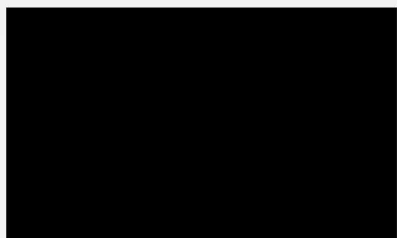
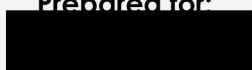


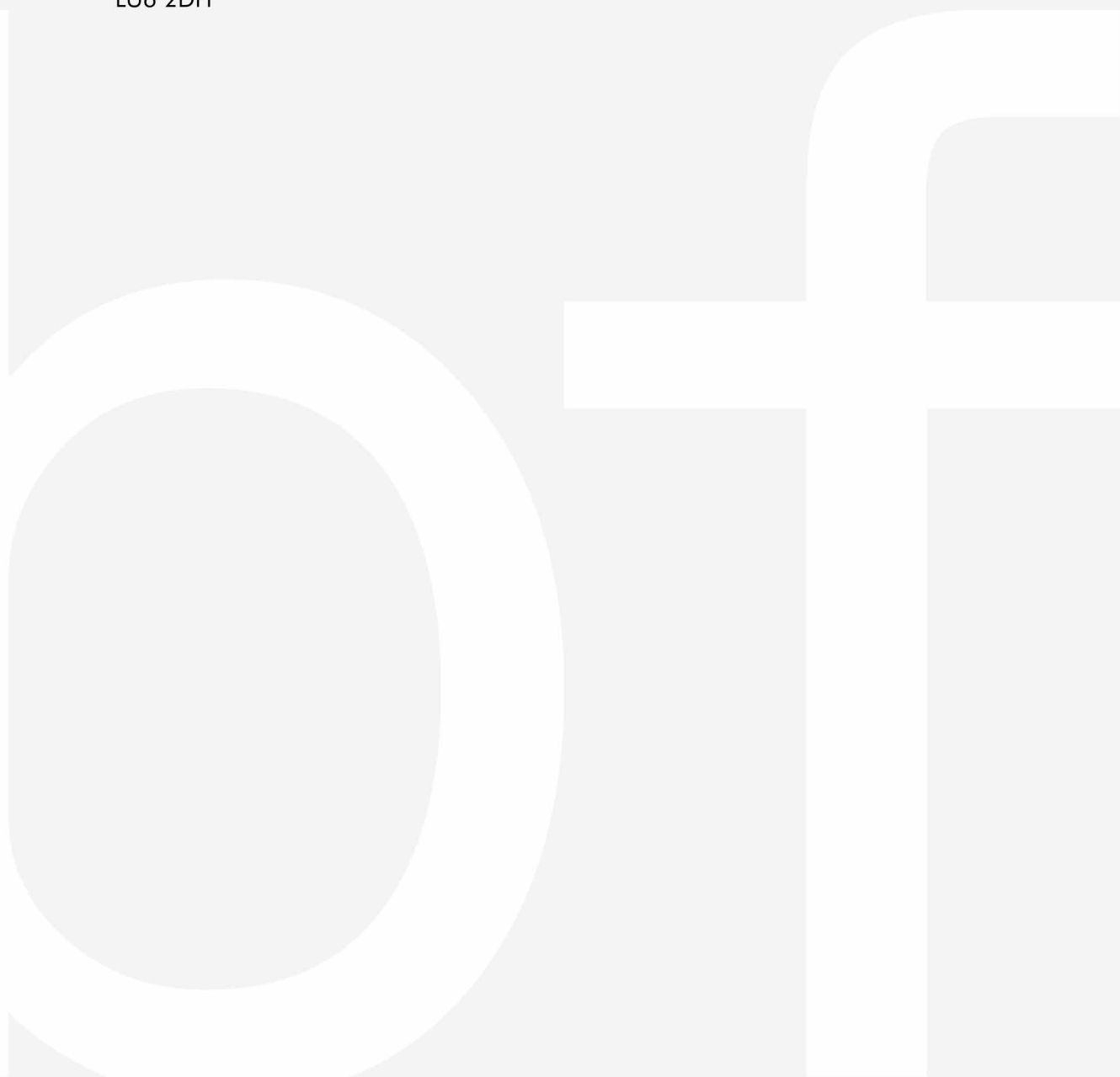
■ Specification of Works



Prepared for:



The Gate House
The Comp
Eaton Bray
LU6 2DH



SPECIFICATION OF WORKS



At:
**16-17 High Street
Tring
Hertfordshire
HP23 5AH**

For:
[REDACTED]
**The Gate House
The Comp
Eaton Bray
LU6 2DH**

Prepared by:
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1.0 PRELIMINARIES AND GENERAL CONDITIONS

1.1 DESCRIPTION OF SITE

The property dates from c.1905 and is a three storey building accommodating shops and offices.

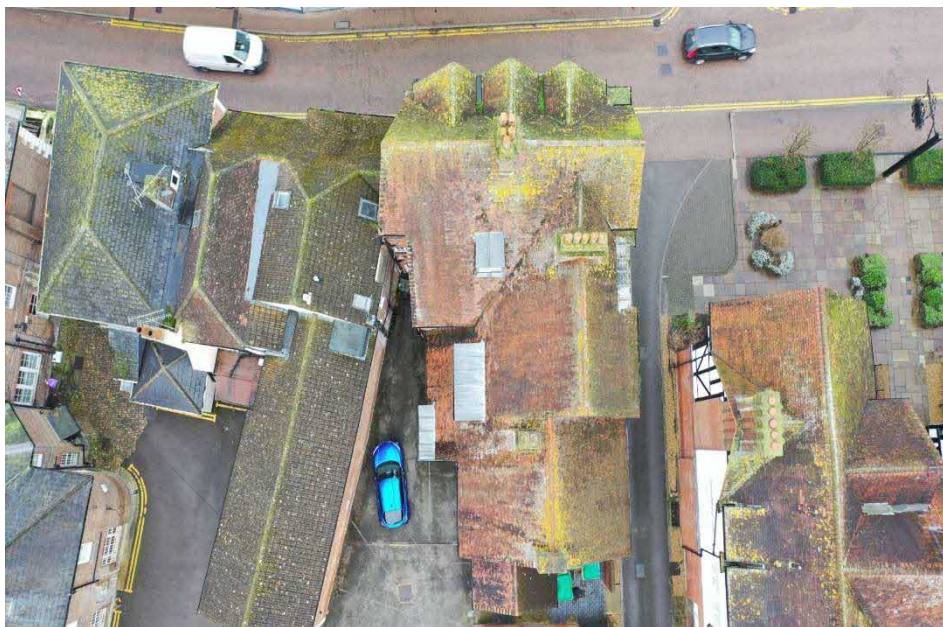
The walls and chimney stacks are finished with rough cast pebbledash render and include painted timbers.

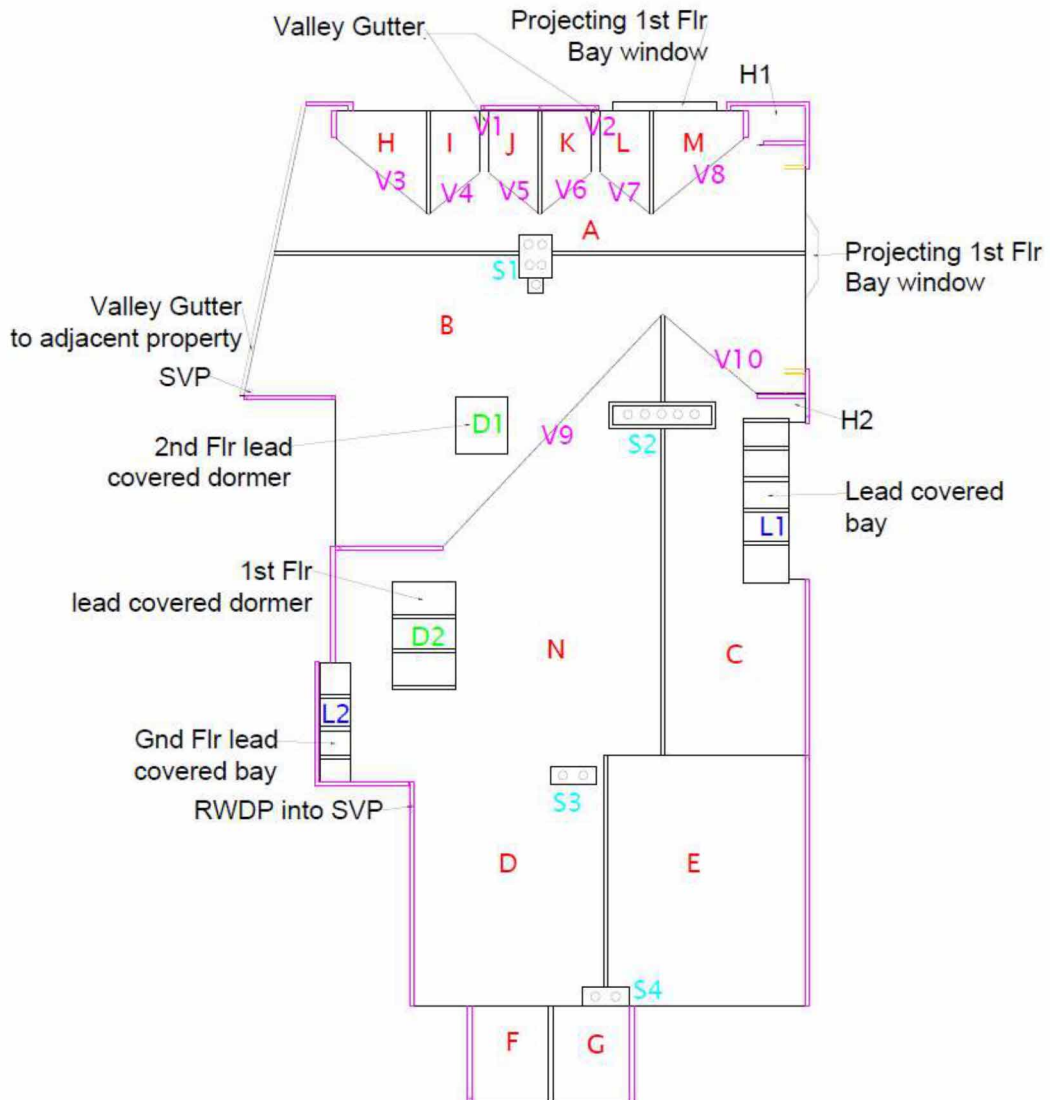
The roofs are steeply pitched finished with clay plain tiling with multiple slopes, pitched valley tiles, lead covered dormer windows and lead bays and valley gutters.

The property is Grade 2 Listed and is also located within a conservation area, and therefore, the works will be subject to scrutiny and review by the local Conservation Officer.

1.2 SCOPE OF WORK

- The procurement of a scaffold design and scaffold licence to enable safe access and working platforms to undertake works.
- The repair and reroofing of the clay plain tiled roof surfaces including ridge tiles valley tiles and verges.
- The provision of replacement sarking felt.
- The upgrading of roof void insulation.
- The repair of lead linings to dormer windows and flat bay structures.
- The repair and replacement of rainwater goods, as required.
- The repair and replacement of cracked pebbledash render to chimney stacks which may involve the brickwork repair of cracks behind the render, repair of chimney heads, chimney flaunchings, chimney pots and abutment flashings.
- Redecoration of high level joinery to windows, facias, soffits, bargeboards and the like, accessible from scaffold.

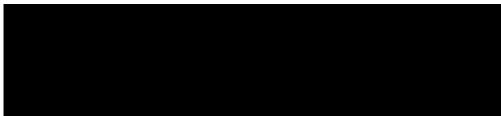




1.3 EMPLOYER/CLIENT



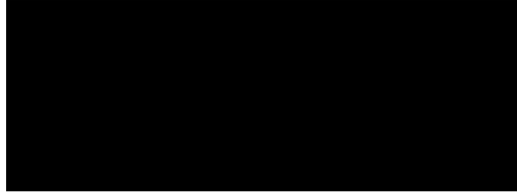
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1.4 CONTRACT ADMINISTRATOR (C.A.)

Brasier Freeth LLP
Wentworth Lodge
Welwyn Garden City
Hertfordshire
AL8 7SR

Contact:
Mobile:
Email:



1.5 PRINCIPAL DESIGNER

Contact: TBC
Tel:
Mob:
Email:

1.6 CONTRACT DRAWINGS

Refer to drawings:

- Refer to appendices and photographs.

1.7 VISITORS AND SITE INSTRUCTION BOOKS

The Contractor will provide a Visitors' book in which shall be recorded the names of all visitors to the site (apart from Contractor's workmen)

The C.A. will provide a Site Query book for site instructions. No claim for extra works will be entertained without a supporting entry in the pad.

Both books shall be kept on site in a secure place and shall be available at all times for use. They must be handed to the C.A. at the time of the hand over inspection.

1.8 TENDER

The Employers do not bind themselves to accept the lowest or any Tender submitted and the Contractor is to have no claim for the cost of preparing his estimate.

The Tender shall remain open for acceptance for a period of three months.

The Contractor shall visit the site and inspect the drawings and satisfy himself as to the local conditions, assess the full extent and character of conditions affecting labour and the execution of the Contract generally as no subsequent claim on the ground of insufficient or inaccurate information will be entertained. He will be held to have fully informed and satisfied himself by his own independent observations and enquiries as to the nature, extent and

practicability of the works, the places where materials can be obtained and disposed of and any other points which affect the Tender. The accuracy of dimensions and measured quantities provided by the C.A. is not guaranteed.

The Tender shall be exclusive of Value Added Tax. Payment and recovery of any tax for which the Contractor is liable is to be the Contractor's responsibility and except as provided in the said Supplemental Agreement the Contractor will be deemed to have allowed in his Tender for all other incidental costs and expenses which he may incur thereby.

If the Contractor cannot tender for any parts of the works defined herein, he must inform the C.A. as soon as possible, defining the relevant sections and stating his reasons for his inability to tender.

1.9 CONTRACTOR TO PRICE THE WHOLE OF THE WORKS

The Contractor shall allow for all labour materials and plant to complete the whole of the works shown on the drawings or described in the Specification whether or not the same is specifically described provided it can reasonably be inferred or results from works described in the Specification or shown in the drawings.

The priced items in the Specification shall together be deemed to be the Schedule of Rates referred to in the Form of Contract.

The Specifications states briefly the works involved dividing the work into items which shall be priced separately. Costs relating to items in the Specification which are not priced will be deemed to have been included elsewhere in the Tender.

Where the structure is altered or cut away, prices shall include for supplying and erecting all struts, needles, raking, flying or dead shore and any other supports necessary to support and uphold all parts of the building whether specifically so described or not. On completion, strike and remove and reinstate all works disturbed.

1.10 DETERMINATION OF QUERIES

Any queries or any points which might give rise to uncertainty shall be referred to the C.A. before the submission of a Tender and at least three days prior to the stipulated closing date and time for receipt of Tenders. All rulings and replies given by the C.A. will be notified simultaneously to all Contractors tendering.

1.11 THE CONTRACT

1.11.1 Form of Contract JCT Intermediate Building Contract 2016.

Allow for the obligations, liabilities and services described in the clauses therein and enumerated below.

Recitals

First	The Works and address
Second	The Contract Drawings
Third	The Specification
	The following will be deleted
	<ul style="list-style-type: none">• <i>"Bills of Quantities"</i>
	<i>"The Work Schedules"</i>
Fourth	The Contractor has priced the Specification
Fifth	CIS –Employer status –Employer not a contractor
Sixth	Information release - delete
Seventh	The project is notifiable under the CDM Regulations 2015
Eighth	The works divided into sections - delete
Ninth	Framework Agreement
Tenth	Supplemental Provisions apply

Articles

1	Contractor's obligations
2	Contract Sum
3	Contract Administrator
4	The Quantity Surveyor
5	Principal Designer
6	Principal Contractor
7	Adjudication
8	Arbitration
9	Legal Proceedings

Contract Particulars

Clause etc.	Subject	
Fifth Recital and clause 4.5	Construction Industry Scheme (CIS)	The Employer at the Base Date is not a 'contractor' for the purposes of the CIS
Seventh Recital	CDM Regulations	The project is notifiable.

