

Eagle Court, 69 High Street, Hornsey QUANTIFIED SCHEDULE of WORKS & SPECIFICATION LBC ISSUE - AUGUST 25 - AMMENDED	
Item	Description
1.0	TESTING, TRIALS & EXPERIMENTATION
-	The following trials should be undertaken. Please do not proceed with the larger work items until formal approval in the form of Contract Administrator's Instruction (CAI) has been received from the CA. Testing Trials and Experimentation to be undertaken as quickly as reasonably possible following project initiation to allow for decisions and site attendance by third parties. See also the Information Release Schedule in the Preliminaries - Section 490.
	COOKIE SAMPLES - Masonry and Mortar
1.1	The process involves mixing lime mortar in accordance with the project specifications, forming small test cookies from the mortar, and allowing them to cure under controlled conditions. The samples will be used to verify that the mortar mix meets the required performance, consistency, and appearance standards. These are to cover the repointing (regular and tuck), rebuilding of walls, stairs, stacks and parapets.
	Forming the Mortar Cookies
	Moulds: Create the mortar cookies using a small, uniform mould or freehand to shape discs approximately 75mm in diameter and 10–15mm thick. Each sample should have consistent dimensions to allow for uniform curing and testing. Labelling: Each mortar cookie must be clearly labelled with: - Date of production - Mortar mix ratio - Lime type (NHL, formulated or non-hydraulic) - Curing conditions (temperature, humidity, etc.)
	Curing the Mortar Cookies
	Controlled Curing Conditions: Place the mortar cookies in a controlled environment, protected from direct sunlight, wind, and frost. The cookies should be stored in a location with good ventilation and moderate temperatures (ideally between 10°C and 20°C). Moisture Control: To ensure proper curing, lightly mist the samples with water daily, or place them under damp hessian or plastic sheeting to maintain a controlled moisture environment. The aim is to prevent the cookies from drying too quickly, which can lead to cracks or weak spots. Curing Time: The mortar cookies should be allowed to cure for a minimum of 5 days before being subjected to testing or further analysis. The samples should be inspected periodically to ensure no shrinkage, cracking, or surface defects occur during the curing period.
	Testing and Inspection
	The sample will be inspected by the CA and the approve mix instructed prior to undertaking the main body of the works.
	Material Specification
	Samples are to be composed of a mixture of the following: - Based on a NHL 2 binder - A range of aggregates & stone dust - A range earth pigments - A range of ratios
	RAKING OUT & REPOINTING
	Raking Out - Brickwork
	In a location agreed with the CA, undertake raking out of brickwork, as follows:
	Raking Out Mortar Joints: The process of raking out mortar joints must be undertaken with care and precision to preserve the historic fabric and prepare the joints for subsequent repointing using specified lime mortar. All work must ensure the preservation of brick arises and avoid damage to the surrounding masonry. All joints must be raked to a consistent depth of 1.5 to 2 times the joint width, with a minimum depth of 15mm for narrow joints. Care must be taken to ensure sound mortar is not overcut and that no damage occurs to the brick surfaces. Tools for Raking Out: Raking out must be performed using appropriate hand tools to avoid damage to the brick arises. Tools should include: - Plugging chisels - Mortar rakes - Hand chisels The use of mechanical tools is not permitted unless explicitly authorised in writing by the Contract Administrator (CA). Where mechanical tools are approved, they must be operated with extreme care to prevent vibration damage or scarring of the brick surfaces.
	Preparing the Joints for Raking: Before commencing the raking process, inspect the existing mortar joints to identify loose or deteriorated mortar that requires removal. Ensure all necessary tools are available on site, and the work area is clear of loose debris. The joints should be raked in a controlled manner, starting from the top of the wall and working downwards to avoid dislodging bricks. Special attention should be paid to corners, junctions, and areas of complex brickwork patterns, where mortar joints may be narrower or uneven.
	Raking Depth and Method: Mortar joints are to be raked to a depth of 1.5 to 2 times the width of the joint, with a minimum depth of 15mm for joints less than 10mm wide. The raking must be consistent across the entire area, ensuring the removal of all loose and defective mortar while avoiding damage to adjacent masonry.
1.2	Begin by inserting the tool at a slight angle to ensure the mortar is gently loosened without exerting excessive pressure on the bricks. Progressively work along the joint in short, controlled movements, applying only sufficient force to remove the mortar without dislodging the bricks.

	Cleaning the Joints: Once the mortar has been raked out, clean the joints thoroughly to remove dust and debris. This can be done using a soft-bristle brush to avoid scratching the brick surface. Compressed air may be used to blow out dust from the joints, provided dust control measures are in place to protect surrounding areas. Water must not be used to clean the joints unless specifically instructed by the CA. Excess moisture can damage the historic brick fabric and compromise the curing of the new lime mortar.
	Addressing Technical Challenges Irregular and Undulating Surfaces: Where the brickwork is irregular or undulating, particular care must be taken to ensure that the mortar joints are raked out to the required depth without disturbing the uneven surface of the bricks. In these areas, smaller hand tools may be required to achieve a consistent depth and to avoid overcutting. Where brick surfaces are uneven or fragile, avoid applying excessive force to prevent cracking or spalling of the brick arises. Narrow and Fragile Joints: For narrow joints or joints in areas of fragile masonry, use finer tools to ensure that the joints are carefully raked without damaging the surrounding brickwork. Work slowly and deliberately to ensure even removal of mortar without causing brickwork damage.
	Joint Protection and Preservation of Brick Arrises: Throughout the raking out process, care must be taken to preserve the edges (arrises) of the bricks. No chipping, spalling, or overcutting of the brick arrises is permitted. The use of hand tools only ensures that the brick edges remain intact and protected. Any damage to the brick arrises must be reported to the CA for further instruction.
	Quality Standard - Historic England Guidance – Repointing Brick and Stone Walls Guidelines for Best Practice Relates to cleaning and preparing joints for lime mortar repointing, ensuring compatibility with historic brickwork and maintaining the appearance of the original masonry.
1.3	Pointing - Brickwork In a location agreed with the CA, undertake pointing of brickwork, as follows:
	Preparing the Joints for Repointing: Once the mortar joints have been raked out and cleaned as per the previous schedule, the joints must be prepared for repointing to ensure proper adhesion of the new lime mortar. The joints must be free from loose material, dust, and debris, and lightly dampened immediately prior to applying the mortar to ensure adequate moisture content. Dampening should be done using a fine mist spray to avoid saturating the brickwork. Care must be taken to ensure the joints are not oversaturated, as excess moisture can affect the curing process of the lime mortar.
	Mixing the Specified Lime Mortar: The lime mortar to be used for repointing must be prepared as specified in the separate Specification document, ensuring it is compatible with the historic brickwork. The mortar should be mixed on-site using the proportions and method detailed in the Specification. The mortar should be mixed thoroughly to achieve a consistent, workable texture, suitable for hand application. The consistency of the mortar must be such that it can be pressed into the joints without slumping, but still allow for adequate workability during the pointing process. Once mixed, the mortar must be used within the specified time frame to prevent drying out or losing workability.
	Application of Lime Mortar to Joints: The mortar is to be applied by hand using appropriate tools to ensure it is pressed firmly into the joint, fully filling the joint without gaps or voids. The mortar must be applied in layers if the joint depth exceeds 15mm, allowing each layer to partially set before the next is applied. The first layer of mortar should be pressed into the back of the joint, ensuring it makes full contact with the internal surfaces. Subsequent layers should be added, taking care to compact the mortar firmly and avoid trapping air within the joint. The final layer of mortar should be finished flush with the brick face or recessed slightly, as specified in the design details. Care should be taken to ensure the mortar profile is consistent across the entire façade.
	Tooling and Finishing the Mortar: The mortar joints must be tooled and finished to achieve a consistent appearance that matches the historic character of the building. The finish should be smooth and compact, with no gaps or loose material. Tooling should be done using appropriate hand tools, such as pointing irons, to achieve the specified joint profile. Care should be taken to ensure the edges of the brick arrises are not damaged during the tooling process. For joints requiring a weatherstruck finish, ensure the top edge of the joint is angled slightly to shed water away from the brick surface.
	Mortar Specification 1 part NHL 2. 2.5 parts well graded sharp sand.
	Quality Standard - Historic England Guidance – Repointing Brick and Stone Walls Guidelines for Best Practice Relates to cleaning and preparing joints for lime mortar repointing, ensuring compatibility with historic brickwork and maintaining the appearance of the original masonry.
	Tuck Pointing - Brickwork
	Preparing the Joints for Repointing Once the mortar joints have been raked out and cleaned as described above, prepare the joints for repointing. Joints must be free from loose debris, dust, and previous pointing remnants. Lightly dampen the joints immediately before repointing using a fine mist spray to control suction and support mortar adhesion. Avoid oversaturating the brickwork. Ensure all joints are evenly prepared and suitable for receiving the new lime mortar.
	Mixing the Specified Lime Mortar Prepare the base mortar on site using the specified mix: 1 part NHL 2 to 2.5 parts well-graded sharp sand Mix thoroughly to achieve a consistent, workable texture. The mortar should be stiff enough to press into joints without slumping but workable enough for hand application. All mortar to be used within the specified time frame to maintain workability and avoid drying out.

1.4	Application of Base Mortar to Joints Apply the base mortar by hand using appropriate small pointing tools. Press mortar firmly into joints to ensure full fill and solid bedding against the internal surfaces. Where joint depth exceeds 15mm, apply in successive layers, allowing each layer to partially cure before the next is applied. The final face of the base mortar should be finished flush or recessed slightly, providing a clean bed for the application of the tuck ribbon.
	Tuck Ribbon Application Once the base mortar has reached a suitable firmness, apply a fine fillet (or ribbon) of white lime putty-based material to create the tuck joint: Use a narrow tuck iron to apply a clean, raised ribbon of white putty along the centre of the joint. The ribbon should be sharp-edged, uniform in width (typically 4–6mm), and sit proud of the base mortar. Finish vertically and horizontally to match the existing historic appearance. All work to replicate the rhythm, layout, and proportions of the original tuck pointing, with reference to surviving examples.
	Tooling and Finishing Tool the white tuck ribbon and the base mortar to achieve a crisp, consistent profile across all repointed areas. Use hand tools to compact and smooth both base and ribbon without smearing the finishes. Take particular care to protect brick arrises from damage and to preserve the sharp geometry of the joint. The final appearance must match the character and detail of surviving tuck pointing on the building.
	Mortar Specification Base Mortar: 1 part NHL 2 : 2.5 parts well-graded sharp sand Tuck Ribbon: Fine white lime putty with fine silver sand (prepared separately to match existing detail)
	Quality Standard Historic England – Repointing Brick and Stone Walls: Guidelines for Best Practice Relates to the preparation of joints, selection of compatible lime mortars, and execution of pointing techniques appropriate to historic brickwork, including specialised finishes such as tuck pointing.
1.5	Render Sample Area
	Produce a trial section of rendering in a discrete location (on-site) as confirmed by CA, as follows:
	Removal of Existing
	Loosening Render by Tapping Gently tap the surface of the render with a lightweight hammer to identify and loosen sections. Focus on visibly delaminated or hollow-sounding areas, avoiding any excessive force that could damage the masonry beneath.
	Controlled Removal Using Chisels Using sharp hand chisels at a low angle, carefully remove the loosened render in layers. - Work in small sections from the outer edges inward. - Avoid heavy strikes or deep penetration that may score or fracture the underlying masonry. - Exercise additional care around window and door surrounds, corners, and decorative features.
	Fine Removal with Scrapers Use scrapers or putty knives to remove smaller fragments and feather the edges of any remaining render. - Pay particular attention to details, returns, and junctions. - Continue removal until the entire façade is cleared back to the underlying masonry, avoiding overcleaning that may damage the substrate.
	Final Cleaning and Inspection
	Surface Brushing Once render removal is complete, brush all exposed masonry using a soft hand brush to remove dust, loose particles, and remnants of render. Avoid wire brushing or abrasive cleaning methods.
	Inspection and Reporting Inspect the entire exposed surface for damage, moisture ingress, or previous repairs. Notify the CA of any defective bricks, voids, or inappropriate previous patching uncovered during the works.
	Re-Render
	Preparation for Rendering Surface Cleaning: Remove any dust from the area using hand tools. Avoid using power tools that could damage the underlying structure.
	Dampening: Lightly mist the substrate with clean water to prevent rapid drying and to improve adhesion of the scratch coat. The surface should be damp, not saturated.

