EMPLOYERS REQUIREMENT

Of

Greenspace and Public Realm Enhancements

At

Kerrier Way, Camborne

For

Camborne Town Council

Project No: CH19433
Date: 20/01/2024
Issue No: 1
Revision No: -

KERRIER WAY, CAMBORNE

EMPLYER'S REQUIREMENTS

Contents

SECTION 1

INSTRUCTIONS TO TENDERERS

Instructions and Notes to Tenderers

1. The Invitation to Tender (ITT) document is the primary reference for the tender process and takes precedence to the ER document for the tender.

2. The Employer's Requirement (ER) document is the primary reference for the delivery of the works and takes precedence to the ITT in relation to the works.

3. Tenders for the execution of the whole of the works which are the subject of the Contract must be made on the Form of Tender in the ITT.

4. This Employer's Requirements Document, fully extended and completed, must be returned with the tender.

5. Any alteration or addition made by the Contractor to the text of the Employer's Requirements Document will be disregarded, unless authorised in writing by the Employer's Agent. If, for whatever reason, the tenderer is unable to comply fully with the Employer's Requirements then a list detailing the areas of non-compliance must be returned with his tender.

6. The successful Contractor will be entirely and solely responsible to the Employer for the design of any Contractor Designed Portions (CDP) of work and construction of the Works, all costs associated therewith must be included within his tender.

7. The tender is to be submitted on a fixed price basis. No adjustments will be made by virtue of increases or decreases in labour or material costs.

8. All values expressed within the tender are to be exclusive of V.A.T. Where V.A.T. is charged it will be at the rate prevailing at the time as appropriate.

9. The employer does not bind himself to accept the lowest or any tender and will not meet any costs associated with tender preparation, submittal or review.

10. The submitted tenders will be arithmetically checked, and if necessary, corrected. The summation of all figures will be taken as the tender figure. No reference will be made to the tenderer. Where examination of tenders reveals errors or discrepancies which would affect the tender figure, in an otherwise successful tender, the tenderer is to be given details of such errors and discrepancies and afforded an opportunity of confirming his rates or withdrawing his tender.

11. The Contractor will be required to submit with his tender adequate drawings and specification information to enable an assessment of the CDP works.

12. Queries made to the tender must be made as set out in the ITT and will be incorporated into the ER document for the tender documents.

13. Tenders shall be accompanied by a preliminary outline programme of works, consisting of a bar chart, showing the estimated time period set against the major elements: -

    13.1 Preparation of drawings for CDP elements.
    13.2 Dates for Employer supplied design and information.
    13.3 Construction programme.
    13.4 Completion and handover.

    The successful Contractor will be totally responsible for reviewing and amending his preliminary programme, as necessary, and providing a fresh programme showing in detail his finally proposed timetable for completing the Works.

SECTION 2

PRELIMINARIES

			Fixed Charge £	p		Time Related £	p
	A10 PROJECT PARTICULARS						
A	**THE PROJECT:** Name: Kerrier Way Nature: Remediation and landscaping development work including hard and soft surface landscaping, the installation of associated street furniture and landscape features. Location: Kerrier Way , Camborne. Length of Contract: 31 Weeks	Itm					
B	**EMPLOYER:** Camborne Town Council, Passmore Edwards Library, The Cross, Cross St, Camborne TR14 8HA.	Itm					
C	**QUANTITY SURVEYOR:** Crossley Hill Chartered Surveyors, 5 Frances Street, Truro, Cornwall, TR1 3DN.	Itm					
D	**CONTRACT ADMINISTRATOR:** Crossley Hill Chartered Surveyors, 5 Frances Street, Truro, Cornwall, TR1 3DN.	Itm					
E	**PRINCIPAL DESIGNER:** Crossley Hill Chartered Surveyors, 5 Frances Street, Truro, Cornwall, TR1 3DN.	Itm					
F	**ARCHITECT:** Mei Loci, Studio G2, Old Bakery Studios, Blewetts Wharf, Malpas Rd, Truro TR1 1QH	Itm					
G	**STRUCTURAL ENGINEER:** MBA Consulting Engineers, Boscawen House, Chapel Hill, Truro, Cornwall TR1 3BN.	Itm					
H	**THE PRINCIPAL CONTRACTOR:** The Contractor shall mean the individual, firm or company undertaking the Works and shall include the legal personal representative of such individual, or of the persons comprising such firm or company and the permitted assignees of such individual, firm or company.	Itm					

			Fixed Charge £	p		Time Related £	p
	A11 TENDER AND CONTRACT DOCUMENTS						
A	**THE TENDER DRAWINGS**: Are included at Appendix B, D and O.	Itm					
B	**THE CONTRACT DRAWINGS** will be as the tender drawings.	Itm					
C	**PRECONSTRUCTION INFORMATION: I**s included at Appendix A.	Itm					
D	**OTHER TENDER INFORMATION**: Are included at Sections 001, 002, Appendix C, E – N, P – R and the ITT Document Volume 1, 2A and 2B.	Itm					
	001/2 To Collection	£			£		

			Fixed Charge			Time Related	
			£	p		£	p
	A12 THE SITE/EXISTING BUILDINGS						
A	**THE SITE:** Two plots of land either side of the Kerrier Way highway (Three words: laptop.outsize.overjoyed) as identified within the red line boundaries on Architect's Drawing M580/DR-L-1001/05 (Appendix B).	Itm					
B	**EXISTING BUILDINGS/FEATURES ON/ADJACENT TO THE SITE**: The land is currently a brown field site which has been left untended for many years, since the demolition of the buildings once home to operations for Holman Brothers Ltd, former world leaders in mining and engineering. The site is bisected by the Kerrier Way highway adjacent a busy roads, a controlled crossroads and a roundabout. The surrounding area is a residential area, supermarket and supermarket petrol station and a nearby school. The Contractor shall have absolute consideration for all neighbours during the construction. The Contractor will take all necessary protection to the existing structures and hard and soft landscape throughout the Works and in particular protection of the trees. Trees, hedges and plants shown in the landscaping scheme to be retained or planted which, during the development works, are removed without prior written consent from the Local Planning Authority or die, become seriously diseased or are damaged, shall be replaced in the first available planting season with others of such species and size as the Authority may specify at the cost of the Contractor. The Contractor is to execute his Works and arrange for deliveries to and removals from the site so as to comply with the following requirements and cause the minimum of inconvenience to neighbours and general public, employ all necessary protective measures to ensure that no damage whatsoever occurs whilst building operations are in progress.: • All deliveries and unloading of all the materials shall be undertaken on the site. • Immediate neighbours and also residents of the area should be notified in advance of any particular intense days of traffic movements. • You should ensure that any damage to the road-side verges, footways, and highways is avoided and if any occurs shall be reinstated promptly. • At no time shall mud, other materials and excess water be spread on the road.	Itm					
C	**EXISTING UTILITIES AND SERVICES**: Existing utility and services infrastructure is identified with the tender information Appendices A, C and G. The Contractor will be required to undertake site visits to establish the location of existing mains and services, necessary to complete the works. It is the Contractor's responsibility to ascertain the precise location of and safeguard from damage during the Works any existing services, etc., which exist within the work area and pay all costs to the appropriate body in respect of any damage caused. The Contractor will be responsible for the design of all temporary works, temporary terminations, permanent terminations, re-routing of services and re-connections in all phases. This is to include agreement of designs, proposals, programmes, wayleaves, timing of orders and management of the subcontractor and relevant utility company. No claims in this respect will be entertained.	Itm					
D	**ACCESS TO THE SITE:** Access to each site is to be agreed with the Employer and Contract Administrator prior to commencing works. Any planned changes are to be identified on the Contractor's Programme and confirmed at the Progress Meeting prior to change. All Contractors' vehicles will be restricted to a 5 mph speed limit within the site boundary. The access points to the designated site and site compound areas are to remain securely closed at all times when the accesses are not in use. All roads and paths, etc. bordering and approaching the site must be kept clean and clear of all vehicles, building plant, materials and rubbish at all times. The site is located within a residential area and the Contractor will need to carefully manage the works to avoid any disturbance or disruption to the residents. And to reasonably prevent ingress out of site hours.	Itm					
	001/3 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A12 THE SITE/EXISTING BUILDINGS (CONT'D)						
A	**PARKING:** The Contractor is to restrict all parking to within the construction site boundary. Temporary parking areas are to be provided by the Contractor. All temporary works are to be returned in accordance with the Landscape design.	Itm					
B	**USE OF THE SITE:** Do not use the site for any purpose other than carrying out the Works.	Itm					
C	**SITE VISIT:** Before tendering, ascertain the nature of the site, the type and extent of the works, access thereto and all local conditions and restrictions likely to affect the execution of the Works. The Contractor shall be deemed to have visited the site before tendering and to have satisfied himself as to the means of communication, access to the site, the extent and nature of the work and the site, the conditions under which work will be carried out, conditions affecting the supply of labour and materials, and any matters which may affect his tender as no claims on the grounds of lack of knowledge in this respect will be entertained. Appointments for visiting the site are to be made with Phil Crossley on 07932 093 530.	Itm					
D	**WORKING AREA:** The Contractor shall confine his stores and everything pertaining to the contract within the site and site compound areas. The site compound area for material storage is to be agreed with the CA prior to commencing works. The Contractor is to allow for making good any damage to the working space, storage areas and surroundings disturbed during the works.	Itm					
E	**TRAFFIC MANAGEMENT:** The Contractor is to allow to provide a traffic management plan for all traffic activities to and from the site. The traffic management plan must clearly show how the conditions set out in 001/3B and 3D are to be managed including an issue mitigation process should there be any breach by a subcontractor or contractor employee. The contractor is to also include for a banksman for all vehicular activates outside of the site compound.	Itm					
	001/4 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A13 DESCRIPTION OF THE WORKS						
A	**THE WORKS:** Key elements of the landscape works include: • Groundworks (cut and fill) to produce a grassed amphitheatre in the east greenspace and informal terracing in the west. • Remediation works through capping the site with clean imported material. • Creation of paths and paved seating areas. • Creation of Cornish hedges alongside Kerrier Way and Perryway. • Installation of landscape furniture and features, including benches, seating walls and bespoke gateway art/features. • Soft landscaping including seeding, amenity planting, boundary planting and tree planting. • Establishment maintenance for 1 year.	Itm					
B	**WORK BY OTHERS CONCURRENT WITH THE CONTRACT:** Artwork Design for the precast concrete benches identified in Section 002 and Appendix B. A Defined Provisional Sum for these works is included in the Section 002 and the Contractor shall coordinate with the Employer to ensure that the key dates for delivery of the design in order to fulfil the key dates in the programme are notified in writing in reasonable time.	Itm					

			Fixed Charge £	p		Time Related £	p
	A20 THE CONTRACT						
A	**JCT INTERMEDIATE BUILDING CONTRACT WITH CONTRACTOR'S DESIGN (ICD):** The Contract: is the JCT Intermediate Building Contract with Contractor's Design, 2016 Edition. The acceptance of any tender will be provisional pending execution of the above Form of Contract. Allow for the obligations, liabilities and services described therein against the headings below: **THE RECITALS** First Recital THE WORKS Comprises: Remediation and landscaping development work including hard and soft surface landscaping, the installation of associated street furniture and landscape features. Location: Kerrier Way, Camborne. Second Recital CONTRACTOR'S DESIGNED PORTION The works include the design and construction of: 1. Temporary works. 2. Protection Works. 3. Site boundary during the works. 4. Bespoke concrete walls. 5. Cornish hedges. 6. Bases for art works. 7. Gateway features including bases. 8. Bespoke tree planters. 9. Utility and drainage temporary works. Third Recital CONTRACT DRAWINGS The Contract drawings: As included in Appendix B, D and O of the tender document and any such drawings provided by the Contractor for the Contractor Designed Portions. Fourth Recital OTHER DOCUMENTS SUPPLIED BY THE EMPLOYER Comprise: As included in Sections 001, 002, Appendix C, E – N, P – R and the ITT Document Volume 1, 2A and 2B. Fifth Recital PRICING BY THE CONTRACTOR Option A will apply: Option B will be deleted. Priced document: The Employer has provided the Contractor with a Work Schedule document for pricing. Ninth Recital: INFORMATION RELEASE SCHEDULE: The Ninth Recital will be deleted. Eleventh Recital: DIVISION OF THE WORKS INTO SECTIONS: The Eleventh Recital will be deleted. The Works are not divided into Sections. Twelfth Recital: FRAMEWORK AGREEMENT: Framework agreement: Does not apply. **THE ARTICLES** Article 3 CONTRACT ADMINISTRATOR: Contract Administrator: See clause A10/D Article 4 QUANTITY SURVEYOR: Quantity Surveyor: See clause A10/C.	Itm					

			Fixed Charge £	p		Time Related £	p
	A20 THE CONTRACT (CONT'D)						
	THE ARTICLES (CONT'D)						
	Articles 5 PRINCIPAL DESIGNER: Principal Designer: See clause A10/E.						
	Articles 6 PRINCIPAL CONTRACTOR: Principal Contractor: See clause A10/I.						
	Articles 8 ARBITRATION: Article 8 and clauses 9.3 to 9.8 apply.						
	CONTRACT PARTICULARS						
	Fourth Recital EMPLOYER'S REQUIREMENTS: Comprise: Document annotated "Employer's Requirements" including Sections 001, 002, Appendices A – R inclusive and ITT Document Volumes 1, 2A and 2B.						
	Sixth Recital CONTRACTOR'S PROPOSALS/CDP ANALYSIS: Comprise: To be completed by the Contractor and supplied with the Tender.						
	Eighth Recital and Clause 4.6 CONSTRUCTION INDUSTRY SCHEME (CIS) Employer at the base date is not a "Contractor" for the purposes of the CIS.						
	Tenth Recital CDM REGULATIONS: The project is notifiable.						
	Eleventh Recital DESCRIPTION OF SECTIONS: The Eleventh Recital will be deleted. The Works are not divided into Sections.						
	Twelfth Recital FRAMEWORK AGREEMENT: Framework agreement: Does not apply.						
	Thirteenth Recital and Schedule 5 SUPPLEMENTAL PROVISIONS: Collaborative working: Paragraph 1 applies Health and safety: Paragraph 2 applies Cost savings and value improvements: Paragraph 3 applies Sustainable developments and environmental considerations: Paragraph 4 applies Performance indicators and monitoring: Paragraph 5 does not apply Notification and negotiation of disputes: Paragraph 6 applies						
	Article 8 ARBITRATION Article 8 and clauses 9.3 to 9.8 apply.						
	Clause 1.1 BASE DATE Base Date: 10 days before the date for return of tenders.						
	Clause 1.1 BIM PRTOCOL There is no BIM Protocol						
	Clause 1.1 DATE FOR COMPLETION OF SECTIONS Date for Completion of the Works: 29th November 2024						
	Clause 1.7 ADDRESSES FOR SERVICE OF NOTICES Employer: See clause A10/B. Contractor: To be advised by Contractor.						
	001/7 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A20 THE CONTRACT (CONT'D)						
	CONTRACT PARTICULARS (CONT'D)						
	Clause 2.4 DATE OF POSSESSION OF THE SITE Date of Possession of the site: 6th May 2024.						
	Clause 2.5 DEFERMENT OF POSSESSION OF THE SITE Clause 2.4 applies. Maximum period of deferment is 6 weeks.						
	Clause 2.23.2 LIQUIDATED DAMAGES: Damages: At the rate of: £461.50 per week or part thereof.						
	Clause 2.30 RECTIFICATION PERIOD: Period: 12 months from Practical Completion.						
	Clause 2.34.3 CONTRACTOR'S DESIGNED PORTION Level of cover: Amount of Indemnity required: - is the aggregate amount for any one period of insurance. - and is £2,000,000.00. Sub limits within the overall level of cover: - cover for pollution and contamination claims: is required, with a limit of indemnity of £2,000,000.00. - Cover for asbestos claims: is not required. - Cover for fungal mould claims: is required. Expiry of required period of CDP Professional Indemnity Insurance: 12 years.						
	Clause 4.3 and 4.9 FLUCTUATIONS PROVISION: No fluctuations provision applies.						
	Clause 4.7 ADVANCE PAYMENT AND ADVANCE PAYMENT BOND Advance payment: Clause 4.7 does not apply and advance payment bond is not required.						
	Clause 4.8.1 INTERIM PAYMENTS – INTERIM PAYMENT DATES.: Interim Valuation Dates: The first Interim Valuation Date is: One month after the Date of Possession. Thereafter at intervals of: 1 month.						
	Clause 4.9.1 INTERIM PAYMENTS – PERCENTAGE OF VALUE • Not achieved practical completion: Where the works have not achieved practical completion, the percentage of total value in respect of the works that have not achieved practical completion is 95% • Completed works: Where the works have achieved practical completion, the percentage in respect of the completed works is 97.5%						
	Clause 4.10.4 LISTED ITEMS – UNIQUELY IDENTIFIED Listed items: Clause 4.10.4 and 4.10.5 will be deleted						
	Clause 6.4.1 CONTRACTOR'S PUBLIC LIABILITY INSURANCE - INJURY TO PERSONS OR PROPERTY: Insurance cover (for any one occurrence or series of occurrences arising out of one event): £2,000,000.00						
	001/8 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A20 THE CONTRACT (CONT'D)						
	CONTRACT PARTICULARS (CONT'D)						
	Clause 6.5.1 INSURANCE – LIABILITY OF THE EMPLOYER Minimum amount of indemnity for any one occurrence or series of occurrences arising out of one event: £2,000,000.00.						
	Clauses 6.7 and Schedule 1 INSURANCE OF THE WORKS – INSURANCE OPTIONS Schedule 1: Insurance option A applies. Percentage cover professional fees: 15 per cent. Option A applies, annual renewal date (as supplied by the Contractor): To be advised by Contractor.						
	Clauses 6.10 and Schedule 1 TERRORISM COVER Insurance is not required.						
	Clause 6.15 JOINT FIRE CODE The Joint Fire Code: Does not apply. The Contractor is to confirm this prior to starting works.						
	Clause 6.19 CONTRACTOR'S DESIGN PORTION – PROFESSIONAL INDEMNITY INSURANCE Refer to Clause 2.34.3						
	Clause 7.2.1 and 7.2.2 PARENT COMPANY GUARANTEE OR PERFORMANCE BOND OR GUARANTEE The Contractor shall within 14 days of the date of this Contract deliver to the Employer a Parent Company Guarantee duly executed by it's ultimate parent company. A proposed format is to be included within the Contractor's Proposal returned with the tender. If the Contractor does not have a parent company, or does not have a parent company reasonably acceptable to the Employer, the Contractor will procure that a guarantor enters into a performance bond in favour of the Employer for an amount equal to 10% of the Contract Sum (rounded down to the nearest whole number). A proposed format is to be within the Contractor's Proposal returned with the tender.						
	Clause 7.3 COLLATERAL WARRANTIES Subcontractors: All elements of Contractor Designed Work identified in the Second Recital Types of warranty required from each subcontractor: JCT Subcontractor Collateral Warranty for the Employer (SCWa/E) Level of Professional Indemnity Insurance required: £1,000,000.00 (One Million Pounds)						
	Clause 8.9.2 PERIOD OF SUSPENSION (TERMINATION BY CONTRACTOR) Period of suspension 2 Months						
	Clause 8.11.1.1 to 8.11.1.5 PERIOD OF SUSPENSION (TERMINATION BY EITHER PARTY) Period of suspension 2 Months						
	Clause 9.2.1 ADJUDICATION The adjudicator is: To be appointed by Nominating body. Nominating body: Royal Institution of Chartered Surveyors.						
	Clause 9.4.1 ARBITRATION Appointer of Arbitrator (and of any replacement): President or Vice President of the Royal Institution of Chartered Surveyors.						
	001/9 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A20 THE CONTRACT (CONT'D)						
	THE CONDITIONS						
	SECTION 1: DEFINITIONS AND INTERPRETATION						
	Clause 1.5 RECKONING PERIODS OF DAYS:						
	Amendments: none.						
	Clause 1.12 APPLICABLE LAW: Amendments: none.						
	SECTION 2: CARRYING OUT THE WORKS						
	SECTION 3: CONTROL OF THE WORKS						
	SECTION 4: PAYMENT						
	SECTION 5: VARIATIONS SECTION 6: INJURY, DAMAGE AND INSURANCE						
	SECTION 7: ASSIGNMENT AND COLLATERAL WARRANTIES						
	SECTION 8: TERMINATION						
	SECTION 9: SETTLEMENT OF DISPUTES						
	EXECUTION: The Contract: Will be executed as a deed.						
	CONTRACT GUARANTEE BOND: Contract Guarantee Bond: is not required.						
A	**ADMINISTRATION OF INSTRUCTIONS REQUIRING CHANGES:** The Contractor is to allow within his tender all costs associated in administering the Contract, including (but not restricted to) provision of sufficient administration, technical and financial personnel required for preparing change quotations, back-up documentation and compensation event negotiation, reproduction of drawings and other documents, for his own use and the use of sub-contractors, etc. No claim for additional cost in connection with this clause will be entertained.	Itm					

			Fixed Charge £	p		Time Related £	p
	A30 TENDERING/SUBLETTING/SUPPLY						
	MAIN CONTRACT TENDERING						
A	**SCOPE:** These conditions are supplementary to those stated in the invitation to tender and on the form of tender. The overarching Invitation to Tender (ITT) takes precedence to all tender documents.	Itm					
B	**TENDERING PROCEDURE:** In accordance with JCT Tendering Practice Note 2012 for Construction projects. Errors: Alternative 1 is to apply. The Contractor's attention is drawn to the fact that the tender is to be submitted on a fixed price basis.	Itm					
C	**EXCLUSIONS:** If the Contractor cannot tender for any part(s) of the work he must inform the Contract Administrator as soon as possible, defining the relevant part(s) and stating the reason(s) for his inability to tender.	Itm					
D	**ACCEPTANCE OF TENDER:** The Employer and his representatives: Offer no guarantee that the lowest or any tender will be recommended for acceptance or accepted. Will not be responsible for any cost incurred in the preparation of any tender. Any acceptance of the tender will be subject to the execution of the formal Form of Contract, and to the receipt of any approval necessary for the work. No payment will be made for loss of profit or other alleged loss due to such approval being withheld, postponed or withdrawn prior to the signing of the contract documents.	Itm					
E	**PERIOD OF VALIDITY:** Tenders must remain open for consideration (unless previously withdrawn) for not less than three months from the date fixed for the submission or lodgement of tenders.	Itm					
	PRICING/SUBMISSION OF DOCUMENTS						
F	**PRELIMINARIES:** The Preliminaries/General Conditions sections must not be relied upon as complying with SMM7.	Itm					
G	**PRICING OF PRELIMINARIES:** If the Contractor requires interim payments to include fixed and time related charges for specific items in the Preliminaries those charges must be clearly shown against the items.	Itm					
H	**PRICED DOCUMENTS:** Do not alter or qualify tender documents without written consent. Tenders containing unauthorised alterations or qualifications may be rejected.	Itm					
I	**QUANTITIES IN THE PRICED DOCUMENT:** Where quantities are included within the Bill of Quantities/ Schedule of Works/ Work Schedules the Contractor is to note that such quantities have not been prepared in accordance with SMM7or any other standard form of measurement and that they are prepared in accordance with the Preambles and other pricing notes included in the documentation. The Contractor is to satisfy himself as to the accuracy of any such quantities and make any necessary amendments. For the avoidance of doubt no adjustment to the contract sum will be made for any errors or inaccuracies in any quantities included within the Bill of Quantities/ Schedule of Works/ Work Schedules. All items within the Bill of Quantities/ Schedule of Works/ Work Schedules must be priced taking into account the drawings, specifications and all other documents provided as part of the tender documents and include for all associated and ancillary works shown or clearly apparent as being necessary for the complete and proper execution of the work.	Itm					
J	**TENDER:** Tenders must include for all work shown or described in the tender documents as a whole or clearly apparent as being necessary for the complete and proper execution of the Section 1 Works in the first tender and for the Section 2 Works on agreement of an overall Contract Sum.	Itm					
K	**PRICING OF THE WORKS SCHEDULE:** Costs relating to items which are not priced will be deemed to have been included elsewhere in the tender.	Itm					
L	**PROGRAMME:** Prepare a summary programme showing the sequence and timing of the Sections and principal elements of the works and periods for the design, all of which must be submitted **with the tender**.	Itm					
	001/11 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A30 TENDERING/SUBLETTING/SUPPLY (CONT'D)						
	MAIN CONTRACT TENDERING (CONT'D)						
A	**PROVISIONAL ALLOWANCES:** If Provisional allowances are stated these will be omitted from the Contract at the commencement of the Works, they will only be used as and when directed by the Contract Administrator and will be measured and valued on completion in accordance with the Conditions of Contract.	Itm					
B	**MATERIALS:** The Contractor shall satisfy himself generally as to the requisite materials, both quantity and quality required, so as to make due and proper completion of the works, and shall be deemed to be conversant with the availability of labour and materials and to have made allowance accordingly. The Contractor is to ascertain for himself the delivery periods of various materials and items required for the contract at its commencement. He is to place his orders to ensure that the sequence of works may not be interrupted by the failure of such items or materials to be delivered on time.	Itm					
C	**SUBSTITUTE PRODUCTS:** If products of different manufacture to those specified are proposed, submit details with the tender giving reasons for each proposed substitution. Substitutions, which have not been notified at tender stage, may not be considered. Substitutions accepted will be subject to the verification requirements of Section A31.	Itm					
D	**OUTLINE CONSTRUCTION PHASE HEALTH AND SAFETY PLAN:** Content – submit the following information with 1 week of request: - Method statements on how risks from hazards identified in the pre-construction information and other hazards identified by the contractor will be addressed. - Details of the management structure and responsibilities. - Arrangements for issuing health and safety directions. - Procedures for informing other contractors and employees of health and safety hazards. - Selection procedures for ensuring competency of other contractors, the self-employed and designers. - Procedures for communications between the project team, other and contractors and site operatives. - Arrangements for co-operation and co-ordination between contractors. - Procedures for carrying out risk assessment and for managing and controlling the risk. - Emergency procedures including those for fire prevention and escape. - Arrangements for ensuring that all accidents, illness and dangerous occurrences are recorded. - Arrangements for welfare facilities. - Procedures for ensuring that all persons on site have received relevant health and safety information and training. - Arrangements for consulting with and taking the views of people on site. - Arrangements for preparing site rules and drawing them to the attention of those affected and ensuring their compliance. - Monitoring procedures to ensure compliance with site rules, selection and management procedures, health and safety standards and statutory requirements. - Review procedures to obtain feedback.	Itm					
E	**SITE WASTE MANAGEMENT PLAN:** Person responsible for drafting the plan: The Contractor. The content of the plan shall include details of: - The Principal Contractor for the purposes of the Regulations (Clean Neighbourhoods and Environment Act) - Location of the site. - Description of the project. - Estimated project cost. - Types and quantities of waste that will be generated. - Resource management options for these wastes, including proposals for minimisation/re-use/recycling. - The use of appropriate and licensed waste management contractors. - Record keeping procedures. - Waste auditing protocols. - Submit with tender.	Itm					

