

THE FERNERY AT THE ACACIAS, UNIVERSITY OF READING		
February 2026		
Section 2 - Glasshouse Structure		
Item	Descriptions	Quantity
	<i>The fernery is a single-storey, L-shaped structure, wrapping around the flat-roofed entrance corridor to the Acacias building. The structure is primarily brick masonry with render on the exterior and a built up Pulhamite rockwork finish on the interior. It has a double pitched glazed roof with an even span of approximately 4m.</i> <i>The original structure dates back to the late 19th century but the roof has been substantially modified in the 20th century.</i> <i>The structure is currently in a dilapidated condition, and existing timber roof frame has been removed from site for safety reasons. Measured surveys were taken prior to the removal of the roof frame, refer to relevant drawings for details and information on like-for-like reinstatement.</i> <i>The purpose of the works is to restore the roof structure, returning the ferney to a watertight condition.</i>	
Strip Off & Demolition		
2.01	Carefully remove eave gutter and downpipes. Set aside gutter and brackets for redecoration and reinstatement. Clear away other materials including lead flashings, boarding, all fixings and uPVC downpipes and hoppers.	
2.02	Carefully dismantle timber post wall frame and glazing to east elevation and 2 side returns, including 4 no. 1.7(h)x1.2(w)m top hung casement windows, and 6 no. 1.7(h)x0.9(w)m fixed windows. Set aside all casement stays for redecoration and reinstatement. Structural timber posts and wall plate are extensively decayed and rotten; dismantle and dispose off site. Timber window frames appear to be in salvageable condition, carefully dismantle and set aside for repair and adaption, including upgrading to incorporate improved weathering details. Retain sound glass panes for cleaning and reinstatement.	
2.03	Carefully remove lead flashing at junction with flat roof, remove all fixings and clear away.	20linM
2.04	Following stripping back of roof and removal of timber post wall, clean all remaining debris out of exposed areas, vaccum clean voids and junctions to remove sundry debris and clear away.	
2.05	Remove temporary ceiling above porch and clear away.	3sqM
Masonry		
2.10	Allow for stripping off existing render to east elevation masonry plinth, and re-render in 3-coat lime render to match existing.	10sqM
2.11	Provide and install brick base plate 150mm (w) by 50mm (h) running along base of timber post wall.	14linM
Timber Post Wall & Returns		
2.20	Provide and install 11 no. solid hardwood wall posts, 100mm (d) x 75mm (w) cross section, 1.7m long.	11 no.

2.21	Provide and install solid hardwood wall plate along wall perimeter to all sides. Chamfer to match roof pitch to provide bearing for roof rafters.	Approx. 34 linM
2.22	Repair and adapt 4 no. top hung casement windows to central 4 bays. Allow for dismantling of windows from site and taken to workshop for repairs and adaptation. Allow for disconnecting and re-fixing timber elements such that timber splice repairs can be carried out.	4 no.
2.22a	Allow for 4 no. replacement bottom rails to casement windows, with profiles matching decayed existing. In preservative treated softwood (C24), finished to match existing.	4 no.
2.22b	Trim and re-fixing existing timber stiles, top rails and glazing bars to suit modified windows, reduced in overall size to accommodate new timber framing to each window. Minimise loss of existing fabric, maintaining original timber profiles and jointing where possible.	4 no.
2.22c	Provide and install 4mm toughened safety glass to all 4 casement windows, to include - - 8 no. approx. 0.5 by 1m lower panes - 12 no. approx. 0.32 by 0.32 upper panes The Contractor shall verify all pane dimensions following adjustment of the window frames and prior to manufacture and installation of the glass.	
2.22d	Provide and install new preservative treated softwood (C24) frames to 4 no. top hung casement windows, sized to suit revised openings and securely fixed to structural posts and wall plates, include new timber cills with appropriate projection and drip details to shed water clear of wall face. Frames to be set out level and true, and prepared to received adapted casements.	4 no.
2.22e	Clean back and redecorate existing casement stays, in black matching existing.	8 no.
2.22f	Provide and fix new spoon end black metal casement stays matching existing.	4 no.
2.23	Repair and adapt 6no. fixed windows to end bays and side returns. Allow for dismantling of windows from site and taken to workshop for repairs and adaptation. Allow for disconnecting and re-fixing timber elements such that timber splice repairs can be carried out.	6 no.
2.23a	Allow for 6 no. replacement bottom rails to casement windows, with profiles matching decayed existing. In preservative treated softwood (C24), finished to match existing.	6 no.
2.23b	Trim and re-fixing existing timber stiles, top rails and glazing bars to suit modified windows, reduced in overall size to accommodate new timber framing to each window. Minimise loss of existing fabric, maintaining original timber profiles and jointing where possible.	6 no.
2.23c	Trim and re-fix sound existing panes to suit the modified windows, allow for new timber glazing beads to all windows.	6 no.