	Application of the Scratch Coat Application: Apply the scratch coat to a thickness of approximately 10mm using a trowel. Press firmly to ensure good adhesion to the substrate. Scoring: Use a scratch comb to score the surface horizontally, creating a key for the next coat. The score lines should be consistent and even. Curing: Allow the scratch coat to cure for 3-5 days, depending on weather conditions. Keep the surface damp and cover it with damp hessian to prevent rapid drying and cracking. Render Mix: 1 part hydraulic lime (NHL 2) 2.5 parts sharp sand.
	Application of the Float Coat Preparation: Dampen the scratch coat before applying the float coat. Application: Apply the float coat to a thickness of approximately 8-10mm, ensuring an even surface. Smooth out any uneven areas, leaving a consistent finish for the final coat. Curing: Allow the float coat to cure for 3-5 days, keeping it damp and protected with hessian to ensure proper curing. Render Mix: 1 part hydraulic lime (NHL 2) 2.5 parts sharp sand. (Same sand type as for the scratch coat to maintain consistency)
	Application of the Finish Coat Preparation: Lightly mist the float coat to provide a damp surface for the final coat. Application: Apply the finishing coat to a thickness of approximately 5mm and finish with a trowel to match the surrounding texture. Use fine, controlled movements to blend the new render seamlessly with the original render. Curing: Allow the finishing coat to cure gradually. Keep it damp with hessian coverings and mist regularly for 7 days to prevent shrinkage or cracking. Avoid exposing the newly rendered area to direct sunlight or frost during curing. Render Mix: 1 part hydraulic lime (NHL 2) 1 Part silica sand.
	Quality Standard BS EN 13914-1:2016 – Design, preparation, and application of external rendering
	Foundation Trial Pits Carry out the excavation and inspection of foundations in order to specify repairs and modifications needed for the new foundations of both the front retaining wall and front porch staircase as follows (See Drawings A0? - ?):
	Preparation of the Work Area Site Setup and Access Establish safe access to all areas identified for trial excavations. Ensure any adjacent hard landscaping, steps, or walls are protected with sheeting or hoarding. Provide suitable edge protection and barriers where excavations are to take place near circulation routes, retained structures, or property boundaries. Service Checks Carry out a CAT scan and hand dig test pits to confirm the location of any known or unknown underground services prior to excavation. Immediately report any services uncovered to the CA before proceeding.
	Trial Excavation Test Pit Locations Excavate trial pits in the locations indicated by the CA or structural engineer. These may include the base of existing retaining walls, base of the porch staircase, or any areas showing movement or settlement. Pits are to be hand dug, unless otherwise agreed, to minimise the risk of damaging buried masonry, services, or fabric. Depth and Size Excavate trial pits to a sufficient depth to expose existing foundations, or until suitable bearing strata is reached, as instructed by the CA or engineer. Typical pit size to be approx. 1.0 m x 1.0 m unless otherwise directed. Stability and Support Where required, temporarily support trench edges to prevent collapse. Use trench sheeting or edge protection to maintain a safe working area.
	Inspection and Recording Structural Engineer and CA Attendance Notify the CA and structural engineer once each pit is open for inspection. Ensure that exposed foundations, ground conditions, and any substructure masonry are visible and clear of loose spoil for assessment. Recording Record depth of footings, construction type, and ground conditions. Take photographs and note any anomalies or unexpected construction. Mark pit locations on a plan and provide the CA with inspection notes if requested.

	Quality Standard BS 8000-1:1989 – Workmanship on Building Sites – Excavation and Filling Relates to safe and controlled methods of excavation, ensuring accuracy in digging, stability of trench sides, and protection of adjacent structures or surfaces. BS 6031:2009 – Code of Practice for Earthworks Relates to good practice in excavation and earth handling, including trench safety, identification of soil conditions, and backfilling procedures where required. PAS 128:2014 – Specification for Underground Utility Detection, Verification and Location Relates to the detection and reporting of underground services prior to excavation. Supports safe planning and controlled execution of test pits. All trial pit excavations must be carried out by hand unless otherwise agreed, with care taken to avoid damage to existing foundations, buried services, or adjacent structures. Test pits must be safely supported, clearly marked, and recorded in full. All work must be undertaken safely, neatly, and to the reasonable satisfaction of the CA and structural engineer.
1.6	Front Retaining walls
1.7	Porch Staircase
	Subtotal
2.0	FLAT ROOFING WORKS - STRIPPING & REPAIR
	Contractor to undertake careful strip of roofing areas shown on Drawing A03 to facilitate repair and re-roofing as scheduled below.
	Note: Contractor to include for all design, installation and removal of temporary propping to facilitate repair works (included in the Preliminaries Section A44 - 140)
	Stripping: Flat Roof Coverings Carefully strip lead/other coverings back to boards and dispose of in line with requirement to weigh in lead as per the preliminaries - Section A35 -160. Allow for inspection by CA on completion.
2.1	Roof 3 - Mineral Felt
2.2	Roof 4 Liquid Poured Mastic Asphalt
2.3	Roof 7 - Liquid Poured Mastic Asphalt
2.4	Roof 8 - Single Ply Overlay
2.5	Roof 9 - Lead
	Gutter Boards/Timber Deck - Removal Carefully lift and set aside for re-use existing gutter boards/timber deck complete. On completion, allow for the attendance of the Employer and CA to determine the insulation detail. Every attempt should be made to lift the boards intact, and the following workmanship should be utilised: Using a block of wood (or steel plate) to protect the edge of the adjoining board, work around the board to be lifted with the bolster, levering from side to side slightly, to try to loosen the board. Starting over a joist (by a nail) about a third of the way down the board (to avoid splitting the end), lever more vigorously with a pumping action first one side of the board and then the other, so as to raise the board by up to one-third of its thickness. Ensure the edge of the adjacent board is protected. Moving towards the middle, then back towards the end, repeat the process until one end of the board comes free. If this does not seem to be working or if the board is very decayed, resort to a nail punch and try to drive the nails down. When one end has been freed, try placing the 13 mm (½”) batten underneath it, spanning the two adjacent boards, and gradually move this towards the next set of nails with gentle pressure applied on the free part of the board. The amount of pressure will depend on the condition of the board. This will normally ease the nails slightly out of the joists. Remove the batten and allow the board to drop to its original position to give access to the nail heads. If this does not succeed, try the bolster again or perhaps the crowbar – levering (pump action again) under the board near the position of the nail, but away from the edge of the board. Particular care needs to be taken with the nails at the end of the board, as it is easy to split an old board unless these are removed gently. Once the board is free, pull out the nails – pincers, hammer or crowbar.
	Quality Standard Boards must be lifted intact wherever possible using hand tools, following the defined step-by-step method. Adjacent fabric must be protected, and removed boards must be safely stored for reuse. All work is to be carried out carefully and to the reasonable satisfaction of the CA.
2.6	Roof 3
2.7	Roof 4
2.8	Roof 7
2.9	Roof 8
	Stripping: Lead Flashings Carefully strip lead flashings. Using a lead dresser or pry bar, lift the abutment carefully out of its position. Care should be taken not to damage any of the timbers beneath or surrounding masonry. All materials to be disposed of off-site or weighed in/sold as per Preliminaries Section A35 - 160.
2.10	Roof 3
2.11	Roof 4
2.12	Roof 7
2.13	Roof 8
	Inspection - Following the stripping of the coverings, allow for inspection of the gutter boards by the CA and Employer with the Contract Manager to determine the condition and amount of salvageable material.
	Ceiling Joists - Flat Roofs - Provisional Quantities - Re-Measurable

	Quality Standard: BS EN 1995-1-1:2004+A2:2014 – Eurocode 5: Design of Timber Structures Relates to structural performance requirements of timber repairs. Ensures that all new rafter sections meet the required structural criteria for load transfer, stability, and integration with retained timber. BS 5756:2007+A2:2017 – Visual Strength Grading of Hardwood Relates to visual grading of new oak rafters. New timber shall be graded to TH1, ensuring structural suitability and compatibility with traditional repair techniques. BS EN 338:2016 – Structural Timber – Strength Classes Relates to the required performance classification of timber. New rafters shall achieve a minimum strength class of D30, confirming their use in structural roof applications. BS EN 14592:2008+A1:2012 – Timber Structures: Dowel-Type Fasteners Relates to performance criteria for mechanical fixings. Stainless steel screws shall be used with a minimum embedment depth of 40 mm, spaced at 400 mm centres unless indicated otherwise in drawings, ensuring robust connections at wall plates, purlins, and ridge. To the Reasonable Satisfaction of the CA All workmanship, alignment, and fixing of new timbers shall be executed to a standard that is subject to approval by the Contract Administrator, with a focus on accuracy, durability, and conservation integrity.
	Roof 9
2.22	Removal of decayed Rafter sections
2.23	Supply and installation of new rafter - assume 50 x 100mm
	Timber Repair Joinery - Jointing New to Existing - Provisional Quantities - Remeasurable Carefully splice new and old timbers using non-standard carpentry joints as detailed on Drawing A13 – Details 1 to 5 as follows: Note: - Measures are assumed and have been estimated for pricing purposes only and will be re-measured on-site when 'actual' quantities can be determined. - See also Information Release Schedule (Preliminaries - Section 490). - Contractor to include for all design, installation and removal of temporary propping to facilitate repair works (included in the Preliminaries Section A44 - 140) - All splices are to be executed by skilled carpenters with experience in heritage timber repairs.
	Execution of Splicing Joints Cutting Joints Carefully cut both new and existing timbers to form the specified non-standard carpentry joints, ensuring precise alignment with the details provided in drawing pack. Use hand tools where necessary to minimise vibration and avoid damaging the existing timber. Ensuring Tight-Fitting Connections All joints must be cut to achieve tight-fitting connections with no gaps or voids. Ensure full bearing contact along the joint to maximise structural performance. Minimal Disturbance to Historic Fabric Take care to minimise the removal of sound historic material during the jointing process. Avoid using tools or methods that may cause unnecessary damage to the existing timber.
	Fixing Joints Specification of Fixings Where specified, use stainless steel or non-ferrous fixings that comply with BS EN 14592:2008+A1:2012 to avoid staining or corrosion. Fixings must be of appropriate size and type to provide secure connections without compromising the integrity of the timbers. Installation of Fixings Install fixings precisely according to the jointing details. Ensure each fixing is driven carefully to avoid splitting the timber. Any pre-drilling required must match the specified fixing diameter to prevent over-tightening or misalignment.
	Final Adjustment and Finishing Final Alignment Ensure the jointed timbers are fully aligned and free from distortion. Adjust as necessary to achieve seamless integration between the new and old timbers. Finishing the Joint Smooth and tidy the jointed areas, removing any sharp edges or splinters. Ensure the finished joint is consistent with the aesthetic and structural requirements of the historic fabric.
	Quality Standards BS EN 1995-1-1:2004+A2:2014 – Eurocode 5: Design of Timber Structures Relates to the structural performance of the spliced joints, ensuring they provide adequate load-bearing capacity and stability. BS EN 14592:2008+A1:2012 – Timber Structures: Dowel-Type Fasteners Relates to the specification of fixings, ensuring they are durable, corrosion-resistant, and compatible with both the new and existing timber. To the Reasonable Satisfaction of the CA Relates to the final workmanship, ensuring the jointing meets the required quality, aligns with the project specifications, and is aesthetically and structurally appropriate for the building.
	Roof 3
2.24	Halved Scarf Joint - Timber Size 150mm x 150mm
2.25	Dovetailed Scarf Joint - Timber Size 150mm x 150mm