			Fixed Charge £	p		Time Related £	p
	SUBLETTING/SUPPLY						
A	**DOMESTIC SUB-CONTRACTS:** Comply with the Construction Industry Board "Code of Practice for the selection of Sub-Contractors".	Itm					
B	**SUB-LETTING:** The Contractor shall not sub-let the works or any part thereof without the written permission of the Contract Administrator. The Contractor will be required to submit for approval a list of firms it is proposed to employ as Domestic Sub-Contractors for trade and specialist work. Names of firms for main element works including mechanical and electrical sub-contracts are to be submitted for approval no later than the Pre-Contract Meeting. No order to commence works will be issued until such names have been submitted and approved.	Itm					
	A31 PROVISION, CONTENT AND USE OF DOCUMENTS						
C	**DEFINITIONS:** The meaning of terms, derived terms and synonyms used in the Preliminaries/General Conditions and Specification is as defined below or in the appropriate British Standard or British Standard glossary.	Itm					
D	**THE WORKS:** Definition: The term 'the works' shall mean the whole of the works envisaged by this contract, including unless expressly stated otherwise, the works of nominated sub-contractors, nominated suppliers, local authorities and public undertakings.	Itm					
E	**IN WRITING:** When required to notify, inform, instruct, agree, confirm, obtain information, obtain approval or obtain instructions; do so in writing. Do not proceed until response has been received.	Itm					
F	**APPROVAL (AND WORDS DERIVED THEREFROM)** means the approval in writing of the Contract Administrator unless specified otherwise.	Itm					
G	**SUBMIT (AND WORDS DERIVED THEREFROM)** means to the Contract Administrator unless otherwise instructed.	Itm					
H	**PRODUCTS** means materials (including naturally occurring materials) and goods (including components, equipment and accessories) intended for permanent incorporation in the Works.	Itm					
I	**SITE EQUIPMENT:** All appliances or things, of whatsoever nature required in or about the construction for completion of the Works but not materials or other things intended to form or forming part of the Permanent Works. Including Construction appliances, vehicles, consumables, tools, temporary works, scaffolding, cabins and other site facilities.	Itm					
J	**TERMS USED IN SCHEDULE OF WORKS:** Remove: Disconnect, dismantle as necessary and take out the designated products or work and associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials. Excludes taking out and disposing of associated pipework, wiring, ductwork or other services. Fix: Unload, handle, store, place and fasten in position including all labours and use of site equipment. Supply and fix: Includes all labour and site equipment for unloading, handling, storing and execution. All products to be supplied and fixed unless stated otherwise. Keep for reuse: Do not damage designated products or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer or for use in the Works as instructed. Make good: Execute local remedial work to designated work. Make secure, sound and neat excludes redecoration and/or replacement. The meaning of the term shall not be limited by this definition where used in connection with the rectification/defects liability provisions of the Contract. Replace: Supply and fix new products matching those removed. Execute work to match original new state of that removed. Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and/or replacement.	Itm					
	001/13 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A31 PROVISION, CONTENT AND USE OF DOCUMENTS (CONT'D)						
	TERMS USED IN SCHEDULE OF WORKS (CONT'D):						
	Refix: Fix removed products.						
	Ease: Adjust moving parts of designated products or work to achieve free movement and good fit in open and closed positions.						
	Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.						
	System: Equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.						
A	**THE COSTS** of conforming to the above definitions, and their meaning and extent, are deemed to be included in the rates for associated measured work.	Itm					
B	**MANUFACTURER AND REFERENCE:** Where used in this combination:	Itm					
	'Manufacturer' means the firm under whose name the particular product is marketed.						
	'Reference' means the proprietary brand name and/or reference by which the particular product is identified.						
	'Currency': references are to the particular product as specified in the manufacturer's technical literature current on the date of the invitation to tender.						
	Manufacturers and reference where given are to indicate the quality, finish, appearance and performance requirements for the product and shall be deemed to be 'or equivalent and approved'. If the Contractor wishes to use an alternative and equivalent product the Contract Administrators prior to approval must be obtained.						
	In all cases the Contractor shall be deemed to have included for the cost of providing the specified product in this tender price.						
C	**SUBSTITUTION OF PRODUCTS** Products: if an alternative product to that specified is proposed, obtain approval before ordering the product. Reasons: submit reasons for the proposed substitution. Documentation: submit relevant information, including manufacturer and product reference, cost, availability, relevant standards, performance, function, compatibility or accessories, proposed revisions to drawings and specification, compatibility with adjacent work, appearance and copy of warranty/guarantee. Alterations to adjacent work: if needed, advise scope, nature and cost. Manufacturer's guarantees: if substitution is accepted, submit before ordering products.	Itm					
D	**CROSS-REFERENCES TO THE SPECIFICATION:** Where a numerical cross-reference to a Specification section or clause is given on drawings or in any other document the Contractor must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section or clause. Where a numerical cross-reference is not given the relevant section(s) and clause(s) of the Specification will apply, cross-reference thereto being by means of related terminology.	Itm					
	Where a cross-reference for a particular type of work, feature, material or product is given, relevant clause(s) elsewhere in the referred to Specification section dealing with general matters, ancillary products and workmanship also apply.						
	The Contractor must before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity which he may discover.						

			Fixed Charge £	p		Time Related £	p
	A31 PROVISION, CONTENT AND USE OF DOCUMENTS (CONT'D)						
A	**EQUIVALENT PRODUCTS:** Where the specification permits substitution of a product of different manufacture to that specified and such substitution is desired, before ordering the product notify the Contract Administrator and, when requested, submit for verification documentary evidence that the alternative product is equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. Submit certified English translations of any foreign-language documents. Any proposal for use of an alternative product must also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole. If such substitution is sanctioned, and before ordering products, provide revised drawings, specifications and manufacturer's guarantees as required by the Contract Administrator.	Itm					
B	**SUBSTITUTION OF STANDARDS**: Where any product is specified to comply with a British Standard for which there is no equivalent European Standard it may be substituted by a product complying with a grade or category within a national standard of another Member State of the European Union or an international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. In advance of ordering notify the Contract Administrator of all such substitutions and, when requested, submit for verification documentary evidence confirming that the products comply with the specified requirements. Any submitted foreign language documents must be accompanied by certified translations into English. Where any product is specified to comply with a British Standard for which there is no equivalent European Standard it may be substituted by a product complying with a grade or category within a national standard of another Member State of the European Union or an international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. In advance of ordering notify the Contract Administrator of all such substitutions and, when requested, submit for verification documentary evidence confirming that the products comply with the specified requirements. Any submitted foreign language documents must be accompanied by certified translations into English.	Itm					
C	**CURRENCY OF DOCUMENTS:** References to standards, type approval certificates, catalogues, codes of practice and the like are to the editions, revisions, versions and amendments current at the date of tender. References to BSI documents are to the versions and amendments listed in the BSI standards catalogue current at the date of tender.	Itm					
D	**SIZES:** Unless otherwise stated, products are specified by their co-ordinating sizes. Cross section dimensions of timber shown on drawings are finished sizes.	Itm					
	DOCUMENTS PROVIDED ON BEHALF OF EMPLOYER						
E	**DRAWINGS:** Will be issued in electronic format only.	Itm					
F	**SPECIFICATIONS AND REPORTS:** Will be issued in electronic format only	Itm					
G	**DIMENSIONS:** The accuracy of dimensions scaled from the drawings is not guaranteed. Obtain from the Contract Administrator any dimensions required but not given in figures on the drawings nor calculable from figures on the drawings. In addition, check dimensions and levels shown on drawings for compatibility with each other and with the site and work completed to date, and immediately inform the Contract Administrator of any discrepancy and seek his instructions. Where changes are required to drawings prepared by the Contractor or Sub-Contractors, arrange for the changes to be made and submit revised drawings for approval.	Itm					
	001/15 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A31 PROVISION, CONTENT AND USE OF DOCUMENTS (CONT'D)						
	DOCUMENTS PROVIDED BY CONTRACTOR/ SUBCONTRACTORS/SUPPLIERS						
A	**INSTALLATION DRAWINGS:** Obtain any fabrication, shop or installation drawings, instructions, etc, provided by manufacturers and suppliers of specified components, necessary for the correct installation of such components, to be included in the project handover file.	Itm					
B	**AS BUILT DRAWINGS AND INFORMATION:** Two copies must be provided to the Contract Administrator not less than 2 weeks before the date for Completion as follows: 1. Record drawings of as installed mechanical and electrical installations and circuit routes. All symbols shall be strictly in accordance with B.S.1553, and drawings will be cross-referenced for ease of interpretation. 2. As constructed general arrangement drawings, detailing plans, sections and elevations at not less than 1:50 scale. Site layouts at not less than 1:100 scale. 3. As constructed drawings, detailing plans and schedules for all below ground services and drainage at not less than 1:100 scale.	Itm					
C	**TECHNICAL LITERATURE:** The Contractor is to keep copies of the following on site, readily accessible for reference by all supervisory personnel: Manufacturers' current literature relating to all products to be used in the Works. Relevant B.S. Codes of Practice.	Itm					
D	**MAINTENANCE INSTRUCTIONS AND GUARANTEES:** Retain copies delivered with components and equipment (failing which, obtain), register with manufacturer as necessary and hand over to the Contract Administrator on or before Practical Completion. Provide telephone numbers for emergency call out services for use after completion. Cover to be provided during office hours and out of hours seven days a week during the Rectification period.	Itm					

			Fixed Charge £	p		Time Related £	p
	A32 MANAGEMENT OF THE WORKS						
	GENERALLY						
A	**SUPERVISION:** Accept responsibility for co-ordination, supervision and administration of the Works on and off the site, including all sub-contracts and the cost of the person-in-charge referred to in Conditions of Contract. Arrange and monitor a programme with each Sub-contractor, Supplier, Local Authority and Statutory Undertaker, and obtain and supply information as necessary for co-ordination of the work. It is an absolute requirement that the principle contractor provides site supervision of the works, who shall be in attendance on site for the whole period during which the works are being undertaken. The supervisors provided by the principal contractor shall be a full time employee of the firm and shall be suitably competent and experienced to supervise the type of works being undertaken.	Itm					
B	**INSURANCE:** Before starting work on site submit documentary evidence and/or policies and receipts for the insurance required by the Conditions of Contract.	Itm					
C	**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 Contract Administrator and the Insurers. Indemnify the Employer against any loss which may be caused by failure to give such notice.	Itm					
D	**OWNERSHIP:** Materials arising from the works are to become the property of the Contractor except where otherwise stated. Remove from site as work proceeds.	Itm					
E	**PROGRESS PHOTOGRAPHS:** The Contractor shall take such photographs as are necessary to record adequately the physical progress of the Works to the satisfaction of Contract Administrator who requires a full record of all work undertaken to be presented upon completion of the works.	Itm					
F	**CHECKING SCHEDULES AND DRAWINGS:** Submit to the Contract Administrator for approval all shop drawings prior to putting the work in hand. Be responsible for checking all schedules and drawings supplied by the Contract Administrator and all shop drawings commented upon by the Contract Administrator. In the event of any discrepancy being found between such schedules and drawings, or if the Contractor considers that additional detail drawings are required, then in either case the Contractor shall report such discrepancy to the Contract Administrator for instruction, or apply in writing for such detail drawings at least 10 days before the works concerned are to be executed. Ascertain from the drawings or otherwise, any holes, recesses, plugs and the like which may be required in time to form these as the works proceed. No extra payment will be allowed for cutting or forming such holes, recesses or plugs subsequently.	Itm					
G	**WASTE MANAGEMENT:** Keep the site and Works clean and tidy. Includes: Rubbish, debris, spoil, containers and surplus material. Minimize: Waste is to be kept to a minimum at all stages of the contract and arrange recycling wherever possible. The Contractor shall where practical segregate waste and provide suitable on site storage as appropriate to maximise the potential for reuse and recycling of materials and reduce disposal costs. Wherever possible the use of suitable excavated material on site is encouraged to minimise the need for disposal off site and the importation of fill material. Re-use of suitable material will be subject to prior approval and compliance with relevant material specification. Remove: Frequently and dispose off site in a safe and competent manner:- - Non-hazardous material: In a manner approved by the Waste Regulation Authority. - Hazardous material: As directed by the Waste Regulation Authority and in accordance with relevant regulations. - Voids and cavities in the construction: Remove rubbish, dirt and residues before closing in. Waste transfer documentation: Retain on site.	Itm					

			Fixed Charge £	p		Time Related £	p
	A32 MANAGEMENT OF THE WORKS (CONT'D)						
	GENERALLY (CONT'D)						
A	**GYPSUM AND PLASTERBOARD WASTE:** Separate gypsum based material and plasterboard from other waste so that it can be recycled or disposed of correctly. If in a mixed load gypsum based material and plasterboard must be separately packaged and identified for separation at waste transfer sites. It is prohibited for loads containing any identifiable gypsum or plasterboard waste to be sent to landfill.	Itm					
	PROGRAMME/PROGRESS						
B	**MASTER PROGRAMME:** As soon as possible, and within 5 days of the notification of acceptance of his tender, the Contractor is to prepare in an approved form a master programme for the Works, clearly identifying separately all phases, elements of the works and activities. 2 copies of the programme are to be provided to the Contract Administrator. The Master Programme shall be updated and modified from time to time as necessary or as required by the Contract Administrator in the light of progress actually achieved, or to allow for Contract Administrator's instructions, variations, or other relevant factors. The Contractor shall immediately notify the Contract Administrator of any such revisions and shall provide four copies of each revised programme. A copy of the original Master Programme and all revisions shall be kept available for inspection in the Contractor's site office.	Itm					
C	**SUBMISSION** of programmes will not relieve the Contractor of his responsibility to advise the Contract Administrator of the need for further drawings or details or Instructions in accordance with the Conditions of Contract.	Itm					
D	**MONITORING:** The Contractor is to record progress on a copy of the programme kept on site. If any circumstances arise which may affect progress of the Works, the Contractor must submit proposals, or take action as appropriate, to minimise any delay and to recover any lost time.	Itm					
E	**MINIMISING DELAY:** If any circumstances arise which may affect the progress of the Works, put forward proposals or take other action as appropriate to minimise any delay and to recover any lost time.	Itm					
F	**REQUESTS FOR FURTHER INFORMATION:** During the mobilisation period, the Contractor is required to examine the up to date information in his possession and prepare and issue to the Contract Administrator a schedule of further information which the Contractor requires to complete the project, together with realistic dates by when the information is required. The information may include instructions, drawings, levels, dimensions, etc. and the dates must not be unreasonably distant from or unreasonably close to the dates when it is necessary for the Contractor to receive the information, having regard to the dates in the master programme when the relevant works are to be carried out. No claim for late issue of information will thereafter be entertained provided all of the release dates for information set down in the schedule have been met. Notwithstanding the above, where an extension of time has been given, the release dates may be amended accordingly by consent between the Contractor and the Contract Administrator.	Itm					
G	**PHOTOGRAPHIC RECORDS** Provide photographic records of the condition of existing structures, public realm, highways and external areas to highlight existing defects / condition prior to the Contractor commencing the Works. Damage or defects on existing structures, public realm, highways and external areas on or adjacent to the site not recorded and, within reasonable conjecture, potentially caused by the works, will need to be addressed at completion along with other defects/ snags identified on the Contract Works. Image format: digital storage format (JPEG). Numbers of images from each location: sufficient to highlight condition.	Itm					
H	**CONTRACTOR'S SITE MEETINGS:** Hold meetings with appropriate Sub-Contractors and Suppliers shortly before main site meetings to facilitate accurate reporting of progress.	Itm					
I	**NOTICE OF COMPLETION:** Give the Contract Administrator at least 2 weeks written notice of the anticipated dates of Practical Completion of the Works.	Itm					
	001/18 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A32 MANAGEMENT OF THE WORKS (CONT'D)						
	PROGRAMME/PROGRESS (CONT'D)						
A	**CONTRACTOR'S PROGRESS REPORTS:** Submit a progress report at least 3 working days before the site meeting. The report must include: 1. A progress statement and progress against programme 2. Details any matters affecting or likely to affect progress of the works 3. Information required. 4. Any requirements for further drawings or details or instructions.	Itm					
B	**EXTENSIONS OF TIME:** When a notice of the cause of any delay or likely delay in the progress of the Works is given under the conditions of the contract, written notice must be given of all the causes which apply concurrently. As soon as possible submit relevant particulars of the expected effects, if appropriate, related to the concurrent causes. An estimate of the extent, if any, of the expected delay in the completion of the Works beyond the date for completion, together with all other relevant information required.	Itm					
C	**ADVERSE WEATHER:** Use all reasonable and suitable building aids and methods to prevent or minimise delays during adverse weather conditions.	Itm					
	CONTROL OF COST						
D	**ESTIMATED COST OF VARIATIONS:** If the Contract Administrator 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.	Itm					
E	**MEASUREMENTS:** Give reasonable notice to the Quantity Surveyor before covering up work which the Quantity Surveyor requires to be measured.	Itm					
F	**PROPOSED INSTRUCTIONS:** Quotations: If a proposed instruction requests and estimate of cost, submit without delay and in any case within seven days. Include: - A detailed breakdown of the cost, including any allowance for direct loss and expense. - Details of any additional resources required. - Details of any adjustments to be made to the programme for the Works. - Any other information as is reasonably necessary to fully assess the implications of issuing such an instruction. Inability to comply: Inform immediately if it is not possible to comply with any of the above requirements.	Itm					
G	**DAYWORK VOUCHERS:** Give reasonable notice to the Contract Administrator of the commencement of any work for which daywork vouchers are to be submitted. Before being delivered, each voucher must be: - Referenced to the instruction under which the work is authorised, and - Signed by the person in charge as evidence that the workmen's names, the time spent by each, the plant and materials shown are correct. No claims for work done on a daywork payment basis will be permitted unless under the written order of the Contract Administrator. The Contractor shall give to the Contract Administrator reasonable notice of the commencement of any such work ordered and shall submit proper daywork sheets signed by the person-in-charge describing the work involved and giving names, trades and time daily and the materials employed, to be delivered in duplicate, for the verification of the Contract Administrator, not later than the end of the week following that in which the work has been executed. One copy, if correct, will be signed by the Contract Administrator and returned to the Contractor. The signature to any daywork sheet is not to be taken as deciding that the work is to be paid for on a daywork payment basis, but vouching the time and materials to be correct for the work described. All work which is ultimately covered up must be recorded by the Quantity Surveyor before so doing and the Contractor must give reasonable notice to the Contract Administrator and the Quantity Surveyor when such work is ready for recording.	Itm					
	001/19 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A32 MANAGEMENT OF THE WORKS (CONT'D)						
	CONTROL OF COST (CONT'D)						
A	**INTERIM VALUATIONS:** At least 5 days before each interim valuation date, submit to the Quantity Surveyor details of amounts due under the Contract, together with all necessary supporting information.	Itm					
B	**UNFIXED MATERIALS:** At the time of each valuation disclose to the Quantity Surveyor which of the unfixed materials and goods on site are free from, and which are subject to, any reservation of title inconsistent with passing of property as required by the Conditions of Contract, together with their respective values. When requested provide evidence of freedom from reservation of title. Where evidence of freedom of reservation of title cannot be provided, the value of such items shall not be included in interim valuations.	Itm					
C	**OVERTIME:** The cost of all overtime necessary to complete the works by the agreed date must be allowed by the Contractor in his Tender. Under no circumstance will additional payment be paid in respect of overtime carried out.	Itm					
D	**NON-PRODUCTIVE TIME:** No claims for non-productive time will be considered and the Contractor is to allow here or in his prices for any overtime that he considers necessary for the efficient completion of the work and for the convenience of the Employer.	Itm					
E	**GOOD PRACTICE:** Where and to the extent that materials, products and workmanship are not fully detailed or specified they are to be of a standard appropriate to the Works and suitable for the functions stated in or reasonably to be inferred from the project documents, and in accordance with good building practice. Omissions or errors in description and/or quantity shall not vitiate the Contract nor release the Contractor from any obligations or liabilities under the Contract.	Itm					

			Fixed Charge £	p		Time Related £	p
	A33 QUALITY STANDARDS/CONTROL						
	MATERIALS AND WORK GENERALLY						
A	**WORKMANSHIP SKILLS:** All operatives shall be appropriately skilled and experienced for the type and quality of the work. All operatives shall be registered with the Construction Skills Certification Scheme. Operatives must provide evidence of skills/qualifications when requested by the Contract Administrator.	Itm					
B	**GENERAL QUALITY OF PRODUCTS:** Products to be new unless otherwise specified. For products specified to a British or European Standard obtain certificates of compliance from manufacturers when requested by the Contract Administrator. Where a choice of manufacturer or source of supply is allowed for any particular product, the whole quantity required to complete the work must be of the same type, manufacture and/or source unless otherwise approved. Produce written evidence of sources of supply when requested by the Contract Administrator. Ensure that the whole quantity of each product required to complete the work is of consistent kind, size, quality and overall appearance. Where consistency of appearance is desirable ensure consistency of supply from the same source. Unless otherwise approved do not use different colour batches where they can be seen together. If products are prone to deterioration or have a limited shelf life, order in suitable quantities to a programme and use in appropriate sequence. Do not use if there are any signs of deterioration, setting or other unsatisfactory condition. The Employer encourages the use of recycled, recyclable, low embodied energy and environmentally friendly materials. (see individual material specification for specific requirements and restrictions). These shall be used wherever they are available and suitable for the use stated subject to the Contract Administrator's approval.Where hardwood is specified a certificate will be required stating that it has been obtained from a renewable source.	Itm					
C	**QUALITY OF EXECUTION:** Generally fix, apply, install or lay products securely, accurately, plumb, neatly and in alignment. Dimensions: Check on-site dimensions. Finished work: Not defective, e.g. not damaged, disfigured, dirty, faulty, or out of tolerance. Location and fixing of products: Adjust joints open to view so they are even and regular.	Itm					
D	**PROPRIETARY PRODUCTS:** Handle, store, prepare and use or fix each product in accordance with its manufacturer's current printed or written recommendations/ instructions. Inform the Contract Administrator if these conflict with any other specified requirement. Submit copies to the Contract Administrator when requested. The tender will be deemed to be based on the products specified and recommendations on their use as described in the manufacturer's literature current at the date of tender. Obtain confirmation from manufacturers that the products specified and recommendations on their use have not been changed since that time. Where such change has occurred, inform the Contract Administrator and do not place orders for or use the affected products without further instructions. Where British Board of Agrement certified products are used, comply with the limitations, recommendations and requirements of the relevant valid certificates.	Itm					
E	**CHECKING COMPLIANCE OF PRODUCTS:** Check all delivery tickets, labels, identification marks and, where appropriate, the products themselves to ensure that all products comply with the project documents. Where different types of any product are specified, check to ensure that the correct type is being used in each location. In particular, check that: - The sources, types, qualities, finishes and colours are correct, and match any approved samples. - All accessories and fixings which should be supplied with the goods have been supplied. - Sizes and dimensions are correct. Where tolerances of components are critical, measure a sufficient quantity to ensure compliance. - The delivered quantities are correct, to ensure that shortages do not cause delays in the work. - The products are clean, undamaged and otherwise in good condition. - Products which have a limited shelf life are not out of date.	Itm					