Eighth Recital	Description of Sections (if any)	N/A
Ninth Recital	Framework Agreement	N/A
Tenth Recital and Schedule 5	Supplemental Provisions (where neither entry against an item below is deleted, the relevant paragraph applies	
	Collaborative working	* paragraph 1 applies
	Health & Safety	* paragraph 2 applies
	Cost savings and value improvements	* paragraph 3 applies
	Sustainable development and environmental considerations	* paragraph 4 applies
	Performance indicators and monitoring	* paragraph 5 does not apply
	Notification and negotiation of disputes	* paragraph 6 applies
	Where paragraph 6 applies, the respective nominees of the	Employer's nominee Mr Tom Masters Contractor's nominee TBC Or such replacement as each party may notify to the other from time to time
Article 8	Arbitration	Article 8 and clauses 9.3 to 9.8 (Arbitration) apply.
1.1	Base Date	1 st February 2004
1.1	CDM Planning Period	Shall mean the period of 8 weeks *ending on the Date of Possession
1.1	Date for Completion of the Works	<u>TBC</u>
	(where completion by Sections does not apply)	TBC
	Sections: Dates for Completion of Sections	Section _____: _____ Section _____: _____ Section _____: _____
1.7	Addresses for service of notices etc. by the Parties	Employer –Page 1

	(If none is stated, the address in each case, unless and until otherwise agreed and subject to clause 1.7.3, shall be that shown at the commencement of the Agreement)	Contractor Page 1
2.4	Date of Possession of the site <i>(Where possession by Sections does not apply)</i>	TBC
	Sections: Dates of Possession of Sections	N/A
2.5	Deferment of possession of the site <i>(where possession by Sections does not apply)</i>	Clause 2.5 does not apply Maximum period of deferment (if less than 6 weeks) is <u>6</u>
	Sections: deferment of possession of Sections	Clause 2.5 does not apply Maximum period of deferment (if less than 6 weeks) is Section _____: _____ Section _____: _____ Section _____: _____
2.23.2	Liquidated damages <i>(where completion by Sections does not apply)</i>	at the rate of £ 1500 per week
2.29	Sections: Section Sums	Section ____:£ _____ Section ____:£ _____ Section ____:£ _____
2.30	Rectification Period <i>(where completion by Sections does not apply)</i> <i>(If no other period is stated, the period is 6 months)</i>	12 months From the date of practical completion of the Works
	Sections: Rectification Periods <i>(If no other period is stated, the period is 6 months)</i>	Section _____: _____months Section _____: _____months Section _____: _____months From the date of practical completion of each Section

4.6	Advance payment (Not applicable where the Employer is a Local Authority)	Clause 4.6 does not apply If applicable: The advance payment will be £ _____ / _____ _____ per cent of the Contract Sum and will be paid to the Contractor on It will be reimbursed to the Employer in the following amount(s) and at the following time(s)
	(Not applicable where the Employer is a Local Authority)	does not apply
4.6	Advance Payment Bond	An advance payment bond is not required
4.7.1	Interim payments –due dates (If no date is stated, the first due date is one month after the Date of Possession)	The first due date is: TBC and thereafter the same date in each month or the nearest Business Day in that month
4.8.1	Interim Payments – Percentage of value.	95 per cent before practical completion 97.5 per cent upon practical completion.
4.9.4	Listed Items –uniquely identified	N/A
4.9.5	Listed Items –not uniquely identified	N/A
4.15 and Schedule 4	Contribution, levy and tax fluctuations Percentage addition for Fluctuations Option, paragraph 12	Schedule 4 (Fluctuations Option) does not apply _____ per cent
6.4.1.2	Contractor’s insurance –injury to persons or property - Insurance cover (for any one occurrence or series of occurrences arising out of one event)	TBC

6.5.1	Insurance –liability of Employer	Insurance may be required/is not required. Minimum amount of indemnity for any one occurrence or series of occurrences arising out of one event £ 5,000,000 TBC
6.7 and Schedule 1	Insurance of the Works – Insurance Options	Schedule 1: Insurance Option C applies – Insurance by the Employer of Existing Structures and Works in or Extensions to them.
6.7 and Schedule 1 Insurance Option A (paragraphs A.1 and A.3, B (paragraph B.1) or C (paragraph C.2)	Percentage to cover professional fees (if no other percentage is stated, it shall be 15 per cent)	15 per cent
6.7 and Schedule 1 Insurance Option A (paragraph A.3)	Annual renewal date of insurance (as supplied by the Contractor)	TBC
6.10 and Schedule 1	Terrorism Cover –details of the required cover	
6.12	Joint Fire Code If the Joint Fire Code applies, state whether the insurer under Schedule 1, Insurance Option A, B or C (paragraph C.2) has specified that the Works are a 'Large Project':	The Joint Fire Code Applies No
6.15	Joint Fire Code – amendments/revisions (The cost shall be borne by the Contractor unless otherwise stated)	The cost, if any, of compliance with amendment(s) or revision(s) to the joint Fire Code shall be borne by The Contractor
8.9.2	Period of suspension (If none is stated, the period is 2 months)	2 months
8.11.1.1 to 8.11.1.5	Period of suspension (If none is stated, the period is 2 months)	2 months
9.2.1	Adjudication	The Adjudicator is:

	Nominating body –where no Adjudicator is named or where the named Adjudicator is unwilling or unable to act (whenever that is established)	The Royal Institution of Chartered Surveyors
9.4.1	Arbitration - Appointer of Arbitrator (and of any replacement (If no appointer is selected, the appointer shall be the President or a Vice-President of the Royal Institute of British Architects)	President or a Vice-President: The Royal Institution of Chartered Surveyors
Collateral Warranties	If collateral warranties are required from the Contractor, complete particulars in (A) to (D)	N/A

EXECUTION

The contract will be executed Underhand.

EXTENSION OF TIME

When a notice of the cause of any delay or likely delay in the progress of the Works is given under Contract clause 2.19, written notice must also be given of all other clauses which apply concurrently. The Contractor shall, as soon as possible, submit to the C.A.:-

- Relevant particulars of the expected effects, if appropriate related to the concurrent clauses.
- An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the Date for Completion.
- All other relevant information required by the C.A.

DISTURBANCE OF REGULAR PROGRESS

Any application under Contract clause 4.17 in respect of direct loss and/or expense must be made as soon as practicable and with (or to be followed by) the requisite supporting information so as to afford the C.A. the opportunity to issue instructions designed (according to the circumstances) to minimise or avoid that loss and/or expense.

1.12 General Clauses

1.12.1 Water, Lighting and Power

The Contractor is to provide water, lighting and power for use on the works including that required by Sub-Contractors, also all temporary connections, plumbing services, etc., and clear away same on completion. It should be noted that the electricity supply may have been cut off in which case it will be necessary to apply for a reconnection to establish a temporary supply. The Contractor shall pay all fees and charges in connection therewith.

1.12.2 Contractors to Provide Everything Necessary (Particularly Plant and Scaffolding)

The Contractor shall provide all materials, labour, cartage, carriage, hoisting, tackle, plant, including any special and mechanical plant, fuel and running expense, etc., for the due execution of the work and to erect and maintain good and sufficient scaffolding, staging, ladders and cradles, fenders, fans, shoring, temporary screens, fences or partitions, tarpaulins, dust sheets, etc., temporary buildings, etc., and is to be responsible for making good any damage caused by the use thereof.

1.12.3 Making Good Footpaths, Fences, etc.

The Contractor shall make good public and private roads, footpaths, fences, hedges, lawns, etc., where damaged or destroyed by the works or workmen, and satisfy all claims legally demandable owing to traffic arising from these works.

In the event of the stacking of materials on the public footpath or highway taking place either without a licence or in contravention of a condition of a licence, then the Borough Engineer will serve a notice upon the Contractor via his site representative giving a period within which such stacking must be brought into compliance or terminated.

1.12.4 Damage to Pavements

The Contractor shall take all steps necessary to make good pavements outside each property named in the Contract, including those of each adjoining property on either side, where damaged or destroyed during the course of the works.

1.12.5 Protection of Roads, Sewers and Public Services

Take all necessary precautions to protect all sewers, roads, drainage connections, services and lines from injury due to the execution of the works; protect also the surface of roads from damage by carting of materials or any other works incidental to the Contract. If any such mains, services or lines are to be found in the way of any new work or otherwise requiring attention, the Contractor shall protect same from injury and give notice to the Authorities of persons concerned and allow for the lowering, diversion or removal of such mains, services or lines as may be necessary. No claim for delay or for damages to the works will be allowed. Afford the various Statutory Authorities facilities for attending their mains, services and lines as may be necessary and for laying new or additional mains.

1.12.6 Work off Adjoining Owner's Property

No workman employed on the work shall be allowed to trespass upon adjoining properties. The Contractor's attention is drawn to the fact that certain works may have to be executed off adjoining Owner's property and he shall allow for this and give all notices and make all arrangements necessary for the proper execution of these Works. The Contractor shall indemnify the Employer against any claim or action for damages on account of any trespass or other misconduct of his employees of any Sub-Contractor.

1.12.7 P.C and Provisional Sums

All goods or work to cover the cost of which Prime Costs or Provisional Sums are provided in the Specification will be obtained from firms selected by the C.A. and the Contractor shall do nothing in respect thereof without the C.A.'s Instructions in writing being first obtained.

The Contractor shall produce receipted accounts for all P.C and Provisional Sums mentioned in the Specification at the time of settling the various accounts.

All P.C and Provisional Sums and provisional work are at the disposal of the C.A. and if not required or if paid direct by the Employer will be omitted at the settlement of accounts, together with any profit added.

The Nominated Sub-Contractors shall be paid the sum as included in the certificates issued to the Contractor and no further payments for the Nominated Sub-Contractor will be included in the Certificates until the receipts for the previous payments to them are produced.

The Contractor shall attend upon all Trades and afford the necessary general attendance and usual facilities such as the use of plant and fixed scaffolding, the provision of water, temporary lighting, mess rooms, sanitary accommodation, welfare facilities, space for office accommodation and for storage of plant and materials and clearing away rubbish, etc., to all Nominated Sub-Contractors and specialists or tradesmen employed by the Employer so that their work may proceed at the same time as his own. The Contractor shall supply full size setting out templates for Sub-Contractor's work and all necessary dimensions and is to be responsible for the accuracy of the same.

The Contractor shall be responsible for unloading, storage and safe custody of Nominated Sub-Contractors' or specialists' goods, plant, etc., upon delivery to the site and handling materials to positions as and when required, but the Sub-Contractors or specialists will be responsible, after commencing work at the site, for the weatherproof conditions of their materials and plant stored on the site.

The Contractor will be held responsible for the correct ordering, protection and safe custody of all goods provided by Nominated Suppliers from the time of their delivery up to the site until they are delivered up to the Employer as part of the building or are removed from the site, as the case may be. The amounts payable by the Employer to the Contractor in respect of such goods will be calculated in relation to the actual goods incorporated in the finished work; breakages; losses, etc., being matters for settlement between the Contractor and the Nominated Supplier concerned, neither of whom shall have any claim in respect of same against the Employer.

Any disputes which may arise between the Contractor and any nominated Supplier or Sub-Contractor in regard to delays, defects, contra-charges and the like, will be matters for settlement between the Contractor and the nominated Supplier or Sub-Contractor concerned, neither of whom shall have any claim in respect of same against the Employer.

The Contractor shall be responsible for verifying all information and dimensions given to Nominated Suppliers and Nominated Sub-Contractors to enable them to carry out work allotted to them under the Contract. The Contractor shall be required to ascertain from all the various Sub-Contractors (including those nominated by the C.A.) all particulars relating to their works in regard to the position in which chases, holes, mortices and similar items will be required to be formed or left before the work is put in hand. The Contractor shall be deemed to have included for this as part of the Contractor's attendance.

All dimensions and particulars necessary for the execution of Sub-Contractor's work and work of other late Trades are to be taken from the actual work and not from the drawings.

In all instances where the works "Prime Costs" or the initials "P.C." occur they are intended to mean the net value after deducting all trade or other discounts except a discount of 2 1/2% in the case of Nominated Sub-Contractor's work and 5% in the case of Nominated Suppliers which is provided for in all cases. The term "Fix Only" in the Specification must be taken to include for receiving, unloading or assistance to unload, unpacking of goods or plant, delivery to position storage of same, return of empty cases, crates, etc., carriage paid, hoisting to required positions, assembling and fixing.

All P.C Sums included in this Specification in respect of work to be executed by Public Authorities and Statutory Undertakings shall be deemed to include 2 1/2 per cent cash discount. Should such discount(s) not be allowed by the Public Authorities and Statutory Undertakings in their charge(s), amount(s) equivalent to such discount(s) shall be included in the Final Account for the Contract.

It should be noted that in order to qualify for the cash discount on Nominated Suppliers' accounts, payments shall in general be made within thirty days of the end of the month during which delivery is made and that the Contractor shall therefore himself be responsible for any defects which may arise in relation to these goods at a later date. Further, in making payments to the Contractor, the Employer will be entitled to deduct a retention, this the Contractor will be unable to do when paying Nominated Supplier.

No guarantee is given that the C.A. will check Nominated Suppliers' accounts by the time payments are due to be made to them by the Contractor. In the majority of cases such accounts will not be checked until goods are fixed in position and are in working order.

The Contractor shall provide receipted accounts for the C.A.'s inspection as, where and when required by them with reference to all P.C items for the purpose of checking the amounts due to the Contractor.

1.12.8 **Provision of Materials and Fittings**

The provision of all necessary materials and fittings is implied in each item unless re-use of the existing is specially mentioned. It is essential, before the work is commenced, that the Contractor shall contact the C.A. to make an inspection with him in regard to any alterations which may have occurred at the premises through looting or otherwise since the Tender was submitted. No claims for any extra costs will be entertained unless the premises have been so inspected within seven days of the date of the order to commence the work or by arrangements made immediately prior to the acceptance of the Tender.

1.12.9 **Watching, Lighting, Welfare, etc.**

The Contractor shall allow in his Tender for all necessary watching and lighting and the care of the whole of the works including protection from weather and other damage. He shall provide facilities for specialist Contractors and all expenses in connection with the provision of safety and welfare of workmen in accordance with the Local Working Rule Agreement and the Building (Safety, health and Welfare) Regulations.

1.12.10 **Holidays with Pay, Insurance, Working Rule Agreement, etc.**

The Contractor shall be responsible for and shall include in his Tender for all costs and expenses due from the Employer in connection with the works particularly in connection with:

- (a) The Holidays with Pay Scheme for the Building and Civil Engineering Industries.
- (b) The London Working Rule Agreement
- (c) The National Insurance Act and the National Insurance (Industrial) Injuries Act.
- (d) Holidays with pay and any other outgoing caused by National or Local Trade Agreement.

1.12.11 **Materials and Workmanship Generally**

Any materials or composition of materials described under one trade or in one instance and only referred to under another trade or item shall be similar in quality or composition.

Suitable existing material, if sound, may be re-used in the works providing the prior consent of the C.A. is obtained prior to the fixing. All new materials shall be, so far as practical, in accordance with the appropriate current British Standards Institution Specification. All materials shall be applied or fixed in a thorough and workmanlike manner. Where applicable all methods of work and workmanship shall be in accordance with the latest Code of Practice.

1.12.12 **Latrines**

Maintain and keep in good order latrines or sanitary accommodation for workmen as required.

1.12.13 **Convenience and Protection of Tenants**

The convenience and protection of any tenants or licensees remaining in occupation are to be carefully considered and the works carried out with a minimum of inconvenience to them consistent with the nature and extent of the works.

1.12.14 **Covering Up**

The Contractor will be required to provide all requisite tarpaulins, etc., to cover up exterior works, if necessary, while in progress. In cases where it is stated in the Invitation to Tender or the Specification or if it is afterwards arranged that any tenants or licensees will remain in occupation of the premises (or any part thereof) comprising the site of the works, the Contractors shall also:

- (a) Provide such coverings as may be reasonably necessary to protect the occupant's furniture and floor coverings from damage of any kind.
- (b) Ensure that gas, water, electricity, sanitary and other essential services are fully maintained during the progress of the works.
- (c) Ensure that before leaving the work daily all plant, ladders, materials, etc., are left so that nothing can be made use of by children or other persons or in any unlawful manner.

1.12.15 **Rubbish**

The Contractor shall remove from the site all debris and rubbish arising out of these works as it arises, including that arising from Sub-Contractors and other work.

1.12.16 **Dry Rot**

Any dry rot or suspected dry rot discovered during the progress of the work, however slight, is to be reported at once to the C.A. who will issue instructions. On completion of such work, no plastering or other finishing is to be carried out until the C.A. has given his approval. The Contractor shall take every precaution to keep timber free from infection.