2.26	Splayed Scarf Joint - Timber Size 150mm x 150mm
	Roof 4
2.27	Halved Scarf Joint - Timber Size 150mm x 150mm
2.28	Dovetailed Scarf Joint - Timber Size 150mm x 150mm
2.29	Splayed Scarf Joint - Timber Size 150mm x 150mm
	Roof 7
2.3	Halved Scarf Joint - Timber Size 150mm x 150mm
2.31	Dovetailed Scarf Joint - Timber Size 150mm x 150mm
2.32	Splayed Scarf Joint - Timber Size 150mm x 150mm
	Roof 8
2.33	Halved Scarf Joint - Timber Size 150mm x 150mm
2.34	Dovetailed Scarf Joint - Timber Size 150mm x 150mm
2.35	Splayed Scarf Joint - Timber Size 150mm x 150mm
	Roof 9
2.36	Halved Scarf Joint - Timber Size 150mm x 150mm
2.37	Dovetailed Scarf Joint - Timber Size 150mm x 150mm
2.38	Splayed Scarf Joint - Timber Size 150mm x 150mm
	Subtotal
3.0	FLAT ROOF - RECOVERING
	Re-Fixing of Gutter Boards
	On completion, the salvaged boards should be fixed back down to the joists. Boards to be fixed using 316 (marine grade) stainless steel screws with a minimum length of 50mm and 6mm diameter. Screws are to be countersunk no more than 50% of the substrate thickness. Two screws should be fixed horizontally and evenly spaced on each joist the board is laid over. Each board should be spaced with a 5mm 'penny' gap between.
	Specification Boards: Salvage where possible, where decayed new as specified below Fixing: 316 stainless steel screws, minimum 6 mm diameter and 50 mm length, to be countersunk no more than 50% of the board thickness. Two fixings per joist, evenly spaced across board width. Board Spacing: 5 mm uniform gap between boards, maintained during installation using spacers.
	Quality Standard BS 8000-5:1990 – Workmanship on Building Sites – Carpentry, Joinery and Timber Fixing Relates to good practice in the reinstallation of timber components, ensuring proper alignment, fixing technique, and care in working with retained elements. BS 8221-1:2012 – Code of Practice for Cleaning and Surface Preparation of Buildings Relates to the preparation of timber and substrates prior to refixing. Surfaces must be clean, stable, and ready to receive salvaged materials. All reinstated boards must be aligned neatly, evenly spaced, and securely fixed. Works are to be carried out using appropriate tools and methods, with care taken to avoid splitting or distortion. All work is to be completed to the reasonable satisfaction of the CA.
3.1	Roof 3
3.2	Roof 4
3.3	Roof 7
3.4	Roof 8
3.5	Roof 9
	New Gutter Boarding - Prime Cost Sum (Supply Only)
	Allow to supply only new gutter boards/ timber deck (cost and methodology of fixing above) to match the existing where the existing are found to be decayed and not salvageable. See Information Release Schedule (Preliminaries - Section 490).
	Specification For pricing purposes, assume the use of: 19mm thick mature straight edged spruce boards complying with BS 5268 Part 2 with a maximum moisture content of 22%.
3.6	Roof 3
3.7	Roof 4
3.8	Roof 7
3.9	Roof 8
3.10	Roof 9
	Firring Strips
	Install firring timbers to create a consistent 1:80 fall across the flat roof area, in accordance with best practice. Ensure firings are accurately aligned and fixed securely to the substrate, maintaining full bearing and structural integrity across their length.

	Specification	
	Timber:	
	Seasoned spruce firing timbers. Dimensions to suit fall requirement of 1:80. All timber to be straight, true, and free from excessive knots, splits, or distortion.	
	Fixings:	
	- 316 (marine grade) stainless steel screws	
	- Minimum 6 mm diameter and 50 mm length	
	- Screws to be countersunk no more than 50% of substrate thickness	
	- Fixings to be spaced at regular intervals to ensure firm bearing and alignment	
	Quality Standard	
	BS 6229:2018 – Flat Roofs with Continuously Supported Flexible Waterproof Coverings	
	Relates to the functional performance and drainage requirements of flat roof systems. Firings must be installed to achieve a minimum finished fall of 1:80, ensuring effective water runoff and avoiding ponding. Alignment and substrate regularity must support the consistent application of waterproof membranes, with no local deflections that risk water retention.	
	BS EN 1995-1-1:2004+A2:2014 – Eurocode 5: Design of Timber Structures	
	Relates to the structural performance and bearing integrity of added timber elements. Firing timbers must maintain continuous bearing, be securely fixed, and not induce deflection or deformation in the existing roof structure.	
	BS EN 14592:2008+A1:2012 – Timber Structures: Dowel-Type Fasteners	
	Relates to the performance specification for dowel-type fasteners. Stainless steel screws shall conform to dimensional standards, achieve durable and corrosion-resistant connections, and be spaced regularly to ensure even fixing pressure and load distribution.	
	BS 4978:2007 – Visual Strength Grading of Softwood	
	Relates to the visual grading of seasoned softwood timber. All firing timbers shall be free from excessive knots, distortion, splits, or other defects which could compromise structural performance or alignment.	
	To the Reasonable Satisfaction of the CA	
	All firings must be cut, aligned, and fixed in a consistent manner that supports the finished roof fall of 1:80, with neat joins and full contact bearing. Fixings must be flush or countersunk as specified, and completed to a standard acceptable to the Contract Administrator.	
3.11		Roof 3
3.12		Roof 4
3.13		Roof 7
3.14		Roof 8
3.15		Roof 9
-	INSTALLATION OF NEW FLAT ROOF COVERINGS	
	Single Ply Membrane	
	Install Alwitra Evalon V single ply membrane to flat roof including preparation of timber deck, cold-applied full bonding, detailing to upstands and outlets, and final cleaning and inspection.	
	Preparation of the Work Area	
	Cleaning and Inspection	
	Ensure the timber deck is dry, clean, and free from dust, loose material, or sharp projections that may damage the membrane. Sweep thoroughly and inspect for any damage or movement in the deck structure. Confirm that rainwater outlets and perimeter details are in place and compatible with the Evalon V system.	
	Protection of Adjacent Areas	
	Protect upstands, abutments, rainwater outlets, and adjacent surfaces with temporary coverings to prevent adhesive or membrane contamination. Confirm that all other works in adjacent areas are complete before membrane application begins.	
	Preparation of Membrane and Adhesives	
	Membrane Preparation	
	Unroll Alwitra Evalon V membrane and allow it to rest flat to reduce memory and curling.	
	- Pre-cut lengths to suit layout and ensure efficient setting out.	
	- Dry lay to check alignment, lap orientation, and integration with outlets and upstands.	
	Adhesive Preparation	
	Select and prepare the Alwitra-approved adhesive (e.g. Alwitra contact or EVA cold adhesive) in accordance with manufacturer instructions.	
	- Stir or prepare as required, ensuring safe handling and ventilation.	
	- Do not apply adhesive in wet or humid conditions.	

	Application of Membrane – Cold-Adhered	
	Full Bonding of Membrane	
	Apply adhesive to the substrate (deck) using a roller or notched trowel, in sections manageable within the working time.	
	- Apply adhesive to the underside of the membrane only if using contact adhesive.	
	- Lay the membrane carefully onto the adhesive bed and press out air pockets using a soft broom or roller.	
	- Work from the centre outward to achieve a smooth, fully bonded surface.	
	Lap Bonding – Cold Application	
	Overlap adjacent sheets by minimum 60 mm.	
	- Apply EVA adhesive or contact adhesive to both lap surfaces as per Alwitra’s non-heat method.	
	- Press the lap firmly together and roll using a hand roller to achieve full bond.	
	- Avoid stretching or misalignment during adhesion.	
	Corners and Junctions	
	Use pre-formed Evalon corners or cut and bond sections of membrane using adhesive only.	
	- Reinforce internal and external corners using additional patches where required.	
	- Press all details firmly into position and ensure complete adhesive contact.	
	Detailing to Upstands and Outlets	
	Upstands and Abutments	
	Extend membrane to a minimum of 150 mm up all vertical surfaces.	
	- Fully bond the membrane using adhesive with no gaps or creases.	
	- Apply corner pieces where needed using cold adhesive only.	
	- Terminate in accordance with manufacturer’s cold-fix guidelines.	
	Outlets and Penetrations	
	Dress membrane into rainwater outlets using factory-formed sleeves or pre-cut detailing.	
	- Bond using cold adhesive with pressure applied to ensure full contact.	
	- Reinforce all penetrations with Evalon detailing strips bonded cold.	
	Final Cleaning and Inspection	
	Cleaning the Work Area	
	Remove all unused materials, backing film, and adhesive residues. Clean tools thoroughly and remove temporary coverings from adjacent areas.	
	Inspection	
	Inspect all bonded laps, edges, corners, and penetrations to ensure complete adhesion, alignment, and watertightness.	
	Use hand pressure and visual checks in place of seam probing.	
	Specification	
	Membrane	
	Product: Alwitra Evalon V	
	Colour: Light Grey (RAL 7047)	
	Thickness: 1.2 mm or 1.5 mm (as specified)	
	Type: Polyester-reinforced EVA-based membrane with integrated self-finished surface	
	Roll width/length: To suit site conditions	
	Adhesive	
	Alwitra EVA Cold Adhesive or Alwitra Contact Adhesive	
	Adhesive type to be selected according to substrate type and manufacturer’s instructions	
	Quality Standard	
	BS 6229:2018 – Flat roofs with continuously supported flexible waterproof coverings – Code of practice	
	Applies to roof build-up, minimum falls (1:80), drainage design, and detailing of flat roof systems using flexible membranes.	
	Alwitra Evalon Waterproofing Membranes – Manufacturer Installation Guidelines	
	Must be followed for all adhesive application methods, laps, detailing, and fixing requirements to ensure compliance with the system warranty and performance.	
3.16		Roof 3
3.17		Roof 4
3.18		Roof 7
3.19		Roof 8
	Abutment Cover Flashings	