			Fixed Charge £	p		Time Related £	p
	A33 QUALITY STANDARDS/CONTROL (CONT'D)						
	MATERIALS AND WORK GENERALLY (CONT'D)						
A	**PROTECTION OF PRODUCTS:** - Prevent over-stressing, distortion and any other type of physical damage. - Keep clean and free from contamination. Prevent staining, chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work. - Keep dry and in a suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects. Where appropriate, store off the ground and allow free air movement around and between stored products. - Prevent excessively high or low temperatures and rapid changes of temperature in the products. - Protect adequately from rain, damp, frost, sun and other elements as appropriate. Ensure that products are at a suitable temperature and moisture content at time of use. - Ensure that sheds and covers are of ample size, in good weatherproof condition and well secured. - Keep different types and grades of products separately and adequately identified. - So far as possible keep products in their original wrappings, packings or containers, until immediately before they are used. - Wherever possible retain protective wrappings after fixing and until shortly before Practical Completion. - Ensure that protective measures are fully compatible with and not prejudicial to the products/materials.	Itm					
B	**SUITABILITY OF RELATED WORK AND CONDITIONS:** Ensure that all trades are provided with necessary details of related types of work. Before starting each new type or section of work, ensure that: - Previous, related work is appropriately complete, in accordance with the project documents, to a suitable standard and in a suitable condition to receive the new work. - All necessary preparatory work has been carried out, including provision for services, openings, supports, fixings, damp proofing, priming and sealing. - The environmental conditions are suitable, particularly that the building is suitably weathertight when internal components, services and finishes are installed.	Itm					
C	**GENERAL QUALITY OF WORKMANSHIP:** - Operatives must be appropriately skilled and experienced for the type and quality of work and take all necessary precautions to prevent damage to the work from frost, rain and other hazards. - Inspect components and products carefully before fixing or using and reject any which are defective. - Fix or lay securely, accurately and in alignment. - Where not specified otherwise, select fixing and jointing methods and types, sizes and spacings of fastenings in compliance with relevant British Standards. - Provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion. Do not overtighten fixings. - Adjust location and fixing of components and products so that joints which are to be finished with mortar or sealant or otherwise left open to view are even and regular. - Ensure that all moving parts operate properly and freely. Do not cut, grind or plane prefinished components and products to remedy binding or poor fit without approval.	Itm					
D	**MANUFACTURER'S RECOMMENDATIONS/INSTRUCTIONS:** Comply with manufacturer's printed recommendations and instructions current on the date of the invitation to tender. Submit details of changes to recommendations or instructions. Use ancillary products and accessories supplied or recommended by main product manufacturer. Comply with limitations, recommendations and requirements of relevant valid certification of Agreement certified products.	Itm					
E	**B.S. 8000 BASIC WORKMANSHIP:** where compliance with B.S. 8000 is specified, this is only to the extent that the recommendations therein define the quality of the finished work. Where B.S. 8000 gives recommendations on particular working methods or other matters which are properly within the province and responsibility of the Contractor, compliance therewith will be deemed to be a matter of general industry good practice and not a specific requirement of the Contract Administrator under the Contract. If there is any conflict or discrepancy between the recommendations of B.S. 8000 on the one hand and the project documents on the other, the latter will prevail.	Itm					

			Fixed Charge £	p		Time Related £	p
	A33 QUALITY STANDARDS/CONTROL (CONT'D)						
	MATERIALS AND WORK GENERALLY (CONT'D)						
A	**WATER FOR THE WORKS:** The Contractor is to provide clean and uncontaminated water for the works. If other than mains water supply is to be used provide evidence of suitability. Test to B.S. EN 1008 if instructed.	Itm					
B	**LIGHTING AND POWER FOR THE WORKS:** The Contractor is to provide all necessary temporary lighting and power for the works. The Contractor must arrange all temporary installations and equipment. Distribute in accordance with British Standard Code of Practise CP 1017 – Distribution of Electricity on Construction and Building Sites. All temporary supplies will be installed by competent electricians and tested in accordance with the IEE Regulations and statutory requirements and a copy of the completion certificate made available. Remove all temporary works on completion and reinstate where disturbed.	Itm					
	SAMPLES/APPROVALS						
C	**APPROVAL OF PRODUCTS:** Where approval of a product is specified the requirement for approval relates to a sample of the product and not to the product as used in the Works. Submit a sample or other evidence of suitability. Do not confirm orders or use the product until approval of the sample has been obtained. Retain approved sample in good, clean condition on site. Ensure that the product used in the Works matches the approved sample.	Itm					
D	**SPECIFIC TESTING** of all materials as required by the Contract Administrator/Engineer will be undertaken by the Contractor and the Contractor must allow here for all costs in connection therewith.	Itm					
	ACCURACY/SETTING OUT GENERALLY						
E	**SETTING OUT:** Submit details of methods and equipment to be used in setting out the Works. Check the levels and dimensions of the site against those shown on the drawings, and record the results on a copy of the drawings. Notify the Contract Administrator in writing of any discrepancies and obtain instructions before proceeding. Inform the Contract Administrator when overall setting out is complete and before commencing construction.	Itm					
F	**APPEARANCE AND FIT:** Arrange the setting out, erection, juxtaposition of components and application of finishes (working within the practical limits of the design and the specification) to ensure that there is satisfactory fit at junctions, that there are no practically or visually unacceptable changes in plane, line or level and that the finished work has a true and regular appearance. Wherever satisfactory accuracy, fit and/or appearance of the work are likely to be critical or difficult to achieve, obtain approval of proposals or of the appearance of the relevant aspects of the partially finished work as early as possible. Without prejudice to the above and unless specified otherwise, tolerances will (where applicable) not be greater than those given in B.S. 5606, Tables 1 and 2.	Itm					
G	**CRITICAL DIMENSIONS:** Critical dimensions: Set out and construct the Works to ensure compliance with specified and manufacturing tolerances of components. Ensure critical building dimensions are maintained.	Itm					

			Fixed Charge £	p		Time Related £	p
	A33 QUALITY STANDARDS/CONTROL (CONT'D)						
	SERVICES GENERALLY						
A	**IDENTIFICATION OF EXISTING SERVICES:** Any work involving removal or alteration of existing services, drainage, etc, must be undertaken with extreme care. It is the Contractor's responsibility to identify each service that will or may be effected by the works. It is imperative that all such services are identified, protected and if necessary isolated, prior to commencement of the works. Any costs associated with rectification of damage caused or loss suffered due to non observance of this clause will be recovered from the Contractor.	Itm					
B	**SERVICES REGULATIONS:** Any work carried out to or which affects new or existing services must be in accordance with the Bye Laws or Regulations of the relevant Statutory Authority.	Itm					
C	**SERVICE RUNS:** Make adequate provision for services, including unobstructed routes and fixings. Wherever possible ducts, chases and holes are to be formed during construction rather than cut.	Itm					
D	**MECHANICAL AND ELECTRICAL SERVICES:** Where work is undertaken to existing service installations they must have final tests and commissioning carried out so that they are in full working order at Practical Completion. Submit certificates (Practical Completion will not be certified until correctly completed certificates have been issued). Test and Commissioning Certificate and Building Regulations Notice: Copies to be lodged in Health and Safety File.	Itm					
	SUPERVISION/INSPECTION/DEFECTIVE WORK						
E	**SUPERVISION:** In addition to the constant management and supervision of the works provided by the Contractor's person-in-charge, all significant types of work must be under the close control of competent trade supervisors to ensure maintenance of satisfactory quality and progress. The site organisation staff must include one or more persons with appropriate knowledge and experience of working on public realm and public highways projects to ensure works are carried out in such a manner that will not cause damage to the existing ifrastructure or present a risk to the safety of site operatives and the public. Submit with the tender, CV's or other documentary evidence relating to the staff concerned.	Itm					
F	**PERSON-IN-CHARGE:** Give maximum possible notice to the Contract Administrator before changing the person-in-charge.	Itm					
G	**OVERTIME WORKING:** Whenever overtime is to be worked, give the Contract Administrator not less than 24 hours' notice, specifying times, types and locations of work to be done. Concealed work executed during overtime for which notice has not been given may be required to be opened up for inspection and reinstated at the Contractor's expense. No additional payment will be made in respect of overtime worked unless the Contract Administrator has specifically ordered overtime work to be carried out and that additional payment will be made. Additional payment, where confirmed, shall be the net difference between flat time and overtime rates. Accurate and detailed weekly returns are to be submitted to the Contract Administrator. Observe any special working conditions and restrictions relating to working hours specified elsewhere.	Itm					
H	**DEFECTS IN NEW CONSTRUCTION:** are to be reported to the Contract Administrator without delay. Obtain approval before proceeding with work which may: - Cover up or otherwise hinder access to the defective construction, or - Be rendered abortive by carrying out of remedial work.	Itm					

			Fixed Charge £	p		Time Related £	p
	A33 QUALITY STANDARDS/CONTROL (CONT'D)						
	SUPERVISION/INSPECTION/DEFECTIVE WORK (CONT'D)						
A	**ACCESS FOR INSPECTION:** Give the Contract Administrator not less than 5 days notice before removing scaffolding or other facilities for access.	Itm					
B	**TIMING OF TESTS AND INSPECTIONS:** Agree dates and times of tests and inspections with the Contract Administrator several days in advance, to enable the Contract Administrator and other affected parties to be present. On the previous working day to each such test or inspection confirm that the work or sample in question will be ready or, if not ready, agree a new date and time.	Itm					
C	**TEST CERTIFICATES:** Submit a copy of each certificate to the Contract Administrator as soon as practicable and keep copies of all certificates on site.	Itm					
D	**PROPOSALS FOR RECTIFICATION OF DEFECTIVE WORK/PRODUCTS:** As soon as possible after any part(s) of the work or any products are known to be not in accordance with the Contract or appear that they may not be in accordance, submit proposals to the Contract Administrator for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution. Such proposals may be unacceptable to the Contract Administrator and he may issue contrary instructions.	Itm					
E	**MEASURES TO ESTABLISH ACCEPTABILITY:** Wherever inspection or testing shows that the work, materials or goods are not in accordance, with the Contract and measures (e.g. testing, opening up, experimental making good) are taken to help in establishing whether or not the work is acceptable, such measures will be at the expense of the Contractor, and will not be considered as grounds for extension of time.	Itm					
F	**QUALITY CONTROL:** Establish and maintain procedures to ensure that the Works, including the work of all Sub-Contractors, comply with specified requirements. Maintain full records, keep copies on site for inspection by the Contract Administrator, and submit copies of particular parts of the records on request. The records must include: - Identification of the element, item, batch or lot, including location in the Works. - The nature and dates of inspections by the Contractor or the Contract Administrator, tests and approvals. - The nature and extent of any non-conforming work found. - Details of any corrective action.	Itm					
G	**DEFECTIVE WORK:** when instructed by the Contract Administrator, submit proposals for opening up, examination and/or testing. Where examination and/or testing shows that the work is not in accordance with the specification and/or drawings, and measures are taken as instructed by the Contract Administrator to remedy the defective work, such measures will be at the expense of the Contractor and will not be considered as grounds for an extension of time. In addition to the requirements of Clause 2.38 any defects, shrinkages or other faults, which appear and are notified within the Rectification Period, shall be deemed to include shrinkage cracks due to drying out of the works. All such normal shrinkage cracks shall be made good by the Contractor at no cost to the Employer, notwithstanding that materials and workmanship may be in accordance with this Contract.	Itm					

			Fixed Charge £	p		Time Related £	p
	A33 QUALITY STANDARDS/CONTROL (CONT'D)						
	WORK AT OR AFTER COMPLETION						
A	**GENERALLY:** Make good all damage consequent upon the work and remove all temporary markings, coverings and protective wrappings unless otherwise instructed Clean the works thoroughly inside and out including all accessible ducts and voids, remove all splashes, deposits, efflorescence, rubbish and surplus materials consequent upon the execution of the work. Cleaning materials and methods to be as recommended by manufacturers of products being cleaned, and to be such that there is no damage or disfigurement to other materials or construction. Obtain COSHH dated data sheets for all materials used for cleaning and ensure they are used only as recommended by their manufacturers. Touch up minor faults in newly painted/repainted work, carefully matching colour, and brushing out edges. Repaint badly marked areas back to suitable breaks or junctions. Adjust, ease and lubricate moving parts of new work as necessary to ensure easy and efficient operation.	Itm					
B	**SECURITY AT COMPLETION:** Leave the Works secure with all accesses locked. Account for and adequately label all keys/ access tools and hand over to Employer with itemised schedule, retaining duplicate schedule signed by Employer as a receipt.	Itm					
C	**MAKING GOOD DEFECTS:** Make arrangements with the Contract Administrator and give reasonable notice of the precise dates for access to the various parts of the Works for purposes of making good defects. Inform the Contract Administrator when remedial works to the various parts of the Works are completed. During the Rectification Period the Contractor will be advised by the Contract Administrator of defects that have occurred. Such defects shall be categorised by the Contract Administrator and dealt with by the Contractor as described hereafter. In the event that the Employer at his sole discretion considers a defect life threatening or extremely significant, on-site staff, or others employed by the Employer, may remedy or temporarily make good such defects without first informing the Contractor. Such actions by the Employer shall neither absolve the Contractor of his responsibility to maintain the works, nor shall the Contractor be entitled to recover any costs that he may incur as a result of later providing the permanent remedy to the defect in accordance with the following categories. In addition the Employer may recover the cost of the temporary remedy from the Contractor. **a) Category A - Urgent** The Contractor shall attend the site within 12 hours, and remedy the defect within 24 hours of the receipt of the notice from the Contract Administrator. **b) Category B - Essential** The Contractor shall attend the site within 3 days and remedy the defect within 7 days of the receipt of the notice from the Contract Administrator. **c) Category C - Non urgent** The Contractor shall attend the site and make good the defects within the Rectification Period. If the Contractor is unable to obtain parts or materials within the time dictated by the Categories described above the following action will be taken:- a) Inform the Contract Administrator of the non-availability of the parts or materials and submit in writing proposals for a temporary repair and request approval. b) On receipt of the approval carry out the temporary repair at no cost to the Employer. c) Agree with the Contract Administrator a date when the final making good shall be completed.	Itm					

			Fixed Charge £	p		Time Related £	p
	A34 SECURITY/SAFETY/PROTECTION						
	GENERALLY						
A	**CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2007:** Under his responsibilities in accordance with the above legislation the client hereby draws the Contractor's attention to the fact that the Construction (Design and Management) Regulations 2007 will apply fully to this Contract. The Contractor is required to read and comply with all recommendations contained in the code of practice relating to the Regulations "Managing Construction for Health & Safety" and "Management of Health and Safety at Work" published by the HSE. Allow for all costs of fulfilling the role of "Principal Contractor" under the terms of the CDM Regulations. The Contractor shall be responsible for all matters of Health, Safety and Welfare relative to this Contract during the Contract period. The Tenderer shall review the design and the Pre-Construction Information in detail, including methods of working, etc., specifically applicable to this contract, that require consideration to comply with CDM Regulations and that will be provided for in his formal Health and Safety plan. The preferred Tenderer shall, prior to acceptance of his tender, resolve any queries with the Contract Administrator and/or Principal Designer, take over, develop, update and publish his formal Health and Safety Plan and take full responsibility for construction of the project in accordance with the Plan and CDM Regulations. No claim for additional costs, nor for an extension of time for the completion of the Works, will be considered for complying with the CDM Regulations. Promptly provide the Principal Designer with any further information throughout the course of the Contract in order that he can review, amend or add to the Health and Safety File, including the provision of record documentation etc., in order to comply with CDM Regulations.	Itm					
B	**EXECUTION HAZARDS:** Common hazards are not listed. Control by good management and site practise. Significant hazards; refer to the Pre-Construction Information for details of any identified significant hazards.	Itm					
C	**PRODUCT HAZARDS:** Hazardous substances: Site personnel levels must not exceed occupational exposure standards and maximum exposure limits stated in the current version of HSE document EH40: Occupational Exposure Limits. Common hazards are not Listed. Control by good management and site practise. Significant hazard refer to the Pre-Construction Information for details of any identified significant hazards regarding specified construction materials.	Itm					
D	**CONSTRUCTION PHASE HEALTH AND SAFETY PLAN:** Submission: Present to the Employer/Client not later than two weeks before commencement of work on site unless otherwise agreed. Confirmation: Do not start any enabling or construction work on site until the Employer has confirmed in writing that the Construction Phase Health & Safety Plan includes the procedures and arrangements required by the CDM Regulations. Content: Develop the plan from and draw on the Outline Construction Health & Safety Plan, as Section A30, and the Pre-Construction Information Document. Liaise with the Principal Designer, keep all requisite records and comply in all respects with the requirements of the Construction (Design and Management) Regulations 2007. Hand over to the CDM Co-ordinator prior to Practical Completion all documents and information reasonably required by him and listed in the Pre-Construction Information Document. Pursuant to Regulations 20(2)(e) of the Construction (Design and Management) Regulations 2007. The Contractor's attention is drawn to the fact that, under the terms of the Contract (Clauses 2.21 and 3.18.3), Practical Completion will not be achieved until the above conditions have been complied with.	Itm					
E	**NATIONAL WORKING RULES FOR THE BUILDING INDUSTRY:** The Contractor is to comply with the Working Rule Agreement as published by the Construction Industry Joint Council.	Itm					
	001/27 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A34 SECURITY/SAFETY/PROTECTION (CONT'D)						
	GENERALLY (CONT'D)						
A	**SECURITY:** Adequately safeguard the site, the Works, products, materials and plant affected by the Works from damage and theft. Take all reasonable precautions to prevent unauthorised access to the site and the Works. The Contractor shall provide all necessary facilities for the safeguarding of the works, materials and plant against damage and theft including those provided by all Sub-Contractors and Suppliers, or others working under separate Contract with the Employer. Provide all necessary watching, lighting, shelter and fuel for the security of the works and the protection of the public.	Itm					
B	**STABILITY:** Accept responsibility for the stability and structural integrity of the Works during the Contract, and support as necessary. Prevent overloading. Details of design loads may be obtained from the Contract Administrator.	Itm					
C	**PERMIT TO WORK PROCEDURES** will be in operation for all of the following works: - Interruption to power supplies/IT connections/fire and security alarms/telephone systems. - Interruption to mechanical service supplies. - Interruption to water supplies. - All hot works.	Itm					
	PROTECT AGAINST THE FOLLOWING:						
D	**EXPLOSIVES:** Do not use.	Itm					
E	**NOISE:** The Contractor's attention is drawn to Sections 60 and 61 of the Control of Pollution Act 1974. The Contractor will be responsible for complying with all requirements and restrictions imposed by this Act and must allow in his tender for all costs necessitated thereby. No instructions issued to the Contractor by the Contract Administrator shall relieve the Contractor from compliance with this Act. Comply generally with the recommendations of B.S. 5228: Part 1, Clause 9.3 for minimising noise levels during the execution of the Works. Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles. The Contractor's attention is particularly drawn to the fact that the use of portable music players and the like will not be allowed on the site.	Itm					
F	**POLLUTION:** Take all reasonable precautions to prevent pollution of the site, the Works and the general environment including streams and waterways. If pollution occurs, inform the appropriate Authorities and the Contract Administrator without delay and provide them with all relevant information. The Contractor shall indemnify the Employer against any claim or action for damages arising from any pollution incident.	Itm					
G	**PESTICIDES:** Use: Only where specified or approved, and then only suitable products listed on www.pesticides.gov.uk. Restrictions: Work near water, drainage ditches or land drains must comply with the 'Guidelines for the use of herbicides on weeds in or near watercourses and lakes'. Containers: Comply with manufacturer's disposal recommendations, Remove from site immediately when empty or no longer required. Competence: Operatives must hold a BASIS Certificate of Competence, or work under supervision of a Certificate holder.	Itm					
H	**NUISANCE:** The Contractor must take all necessary precautions for the prevention of nuisance arising from dust, excessive noise and vibration, in any event dust will not be allowed to encroach into occupied buildings or circulation areas. The Contractor must discuss with the Contract Administrator measures he proposes to adopt to counter nuisances described above and must give notice of, and agree periods when noisy operations and operations causing vibrations are to be executed. The Contractor must comply with the prescribed quiet periods detailed in the A35 – Working Hours item, when noisy operations and operations causing vibrations cannot be executed. The Contractor must allow for dealing with any complaints in connection with alleged nuisance arising from the execution of the Works and for making such arrangements	Itm					

			Fixed Charge £	p		Time Related £	p
	A34 SECURITY/SAFETY/PROTECTION (CONT'D						
	PROTECT AGAINST THE FOLLOWING: (CONT'D)						
	NUISANCE: (CONT'D)						
	and negotiations as may be necessary, including temporarily suspending any portion of the Works, and must include for everything required to enable the Works to be completed by the due dates, as no claims for lack of knowledge in this respect will be entertained.						
	The Contractor's attention is drawn to the fact that should either the Contract Administrator deem it necessary to suspend the Works at any time, the Works shall cease forthwith until such time as an instruction is given to continue. After two hours and failing an instruction to proceed the Contractor shall seek approval from the Contract Administrator to recommence working.						
A	**ASBESTOS BASED MATERIALS:** Report immediately to the Contract Administrator any suspected asbestos based materials discovered during the works. Avoid disturbing such materials. Agree with the Contract Administrator methods for safe removal or encapsulation.	Itm					
B	**ANTIQUITIES:** Report immediately any fossils, antiquities and other objects of interest or value discovered during execution of the works. Keep objects in the exact position and condition in which they were found.	Itm					
C	**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" published by the Construction Confederation and The Fire Protection Association (The Joint Fire Code). All cutting equipment and fuel for same, and other items of plant and equipment subject to fire hazard, must be safely and securely stored when not in use. The Contractor shall ensure that no materials arising from the work are burned on site. Emergency lighting shall be provided. Smoking will not be permitted on the site. Burning will not be permitted on site.	Itm					
D	**INCLEMENT WEATHER:** Allow for carefully covering up and protecting exposed works from inclement weather. The Contractor, as part of his best endeavours to prevent delay in the progress of the works, will be expected to adopt measures to prevent or minimize harmful effects of weather conditions on the works. The extent to which he has taken such measures will be taken into account when considering any notice of delay due to exceptionally adverse weather conditions.	Itm					
E	**MOISTURE AND HUMIDITY:** Prevent the work from becoming wet or damp where this may cause damage. Dry out the Works thoroughly, provide and maintain the necessary equipment, fuel and attendance for drying the works. Control the drying out and humidity of the Works and the application of heat to prevent blistering and failure of adhesion, damage due to trapped moisture and excessive movement.	Itm					