1.12.17 **Asbestos**

Any asbestos found on site is to be brought to the attention of the C.A. All asbestos which is to be removed shall be removed by an approved specialist.

1.12.18 **Extra Works**

The Contractor shall not without written sanction from the C.A. carry out any work which he considers is not included in his Tender or Contract.

Any additional work likely to involve extra cost shall be pointed out to the C.A. at the time of the discovery and a written order shall be obtained before proceeding.

In cases of urgency (e.g. blocked drains, dangerous walls, etc.) notice in writing shall be given by the Contractor to the C.A. immediately setting out the full circumstances relating to such urgent additional work.

The extent of which old plaster to walls, ceilings and partitions is removed shall be agreed before-hand if this work involves extra cost, and the manner in which old and defective work is removed shall be such as to minimise the extent of such works.

Where extra work has been caused by improper methods, carelessness or lack of supervision by the Contractor, no additional payment will be made.

1.12.19 **Cleaning on Completion**

Allow for scrubbing and washing all floors, staircases, etc. Wash and clean all glass both inside and out and leave premises clean and tidy, all to the C.A.'s approval.

Touch up paintwork as required and leave premises entirely fit for occupation.

1.12.20 **Control of Fly Tipping In Building Contracts**

The Contractor shall be responsible for preventing excavated material, rubbish, rubble, surplus materials, etc., arising from the works being dumped anywhere other than on a recognised tip lawfully so used. Without prejudice to the generality of the foregoing he shall:

- (a) Sub-let carting away only to bona-fide carriers.
- (b) Obtain from such carriers the location of the tip or tips proposed to be used by them.
- (c) If and when required by the C.A. obtain and submit to the C.A. written evidence that all loads of excavated material, rubbish, rubble, surplus material, etc., have rubbish, rubble, surplus material, etc., have been deposited at a recognised tip lawfully so used.

Should it be shown to the satisfaction of the C.A. that any excavated material, rubbish, rubble, surplus materials, etc., have been deposited anywhere other than a recognised tip lawfully so used, the Contractor will be held responsible for clearing away such deposits at his own cost and ensuring that they are placed in a recognised tip lawfully so used and for securing the dismissal from the site of the driver of the vehicle concerned and, where the work is sub-let, the firm of carriers by whom he is employed.

1.13 **TERMS USED IN REFURBISHMENT/ALTERATION**

1.13.1 **Remove** means isolate, disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials and dispose of unwanted materials. It includes removing associated pipework, wiring, ductwork or other services unless specifically stated otherwise or unless the item referred to is required to be reused or replaced with a similar item.

1.13.2 **Replace** means:

- (a) Remove the stated existing components, features and finishes.
- (b) Provide and fit components, features or finishes which, unless specified otherwise must match those which have been removed.
- (c) Make good as necessary.

1.13.3 **Repair** means carry out local remedial work to components, features and finishes as found in the existing building, re-secure or re-fix as necessary and leave in a sound and neat condition. It does not include replacement of components or parts of components or redecoration.

- 1.13.4 **Make Good** means carry out local remedial work to components, features and finishes which have been disturbed by other previous work under this Contract and leave in a sound and neat condition. It does not include replacement components or parts of components. The meaning of the term shall not be limited by this definition where used in connection with the defects liability provisions of the Contract.
- 1.13.5 **Ease** means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.
- 1.13.6 **To Match Existing** means use products, materials and methods to match closely all visual characteristics and features of the existing work with joints between existing and new work as inconspicuous as possible.
- 1.13.7 **Overhaul** - in conjunction with doors and casement windows means adjust the opening part to open and close readily within the existing lining or frame including allowances for decorations (3 coats of paint). Remove paint from the hinges, door closers, locks or latches and oil to leave in ready working order. Adjust door closers to close properly and readily. Carefully remove and refix stops to a close fit with the adjusted position.
- 1.13.8 **Overhaul** - in conjunction with timber double hung sliding sash windows with box frames means removing paint and operative closing devices, removing the staff and parting beads and renewing with new approved beads, adjusting the sliding sashes by either planning or planing new matching sections to ensure a smooth regular action within the box frame, removing the sash cords and renewing with new waxed sash cords, adjusting the balances with new or additional weights, replacing the sashes and leaving in full working order. Allowances are to be made for decorations where these are specified.
- 1.14 MANAGEMENT OF THE WORKS**
- 1.14.1 **Insurances**
- Before starting work on site submit documentary evidence and/or policies and receipts for the insurances required by the Conditions of Contract.
- 1.14.2 **Insurance Claims**
- If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, forthwith give notice in writing to the Employer, the C.A. and the Insurers. Indemnify the Employer against any loss which may be caused by failure to give such notice.
- 1.14.3 **Programme**
- As soon as possible and before starting work on site prepare in an approved form a programme for the Works which must make allowance for all:
- (a) Sub-Contractor's work.
 - (c) Running in, adjustment and testing of engineering services.
 - (d) Work resulting from instructions issued in regard to the expenditure of Provisional Sums.
 - (d) Work by others concurrent with the Contract.
- 1.14.4 **Site Meetings**
- (a) The C.A. will hold site meetings to review progress and other matters.
 - (b) Ensure the availability of accommodation and attend all such meetings.
- 1.14.5 **Notice of Completion**
- Give C.A. at least two weeks' notice of the anticipated dates of Practical Completion of the whole or parts of the Works.
- 1.14.6 **Security and Safety**
- Adequately safeguard the site, the works, materials, plant, etc. from damage or theft. Comply with all statutory requirements to protect all persons from any hazards. Provide the C.A. with copies of all Method Statements, Safety Plans, and Risk Assessments, etc. Use products, methods of work and protective measures to minimise health and safety hazards.

1.14.7 Estimated Cost of Variations

If the C.A. issues details of a proposed instruction with a request for an estimate of cost, submit such an estimate without delay and in any case within 7 days.

1.14.8 Measurements

Give reasonable notice to the C.A. before covering up work which the C.A. requires to be measured.

1.14.9 Interim Valuations

At least 7 days before the established dates for interim valuations submit to the C.A. details of amounts due under the Contract together with all necessary supporting information.

1.15 SAMPLES/APPROVALS

1.15.1 Samples

Where approval of products is specified submit samples or other evidence of suitability. Do not confirm orders or use products until approval of samples has been obtained. Retain approved samples in good clean condition on site for comparison with products used in the Works. Remove when no longer required. Samples of new mouldings, etc. will be required of each particular type prior to commencement of repair or renewal works.

1.15.2 Approvals

Where products or work are specified to be approved or the C.A. instructs or requires that they are to be approved the same must be supplied and executed to comply with all other requirements and in respect of the stated or implied characteristics either to the express approval of the C.A. or to match a sample expressly approved by the C.A. as a standard for the purpose.

1.16 PROTECT AGAINST THE FOLLOWING:

1.16.1 Noise

- (a) Comply generally with BS 5228.
- (b) Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles.
- (c) Do not use pneumatic drills and other noisy appliances before 8.30am and after 5.00 PM weekdays or at any time at weekends without consent of the C.A.
- (d) Do not use or permit employees or Sub-Contractors to use radios or other audio equipment.

1.16.2 Pollution

Take all reasonable precautions to prevent pollution of the site, the works and the general environment including streams and waterways.

1.16.3 Nuisance

Take all necessary precautions to prevent nuisance from smoke, dust, rubbish, vermin and other causes.

1.16.4 Fire

Take all necessary precautions to prevent personal injury, death and damage to the works or other property from fire. Comply with Joint Code of Practice "Fire Prevention on Construction Sites" 1992 published by the Building Employers Confederation, the Loss Prevention Council and the National Contractors' Group. Burning off using a naked flame or hot air gun will not be permitted without prior written consent from the C.A. Smoking will not be permitted on the site at any time.

1.17 EXISTING SERVICES

Notify all service authorities and adjacent owners of the proposed works not less than one week before commencing site operations. Before starting work check positions of existing services. Observe Service authorities' recommendations for work adjacent to existing services. Do not interfere with their operation without consent of the Service authorities or other owners. If any damage to services results from the works notify C.A. and appropriate service authority without delay. Make arrangements for making good without delay to the satisfaction of the Service authority or other owner as appropriate.

PRELIMINARIES & GENERAL CONDITIONS

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TOTAL TO FINAL COLLECTION

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2.0 MATERIALS AND WORKMANSHIP

2.1 DEMOLITION & ALTERATIONS

- 2.1.1 The Contractor is to provide all scaffolding and protection to the property and adjacent properties necessary in order to carry out all the demolition works safely and without risk of damage to persons or property. The Contractor will be held directly responsible for any claims arising out of any such damage.
- 2.1.2 All demolition work described is to be carried out so as to cause minimal inconvenience to Tenants, the public or the occupants of any adjacent properties.
- 2.1.3 The materials arising from excavations, demolitions, pulling down, etc. shall, unless otherwise described, become the property of the Contractor and he is to allow credit for them in his prices.
- 2.1.4 All surplus material and rubbish is to be carted away. The term "carry away" shall include getting out, filling into barrows, wheeling, loading and carrying to a licensed tip.
- 2.1.5 Materials described as "set aside for reuse" shall be cleaned, prepared for refixing and stored and protected until required.
- 2.1.6 The Contractor is to provide where necessary temporary support to adjacent properties and the sections of the property to be retained during the course of the demolition works where the existing support has been temporarily removed. The Contractor is required to protect any party wall exposed as a result of the works. All temporary support works are to be to the satisfaction of the C.A. and the District Surveyor/Building Inspector. All such prices in connection with temporary support are deemed to be included in the Contract Sum.
- 2.1.7 All demolition works are to be carried out during normal working hours and in strict compliance with any Local Authority bye-laws.
- 2.1.8 The prices of demolition, concrete, brickwork, masonry, etc. shall include for cutting out, cutting back and plugging off as appropriate of any redundant piping, tubing, conduit, wire bars, etc. that may be encountered.

2.2 EXCAVATIONS & EARTHWORK

- 2.2.1 Trenches shall be excavated as required to construct foundations for structures as shown on the drawings and described in the Specification hereinafter. Any other excavation beyond that required shall be made up in concrete as described for foundations, at the Contractor's own expense.
- 2.2.2 The bottom of the excavation is to be levelled, rammed and approved by the C.A. and where appropriate the District Surveyor/Building Inspector before any concreting or backfilling.
- 2.2.3 Should the Contractor notice any change in the soil type during the course of excavation he should notify the C.A. immediately.
- 2.2.4 All good quality top soil which has been excavated is to be stored on site and distributed over the site on completion of the works. Any surplus soil is to be removed from site.
- 2.2.5 All turf affected by the works is to be carefully lifted in sections and stored on site in a suitable position. During dry weather the Contractor is required to keep all rolled turf moist.
- 2.2.6 All trenches and excavations are to be fully protected from the weather during the course of the works by tarpaulins, boarding's and counter trenches dug to stop rainwater entering the trenches.
- 2.2.7 Any excavations near roads, rights of way, footpaths, etc. are to be adequately protected at all times during the works by suitable sturdy boarding/guard rails illuminated where necessary.
- 2.2.8 The price for excavation should include for planking and strutting, cutting off and grubbing up roots, breaking up old drains or other obstructions, double handling, supporting by timbers or other adequate means. Planking and strutting should include everything necessary to uphold the face of the trench including heavy timbering to prevent settlement or damage to adjacent buildings, roads, footpaths, etc.
- 2.2.9 Excavations for underpinning are to be carried out in a maximum of one metre sections or as otherwise specified by the C.A. All brickwork being underpinned is to be carefully needled across the trench.
- 2.2.10 Hardcore shall be approved hard brick or stone rubble free from any foreign material, e.g. timber, plaster or soil, etc. and broken to pass a 75mm ring spread, levelled, well rammed and consolidated to the thickness described. The price shall include for blinding surface of hardcore with fine ballast ash or sharp sand.
- 2.2.11 Returning, filling and ramming shall be carried out with the best of the excavated material, filled in up to the levels required in layers not exceeding 225mm thick, each layer well consolidated with the addition of water if required or directed before the next layer is added.

2.2.12 The Contractor shall not undertake any excavation which may be considered hazardous and in breach of Health & Safety legislation or regulations. In the event of any risk whatsoever the Contractor is to immediately cease all work and seek the C.A.'s instructions.

2.3 CONCRETE WORK

2.3.1 Water shall be clean drinking tap water.

2.3.2 Cement for use above ground level shall be ordinary quality Portland cement to BS EN 197-1:2000.

2.3.3 Cement for use in foundations, for floor slabs, pavings, drainage work and any work in contact with the ground shall be sulphate resisting cement to BS 4027:1996.

2.3.4 All cement shall be delivered in the manufacturer's sealed bags and stored in a clean dry place on a boarded platform.

2.3.5 Use of high alumina cement is not permitted.

2.3.6 Cement which has commenced to set shall not be used or regauged.

2.3.7 Sand shall be clean riverbed sand free from all salts.

2.3.8 Fine and coarse aggregate shall comply with BS EN 882:2004 and be stored on a clean drained base.

2.3.9 Fine aggregate should be graded from 5 mm downwards. Coarse aggregate should be graded from 20mm to 5mm.

2.3.10 Concrete shall be composed of cement, fine and coarse aggregate with the correct water/cement ratio for the prescribed mix and shall be mixed to a uniform colour and consistency in the following proportions where specified:

- (a) Nominal 1:12 50 kg cement/4.2 m³ "all in" aggregate.
- (b) Nominal 1:3:6 50 kg cement/0.1 m³ aggregate/0.3 m³ coarse aggregate (foundations, ground floor slabs, manhole bases and benching, beds and surrounds to drains).
- (c) Nominal 1:2:4 50 kg/.07 m³ fine aggregate/.14 m³ coarse aggregate (steps, casings to steel beams, all precast concrete and all reinforced concrete).

2.3.11 Ready mixed concrete shall comply with BS EN 206-1:2000 and may only be used with the prior approval of the C.A. Delivery tickets must be retained by the Contractor for inspection.

2.3.12 When mixing is done by hand or in a batch mixer on site materials are to be measured in gauge boxes on a platform.

2.3.13 The platform, boxes, mixer and tools must be kept clean and free from partially set cement.

2.3.14 All concrete is to be mixed evenly and uniformly in either a clean mixing machine or on a clean surface free from any deleterious matter.

2.3.15 No additives shall be used to assist setting or for any other reason.

2.3.16 No concrete is to be mixed or placed when the temperature is below 4°C (38° F) and the Contractor shall prevent any damage by frost and shall make good any frost damage entirely at his own expense to the approval of the C.A.

2.3.17 The Contractor is to ensure that during the first five days of curing all concrete is prevented from rapid drying out. During warm weather the concrete is to be covered with soaked tarpaulins which are to be kept damp at all times. The concrete must not be loaded until the curing period is complete.

2.3.18 The concrete once mixed is to be placed immediately on mixing and to be well tamped and consolidated into trenches. All planking and strutting to trenches is to be removed immediately after the concrete has been placed and the concrete well packed in against the trench walls. Mechanical vibration is to be employed where necessary and all costs arising there from are deemed to be included.

2.3.19 The Contractor is to provide suitable test cubes 150m³ when requested by the C.A. for testing purposes.

2.3.20 No concrete shall be placed after it has developed its initial set. It shall not be dropped from a height greater than 1 metre and where concrete has to be stopped and restarted at a later date the sections of existing concrete which are to abut the new are to be well hacked, brushed down and painted with cement: sand slurry 1:1 mix immediately prior to placing the new concrete.