	Install new lead cover flashing to parapet and abutment walls including cutting chase in masonry, fixing the flashing, lime mortar pointing, and final cleaning and inspection.	
	Preparation of the Work Area	
	Inspection of Roof Membrane	
	Ensure that the Alwitra Evalon V membrane has been fully applied and turned up the abutment and parapet wall to a minimum height of 150 mm above the finished roof surface. Confirm that the upstand is securely bonded and free from voids or creases.	
	Marking and Setting Out the Chase Line	
	Mark a horizontal line for the flashing chase at a minimum of 25 mm above the top edge of the membrane upstand. Ensure the line is straight, level, and continuous across the length of the wall.	
	Preparation of the Chase	
	Cutting the Chase	
	Using a hand tools with appropriate dust control measures, carefully cut a continuous chase into the masonry, minimum 25 mm deep and 6–10 mm wide, following the marked line.	
	- Take care to avoid damaging adjacent masonry.	
	- Vacuum and brush out all dust and debris from the chase once cut.	
	- Protect the membrane surface below with sheeting during the operation.	
	Installation of the Cover Flashing (with Lime Mortar Pointing)	
	Fitting Cover Flashing	
	Insert pre-formed or site-fabricated lead cover flashing into the pre-cut chase, ensuring it overlaps the Evalon V membrane upstand by a minimum of 50 mm.	
	- Secure the flashing into the chase using lead wedges or stainless steel fixings, spaced at 300–450 mm centres.	
	- Ensure the lead lies flat against the upstand with a consistent, tight fit and no distortion or lifting.	
	Sealing the Chase	
	Point the chase using a natural hydraulic lime mortar, mixed at a ratio specified below.	
	- Fill the chase fully, packing the mortar behind and around the flashing to secure it.	
	- Finish with a slight weathered slope using a pointing tool to allow water to shed.	
	-	- Avoid overworking the surface; allow mortar to cure naturally without forced drying.
	Final Cleaning and Inspection	
	Cleaning the Work Area	
	Remove all mortar droppings, debris, lead offcuts, and protective sheeting. Wipe down the Evalon membrane and flashing with a soft cloth to remove any residue without damaging the surface.	
	Inspection	
	Check that:	
	- The lead flashing is securely fixed, continuous, and evenly installed	
	- The lime mortar is fully packed, cleanly pointed, and free from shrinkage cracks	
	- There are no visible gaps behind the flashing or signs of damage to the membrane or adjacent finishes	
	Specification	
	Lead Sheet: Rolled lead sheet to Code 6	
	Maximum length per flashing section: 1.5 m to prevent thermal movement stresses	
	Lime Mortar	
	Binder: NHL 3.5	
	Aggregate: Clean, well-graded sharp sand.	
	Mix Ratio: 1 part NHL 3.5 : 2.5 parts sharp sand (by volume)	
	Wedges: Stainless steel or lead wedges for securing flashing into chase	
	Quality Standard	
	BS EN 12588 – Lead and Lead Alloys: Rolled Lead Sheet for Building Purposes	
	Use only Code 4 rolled lead sheet manufactured to this standard to ensure correct thickness, durability, and performance.	
	Lead Sheet Training Academy – Rolled Lead Sheet Manual	
	Follow the methods outlined in this manual for forming, fixing, and jointing lead flashings. This includes specific guidance on the proper depth, spacing, and sealing of chases for lead terminations.	
	BS EN 998-2 – Mortar for Masonry: Masonry Mortar	
	Lime mortar used for pointing must comply with this standard. Mix must be based on NHL 3.5 and sharp sand at 1:2.5 ratio.	
	All work must be carried out carefully and in accordance with the above standards and guidance, and completed to the reasonable satisfaction of the CA.	
	3.20	Roof 3
	3.21	Roof 4
	3.22	Roof 7

3.23	Roof 8
3.24	New Lead Covering - Roof 9
	Install new Code 8 rolled lead sheet covering to flat roof including substrate preparation, chalk slurry application, lead sheet fixing, lap formation, and final cleaning and inspection.
	Installation of New Flat Lead Covering
	Preparation of Substrate
	Confirm that new timber boards are securely fixed, level, and clean. Ensure the substrate is dry and free from debris or surface contaminants before application of lead. All fixings to be flush with the surface.
	Application of Chalk Slurry Coating
	Apply a chalk slurry to the underside of each lead sheet before installation.
	- Mix slurry using whiting and water to a thick, brushable consistency.
	- Add a visible dye (e.g. pink) to distinguish coated sheets and assist with future maintenance checks.
	- Apply evenly, covering the full underside surface of the lead sheet.
	Installation of Lead Sheet
	Supply and fix Code 8 milled lead sheet over the prepared boards.
	- Lay in bays of appropriate length and width for Code 8, allowing for thermal movement.
	- Fix with copper or stainless steel nails, clips, or straps, using correct spacing and positioning.
	- Dress lead carefully and evenly without overstretching.
	Lap Formation and Jointing
	Form laps, drips, and joints in accordance with recognised good practice.
	- Ensure water sheds freely across all joints.
	- Do not exceed recommended bay sizes or unsupported lengths.
	- All free edges to be securely fixed or clipped to prevent wind uplift.
	Final Cleaning and Inspection
	Once installed, clean the exposed lead surface with a soft cloth to remove marks or debris.
	Inspect the entire installation to confirm fixings are secure, joints are correctly formed, and surfaces are undamaged.
	Specification:
	Lead Sheet: Rolled lead sheet to BS EN 12588, Code 8
	Fixings: Stainless steel annular ring-shank nails, minimum 20 mm penetration into substrate
	Straps: Stainless steel straps
	Underside Treatment- Chalk slurry: Mixed from clean whiting (calcium carbonate) and clean tap water. Dyed (e.g. pink) for visibility during future inspection
	Quality Standard
	BS EN 12588 – Lead and Lead Alloys: Rolled Lead Sheet for Building Purposes
	All lead sheet must be Code 8 and manufactured to this standard, ensuring correct thickness, consistency, and performance.
	Lead Sheet Training Academy – Rolled Lead Sheet Manual
	All installation practices must follow the detailing, bay sizing, fixing methods, and thermal movement guidance set out in this manual, including limitations on maximum bay size and clip spacing.
	All work must be carried out carefully, with neat workmanship, and completed to the reasonable satisfaction of the CA .
	Lead Abutment Stepped Flashing - Roof 9
	Install new Code 6 lead stepped cover flashing to masonry abutments including cutting and cleaning of stepped chase, fixing flashing with lead wedges, lime mortar pointing, and final cleaning and inspection.
	Preparation of the Masonry Chase
	Mark out and fully chase the mortar joint one full course above the finished height of the lead upstand in the masonry wall.
	- Chase depth to be minimum 25 mm, and twice the width of the original joint.
	- Use a plugging chisel or suitable mortar raking tool.
	- Clear out all loose material and dust using a brush and vacuum.
	- Ensure the chase follows the stepping of the brickwork or stonework, as shown in Drawing A14, Detail 6.

3.25	Installation of Stepped Cover Flashing Supply and fit rolled lead stepped cover flashing. - Cut to follow the profile of the brick or stone courses. - Insert flashing pieces into the pre-cut chase, with the vertical leg overlapping the lead soakers and upstand by a minimum of 65 mm. - Secure flashing using lead wedges spaced at 450 mm centres, driven firmly into the chase using a hammer and plugging chisel. - Do not exceed 1.5 m in length per flashing section; lap adjacent pieces by minimum 100 mm.
	Pointing the Chase Point the chased joint using a natural hydraulic lime mortar (NHL 5) mixed in a ratio of 1:2.5 with well-graded sharp sand. - Fully deep-pack the mortar behind the flashing. - Finish with a neat churn-brush texture or weathered struck joint to shed water. - Protect mortar from drying too quickly and allow to cure gradually.
	Final Cleaning and Inspection Remove all waste, mortar droppings, and protective coverings. Wipe down lead surfaces to remove residues.
	Specification Lead Sheet: Rolled lead sheet Code 6 Length: Individual flashing pieces not to exceed 1.5 m, with minimum 100 mm lap between lengths Width: Sufficient to provide minimum 65 mm vertical overlap over the upstand of the lead roof Lead Fixings Wedges: Lead or stainless steel wedges, suitable for the chase width, Inserted at 450 mm centres Chase Sealant (Traditional Finish) Mortar: Natural Hydraulic Lime (NHL 5) mortar, mixed 1:2.5 with well-graded sharp sand
	Quality Standard BS EN 12588 – Lead and Lead Alloys: Rolled Lead Sheet for Building Purposes All lead sheet used must conform to this standard to ensure consistent thickness, composition, and performance. Code 5 lead is required for abutment flashing applications. Lead Sheet Training Academy – Rolled Lead Sheet Manual All detailing, fixing, and jointing of lead flashings must follow the guidance in this manual, including maximum bay lengths (1.5 m), lap sizes (minimum 100 mm), and chase preparation. All work must be completed with care, using neat workmanship, and to the reasonable satisfaction of the CA.
	Subtotal
4.0	CHIMNEY STACKS
	Dismantling of Chimney Stack Protection Install dust sheets, scaffold sheeting, or temporary coverings to protect the surrounding roof coverings. Ensure no loose debris or tools can fall or damage roof coverings or rainwater goods during works.
	Removal of Cowls and Chimney Pots Removing Cowls Carefully remove any cowls, bird guards, or ventilation terminals fixed to the chimney pots. Unbolt or detach fixings by hand. If sealed with mortar or mastic, carefully break out using hand tools. Loosening Chimney Pots Break out the bedding mortar around the base of each chimney pot using hand tools. Avoid striking the pots directly or levering in a way that could crack or fracture the clay. Lifting, Numbering and Storage Lift chimney pots manually or using suitable lifting gear as required. Number each to record their original position. Place each pot in a padded crate or secure location, away from the working area, for reuse where possible, as instructed by the CA.
	Removal of Flaunching Breaking Out Flaunching Use small hand tools to carefully break out the remaining flaunching after pots and cowls are removed. Take care not to disturb the brickwork below or allow debris to fall into flues or onto the roof. Cleaning Stack Top Clear all mortar and debris from the top of the stack. Brush down and inspect the surface for any remaining loose material.

	Removal of Lead Flashings	
	Careful Removal of Flashings	
	Following removal of pots and flaunching, carefully remove all lead flashings at the base of the chimney stack, including apron, back gutter, side abutments, and any stepped or soaker elements. Lift flashings by hand or with flat hand tools, avoiding tearing or unnecessary deformation. Break out any bedding mortar or fixings using small hand tools, taking care not to damage adjacent roof coverings or masonry.	
	Sorting and Storage	
	If flashings are to be reused, clean and tag each piece, storing flat in a dry, secure location for reinstallation. If flashings are to be replaced, set aside for responsible disposal or recycling, as instructed by the CA.	
	Removal of Existing Render	
	Carefully remove existing render from chimney stacks to enable dismantling and repair works.	
	- Use hand tools only to avoid damage to the underlying historic brickwork.	
	- Remove render in manageable sections, working methodically to expose all mortar joints and brick arrises.	
- Take care to avoid dislodging or fracturing any masonry units.		
- Dispose of all render waste off-site in accordance with environmental regulations.		
	Brickwork Removal – By Hand	
	Dismantle the chimney stack by hand, one course at a time, starting from the top and ending where the chimney meets the roof. Use hand tools and avoid percussive methods that may cause vibration or damage to the roof structure below.	
	Sorting and Storage	
	Carefully lower salvaged bricks for potential reuse. Stack neatly in a designated location and protect from frost and impact. Discard any irreparably damaged units, but retain fragments for matching if required.	
	Control of Debris	
	Ensure that all debris is contained within the working area. Do not allow loose bricks, mortar, or dust to fall into roof valleys, gutters, or flues.	
	Final Cleaning and Making Safe	
	Cleaning Work Area	
	Remove all loose mortar, brick fragments, and dust from the roof surface, gutters, and surrounding work area.	
	Making Safe	
	Ensure the remaining roof and chimney junction is left weather-tight and stable. Install temporary capping or weatherproof covering over the chimney opening if required.	
	Quality Standard	
	BS 8000-3:2001 – Workmanship on Building Sites – Masonry	
	Relates to the correct methods for dismantling brickwork by hand, including the safe removal of chimney components, avoiding damage to retained structures, and the proper stacking and protection of reusable materials.	
	BS 8221-1:2012 – Cleaning and Surface Preparation of Buildings	
	Relates to the safe removal of building components and debris, and the cleaning of surrounding areas during and after dismantling, including prevention of contamination to roof coverings, gutters, and adjacent fabric.	
	All dismantling must be carried out progressively by hand using non-percussive tools. Cowls, pots, flaunching, and brickwork must be carefully removed in accordance with conservation best practice. Salvaged items must be clearly marked, recorded, and stored securely. The working area must be left clean, weather-tight, and to the reasonable satisfaction of the CA.	
4.1		Stack 1
4.2		Stack 2
4.3		Stack 3
4.4		Stack 4
4.5		Stack 5
	Re-build Chimney Stacks	
	Preparation of the Work Area	
	Inspection of Base and Substructure	
	Inspect the remaining base of the chimney and adjacent structure following deconstruction. Confirm that the substrate is sound, level, and capable of supporting the rebuilt stack. Report any concerns, including signs of movement or decay, to the CA prior to rebuilding.	
	Protection	
	Protect adjacent roof coverings, parapets, copings, and flues with sheeting or temporary coverings during construction. Maintain access for safe working and inspection.	
	Setting Out	
	Marking Plumb Line and Profile	
Establish a plumb vertical line from the retained base using spirit levels, plumb lines, or laser levels. Set out the chimney footprint and profile to match the original stack in plan, height, and proportion, using retained photographs, survey measurements, or drawings.		
Template Use (if applicable)		
Where detailed profiles (e.g. offsets, corbels, or decorative courses) are to be rebuilt, prepare and use a timber or metal template to ensure consistency and alignment with the original.		