			Fixed Charge £	p		Time Related £	p
	A34 SECURITY/SAFETY/PROTECTION (CONT'D						
	PROTECT AGAINST THE FOLLOWING: (CONT'D)						
A	**WASTE:** Remove rubbish, debris, surplus material and spoil regularly and keep the site and Works clean and tidy. Remove all rubbish, dirt and residues from voids in the construction before closing in. Ensure that non-hazardous material is disposed of at a tip approved by a Waste Regulation Authority. Remove all surplus hazardous materials and their containers regularly for disposal offsite in a safe and competent manner as approved by a Waste Regulation Authority and in accordance with relevant regulations. Retain waste transfer documentation on site. No unauthorised persons may have access or take possession of works materials.	Itm					
B	**ELECTROMAGNETIC INTERFERENCE:** Take all precautions to avoid excessive electromagnetic disturbance of apparatus and specialist equipment outside the site.	Itm					
C	**LASER EQUIPMENT:** Install, use and store construction laser equipment in accordance with B.S. EN 60825-1 and the manufacturer's instructions. Use either Class 1 or Class 2 laser equipment, ensuring that the laser beam is not set at eye level and is terminated at the end of its useful path. The use of Class 3A and Class 3B laser equipment will not be permitted without the approval of the Contract Administrator and subject to the submission of a method statement on its safe use.	Itm					
D	**POWER ACTUATED FIXING SYSTEMS:** use is not permitted on site.	Itm					
E	**WORK IN ALL SECTIONS:** Adequately protect all types of work and all parts of the Works, including work carried out by others, throughout the Contract. Wherever work is of an especially vulnerable nature or is exposed to abnormal risks provide special protection to ensure that damage does not occur. The Contractor shall be responsible for any damage to adjoining buildings, structures, public and private roads, and footpaths fencing, gates, underground and overhead services, mains, waterways, and all other property of every kind and description, if caused by or attributable in any way to the execution of this contract, and all damages shall be made good to the satisfaction of the Contract Administrator and all authorities and/or other parties concerned, at the Contractors sole expense. The Contractor shall indemnify the Employer against any claims for damage caused, howsoever caused.	Itm					
F	**EXISTING SERVICES:** Notify all service authorities and/or adjacent owners of the proposed works not less than one week before commencing site operations. Before starting work check positions of existing services. Where positions are not shown on drawings, obtain relevant details from Service Authorities or other owners. Observe Service Authorities' recommendations for work adjacent to existing services. Adequately protect, and prevent damage to all services. Do not interfere with their operation without consent of the service authorities or other owners. If any damage to services results from the execution of the Works, notify the Contract Administrator and appropriate Service Authority without delay. Make arrangements for the work to be made good without delay, to the satisfaction of the Service Authority or other owner as appropriate. Any measures taken to deal with an emergency will not affect the extent of the Contractor's liability. Replace any marker tapes or protective covers disturbed during site operations to the Service Authorities' recommendations.	Itm					
G	**MAINTENANCE OF PUBLIC AND PRIVATE ROADS AND FOOTPATHS:** The Contractor shall be responsible for all damage to roads or streets (whether public or private) arising out of, or in the course of, or by reason of the execution of the Works. The Contractor shall be responsible at all times for keeping roads or streets immediately adjacent to the site of the Works free from mud, dirt, rubbish, etc, arising as aforesaid, and for the observance of any bye-law or regulation imposed by a competent authority requiring roads or streets to be kept free from mud, dirt, rubbish, etc. The Contractor shall observe the requirements of the Local Government (Miscellaneous Provisions) Act, 1976, controlling the depositing or mixing of mortar, cement, etc.	Itm					
	001/30 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A35 SPECIFIC LIMITATIONS ON METHOD/SEQUENCE/TIMING						
A	**SCOPE:** The limitations described in this section are supplementary to limitations described or implicit in information given in other sections or on the drawings.	Itm					
B	**USE OF THE SITE:** See section A12.	Itm					
C	**SEQUENCE OF WORKS:** The Contractor is to carry out the work in a sequential manor or concurrently to ensure the completion date is achieved and the Contractor is to ensure sufficient resource is provided to achieve this.	Itm					
D	**WORKING HOURS:** Normal working hours on this contract will be 0800 hrs to 1800 hrs Monday to Friday. Working on outside of these hours or at weekends will be by agreement with the Contract Administrator only. No works shall be permitted outside of normal working hours without the prior approval of the Contract Administrator. There shall be no working permitted on Sundays, Bank Holidays or National Holidays. If a relaxation of this condition is required at any time to allow work outside those times, the prior agreement must be obtained from the Council Environmental Protection Section or Council Area Planning Officer.	Itm					
E	**WORK OUTSIDE NORMAL HOURS:** obtain prior permission from the Contract Administrator to carry out work outside normal working hours which will also be subject to any Establishment Regulations, Special Restrictions, etc.	Itm					
G	**CONTRACTOR SIGN IN PROCEDURE:** The Contractor is to maintain a daily sign-in register for all management, visitors and contractors on site.						
H	**WELFARE/OFFICE SPACE FOR THE WORKS:** The Contractor shall ensure that there is a suitable office and welfare facility provided on site suitable for subcontractors, his own employees, the Employer, the Employer's Team and other visitors. The facilities are to be kept clean at all times.						
I	**TRESPASS:** the Contractor shall be responsible for the control of all workmen employed by him or Sub-Contractors on the site and shall prevent them from trespassing onto the adjoining land and shall indemnify the Employer from any claim so arising.	Itm					

	To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A36 FACILITIES/TEMPORARY WORK/SERVICES						
	GENERALLY						
A	**LOCATIONS:** Inform the Contract Administrator of the intended siting of all temporary works and services. Maintain, alter, adapt and move temporary works and services as necessary. Remove when no longer required and make good.	Itm					
B	**PLANT, TOOLS, VEHICLES AND EQUIPMENT:** The Contractor shall provide everything necessary for the proper execution of the work including all requisite plant, tools, vehicles, gantries, chutes, tarpaulins, rods, pegs, moulds, templates, levels, tackle and other implements and conveniences required for the expeditious carrying out of the works in proper sequence. Comply with the Factories Act or other regulations governing the use of machinery guards and other safeguards for the protection of workpersons.	Itm					
C	**GENERAL ACCESS SCAFFOLDING AND WORKING PLATFORMS:** The Contractor is to comply with all current Health and Safety Regulations relating to the Height Regulations 2005. The Contractor is to provide, erect and maintain all necessary access scaffolding and other safe working platforms for the proper execution of the works, including moving, adapting as necessary during the course of the works, dismantling and removal on completion. All scaffolding work including erections, alterations and dismantling is to be carried out by qualified scaffolders. The Contractor shall include for the requirements for the scaffold installation within the Structural Engineers's Specification All working platforms must be capable of supporting the intended loads, adequately supported and braced, and provided with guard rails or barriers and toe boards. All scaffolding must be erected with legs/standards vertical and bearing on firm level ground using base plates, or on spreader boards if on soft ground. Tower scaffolds and other proprietary scaffold systems must be erected, used and dismantled in accordance with manufacturer's instructions. Mobile towers must have all wheels and outriggers locked and never be moved whilst in use or when loaded with materials. Only use internal ladders to access tower scaffolds, do not climb up the outside of the tower to reach the platform. Provide safe access to all scaffold/working platforms. Ladders are to be adequately tied to prevent slipping, correctly angled (75 degrees, i.e. 1 out of every 4 up), and extend 1m above the working platform. Inspections of scaffolding/working platforms are to be carried out by a competent person at maximum 7 day intervals and recorded in an Inspection Report. Should the Contractor remove any of his scaffolding/working platforms before ascertaining whether it is required by any sub-contractor he must re-erect it if required at his own expense. The Contractor is to provide a full breakdown of costs, fixed and time related, and a programme relating to that cost for the scaffold installation with their tender submission.	Itm					
D	**MOBILE AND SUSPENDED ACCESS EQUIPMENT:** (Including Mobile Elevating Work Platforms (MEWPs), Mast Climbing Work Platforms (MCWPs), temporary suspended access cradles and platforms). Mobile and other suspended access equipment must only be used where it is suitable for its intended purpose and only used by suitably trained and competent personnel.	Itm					
E	**MOBILE AND SUSPENDED ACCESS EQUIPMENT:** Equipment must only be installed or erected, or modified by specialist contractors and a handover certificate obtained covering safe working load, operation, maintenance and emergency procedures. Do not move equipment in an elevated position or operate close to overhead cables.	Itm					

			Fixed Charge £	p		Time Related £	p
	A36 FACILITIES/TEMPORARY WORK/SERVICES (CONT'D)						
	SERVICES AND FACILITIES						
A	**LIGHTING:** During finishing work and inspection provide temporary lighting, the intensity and direction of which closely resembles that provided by the permanent installation.	Itm					
B	**LIGHTING AND POWER:** Provide all necessary temporary lighting and power required for the execution of the Works, including temporary connections. The Contractor is to allow for making all temporary connections, distribution about the site in accordance with CP 1017, alterations and adaptations as necessary and clearing away on completion and making good.	Itm					
C	**WATER:** Provide fresh potable water for the work. The Contractor is to allow for making all temporary connections, providing hoses, storage tanks, etc., alterations and adaptations as necessary and clearing away on completion and making good.	Itm					
D	**TELEPHONES:** Provide as soon as practicable after the Date of Possession a temporary on site telephone for use by the Contractor and Sub-Contractors at all times during normal working hours and for emergency purposes only outside normal working hours. Make arrangements (e.g. an external bell) to ensure that incoming calls are answered reasonably promptly. Allow for the cost of a modest number of calls made by those acting on behalf of the Employer. Contact names and telephone numbers for the site, Contractor's office and out of hours emergencies shall be supplied to the Contract Administrator at the commencement of the Contract.	Itm					
E	**E-MAIL FACILITY:** Provide as soon as practicable after the Date of Possession a suitable on site E-mail facility, for use by the Contractor and Sub-Contractors. Allow for the cost of a modest number of transmissions made by those acting on behalf of the Employer.	Itm					
F	**BENEFICIAL USE OF INSTALLED SYSTEMS:** Unless specific permission is given by the Employer and installer, the permanent supply, disposal, mechanical, electrical, communications, transport and access systems may not be used for any purpose other than running in, testing and commissioning. Where permission is given for any other use of a system before practical completion of the works it must be subject to a separate written agreement between the parties and in accordance with the recommended procedures given in NJCC Guidance Note 10.	Itm					
G	**THERMOMETERS:** Provide on site and maintain in accurate condition a maximum and minimum thermometer for measuring atmospheric shade temperature, in an approved location.	Itm					
H	**SAFETY HEALTH AND WELFARE OF WORKPEOPLE:** The Contractor shall ensure that all safety and welfare measures required under or by virtue of the provisions of any enactment, or regulations or the working rules of any industry are strictly complied with. The Contractor shall provide and maintain on site all necessary facilities for his own employees and for those employed by all Sub-Contractors. The Contractor shall designate all sites as hard hat areas unless the work is being carried out internally amidst occupied premises	Itm					
I	**DRYING THE WORKS:** Allow for providing all necessary temporary heating, including fuel, which may be required to enable the works to proceed at all times, including that required to enable workpeople to work during inclement weather, to protect the works from damage due to frost and to enable trade to follow upon trade. The use of permanent heating systems will not be allowed without the consent of the Contract Administrator. Provide all necessary temporary equipment, fuel and attendance for drying and controlling the humidity of the Works.	Itm					
J	**SMALL PLANT AND TOOLS:** The Contractor shall provide all plant and tools necessary for the completion of the Works and shall maintain and remove same on completion. All plant and tools shall comply with current Statutory Regulations and Orders and power tools are to be a maximum of 110 volts.	Itm					
	001/33 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A36 FACILITIES/TEMPORARY WORK/SERVICES (CONT'D)						
	SERVICES AND FACILITIES (CONT'D)						
A	**PERSONAL PROTECTIVE EQUIPMENT:** Provide for the sole use of those acting on behalf of the Employer, in sizes to be specified: Safety helmets to B.S. EN 397, neither damaged nor time expired. Number required: 2. High visibility waistcoats to B.S. EN 471 Class 2. Number required: 2. Safety boots with steel insole and toecap to B.S. EN ISO 20345. Pairs required 2. Disposable respirators to B.S. EN 149. FFP1S. Eye protection to B.S. EN 166. Ear protection – muffs to B.S. EN 352-1, plugs to B.S. EN 352-2. Hand protection – to B.S. EN 388, 407, 420 or 511 as appropriate.	Itm					

			Fixed Charge £	p		Time Related £	p
	A37 OPERATION/MAINTENANCE OF THE FINISHED BUILDING						
A	**EMPLOYER'S COMMISSIONING PERIOD:** all mechanical and electrical services installations must be complete and operational before final commissioning can take place. All items of plant, such as boilers, pumps and motorised valves shall be pre-commissioned as far as practically possible prior to the final commissioning by the Employer. Practical completion will not be given until the commissioning requirements laid out in the Specification have been met. All builders' works within the building zones to be commissioned must be complete so that the systems can be tested in a finished environment	Itm					
B	**THE BUILDING MANUAL:** Purpose: The Building Manual (incorporating the Health and Safety File) is to be a comprehensive information source and guide for the Employer and end users providing a complete understanding of the finished project and its systems to enable efficient and safe operation and maintenance. Where the Contractor deems a section or sub-section to be "not applicable" they shall seek confirmation in writing from the Contract Administrator. Compilation: - Prepare all information for Contractor Designed work including as-built drawings. - Obtain or prepare all other information to be included in the Manual. Content: PART 1: GENERAL: Content as detailed below. PART 2: BUILDING FABRIC: Content as detailed below. PART 3: BUILDING SERVICES: Content as detailed below. PART 4: THE HEALTH AND SAFETY FILE: Content as detailed below PART 5: THE BUILDING USER GUIDE: Content as detailed below A complete draft of the manual must be submitted to the Contract Administrator for comment not less than 2 weeks before the date of submission of the final copies of the Manual. The Contractor must not proceed with production of the final copies of the Manual until authorised to do so by the Contract Administrator. The Contractor is to provide the Project Manager with 2 paper copies and 1 electronic copy not less than 2 weeks after the date of Practical Completion.	Itm					
C	**CONTENT OF THE BUILDING MANUAL PART 1: GENERAL** Obtain and provide the following, including all relevant details not included in other parts of the Manual: Index: • List of the constituent parts of the manual, together with their location in the document. The Works: • A description of the works. • Details of ownership. • Health and safety information – other than that specifically required by the Construction (Design and Management) Regulations. The Contract: • The parties: Names, addresses (including e-mail), telephone and fax numbers of the Consultants and designers, Authorities and statutory undertakers plus copies of consents and approvals, Contractors, Sub-Contractors, suppliers and manufacturers. • Overall design criteria Operational requirements and constraints of a general nature: • Maintenance contracts and contractors. • Emergency procedures and contact details in case of emergency • Description and location of other key documents	Itm					

			Fixed Charge £	p		Time Related £	p
	A37 OPERATION/MAINTENANCE OF THE FINISHED BUILDING (CONT'D)						
A	**CONTENT OF THE BUILDING MANUAL PART 2: BUILDING FABRIC/SERVICES** Obtain and provide the following, including all relevant details not included in other parts of the Manual: Design criteria: • Loadings • Durability of individual components and elements • Loading restrictions • Insulation values • Fire ratings • Other performance requirements. Construction of the building: • A detailed description of methods and materials used. • As-built drawings recording details of construction, together with an index. • Maintenance of the building fabric: Instructions for general maintenance detailing work to be done, acceptable tolerances and frequency of operation. • Product details: Copies of manufacturer's current literature including COSHH data sheets and recommendations for cleaning, repair and maintenance. • Environmental and trafficking conditions: Details of those that may result in damage/disfigurement. • Guarantees, warranties and maintenance agreements: Obtain from suppliers, Sub-Contractors and manufacturers. • Test certificates and reports required in the specification and by the Building Regulations.	Itm					
B	**PRESENTATION OF BUILDING MANUAL:** Format: A4 size, plastic covered, loose leaf, four-ring binders with hard covers, each indexed, divided and appropriately cover titled. Selected drawings needed to illustrate or locate items mentioned in the Manual: Where larger than A4, to be folded and accommodated in the binders so that they may be unfolded without being detached from the rings. As-built drawings: The main sets may form annexes to the Manual.	Itm					
C	**TRAINING OF EMPLOYER:** Before Practical Completion the Contractor is to explain and demonstrate to Employer's Representatives the purpose, function and operation of the installations including all items and procedures listed in the Building Manual. Obtain signed confirmation that specified training has been received, including details of training given, names and designation of personnel present and date training carried out.	Itm					
D	**SPARE PARTS:** Details: Before Completion submit a priced schedule of spare parts that the Contractor recommends should be obtained and kept in stock by the Employer for maintenance of the services installations. Include in the priced schedule for: Manufacturer's current prices, including packaging and delivery to site. Checking receipt, marking and numbering in accordance with the schedule of spare parts. Referencing to the plant and equipment list in Part 3 of the Building Manual. Painting, greasing, etc., and packing to prevent deterioration during storage. Latest date for submission: One week before the date for completion stated in the contract.	Itm					
E	**TOOLS:** General: Provide tools and portable indicating instruments for the operation and maintenance of all services plant and equipment together with suitable means of identifying, storing and securing same. Quantity: Two complete sets. Time of submission: At Completion.	Itm					

			Fixed Charge £	p		Time Related £	p
	A40 CONTRACTOR'S GENERAL COST ITEMS: MANAGEMENT AND STAFF						
A	**MANAGEMENT AND STAFF:** The Contractor is to allow for all salary and wage costs of management and staff required and encompassing the following:- a. National Insurance Contributions. b. Pensions. c. National minimum wage d. Annual and public holidays. e. Travelling time, expenses, fares and transport. f. Subsistence and lodging allowances. g. Guaranteed time. h. Incentive and bonus payments and operations of such schemes, non-productive time and all costs of overtime working. i. Sick pay. j. Guaranteed minimum bonus. k. Severance pay and obligations under the Redundancy Payments Act. l. Training board levies. m. Any other disbursements arising from the employment of labour.	Itm					
	001/37 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A41 CONTRACTOR'S GENERAL COST ITEMS: SITE ACCOMMODATION For details of site accommodation required or made/not made available by the Employer see Section A36.						
A	**SITE ACCOMMODATION**	Itm					
	001/38 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A42 CONTRACTOR'S GENERAL COST ITEMS: SERVICES AND FACILITIES For details of services and facilities required or made/not made available by the Employer see Section A36.						
A	**POWER**	Itm					
B	**LIGHTING**	Itm					
C	**FUELS (excluding fuels for testing and commissioning)**	Itm					
D	**WATER**	Itm					
E	**TELEPHONE AND ADMINISTRATION**	Itm					
F	**SAFETY, HEALTH AND WELFARE (see A34, A36)**	Itm					
G	**STORAGE OF MATERIALS (see A33 and A36)**	Itm					
H	**RUBBISH DISPOSAL (see A34)**	Itm					
I	**CLEANING (see A33)**	Itm					
J	**DRYING OUT (see A34 and A36)**	Itm					
K	**PROTECTION OF WORK IN ALL SECTIONS (see A34)**	Itm					
L	**SECURITY (See A34)**	Itm					
M	**MAINTAIN PUBLIC AND PRIVATE ROADS (see A34)**	Itm					
N	**SMALL PLANT AND TOOLS**	Itm					
O	**ADDITIONAL SERVICES AND FACILITIES ITEMS:** Insert below further cost items as may be required, with fixed charges and time related charges as required:	Itm					
	001/39 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A50 WORK/PRODUCTS BY/ON BEHALF OF THE EMPLOYER						
A	**THE FOLLOWING WORKS WILL BE UNDERTAKEN BY OTHERS DIRECTLY EMPLOYED BY THE EMPLOYER:** - Design of the artworks to be etched, or similar, on elements of the landscape works. - The Contractor will install builders work for the artwork/ gateway installations. This will be instructed. It is anticipated that these works will be undertaken post completion, however, the Contractor should clearly state in their tender return any issues should these installations commence concurrently during the works.	Itm					
	001/40 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	A54 PROVISIONAL WORK/ITEMS						
A	**PROVISIONAL SUMS FOR DEFINED WORK** Where work cannot be described in adequate detail it shall be given as a Provisional Sum and identified as for either defined or undefined works as appropriate. A Provisional Sum for defined work is a sum provided for work which is not completely designed but for which the following information shall be provided: a) The nature and construction of the work. b) A statement of how and where the work is fixed to the building and what other work is to be fixed thereto. c) Any specific limitations and the like identified in Section A35. Where Provisional Sums are given for defined work the Contractor will be deemed to have made due allowances in programming, planning and pricing Preliminaries. Any such allowance will only be subject to adjustment in those circumstances where the above information is varied.	Itm					
	001/41 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	COLLECTION PAGE						
	Page Nr 001/1						
	Page Nr 001/2						
	Page Nr 001/3						
	Page Nr 001/4						
	Page Nr 001/5						
	Page Nr 001/6						
	Page Nr 001/7						
	Page Nr 001/8						
	Page Nr 001/9						
	Page Nr 001/10						
	Page Nr 001/11						
	Page Nr 001/12						
	Page Nr 001/13						
	Page Nr 001/14						
	Page Nr 001/15						
	Page Nr 001/16						
	Page Nr 001/17						
	Page Nr 001/18						
	Page Nr 001/19						
	Page Nr 001/20						
	Page Nr 001/21						
	Page Nr 001/22						
	Page Nr 001/23						
	Page Nr 001/24						
	Page Nr 001/25						
	Page Nr 001/26						
	Page Nr 001/27						
	001/42 To Collection	£			£		

			Fixed Charge £	p		Time Related £	p
	COLLECTION PAGE						
		Brought Forward					
	Page Nr 001/28						
	Page Nr 001/29						
	Page Nr 001/30						
	Page Nr 001/31						
	Page Nr 001/32						
	Page Nr 001/33						
	Page Nr 001/34						
	Page Nr 001/35						
	Page Nr 001/36						
	Page Nr 001/37						
	Page Nr 001/38						
	Page Nr 001/39						
	Page Nr 001/40						
	Page Nr 001/41						
		£			£		
		TOTAL FIXED CHARGE COSTS			£		
		TOTAL TIME RELATED COSTS			£		
	002/43	To General Summary			£		

SECTION 3

PRICING DOCUMENT

Crossley Hill
Chartered Surveyors

5 Frances St, Truro TR1 3DN
Phil : 07932 093 530 Email : phil@chsurveyors.com

KERRIER WAY, CAMBORNE

BQ COLLECTION

	Summary Page				
1.0	Preliminaries				0.00
2.0	Schedule of Works Pricing Document:				
2.1	Demolition/Preparation				
2.1 A	East			0.00	
2.1 B	West			0.00	
2.2	Earthworks				
2.2 A	East			0.00	
2.2 B	West			0.00	
2.3	Demolition/Preparation				
2.3 A	East			0.00	
2.3 B	West			0.00	
2.4	Demolition/Preparation				
2.4 A	East			0.00	
2.4 B	West			0.00	
2.5	Demolition/Preparation				
2.5 A	East			0.00	
2.5 B	West			0.00	
2.6	Demolition/Preparation				
2.6 A	East			0.00	
2.6 B	West			0.00	
	SUB-TOTAL			-	
	Overheads & Profit (%)	0.0%		0.00	
	SUB-TOTAL				-
	Contingency			49,000.00	49,000.00
	TOTAL				49,000.00

	Element	Qty	Unit	Rate	Total
	Demolitions				
	EAST SIDE				
	DEMOLITION/ALTERATION/RENOVATION				
	C20: DEMOLITION				
	Various locations on site; all as shown on drawings				
	Protect Existing Structures and Installations				
A	Retain and protect all buried Utilities infrastructure	1	item		-
B	Retain and protect all buried drainage infrastructure	1	item		-
C	Retain and protect the 10m x 3m SWW buried attenuation tank	1	item		-
D	Retain and protect the 10m x 3m buried chamber	1	item		-
E	Retain and protect the BT junction box	1	item		-
F	Retain and protect all adjacent pavements and paths, including all services, lamp posts and highways infrastructure.	1	item		-
G	Retain and protect the existing boundary wall	41	m		-
H	Retain and protect the existing boundary fences	44	m		-
	Various locations on site; all as shown on drawings				
	Demolishing structures				
I	Removal of 1700 high blockwall, including grubbing up foundations; all as shown on drawing; disposing of material off site	8	m		-
J	Removal of temporary parking/ hard standing area; including grubbing up any sub-base and edgings; disposing of material off site	325	m2		-
K	Removal of timber fences; all as shown on drawing; disposing of material off site -	106	m		-
L	Removal of partially buried scaffold poles; including grubbing up any footings; all as shown on drawing; disposing of material off site	2	nr		-
M	Removal of existing park signage; including grubbing up any footings; all as shown on drawing; disposing of material off site	1	item		-
	Clear site				
N	Retain and protect the trees in the Tree Protection Zone; all as shown on drawings; protective measures in accordance with the Arboricultural Impact Assessment/ Phase 3 Remediation Strategy	1	item		-
O	Removal of small trees and shrubs vegetation; including grubbing up any roots; all as shown on drawing; disposing of material off site	909	m2		-
P	Removal of grass and scrub vegetation; all as shown on drawing; disposing of material off site	2,320	m2		-