- 2.3.21 The concrete shall be well tamped into moulds of formwork around reinforcement and exposed surfaces and shall be protected from premature drying and rain.
- 2.3.22 Precast concrete components are to be free from cracks, chips or any other imperfections. On request from the C.A. the Contractor is to provide invoices from the suppliers of precast concrete products as evidence that they have been obtained from the agreed source. Prices for precast concrete shall include for moulds, reinforcement hoisting and setting. Fair finish shall be that produced by wrot formwork.
- 2.3.23 Precast copings are to comply with BS 5642 Part2:1983 to dimensions as specified later or shown on drawings.
- 2.3.24 Precast paving slabs are to be 50mm thick type A complying with BS EN ISO 7263 :2011 and to be laid on a 25mm dry mix bed of sand/lime on a well consolidated base. Joints are to be filled with sand/lime mortar after tamping into position.
- 2.3.25 Lintels are to be cast using mix "C" concrete. When precast lintels are used the top shall be clearly marked. Lintels are to be reinforced with 1 N ° 12.5 mm bars per 115mm width. The bars are to have standard hooked ends. All lintels are to be minimum 230mm longer than their clear span. Their depth to be calculated as follows:
- (a) Up to 915mm: 150mm.
 - (b) 914 - 1525mm: 230mm.
 - (c) 1525mm - 2135mm: 305mm.
- Lintels over openings in plasterboard shall be keyed for plaster. Where particularly specified brick arches shall be provided to lintels in external walls tied with non-ferrous ties at 225mm centres into in-situ lintels.
- 2.3.26 Unless specified otherwise no steel or pre-stressed concrete lintels shall be used unless prior approval is obtained from the C.A. in writing.
- 2.3.27 Screeding to concrete floors is to be 75mm thickness or as otherwise specified in cement sand mix 1:4 to a level plain surface with a wood float, free from cracks and hollows. The Contractor is deemed to include for providing and fixing 150mm wide strips of galvanised EML over pipework which has been insulated and hidden within the screed. Expansion joints consisting of 12mm thick flexcell or other similar approved material are to be provided at 5m intervals. The position of all expansion joints is to be agreed with the C.A. on site. In all circumstances the substrate is to be fully swept and prepared to ensure satisfactory screed adhesion. If the substrate is in an unsatisfactory state which may prejudice adhesion the Contractor shall be required to provide suitable bonding agents having obtained the C.A.'s prior approval. The provision and application of any necessary bonding agents together with any other work necessary to achieve satisfactory adhesion is deemed included within the Contract price.
- 2.4 DPCs AND DPM's**
- 2.4.1 Damp-proof membranes are to be either
- (a) 1200 gauge Visqueen, lapped 225mm and tape sealed with PVC self-adhesive tape 50mm wide, at all joints, turned up perimeter walls and partitions, etc. by 300mm. OR
 - (b) a single layer of Bituthene self-adhesive DPM material laid in strict accordance with manufacturer's instructions. Extend up all abutments by 300mm. Use recommended primer to achieve requisite adhesion. OR
 - (c) 3No full brush applied coats of Synthaprufe as manufactured by Messrs Ruberoid used in strict accordance with the manufacturer's instructions. Final coat to be blinded with sand whilst still tacky. Extend coats up all abutments, etc. by 300mm.
- 2.4.2 Slate and bitumen damp-proof courses shall comply with BS 743:1970 (with AMD's). DPCs shall be a minimum height of 150mm above external ground level and where fixed vertically they shall be of one continuous length.
- 2.4.3 Bitumen damp-proof courses shall be asbestos based lead cored type 5F laid and bedded for the full wall thickness. Joints shall be applied minimum 150 mm full width at corners, and neatly pointed where exposed.
- 2.4.4 Where slates are specified, they shall be first quality Westmorland slates. Use of second hand slates is not permitted unless expressly stated hereinafter.
- 2.4.5 Unless otherwise specified DPCs shall be reinforced plastic hyloads or similar approved by the C.A., equal to wall width. Where possible joints are to be formed at quoins and are to be full width lap joints. Where a joint occurs along a straight section of wall the minimum joint lap is to be 255mm or the DPC width whichever is the greater.

- 2.4.6 The positioning of DPCs is as follows:
- (a) Horizontally beneath concrete or stone subsill or threshold turned upwards or back and tucked between the underside of the window frame and sill/threshold and wall beneath;
 - (b) 150mm above ground level in any new walls or partitions or in any other position suitable to arrest the ingress of rising damp;
 - (c) On chimney stacks 150mm above the lowest point where the stack emerges through the roof covering;
 - (d) Below brick on edge and precast concrete copings;
 - (e) On parapet walls, 150mm above an abutting roof slope;
 - (f) Between external walls and garden walls where they abut;
 - (g) Where it is necessary to form a cavity tray over a lintel (extending 150mm beyond jambs of opening and sloping towards the outer face) or in a parapet cavity wall (sloping towards the inner face);
 - (h) In a suitable position in sleeper walls for suspended ground floor construction;
 - (i) At the interface between inner and outer leaves of construction in a cavity wall;
 - (j) Any other location within the construction deemed necessary in order to prevent damp ingress into the interior of the premises or the structure itself. Where in doubt contact the C.A. for instructions.

2.5 BRICKWORK & BLOCKWORK

- 2.5.1 All bricks shall be hard, sound, square, even in size, clean and equal to samples approved by the C.A., Clay Bricks shall comply in all respects to with BS EN 3921:2001.
- 2.5.2 All brickwork and blockwork shall comply with BS 8000 Part 3: 2001 (AMD 6195:1990).
- 2.5.3 Common bricks shall be flettons as supplied by London Brick Company or similar approved by the C.A. They shall be laid frog up in accordance with BS EN 1996:-1-2:2005 and shall have a minimum compressive crushing strength of 20.7 N/mm².
- 2.5.4 London stock bricks shall be frogged and have a minimum compressive strength of 16 N/mm².
- 2.5.5 Semi engineering bricks (Class B) shall be frogged and have a minimum compressive strength of 48.5 N/mm².
- 2.5.6 Engineering bricks (Class A) shall be frogged and have a minimum compressive strength of 68.9N/mm².
- 2.5.7 Sand/lime bricks shall comply in all respects with BS EN 771-2:2003(AMD 5427 1987) and must be stored in a dry place. Minimum compressive strength to be 20.5 N/mm².
- 2.5.8 "Bricks to match existing" where specified shall be deemed to mean bricks which are of a similar appearance, design and crushing strength to the existing. The Contractor is required to provide the C.A. with sample bricks for approval prior to ordering and construction.
- 2.5.9 Brick rubbers shall be soft clay bricks suitable for accurate grinding to form arches and special features, the colour of which is to match existing brick rubbers. Each rubber is to be joggled and slightly frogged on each abutting face.
- 2.5.10 Blocks shall comply with BS 6073 Part 2: 2008 (AMD 3944:1982: & AMD 4462:1984) and be Thermalite, Celcon or similar approved by the C.A. They shall comply in every respect with the manufacturer's specifications and with building regulations applicable for the construction specified.
- 2.5.11 External airbricks shall be yellow clay airbricks or red terracotta airbricks to BS 493:1995+A1:2010 and be free from cracks, chips or any imperfections.
- 2.5.12 All ties shall be stainless steel straight or twisted strip as specified, with fishtail ends to BS EN 1243:2011 (AMD 3651:1981 & AMD 4024:1982) extending a minimum of two thirds into each brick or blockwork joint.
- 2.5.13 Water cement and sand for use in mortar shall be as specified in Section 2.3 above. Lime shall be hydrated lime complying with BS EN 4559-1:2010: delivered and stored as for cement.
- 2.5.14 Cement mortar shall be composed of 1:3 sulphate resistant cement/sand by volume for all work below DPC level. Cement/lime mortar shall be composed of 1:1:6 ordinary cement/lime/sand by volume for all other brickwork and blockwork except where specifically directed.

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- 2.5.15 No additives or plastering agents shall be used. No mortar is to be reworked or retempered once it has commenced to set.
- 2.5.16 Walls should be carried up uniformly, no one portion being raised more than 900mm above another at one time and they should be laid with courses level and perpendics plumb throughout.
- 2.5.17 All bricks and blocks shall be well butted with mortar before being laid. Mortar is to be mixed in either a clean mixing machine or on a clean surface free from all deleterious matter.
- 2.5.18 Joints of all new fair faced brickwork are to be raked out a minimum of 12.5 mm deep as the work proceeds. Bonding of the brickwork is to match existing and jointing and pointing is to be weather struck unless described otherwise. Areas of existing brickwork where specified are to be raked out to a minimum of 19mm, the brickwork well wetted and pointed with cement/lime mortar to match existing. All pointed brickwork shall be cleaned down on completion.
- 2.5.19 The bonding of brickwork and blockwork is to match existing, and jointing and pointing is to be weather struck unless described otherwise. Where blockwork/brickwork abutments are not to be bonded together the joint must be reinforced with straight line wall ties 150mm long at 225mm vertical intervals. Garden wall abutments with external walls are to be straight jointed with a vertical DPC inserted between the two walls. Where brickwork and blockwork are to be bonded into existing brickwork or blockwork, these are to be bonded in English or Flemish bonds to the adjoining walls and pointed externally on completion with a neat weather struck joint in cement/lime mortar to match existing adjoining pointing.
- 2.5.20 Care should be taken to ensure that all facework is kept free from mortar droppings and that adjacent scaffold boards are turned back during heavy rain and at night.
- 2.5.21 Frame lugs or cramps are to have fishtailed ends and be of hot dipped galvanised steel built into the brickwork or blockwork with a minimum depth of 75mm at 750mm centres.
- 2.5.22 No brickwork or blockwork shall be built after the ambient outside temperature reaches +4° C on a falling thermometer or before +2° C on a rising thermometer. In seasons liable to frost all brickwork and blockwork laid during the day shall be properly covered and protected against frost at night. Any brickwork or blockwork damaged by frost shall be pulled down and rebuilt as directed by the C.A. at the Contractor's expense. The Contractor shall provide and maintain a foreman on site at all times during the winter season.
- 2.5.23 Wall restraint ties shall be 6mm x 25mm x 305mm MS twisted if necessary with fish tail ends and fixed to the sides of joists where the joists are at right angles to the walls, or fixed across the top of 3 N° joists where the wall is parallel to the joists.
- 2.5.24 Chimney pots are to be of terracotta type of a suitable size and design to match existing. Where specified hereinafter the pots are to be protected by means of hog backed spigot terracotta terminals properly bedded and fixed into position.
- 2.5.25 Joist hangers are to be built into a corresponding horizontal brick joint allowing for all raking out and repointing.
- 2.5.26 All vent grilles are to be hot dipped galvanised steel perforated grilles 225 x 225mm minimum size properly decorated in accordance with this specification prior to fixing.
- 2.5.27 Wall straps are to be 25 x 6mm galvanised steel bar with a twisted and bent down end (100mm minimum) built into the brickwork of the external wall to be restrained. The other end of the strap is to be fixed across the top surface of 2 N° joists (flush with the surface in small rebates) where the floor joists are parallel to the external wall. Where floor joists are at right angles to the external wall the straps are to be fixed to the side of alternate joists of 100mm centres with gauge 14 MS countersunk screws. In this instance the total length of strap abutting and fixed to the joists must not be less than 550mm. Noggins to be provided below spiked in position.
- 2.6 ROOFING**
- 2.6.1 Slates for overhauling or re-slating existing roofs shall be sound, second hand and equal to samples approved by the C.A. or new complying with BS EN 12326-1:2004 and laid in accordance with BS 5534 Part1:1991 & Part 2:1986, fixed with 2 N° 38mm aluminium slate nails per slate for head nail slates, or 2 N° 50mm aluminium ditto for centre nail slates. Lap to be minimum 75mm.
- 2.6.2 Roofing felt under re-slatted or retiled roofs should comply with BS 747:2000 Class 1F hessian reinforced untearable bituminous felt laid over rafters turned up a minimum of 100mm at abutments and lapped minimum 150mm at joints. No joints will be permitted in the length.
- 2.6.3 Commercial zinc for roofing shall be a minimum of 14 gauge (0.8mm) and laid in accordance with BS CP 143 Part 5:1964.

- 2.6.4 Lead is to be British lead complying with BS EN 12588:2006. Unless specified otherwise thicknesses are to be as follows:
- Aprons and flashings Code 4
 - Soakers Code 4
 - Cill coverings Code 4
 - Back gutters to stacks Code 5
 - Hip and ridge flashings Code 5
 - Flat roofs Code 6
 - Flashing clips Code 6
- 2.6.5 Sheeting felt laid under new valley or parapet metal gutter linings, asphalt roofing or zinc flat roofing, shall be brown sheeting felt to BS 747:2000, class SA (2 Inodorous), laid continuously in gutter linings and with minimum 150 laps at joints elsewhere.
- 2.6.6 Batons and counter batons shall be 38mm x 19mm treated SW firmly secured with aluminium nails to each rafter.
- 2.6.7 Mastic asphalt shall comply with BS 8218:1998.
- 2.6.8 Reflective paint shall be applied to the top surface of asphalt roofs where specified to substitute the mineral chippings top layer and shall be Blue Circle reflective roof paint for asphalt applied in strict accordance with the manufacturer's instructions. Where mineral chippings are specified, these shall be 6mm white spar.
- 2.6.9 The price for each type of roofing material shall include where relevant roofing felt, batons, angle or tilting fillets, gutter boards, soakers, cover and stepped flashings, cutting and dressing at the abutments, verges and eaves.
- 2.6.10 Insulation is to be approved by the C.A.

2.7 CARPENTRY AND JOINERY

- 2.7.1 Timber for carpentry and joinery shall be best quality properly seasoned, sound, square edged and free from large, loose and dead knots and other defects which would render it unsuitable for the particular purpose for which it is to be used.
- 2.7.2 Timber should have a moisture content between 15% and 20% at the time of fixing and shall for structural and carcassing use comply with BS 4978:2007 and be used in accordance with BS EN 338:2003 (AMD 8597:1995) & Part 3:1985 (AMD 5391:1988 & AMD 8101:1994).
- 2.7.3 For joinery/wrot timber it shall have a moisture content between 12% and 15% and shall comply with BS 1186 -3:1990 and be used in accordance with Part 2:2002.
- 2.7.4 Unless specified otherwise joinery timber is to be "European Redwood".
- 2.7.5 Cills to door frames shall be well seasoned oak, teak, or utile and laid on a bituminous damp proof course.
- 2.7.6 Plywood shall comply with BS EN 636:2003 Grade 2 bonded with WBP adhesive and faced with birch veneer unless otherwise specified.
- 2.7.8 Blockboard and laminboard shall be bonded with Urea Resin moisture resistant adhesive.
- 2.7.9 Chipboard shall be tongue and grooved pre-treated (if necessary) Resin bonded chipboard complying with BS EN 312:2003 shall be stored flat in a dry store area.
- 2.7.10 Fibreboard shall be low density acoustic quality bitumen impregnated fibreboard complying with BS EN 316:2009 stored flat in a cool dry store area.
- 2.7.11 Hardboard shall be high density tempered high hardboard stored flat in a dry store area.
- 2.7.12 Glue for joinery shall be "Cascamite" by Borden (UK Limited) or equivalent, or synthetic resin adhesive complying with BS 1203:2001 for plywood and BS 1204 1993 for wood.
- 2.7.13 Joist hangers, timber connectors, frame ties and straps shall be galvanised of proprietary manufacturer and suitable for the load being carried as recommended by the manufacturer.
- 2.7.14 All items of joinery and carpentry are to be firmly and securely fixed in position so to be able to withstand reasonable twisting, loadings etc. All exposed nail heads are to be punched below the surface of the wood in preparation for stopping/filling.
- 2.7.15 External window and door frames in preformed openings are to be secured by counter sunk MS gauge 12 wood screws 75mm long and staggered at 225mm centres along the vertical stops.