	Reconstruction of Chimney Stack Brickwork Rebuild the chimney using salvaged bricks from the original chimney stack wherever they are in suitable condition. Bricks salvaged during the demolition of chimneys shall be reused only in the reconstruction of the same element from which they were removed, and shall not be diverted to form other elements. Where new bricks are needed, match the original in size, colour, texture, and bond. - Lay bricks on a full bed of lime mortar. - Match the original bonding pattern (e.g. English bond, Flemish bond). - Maintain consistent and well-packed joint thickness. - Build courses level and plumb throughout. - Incorporate any decorative brick courses or stepped detailing exactly as found in the original. Flue Linings (if applicable) Install clay or approved flue liners as instructed. Ensure liners are centred within each flue shaft and extend through to termination point. Joints to be sealed and supported appropriately.
	Finishing Details Chimney Pots & Cowls Refit original chimney pots and cowls where sound, or install new pots to match the originals in height, profile, and material. Bed each pot in lime mortar or suitable hydraulic flaunching mix. Flaunching Form new flaunching around the chimney pots using a suitable lime-based or breathable cement-lime mix, shaped to shed water away from the pots. Finish neatly and free of cracks, with a smooth profile.
	Final Cleaning and Inspection Cleaning Brush all new brickwork with a soft brush to remove lime staining or surface residue. Do not acid wash. Clean all working areas and remove all waste materials and protective sheeting.
	Specification Bricks: Use salvaged bricks from the original chimney stack wherever sound and undamaged. Bricks salvaged during the demolition of chimneys shall be reused only in the reconstruction of the same element from which they were removed, and shall not be diverted to form other elements. Bricks must be carefully cleaned of all mortar and flaunching residues before reuse. Condition: Bricks must be free from significant cracks, spalling, frost damage, or saturation. Any unsuitable bricks are to be set aside and retained on site for reference or matching. Matching Bricks: Where additional bricks are required, these must be new handmade quality bricks to match the existing in size, colour, texture, and type. See item 4.11. Mortar Mix: 3 parts NHL 5 0.5 part white cement 5 parts well graded sharp sand Flaunching Mix 3 parts NHL 5 0.5 part white cement 5 parts well graded sharp sand Pots & Cowls: Those Previously removed if in a standard seen fit by the CA.
	Quality Standard BS EN 998-2 – Specification for Mortar for Masonry Relates to the consistent mixing and use of site-applied mortar, ensuring full joints and neat finishes appropriate for traditional brickwork. Verticality and Alignment The rebuilt chimney must be constructed plumb and in line with the original profile, with all decorative or projecting courses accurately reinstated. To the Reasonable Satisfaction of the CA Ensure that the workmanship and finish of the re-installation of the pots meet the reasonable satisfaction of the CA (Contract Administrator), achieving compliance with the project requirements and maintaining the integrity of the historic building.
4.6	Stack 1
4.7	Stack 2
4.8	Stack 3
4.9	Stack 4
4.10	Stack 5
	New Stock Bricks - Prime Cost Sum (Supply Only)
4.11	Where bricks are unsuitable for reuse, provide new handmade bricks to match the existing in size, texture, and colour as specified below. New Bricks: (9 x 4¼ x 2⅝) - Handmade clay Available from: Bulmer Brick & Tile Co Ltd The Brickfields Bulmer Sudbury Suffolk CO10 7EF Tel: 01787 269232
	Chimney Stack Apron & Abutment Flashing

	Preparing the Chimney Stack and Setting Out the Abutment Any loose mortar or damaged bricks must be repaired before commencing work. The area where the lead apron and stepped abutment will be fixed must be cleaned of debris, dust, and loose materials using a stiff-bristled brush. Using a measuring tape and chalk line, mark the line of the stepped abutment along the chimney stack. Each step should align with the brick courses, with each step covering a single brick height. Ensure the markings allow for a consistent overlap of 25mm to 30mm between the lead and the brick face to maintain a watertight seal. Verify all measurements with a straightedge or laser level to ensure the markings are accurate and aligned.
	Preparing and Cutting the Lead Sheets The specified lead sheets must be prepared and cut to size using a lead knife or other suitable cutting tool. Each lead piece must be accurately sized to fit the marked stepped abutment and apron area, allowing for overlaps and turn-ups as required. The apron section of the lead must extend horizontally over the roof covering by at least 150mm, ensuring it provides adequate protection against water ingress. The stepped abutment pieces should overlap the apron section by 100mm or as specified, creating a seamless and watertight connection. All edges of the lead sheets must be smoothed using a metal file to prevent tearing or damage during installation.
	Creating the Stepped Abutment Starting with the lowest step of the abutment, position the first piece of lead into place, ensuring it aligns with the chalk markings and overlaps the brick face by 25mm to 30mm. Dress the lead tightly against the brick surface using a lead dresser, ensuring it conforms neatly to the stepped profile. Fix the lead into the mortar joint using stainless steel wedges spaced at 300mm intervals. Ensure the wedges are driven firmly into place without damaging the surrounding bricks. The edges of the lead must fit flush with the brick surface to prevent water ingress and maintain a clean appearance. Repeat this process for each subsequent step, ensuring that all pieces overlap consistently to create a seamless and watertight finish.
	Forming the Lead Apron The lead apron must be positioned to overlap the roof covering by 150mm and the stepped abutment pieces by 100mm, ensuring a secure and watertight connection. Dress the apron tightly against the roof surface using a lead dresser, creating smooth and even folds. Fix the apron to the roof substrate using stainless steel screws or nails at 300mm intervals, ensuring the fixings are flush with the surface to avoid puncturing the lead. The upper edge of the apron must be dressed neatly into the stepped abutment, ensuring it fits tightly against the lower edge of each lead step. Seal all overlaps and joints with a compatible lead sealant to ensure watertightness and durability.
	Deep Packing and Finishing Once the lead flashing and apron are securely fixed, deep-pack the mortar joints with the specified lead sealant. Use a pointing gun or applicator to ensure the sealant is applied evenly and fills the joints completely. This step is critical for creating a watertight barrier and reinforcing the bond between the lead and the brickwork. After the sealant has been applied and smoothed, finish the joints with specified lime mortar. Use a pointing trowel to apply the lime mortar neatly, ensuring the joints are flush and free from voids. Allow the mortar to cure under damp hessian sheeting for at least 7 days, keeping it moist to prevent cracking and ensure proper setting.
	Sealing and Finishing Once all lead sections are installed, apply a lead sealant to the mortar joints, overlaps, and edges to reinforce the watertight barrier. Use a pointing trowel to pack the sealant neatly into the joints, ensuring no gaps or voids remain. Finish the lead surface with a uniform application of patination oil to prevent staining and oxidation, ensuring the apron and stepped abutment remain durable and visually consistent.
	Specification: Lead: Rolled Code 6 Mortar Mix: 3 parts NHL 5 0.5 part white cement 5 parts well graded sharp sand
	Quality Standards: Lead Sheet Training Academy (LSTA) – Chimney Flashing Guidelines Relates to best practices for installing apron and abutment flashings, including forming welted edges, allowing for thermal movement, and achieving weathertight joints.
4.12	Stack 1
4.13	Stack 2
4.14	Stack 3
4.15	Stack 4
4.16	Stack 5
	Subtotal
5.0	EXTERNAL WALLS
	Dismantling of Front Retaining Wall - Provisional - TBC following Trial Pit findings Preparation of the Work Area Inspection and Recording Inspect the existing retaining wall and record its condition prior to dismantling. Photograph all elevations and any distinctive features, such as brick bonds, dimensions, stone types, or joint finishes. Protection and Access Protect adjacent surfaces, planting, paving, or retained structures using sheeting, hoarding, or temporary barriers. Ensure safe access to both faces of the wall for dismantling and rebuilding, including provision for safe retention of adjacent ground if necessary.

5.1	Dismantling of Retaining Wall Careful Removal Dismantle the retaining wall course-by-course, starting from the top down. All work is to be carried out by hand, using non-percussive tools. Avoid damage to salvageable materials and take precautions to prevent collapse or undermining of adjacent structures. Sorting and Storing Materials Sort and stack sound bricks or stones on pallets or in crates, separating by type and condition. Clean all salvageable units of loose mortar by hand. Store securely on site in a dry, protected location for reuse. Discard only damaged or unsalvageable units, subject to approval by the CA.
	New Foundations for Retaining wall - Provisional - TBC following Trial Pit findings
5.2	Description of Work Allow for the provision of a defined provisional sum for the installation of new, more robust foundations beneath the existing retaining wall. This sum includes excavation, preparation, and placement of concrete foundations following the structural engineer's recommendations, which will be finalised after trial pit inspection and assessment of existing ground conditions. Location At the base of the existing retaining wall, as identified on site and confirmed by the Contract Administrator (CA) and structural engineer following excavation. Final locations and extent of foundation works are to be determined based on structural investigation findings.
	Scope of Work (Provisional) The provisional scope of this defined provisional sum includes the following: - Local excavation to expose existing foundation levels and accommodate new mass concrete foundations. - Trimming and preparation of trench bases to receive new foundations. - Placement of mass concrete (e.g. C25/30) to an assumed width and depth (see below). - Levelling and compaction of backfill using site-won or imported suitable fill. - Removal of excavated spoil and disposal off-site (non-hazardous material only). - Temporary protection of adjacent structures and safe working access. This scope does not include drainage or reinforcement unless specifically instructed following engineering review.
	Specification Materials Concrete: Mass concrete to a minimum strength class of C25/30, placed in one pour unless otherwise instructed. Formwork: Basic formwork where required to form straight, level foundations or edge restraint.
	Backfill: Well-graded granular fill, compacted in layers where reinstatement is required.
	Quality Standards BS 8000-1:1989 – Workmanship on Building Sites – Code of Practice for Excavation and Filling Relates to proper methods for trench excavation, protection of adjacent structures, and safe compaction of backfill. BS EN 206 – Concrete – Specification, Performance, Production and Conformity Relates to the specification and delivery of concrete for use in structural foundations. BS 6031:2009 – Code of Practice for Earthworks Relates to excavation, handling of spoil, and preparation of ground for construction of new foundations. CA Satisfaction All foundation works must be carried out to the reasonable satisfaction of the CA and structural engineer.
	Exclusions This provisional sum excludes the following: - Full removal or dismantling of the existing retaining wall (scheduled separately). - Reinforced concrete design, steel reinforcement, or formwork beyond basic trench edge shaping. - Drainage provisions or weep holes (to be specified separately if required). - Access scaffolding or temporary shoring, which are addressed under the Preliminaries.
	Assumptions This provisional sum is based on the following assumptions: - Foundation dimensions assumed at 600 mm wide by 750 mm deep unless revised by structural engineer. - Ground conditions are suitable for mass concrete construction and free from groundwater or contamination. - Normal working hours apply, and safe access to the base of the wall is available without specialist support.
	Rebuilding of retaining flank walls - Provisional - TBC following Trial Pit findings