Element				
	Qty	Unit	Rate	Total
Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Demolitions				
	WEST SIDE				
	DEMOLITION/ALTERATION/RENOVATION				
	C20: DEMOLITION				
	Various locations on site; all as shown on drawings				
	Protect Existing Structures and Installations				
A	Retain and protect all buried Utilities infrastructure	1	item		-
B	Retain and protect all buried drainage infrastructure	1	item		-
C	Retain and protect the CCTV column and camera	1	item		-
D	Retain and protect all adjacent pavements and paths, including all services, lamp posts and highways infrastructure.	1	item		-
	Various locations on site; all as shown on drawings				
	Demolishing structures				
E	Removal of temporary footpath of various hard standing materials; including grubbing up any sub-base and edgings; disposing of material off site	120	m2		-
F	Removal of timber fences; all as shown on drawing; disposing of material off site -	173	m		-
G	Removal of gate; including grubbing up any footings; all as shown on drawing; disposing of material off site	1	nr		-
H	Removal of existing park signage; including grubbing up any footings; all as shown on drawing; disposing of material off site	1	item		-
	Clear site				
I	Removal of small trees and shrubs vegetation; including grubbing up any roots; all as shown on drawing; disposing of material off site	278	m2		-
J	Removal of grass and scrub vegetation; all as shown on drawing; disposing of material off site	3,049	m2		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Earthworks				
	EAST SIDE				
	GROUNDWORK				
	D20: EXCAVATING AND FILLING				
	Excavating				
	Topsoil; removed from site in accordance with the Architect's Design information and Phase 3 Remediation Strategy				
A	maximum depth; not exceeding 0.25m (Approximate Quantity)	34	m3		-
	To reduce levels				
B	maximum depth; not exceeding 0.25m	152	m3		-
C	maximum depth; not exceeding 0.25m (Approximate Quantity)	60	m3		-
D	maximum depth; 0.26m to 0.50m	371	m3		-
E	maximum depth; 0.26m to 0.50m (Approximate Quantity)	120	m3		-
F	maximum depth; 0.51m to 1.00m	62	m3		-
G	maximum depth; 0.51m to 1.00m (Approximate Quantity)	20	m3		-
	Disposal of toxic/hazardous excavated material; Phase 3 Remediation Strategy				
H	off site	441	m3		-
I	off site (Approximate)	166	m3		-
	Compacting				
J	bottoms of excavations (under paving)	540	m2		-
K	bottoms of excavations (under soft landscaping)	2,733	m2		-
	Excavated material obtain from on site excavations				
	Filling to make up levels				
L	average thickness not exceeding 0.25m	53	m3		-
M	average thickness not exceeding 0.26m to 0.50m	107	m3		-
N	average thickness not exceeding 0.51m to 1.00m	18	m3		-
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q20: GRANULAR SUB-BASES TO ROADS/PAVINGS				
	Granular material; type 1 (Clause 803) to be obtained off site; NBS Q20				
	Filling to make up levels				
O	average thickness not exceeding 0.25m	81	m3		-
	Accessories				
	High-visibility geotextile membrane; Lotrak Alarm				
P	laid in accordance with manufacturers instructions (under all paving and soft landscaping areas)	3273	m2		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Earthworks				
	WEST SIDE				
	GROUNDWORK				
	D20: EXCAVATING AND FILLING				
	Excavating				
	Topsoil; removed from site in accordance with the Architect's Design information and Phase 3 Remediation Strategy				
A	maximum depth; not exceeding 0.25m (Approximate Quantity)	30	m3		-
	To reduce levels				
B	maximum depth; not exceeding 0.25m	115	m3		-
C	maximum depth; not exceeding 0.25m (Approximate Quantity)	65	m3		-
D	maximum depth; 0.26m to 0.50m	290	m3		-
E	maximum depth; 0.26m to 0.50m (Approximate Quantity)	130	m3		-
F	maximum depth; 0.51m to 1.00m	48	m3		-
G	maximum depth; 0.51m to 1.00m (Approximate Quantity)	22	m3		-
	Disposal of toxic/hazardous excavated material; Phase 3 Remediation Strategy				
H	off site	382	m3		-
I	off site (Approximate)	186	m3		-
	Compacting				
J	bottoms of excavations (under paving)	539	m2		-
K	bottoms of excavations (under soft landscaping)	2,785	m2		-
	Excavated material obtain from on site excavations				
	Filling to make up levels				
L	average thickness not exceeding 0.25m	30	m3		-
M	average thickness not exceeding 0.26m to 0.50m	61	m3		-
N	average thickness not exceeding 0.51m to 1.00m	10	m3		-
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q20: GRANULAR SUB-BASES TO ROADS/PAVINGS				
	Granular material; type 1 (Clause 803) to be obtained off site; NBS Q20				
	Filling to make up levels				
O	average thickness not exceeding 0.25m	81	m3		-
	Accessories				
	High-visibility geotextile membrane; Lotrak Alarm				
P	laid in accordance with manufacturers instructions (under all paving and soft lanscaping areas)	3324	m2		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	WALLS				
	EAST SIDE				
	WALLS				
	F20 NATURAL STONE RUBBLE WALLING				
	Contractor Designed Cornish Stone Hedges				
	Stone faced Cornish stone hedge; including all footings; NBS F20/110				
A	sample reference panel wall including end, junction and precast seating detail	4	m		-
B	wall constructed in accordance with Employer's Requirements; NBS F20; Architect's Drawings; Engineer's design information; and approved reference sample	85	m		-
C	E.O for wall end	6	nr		-
	F31 CONCRETE SEATING WALLS				
	Contractor Designed Precast Concrete Seating Walls				
	Reinforced precast concrete wall; including all footings; NBS F31				
D	sample reference panel wall including end, junction and precast seating detail	4	m		-
E	wall constructed in accordance with Employer's Requirements; NBS F20; Architect's Drawings; Engineer's design information; and approved reference sample	13	m		-
F	E.O for wall end	12	nr		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	WALLS				
	WEST SIDE				
	WALLS				
	F20 NATURAL STONE RUBBLE WALLING				
	Contractor Designed Cornish Stone Hedges				
	Stone faced Cornish stone hedge; including all footings; NBS F20/110				
A	sample reference panel wall including end, junction and precast seating detail	4	m		-
B	wall constructed in accordance with Employer's Requirements; NBS F20; Architect's Drawings; Engineer's design information; and approved reference sample	126	m		-
C	E.O for wall end	6	nr		-
	F31 CONCRETE SEATING WALLS				
	Contractor Designed Precast Concrete Seating Walls				
	Reinforced precast concrete wall; including all footings; NBS F31				
D	sample reference panel wall including end, junction and precast seating detail	4	m		-
E	wall constructed in accordance with Employer's Requirements; NBS F20; Architect's Drawings; Engineer's design information; and approved reference sample	83	m		-
F	E.O for wall end	14	nr		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Trees/shrubs/plants/grasses				
	EAST SIDE				
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q28: TOPSOIL AND SOIL AMELIORANTS				
	Mulching and top dressing				
	Beds and bases of trees; NBS Q28/155, Q28/355				
A	mulching/bark; 75mm deep	756	m2		-
	Mycorrhizal inoculant; NBS Q28/380				
	Beds and bases of trees; NBS Q28/155, Q28/355				
B	mulching/bark; 75mm deep	85	m2		-
	Imported topsoil				
	Beds; NBS Q28/115, Q28/315				
C	200mm deep; grassed areas	1,590	m2		-
D	Extra over additional 100mm deep; grassed areas (Approximate Quantity)	1,590	m2		-
E	200mm deep; wildflower areas	491	m2		-
F	Extra over additional 100mm deep; wildflower areas (Approximate Quantity)	491	m2		-
	Imported topsoil				
	Beds; NBS Q28/135, Q28/315				
G	200mm deep; planting beds	671	m2		-
H	Extra over additional 100mm deep; planting beds areas (Approximate Quantity)	671	m2		-
	Preparing for top soil for seeding; NBS Q28/300				
A	removing weeds, debris and stones over 25mm; raked smooth with fine tilth	2,143	m2		-
	Q30: SEEDING/TURFING				
	Surface applications				
	Cultivating				
	Surfaces of natural ground; NBS Q30/212				
J	generally	2,143	m2		-
	Wildflower seeding				
	Wildflower seed areas; as NBS Q30/310				
K	generally	491	m2		-
	Wildflower seed within edible scrub planting areas; as NBS Q30/310A				
L	Edible scrub planting area to be seeded with 'EH1 Hedgerow Mixture' by 'Emorsgate Seeds'; or equal and approved	378	m2		-
	Wildflower seed within Cornish hedge tops; as NBS Q30/310B				
M	generally	62	m2		-
	Grass seeding				
	Grass seed; as NBS Q30/311				
N	generally	1,590	m2		-
	Swale seeding ; as NBS Q30/311A				
O	generally	137	m2		-
	Q31: PLANTING				
	Tree planting				

	Element	Qty	Unit	Rate	Total
	Tree planting; including pit excavation, disposal, backfilling with topsoil; stakes/ties supports or below ground guying; included irrigation/aeration system; installed all in accordance with schedule and drawings1; NBS Q31				
P	Ulmus Vada (Wanoux); 8 - 10cm girth; 2.5m - 3m high; standard	5	nr		-
Q	Cornus florida; 8 - 10cm girth; 2.5m - 3m high; standard	2	nr		-
R	Apple 'Strawberry Pippin'; 1.0m - 1.5m high; maiden	1	nr		-
S	Apple 'Bens Red'; 1.0m - 1.5m high; maiden	1	nr		-
T	Apple 'Cornish Pine'; 1.0m - 1.5m high; maiden	1	nr		-
U	Apple 'Cornish Gilliflower'; 1.0m - 1.5m high; maiden	1	nr		-
V	Apple 'Bramley'; 1.0m - 1.5m high; maiden	1	nr		-
	Edible Scrub Planting				
	Shrubs; including spiral guard and cane supports; total area 378m2; NBS Q31				
W	Blackcurrent 'Ben Conan'; 60cm - 80cm high; at 800 centres	30	nr		-
X	Blackcurrant 'Ben Lomand'; 60cm - 80cm high; at 800 centres	30	nr		-
Y	Corylus avellana 'Cosford cob'; 100cm - 125cm high; at 800 centres	59	nr		-
Z	Corylus avellana 'Webb's Prize Cobb'; 100cm - 125cm high; at 800 centres	59	nr		-
AA	Gooseberry 'Hinnomaki Red'; 60cm - 80cm high; at 800 centres	30	nr		-
AB	Gooseberry 'Winnham's Industry'; 60cm - 80cm high; at 800 centres	30	nr		-
AC	Mespilus germanica 'Medlar'; 1000cm - 120cm high; maiden; at 800 centres	30	nr		-
AD	Prunus domestica 'Kea Plum (Cornish)'; 100cm - 120cm high; at 800 centres; maiden	59	nr		-
AE	Prunus domestica 'Manaccan Plum (Cornish)'; 100cm - 120cm high; at 800 centres; maiden	59	nr		-
AF	Prunus instita 'Damson'; 80cm - 100cm high; at 800 centres; transplant	30	nr		-
AG	Redcurrant 'Junifer'; 60cm - 80cm high; at 800 centres	30	nr		-
AH	Redcurrant 'Laxton's No 1'; 60cm - 80cm high; at 800 centres	30	nr		-
AI	Sambucus higra 'Elderflower'; 80cm - 100cm high; at 800 centres; transplant	59	nr		-
AJ	Whitecurrent 'Blanka'; 60cm - 80cm high; at 800 centres	30	nr		-
AK	Whitecurrent 'White Versailles'; 60cm - 80cm high; at 800 centres	30	nr		-
	Greenspace Planting; total area 231m2				
	Shrubs; including spiral guard and cane supports; NBS Q31				
AL	Ceanothus thyrsiflorus repens; 20cm - 30cm high; 2 litre; 0.45 centre density	30	nr		-
AM	Choisya 'Aztec Pearl'; 20cm - 30cm high; 2 litre; 0.5 centre density	30	nr		-
AN	Hebe 'Great Orme'; 20cm - 30cm high; 2 litre; 0.5 centre density	32	nr		-
AO	Hebe franciscana 'Blue Gem'; 20cm - 30cm high; 2 litre; 0.5 centre density	22	nr		-
AP	Hebe rakaiensis; 20cm - 30cm high; 2 litre; 0.5 centre density	29	nr		-
AQ	Hebe topiaria; 20cm - 30cm high; 2 litre; 0.4 centre density	40	nr		-
AR	Ilex crenata 'Green Hedger'; 20cm - 30cm high; 2 litre; 0.4 centre density	20	nr		-
AS	Lavendula intermedia 'Grosso'; 20cm - 30cm high; 2 litre; 0.4 centre density	40	nr		-
AT	Mahonia eurybracteata 'Soft Caress'; 20cm - 30cm high; 2 litre; 0.45 centre density	26	nr		-
AU	Pachysandra termilais 'Green Carpet'; 2 litre; 0.4 centre density	38	nr		-
AV	Perovskia atriplicifolia 'Blue Spire'; 20cm - 30cm high; 2 litre; 0.45 centre density	39	nr		-
AW	Phlomis fruiticosa; 20cm - 30cm high; 2 litre; 0.45 centre density	35	nr		-
AX	Prunus laurocerus 'Otto Lyken'; 30cm - 40cm high; 3 litre; 0.45 centre density	27	nr		-
AY	Rosemarinus officinalis 'Tuscan Blue'; 30cm - 40cm high; 3 litre; 0.5 centre density	23	nr		-
AZ	Ruta graveolens 'Lackman's Blue'; 20cm - 30cm high; 2 litre; 0.45 centre density	25	nr		-

	Element	Qty	Unit	Rate	Total
BA	Sarcococca hookerana; 20cm - 30cm high; 2 litre; 0.4 centre density	22	nr		-
	Herbaceous; including spiral guard and cane supports; NBS Q31				
BB	Acanthus moliis;2 litre; 0.45 centre density	29	nr		-
BC	Agapanthus 'Blue'; 2 litre; 0.45 centre density	41	nr		-
BD	Anemone hybrida 'Honorine Jobert'; 2 litre; 0.45 centre density	27	nr		-
BE	Hemerocallis 'Sir Modred'; 2 litre	15	nr		-
BF	Miscanthus sinensis 'Klein Fontane'; 2 litre	15	nr		-
BG	Osteospermum 'White Pixie'; 1 - 1.5 litre; 0.4 centre density	38	nr		-
BH	Osteospermum jucundum 'Tresco Purple'; 1 - 1.5 litre; 0.4 centre density	35	nr		-
BI	Rudbeckia 'Goldstrum'; 2 litre	15	nr		-
BJ	Sedum spectabile'; 2 litre; 0.4 centre density	24	nr		-
BK	Stipa gigantea; 2 litre	4	nr		-
BL	Verbena bonariensis; 2 litre	40	nr		-
	Ferns; including spiral guard and cane supports; NBS Q31				
BM	Matteiccia struthiopteris; 2 litre	12	nr		-
	Perrenials; including spiral guard and cane supports; NBS Q31				
BN	Cynara cardunulcus; 2 litre	15	nr		-
	Annuals/ Biennials; including spiral guard and cane supports; NBS Q31				
BO	Echium pininana; 1 litre	15	nr		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Trees/shrubs/plants/grasses				
	WEST SIDE				
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q28: TOPSOIL AND SOIL AMELIORANTS				
	Mulching and top dressing				
	Beds and bases of trees; NBS Q28/155, Q28/355				
A	mulching/bark; 75mm deep	1,215	m2		-
	Mycorrhizal inoculant; NBS Q28/380				
	Beds and bases of trees; NBS Q28/155, Q28/355				
B	mulching/bark; 75mm deep	120	m2		-
	Imported topsoil				
	Beds; NBS Q28/115, Q28/315				
C	200mm deep; grassed areas	1,485	m2		-
D	Extra over additional 100mm deep; grassed areas (Approximate Quantity)	1,485	m2		-
E	200mm deep; wildflower areas	90	m2		-
F	Extra over additional 100mm deep; wildflower areas (Approximate Quantity)	90	m2		-
	Imported topsoil				
	Beds; NBS Q28/135, Q28/315				
G	200mm deep; planting beds	1,095	m2		-
H	Extra over additional 100mm deep; planting beds areas (Approximate Quantity)	1,095	m2		-
	Preparing for top soil for seeding; NBS Q28/300				
A	removing weeds, debris and stones over 25mm; raked smooth with fine tilth	2,580	m2		-
	Q30: SEEDING/TURFING				
	Surface applications				
	Cultivating				
	Surfaces of natural ground; NBS Q30/212				
J	generally	2,580	m2		-
	Wildflower seeding				
	Wildflower seed within Cornish hedge tops; as NBS Q30/310B				
K	generally	90	m2		-
	Grass seeding				
	Grass seed; as NBS Q30/311				
L	generally	1,485	m2		-
	Swale seeding ; as NBS Q30/311A				
M	generally	188	m2		-
	Q31: PLANTING				
	Tree planting				
	Tree planting; including pit excavation, disposal, backfilling with topsoil; stakes/ties supports or below ground guying; included irrigation/aeration system; installed all in accordance with schedule and drawings1; NBS Q31				
N	Amalancher arborea 'Robin Hill'; 8 - 10cm girth; 2.5m - 3m high; standard	3	nr		-
O	Ulmus Vada (Wanoux); 8 - 10cm girth; 2.5m - 3m high; standard	5	nr		-

	Element	Qty	Unit	Rate	Total
P	Crataegus pruniflora 'Splendens'; 8 - 10cm girth; 2.5m - 3m high; standard	3	nr		-
Q	Apple 'Golden Noble'; 1.0m - 1.5m high; maiden	1	nr		-
R	Apple 'Pig Nose'; 1.0m - 1.5m high; maiden	1	nr		-
S	Apple 'Tregonna King'; 1.0m - 1.5m high; maiden	1	nr		-
	Sensory Garden Ornamental planting				
	Ornamental planting; total area 102m2; NBS Q31				
T	Artemisia pontica; full pot; 2 litre; 0.45 centre density	27	nr		-
U	Centaurea macrocephala; full pot; 2 litre; 0.45 centre density	12	nr		-
V	Centaurea scabosa; full pot; 2 litre; 0.45 centre density	16	nr		-
W	Echinacea purpurea 'Magnus'; full pot; 2 litre; 0.45 centre density	27	nr		-
X	Echinacea ritro 'Veitch's Blue'; full pot; 2 litre; 0.45 centre density	27	nr		-
Y	Eryngium planum 'Blaukappe'; full pot; 2 litre; 0.45 centre density	27	nr		-
Z	Foeniculum vulgare 'Purpureum'; full pot; 2 litre; 0.45 centre density	16	nr		-
AA	Helenium 'Moerheim Beauty'; full pot; 2 litre; 0.45 centre density	12	nr		-
AB	Helianthus maximiliani'; full pot; 2 litre; 0.45 centre density	12	nr		-
AC	Helichrysum italicum; full pot; 2 litre; 0.45 centre density	27	nr		-
AD	Miscanthus nepalensis; full pot; 2 litre; 0.45 centre density	12	nr		-
AE	Miscanthus sinensis 'Malepartus'; full pot; 2 litre; 0.45 centre density	16	nr		-
AF	Verbascum 'Firedance'; full pot; 2 litre; 0.45 centre density	16	nr		-
AG	Verbena bonariensis; full pot; 2 litre; 0.45 centre density	27	nr		-
AH	Achillea millefolium 'Red Velvet'; full pot; 2 litre; 0.35 centre density	11	nr		-
AI	Allium schoenoprasum'; full pot; 1.5-2 litre; 0.35 centre density	21	nr		-
AJ	Cenchrus alopecuroides 'Dark Desire'; full pot; 2 litre; 0.35 centre density	21	nr		-
AK	Chamaemelum nobile; full pot; 1 - 1.5 litre; 0.35 centre density	21	nr		-
AL	Cosmos atrosanguineus 'Chocamocha'; full pot; 1.5 - 2 litre; 0.35 centre density	21	nr		-
AM	Erigeron glaucus 'Sea Breeze'; full pot; 1.5 - 2 litre; 0.35 centre density	11	nr		-
AN	Knautia macedonica; full pot; 2 litre; 0.35 centre density	21	nr		-
AO	Salvia argentea; full pot; 2 litre; 0.35 centre density	11	nr		-
AP	Salvia officinalis 'Purpurascens'; full pot; 1.5 - 2 litre; 0.35 centre density	11	nr		-
AQ	Santolin chamaecyparissus 'Lemon Queen'; bushy; 2 litre; 0.35 centre density	11	nr		-
AR	Stachys byzantina; full pot; 2 litre; 0.35 centre density	21	nr		-
AS	Stippa tenuissima 'Pony Tails'; full pot; 2 litre; 0.35 centre density	21	nr		-
AT	Thymus serpyllum'; full pot; 1.5 - 2 litre; 0.35 centre density	11	nr		-

Element	Qty	Unit	Rate	Total
Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Pavings/Gravel				
	EAST SIDE				
	Q20: GRANULAR SUB-BASES TO ROADS/PAVINGS Granular material; type 1 (Clause 803) to be obtained off site; NBS Q20				
	Compacting granular material; type 1 , with 6 - 8 tonnes smooth wheeled roller				
A	filling	81	m3		-
	Accessories				
	Geotextile membrane; Terram T1000				
B	laid in accordance with manufacturers instructions	540	m2		-
	Q22: COATED MACADAM/ASPHALT ROADS/PAVINGS				
	Asphalt concrete paving; NBS Q22/115				
	85 thick footways; 60 thick binder course; max 25 thick surface course; Addastone plus proprietary resin bonded chipping overlay (Q23/190); to falls and crossfalls, and slopes not exceeding 15 degrees from horizontal				
C	generally	402	m2		-
D	E.O. for acid etched artworks	56	m2		-
	Q24: INTERLOCKING BRICK/BLOCK ROADS/PAVINGS				
	Plastic reinforced cellular paving; Terram Bodpave 40; black, on 35mm sand/grit bedding layer; NBS Q25/180				
	Filling with topsoil and seeded (measured elsewhere); to falls and crossfalls, and slopes not exceeding 15 degrees from horizontal				
E	generally	14	m2		-
	Q25: SLAB/BRICK/BLOCK/SETT/COBBLE PAVINGS				
	Stone paving; granite paving slabs; on 150 thick sub-base (measured elsewhere); mixed colours and sizes; tessellated laying pattern; bedding with cement and sand; jointing and pointing in cement and sand; all in accordance with manufacturers instructions and recommendations; as NBS Q25/110				
F	Generally	42	m2		-
	Stone paving; Temple granite setts; on 150 thick sub-base (measured elsewhere); mixed colours and sizes; random staggered laying pattern; bedding on 50 thick mortar; primer for underside of setts; 8mm tooled mortar joints; all in accordance with manufacturers instructions and recommendations; as NBS Q25/140				
G	Generally	51	m2		-