- 2.7.16 External window and door frames in new brickwork or blockwork are to be secured with 3No equally spaced hot dipped galvanised steel lugs/cramps built into each stop and screwed into the frame using counter MS gauge 8 wood screws 32mm long.
- 2.7.17 Internal door and hatch linings in preformed openings in brickwork and blockwork are to be secured with counter sunk MS gauge 10 wood screws 50mm long at 225mm centres staggered along stops.
- 2.7.18 Internal door linings in preformed openings to new or existing stub works are to be secured with wire nails 63mm long at 150mm centres.
- 2.7.19 Fire door stops to plain faced linings and stops to roof space access hatches are to be secured with glue and counter sunk MS gauge 10 wood screws 15mm long and 150mm centres.
- 2.7.20 Stops to fire doors are to be secured with 32mm MS panel pins at 150mm centres.
- 2.7.21 Skirting applied to walls which are not to be damp proofed are to be fixed using "obo" or similar tempered blue steel masonry nails 63mm long staggered at 150mm centres using appropriate timber ground spacers. Where timber grounds have been fixed to the wall or a splayed ground used as a stop bead for plaster, skirtings shall be fixed to the said ground using 32mm MS panel pins at 150mm centres.
- 2.7.22 Skirting which are to be applied to walls which are damp proofed are to be secured using counter sunk MS gauge 10 wood screws 50mm long staggered at 225mm centres using all necessary timber ground spacers in plugs liberally dipped in araldite or epoxy other similar approved adhesive in strict accordance with the manufacturer's instructions.
- 2.7.23 Fixings to stud partitions built of a suspended timber floor are to be as follows:
- (a) Solid plate spiked to floor using 100mm wire nails at 225mm centres.
 - (b) Head spiked to ceiling using 100mm wire nails at 225mm centres.
 - (c) Vertical studs spiked in position screw nails using 100mm wire nails.
 - (d) Noggins where necessary spiked in position using 100mm wire nails.
 - (e) End studs abutting a brick or block wall (not damp proofed) secured in position using blue steel masonry nails at 100mm long at 225mm centres.
 - (f) End studs abutting a brick wall which has been damp proofed screwed in position using counter sunk MS gauge 12 wood screws 87mm long with plugs liberally dipped in araldite, epoxy adhesive or similar approved in strict accordance with the manufacturer's instructions at 225mm centres.
 - (g) Sole plates fixed directly to a sub floor using counter sunk stainless steel screws gauge 10 87 mm long at 225mm centres.
- 2.7.24 Architraves, cover plates, copings, etc. are to be secured using 32mm Ms panel pins at 150mm. centres.
- 2.7.25 Ducts are to be securely fixed using MS panel pins at 150mm centres of suitable depth.
- 2.7.26 Kitchen fittings unless otherwise specified by the manufacturer are to be secured at suitable points on the carcassing using counter sunk MS screws at 225mm centres 50mm long into noggins and studs or brickwork including plugs dipped in araldite epoxy adhesive or similar in strict accordance with the manufacturer's instructions if into a damp proof wall or screeded solid concrete floor.
- 2.7.26 Lippings to door, hatches, shelves, worktops, etc. shall be secured using 32mm MS panel pins at 100mm centres.
- 2.7.27 Worktops are to be secured in strict accordance with the kitchen fitting manufacturer's recommendations.
- 2.7.28 Roof decking is to be secured using hot dipped galvanised or copper nails of suitable length well driven home.
- 2.7.29 Roof structure and other structural carpentry work is to be fixed into position using wire nails of suitable length well driven home.
- 2.7.30 Floorboards are to be securely fixed using MS brads 75mm long at 50mm centres across the width of each floorboard to each joist.
- 2.7.31 Where joists are doubled up the abutting faces are to be secured together using 15mm diameter MS double sided toothed plate timber connectors to BS EN 912:2000 between the faces which are to be bolted together, together with 12mm diameter 4.6 Grade black bolts and washers at 300mm centres.
- 2.7.32 Access panels are to be secured using brass cups and Gauge 8 raised head brass screws 25mm long at 150mm centre.

- 2.7.33 Hardboard (where not part of a sound resistance floor covering detail) is to be fixed using copper hardboard pins 19mm long at 150mm centres.
- 2.7.34 Supalux is to be fixed using MS cups and counter sunk wood screws 32mm long at 225mm centres.
- 2.7.35 Other items of joinery or carpentry not specifically mentioned are to be fixed in accordance with the standard practice in a good workman like manner to the satisfaction of the C.A.
- 2.7.36 Structural timber and softwood carcassing should be "tanalised" or equal and approved by the C.A. The Contractors shall for each delivery produce a certificate of impregnation for verification. Cut ends shall be treated with coloured "Ensele" in accordance with the manufacturer's recommendations. (Tanalith C and Ensele by Hicksons Timber Impregnation Company GB Ltd).
- 2.7.37 Timber should be ordered and prepared as soon as practicable after the order to start and shall be carefully stacked undercover so that air may circulate around it.
- 2.7.38 Exposed faces of joinery shall be wrot. Except in the case of doors for which finished sizes are given, 3mm will be allowed of the nominal size of timber specified for each wrot face.
- 2.7.39 Joinery shall be constructed as BS 1186 Part 2:1988 and the term "framed" shall imply cutting, morticing, tenoning, wedging, notching, halving, etc., as required.
- 2.7.40 All prices shall include for rebating, rounding, moulding, grooving, beading, etc. as required for mitres, short length ends, notching, etc. and for glue, nails, screws, dowels, grounds, plugs and fixings as required.
- 2.7.41 Joinery that is to be painted shall be knotted and primed before leaving the joiners shop and should be stored and protected from the weather immediately after delivery to the site. Back faces of linings, frames, skirtings, architraves, stair strings and bottoms of doors shall be primed before fixing. Paint for priming shall be obtained from the same manufacturers as that selected by the C.A. from a list of approved manufacturers. In cases where joinery items are supplied ready primed, they shall be re-primed with aluminium primer.
- 2.7.42 Ironmongery shall be fixed with screws to match and locks, latches, hinges, fastenings, etc. and shall be oiled adjusted and left in perfect working order on completion.
- 2.7.43 No new notching of joists will be permitted. Unauthorised notching must be made good by nailing in 2No 5mm plywood fishplates, 450mm x remaining depth of joist under the notch.
- 2.7.44 Drilling of joist for services must be through the neutral axis.
- 2.7.45 Rafters to pitch and roofs are to be birds mouthed over wall plate. Birds' mouting is not to extend more than 1/3 of the depth of the rafter.
- 2.7.46 Architraves shall be ex 75mm x 25mm SW ogee architraves, unless otherwise specified and neatly mitred at corners. Any gaps between architraves and the face of plaster is to be infilled with a scribed fillet piece.
- 2.7.47 Skirting shall be ex 150mm x 25mm plain edged SW skirtings unless otherwise specified with mitred external corners and butted internal corners. Where the floor surface is irregular the Contractor is to plain the bottom edge of the skirting board to suit the profile of the floor. Skirtings are to be capped with staff bead, mitred at internal and external corners.
- 2.7.48 External panelled and glazed doors shall comply with BS 459:1988. Frame doors shall have 75mm x 25mm splayed and hollowed weather fillet housed to bottom rails and bottom rails should be rebated for water bar.
- 2.7.49 Internal doors shall be hollow cored and external doors shall be fully cored.
- 2.7.50 Flush doors shall be ply faced external quality where applicable or hardboard faced for internal doors and supplied lipped on long ledges.
- 2.7.51 Fire resisting doors whether one hour or half hour resistance shall comply with BS 476.
- 2.7.52 New softwood casement windows shall comply with BS 644:2009. New softwood double hung sash windows shall comply with BS 644:2009.
- 2.7.53 Door and hatch linings shall be ex 32mm stored SW lining x opening depth properly house together and stored in a cool dry store.
- 2.7.54 Planted stops shall be 25mm softwood for fire doors and 12mm softwood for non-fire doors.
- 2.7.55 Should any joinery or carpentry warp, cup, twist, crack or wind more than the C.A. considers is reasonable during the Defects Liability Period, the Contractor will be liable to replace the component (s) and make good all decorations disturbed.

2.8 GLAZING

- 2.8.1 Glass shall comply with BS 952:1995 & Part 2:1980 and be of British manufacture and free from defects. Generally, glass shall be ordinary quality (OQ) and clear except for bathrooms and WCs where it should be obscured with powers of obscuration and diffusion not less than 8:6 respectively e.g. "readlyte".
- 2.8.2 Glazing in fire doors, fire screens, external doors and the lower panel of fully glazed internal doors shall be 5mm Georgian wired cast and polished plate glass as specified.
- 2.8.3 Thickness of glass shall be as specified.
- 2.8.4 The putty for glazing to wooden rebates shall comply with BS 544:1969 (1994) (with AMD's) and metal rebates shall be an approved proprietary glazing compound.
- 2.8.5 Rebates shall be thoroughly cleaned and primed before glazing.
- 2.8.6 The glass shall be cut to size with a small clearance and fixed with putty or compound, well bedded, back putted, sprigged or clipped and front putted to the full depth of the rebate and site lines of the glazing bars, neatly trimmed and cleaned off.
- 2.8.7 Where beads are specified for fixing the glass these shall be bedded in wash leather or proprietary glazing tape.
- 2.8.8 All stained glass repairs and works are to be carried out by specialists in accordance with traditional specialist techniques.

2.9 PAINTING & DECORATING

- 2.9.1 Paint should be obtained from an approved supplier. It should be delivered in the manufacturers sealed tins and used in strict accordance with the manufacturer's instructions. The name of the selected supplier shall be agreed with the C.A. at the commencement of the Contract and any change of supplier should be similarly agreed before materials are delivered to site.
- 2.9.2 On any one surface the priming and subsequent coats of paint shall be of one manufacture and in cases where joinery and other items are supplied already primed in a non-compatible primer, they shall be re-primed with an aluminium primer. The backs of all items of joinery are to be primed before fixing.
- 2.9.3 No paint should be thinned, applied by spray or roller unless specifically agreed.
- 2.9.4 No painting or external preparation work shall be carried out in wet or foggy weather or upon surfaces that are not thoroughly dry, clean and free from dust.
- 2.9.5 Door and window furniture, electrical accessories and radiators shall be removed prior to decorating and properly refixed thereafter.
- 2.9.6 Surfaces usually decorated shall be deemed to be included in the price for decoration.
- 2.9.7 External stopping shall be "External Poly filler" or similar as approved by the C.A.
- 2.9.8 To existing woodwork - remove unwanted nails and screws, stop in holes and cracks, and rub down with glass paper to smooth finish, wash down with sugar soap and clean water. Paint bare timber with one coat of pink primer, stop and knot and bring forward with one coat of undercoat.
- 2.9.9 To new woodwork - sand down to smooth surface, knot, prime with pink primer and stop in imperfections ready to receive following coats of paint.
- 2.9.10 To metalwork - wire brush, scrape and clean of loose and defective paint and rust, apply one coat of calcium plumbate primer to new metal work and to bare patches on existing metal work ready to receive oil paint. Prepare existing metal gutters and paint internally with one coat of bituminous paint.
- 2.9.11 Galvanised surfaces shall be thoroughly degreased, treated with a mordant solution washed off after it has dried before priming.
- 2.9.12 To stucco, rendering and stonework - scrape down, brush and pumice to remove unsound paint and wash with sugar soap and water. Stop in small holes and cracks with external filler, cut out larger cracks and make good with 1:1:6 cement; lime; sand filler incorporating mortar bonding agent. Prime new work and where necessary make good with alkali resistant primer and bring forward making good with patch repairs with one undercoat oil paint.
- 2.9.13 Unless otherwise specified the following finishing coats shall be included in the price for decorations.
- (a) Woodwork and metal work externally - two undercoats and one coat finish gloss.
 - (b) Stonework, stucco and rendering externally - two coats of stone paint as specified.

2.10 PLASTERING, RENDERING & TILING

- 2.10.1 Water and cement are described under 2.3 above.
- 2.10.2 Lime shall be hydrated lime complying with BS EN 459-1:2010 delivered and stored as cement.
- 2.10.3 Sand for external rendering, internal plastering with lime and Portland cement and floor screeds shall comply with BS 1199 and 1200:1976 table 1 (sharp washed) and be obtained from an approved source.
- 2.10.4 Plaster shall comply with BS EN 13279-1:2005, class "B" - thistle multi finish or board finish. In no circumstance will the use of carlite plaster be permitted.
- 2.10.5 Plasterboard shall be 9.5mm Gypsum plasterboard complying with BS EN 520:2004+A1:2009 backed with aluminium foil where so described and shall be fixed with 32mm plasterboard nails at 150mm centres along edges and bearings with joints scrimmed with good quality hessian scrim tape 75mm wide. The prices for plasterboarding shall include for extra noggins between joints or studs to provide a solid bearing at edges and for firings or for packing out on existing studs or joists. Where two layers of plasters are specified, they should be fixed broken and staggered joints and with plasterboard nails 50mm long.
- 2.10.6 EML shall comply with BS EN 13658-2:2005 and weigh not less than 1.6kg per m³. They shall be fixed with galvanised staples and coated with black bituminous paint and shall be sealed at cut edges and any breaks in the coating.
- 2.10.7 Galvanised corner/angle beams shall be used in arises situations.
- 2.10.8 Mixing and application of internal plastering and external renderings shall be carried out strictly in accordance with the recommendations in BS 13914 Part 1 & 2:2005.
- 2.10.9 No additives or plastering agents shall be used other than those specified.
- 2.10.10 Surfaces of brickwork, blockwork, concrete, etc. that are to be plastered or rendered shall be thoroughly brushed, cleaned down and well wetted before plastering and undercoat should be properly scratched to afford a key for the next coat. Concrete surfaces should be thoroughly hacked and existing brickwork should have the joints well raked out before plastering.
- 2.10.11 Plastering on brickwork, blockwork and concrete shall be two coat work comprising a 12mm render coat 1:1:6 cement; lime; sand and a finishing coat of thistle multi finish to a minimum of 3mm thick.
- 2.10.12 Plastering on EML shall be as for brickwork but with an additional pre-coat of cement; lime; sand (prickings up) render well trowelled into the lathing to provide adequate mechanical key.
- 2.10.13 Plastering on plasterboard shall be in one coat of Sirapite finish to a minimum of 3mm thick.
- 2.10.14 All wall plastering shall be terminated 50mm from finished floor level.
- 2.10.15 The prices for plastering on existing surfaces or in making good shall include for dubbing out and for finishing flush with adjacent retained surfaces.
- 2.10.16 The face of plastering shall be trowelled smooth ready to receive decoration and fully made good up to and around electrical conduit boxes, skirtings and frames.
- 2.10.17 Renewed plaster or plaster which is partially set must not be mixed or used with fresh plaster.
- 2.10.18 External render shall be two coat work comprising a scratch coat of cement/lime/sand 1:1:6 followed by a minimum 9.5mm render smooth 1:1:6 finishing coat which is to be wood floated with a minimum working and shall not be steel trowelled. Where monolithic surfaces are to have rendering applied the Contractor is to hack the monolithic surface as necessary apply a splatter - dash coating or include a PVA based bonding agent. Apply in strict accordance with the manufacturer's instructions in order to obtain a good key.
- 2.10.19 At the base of external rendering the rendering shall be stopped at DPC level and finished with a bell mould. Similarly rendered plinth shall not be continued above the DPC level and shall be finished with a neat weather struck top edge.
- 2.10.20 Floor screeds shall be composed of a semi dry mix of cement and sand 1:3 laid true and level with a minimum 50mm depth and ready to receive tile floor finish.
- 2.10.21 Where specialist damp course insertion is specified as a Sub-Contract item, all cutting away, removal of existing plaster, opening up fireplaces and making good defective brickwork internally and repointing externally or other masonry works shall be completed to walls to be treated before the commencement of Sub-Contracts works, in accordance with the specification of the Sub-Contractor and the C.A. Timber grounds and fixings shall be removed before treatment and existing air bricks solidly bricked in. Plastering shall be applied subsequent to damp coursing by the damp course Sub-Contractor.

- 2.10.22 Where fibrous plaster cornices are to be re-run or repaired, the Contractor is required to clean up and rake out crevices of any sound section of the existing cornice and take a wax mould of that section. The new cornice shall be fixed in position using an approved adhesive together with plugs and screws at 500mm centres. The abutment joints between the new and existing sections of cornice are to be made good using a suitable stopper worked and sculptured to the profile of the cornice.
- 2.10.23 Ceramic wall tiles are to be good quality 150 x 150mm white ceramic glazed unless otherwise specified. Revealed edges and corners are to be glazed or bull nosed and glazed.
- 2.10.24 Tile adhesive is to be "Nicobond" or similarly approved used in strict accordance with the manufacturer's instructions. Tile grout is to be "Nicogrout" or similar approved and white used in strict accordance with the manufacturer's instructions. On completion all tiling is to be buffed so that all surplus grout is removed.
- 2.10.25 Sealing mastic is to be "Dow Corning" silicon white mastic applied and wiped smooth using a white spirit soaked rag in strict accordance with the manufacturer's instructions. It is to be applied to all abutments between wall and fittings. The seal is to be in the form of a neat fillet not exceeding 6mm wide.
- 2.10.26 External quality ornamental ceramic tiles shall be frost resistant tiles as specified. Where existing sections of path or floor are to be demolished the Contractor is to set aside sound tiles for reuse.
- 2.10.27 Terrazzo and the repairing of Terrazzo shall comply strictly with the requirements of BS 5385-5:2009 and consists of marble or spar to match existing or as approved by the C.A. laid level packed to a density and designed to match existing in a 1:3 cement: sand bed.