2.23d	Provide and install 4mm toughened safety glass to all 6 no. fixed windows, to include - - 6 no. approx. 0.75 by 1m lower panes - 12 no. approx. 0.35 by 0.35 upper panes The Contractor shall verify all pane dimensions following adjustment of the window frames and prior to manufacture and installation of the glass.	
2.23e	Provide and install new preservative treated softwood (C24) frames to 6 no. fixed windows, sized to suit revised openings and securely fixed to structural posts and wall plates, include new timber cills with appropriate projection and drip details to shed water clear of wall face. Frames to be set out level and true, and prepared to received windows.	6 no.
2.24	Provide and install preservative treated softwood (C24) posts for mounting ventilating mechanism, 1 no. to north wing and 1 no. to east wing.To include masonry ground socket and mechanical fixing to timber rafters.	2 no.
<i>Glazed Roof (including porch)</i>		
2.30	Provide new masonry (brick) upstands along junction with adjacent flat roof, bedded in lime mortar.	20linM
	Provide and install softwood wall plate along wall perimeter above masonry plinth as per item 2.21. Chamfer to match roof pitch to provide bearing for roof rafters.	
2.31	Provide and install glazed roof structure as per drawings - - 242925-PUR-01-XX-DR-A-3001 - 242925-PUR-01-XX-DR-A-3002 - 242925-PUR-ZZ-01-DR-A-0201 The Contractor shall: -- Be responsible for setting out the works on site and verifying all dimensions prior to manufacture and installation. - Check and coordinate all interface dimensions with existing structure and adjoining buildings. - Execute the works as a complete and fully integrated system, including timber framing and supporting structure; glazing units and glazing system; ventilators; lead flashings and weatherings; cappings, trims, seals and all associated roof elements; fixings, brackets and ancillary components required for a complete installation. The glazed roof structure shall: - Be structurally adequate for all imposed, dead and wind loads in accordance with current Building Regulations and relevant British Standards. - Achieve full weather-tightness and durability appropriate to its exposure. The Contractor shall notify the Contract Administrator in writing of any discrepancies, dimensional conflicts or deviations from the drawings prior to manufacture.	
<i>Porch</i>		
2.40	Allow for stripping off existing render to masonry plinths below side lights, and re-render in 3-coat lime render to match existing.	0.8sqM
2.41	Provide and install brick base plate 150mm (w) by 50mm (h) under fixed side light to north of double door, and timber infill panel to south of double door.	1 no. 0.3linM 1 no. 0.6linM

2.42	Repair and adapt fixed side light. Allow for: - Dismantling and removing the sidelights and associated frames. - Preparing existing timber frames by removing all loose and flaking paint, rubbing down, priming and redecorating. - Trimming back the existing timber frames as necessary to accommodate new brick base plates.	
2.43	Allow for replacing bottom rails to side lights, with dimensions matching existing. In preservative treated softwood (C24), finished to match existing.	0.15 (h) x 0.42 (l) linM
2.44	Overhaul double door. Allow for: - Preparing existing timber frames by removing all loose and flaking paint, rubbing down, priming and redecorating to match existing - Ease and adjust to ensure door operates smoothly. - Ease and adjust ironmongery. Redecorate existing ironmongery.	
2.45	Provide and install 4mm toughened safety glass to - Sidelight, 1.2m by 0.42m - 2 no. upper panes of double door, 1.2m by 0.5m each - 2 no. lower panes of double door, 0.5m by 0.35m each The Contractor shall verify all pane dimensions following adjustment of frames and prior to manufacture and installation of the glass.	
2.46	Provide and install solid hardwood wall plate along wall perimeter to east and west sides of porch. Chamfer to match roof pitch to provide bearing for roof rafters.	Approx. 4 linM
2.47	Provide and install new 38x97mm preservative treated softwood (C24) joists between porch and fermery, approx. 1.8m long, as required to form and adequately support the new box gutter.	3 no.
2.48	Provide and fix new plywood decking to joists to form the new box gutter. Prepare and decorate exposed internal faces.	2 no. 0.5x1.8m 2 no. 0.2x 1.8m
<i>Rainwater Goods & Below Ground Drainage</i>		
2.50	Allow for the existing downpipe serving the upper roofs (RWP 06) and discharging into the eaves gutter to the east of the porch to be extended down to ground level and connected into the existing manhole to the east. Include all necessary offsets, bends, shoes, fixings and connections. Downpipe to be cast iron, manufactured by J & JW Longbottom or similar approved, to match existing in dimension and appearance. Allow for all associated groundworks required to form the connection to the sump, including excavation, pipework, fittings and backfilling. Make good ground upon completion of works.	
2.51	Clean masonry adjacent to the porch to remove biological deposits resulting from prolonged overflow from the eaves gutter.	
2.52	Allow for relocating downpipe RWP 01 from existing location to new location as shown on drawing 242925-PUR-ZZ-XX-DR-A-0210. Allow for all associated groundworks required to form the connection to the sump, including excavation, pipework, fittings and backfilling. Make good ground upon completion of works.	