	Element	Qty	Unit	Rate	Total
	Q26: SPECIAL SURFACINGS/PAVINGS FOR SPORT/GENERAL AMENITY Safety surface; TigerMulch; polyurethane bound mulch surface; colour TBA; installed all in accordance with manufacturers instructions; NBS Q26/130 Pavings				
H	40 thick; to falls and crossfalls and to slopes not exceeding 15 degrees from horizontal (play equipment area)	32	m2		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Pavings/Gravel				
	EAST SIDE				
	Q20: GRANULAR SUB-BASES TO ROADS/PAVINGS Granular material; type 1 (Clause 803) to be obtained off site; NBS Q20				
	Compacting granular material; type 1 , with 6 - 8 tonnes smooth wheeled roller				
A	filling	80.85	m3		-
	Accessories				
	Geotextile membrane; Terram T1000				
B	laid in accordance with manufacturers instructions	539	m2		-
	Q22: COATED MACADAM/ASPHALT ROADS/PAVINGS				
	Asphalt concrete paving; NBS Q22/115				
	85 thick footways; 60 thick binder course; max 25 thick surface course; Addastone plus proprietary resin bonded chipping overlay (Q23/190); to falls and crossfalls, and slopes not exceeding 15 degrees from horizontal				
C	generally	357	m2		-
D	E.O. for acid etched artworks	28	m2		-
	Q24: INTERLOCKING BRICK/BLOCK ROADS/PAVINGS				
	Plastic reinforced cellular paving; Terram Bodpave 40; black, on 35mm sand/grit bedding layer; NBS Q25/180				
	Filling with topsoil and seeded (measured elsewhere); to falls and crossfalls, and slopes not exceeding 15 degrees from horizontal				
E	generally	17	m2		-
	Q25: SLAB/BRICK/BLOCK/SETT/COBBLE PAVINGS				
	Stone paving; granite paving slabs; on 150 thick sub-base (measured elsewhere); mixed colours and sizes; tessellated laying pattern; bedding with cement and sand; jointing and pointing in cement and sand; all in accordance with manufacturers instructions and recommendations; as NBS Q25/110				
F	Generally	154	m2		-

	Element	Qty	Unit	Rate	Total
	Q26: SPECIAL SURFACINGS/PAVINGS FOR SPORT/GENERAL AMENITY Safety surface; TigerMulch; polyurethane bound mulch surface; colour TBA; installed all in accordance with manufacturers instructions; NBS Q26/130 Pavings				
G	40 thick; to falls and crossfalls and to slopes not exceeding 15 degrees from horizontal (play equipment area)	16	m2		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Kerbs/Edgings				
	EAST SIDE				
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q10: KERBS/EDGINGS/CHANNELS/PAVING ACCESSORIES				
	Steel edging; Kinley Systems Everedge Fort; galvanised finish; all in accordance with manufacturers instructions; NBS Q10/200A				
	Edgings; and fixing pins				
A	75mm edging - straight or curves under 1.5m radius	267	m		-
B	75mm edging - curved over 1.5m radius	49	m		-
	Steel edging; Kinley Systems Everedge Fort; galvanised finish; all in accordance with manufacturers instructions; NBS Q10/200B				
	Edgings; and fixing pins				
C	100mm edging - straight or curves under 1.5m radius	27	m		-
	Steel edging; Kinley Systems Everedge Fort; galvanised finish; all in accordance with manufacturers instructions; NBS Q10/200C				
	Edgings; including 150 wide x 120 GEN 1 footing; and fixings				
D	200mm edging - straight or curves under 1.5m radius	48	m		-
	Q23: GRAVEL/HOGGIN/WOODCHIP ROADS/PAVINGS				
	Timber edging; Sawn softwood				
	Edgings; fixing with galvanised nails into softwood pegs driven into ground at suitable centres				
E	150 x 38 high (Approximate Quantity)	513	m		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Kerbs/Edgings				
	WEST SIDE				
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q10: KERBS/EDGINGS/CHANNELS/PAVING ACCESSORIES				
	Steel edging; Kinley Systems Everedge Fort; galvanised finish; all in accordance with manufacturers instructions; NBS Q10/200A				
	Edgings; and fixing pins				
A	75mm edging - straight or curves under 1.5m radius	270	m		-
B	75mm edging - curved over 1.5m radius	14	m		-
	Steel edging; Kinley Systems Everedge Fort; galvanised finish; all in accordance with manufacturers instructions; NBS Q10/200B				
	Edgings; and fixing pins				
C	100mm edging - straight or curves under 1.5m radius	23	m		-
	Q23: GRAVEL/HOGGIN/WOODCHIP ROADS/PAVINGS				
	Timber edging; Sawn softwood				
	Edgings; fixing with galvanised nails into softwood pegs driven into ground at suitable centres				
D	150 x 38 high (Approximate Quantity)	616	m		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Furniture / Equipment				
	EAST SIDE				
	INFORMATION *All the below items are to be priced to included for supply, delivery, assembly, installing in location and any associated excavation/concrete foundations and/or fittings required.*				
	FURNITURE/EQUIPMENT				
	PAVING/PLANTING/FENCING/SITE FURNITURE Q50: SITE/STREET FURNITURE/EQUIPMENT				
	Gates, barriers and parking controls				
	Collapsible/ Telescopic bollards; Furniitubes; Round Telescopic Bollard TPR700; stainless steel grade 316; 670mm above ground; 90mm diameter; lockable socket; fixing into ground as per manufacturers instructions and details; NBS Q50/192				
A	90 diameter x 670 high above ground; (Approximate Quantity)	8	nr		-
	Benches, seats and tables				
	Contractor Designed Precast concrete bespoke precast seating/ seating walls/ benches; including concrete foundations; NBS Q50/220A				
B	1400mm long	3	nr		-
C	3000mm long	3	nr		-
D	E.O. curved	6	m		-
	Bench seat; Marshalls Metrolinia; precast concrete; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/220B				
E	Intermediate Block 600	2	nr		-
F	Radius end	4	nr		-
G	Radius corner with right side blanked off	1	nr		-
	Bench seat; Mmcite; polyester powder coated steel; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/220C				
H	Intervera LVR 256	1	nr		-
I	Intervera LVR 257	1	nr		-
	Planters				
	Bench seat; Marshalls Metrolinia; precast concrete; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/220B				
J	Planter	3	nr		-
	Contractor designed Precast concrete pipe planter; Stanton Precast; manhole ring 2400 x 1000mm; clad in 1.5mm corten steel; NBS Q31/293				

	Element	Qty	Unit	Rate	Total
K	2400 diameter	2	nr		-
	Litter bins and recycling				
	Recycling Bin; Streetlife; Box Bins extra slim; with closed walls and rain cover; stainless steel power coated steel; RAL colour TBA; fixing to base as per manufacturers instructions and details				
L	400 x 400 x 970 (Approximate Quantity)	2	nr		-
M	400 x 400 x 970; with PET print and graphics symbol (Approximate Quantity)	2	nr		-
N	400 x 400 x 970; with ALU print and graphics symbol (Approximate Quantity)	2	nr		-
	Litter Bin; Streetlife; Box Bins extra slim; with closed walls and rain cover; stainless steel power coated steel; RAL colour TBA; fixing to base as per manufacturers instructions and details; NBS Q50/242				
O	400 x 400 x 970 (Approximate Quantity)	2	nr		-
	Ecological Items				
	Bee Post; Green And Blue; Bee Post Tower; Concrete using waste from chain clay; set into concrete base as per manufacturers instructions and details; (Approximate Quantity)				
P	120 x 120 x 2300 high; 300 fixing into ground	4	nr		-
	Bat Box; Schwegler 2F universal bat box; fixing to manufacturers instructions and details; (Approximate Quantity)				
Q	160Ø x 330; fixing to existing trees	4	nr		-
	Bird Box; Vivara Pro; Woodstone Seville; 32mm hole nest box; brown; fixing to manufacturers instructions and details; (Approximate Quantity)				
R	200 x 205 x 310; fixing to existing trees	4	nr		-
	Q52: PLAY AND SPORTS EQUIPMENT				
	Archway Structure				
	Contractor designed Corten archway / ring at key entrance; Stark and Greensmith Moongate; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/322				
S	2m ground clearance above path	2	nr		-
	P.C. SUMS/PROVISIONAL SUMS/DAYWORKS				
	A54: PROVISIONAL WORK Include the following Provisional Sums:-				
	For defined work				
T	Reinforced concrete base for bespoke artwork		Sum	3,000.00	-
U	Interoperative signage		Sum	3,000.00	-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Furniture / Equipment				
	WEST SIDE				
	INFORMATION *All the below items are to be priced to included for supply, delivery, assembly, installing in location and any associated excavation/concrete foundations and/or fittings required.*				
	FURNITURE/EQUIPMENT				
	PAVING/PLANTING/FENCING/SITE FURNITURE Q50: SITE/STREET FURNITURE/EQUIPMENT				
	Gates, barriers and parking controls				
	Collapsible/ Telescopic bollards; Furniitubes; Round Telescopic Bollard TPR700; stainless steel grade 316; 670mm above ground; 90mm diameter; lockable socket; fixing into ground as per manufacturers instructions and details; NBS Q50/192				
A	90 diameter x 670 high above ground; (Approximate Quantity)	4	nr		-
	Shade Structure/ Shelter				
	Shelter; Streetlife; Ensemble Circle Shade Structure; corten steel; with roof panel; including concrete foundations; all as per manufacturers instructions and details; NBS Q50/210				
B	single ECS 450 diameter with open roof	1	nr		-
	Benches, seats and tables				
	Contractor Designed Precast concrete bespoke precast seating/ seating walls/ benches; including concrete foundations; NBS Q50/220A				
C	1400mm long	2	nr		-
D	3000mm long	2	nr		-
E	E.O. curved	3	m		-
	Bench seat; Marshalls Metrolinia; precast concrete; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/220B				
F	Intermediate Block 600	3	nr		-
G	Radius end	5	nr		-
H	Radius corner with left side blanked off	1	nr		-
	Bench seat; Mmcite; polyester powder coated steel; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/220C				
I	Intervera LVR 251	2	nr		-
J	Vera LVS 251	1	nr		-
K	Vera Solo LVS 211	6	nr		-
L	Vera Solo LVS 510	1	nr		-

	Element	Qty	Unit	Rate	Total
M	Tably TBW 421	2	nr		-
N	Tably TBW 421 (Disabled)	1	nr		-
	Planters				
	Bench seat; Marshalls Metrolinia; precast concrete; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/220B				
	Archway Structure				
	Contractor designed Corten archway / ring at key entrance; Stark and Greensmith Moongate; fixing into ground in concrete foundation; as per manufacturers instructions and details; NBS Q50/322				
O	2m ground clearance above path	2	nr		-
	P.C. SUMS/PROVISIONAL SUMS/DAYWORKS				
	A54: PROVISIONAL WORK Include the following Provisional Sums:-				
	For defined work				
P	Reinforced concrete base for bespoke artwork		Sum	3,000.00	-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Maintenance				
	EAST SIDE				
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q35: LANDSCAPE MAINTENANCE				
	Landscape maintenance; NBS Q35				
	General site wide maintenance; 1 year duration				
A	grassed areas	1	item		-
B	flower beds / seasonal bedding	1	item		-
C	shrubs / trees / hedges	1	item		-
D	trees	1	item		-
E	hard landscaping	1	item		-
F	furniture and fencing	1	item		-
	Total				**0.00**

	Element	Qty	Unit	Rate	Total
	Maintenance				
	EAST SIDE				
	PAVING/PLANTING/FENCING/SITE FURNITURE				
	Q35: LANDSCAPE MAINTENANCE				
	Landscape maintenance; NBS Q35				
	General site wide maintenance; 1 year duration				
A	grassed areas	1	item		-
B	flower beds / seasonal bedding	1	item		-
C	shrubs / trees / hedges	1	item		-
D	trees	1	item		-
E	hard landscaping	1	item		-
F	furniture and fencing	1	item		-
	Total				**0.00**

SECTION 4

FORM OF TENDER

INCLUDED IN ITT

APPENDIX A

Preconstruction Information (PCI)

Crossley Hill
Chartered Surveyors

Pre-Construction Information

For

Remediation and Landscaping Development Work

At

Kerrier Way,

Camborne

For

Camborne Town Council

Date: January 2024

Version: 01

Contents

Author	**Daryl Hill** **Principal Designer**	*Signed* ……	Date: 14 February 2024
Reviewed	**Phil Crossley** **Director**	*Signed* ……	*Date: 14 February 2024* ……

AMENDMENT LOG

Revision	Reason for Issue	Section Updated	Author	Reviewed

PREAMBLES

Pre-Construction Information

The Pre-construction Information has been prepared in accordance with the requirements of the Construction (Design and Management) Regulations 2015 (the CDM Regulations). It has been compiled on the basis of the information available about the project at the time of this revision.

This document is intended to collate information provided into a useful document that can be taken forward and used to plan the project in terms of general cooperation and consideration as well as detailing known health and safety issues.

This document does not attempt to list the responsibilities of the Principal Contractor, of which he should already be fully aware. Further details of such can be viewed in guidance document L153 for the CDM Regulations 2015. This document does however give a guide as to the issues that have been identified already and inform of any site peculiarities or Client restrictions.

This document should not be used in isolation for planning health and safety matters as reference should always be made to other information detailed as well as tender information. Site inspections should always be carried out by the Principal Contractor prior to works commencing to ensure all relevant issues have been identified as far as reasonably possible.

Construction Stage

The successful contractor should note that the appointment will not be confirmed unless or until the Client is satisfied as to the competence of the contractor to fulfil these duties and as to the adequacy of resources to be allocated to the health and safety aspects of the project.

Construction Phase Plan

It is a requirement under the CDM Regulations 2015 that the Principal Contractor produces a comprehensive Construction Phase Plan (herein referred to as the Plan). This plan must be submitted to the Principal Designer for review at least two weeks before works commence on site.

The information provided within this document and other documents referenced herein should be referred to when the Principal Contractor is preparing the Plan. Details of how the hazards will be managed should be included.

The Plan must not be a generic health & safety policy style document but must detail actual information that will be implemented. Irrelevant and out of date information (including reference to the 1994 Regulations) must be removed or amended.

The Principal Contractor shall assume full responsibility for the maintenance of this information and for the development of the Construction Phase Plan which shall be up-dated as necessary during the course of the project.

No construction shall be allowed to commence without receipt of written confirmation that the Client is satisfied that the plan is satisfactorily developed and appropriate to the work at hand and the welfare facilities are suitable and sufficient.

1.0 DESCRIPTION OF PROJECT

1.1 Location

Two plots of land either side of the Kerrier Way Highway (Three words: laptop.outsize.overjoyed) as identified within the red line boundaries on Architect's Drawing M580/DR-L-1001/05.

1.2 Project Description

Remediation and landscaping development work including hard and soft surface landscaping, the installation of associated street furniture and landscape features.

1.3 Programme

Planned commencement:	01/05/2024
Contract period:	31 weeks
Mobilisation period (minimum):	3 weeks (after instruction of Principal Contractor before commencement of works on site)

The Principal Contactor is required to provide a detailed programme of the works which will be used and updated on a regular basis. Any significant changes to the programme should be notified to the Client in good time.

1.4 Contact Details for Duty Holders

Client
Camborne Town Council,
Passmore Edwards Library,
The Cross,
Cross Street,
Camborne.
TR14 8HA.

Principal Designer
Crossley Hill Chartered Surveyors
5 Frances Street
Truro
TR1 3DN

Lead Designer
Mei Loci,
Studio G2,
Old Bakery Studios,
Blewetts Wharf,
Malpas Rd,
Truro
TR1 1QH

Designers
MBA Consulting Engineers,
Boscawen House,
Chapel Hill,
Truro,
TR1 3BN.

Principal Contractor
TBC

1.5 Extent and Location of Existing Plans and Records

A number of surveys, reports and plans relating to the property and relevant to the works are, included within this document, held by Mei Loci and Crossley Hill Chartered Surveyors, copies can be obtained from these parties on request. The relevant information is referred to in the following sections of this document.

2.0 CLIENT'S CONSIDERATIONS & MANAGEMENT REQUIREMENTS

2.1 Planning & Managing Construction Work

The Client attaches particular importance to the promotion of a positive Health & Safety Culture on all their construction sites, and as a result requires that the following Safety Goals are targeted:

- Project to be managed to achieve 'Zero' accidents
- If this target is not met all accidents are to be fully investigated and details reported as necessary and published to the Client
- The project shall not receive any HSE enforcement action
- The scheme shall comply with any current HSE initiatives; current initiatives include; the 'Asbestos Hidden Danger' Campaign and the 'Shatter Lives' slips and trips campaign

The Principal Contractor will need to identify in the Plan exactly how the project will be planned and managed detailing, but not limited to, the sections provided in this document. This will include the need for a full and detailed programme of works.

2.2 Communication & Liaison between the client and others

It should be ensured that the lines of communication throughout the project are maintained to a high degree. Therefore any significant information produced or received should be passed to the relevant people in good time.

The Principal Contractor is to include within his construction phase plan; details of how clear communication lines will be maintained between all key parties. Including how relevant information from this document and his construction phase plan will be passed to the subcontractors.

The Principal Contractor is to identify how and when communication and liaison will take place in the form of schedules of meetings etc. The method for passing information to all parties should also be detailed.

2.3 Arrangements for Security of the Site

The Principal Contractor must ensure that adequate security measures are implemented to prevent unauthorised access to the site. All necessary site hoarding and/or enclosures are to be provided by the Principal Contractor to isolate the site works and protect the public and adjacent activities. The site shall not be left in an unsecured condition.

The client has identified the boundaries on drawing M580-DR-L-1001-07 which need to be kept secure throughout the course of the contract.

The Principal Contractor must note they have a duty of care to trespassers under the Occupiers Liability Act 1984 and reasonably practicable security measures must be undertaken.

Due to the nature of the site, it is envisaged that the site set up and compound will be entirely within the footprint of the site.

Details of how the Principal Contractor will comply with these provisions must be included within the Construction Phase Plan.

2.4 Arrangements for Welfare Provision and First Aid

Adequate provision will need to be made by the Principal Contractor for all required welfare facilities in accordance with Schedule Two of the CDM Regulations 2015.

The Principal Contractor must include within his Construction Phase Plan; details of the following:

- Details of welfare facilities being provided;
- Details and location of First Aid Facilities giving consideration to the split site arrangement
- Details of any phasing;

The Principal Contractor is required to make suitable provision for first aid facilities in accordance with the Health and Safety (First Aid) Regulations 1981. Details of equipment provided and trained first aiders must be included within the Construction Phase Plan.

2.5 Fire Precautions and Emergency Procedures

The Principal Contractor is required to comply with the 'Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation' (known as The Fire Code) and accordingly produce a fire safety plan as part of the Construction Phase Plan which is updated as required whilst the project progresses.

There are no specific fire precautions other than those that would normally be connected with working on such a site. Any specific fire risks brought about by the construction works will need to be raised in the Plan and detailed as required to reduce risks wherever possible.

The details relating to emergency procedures will need to be detailed in the Plan to include items such as those detailed in the list below:

- Means of warning and escape
- Significant accidents(s)
- Bomb threat
- UXO strike
- Utilities strike

2.6 No-go Areas

The works are restricted to the site area only and no deviation from this is permitted. It is particularly important that the adjacent land users are protected and no access into or disturbance of those areas will be permitted.

2.7 Site Rules

The Plan is to detail all site rules used by the Principal Contractor and the method of relating these to the workforce, such as in the site induction procedure. Inductions will be required for all visitors where the site rules will be related. The rules are to be explained to all persons working and visiting the site at the induction stage. A copy is to be displayed on site in an accessible location and individual points reinforced as required as part of the Principal Contractors discipline policy.

2.8 Permit to Work Systems

The Principal Contractor is to set out within the Construction Phase Plan the work activities that will trigger the need for a permit to work system. The Permit to work system is to be rigorously enforced.

For Work in existing client premises the client requires the Principal Contractor implement the following permit to work procedures:

- Work on services
- Noisy and/or vibratory works
- Work over or adjacent to water

2.9 Personal Protective Equipment (PPE)

Strict details will need to be provided in relation to PPE to ensure the safety of all construction staff, project team members and visitors. The Principal Contractor will need to detail what PPE requirements are the minimum standard and make suitable PPE available for workers and visitors. All risk assessments and method statements will need to identify what task specific PPE is required.

2.10 Confined Spaces

The Principal Designer has not been made aware of any areas designated as confined spaces

3.0 ENVIRONMENTAL RESTRICTIONS AND EXISTING ON-SITE RISKS

SAFETY HAZARDS

3.1 Access and Egress

The Principal Contractor is to note that the following restrictions are present on the neighbouring roads:

Restricted width access roads on all routes to the site
Low cables over access routes into the site
Traffic and Speed Calming measure on the access routes to the site

Access to and from the site is via Roskear Road turning onto Kerrier Way for the duration of the project. The Contractor should note that no drop of zones or parking areas are available externally to the site.

A detailed traffic management plan will need to be produced by the Principal Contractor to show information in relation, but not limited to, all items noted below:

- Access routes and one-way systems
- Delivery / working times
- Parking (contractors & visitors)
- Construction vehicle storage & refuelling (bunded area)
- Delivery drop off
- Banksman
- Materials storage
- Waste storage
- Waste collection
- Wheel wash / road cleaning / inspection
- Pedestrian & vehicles routes

A clean area will need to be provided for deliveries / waste removal to ensure that no mud or debris will be transferred onto the roads. Arrangements are also to be detailed in the event that any cleaning is required.

The occupiers of the adjacent properties to the above site are sensitive to noise and traffic movements and this must be planned in order to reduce disturbance and inconvenience to them. Therefore the numbers of vehicles must be kept to a minimum as well as deliveries and waste collections which should be planned to occur at off peak periods and the positioning of vehicles during drop off and collection given due consideration to prevent blocking the road.

3.2 Deliveries, Storage and Waste Collection

All deliveries are to be made to the site entrance. Materials are to be stored in a position away from site boundaries within the building where possible to reduce the risk of theft and arson. The Principal Contractor is to include in his Construction Phase Plan a plan showing the positioning of all skips and material storage area.

3.3 Adjacent Land Uses

The neighbourhood shows a mix of property types including, residential, commercial, retail, and a School. The School will need to have due consideration made for it, particularly when planning site security, noisy or vibratory works and for the delivery of materials outside of school pick up and drop off times.

3.4 Existing Storage of Hazardous Substances

None identified to the Principal Designer

3.5 Location of Existing services

The extent of the existing services has been identified and indicated on M580-DR-L-1003-02 by review of the services on site. This should not be relied upon alone and the Principal Contractor must allow for further visual inspection of exposed services and use of cable avoidance scanning tools. Construction work should not be carried out unless or until the Principal Contractor is satisfied that all services in the vicinity of the works have been identified. Further investigation may be required subject to the extent of the works; such as during deep excavations.

The following services have been identified:

- BT Junction Box
- Drainage and an attenuation tank
- CCTV camera pole

Should any previously unidentified services be found then these should be protected, isolated if appropriate and reported to all parties as soon as possible and marked on a services plan for future reference.

3.6 Existing Structural Information

The Principal Designer has not been made aware of any further issues.

Should the Principal Contractor discover any structural abnormalities work in the area is to cease immediately and the Principal Designer and Employers Representative informed at the earliest practicable opportunity.

3.7 Previous Structural Modifications

Refer to Ground Sures Summary Report detailing the previous site investigations and providing commentary on any mining related ground instability.

3.8 Fire Damage, Ground Shrinkage, Movement or Poor Maintenance

Refer to Ground Sures Summary Report detailing the previous site investigations and providing commentary on any mining related ground instability.

3.9Fragile Materials

None identified to the Principal Designer.

3.10Traffic Routes on Site

No vehicle movement permitted on the site.

3.11Unexploded Ordnance

None have been reported to the Principal Designer.

3.12 Other safety Risks

The Principal Contractor is to consider the hazards detailed below and include within his Construction Phase Plan methods as to how each matter will be dealt with to ensure the health, safety and welfare for his employees, subcontractors and third parties; when carrying out these activities:

- Temporary works
- Work over or adjacent to water
- Demolition
- Excavation
- Manual Handling

HEALTH HAZARDS

3.13 Asbestos

The following survey information has been provided:

Wheal Jane Consultancy – Phase 2 – Site Investigation – Ref 20931/PH2

Chemical testing revealed that elevated concentrations of arsenic were observed across the proposed development at varying depths, up to a maximum concentration of 990.0mg/kg (generic assessment criteria for public open space is currently 170mg/kg). Levels of arsenic were considerably higher than the guideline value and therefore bioavailability testing is unlikely to bring them to within acceptable levels. There were no elevated levels of other heavy metals in relation to current residential assessment criteria.

Asbestos was also recorded on site in one location.

As a result Wheal Jane Consultancy have produced a Phase 3 Remediation Strategy Report Appended to this document which must be adhered to at all times.

3.14 Hazardous Materials within the Structure/On Site

Please refer to the above.

Should the Principal Contractor discover any hazardous or suspected hazardous materials within the structure; he is to cease work immediately and inform the Principal Designer and Client's Representative immediately.

3.15 Health Risks Arising from Client Activities

None have been identified to the Principal Designer.