2.11 DRAINAGE

- 2.11.1 The proposed drainage works shall be agreed on site with the Borough engineer and surveyors drainage inspector prior to carrying out any drainage works other than established and existing drain runs. The Contractor is required to make all necessary arrangements with the local authority when making connections to the sewer.
- 2.11.2 Open ends of existing and new drains must be temporarily fitted with a drain stopper and manholes kept covered until the drainage installation is complete in order to prevent debris falling in to the system.
- 2.11.3 Excavations of drainage trenches shall be not less than 300mm wider than the external diameter of the pipes and should be laid to proper falls. Include for grading and ramming bottoms, returning, filling and clearing away surplus material, planking and strutting and inclusions as previously described in excavations and earth work in section 2.2 above.
- 2.11.4 Concrete and brickwork shall be as described in sections 2.3 and 2.5 above. Cement is to be sulphate resistant.
- 2.11.5 Concrete beds under pipes shall be a minimum 100mm thick and 300mm wider than the external diameter of the pipe. Haunching shall be packed in under and carried up from the extreme edge of the bed to the top of the pipes on both sides. Pipes under buildings shall be completely surrounded in concrete 150mm thick. Where new drains pass under walls there shall be a lintel or relieving arch of sufficient strength and with sufficient bearing installed to support the brickwork above.
- 2.11.6 Pipes and fittings for foul drains shall be British Standard quality complying with BS 65:1991. Pipes for rainwater only shall be BS EN 12056-3:2000.
- 2.11.7 Pipes and fittings shall comply with BS 437:2008. Only cast-iron fittings and pipes shall be used where a drain passes under or through an existing wall.
- 2.11.8 Pipes shall be laid in straight lines and regular gradients from point to point. 75mm pipes shall be laid to a minimum fall of 1:30, 100mm pipes shall be laid to a minimum fall of 1:40 and 150mm pipes to a minimum of 1:60. Prices shall include for all cutting and waste and extra joints at fittings.
- 2.11.9 Flexible jointed pipes shall be jointed in accordance with manufacturer's instructions. Other clayware pipes and fittings shall be jointed with plain yarn dipped in cement grout, well caulked into position and finished with a bold fillet of cement: sand 1:1. The inside of each joint shall be wiped clean with a damp cloth and a close fitting cork pad shall be drawn through each pipe as it is laid. Cast-iron pipe fittings shall be jointed with tarred yarn and molten lead well caulked.
- 2.11.10 Gullies shall be the necessary side or back inlets for the pipes discharging into same and shall be bedded on and surrounded with 150mm concrete and connected to the drain. They shall be provided with raising pieces and access plates as necessary to suit.
- 2.11.11 Welding eyes shall be formed by extending the drain with an easy bend terminating at ground level fitted with a galvanised sealing plate and frame. Bends shall be surrounded in 150mm of concrete.
- 2.11.12 Manhole covers and frames unless otherwise specified shall be cast iron complying with BS EN 124:1994 grade 0 single seal. Covers shall be set in manhole grease and sand. Covers and frames shall be painted with two coats of bituminous paint including the underside of the cover.

- 2.11.13 Drainage works shall be fully tested as the work proceeds to the satisfaction of the drainage inspector before any back filling is carried out. The whole drainage system shall be further tested and rodded through on completion of the works and immediately prior to handover. It is the Contractors responsibility to obtain a "drain test certificate" from the drainage inspector for verification prior to practical completion.

2.12 SOIL AND SURFACE WATER PLUMBING

- 2.12.1 Cast iron rainwater gutters and downpipes together with fittings and accessories shall comply with BS EN 460:1964 (1981), be medium weight and have joints left open, fixed to walls with galvanised pipe nails in hardwood plugs.
- 2.12.2 uPVC rainwater goods and downpipes shall comply with BS EN 1462:2004 and be unpainted goods as manufactured by Key Terrain and be series 2100 or similar approved by the C.A. Installation shall be in strict accordance with the manufacturer's instructions. Screws for fixing shall be "bright zinc".
- 2.12.3 Cast iron soil and vent pipes and fittings shall comply with BS 416:1990 "medium grade" and shall be jointed with tarred yarn and corked with molten lead. Pipes shall be fixed through ears and distance pieces with galvanised pipe nails and hardwood plugs in brickwork.
- 2.12.4 The Contractor is to ensure that all flashings, aprons and rainwater outlet linings are well dressed down into the rainwater disposal units in accordance with Good Building Practice.
- 2.12.5 uPVC soil pipes and wastes and fittings shall comply with BS 4514:2001 and shall be unpainted goods as manufactured by Key Terrain series 100 soil systems and series 200 for high temperature PVC waste systems or similar as approved by the C.A. Pipes and fittings shall be installed strictly in accordance with manufacturer's instructions with special attention given and allowance made for thermal movement. Screws for fixing shall be "bright zinc".
- 2.12.6 The whole of the sanitary system shall be installed to "Single Stack" principals to BS EN 12056-2:2000 unless otherwise specified. The system shall be tested to the satisfaction of the C.A. and by the engineer and surveyors' drainage inspector.
- 2.12.7 Where soil or rainwater pipes are situated in positions externally where damage can occur the bottom 2m be in cast iron with appropriate adapters to connect to uPVC as necessary.
- 2.12.8 Access points must be provided at the base of stacks at branches on the main stack and at such other points that are necessary to enable testing and rodding of all pipe work.

2.13 WATER SERVICES PLUMBING

- 2.13.1 The whole of the water services installation shall be carried out in accordance with BS 6700+A1:2009 and the regulations and bye-laws of the local Water Authority.
- 2.13.2 Copper pipes shall be "Kite" marked and comply with BS EN 1057:2006+A1:2010 table X and shall be jointed with capillary fittings complying with BS 864 Part 2:1983.
- 2.13.3 Flux shall be as supplied or recommended by the fittings manufacturer, but no self-cleaning fluxes will be permitted. Excess flux and solder shall be cleaned off pipework.
- 2.13.4 Copper pipework shall be run neatly in ducts where provided for or within floor voids. No new notching of joists will be permitted but existing notches may be re-used.
- 2.13.5 Pipes shall be adequately supported by SCH nylon saddles as manufactured by Arthur Fisher (UK) Ltd or equal and approved. Pipework laid within floor screeds shall be without joints.
- 2.13.6 Underground supply pipes shall be fully annealed copper complying with BS EN 1057:2006+A1:2010 Table Y. Pipes passing through solid walls shall be properly sleeved.
- 2.13.7 Storage cisterns shall be plastic complete with manufactures lids and comply with BS 4213:2004 (AMD 6797:1991). They shall be fully supported on a solid base and be fitted with 15mm clearance over to facilitate adjustment and renewal of ball valve.
- 2.13.8 Ball valves shall be Diaphragm type in plastic and comply with BS 1212 Part 3 1990.
- 2.13.9 Hot water cylinders shall be pre-lagged copper cylinders complying with BS 1566-1:2002+A1:2011 for direct cylinders BS 1566-1:2002+A1:2011 for indirect cylinders. The use of "Primatic" self-compensating indirect cylinders is not permitted.
- 2.13.10 Stop valves shall comply with BS 1010 Part 2: 1973 (with AMD's) and be provided on rising mains and before storage cisterns.
- 2.13.11 Gate valves shall comply with BS 5154:1991 and shall be provided immediately after storage cisterns on down services in readily accessible positions.

- 2.13.12 Stop valves shall be labelled to indicate their use. Labels shall be plastic cards with embossed or engraved lettering and wired on to the valve head.
- 2.13.13 Pipework in unheated areas shall be lagged with "Armaflex" performed sections with adhesive as manufacturers' instructions. Storage cisterns in roof spaces shall be insulated with a plastic covered fibreglass quilted sectional jacket to the latest Building Regulation Standards.
- 2.13.14 Overflow pipes are to be uPVC and should fall evenly either to an external wall or overflow manifold. Overflow pipes are to be terminated 150 mm from the face of the external wall. Where possible overflow pipes should be positioned vertically above gullies and, in any case, must not be discharged onto any roof or past any door or window opening.
- 2.13.15 Pipework shall be pressure tested by the Contractor before being covered up by lagging, dust covers, screeds, floorboards, etc.
- 2.13.16 Immediately prior to the handing over of the premises unless otherwise instructed in writing by the C.A., the Contractor shall turn off the main water supply and drain down hot and cold water supply pipes and cisterns including WWP's and central heating systems complete. Failure to comply will render the Contractor liable for damage resulting from burst pipes or fittings or overflowing cisterns.

3.0 SCHEDULE OF WORKS

3.1 DAYWORKS AND CONTINGENCIES

- 3.1.1 The following sums and amounts to be deducted in whole or in part if not required.
- 3.1.2 No daywork will be allowed that can be measured and valued. Weekly day sheets giving details of labour and materials for all daywork must be submitted in triplicate to the C.A. by the end of the week following that in which the work was executed and shall be signed by the foreman in charge of the work and the C.A. as a record of the time actually worked on site (exclusive of travelling time) and materials and shall be subject to the approval of the C.A. DAYWORK SHEETS NOT SUBMITTED WITHIN SEVEN DAYS TO THE C.A. SHALL BE REJECTED.
- 3.1.3 All accepted dayworks will be priced at the rates of labour quoted below by the Contractor and such rates shall include for all supervisions, overheads, travelling time and expenses, time lost through inclement weather, guaranteed weekly minimum subsistence, bonuses, tool money, holidays with pay and public holidays, National Insurance contributions, graduated pension, industrial training scheme, third party and Employers' insurance, absence due to sickness or injury and all other charges whatsoever which the Contractor may require, as no other adjustment to the rates below will be allowed.
- 3.1.4 The time of gangers or charge hands (i.e. men actually working with their hands) will be paid at the plain time rates quoted hereunder but the time of foreman and working gangers will be deemed to be included in the site supervision.
- 3.1.5 Apprentices and labourer's rates of labour will be allowed in the proportion of the craftsmen of labourer's rates as shown in the Federation of Building Trades Employers' wages rates current at the date of the dayworks.
- 3.1.6 Materials will be priced at cost delivered to site excluding all trade discounts and invoices shall be submitted to substantiate any claim.
- 3.1.7 Profit will be allowed on material costs at the rate quoted by the Contractor, which is to include for Establishment charges, etc.
- 3.1.8 The plant hire charges shall be those contained in the current schedule of charges published by the Royal Institution of Chartered Surveyors and profit will be allowed at the rates quoted below.
- 3.1.9 The Contractor shall show below his daywork rates and shall extend into the money column the cost of his dayworks at the provision number of hours shown. The Contractor should carefully note that the all-in rates or percentage additions stated below will apply to all work executed by himself and his Sub-Contractors irrespective of any special arrangements which he may have with his Sub-Contractors. The Contractor must make due allowance for this in his all-in rate over percentage.

		Unit Rate	£
3.1.10	Dayworks Before Practical Completio		
(a)	Craftsmen hours 16 hours		
(b)	Labourers hours 16 hours		
(c)	Include a provisional sum for materials to be used in daywork.	PS	£2,000.00
(d)	Add for profit and overheads to be allowed on the net cost of materials used in dayworks.		
(e)	Include a Provisional sum for plant, etc., to be used in dayworks.	PS	£500.00
(f)	Add profit and overheads.		
3.1.11	Dayworks During Defects Liability Period		
(a)	Craftsmen hours 8 hours		
(b)	Labourers hours 8 hours		
3.1.12	Contingencies		
	Include a Provisional sum for contingencies	PS	£2,000.00
DAYWORKS & CONTINGENCIES TO COLLECTION			£

Item		Unit	Rate	Cost (£)
3.2	GENERAL ITEMS			
3.2.1	<u>Hours of Working</u> Works to be undertaken only during normal working hours, unless otherwise agreed by C.A. (Monday – Saturday 8:00am – 5:30pm).	Item		
3.2.2	<u>Programme of Works</u> The Contractor will be required to provide a PROGRAMME OF WORKS before works commence to ensure minimal disruption to the Client.	Item		
3.2.3	<u>Site Protection and Tidiness</u> Contractor to allow for keeping the site clean tidy at all times , and for the disposal of all waste material both during and on completion of the works.	Item		
3.2.4	<u>Waste Disposal</u> Allow for all skips, licences and rubbish disposal throughout the duration of the works. Skips to be located in positions agreed before the commencement of the works.	Item		
3.2.5	<u>Temporary Works</u> The Contractor is to allow for all necessary shoring, formworks and their temporary works as required	Item		
3.2.6	<u>Access Equipment</u> Include for all scaffolding, access towers and safety netting, etc. required to safely undertake the works. Allow for forming a temporary roof over roof slopes to provide temporary weather protection. All standards and tubes lower than 3m are to be provided with alternative red and white coloured tape. All ladders to lower lifts are to be removed and secured overnight. Full toe boards and safety netting to all lifts. Include for monitored scaffold alarm	Item		

TOTAL TO COLLECTION £

Item		Unit	Rate	Cost (£)
3.2.7	<p><u>Noise and Disturbance</u> The use of noisy plant or machinery is to be kept to a minimum and site radios will not be allowed. The building will be occupied by tenants during the works and the contractor is ensure that all operatives and visitors, delivery drivers, sub-contractors to the site are respectful, courteous and cognisant that people will be visiting the offices and working within them</p>	Item		
3.2.8	<p><u>Site Safety</u> Include for all protective and other safety equipment such as barriers, safety signage, and a designated safe place to leave ladders and materials while the site is unattended.</p>	Item		
3.2.9	<p><u>Site Enclosure</u> The Contractor is to allow for providing a full enclosure to the site in heras fencing, and to agree a compound position with the C.A.</p>	Item		
3.2.10	<p><u>Welfare Facilities</u> Provide temporary latrines and welfare facilities for site staff, if required.</p>	Item		
3.2.11	<p>All works to be adequately weather protected at all times.</p>	Item		
3.2.12	<p><u>Personal Protective Equipment</u> All operatives should be properly trained for their duties and provided with all necessary PPE.</p>	Item		
3.2.13	<p><u>Leadwork</u> All leadwork to be in accordance with LDA guidelines –which can be supplied on request.</p>	Item		
3.2.14	<p><u>CDM Regulations</u> The full extent of the CDM Regulations 2015 will apply. The Contractor shall be required to submit the usual construction plan and maintain site visitors' procedures and records, and accident books, etc. ALL accidents are to be reported to the C.A. and Principal Designer immediately.</p>	Item		

TOTAL TO COLLECTION £

Item		Unit	Rate	Cost (£)
3.2.15	<p><u>Health and Safety File</u> The Contractor is to provide a list of all products and materials used on site, retain all manufacturer's literature and contact details, to be handed over to the Principal Designer throughout the project, including commissioning certificates for services, etc.</p> <p>The C.A. reserves the right to delay final payment or agreement of the final account until this is completed</p>	Item		
3.2.16	<p><u>Asbestos</u> A Refurbishment & Demolition Asbestos Survey of the property has not been undertaken, and the report will be made available to the Contractor when the contract is offered. The Contractor is required to include for obtaining a survey and report after being awarded the tender and this is to be completed and distributed before works commencement.</p>	Item		
3.2.17	<p>The Contractor is to notify the C.A. or Principal Designer immediately if any suspected asbestos containing materials are identified.</p>	Item		
3.2.18	<p>Contractor to allow for providing all temporary lighting and power, as required, to safely complete works.</p>	Item		
3.2.19	<p><u>BWIC</u> Allow for builders work in connection with Mechanical & Electrical Services installation. Include for forming and finishing all necessary ducts, chases. The provision of all access towers, access equipment, etc.</p>	Item		

3.3

**FRONT (NORTH ROOF SLOPES)
LABELLED A, H, I, J, K, L & N ON DRAWING**



3.3.1

Roof Tiling

Strip off clay plain roof tiles from roof slopes and set aside sound non-spalled or weathered tiles for cleaning and then re-use.

Item

3.3.2

Strip off and remove ridge tiles from main slope and lower ridges to front gabled roofs.

Item

3.3.3

Strip off and remove preformed valley tiles from 6No sloping valley intersections.

Item

3.3.4

Strip off and remove hip tiles from west and east corners of front roof slope.

Item

3.3.5

Carefully remove all tiling battens and sarking felt from roof slopes.

Item

3.3.6

De-nail all rafters and allow for a thorough inspection of all exposed roof timbers.

Item

3.3.7

Allow the provisional sum of £3,500 for timber repairs or replacement of any damaged, split or decayed roof frame timbers in matching section sizes using CLS C16 grade treated tanalised kiln dried timber with a moisture content of 10-15%.

PS

£3,500.00

3.3.8

Structural replacement timbers to be screwed fixed in accordance with BS 8000-5:1990.

Item

3.3.9

Bolted connections fixed in accordance with BS 8000-5:1990 with drill holes a maximum of 2mm larger than bolt hole.