5.3	Preparation for Rebuilding Inspection of Footing and Ground Inspect the base or footing of the dismantled wall to ensure it is structurally sound and ready to receive rebuilt masonry. Report any instability or unsuitable ground conditions to the CA before proceeding. Setting Out Line and Level Mark plumb lines and string lines to match the original line, height, and profile of the existing wall. Ensure rebuild aligns with adjoining sections and any visible retained fabric.
	Rebuilding of Retaining Flank Wall Reconstruction Using Salvaged Bricks Rebuild the wall using cleaned salvaged bricks or stones where suitable. Where new units are required, these must match the original in size, colour, and finish, subject to approval by the CA. Lay units on a full bed of mortar with tight, consistent joints. Match the original bond pattern, joint type, and overall wall appearance. Mortar Use a lime mortar specified below, all joints are to be fully packed and finished to match the original appearance. Do not retemper mortar once it begins to set.
	Finishing and Cleaning Final Pointing Point any exposed joints using the same lime mortar mix, neatly finished to match adjacent retained or original work. Use a slightly recessed, flush, or weathered joint as appropriate. Cleaning of Surfaces Brush masonry faces using a soft hand brush to remove mortar residue. Avoid the use of wire brushes, power tools, or chemical cleaners. Leave the wall clean, aligned, and free of surface staining or debris.
	Specification Masonry Units Salvaged Bricks: All sound bricks or stones from the dismantled wall are to be retained, cleaned by hand, and reused. Units must be free from significant damage, delamination, or contamination. Rebuild the wall using cleaned salvaged bricks from the original wall wherever they are in suitable condition. Materials salvaged during the demolition of walls or other elements shall be reused only in the reconstruction of the same element from which they were removed, and shall not be diverted to form other elements. If bricks are not reuseable See item 4.11. Mortar Type: Use a lime mortar based on Natural Hydraulic Lime (NHL 3.5) mixed with well-graded sharp sand at a ratio of 1:2.5 (lime: sand). Mixing: Mortar must be mixed on site in small batches. Do not use cement-based additives or plasticisers. Do not retemper mortar after initial set has begun.
	Quality Standard BS 5628-3:2005 – Code of Practice for the Use of Masonry – Materials and Components, Design and Workmanship (Retaining Walls): Sets out best practice for construction and detailing of unreinforced and reinforced masonry retaining walls, including alignment tolerances, bedding, and backfilling procedures. BS EN 1996-1-1: Eurocode 6 – Design of Masonry Structures – General Rules for Buildings: Governs the structural performance of masonry including stability, load resistance, and durability, which is relevant where wall stability and soil pressure retention are key concerns. BS 8500-2:2015 – Concrete – Complementary British Standard to BS EN 206: Provides guidance on concrete mix specifications, particularly for use in foundation bases and wall footings exposed to moisture. CA Satisfaction All works to be completed to the reasonable satisfaction of the CA.
5.4	Dismantling of Existing Front Porch Staircase (Bridge Arch) - Provisional - TBC following Trial Pit findings
	Preparation of the Work Area Inspection and Recording Inspect the existing porch staircase and record its current condition through photographs and notes before dismantling. Document step sizes, riser and tread depths, and any decorative features such as stringers, nosing's, or edge detailing. Note and number any stone or brick units that are to be salvaged and reinstated in the same position. Notify the CA of any significant structural failures, differential movement, or embedded ironwork discovered during inspection. Protection and Access Protect adjacent masonry, door thresholds, plinths, paths, and any retained steps or surrounding paving using temporary sheeting or timber hoarding. Provide safe, temporary access where needed to ensure the building remains accessible, in consultation with the Employer.

	Dismantling of Existing Staircase Careful Removal by Hand Dismantle the existing staircase by hand, removing any loose or unstable elements progressively and under controlled conditions. Begin from the top step and work downward, removing stone or brick units course-by-course and tread-by-tread. Avoid excessive use of mechanical tools or force that could damage salvageable materials. Sorting and Storage Clean and set aside all sound stone or brick components for reuse. Each item is to be numbered in line with recorded positions and stored safely on site, protected from frost and impact.
	New Foundations for Front Porch Staircase (Bridge Arch) - Defined Provisional Sum - Provisional - TBC following Trial Pit findings
5.5	Description of Work Allow for the provision of a defined provisional sum for the installation of new foundations beneath the front porch staircase. This sum includes excavation, foundation preparation, and placement of mass concrete footings, following the recommendations of the structural engineer. The final specification and extent of works will be confirmed after trial pit inspection and assessment of ground conditions. Location At the base of the front porch staircase, as identified on site and confirmed by the Contract Administrator (CA) and structural engineer following excavation. Foundation works will be located beneath the footprint of the rebuilt staircase.
	Scope of Work (Provisional) The provisional scope of this defined provisional sum includes the following: - Local excavation to accommodate new concrete foundations for the stair base. - Preparation of trench bases, including trimming and levelling. - Placement of unreinforced or lightly reinforced mass concrete foundations to the required dimensions. - Backfilling and compacting around the new foundation using site-won or imported fill. - Off-site disposal of non-hazardous excavated spoil. - Temporary protection of adjacent fabric, including thresholds, paving, or brickwork. This sum allows for isolated pad or strip foundations beneath step lines but does not include reinforcement or complex substructure design unless instructed by the CA.
	Specification Materials Concrete: Mass concrete, minimum C25/30, unless revised by structural engineer. Formwork: Simple formwork or ground shaping where required to achieve the necessary level and foundation profile. Backfill: Clean, compactable material suitable for reinstatement beneath and around the staircase.
	Quality Standards BS 8000-1:1989 – Workmanship on Building Sites – Code of Practice for Excavation and Filling Relates to trenching, base preparation, and safe backfilling for small foundation works. BS EN 206 – Concrete – Specification, Performance, Production and Conformity Relates to the specification, batching, and placing of structural concrete. BS 6031:2009 – Code of Practice for Earthworks Relates to ground handling and excavation safety, suitable for small-scale footings. CA Satisfaction All work must be carried out to the reasonable satisfaction of the CA and structural engineer.
	Exclusions This provisional sum excludes the following: - Removal or dismantling of the existing staircase (addressed separately). - Reinforcement or steel fixings (to be included if specified by the engineer). - Drainage or damp-proof membranes beneath the foundation. - Access scaffolding, temporary ramps, or working platforms (included in Preliminaries).
	Assumptions The provisional sum is based on the following assumptions: - Foundations assumed to be 600 mm wide by 600 mm deep, unless otherwise confirmed by the structural engineer. - Ground conditions are suitable for shallow foundations and free from groundwater or obstructions. - Works will be carried out during normal working hours with unrestricted access to the porch area.
	Rebuilding of Front Porch Staircase (Bridge Arch) - Provisional - TBC following Trial Pit findings

5.6	Preparation for Rebuilding Setting Out Set out the staircase to match the original rise and going dimensions, alignment, and profile, using recorded dimensions and photographs. Establish string lines, levels, and gauge for riser consistency and tread depth.
	Rebuilding of Staircase Reconstruction Using Salvaged Materials Rebuild the staircase using cleaned salvaged materials where sound. Where units are damaged or missing, replacements must match the original in material, size, surface finish, and colour, as specified below. Brickwork All brick units must be fully bedded and jointed in lime mortar to match existing. Maintain the original bond, coursing, and edge profiles, including nosing's, stringers, or other decorative features. Mortar Use the specified lime mortar, applied fresh. Joints to be fully packed and finished to match the original appearance. Do not retemper or use cement additives unless approved.
	Finishing and Cleaning Pointing All visible joints are to be pointed using the same mortar mix, applied while the mortar is still workable. Finish neatly to match the original joint profile (typically flush or slightly recessed) and avoid mortar staining of the brick faces. Cleaning and Protection Brush off all loose mortar with a soft brush before initial set. Protect completed work from frost, rain, and rapid drying using hessian or temporary coverings. Ensure the site is left clean and safe, with reinstated access and all tools and arisings removed.
	Specification Masonry Units Salvaged Bricks: All sound bricks from the dismantled staircase are to be retained, cleaned by hand, and reused. Bricks must be free from significant cracking, spalling, delamination, or contamination. Using salvaged components from the dismantled staircase wherever they are in suitable condition. Components salvaged during the dismantling of the staircase shall be reused only in the reconstruction of the same staircase from which they were removed, and shall not be diverted to form other elements. Replacement Bricks: Where replacements are required, bricks must match the original in size, colour, texture, and type See item 4.11. Mortar Type: Use a lime mortar based on Natural Hydraulic Lime (NHL 3.5), mixed with well-graded sharp sand at a ratio of 1:2.5 (lime: sand). Mixing: Mortar must be mixed on site in small batches. Do not use cement-based additives or plasticisers. Do not retemper mortar after initial set has begun0. Use: Mortar must be applied fresh. All joints are to be fully filled and compacted. Mortar colour and finish must match the original.
	Quality Standard BS 8000-3:2001 – Workmanship on Building Sites – Masonry Relates to the correct laying, bedding, jointing, and alignment of brickwork. Bricks must be laid plumb and level with consistent joints and appropriate coursing throughout the staircase. BS EN 998-2 – Specification for Mortar for Masonry Relates to the mixing and application of site-made lime mortar. Mortar must be freshly mixed, fully packed into joints, and used without additives unless specified. BS 8221-1:2012 – Cleaning and Surface Preparation of Buildings Relates to the cleaning of salvaged bricks and preparation of the staircase base and bonding surfaces prior to rebuilding. CA Satisfaction All brickwork must be rebuilt plumb, level, and to match the original staircase in appearance. Mortar joints must be neatly finished and free from smears. Work is to be carried out with care and completed to the reasonable satisfaction of the CA.
	Investigation of canted bay - localised render removal

5.7	Protection of Surrounding Fabric Protect adjacent masonry, windows, cills, and decorative features with breathable protective sheeting prior to any works. Lay dust sheets or temporary coverings at the base of the bay to collect arisings and prevent staining or damage to underlying finishes.
	Identification and Setting Out Confirm with the Contract Administrator (CA) the precise area of render to be removed. Photograph the canted bay in its existing condition and mark out the agreed inspection zone for clarity.
	Render Removal (Investigatory) Carefully remove a small, controlled area of external render (area to be defined on-site by the CA) using hand tools only. Take all necessary precautions to avoid damaging underlying iron or steel elements, surrounding render, or adjacent decorative finishes.
	Temporary Protection Temporarily cover the exposed area using a breathable membrane, hessian wrap, or other agreed protection pending further works. Leave the area clean and safe. Do not reinstate render until further instructions are issued. Do not use mechanical breakers, unless expressly authorised by the CA following a condition review.
	Quality Standard CA Satisfaction All works must be completed to the reasonable satisfaction of the CA, ensuring no damage is caused to adjacent finishes and that photographic records are provided as required.
-	Inspection of Canted Bay
	Allow for attendance on-site by the Contract Administrator (CA) and Structural Engineer to inspect the exposed area of the canted bay following removal of render.
	The inspection will be used to assess the condition of underlying iron/steel elements and surrounding fabric and to inform the scope of any subsequent repairs.
	Provide safe access and ensure the area remains clean, dry, and clearly visible at the time of inspection.
5.8	Propping of canted bay - Defined Provisional Sum
	Description of Work Allow for the provision of a defined provisional sum for the temporary propping of the canted bay during inspection and subsequent repair works. This sum includes the supply, installation, and removal of temporary support props to stabilise the structure, based on the anticipated location and nature of defects. Final details and method of propping will be confirmed by the Contract Administrator (CA) and Structural Engineer following visual inspection of the exposed substrate.
	Location To the sides of the current beam, as identified on site and confirmed by the CA and Structural Engineer. Exact positioning and number of props to be determined following initial investigation and risk assessment.
	Scope of Work (Provisional) The provisional scope of this defined provisional sum includes the following: - Delivery and setup of proprietary propping system suitable for use on historic masonry or framed structures. - Positioning of acrow props, strongboys, or equivalent with spreader plates as required to prevent point loading. - Installation of temporary timber packers or compression heads to distribute load evenly across the bay structure. - Adjustment and monitoring of props to maintain stability during inspection or remedial works. - Removal of props following completion of instructed works or upon confirmation from CA and Structural Engineer. All work to be carried out with due care to avoid damage to existing fabric.
	Specification Materials (Assumed) Props: Acrow-type steel props or approved temporary structural support system, adjustable and tested to appropriate safe working loads. Bearers and Spreaders: Softwood or hardwood timber bearers, and steel or timber spreader plates sized to prevent damage to floors or masonry. Packing: Timber wedges or proprietary compression packers for fine adjustment.
	Quality Standards BS 5975:2019 – Code of Practice for Temporary Works Procedures and the Permissible Stress Design of Falsework Relates to the planning and safe installation of temporary structural supports. BS 8000-1:1989 – Workmanship on Building Sites – Code of Practice for Excavation and Filling Relevant where support props interface with excavation or ground-bearing surfaces.
	CA Satisfaction All propping works must be carried out to the reasonable satisfaction of the CA and Structural Engineer, with regular review for stability and safety.