3.16 Other significant health risks

The following significant health risks have been noted as being present in the site:

- Leptospirosis (weils' disease)
- Ornithosis (bird related diseases)

4.0 Significant Design and Construction Hazards

4.1 Design Assumptions and Suggested Work Methods

None identified

4.2 Coordination of Ongoing Design and Handling Design Changes

Any ongoing design changes are to be distributed to all relevant parties in good time in order to improve coordination and to ensure that all relevant health, safety and other issues have been identified. The Principal Contractor is to detail how such changes will be managed and who will retain responsibility for distributing and following up on such changes.

The Principal Contractor and designers will be required to ensure that any significant design changes are notified to the Principal Designer as soon as reasonably practicable and before work on that element commences on site

4.3 Significant Risks identified during design

The Principal Contractor should refer to the Hazard Identification Schedule and Residual Risk Assessment in Appendix C for information on significant risks that the designers could not design out.

The sanction of the suitability of the Construction Phase Plan in compliance with regulations 23(1)(a); and 23(2) and 22(1)(c) is dependent on the inclusion of satisfactory method statements in respect the items noted above.

4.4 Materials Requiring Precautions

No materials are known to have been specified which will require specific precautions other than those in normal use in the construction industry, which will require COSHH assessments in any case.

4.5 Asbestos Declaration

The designers are required to provide a declaration stating they have not specified any Asbestos Containing Materials.

The Principal Contractor is required to provide a declaration stating he has not installed any Asbestos Containing Materials.

The above information will be used by the Client to form part of their Asbestos Register in accordance with the Control of Asbestos Regulations 2012.

5.0 HEALTH AND SAFETY FILE

It is a requirement of the Regulations that the Principal Contractor implements an effective management system by which the requisite information is provided for inclusion in the Health and Safety File which should include:

- Brief description on the work carried out
- Residual hazards and how they have been dealt with (for example surveys or other information concerning contaminated land, water bearing strata, buried services etc)
- Key structural principles incorporated in the design of the structure (e.g. bracing, sources of substantially stored energy including pre or post tensioned members) and safe working loads for floors and roofs, particularly where these may preclude placing scaffolding or heavy machinery there
- Any hazards associated with the materials used (for example hazardous substances, lead paint, special coatings which should not be burned off)
- Health and safety information about equipment provided for cleaning or maintaining the structures
- The nature, location and markings of significant services, including fire fighting services
- As-built drawings of the structure, its plant and equipment
- Operation and Maintenance information in relation to all building aspects including services and plant installed.
- Any other information relevant to the construction and future of the building, including demolition which should be passed to future users of the building.

APPENDIX A – CONSTRUCTION PHASE PLAN REQUIREMENTS

1. Description of Project

a. Project description and programme details including any key dates;
b. Details of Client, Principal Designer, designers, Principal Contractor and other consultants
c. Extent and location of existing records and plans that are relevant to health and safety on site, including information about existing structures when appropriate.

2. Management of the work

a. Management structure and responsibilities
b. Health and safety goals for the project and arrangements for monitoring and review of health and safety performance
c. Arrangements for
    i. Regular liaison between parties on site
    ii. Consultation with the workforce
    iii. Exchange of design information between the Client, designers, Principal Designer and contractors on site
    iv. Handling design changes during the project
    v. The selection and control of contractors
    vi. Exchange of health and safety information between contractors
    vii. Site security
    viii. Site induction
    ix. On site training
    x. Welfare facilities and first aid
    xi. Reporting and investigation of accidents and incidents, including near misses
    xii. Production and approval of risk assessments and written systems of works
d. Site rules (including drug and alcohol policy
e. Fire and emergency procedures

3. Arrangements for controlling significant risks

a. Safety risks, including
    i. Delivery and removal of materials (including waste) and work equipment taking account of any risk to the public, for example during access or egress from the site
    ii. Dealing with services
    iii. Accommodating adjacent land uses
    iv. Stability of structures
    v. Preventing falls
    vi. Work with or near fragile materials
    vii. Control of lifting operations
    viii. Maintenance of plant and equipment
    ix. Work on excavations or work where there are poor ground conditions
    x. Work on wells, underground earthworks or tunnels
    xi. Work on or near water where there is a risk of drowning
    xii. Work involving diving
    xiii. Work in a caisson or compressed air working
    xiv. Work involving explosives
    xv. Traffic routes and segregation of vehicles and pedestrians
    xvi. Storage of materials and work equipment
    xvii. Any other safety risks

b. Health risks, including:

i. Removal of asbestos
ii. Dealing with contaminated land
iii. Manual handling
iv. Use of hazardous substances
v. Reducing noise and vibration
vi. Work with ionising radiation
vii. Exposure to UV radiation
viii. Any other significant health risks

4. Health and Safety File

a. Layout and format
b. Arrangements for the collection and gathering of information
c. Storage of information

APPENDIX B – HEALTH AND SAFETY FILE

Section 1 General Information

1.1 Important Notice
- 1.1.1 Statutory Requirements
- 1.1.2 Purpose of the Health & Safety File

1.2 File Maintenance
- 1.2.1 Keeping and Maintaining the File
- 1.2.2 Amendments to the File

Section 2 Project Particulars

2.1 Brief Description of Project
2.2 Address of the Project
2.3 Project Dates
2.4 Project Directory

Section 3 Design Criteria

3.1 Lead Designer - key design principles
3.2 Architectural - design philosophy statement
3.3 Structural
- 3.3.1 Design philosophy statement
- 3.3.2 Safe working loads/limits (floors & roofs)
- 3.3.3 Details of stored energy
- 3.3.4 Special arrangements for lifting

3.4 Building Services
- 3.4.1 Design philosophy statement
- 3.4.2 Safe access to plant & equipment

3.5 Design Solution Statements
- 3.5.1 Access Strategy statement
- 3.5.2 Firefighting strategy

Section 4 Residual Hazards & Risks

4.1 Residual Hazards
4.2 Residual Hazardous Materials

Section 5 Maintenance & General Details

5.1 Cleaning and Maintenance Strategy/ Statement
5.2 Contractor's advice and suggested method statements
5.3 Cleaning and Maintenance Provisions - Special Requirements
5.4 Future Demolition or Dismantling
- 5.4.1 Prior Arrangements

5.5 Environment and disposal of waste materials and products
5.6 Commissioning reports and test certificates
5.7 Warranties & Guaranties
5.8 Surveys and Investigation Reports
5.9 Planning and Building Regulations Approval Documents

Appendix C – RISK REGISTER

Appendix D – Phase 3 Remediation Strategy

M580_SH_L_9002_RISK_REGISTER

CDM risk register for: M580 Kerrier Way - CDM Designers Risk Assessment					**Document Number: M580_RISK_REGISTER_01**									**Revision No: 01**		**Pre-construction**	
DATE: 02.02.2024																	
Designer: Mei Loci									**Design description:** Landscaping works associated with the construction of public greenspace at Kerrier Way, Camborne.								
Ref no. {unique identifier if applicable}	**Location {Chainage/ Structure}**	**Classification**	**Hazard description**	**Risk description**	**Current risk impact {risk matrix}**			**Design mitigation action**	**Risk owner**	**Residual risk {risk matrix}**			**Comments / actions**	**Status**	**Residual risk owner**	**Design document number and revision**	
					Likelihood	**Impact**	**Rating**			**Likelihood**	**Impact**	**Rating**					
1. External works Design issues																	
1.01	Adjacent highway	User/Contractor	Kerrier Way (public road) crosses between two portions of the site, with other adjacent roads along other boundaries.	Working required adjacent to highway/ public pavements Movement of materials, machinery and personnel across Kerrier Way will be required Potential risk to future users of greenspace from adjacent roads	Medium	High	High	Contractor to consider suitable arrangements/ restrictions for movement of machinery/ equipment/ materials across highway Appropriate fencing/ safety arrangements made when working adjacent to highway/ public pavement Cornish hedges and boundary planting create an informal enclosure of the space	Contractor/Designer	Low	High	Medium	Check drawings are accurate to eliminate or reduce design risk to an acceptable level; Ensure constructed works are correct to mitigate risk; Implement management plan where appropriate.	Open	Contractor/CTC	N/A	
1.02	Materials	User/Contractor	Surface materials choice for longevity, urban environment and suitability.	Unsuitable material choice leading to premature deterioration/maintenance;	Low	High	Medium	Select appropriate materials for public open space	Contractor/Designer	Very Low	High	Medium	Check drawings are accurate to eliminate or reduce design risk to an acceptable level; Ensure constructed works are correct to mitigate risk; Implement management plan where appropriate.	Open	Contractor/CTC	N/A	
1.03	Interactive art/ play equipment	User/Contractor	Design and other potential risks (e.g. height) presented by the interactive art features (yet to be designed - to be implemented through separate D&B commission)	Risk of injury using equipment (both through intended and unintended use) Potential fall from height (if structures can be climbed) Potential additional risks presented if equipment is broken	Medium	High	High	Include safety consideration within design brief/ requirements and review as designs progress Commission design review, post installation inspection and (if appropriate) routine inspections by ROSPA accredited H&S specialist. Safety surfacing proposed surrounding features Implement management and maintenance plan.	Contractor/Designer	Low	High	Medium	Monitor as procurement/ design progresses in order to reduce design risk to an acceptable level; Ensure features are robust and fit for purpose. Implement management plan where appropriate.	Open	Contractor/CTC	N/A	
1.04	Contamination - Full site	User/Contractor	Hazardous contamination (e.g. arsenic levels) found during site investigation.	Remediation proposals (Phase 3 report - Wheal Jane) require site wide capping with clean imported material, Prior to site capping, earthworks (cut and fill) of contaminated material will be required to achieve proposed levels. A significant quantity of imported material will be required (many vehicle movements/ tipping oppositions and soil storage required)	Medium	High	High	Ensure proposed depth of buildups/ capping is suitable for proposed end use (e.g. deeper buildup for shrubs/ edible planting/ trees) Aim for a cut/ fill balance to reduce risks associated with removal of material from site	Contractor/Designer	Low	High	Medium	Ensure that available info on site contaminated is distributed to parties required. Review contractors H&S plan for suitability. Contamination specialist to undertake monitoring (ph4 verification report) to ensure that remediation works are implemented as required (plastic tubes to be placed in buildup material to allow for inspections).	Open	Contractor/ CTC	N/A	
1.05	Ground stability/ mining risks	User/Contractor	Potentially unstable ground due too historical mining/ industrial activities	- Abundant mining/ industrial activity onsite - One potential feature (T1) identified as being potentially unstable within the E portion of site (though potential; risks assessed as acceptable)	Low	High	Medium	Risk assessment undertaken by geotechnical consultant (Groundsure) - which deemed risks acceptable Proposed use as greenspace reduces risks/ requirements (e.g. compared to a building/ structure)	Contractor/Designer/ CTC	Very Low	Very High	Medium	Continue to monitor T1 area/ wider site for instability (as set out in Groundsure Risk Assessment) Contractor factor in findings of GI/ risk assessment into H &S plan	Open	Contractor/ CTC	N/A	
1.06	Furniture	User/Contractor	Surface materials choice for longevity and suitability for conditions.	Unsuitable material choice leading to damage, risk to people or premature deterioration/ maintenance;	Low	Medium	Medium	Select appropriate materials for urban public realm setting	Contractor/Designer	Very Low	Medium	Low	Check drawings are accurate to eliminate or reduce design risk to an acceptable level; Ensure constructed works are correct to mitigate risk. Undertake suitable inspections/ monitoring to identify and respond to any damage	Open	Contractor	N/A	
1.07	Soft landscaping	User	Tree and planting selection	Impacts on visibility across site due to trees/ planting	Medium	Medium	Medium	Trees proposed as clear stemmed standards to allow light and views through spaces, minimising problem 'hiding' places. Planting alongside roads/ open boundaries also kept low (e.g. 1 - 1.5m) with low, turf topped Cornish hedging, to allow views into/ across the greenspace	Contractor/Designer	Very Low	Medium	Low	Check drawings are accurate to eliminate or reduce design risk to an acceptable level; Ensure constructed works are correct to mitigate risk Undertake suitable maintenance	Open	Contractor	N/A	
1.08	Services (existing)	Designer/Contractor	Potential conflicts during or post construction	Risk of serious injury/ death to personnel/ public (eg. Hitting electric cable/ gas leak) Potential damage as a result of construction activities Tree roots encroaching underground services	Medium	Very High	High	Utilities survey undertaken (SUMO) Liaise with service providers regarding proposals/ operations (SWW permission required) Buffers alongside buried services kept free of tree planting Remediation proposals should prevent ingress of roots	Contractor/Designer	Very Low	High	Medium	Continue to try to source AB services info Factor restrictions/ precautions into H&S plan Ensure constructed works are correct to mitigate risk.	Open	Contractor	N/A	
1.09	Manual handling	Designer/Contractor	Size of hard landscaping materials, precast elements and trees	Weight of slabs, precast units, trees, etc. causing manual handling injuries or injuries from dropping , etc.	Medium	High	High	Consider size/ weight of units through design development (and reducing weight where practical) Lifting by sling/ lifting eye to be factored in to detailed design of precast units (by precast manufacturer) Mechanical assistance/ lifting equipment to be used wherever practical Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives;	Contractor/Designer	Low	High	Medium	Contractor to monitor	Open	Contractor	N/A	
2. Construction Site Management, Access (vehicle and pedestrian) Deliveries & Demolition																	
2.01	Full site	Contractor	Emergency vehicle access onto site	Construction operations resulting in restricted access for emergency vehicles and personnel resulting in risk of injury/death	Low	Very High	High	Ensure gates/ site entrances are wide enough emergency access; Ensure emergency route is planned and illustrated inside principle contractors office with route marked; Monitor and check adherence to route throughout construction.	Contractor	Very Low	Very High	Medium	Contractor to maintain and monitor	Open	Contractor	N/A	
2.02	Access - pedestrian and vehicular	Contractor	Conflict between movement of plant and materials and users of adjacent pavements/ roads	Frequency of delivery and removal of materials from site; Injury from movement of plant; Risk of potential conflict between construction personnel, members of the public and other adjacent users	Low	High	Medium	Arrange delivery times/ options to minimise disruption Consider closing/ fencing off areas of pavement (with appropriate permissions) Ensure adequate signage identifies segregated areas for pedestrian and vehicular routes to safe access routes; Ensure use of banks-men as required	Contractor	Very Low	Medium	Low	Careful consideration within H&S Plan Permissions to close parts of pavements may be required Contractor to monitor	Open	Contractor	N/A	
2.03	Access - vehicular	Contractor	Unexpected ground conditions	Potential for subsidence of temporary access/waterlogging resulting in vehicles and machinery sticking	Low	Medium	Medium	Review GI reports and risk assessments Ensure adequate signage for uneven surfaces; Monitor high risk areas (as well as wider site); Ensure adequate PPE is worn.	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A	
2.04	Full site	Contractor	All on site activities	Slip, Trips and Falls, risk of injury/death	Very Low	High	Medium	Specialist contractors appointed by the Principal Designer with a proven track record in the required activity; No site activity to be authorised prior to full review and approval of Contractor RAMS; Follow HSE guidelines on working safely on construction site; Ensure all training is up to date and maintained & Relevant site inductions and briefings to be carried out prior to commencing shift work; Appropriate PPE to be worn by operatives and ensure only trained personnel are permitted in high risk areas.	Contractor	Very Low	High	Medium	Slipping hazards to be reported/removed off site; suitable PPE to be worn at all times; Adequate task lighting to be provided where required.	Open	Contractor	N/A	
2.05	Full site	Contractor	Unauthorised access onto site	Risk of injury/death	Low	Very High	High	Install suitable site fencing with locked gates where necessary; Install information signs to advise of construction site: keep out; Adopt maintenance checks and control measures for all construction personnel and authorised visitors.	Contractor	Very Low	Very High	Medium	Contractor to maintain and monitor	Open	Contractor	N/A	
2.06	Full site	Contractor	Existing site services and features	Risk of serious injury/ death to personnel/ public (eg. Hitting electric cable/ gas leak) Potential damage to existing site services and existing infrastructure	Medium	Very High	Medium	Review available services surveys/ information Establish exact locations of services prior to start of works (e.g. CAT scan/ camera survey) Confirm and communicate location(s) of services within Construction personnel and principle contractor prior to operations - if necessary mark out service locations onsite	Contractor	Very Low	Very High	Medium	Contractor to obtain all relevant survey information, establish exact service locations execute works accordingly	Open	Contractor	N/A	
2.07	Full site	Contractor	Excavation/removal, handling and storage of excavated material	Exposure to contaminated material Risk of injury/death from collapse of excavated material; Injury/death from heavy plant/machinery;	Low	Very High	High	Include careful consideration to handling of contaminated material within H&S plan, with measures to reduce/ mitigate risks to acceptable levels (e.g. appropriate PPE, not undertaking tasks when too windy or dry, etc.) and stick to those restrictions/ procedures Ensure signage is present around high risk areas; Ensure only Suitable PPE is worn Secure materials and equipment where appropriate.	Contractor	Very Low	Very High	Medium	Careful consideration in H&S plan Review requirements of Ph3 3 (remediation plan) and ensure all operatives are aware of contaminated nature of site. Contractor to monitor	Open	Contractor	N/A	
2.08	Site visits by Project Team or other authorised visitors	Contractor	Site visits by other Contractors, client groups or other authorised stakeholders	Risk of personal injury	Very Low	High	Medium	Ensure visitors are inducted and accompanied as appropriate and kept clear of high risk areas	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A	
3. External works - Construction (Hard)																	
3.01	Construction: general site activities	Contractor	General construction activities	Risk of injury/death	Low	High	Medium	Specialist contractors appointed by the Principal Designer with a proven track record in the required activity; No site activity to be authorised prior to full review and approval of Contractor RAMS; Follow HSE guidelines on working safely on construction site; Ensure all training is up to date and maintained & Relevant site inductions and briefings to be carried out prior to commencing shift work; Appropriate PPE to be worn by operatives and ensure only trained personnel are permitted in high risk areas.	Contractor	Very Low	High	Medium	Slipping hazards to be reported/removed off site; Suitable PPE to be worn at all times; Adequate task lighting to be provided where required.	Open	Contractor	N/A	
3.02	Construction: noisy activities	Contractor	Personnel working in conditions which exceed HSE/environmental guidelines on safe noise levels	Risk to hearing/loss of hearing	Low	Very High	High	Appropriate PPE to be worn by operatives; Follow HSE guidelines for working with noisy tools; Ensure agreed working hours are adhered to.	Contractor	Very Low	Very High	Medium	Contractor to monitor	Open	Contractor	N/A	
3.03	Construction: dust arising from works	Contractor	Risk to personnel/ the public from airborne dust	Exposure to contaminated material (prior to site capping) Exposure to hazardous airborne particles	Low	Very High	High	Include careful consideration to handling of contaminated material within H&S plan, with measures to reduce/ mitigate risks to acceptable levels (e.g. appropriate PPE, not undertaking tasks when too windy or dry, etc.) and stick to those restrictions/ procedures Complete site remediation (capping) as soon as practical in the program Designated areas for specific materials cutting to be made restricted when in operation; Appropriate PPE to be worn by operatives and those in HSE defined proximity.	Contractor	Very Low	Very High	Medium	Refer to phase 3 remediation plan Contractor to monitor	Open	Contractor	N/A	
3.04	Full site	Contractor	Topsoiling - clean imported soil required across site	Large volumes of imported soil required (many vehicle movement/ tipping operations) Topsoil/ subsoil storage likely to be required	Medium	High	High	Carefully consider arrangements and location for site deliveries/ tipping Make use of banks-man for. Vehicles entering/ leaving site Program/ stagger delivery of clean soil to reduce the need for site storage. Limit size of storage heaps.	Contractor	Low	High	Medium	Contractor to monitor	Open	Contractor	N/A	

M580_SH_L_9002_RISK_REGISTER

CDM risk register for: M580 Kerrier Way - CDM Designers Risk Assessment	**Document Number: M580_RISK_REGISTER_01**	**Revision No: 01**	**Pre-construction**
DATE: 02.02.2024			
Designer: Mei Loci	**Design description:** Landscaping works associated with the construction of public greenspace at Kerrier Way, Camborne.		

Ref no. {unique identifier if applicable}	Location {Chainage/ Structure}	Classification	Hazard description	Risk description	Current risk impact {risk matrix}			Design mitigation action	Risk owner	Residual risk {risk matrix}			Comments / actions	Status	Residual risk owner	Design document number and revision
					Likelihood	Impact	Rating			Likelihood	Impact	Rating				
3.05	Construction: use of electrical tools	Contractor	General use of electrical tools	Risk of electric shocks; Electrocution; Death	Very Low	Very High	High	Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives;	Contractor	Very Low	Very High	Medium	Contractor to monitor	Open	Contractor	N/A
3.06	Construction: working outside normal hours	Contractor	Working outside normal working hours	Risk to welfare of construction personnel and provision for reasonable periods of time off as per employment legislation; Disruption to neighbouring residents during work out of normal working hours	Very Low	High	Medium	Operations to be undertaken during agreed hours only; Any extra hours to be undertaken under agreement with community and Client agreement and in accordance with employment legislation	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.08	Foundations: general	Contractor	Softer than expected formation level(s) due to weather related causes	Alterations of foundation profiles	Very Low	Medium	Low	Ensure site is covered and water ingress is avoided with use of bunds; Pumps may be required for ground water.	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A
3.09	Excavation of foundation	Contractor	Deep excavations including foundation trenches	Risk or injury/death from working at height, falling from height, dropping objects from height.	Medium	Very High	High	Specialist contractors appointed by the Principal Designer with a proven track record in the required activity; No site activity to be authorised prior to full scrutiny of RAMS information; Relevant site inductions to be carried out prior to commencing shift work and before personnel access the site; Ensure signage is present around high risk areas; Ensure lone working is not exercised in high risk areas; Shore up trenches adequately.	Contractor	Very Low	Very High	Medium	Contractor to monitor	Open	Contractor	N/A
3.10	Foundation/access	Contractor	Encountering unknown services during excavation works	Risk to unknown services during excavation works	Low	High	Medium	Review of record drawings, updated STAT packs, undertake site CAT scans	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.11	Excavation slope stability	Contractor	Cutting/excavation instability	Profile of excavations affected during the works and/or external factors; Risk of injury.	Low	High	Medium	Undertake daily visual checks by suitably qualified person; If ground conditions are different then works to stop in order to reassess stability .	Contractor	Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.12	Excavation slope groundwater ingress	Contractor	Groundwater Ingress	Excessive groundwater ingress affecting cutting stability and associated risks	Low	High	Medium	No immediate rainfall on cutting face; encourage water to be diverted away from the perimeter of the structure; Open time of excavation to be minimised and an exclusion zone should be provided at the crest of the embankment.	Contractor	Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.13	Full site	Contractor	Use of heavy machinery in restricted space for groundwork excavation; land-forming; grading of materials	Risk of injury/death	Low	High	Medium	Ensure signage is present around high risk areas; Ensure only trained personnel are permitted in high risk areas; Ensure lone working is not exercised in high risk areas.	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.14	Full Site	Contractor	Tip over, roll over of plant/machinery	Use and operation of MEWP/Dump trucks and other equipment	Medium	High	High	Only suitably trained and experienced workers to operate specialist plant and machinery; Ensure signage is present around high risk areas.	Contractor	Medium	Low	Medium	Contractor to monitor	Open	Contractor	N/A
3.15	Full Site	Contractor	Sufficient external lighting for site works	Risk of injury	Low	High	Medium	Ensure adequate lighting is provided taking into account seasonal and locational lighting variations across the site	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.16	Full Site	Contractor	Fire escape exits and assembly points	Risk of injury/death	Very Low	Very High	High	Ensure fire assembly points are kept clear and escape routes maintained and clearly marked; Complete fire drills periodically as per HSE guidelines; Ensure all site users are registered and aware of fire evacuation procedure and assembly points.	Contractor	Very Low	Very High	Medium	Contractor to maintain training and monitor	Open	Contractor	N/A
3.17	Compound	Contractor	Storage of materials and equipment	Trip/snagging hazards; Blocked pathways; Risk of injury / death from collapse of excavated material.	Low	Very High	High	Ensure pathways and access routes are clear at all times; Ensure signage is present around high risk areas; Ensure only trained personnel are permitted in high risk areas; Ensure lone working is not exercised in high risk areas; Appropriate storage of materials Secure materials and equipment where appropriate.	Contractor	Very Low	Very High	Medium	Contractor to monitor	Open	Contractor	N/A
3.18	Full Site	Contractor	Works in close proximity to adjacent buildings	Damage to property; Risk of injury.	Low	Medium	Medium	Comply with fire regulations regarding proximity of operations to existing building; Ensure safe working distances between plant/machinery and completed buildings. Limit excavations adjacent to existing buildings (potential impacts on foundations)	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A
3.19	Full Site	Contractor	Adverse weather causing unsafe working conditions	Risk of injury; Damage to site.	Very Low	High	Medium	Operations to be suspended during periods of extreme weather appropriate to planned construction (i.e. high winds during crane operations, heavy rainfall during ground works) at discretion of Lead Contractor and as per HSE guidelines	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
3.20	Full Site	Contractor	Installation of all designed surfaces and site features	Trip hazard; Risk of back, hand, feet, arms or leg injuries; Manual handling injuries	Very Low	High	Medium	Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives; Mechanical assistance required for movement around site.	Contractor/Designer	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
4. External works - Construction (Soft)																
4.01	Landscape	Contractor	Erosion of topsoil onto adjacent footway/ pavements	Muddy footpaths causing slips and injuries	High	Medium	High	Organise works/ storage of materials to avoid runoff of mud Continually monitor and clear pavements as required	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A
4.02	Landscape	Contractor	Mature/semi-mature tree planting	Risk of injury from heavy lifting/ fall/ crush	Medium	High	High	Make use of lifting equipment wherever practical Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives.	Contractor	Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
4.03	Landscape	Contractor	Ground preparations, cultivation	Potential damage to remediation/ capping geotextile (and exposure to contaminated material) General manual handling injuries Damage to other on/off site vegetation.	Medium	Medium	Medium	Ensure all operatives are aware of capping depths in different areas - with restrictions on mechanical operations within shallower areas (grass/ amenity planting) Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives; Designated areas deemed high risk to be made restricted when in operation Restrictions within root protection areas as set out in the Arboricultural Implications Assessment (Evolve)	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A
4.04	Landscape	Contractor	Application of fertilisers	Exposure to harmful substances	Very Low	Low	Low	Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives; Designated areas deemed high risk to be made restricted when in operation	Contractor	Very Low	Low	Low	///	Open	Contractor	N/A
4.05	Landscape	Contractor	Adverse weather causing unsafe working conditions	Risk of injury; Damage to site; Soil compaction.	Very Low	High	Medium	Operations to be suspended during periods of extreme weather appropriate to planned construction (i.e. high winds during crane operations, heavy rainfall during ground works) at discretion of Lead Contractor and as per HSE guidelines; Soil movement to be avoided when wet.	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
4.06	Landscape	Contractor	Buried services within capping (if applicable)	Risk of injury and death; Damage to site;	Very Low	High	Medium	Hazard warning tape to be installed with any buried services , with services laid to suitable depths Full details of services locations to be available to all operatives (with service runs marked out, where required)	Contractor	Very Low	High	Medium	No such services currently proposed Contractor to monitor	Open	Contractor	N/A
5. Future maintenance																
5.01	Landscape	Contractor	Maintenance works in proximity to areas used by site users	Risk of injury	Very Low	Medium	Low	Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives; Designated areas deemed high risk to be made restricted when in operation	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A
5.02	Landscape	Contractor	Arboricultural works	Risk of injury caused by falling tree limbs and branches; Risk of injury from cutting and grinding equipment.	Low	High	Medium	Conduct activities with appropriate PPE for operation (such as harnesses, etc) as advised as per related guidelines; Ensure protection of work below (if operating) from work above; Cordon off areas of areas with advance agreement of management company as appropriate.	Contractor	Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
5.03	Landscape	Contractor	Maintenance works to soft landscaping	Risk of injury	Very Low	Low	Low	Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives.	Contractor	Very Low	Low	Low	Contractor to monitor	Open	Contractor	N/A