Item

3.3.10

Brush apply a minimum of 2No coats water based Cuprinol 5 Star Clear complete wood treatment to all existing and new exposed roof timbers in accordance with manufacturer's application details.

Item

TOTAL TO COLLECTION £

3.3.11	Apply Tyvek Supro Breather Felt Underlay over roof structure with a minimum overlap at joints of 100mm.	Item
3.3.12	Dress Felt Underlayer into rainwater gutter sections.	Item
3.3.13	Provide and fix 38 x 25mm pre-treated tanalised softwood tiling battens spaced to replicate the original setting out of original tiling battens but taking into account the roof slopes may not be square but ensuring the maximum gauge is no greater than 100mm.	Item
3.3.14	Ensure that all battens are level (horizontal) and straight with no sags or deflections.	Item
3.3.15	In accordance with the principles of BS 5534:2014 re-fix all sound previously salvaged clay plain tiles using 38mm x 2.65 aluminium nails to BS 10088-3 grade 304 ensuring they are predominantly used on visible exposed roof slopes with a maximum head lap of 65mm and a maximum gauge of 100mm.	Item
3.3.16	In accordance with BS 5534:2014 provide and fix Marley Ashdowne Handcrafted clay plain tiles fixed to the same specification to make up any shortfall and to be predominately used on roof areas which are not clearly visible from the road or paved areas.	Item
3.3.17	Ensure that all perimeter tiles are fixed twice on every course.	Item
3.3.18	Ensure that verge tiles are fixed at least twice and at least 6 courses counted in from the edge are nailed.	Item
3.3.19	Allow to fit timber battened under cloak to underside of verge tiles to roadside facing gables (as existing).	Item
3.3.20	Allow to fit tiled undercloak to west and east gables pointed in cement sand mortar 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139.	Item
3.3.21	Ensure that fixings are at least every third course (not fifth).	Item
3.3.22	Provide and fix new clay tiled ridge sections bedded on 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139.	Item
3.3.23	Provide and fix new valley tiles from the Marley Ashdowne Handcrafted clay plain tile range fixed in accordance with the manufacturer's specification.	Item

3.3.24 Provide and fix new bonnet hip tiles from the Marley Ashdowne Handcrafted clay plain tile range fixed in accordance with the manufacturer's specification. Item

3.3.25 On the hip abutments where they abut the rough cast render wall for approximately 4 or 5 courses of tiles include for forming a stepped lead flashing detail chased into the brickwork behind the render and then make good the damaged render. Item

3.4 LEAD VALLEYS LABELLED V1 & V2 ON DRAWING



3.4.1 NB. The existing valleys appear to be covered in aged mineral felt possibly applied over old lead sheeting. Remove and dispose of all vegetation and debris. Item

3.4.2 Lift and remove felt coverings and any other valley lining materials. Item

3.4.3 Allow for an inspection of the timber valley boarding and valley gutter enclosures. Item

- | | | |
|--------|--|------|
| 3.4.4 | Take accurate dimensioned drawings of existing constructional arrangement. | Item |
| 3.4.5 | Allow to reform gutter bearers and supports using some dimensioned timber using CLS C16 grade treated tanalised kiln dried timber with a moisture content of 10 -15%. | Item |
| 3.4.6 | Fix timbers with stainless steel screws fixed in accordance with BS 8000-5:1990. | Item |
| 3.4.7 | Ensure there is the maximum possible drip detail (height) between the lowest course of tiles and the valley gutter bases forming an upstand drip detail. Include for dressing Tyvek sarking felt over drip detail and into lead valley gutter. | Item |
| 3.4.8 | Provide and lay new gutter base and possibly sloping gutter edges to tiles using 18mm WBP plywood, screw fixed to the supporting bearers. | Item |
| 3.4.9 | Lay Geotec 220PY Underlay with minimum laps of 100mm. | Item |
| 3.4.10 | Provide and Lay Code 5 lead sheeting to BS EN12588 with a maximum length of 2000mm and maximum overall girth of 750mm. | Item |
| 3.4.11 | Allow for forming 1No 50mm drip detail in gutter length. | Item |
| 3.4.12 | Allow for forming and dressing in circular rainwater outlet to metal hooper head under valley gutter section. | Item |
| 3.5 | FRONT ELEVATION (HIGH STREET)
RAINWATER GOODS | |



3.5.1	Remove wire netting from the two hopper heads directly underneath the lead valley gutters between the three front gable roofs.	Item	
3.5.2	Carefully remove, taking care not to cause damage to the render, the hopper heads or any fixing lugs to the hopper heads.	Item	
3.5.3	Once taken down clean the hopper heads and remove all loose paint, surface corrosion and the like back to bare metal.	Item	
3.5.4	Apply Rust Oleum Mathys Noxyde Peganox black (RAL 9004) to all surfaces of the hopper heads internally and externally.	Item	
3.5.5	Take down uPVC and metal vertical rainwater pipes and sloping sections of rainwater pipes from west and west hipped roofs complete with fixing brackets and embedded wall plugs.	Item	
3.5.6	Apply Rust Oleum Mathys Noxyde Peganox black (RAL 9004) to all surfaces of the hopper head brackets.	Item	
3.5.7	Carefully re-fix hopper heads upon completion taking care not to excessively damage rough cast render and to make good any damage surfaces. Provide new galvanised wire netting.	Item	
3.5.8	Carefully take down upper uPVC and metal rainwater pipes forming vertical and inclined sections across from elevation and draining into timber box gutter above second floor and fixed to the centre of the building.	Item	
3.5.9	Take down half round gutters around east and west hipped roofs over each gable.	Item	
3.5.10	Apply Rust Oleum Mathys Noxyde Peganox black (RAL 9004) in situ to the half round gutter brackets and supports (believed to be 4No).	Item	
3.5.11	Provide and fix 100mm half round aluminium gutters including 90° bends and stop ends and finished in black.	Item	
3.5.12	Provide and fix new aluminium rainwater downpipes (colour: black) with new brackets and fixings to replicate the original downpipe configuration.	Item	

3.5.13	Make good to any damage to the render caused by the removal of the original downpipes, brackets and fixings.	Item	
3.5.14	Allow to remove all debris from second floor timber longitudinal box gutter.	Item	
3.5.15	Check lead lining.	Item	
3.5.16	Take accurate dimensioned drawings of existing constructional arrangement.	Item	
3.5.17	Allow to remove lead lining.	Item	
3.5.18	Check timbers in box gutter construction.	Item	
3.5.19	Allow to re-build box gutter construction using 18mm WBP plywood with reinforcing internal bearers at each end.	Item	
3.5.20	Prepare and paint all timber surfaces with one primer coat, one undercoat and two full gloss coats rubbing down and sanding surfaces between each coat.	Item	
3.5.21	Lay Geotec 220PY Underlay with minimum laps of 100mm to base and upstands.	Item	
3.5.22	Provide and fix Code 4 lead lining to match the constructional details of the original.	Item	
3.5.23	<u>First Floor & Ground Floor Downpipes</u> Disconnect rainwater outlet connection to underside of longitudinal box gutter, the downpipe, the lower hopper head and the remainder of the rainwater pipe to the connector located adjacent to the ground floor fascia/jetty construction.	Item	
3.5.24	Provide and fix new aluminium rainwater downpipes (colour: black) with new brackets and fixings to replicate the original downpipe configuration but omitting the hopper head and connect to the existing retained rainwater pipe connection at the fascia/jetty position.	Item	
3.5.25	Make good to any damage to the render caused by the removal of the original downpipes, brackets and fixings.	Item	
3.5.26	Allow for new brackets, fixings and plugs.	Item	

3.5.27	<u>First Floor Lead Bay Roof</u> Remove all debris from lead bay roof. Check the condition of the lead, the flashings and soakers.	Item	
3.5.28	Allow the Provisional Sum of £5,000 for lead replacement to include labour and materials.	PS	£5,000.00
3.5.29	Provide and fix anti-pigeon spikes glued onto lead roof.	Item	
3.5.30	<u>Defective Render</u> Carefully hack off defective and cracked render sections. Allow the Provisional area of 15m ² in various areas.	Item	
3.5.31	Apply new roughcast render to match texture of original using 1:4 lime putty : sharp sand mix for the base (laying on coat) and 2:4:5 (lime putty .: sharp sand: small shingle mix for cast (top) coat. Building up small areas of repair in thin coats	Item	
3.5.32	<u>Redecoration of Bargeboards, Windows, Fascias & Jetties</u> Remove all defective timber and replace in matching timber sections using pretreated tanalised timber.	Item	
3.5.33	Remove all loose and redundant fixtures and fittings from Bargeboards and associated adjacent timbers and make good all holes, splits and cracks .	Item	
3.5.34	Remove all loose, failing and organic growth material by scraping or brushing with a stiff bristle brush (not wire) back to bare timber. Where the surfaces breakdown is extensive the complete section should be stripped by scraping back or using hot air paint stripper.	Item	
3.5.35	All surfaces must be clean and free from debris and contaminants. Prior to redecoration the moisture content must not exceed 18%.	Item	
3.5.36	Apply Sandtex Trade Fungicide to remove organic growth.	Item	
3.5.37	Remove excess resin from knots using hot air stripper and wipe immediately with methylated spirit using lint free cloths. Apply to thin coats of knotting solution to all knots.	Item	

TOTAL TO COLLECTION £

3.5.38	To areas with large surface defects, remove any defective filler up to 12mm depth build-up defects using Sadolin Stainable Wood filler built-up no more 12mm at a time.	Item	
3.5.39	Fill any open joints with Sadolin Stainable Wood filler.	Item	
3.5.40	Spot prime all bare timber and filled areas with one full coat of Sandtex Trade Flexible Primer Undercoat. Ensure end grain is well coated and allow a minimum drying time of 16 hours in normal drying conditions.	Item	
3.5.41	To areas of sound paint wash with hot water and liquid detergent solution to remove any contaminants. Wet abrade sound paint to provide a key, remove all residues and leave to dry.	Item	
3.5.42	Bring forward spot primed areas with one full coat of Sandtex Trade Flexible Primer Undercoat.	Item	
3.5.43	Apply one full coat of Sandtex Trade Flexible Primer Undercoat to all surfaces to be decorated.	Item	
3.5.44	Apply one full coat of Sandtex Trade Flexigloss X-Tra in accordance with the Manufacturer's instructions.	Item	
3.5.45	<ul style="list-style-type: none">• Bargeboards and associated features to gables.• 3No second floor windows.	Item	
3.5.46	<ul style="list-style-type: none">• 2No large first floor windows.• Timber posts.• Ground floor fascia/jetty.	Item	

3.6

**CHIMNEY STACK
LOCATION S1 ON DRAWING**



- | | | |
|-------|---|------|
| 3.6.1 | Carefully remove chimney pots and set aside for re-use. | Item |
| 3.6.2 | Hack of cement flaunching from chimney heads. | Item |
| 3.6.3 | Hack off all roughcast render from chimney stack. | Item |
| 3.6.4 | Remove existing lead flashings adjacent to tiling. | Item |
| 3.6.5 | Provide and install new Code 3 & Code 4 soaker and stepped lead flashings and aprons pointed, wedged and bedded into coursed brickwork. | Item |
| 3.6.6 | Allow to cut out any cracked bricks and tooth in new bricks of matching sizes bedded in lime mortar. | Item |
| 3.6.7 | Replace and re-bed chimney pots on new lime mortar flaunching. | Item |
| 3.6.8 | Apply new roughcast render to match texture of original using 1:4 lime putty: sharp sand mix for the base (laying on coat) and 2:4:5 (lime putty : sharp sand: small shingle mix for cast (top) coat. Building up small areas of repair in thin coats. | Item |

TOTAL TO COLLECTION £

3.6.9 Include for new bellmouth drip detail above the stepped lead flashings to tiles formed from galvanised beading.

Item

3.7 **ROOF & DORMER
LOCATION B, N, D & D1 & D2 ON DRAWING**



3.7.1 **Roof Tiling**
Strip off clay plain roof tiles from roof slopes and set aside sound non-spalled or weathered tiles for cleaning and then re-use.

Item

3.7.2 Strip off and remove ridge tiles from main slope.

Item

3.7.3 Strip off and remove preformed valley tiles from 2No sloping valley intersections V9 & V10.

Item

3.7.4 Carefully remove all tiling battens and sarking felt from roof slopes.

Item

3.7.5 De-nail all rafters and allow for a thorough inspection of all exposed roof timbers.

Item

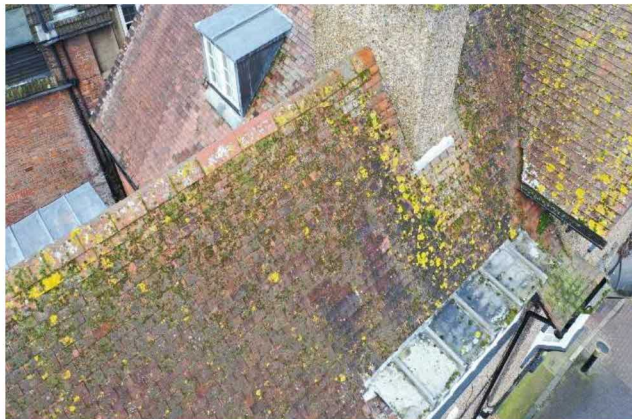
3.7.6	Allow the Provisional Sum of £3,500 for timber repairs or replacement of any damaged, split or decayed roof frame timbers in matching section sizes using CLS C16 grade treated tanalised kiln dried timber with a moisture content of 10-15%.	PS	£3,500.00
3.7.7	Structural replacement timbers to be screwed fixed in accordance with BS 8000-5:1990.	Item	
3.7.8	Bolted connections fixed in accordance with BS 8000-5:1990 with drill holes a maximum of 2mm larger than bolt hole.	Item	
3.7.9	Brush apply a minimum of 2No coats water based Cuprinol 5 Star Clear complete wood treatment to all existing and new exposed roof timbers in accordance with manufacturer's application details.	Item	
3.7.10	Apply Tyvek Supro Breather Felt Underlay over roof structure with a minimum overlap at joints of 100mm.	Item	
3.7.11	Dress Felt Underlayer into rainwater gutter sections.	Item	
3.7.12	Provide and fix 38 x 25mm pre-treated tanalised softwood tiling battens spaced to replicate the original setting out of original tiling battens but taking into account the roof slopes may not be square but ensuring the maximum gauge is no greater than 100mm. Noting that the west verge is not square.	Item	
3.7.13	Ensure that all battens are level (horizontal) and straight with no sags or deflections.	Item	
3.7.14	In accordance with the principles of BS 5534:2014, re-fix all sound previously salvaged clay plain tiles using 38mm x 2.65 aluminium nails to BS 10088-3 grade 304 ensuring they are predominantly used on visible exposed roof slopes with a maximum head lap of 65mm and a maximum gauge of 100mm.	Item	
3.7.15	In accordance with BS 5534:2014 provide and fix Marley Ashdowne Handcrafted clay plain tiles fixed to the same specification to make up any shortfall and to be predominately used on roof areas which are not clearly visible from the road or paved areas	Item	
3.7.16	Ensure that all perimeter tiles are fixed twice on every course.	Item	
3.7.17	Allow to fit tiled undercloak to west and east gables pointed in cement sand mortar 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139.	Item	

TOTAL TO COLLECTION £

3.7.18	Ensure that fixings are at least every third course (not fifth).	Item	
3.7.19	Provide a fix new clay tiled ridge sections bedded on 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139.	Item	
3.7.20	Provide and fix new valley tiles from the Marley Ashdowne Handcrafted clay plain tile range fixed in accordance with the manufacturer's specification.	Item	
3.7.21	Locate the metal overflow within the roof void which, is externally located to the North of D2 and establish whether it remains live. If it is a live pipe then remove the existing pipe and insert a new copper overflow pipe which will protrude at least 100mm away from the outer tiled surface.	Item	
3.7.22	Provide an internal pipe sleeve and external lead apron flashing to provide a weathertight seal around the pipe.	Item	
3.7.23	Provide and install New Code 4 soaker and stepped flashings to both lead dormer cheeks heads and cills.	Item	
3.7.24	Remove stepped lead flashings from lower north wall abutment and provide and fit new stepped lead flashings with soakers between tiles and abutment brickwork wedged and pointed in lime mortar. Include for lead slate flashing to seal SVP pipe on south west slope	Item	
3.7.25	All new leadwork to be coated with two coats of patination oil.	Item	
3.7.26	Prepare and paint dormer windows D1 & D2 in accordance with Clauses 3.5. 33 to 3.5.45 inclusive.	Item	
3.7.27	Prepare and paint south facing bargeboards to roof slopes N & C in accordance with Clauses 3.5.33 to 3.5.45 inclusive.	Item	
3.7.28	Allow the Provisional sum of £5000 for lead repairs to dormer cheeks and heads as directed by the CA.	PS	£5,000.00

3.8

**ROOF & BAY
LOCATION C ON DRAWING**



3.8.1

Roof Tiling

Strip off clay plain roof tiles from roof slopes and set aside sound non-spalled or weathered tiles for cleaning and then re-use.