	Exclusions This provisional sum excludes the following: - Scaffolding, crash decks, or access towers (refer to Preliminaries). - Structural repairs to the bay (to be scheduled separately). - Monitoring equipment or sensors (if required, to be instructed separately). - Full structural design of a bespoke support system.
	Assumptions This provisional sum is based on the following assumptions: - A simple propping arrangement is sufficient (1–3 props) to maintain local stability. - The bay is accessible from ground level or internal floor, without specialist lifting equipment. - Works are carried out during normal working hours. - Ground and surrounding floors are capable of supporting temporary loads without reinforcement.
	Structural Repairs to Canted Bay - Un-Defined Provisional Sum - Provisional - TBC following Site Investigation Description of Work Allow a provisional sum for structural repairs to the canted bay following further inspection of the supporting iron/steel beams. This sum includes the anticipated remedial work required to address corrosion-related deterioration, including the potential repair, treatment, or partial replacement of embedded metalwork and associated making good. The final scope, method, and extent of works will be confirmed by the Contract Administrator (CA) and Structural Engineer following detailed assessment once the render has been removed. Location Canted bay located to the rear of the property, North elevation of the building, as identified on drawings A05, A06, A09 & A10. Repairs will relate to the evident movement seen to the bay at first-floor level.
	Scope of Work (Provisional) The following indicative scope is anticipated but subject to change pending full inspection: - Cleaning and treatment of corroded iron or steel beams and structural elements. - Localised cutting out and replacement of severely corroded sections of embedded metalwork, if required. - Application of protective coatings or corrosion inhibitors to treated metal. - Temporary support or stabilisation of surrounding masonry, if necessary, during repair works. - Rebuilding or reinstating disturbed render, finishes, or substrate following completion of structural repairs. - All works to be carried out with due care for adjacent historic fabric and finishes.
5.9	Quality Standards BS EN 1504 – Products and Systems for the Protection and Repair of Concrete Structures (if applicable) Relevant for preparation and repair of embedded steelwork within rendered or concrete-backed structures. Structural Engineer Direction All works must be carried out strictly in accordance with structural repair strategy issued by the appointed engineer. CA Satisfaction All repairs must meet the reasonable satisfaction of the Contract Administrator and Structural Engineer.
	Exclusions This provisional sum excludes: - Removal of render for investigation (scheduled separately). - Propping and temporary support (scheduled separately). - Full rebuilding of the bay structure. - Access scaffolding or temporary works (refer to Preliminaries).
	Assumptions - Repairs may involve treatment or partial replacement of embedded steel components. - Safe access and propping will be in place prior to commencement of repair works. - Ground conditions are stable, and no additional excavation or foundation works will be required. - Normal working hours apply.
	Subtotal
6.0	PARAPETS & COPINGS

	Removal of coping stones Carefully number and photograph the coping stones and submit details to the CA for approval prior to removing. Carefully rake out mortar joints as required, safely lift coping stones and store at ground level in a secure and lockable location to prevent theft. Clean all mortar from coping stones and wall head to facilitate re-setting of salvaged stones.
	Quality Standard BS 8000-3:2001 – Workmanship on Building Sites – Masonry Relates to the safe and correct removal of masonry units, including careful handling, raking out of joints, and avoiding damage to adjacent stonework during dismantling. BS 8221-1:2012 – Cleaning and Surface Preparation of Buildings Relates to the appropriate cleaning of salvaged coping stones and preparation of the wall head, ensuring surfaces are free from mortar residues before reinstallation. To the Reasonable Satisfaction of the CA Ensure that the workmanship meet the reasonable satisfaction of the CA (Contract Administrator), achieving compliance with the project requirements and maintaining the integrity of the historic building.
6.1	North Elevation
6.2	East Elevation
6.3	South Elevation
6.4	West Elevation
	Dismantle parapet wall Careful Dismantle Parapet Wall as follows: Preparation of the Work Area Protection Install dust sheets or protective sheeting over adjacent roof coverings, gutters, wall heads, and internal spaces where required. Provide temporary edge protection to adjacent openings or roof edges to ensure safe working conditions during dismantling.
	Raking Out Joints Carefully rake out mortar joints using hand tools only. Work progressively in small sections to reduce vibration and avoid disturbing retained adjacent masonry or roof finishes. Progressive Dismantling by Hand Remove parapet bricks course-by-course from top to bottom. - Lift each unit by hand, taking care not to damage arrises or corners. - Avoid levering against the wall or using percussive tools. - Work in manageable sections to maintain control and site safety. Sorting and Storing Materials - Sort salvaged masonry as it is removed. - Keep salvaged materials clean and separated from general waste. Stack sound bricks neatly on pallets in a secure, sheltered location. - Discard only those units that are broken or structurally unsound, subject to CA approval. Waste and Debris Control - All materials to be disposed of off-site or weighed in/sold as per Preliminaries Section A35 - 160. Collect and remove mortar waste and debris progressively to prevent buildup. Ensure gutters, roof slopes, and adjacent surfaces are kept clear of debris at all times.
	Final Cleaning and Preparation Wall Head Cleaning Once dismantling is complete, clean the top of the remaining wall structure by brushing away loose mortar and debris. Scrape away residual bedding material by hand, taking care not to damage retained courses.
	Quality Standard BS 8000-3:2001 – Workmanship on Building Sites – Masonry Relates to the correct site practices for dismantling and handling masonry, including careful raking of joints, progressive removal, and protection of adjacent fabric. BS 8221-1:2012 – Cleaning and Surface Preparation of Buildings Relates to the safe and appropriate preparation of historic building materials, including cleaning salvaged bricks or stones and leaving the wall head free of mortar and debris. To the Reasonable Satisfaction of the CA All masonry is to be dismantled progressively by hand, without damage to surrounding fabric or salvageable materials. Salvaged bricks or stones must be cleaned, stacked securely, and protected on site. The wall head is to be left clean, stable, and ready for the next phase of work. All work must be carried out neatly and to the reasonable satisfaction of the CA.
6.5	North Elevation
6.6	East Elevation
6.7	South Elevation
6.8	West Elevation
	Rebuilding of Parapet Wall Rebuild the currently unstable Parapet Wall to Match Existing and be Structurally Sound as follows:

	Installation of DPC and Bedding Mortar Laying the DPC Supply and install Visqueen Zedex High Bond DPC, or approved equal, neatly cut to over sail the wall head by no more than 10 mm on either side. Lay the DPC on an even, full bed of freshly mixed lime mortar to ensure continuous support. Pack all voids and surface irregularities to prevent water tracking beneath the DPC. All DPC laps should be a minimum of 100 mm and bonded with Visqueen Zedex Jointing Tape. Heat bonding is not to be used unless specifically approved by the CA. Bedding Mortar Use the below specified lime mortar mix, apply mortar evenly across the full width of the wall head, avoiding hollows or uneven bedding. Keep the mortar fresh and workable. Do not retemper or allow to skin over before setting the coping stones. Resetting of Coping Stones Placing and Aligning Stones Reset the coping stones in their original numbered order. Lay each stone carefully on the DPC while the mortar remains plastic, adjusting by hand to suit minor variations in size or shape. Tap stones gently into place to ensure full contact with the bedding and to avoid rocking or displacement of the DPC. Jointing and Finish All sky-facing and perp joints are to be fully packed with the same lime mortar mix. Finish joints flush or slightly weathered to match the original detail and promote water run-off. Take care to avoid smearing mortar onto visible masonry faces. Specification Mortar Mix: 3 parts NHL 5 0.5 part white cement 5 parts well graded sharp sand Quality Standard BS 8000-3:2001 – Workmanship on Building Sites – Masonry Relates to good practice for laying and bedding masonry units, including coping stones. Covers alignment, bedding, jointing, and care in handling to avoid damage during reinstatement. BS 8221-1:2012 – Cleaning and Surface Preparation of Buildings Relates to appropriate cleaning of wall heads and salvaged coping stones prior to reinstatement. Ensures surfaces are free from mortar residue and suitable to receive new bedding and DPC. To the Reasonable Satisfaction of the CA All coping stones must be reset plumb and level, using a full bed of fresh lime mortar over a neatly installed DPC with bonded laps. All joints must be fully packed and neatly finished. Work is to be completed to the reasonable satisfaction of the CA.
6.13	North Elevation
6.14	East Elevation
6.15	South Elevation
6.16	West Elevation
	New Coping Stones - Prime Cost Sum (Supply Only) Where existing coping stones are unsuitable for reuse, provide new natural stone coping units to match the existing in size, profile, and colour, as specified below. New Coping Stones: Natural Bath stone coping, sawn and rubbed, to match existing dimensions and profile (typical length 600 mm; width and thickness to match existing or as directed by CA). Available from: Bath Stone Group Monks Park Works Farrington Gurney Bristol BS39 6UX Tel: 01761 452006 www.bathstonegroup.co.uk
	Subtotal
7.0	RENDER
-	The following should only be undertaken following agreement of samples and express Contract Administrator's Instruction from the CA, in line with the Information Release Schedule (Preliminaries - Section 490).
-	Removal of Existing - Provisional Quantities - Re-Measurable Remove the existing render to the front (south) and rear (north) elevation where required, as before described in Testing Trials & Experimentation.
7.1	North Elevation
7.2	East Elevation
7.3	South Elevation
	Re-Rendering - Provisional Quantities - Re-Measurable Supply materials and undertake rendering to the front (south) and rear (north) elevation where required, as before described in Testing Trials & Experimentation.
7.4	North Elevation
7.5	East Elevation
7.6	South Elevation
	Subtotal
8.0	BRICKWORK
-	BRICKWORK RAKING OUT & REPOINTING - Provisional Quantities - Re-Measurable

