on strip foundations, depth as agreed on site with BCO. Concrete made with cement to BS12/1978 and fine and coarse aggregate to BS/82/1983 in proportion of 50kg cement to not more than 0.1m³ of coarse aggregate. Form cavity walls (or single skin) to DPC with 7.5N/mm² dense concrete blockwork laid with sand cement mortar. Fill cavities (if applicable) to GI with lean mix concrete. Option to use trenchblocks, see details.
- Underground Lintels :- 150mm Lintels to be laid over drains with gravel surround where passing through walls.
- New constructed walls above DPC to be laid using sand/cement mortar. Cavities (where applicable) to be 50mm continuous. Use st.st. ties at 750crs max horizontally and 450crs vertically and every course adjacent to openings. New walls to be properly tied to existing using St.St. 'furfix' or similar, with cold bridging minimised. Use insulated cavity closers at new openings where appropriate.
- Lintels – Lintels over openings where shown to be IG type HD (Heavy Duty), supplied with Technical loading backup documents. To suit opening widths and wall constructions /finishes with minimum end bearing 150mm on suitable padstones as directed by the supplier and Engineer / BCO.
- Lintels in blockwork to be 150 x 100 PC concrete lintels.
- Visible lintels over openings to be oak D40 structural grade, unfinished to weather grey.
- Openings in Existing structure – As noted with regard to structural stability and safety.
- Leadwork :- New Code 4 lead flashing to all joins and soakers to BS5534, lead collars or appropriate fittings where flues run through roof.
- Land and surface drainage system :- Existing gullies to accept rainwater and surface water. 110mm land drains to soakaways, minimum 1mtr./3, at 5 metres from buildings, (or other agreed discharge) installed after excavation and inspection. Backfill as directed by BCO. Landscaping to effectively disperse water away from the property. Provide minimum 150mm minimum from GL to FFL at existing interfaces.
- New Ground Floor Construction :- Concrete slab as shown on detailed drawings and to suppliers specifications. Floor finish to Clients requirements.
- Radon Protection (Basic) : Ensure that the floor membrane is taken up the edge of the slab and the wall where it should be lapped and bonded with double sided tape, or through the wall if new constructed wall..
- DPC's :- Horizontal dpc to all new walls, min 150mm above GI to BS.743. Vertical insulated dpc at new returns and closures. Trays over all new openings for windows and doors in conjunction with new lintels.
- Partition Walls :- As details.
- Insulation, refer to details :
 - Floors – P/A= 1.1, 100mm to achieve U-0.18.
 - Walls new elements – Cavity blockwork 80mm to achieve U-0.21.
 - Roofs – Pitched roof, rigid board as deep as site conditions allow.
- Underground Drainage : Marley or equivalent approved upvc pipework and fittings. All laid to fall as referred to in Approved Document Part H1. Lintels over drains when passing through walls, encased in 100mm granular or other flexible material and fire-stopped as necessary. New drainage to be taken to 110mm pipes, min cover 200mm pea gravel.
- Drainage :- All internal wastes to be trapped and have Maximum 2mtr external runs. All soil and grey water to existing system or new internal SVP's as shown on drawings. New drainage runs to South aspect to new IC and then to new STP.
- Rainwater goods :- All to be as specified by Clients in minimum 100mm half round gutters and 68mm round downpipes. Discharge to existing or new soakaway pits 1 cu mtr at distance 5mtrs from property, with option to discharge to collection vessels or stream. Refer to any Planning Conditions. All to be agreed with BCO.
- Ventilation :- 'Tyvek Supra' roof membrane, 'Tyvek Housewrap' on any external stud walling. Roof constructions as detailed. All new windows and doors to have trickle vents giving min 8000mm sq background ventilation to all rooms. Extractor fans in wc, bath / shower rooms to have 15 litres/second extraction rate with 15 minute overrun. Extractor fans in kitchens / utility rooms to have a 30 litres/second extraction rate if adjacent to a hob, or 60 litres/second if elsewhere.
- Any hot water storage must be restricted preventing the water exceeding 100 degrees centigrade.
- Windows and doors :- To be as specified by Clients. All windows and doors to perform to a U value of 1.6 or better and be fitted with 24mm (minimum) double glazed units using 'Pilkington K glass', all internally glazed with fixing beads. Installation of all windows and doors to be carried out by a registered 'Fensa' contractor, or under the direct control of the BCO to ensure full compliance with Building Regulations. Note any requirements for fire escape windows.
- Glazing :- Toughened or safety glass to be installed in all windows within 800mm of FFL and all doors within 1500mm of FFL. Glazing to windows within 300mm of door edges up to a height of 1500mm should have safety glazing.
- Roof Construction :- See drawing details. To tie into existing.
- Ecology :- Refer to latest bat report and other details regarding compliance and bat licence requirements. Note details for bat loft and access arrangements.
- Electrical works :- All electrical works to be to carried out by a 'Competent Person' as determined by Building Regulations Part 'P'. Contractor to provide a Certificate of Completion of works and a Connection Certificate from the Electricity Company. Installation to Clients requirements. Energy efficient lamp fittings to be installed to all new areas.
- Rooflights :- To be conservation type size assumed to be CK04 – 550mm x 980mm but to be checked on site before ordering. Option to use different supplier if Velux is too large.
- Fire Resistance :- Ceilings 1/2hr. FR. minimum. All doors fitted to 1/2hr.FR minimum. Universal beams and lintols to be protected to provide 1hr rating.
- Fire Suppression :- To tie with existing.
- Fire Detection :- To tie with existing.

Project : Hirfron, Pant Y Dwr,
Rhayader, LD6 5LR

Title : Construction Notes
Proposed
(2022)

Drawing : 9945P rev A

Scale : N/A @ A2

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