Item

3.8.2

Strip off and remove ridge tiles from main slope.

Item

3.8.3

Carefully remove all tiling battens and sarking felt from roof slopes.

Item

TOTAL TO COLLECTION £

3.8.4	De-nail all rafters and allow for a thorough inspection of all exposed roof timbers.	Item	
3.8.5	Allow the Provisional Sum of £3,500 for timber repairs or replacement of any damaged, split or decayed roof frame timbers in matching section sizes using CLS C16 grade treated tanalised kiln dried timber with a moisture content of 10-15%.	PS	£3,500.00
3.8.6	Structural replacement timbers to be screwed fixed in accordance with BS 8000-5:1990.	Item	
3.8.7	Bolted connections fixed in accordance with BS 8000-5:1990 with drill holes a maximum of 2mm larger than bolt hole.	Item	
3.8.8	Brush apply a minimum of 2No coats water based Cuprinol 5 Star Clear complete wood treatment to all existing and new exposed roof timbers in accordance with manufacturer's application details.	Item	
3.8.9	Apply Tyvek Supro Breather Felt Underlay over roof structure with a minimum overlap at joints of 100mm.	Item	
3.8.10	Dress Felt Underlayer into rainwater gutter sections.	Item	
3.8.11	Provide and fix 38 x 25mm pre-treated tanalised softwood tiling battens spaced to replicate the original setting out of original tiling battens but taking into account the roof slopes may not be square but ensuring the maximum gauge is no greater than 100mm.	Item	
3.8.12	Ensure that all battens are level (horizontal) and straight with no sags or deflections.	Item	
3.8.13	In accordance with the principles of BS 5534:2014 re-fix all sound previously salvaged clay plain tiles using 38mm x 2.65 aluminium nails to BS 10088-3 grade 304 ensuring they are predominantly used on visible exposed roof slopes with a maximum head lap of 65mm and a maximum gauge of 100mm.	Item	
3.8.14	In accordance with BS 5534:2014 provide and fix Marley Ashdowne Handcrafted clay plain tiles fixed to the same specification to make up any shortfall and to be predominately used on roof areas which are not clearly visible from the road or paved areas.	Item	
3.8.15	Ensure that all perimeter tiles are fixed twice on every course.	Item	

TOTAL TO COLLECTION £

- | | | |
|--------|--|------|
| 3.8.16 | Ensure that verge tiles are fixed at least twice and at least 6No courses counted in from the edge are nailed. | Item |
| 3.8.17 | Allow to fit tiled undercloak to gables pointed in cement sand mortar 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139. | Item |
| 3.8.18 | Ensure that fixings are at least every third course (not fifth). | Item |

**3.9 CHIMNEY STACK
LOCATION S2 ON DRAWING**



- | | | |
|-------|---|------|
| 3.9.1 | Carefully remove chimney pots and set aside for re-use. | Item |
|-------|---|------|

3.9.2	Hack of cement flaunching from chimney heads.	Item
3.9.3	Hack off all roughcast render from chimney stack.	Item
3.9.4	Remove existing lead flashings adjacent to tiling.	Item
3.9.5	Provide and install new Code 3 & Code 4 soaker and stepped lead flashings, and aprons pointed, wedged and bedded into coursed brickwork.	Item
3.9.6	Allow to cut out any cracked bricks and tooth in new bricks of matching sizes bedded in lime mortar.	Item
3.9.7	Allow to insert HeliBars to stabilise any structural cracks.	Item
3.9.8	Replace and re-bed chimney pots on new lime mortar flaunching.	Item
3.9.9	Apply new roughcast render to match texture of original using 1:4 lime putty: sharp sand mix for the base (laying on coat) and 2:4:5 (lime putty : sharp sand: small shingle mix for cast (top) coat. Building up small areas of repair in thin coats.	Item
3.9.10	Include for new bellmouth drip detail above the stepped lead flashings to tiles formed from galvanised beading.	Item
3.10	ITEM NOT USED	
3.11	CHIMNEY STACK LOCATION S3 ON DRAWING	

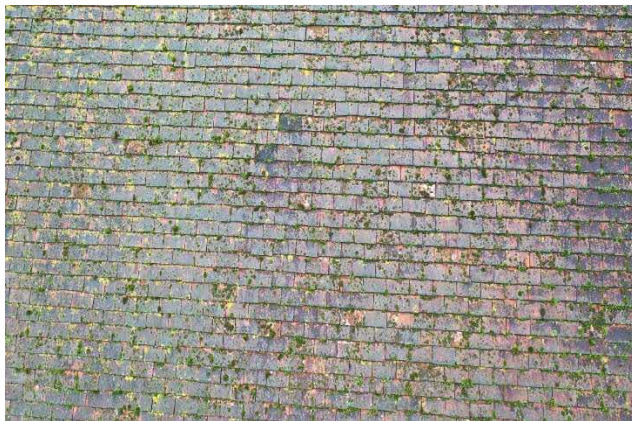




3.11.1	Carefully remove chimney pots and set aside for re-use.	Item
3.11.2	Hack of cement flaunching from chimney heads.	Item
3.11.3	Hack off all roughcast render from chimney stack.	Item
3.11.4	Remove existing lead flashings adjacent to tiling.	Item
3.11.5	Provide and install new Code 3 & Code 4 soaker and stepped lead flashings and aprons pointed, wedged and bedded into coursed brickwork.	Item
3.11.6	Allow to cut out any cracked bricks and tooth in new bricks of matching sizes bedded in lime mortar.	Item
3.11.7	Allow to insert HeliBars to stabilise any structural cracks.	Item
3.11.8	Replace and re-bed chimney pots on new lime mortar flaunching.	Item
3.11.9	Apply new roughcast render to match texture of original using 1:4 lime putty: sharp sand mix for the base (laying on coat) and 2:4:5 (lime putty : sharp sand: small shingle mix for cast (top) coat. Building up small areas of repair in thin coats.	Item
3.11.10	Include for new bellmouth drip detail above e stepped lead flashings to tiles formed from galvanised beading.	Item

3.12

**ROOF & CHIMNEY STACK
LOCATION E & S4 ON DRAWING**



3.12.1

Roof Tiling

Strip off clay plain roof tiles from roof slopes and set aside sound non-spalled or weathered tiles for cleaning and then re-use.

Item

3.12.2

Strip off and remove ridge tiles from main slope.

Item

3.12.3


Carefully remove all tiling battens and sarking felt from roof slopes.

Item

TOTAL TO COLLECTION £

3.12.4	De-nail all rafters and allow for a thorough inspection of all exposed roof timbers.	Item	
3.12.5	Allow the Provisional Sum of £3,500 for timber repairs or replacement of any damaged, split or decayed roof frame timbers in matching section sizes using CLS C16 grade treated tanalised kiln dried timber with a moisture content of 10-15%.	PS	£3,500.00
3.12.6	Structural replacement timbers to be screwed fixed in accordance with BS 8000-5:1990.	Item	
3.12.7	Bolted connections fixed in accordance with BS 8000-5:1990 with drill holes a maximum of 2mm larger than bolt hole.	Item	
3.12.8	Brush apply a minimum of 2No coats water based Cuprinol 5 Star Clear complete wood treatment to all existing and new exposed roof timbers in accordance with manufacturer's application details.	Item	
3.12.9	Apply Tyvek Supro Breather Felt Underlay over roof structure with a minimum overlap at joints of 100mm.	Item	
3.12.10	Dress Felt Underlayer into rainwater gutter sections.	Item	
3.12.11	Provide and fix 38 x 25mm pre-treated tanalised softwood tiling battens spaced to replicate the original setting out of original tiling battens but taking into account the roof slopes may not be square but ensuring the maximum gauge is no greater than 100mm.	Item	
3.12.13	Ensure that all battens are level (horizontal) and straight with no sags or deflections.	Item	
3.12.14	In accordance with the principles of BS 5534:2014 re-fix all sound previously salvaged clay plain tiles using 38mm x 2.65 aluminium nails to BS 10088-3 grade 304 ensuring they are predominantly used on visible exposed roof slopes with a maximum head lap of 65mm and a maximum gauge of 100mm.	Item	
3.12.15	In accordance with BS 5534:2014 provide and fix Marley Ashdowne Handcrafted clay plain tiles fixed to the same specification to make up any shortfall and to be predominately used on roof areas which are not clearly visible from the road or paved areas.	Item	
3.12.16	Ensure that all perimeter tiles are fixed twice on every course.	Item	

TOTAL TO COLLECTION £

3.12.17	Ensure that verge tiles are fixed at least twice and at least 6No courses counted in from the edge are nailed.	Item	
3.12.18	Allow to fit tiled undercloak to gables pointed in cement sand mortar 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139.	Item	
3.12.19	Ensure that fixings are at least every third course (not fifth).	Item	
3.12.20	<u>Chimney Stack S4</u> Repeat the repairs as described in Section 3.9 noting the brick capped chimney head.	Item	
3.13	ROOFS LOCATION F & G ON DRAWING		
			
3.13.1	<u>Roof Tiling</u> Strip off clay plain roof tiles from roof slopes and set aside sound non-spalled or weathered tiles for cleaning and then re-use.	Item	
3.13.2	Strip off and remove ridge tiles from main slope.	Item	
3.13.3	Carefully remove all tiling battens and sarking felt from roof slopes.	Item	
3.13.4	De-nail all rafters and allow for a thorough inspection of all exposed roof timbers.	Item	
3.13.5	Allow the Provisional Sum of £1,500 for timber repairs or replacement of any damaged, split or decayed roof frame timbers in matching section sizes using CLS C16 grade treated tanalised kiln dried timber with a moisture content of 10-15%.	PS	£1,500.00

3.13.6	Structural replacement timbers to be screwed fixed in accordance with BS 8000-5:1990.	Item	
3.13.7	Bolted connections fixed in accordance with BS 8000-5:1990 with drill holes a maximum of 2mm larger than bolt hole.	Item	
3.13.8	Brush apply a minimum of 2No coats water based Cuprinol 5 Star Clear complete wood treatment to all existing and new exposed roof timbers in accordance with manufacturer's application details.	Item	
3.13.9	Apply Tyvek Supro Breather Felt Underlay over roof structure with a minimum overlap at joints of 100mm	Item	
3.13.10	Dress Felt Underlayer into rainwater gutter sections.	Item	
3.13.11	Provide and fix 38 x 25mm pre-treated tanalised softwood tiling battens spaced to replicate the original setting out of original tiling battens but taking into account the roof slopes may not be square but ensuring the maximum gauge is no greater than 100mm.	Item	
3.13.12	Ensure that all perimeter tiles are fixed twice on every course.	Item	
3.13.13	Allow to fit tiled undercloak to gables pointed in cement sand mortar 1:3 mix Portland Cement to 3 parts sharp sand using sand to conform with BS 13139.	Item	
3.13.14	Ensure that all battens are level (horizontal) and straight with no sags or deflections.	Item	
3.13.15	In accordance with BS 5534:2014 provide and fix Marley Ashdowne Handcrafted clay plain tiles fixed to the same specification.	Item	
3.13.16	Ensure that verge tiles are fixed at least twice and at least 3No courses counted in from the edge are nailed.	Item	

3.14

**BAY
LOCATION L1 & L2 ON DRAWING**



3.14.1

Allow the Provisional Sum of £5,000 for lead repairs to lead work as directed by the C.A.

PS

£5,000.00

3.15

ROOF VOIDS

3.15.1

Remove all debris from accessible roof voids.

Item

3.15.2

Provide and lay 200mm Rockwool insulation quilt over accessible ceilings taking care not to trap or lay insulation over electrical cables and fittings to cause over heating of electrical fittings.

Item

3.15.3

Allow for specialist advice.

Item

TOTAL TO COLLECTION £

3.16	CONTRACTOR'S OWN ADDITIONS	
Item		£
3.16.1	<p>Items that the Contractor feels have been omitted from this Specification of Works but in his opinion are deemed necessary for inclusion to adequately and satisfactorily complete the works. Please specify and price below. Use an additional sheet if necessary.</p>	
3.16.2		
3.16.3		
3.16.4		
3.16.5		
		TOTAL TO COLLECTION

4.0 FINAL COLLECTION PAGE		£
1.0	Preliminaries and General Conditions	
2.0	Materials and Workmanship	
3.0	Schedule of Works	
3.1	Dayworks and Contingencies	
3.2	General Items	
3.3	Front (North Roof Slopes)	
3.4	Lead Valleys	
3.5	Front Elevation (High Street) Rainwater Goods	
3.6	Chimney Stack	
3.7	Roof & Dormer	
3.8	Roof & Bay	
3.9	Chimney Stack	
3.10	Item Not Used	
3.11	Chimney Stack	
3.12	Roof & Chimney Stack	
3.13	Roofs	
3.14	Bay	
3.15	Roof Voids	
3.16	Contractors' Own Additions	
TOTAL (excluding VAT)		£

5.0 FORM OF TENDER

16-17 High Street
Tring
Hertfordshire
HP23 5AH

I/We.....
..... having visited the
site and examined the scope of works, hereby Tender and undertake to execute and complete
all the works required in accordance with the various Conditions of Contract and the
Specification of Works, for the sum of:
in words.....
in figures.....
exclusive of VAT.

I/We can commence the works on and require
..... weeks to complete the works.

This Tender remains open for consideration for 12 weeks from the date fixed for submission.

I/We understand that the Employer is not bound to accept the lowest or any Tender.

Dated this.....day of..... 20

Name.....

Signature.....

This completed 'Form of Tender' and priced Specification of Works are to be returned to
Brasier Freeth, Welwyn Garden City office, no later than **noon** on **Friday 19th April 2024**.

APPENDIX I - Promap

APPENDIX II –Marley Ashdowne Handcrafted



ASHDOWNE HANDCRAFTED

Now with subtle, distressed edges.

Each tile is uniquely beautiful but with all the benefits of machine-made clay tiles.



THE BEAUTY OF ASHDOWNE... WITH ADDED EDGE

Advances in processing technology now give Ashdowne tiles subtle distressed edges and irregularities, replicating a hand-made tile aesthetic.

The evolution of this popular tile allows a unique, hand-made look, yet with all the benefits and cost effectiveness of a machine-made tile.

The Ashdowne range is fully compatible with the Marley full roof system, complemented by a range of fittings and accessories, and covered by a 15-year guarantee.



COLOUR AVAILABILITY



TECHNICAL DATA

Size of tile	265mm x 165mm	
Minimum pitch*	35°	
Maximum pitch	90°	
Minimum headlap	Roof	65mm
	Vertical	35mm
Maximum gauge	Roof	100mm
	Vertical	115mm
Tile thickness	11mm (nominal)	
Cover width	165mm (nominal)	
Covering capacity (net)	Roof	60 tiles/m ² at 100mm gauge
	Vertical	53 tiles/m ² at 115mm gauge
Weight of tiling (approx.)	Roof	65kg/m ² (0.64 kN/m ²) at 100mm gauge
	Vertical	57kg/m ² (0.56 kN/m ²) at 115mm gauge
Battens required (net)	Roof	10.0 lin.m/m ² at 100mm gauge
	Vertical	8.7 lin.m/m ² at 115mm gauge
Batten size recommended (fixed to BS 5534)	38 x 25mm for rafters/supports not exceeding 600mm centres	
Tile nails	38mm x 2.65mm	
Authority	BS EN 1304	

* The minimum recommended pitch and lap may be influenced by special circumstances, please contact the Technical Advisory Service for further information.

PRODUCT INFORMATION

Tile camber
Single camber



Feature tiles

Available in a range of colours. For advice on the use of feature tiles in main roof areas, contact the Technical Advisory Service.



Bullnose



Club

SUSTAINABILITY

Green guide rating**	A+
BES 6001	Excellent

** Element Ref: 812410006


Tell me more

bf.

brasierfreeth.com

London. Kings Langley. Welwyn Garden City.