-	The following should only be undertaken following agreement of samples and express Contract Administrator's Instruction from the CA. Supply materials and undertake raking out and repointing to areas instructed by CA as before described in Testing Trials & Experimentation.
8.1	North Elevation
8.2	East Elevation
8.3	South Elevation
8.4	West Elevation
	BRICKWORK RAKING OUT & REPOINTING TUCK - Provisional Quantities - Re-Measurable
	The following should only be undertaken following agreement of samples and express Contract Administrator's Instruction from the CA. Supply materials and undertake raking out and repointing to areas instructed by CA (areas where tuck pointing currently exists to be confirmed following thorough inspection) as before described in Testing Trials & Experimentation.
8.5	North Elevation
8.6	East Elevation
8.7	South Elevation
8.8	West Elevation
	Subtotal
9.0	RAINWATER GOODS & FOUL WATER DRAINAGE
	Rainwater Goods - Repair and Reinstallation
	To works area complete, undertake the following: Gutter and Downpipe Removal Note: See Preliminaries section A44 - 200 removal and temporary rainwater works. Label each section for identification during reinstallation. Inspection and sorting of removed sections: Separate salvageable sections from those requiring replacement for inspection and written confirmation by CA. Store salvageable sections in a designated, protected area. Any UPVC Rainwater goods are to be disposed of. - See also Information Release Schedule (Preliminaries - Section 490). Blasting and Repairs Transportation of salvageable sections to an off-site blasting facility (if lead paint is present). Off-site blasting of paint from salvageable sections using a lead-safe method (e.g., media blasting in a contained environment). Visual inspection and hand-cleaning of blasted sections to ensure complete paint removal. Reinstallation Reinstallation of the gutters and downpipes using appropriate stainless steel fixings and oak bobbins where required ensuring proper alignment and fall to BS EN 12056-3:2000, "Gravity drainage systems inside buildings. Sanitary pipework, layout, and calculation." Downpipes should be installed to allow for future redecoration of rear sides to CA's satisfaction.
-	North Elevation
-	Gutters
9.1	G1
9.2	G2
9.3	G3
-	Rainwater Pipes
9.4	RWP1
9.5	RWP2
9.6	RWP3
9.7	RWP4
9.8	RWP5
9.9	Hopper Heads
-	South Elevation
-	Rainwater Pipes
9.10	RWP6
9.11	RWP7
9.12	RWP8
9.13	RWP9
9.14	Hopper Heads
-	West Elevation
-	Rainwater Pipes
9.15	RWP10
9.16	RWP11
9.17	RWP12
9.18	Hopper Heads

9.19	Testing On completion of re-installation, the system should be leak tested to BS EN 12056-3:2000 as follows: 1. Visual Inspection: Conduct a thorough visual inspection of all joints, connections, and seams in the rainwater goods system to identify any obvious signs of leakage or improper installation. 2. Water Test: Introduce water into the system (e.g., by using a hose or filling the gutters with water) and observe for any leaks at joints, seams and connections. Ensure that water flows correctly through the system without pooling or overflowing. Results to be submitted to CA for certification.
New Rain Water Goods Sections Aluminium (Supply Only) - Defined Provisional Sum	
9.20	Description of Work Allow for the supply of aluminium rainwater goods (gutters, downpipes, offsets, hoppers, and associated fittings) in sections or locations where replacement is confirmed by the CA following access and inspection. This Prime Cost Sum is for supply only and does not include installation or removal of existing rainwater goods. Location - To elevations identified by the CA as requiring rainwater goods replacement, as confirmed during works. Final locations and quantities to be established during the contract. Supplier/Type Aluminium heritage-style rainwater goods, polyester powder-coated to black RAL 9005 or equivalent, suitable for conservation settings. Suggested Supplier: Alumasc Heritage Aluminium Profile and dimensions to be agreed with the CA.
	Rainwater Pipes
	RWP2
	2x Hopper Heads
	Gutters
	G1
	G2
	G3
Foul Water Pipes - Repair and Reinstallation	
-	To works area complete, undertake the following: Foul Water Pipe Removal and associated hoppers Note: See Preliminaries section A44 - 200 removal and temporary works. Inspection and sorting of removed sections: Separate salvageable sections from those requiring replacement for inspection and written confirmation by CA. Store salvageable sections in a designated, protected area. Any UPVC foul water pipes are to be disposed of. - See also Information Release Schedule (Preliminaries - Section 490). Blasting and Repairs Transportation of salvageable sections to an off-site blasting facility (if lead paint is present). Off-site blasting of paint from salvageable sections using a lead-safe method (e.g., media blasting in a contained environment). Visual inspection and hand-cleaning of blasted sections to ensure complete paint removal. Reinstallation Reinstallation of the foul water pipes using appropriate stainless steel fixings and oak bobbins where required ensuring proper alignment and fall to BS 416-1:1990 and BS EN 877:1999 + A1:2006, "Cast iron pipes and fittings, their joints and accessories for the evacuation of water from buildings - Requirements, test methods, and quality assurance" Pipework should be installed to allow for future redecoration of rear sides to CA's satisfaction.
	North Elevation
	FWP1
	FWP2
	SVP 1
	East Elevation
	FWP3
	FWP4
	SVP 2
	South Elevation
	FWP5
	West Elevation
	FWP6
	FWP7
	FWP8

9.31	Testing On completion of re-installation, the system should be leak tested to BS EN 12056-3:2000 as follows: 1. Visual Inspection: Conduct a thorough visual inspection of all joints, connections, and seams in the foul water system to identify any obvious signs of leakage or improper installation. 2. Water Test: Introduce water into the system (e.g., by using a hose or filling the gutters with water) and observe for any leaks at joints, seams, and connections. Ensure that water flows correctly through the system without pooling or overflowing. Results to be submitted to CA for certification.
	New Foul water Sections Cast Iron (Supply Only) - Defined Provisional Sum
-	Description of Work Allow for the supply only of new cast iron foul water pipework and fittings to replace existing uPVC sections, which are visually and materially inappropriate for a listed building. This Prime Cost Sum covers the direct cost of materials only and does not include installation or removal. Replacement is required to bring the foul water system in line with the building's listed status and conservation best practice. Location To foul water runs (internal and/or external) currently in uPVC, as identified by the CA during works. Final locations and quantities to be confirmed following full site inspection and review. Supplier/Type Cast iron soil and waste system to BS EN 877, suitable for gravity drainage. Internal and external pipes to be epoxy-coated or painted black, with push-fit or socketed joints as appropriate. Suggested Supplier: J&JW Longbottom Bridge Foundry Holmfirth Huddersfield HD9 7AW Component types and dimensions to be agreed with the CA.
9.32	FWP6 SVP1 SVP2
	Subtotal
10.0	DECORATION
-	Rainwater Goods
	Preparation Inspection of Rainwater Pipes : Inspect the sand-blasted rainwater pipes for any signs of damage, corrosion, or deterioration. Ensure that the pipes are structurally sound before proceeding with the painting process. Any areas of damage should be repaired prior to painting. Surface Cleaning After Sand-Blasting: After sand-blasting, clean the pipes to remove any residual dust, debris, or contaminants. Use a soft brush or compressed air to ensure the surface is completely clean. If necessary, wipe down the pipes with a damp cloth and allow them to dry thoroughly before applying paint. Protection of Surrounding Areas: Use protective sheeting (e.g., polythene or tarpaulins) to cover adjacent masonry, windows, doors, and other architectural features to prevent paint splatters or damage during the painting process. Application of Linseed Oil Paint Priming the Surface Apply 2 thin, even coats of linseed oil primer to the clean, dry surface of the rainwater pipes using a brush or roller. Allow the primer to dry thoroughly, following the manufacturer's recommended drying time (typically 24 hours or more). Mixing the Paint Stir the linseed oil paint thoroughly before application to ensure even distribution of pigments and oils. Do not dilute the paint unless recommended by the manufacturer. First Coat Application Apply the first coat of linseed oil paint in thin, even layers using a brush or small roller. Work methodically, ensuring all areas of the rainwater pipe are fully covered. Pay special attention to joints, seams, and edges to ensure complete coverage. Brush out any drips or excess paint to achieve a smooth, consistent finish. Thin coats are essential with linseed oil paint, as thick coats can take too long to dry and may result in uneven curing. Drying Time Allow the first coat to dry thoroughly - minimum 48hrs. Ensure the painted surface is fully dry before applying additional coats.

	Second Coat Application Preparation for Second Coat: After the first coat has fully dried, inspect the surface for any imperfections, such as drips or uneven areas. Lightly sand any rough patches with fine-grit sandpaper if necessary, then clean the surface of any dust. Application of Second Coat: Apply the second coat of linseed oil paint in the same manner as the first coat, ensuring thin, even layers for a smooth finish. Use a brush to reach detailed areas and ensure full coverage over any exposed metal. Work carefully to avoid overlapping or brush marks, maintaining a consistent finish across the entire surface of the rainwater pipes.
	Finishing and Curing Final Inspection: Once the final coat has been applied and fully dried, inspect the painted surface to ensure uniform coverage and an even finish. Check for any missed areas, drips, or imperfections and touch up if necessary. Curing Time: Linseed oil paint continues to cure for several weeks after application. Ensure the rainwater pipes are protected from heavy rain or extreme weather during this curing period whilst on-site. Linseed oil paint remains slightly soft for several days, so avoid handling the pipes until they are fully cured.
	CAUTION: any cloth/rags used should be soaked in water before placing in an airtight container for disposal to prevent self combustion.
	Specification: - 2 coats of undercoat Linseed paint iron oxide primer. - 2 coats Linseed paint to colour of choice. Available from: Brouns & Co Unit 1, Bypass Park Estate, Sherburn in Elmet, Leeds LS25 6EP Tel : +44 (0)1423 500 694
-	North Elevation
-	Gutters
10.1	G1
10.2	G2
10.3	G3
-	Rainwater Pipes
10.4	RWP1
10.5	RWP2
10.6	RWP3
10.7	RWP4
10.8	RWP5
10.9	Hopper Heads
-	South Elevation
-	Rainwater Pipes
10.10	RWP6
10.11	RWP7
10.12	RWP8
10.13	RWP9
10.14	Hopper Heads
-	West Elevation
-	Rainwater Pipes
10.15	RWP10
10.16	RWP11
10.17	RWP12
10.18	Hopper Heads
	Foul Water Pipes
	Preparation Inspection of Rainwater Pipes: Inspect the sand-blasted rainwater pipes for any signs of damage, corrosion, or deterioration. Ensure that the pipes are structurally sound before proceeding with the painting process. Any areas of damage should be repaired prior to painting. Surface Cleaning After Sand-Blasting: After sand-blasting, clean the pipes to remove any residual dust, debris, or contaminants. Use a soft brush or compressed air to ensure the surface is completely clean. If necessary, wipe down the pipes with a damp cloth and allow them to dry thoroughly before applying paint. Protection of Surrounding Areas: Use protective sheeting (e.g., polythene or tarpaulins) to cover adjacent masonry, windows, doors, and other architectural features to prevent paint splatters or damage during the painting process.
	Application of Linseed Oil Paint Priming the Surface: Apply 2 thin, even coats of linseed oil primer to the clean, dry surface of the foul pipes using a brush or roller. Allow the primer to dry thoroughly, following the manufacturer's recommended drying time (typically 24 hours or more). Mixing the Paint: Stir the linseed oil paint thoroughly before application to ensure even distribution of pigments and oils. Do not dilute the paint unless recommended by the manufacturer. First Coat Application: Apply the first coat of linseed oil paint in thin, even layers using a brush or small roller. Work methodically, ensuring all areas of the foul pipe are fully covered. Pay special attention to joints, seams, and edges to ensure complete coverage. Brush out any drips or excess paint to achieve a smooth, consistent finish. Thin coats are essential with linseed oil paint, as thick coats can take too long to dry and may result in uneven curing. Drying Time: Allow the first coat to dry thoroughly - minimum 48hrs. Ensure the painted surface is fully dry before applying additional coats.

	Quality Standards BS 6150:2019 – Painting of Buildings Relates to preparation and application of decorative coatings, including mineral paints and limewash. Ensures adequate drying times, surface compatibility, and environmental controls. BS 7913:2013 – Guide to the Conservation of Historic Buildings Ensures paint systems used on lime render are compatible, non-film-forming, and allow full vapour permeability of the substrate. To the Reasonable Satisfaction of the CA Paint is to be applied uniformly with full coverage, avoiding lap marks, sheen variation, or pigment streaking. Paint must not trap moisture or show signs of failure (e.g., blistering, flaking) following drying. All work is to be completed to the reasonable satisfaction of the Contract Administrator.
10.30	North Elevation
10.31	East Elevation
10.32	South Elevation
	Subtotal