M580_SH_L_9002_RISK_REGISTER

CDM risk register for: M580 Kerrier Way - CDM Designers Risk Assessment	**Document Number: M580_RISK_REGISTER_01**	**Revision No: 01**	**Pre-construction**
DATE: 02.02.2024			
Designer: Mei Loci	**Design description:** Landscaping works associated with the construction of public greenspace at Kerrier Way, Camborne.		

Ref no. {unique identifier if applicable}	**Location {Chainage/ Structure}**	**Classification**	**Hazard description**	**Risk description**	**Current risk impact {risk matrix}**			**Design mitigation action**	**Risk owner**	**Residual risk {risk matrix}**			**Comments / actions**	**Status**	**Residual risk owner**	**Design document number and revision**
					Likelihood	**Impact**	**Rating**			**Likelihood**	**Impact**	**Rating**				
5.04	Landscape	Contractor	Adverse weather causing unsafe working conditions during maintenance	Risk of injury; Damage to site and/or buildings; Soil compaction.	Very Low	High	Medium	Operations to be suspended during periods of extreme weather appropriate to planned construction (i.e. high winds during operations at height, heavy rainfall during ground works) at discretion of Lead Contractor and as per HSE guidelines; Soil movement to be avoided when wet.	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
5.05	Landscape	Contractor	Spray operations; Use of herbicides and pesticides	Exposure to chemical / harmful substances; Damage to other on/off site vegetation.	Very Low	Medium	Low	Ensure all training is up to date and maintained; Appropriate PPE to be worn by operatives; Designated areas deemed high risk to be made restricted when in operation	Contractor	Very Low	Medium	Low	Contractor to monitor	Open	Contractor	N/A
6. Demolition and Life cycle																
6.01	Full site	Contractor	Emergency vehicle access onto site	Demolition operations resulting in restricted access for emergency vehicles and personnel resulting in risk of injury/death	Low	Very High	High	Ensure security gates are wide enough emergency access; Ensure emergency route is planned and illustrated inside principle contractors office with route marked; Invite the Chief Fire Officer to site for review; Monitor and check adherence to route throughout construction.	Contractor	Very Low	Very High	Medium	Contractor to maintain and monitor	Open	Contractor	N/A
6.02	Full site	Contractor	Unauthorised access to demolition works site	Risk of injury/death	Low	Very High	High	Install 2.5m high boarding with locked gates; Install information signs to advise of construction site: keep out; Ensure adequate lighting; Adopt maintenance checks and control measures for all construction personnel and authorised visitors.	Contractor	Very Low	Very High	Medium	Contractor to maintain and monitor	Open	Contractor	N/A
6.03	Full site	Contractor	Excavation/removal, handling and storage of excavated material	Risk of injury/death from collapse of excavated material; Injury/death from heavy plant/machinery; Exposure to contaminated material	Low	Very High	High	Ensure signage is present around high risk areas; Ensure only trained personnel are permitted in high risk areas; Ensure lone working is not exercised in high risk areas; Secure materials and equipment where appropriate.	Contractor	Very Low	Very High	Medium	Contractor to monitor	Open	Contractor	N/A
6.04	Access - pedestrian and vehicular	Contractor	Site access for the deconstruction including removal of materials	Frequency of delivery and removal of materials from site; Injury from movement of plant; Risk of potential conflict between construction personnel, members of the public and other visiting site users	Low	High	Medium	Deliveries to be undertaken during agreed hours only; Ensure adequate signage identifies segregated areas for pedestrian and vehicular routes to safe access routes; Ensure use of banks-man as required.	Contractor	Very Low	High	Medium	Contractor to monitor	Open	Contractor	N/A
6.05	Construction: dust arising from works	Contractor	Personnel working in conditions which exceed HSE/environmental guidelines on safe noise levels	Exposure to hazardous airborne particles	Low	Very High	High	Designated areas for specific materials cutting to be made restricted when in operation; Appropriate PPE to be worn by operatives and those in HSE defined proximity.	Contractor	Very Low	Very High	Medium	Contractor to monitor	Open	Contractor	N/A
6.06	Full site	Contractor	All on site activities	Slip, Trips and Falls, risk of injury/death	Very Low	High	Medium	Specialist contractors appointed by the Principal Designer with a proven track record in the required activity; No site activity to be authorised prior to full review and approval of Contractor RAMS; Follow HSE guidelines on working safely on construction site; Ensure all training is up to date and maintained & Relevant site inductions and briefings to be carried out prior to commencing shift work; Appropriate PPE to be worn by operatives and ensure only trained personnel are permitted in high risk areas.	Contractor	Very Low	High	Medium	Slipping hazards to be reported/removed off site; suitable PPE to be worn at all times; Adequate task lighting to be provided where required.	Open	Contractor	N/A
6.07	Full site	Contractor	Existing site services and features	Potential damage to existing site services and existing infrastructure	Very Low	High	Medium	Survey underground and overhead services and infrastructure as part of site appraisal; Confirm and communicate location(s) of services within Construction personnel and principle contractor prior to operations.	Contractor	Very Low	High	Medium	Contractor to obtain all relevant survey information and execute works accordingly	Open	Contractor	N/A

		Likelihood				
		Very High	High	Medium	Low	Very Low
Severity	Very High	HIGH	HIGH	HIGH	HIGH	MEDIUM
	High	HIGH	HIGH	HIGH	MEDIUM	MEDIUM
	Medium	HIGH	HIGH	MEDIUM	MEDIUM	LOW
	Low	HIGH	MEDIUM	MEDIUM	LOW	LOW
	Very Low	MEDIUM	MEDIUM	LOW	LOW	LOW

Phase 3 Remediation Strategy

Kerrier Way

26 October 2023

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Ref: 21817/PH3

DOCUMENT CONTROL SHEET

Client	Mei Loci
Project Title	Kerrier Way
Document Title	Phase 3 Remediation Strategy
Document No.	21817/PH3

Date	Status	Revision	Prepared By	Approved By
26 October 2023	Final	-	BH	WJC

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FIGURES

TABLES

EXECUTIVE SUMMARY

Objectives		
Wheal Jane Consultancy was commissioned by Mei Loci to undertake a Phase 3 Remediation Strategy at the site known as 'Kerrier Way'.		
Remediation		
Areas of Site Requiring Remediation	Remediation is required across the site in all areas.	
Remedial Requirements	**Soft Landscaping**	It is necessary to emplace a minimum depth of 600mm of clean Topsoil over a high visibility geotextile. This should be placed over the residual soils where either 600mm have been removed or on top of areas that are to be risen. These areas are highlighted green in Figure 4.1.
	Tree Protection	The roots of any existing trees should not be disturbed in order to maintain their health. Further details are given in the BSI Standards Publication 'Trees in Relation to Design, Demolition and Construction – BS 5837:2012'. For any new trees proposed a minimum soil depth of 1m over an area that will support the tree's mature rooting volume requirements, as per guidance from Green Blue Urban Tree Species Soil Volume Guide.
	Non-Continuous Hardstanding	It is necessary to cover the exposed soils with a high visibility geotextile. An overlay of at least 100mm of compacted, clean sub-base or lean-mix concrete should then be added. The proposed surfacing should then be placed above this layer. If gravel is to be installed it should be of at least 150mm depth. Non-continuous hardstanding should be placed over the residual soils, where a specified depth of contaminated materials have been removed to accommodate remedial materials. These areas are highlighted yellow in Figure 4.1.
Remediation Timescale	• It is expected that the scope of works should be completed at an early stage in the construction works. • Material excavated from the site should be treated as waste and would have to be disposed of to a licensed waste management facility.	

	• Any soil imported to site should be certified for residential end use with certification to demonstrate it is of suitable composition. • This remediation strategy should be submitted to the Local Authority prior to construction commencement.
Verification	• To complete the phased process, a Verification Report documenting the successful implementation of the outlined works above shall be produced and submitted to the Local Authority. • Photo documentation should be taken regularly during the course of the remedial work for the Phase 4 Verification Report. Key stages of the development to be photographed may include when a site is cleared, when excavations and footings are open, when geo-textile membranes are laid, when imported materials are being added and installed, when the site is complete. • For inspection and verification purposes, the installation of temporary plastic pipes in remediated areas is highly recommended. The pipes should be open ended and oriented vertically, with the base of the pipes sitting directly onto the surface of the geo-textile membrane. Remedial materials should then be appropriately installed surrounding the exterior of pipes. Pipes should be a minimum of 160mm in diameter to allow for visual inspection and measurements to take place. Once the Phase 4 Verification Report has been approved by the local planning authority, the pipes should be removed, and the remaining holes backfilled with suitable materials. • It is paramount that all invoices, analysis certification, waste transfer notices and all other general documentation relating to the remedial process be kept for verification purposes. • A suitably qualified person from Wheal Jane Consultancy will monitor the progress of the remediation and conduct a site visit upon completion of all outlined works to ensure compliance has been achieved.

2 INTRODUCTION

2.1.1 Wheal Jane Consultancy was commissioned by Mei Loci to plan a remediation strategy for the site; "Kerrier Way."

2.1.2 This report has been prepared by Wheal Jane Consultancy solely for the benefit of the client. It shall not be relied upon or transferred to any third party without the prior written authorisation of Wheal Jane Consultancy.

2.2 Scope and Objectives

2.2.1 The objective of this report is to outline a strategy of remediation to mitigate any risks to human health and that of flora and fauna inhabiting the site.

2.2.2 This strategy has been prepared with guidance from BS10175:2011+A2:2017 and the UK government Land Contamination Risk Management (LCRM) framework published October 2020 (superseding Environment Agency report CLR11), and as such represents a Phase 3 Remediation Strategy.

2.2.3 The conclusions and recommendations of this report are valid for a period of 12 months from the date of issue. Outside of this timeframe the report will require reviewing by a suitably qualified geoenvironmental engineer / environmental scientist, to ensure that the report complies with any changes to industry standards, policies and/or guidelines.

2.2.4 This report does not constitute an asbestos inspection that may fall within the 'Control of Asbestos' regulations, 2012.

2.3 Background

2.3.1 In order to comply with the latest Government guidelines on new building developments, the site needed to be subjected to a phased environmental assessment prior to any development works commencing. This report forms Phase 3 of this process and should be considered in conjunction with the previous Phase 1 and Phase 2 reports, detailed below (section 2.4).

3 THE SITE

3.1 Site Location

3.1.1 The site is located either side of Kerrier Way approximately 0.50km to the north-east of Camborne Town Centre. The site is approximately centred on National Grid Reference SW 65370 40271.

3.1.2 The site is irregular in shape and covers an area of approximately 0.75ha.

3.1.3 A site location plan (SLP) is contained in Figure 2.1, to the rear of the report (image obtained from Cornwall Council's Interactive Map).

3.2 Surrounding Area

Direction	Land Use
North	Residential, Road
East	Residential
South	Residential, Road
West	Supermarket, Fuel Station, Road

3.3 Proposed Development

3.3.1 It is proposed to redevelop the site as public open space.

3.3.2 The proposed site plan is contained in Figure 2.2, to the rear of the report (plan drawn by Mei Loci Landscape Architects, ref. DR-L-2001).

3.4 Previous Investigations

3.4.1 The following investigations have taken place on site;

Table 2.1: Previous Site Investigations

Report	Date	Author
Phase 2 Site Investigation – 20931/PH2	April 2022	Wheal Jane Consultancy

3.4.2 The BGS 1:50,000-scale bedrock geological map Sheet 352, Falmouth, of the area shows the site to be underlain by the Mylor Slate Formation.

3.4.3 The Phase 2 Site Investigation in April 2022 involved the excavation of eight windowless sampler boreholes to depths of between 0.70m and 5.45m, across the two site areas. Samples were collected for laboratory analysis and tested for;

- Heavy Metals (As, B, Cd, Cr, Cu, Hg, Pb, Ni, Se, Zn)
- Sulphates
- Polycyclic Aromatic Hydrocarbons (PAH)
- pH
- Asbestos
- Total Petroleum Hydrocarbons (TPH)

3.4.4 Surface water and groundwater was encountered during the site investigation from surface.

3.4.5 Ground conditions indicated that Made Ground was present across the site overlying the weathered Mylor Slate Formation.

3.4.6 Chemical testing revealed that elevated concentrations of arsenic were observed across the proposed development at varying depths, up to a maximum concentration of 990.0mg/kg (generic assessment criteria for public open space is currently 170mg/kg). Levels of arsenic were considerably higher than the guideline value and therefore bioavailability testing is unlikely to bring them to within acceptable levels. There were no elevated levels of other heavy metals in relation to current residential assessment criteria. Concentrations of PAH and TPH were below guideline values.

3.4.7 Asbestos was also recorded on site in one location.

3.4.8 Recommendations were given in the Phase 2 report concerning the design sulphate class for concrete. It was classified as falling into the design sulphate class DS-1. The soils on site fall into class AC-1.

4 RISK ASSESSMENT

4.1 Introduction

4.1.1 The assessment of risk is based upon the principle of the pollutant linkage, which is described in more detail below. This assessment sought to identify plausible pollutant linkages associated with the proposed development. Once this was done, the resultant risk was determined based on the probability and the possible consequence of the pollutant linkages being present. As such, this qualitative risk assessment has been undertaken in accordance guidance published in CIRIA C552.

A summary of the CIRIA C552 risk classification matrix is presented in Table 3.1 below.

Table 3.1 *Risk Classification Matrix*

Risk Classification Matrix					
Taken from CIRIA C552		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High	High	Moderate	Moderate / Low
	Likely	High	Moderate	Moderate / Low	Low
	Low Likelihood	Moderate	Moderate / Low	Low	Very Low
	Unlikely	Moderate / Low	Low	Very Low	Very Low

4.2 Refined Conceptual Model

4.2.1 This conceptual site model has been undertaken with due regard to guidance provided in BS10175:2011+A2:2017 and the UK government Land Contamination Risk Management (LCRM) framework published October 2020 (superseding Environment Agency report CLR11). The assessment of risk from land contamination also pays due regard to the definition of contaminated land, as defined within Part 2A of the Environment Protection Act 1990. This legislation defines contaminated land as any land that is in such a condition that by reason of substances in, on or under the land:

- Significant harm is being caused or there is a significant possibility of such harm being caused; or
- Pollution of controlled water is being, or is likely to be, caused.

4.2.2 This definition is based on the principles of risk assessment defined as a combination of the probability (or frequency) of occurrence of a defined hazard and the magnitude (including the seriousness) of the consequences. Central to the risk assessment process is the concept of pollutant linkage, which is a linkage between a contaminant and a receptor by means of a pathway.

Table 3.2. *Summary of statutory definitions relating to pollution linkage.*

Statutory definitions relating to pollution linkage.	
Contaminant	"a substance which is in, on or under the land and which has the potential to cause harm or to cause pollution of controlled waters."
Receptor	"a living organism, a group of living organisms, and ecological system or a piece of property" which meets given criteria. "controlled waters which are, or could be, polluted by a contaminant".
Pathway	"one or more routes or means by, or through, which a receptor: • is being exposed to, or affected by, a contaminant, or • could be so exposed or affected".

4.2.3 Without the presence of all three components, there is no linkage and therefore no risk. The relationship between these components is discussed below in order to identify the existence of any source-pathway-receptor linkage on the site, and hence the potential risks associated with any contamination. Following the site investigation, the preliminary conceptual site model was revised as outlined in the Phase 2 report, with regard to the quantitative risk assessment.

4.2.4 A Revised Conceptual Model (included as Table 3.4 overleaf) was produced following the conclusions of the chemical testing discussed above.

***Table 3.3**: Identified Sources, Pathways and Receptors*

Source – Pathway – Receptor Overview	
Contaminant sources	Natural geology – arsenic
	Natural geology – radon
	Made Ground - arsenic
	Made Ground – PAHs, TPHs
	Made Ground - Asbestos
	Dermal contact
Pathways	Ingestion
	Ingress into buildings
	Inhalation of dust and soil
	Flora & Fauna
Receptors	Future site users
	Water supply pipes
	Site workers

Table 3.4: Refined Conceptual Site Model

Preliminary Conceptual Model							
	Source(s)	**Contaminant(s)**	**Pathway(s)**	**Receptor(s)**	**Probability**	**Consequence**	**Risk Assessment**
On Site	Natural Geology	Radon gas	Ingress into proposed buildings	Future site users	High Likelihood	Medium	**High Risk** – The planned development is within an area where greater than 30% of properties are above the action level. Full radon protection measures are required.
		Arsenic	Dermal contact Soil and dust ingestion and inhalation	Future site users Site workers Site flora and fauna	Likely	Medium	**Moderate Risk** – Levels of arsenic on site are recorded up to 990mg/kg. This greatly exceeds the generic acceptance criteria value of 170mg/kg for public open space.
	Made Ground	Total Petroleum Hydrocarbons (TPH) Polycyclic Aromatic Hydrocarbons (PAH) VOCs & SVOCs	Dermal contact Soil and dust ingestion and inhalation Ground & surface waters	Future site users Site workers Site flora and fauna Building structures and services	Unlikely	Medium	**Low Risk –** There were no exceedances recorded on site for PAHs, TPHs, VOCs or SVOCs.
		Arsenic	Dermal contact Soil and dust ingestion and inhalation	Future site users Site workers Site flora and fauna	Likely	Medium	**Moderate Risk –** Levels of arsenic on site are recorded up to 990mg/kg. This greatly exceeds the generic acceptance criteria value of 170mg/kg for public open space.

	Asbestos	Dermal contact Soil and dust ingestion and inhalation	Future site users Site workers Site flora and fauna	Likely	Medium	**Moderate Risk –** Asbestos was encountered on site during the site investigation.
	Heavy Metals	Dermal contact Soil and dust ingestion and inhalation Ground & surface waters	Future site users Site workers Site flora and fauna Building structures and services	Unlikely	Medium	**Low Risk –** Levels of all other heavy metals are within the relevant generic acceptance criteria.

5 REMEDIATION

5.1 Remedial Objectives and Options Appraisal

5.1.1 The remedial objectives for this site are designed to ensure that the final development greatly reduces the risk from exposure to the contaminants identified in the Phase 2 investigation by people, flora or fauna.

5.1.2 The proposed plan shows that soft landscaping is included in the design, and these are the most sensitive areas for exposure to contamination. Pathways are also proposed across the site.

5.1.3 Any made ground that is removed from the site should be treated as waste and is not suitable for use as structural fill.

5.1.4 A plan illustrating the remedial requirements is presented as Figure 4.1.

5.1.5 Several options to remediate the site have been considered and these are summarised in Table 4.1.

Table 4.1 Remediation Options Appraisal

Overview of Remedial Options	
Option	**Assessment**
Simple In-Situ Capping System	Excavation of a pre-determined depth of contaminated media before a geotextile fabric is laid over the exposed soil and capped with clean, cover material. This option ensures the removal of contaminated material, and the geotextile guarantees the pathway from the soil is broken.
Soil washing	This physical approach to remediation involves the extraction of contaminated soil and then treatment using mechanical and chemical separation of contaminants from uncontaminated soil. This method is likely to have constraints particularly regarding timescale, as a treatability study may have to be carried out.

Soil flushing	A flushing solution is delivered to the surface of the soil, utilising infiltration. Leachates are diverted and collected where they are subsequently treated at the surface. This approach may require the addition of further chemical treatment to neutralise acidity. It is also likely to be costly.
Stabilisation and solidification using hydraulic binders	Soil mixing equipment is used to cut and mix the soil. Pre-selected materials are then added to the mix to solidify and stabilise the soil. The area is gradually treated in columns. This technique is also costly and involves careful assessment of soil types and binder additives, usually during a treatability study.

5.1.6 The most suitable remediation methodology for this site is the simple in-situ capping system. This method will be suitable for all areas, with a separate consideration for the proposed areas of non-continuous hardstanding and ground where tree protection measures have been identified.

5.2 Remediation Strategy

5.2.1 Each of the areas requiring remediation are discussed separately below.

5.3 Soft Landscaping

5.3.1 The soft landscaping on site is highlighted in green in Figure 4.1. To break the contamination pathway, it is necessary to excavate existing soils/made ground to a minimum depth of 600mm below the finished ground level. A high visibility geotextile should be placed over the residual soils and overlain with clean soil; Figure 4.2 depicts the recommended method of remediation. The soils should be clean, chemically inert topsoil. Alternatively, it is acceptable to use 420mm of clean subsoil with 180mm of topsoil. If there are areas where soil is not currently present and there is only exposed rock where gardens are planned, it will be necessary to install the geotextile above the rock and place the clean cover above it.

5.3.2 The following points should be noted:

5.3.3 The material excavated from the site should be treated as waste and would have to be disposed of at a licensed waste management facility. The materials should be handled in

accordance with the Site Waste Management Plan. Waste transfer notes should be retained for your records. Should ground levels require it material may be required to be excavated in order to install the necessary depth of clean cover. Underlying material should be compacted prior to placement of the clean cover. A layer of sand beneath the geotextile may be required to ensure that the barrier is not pierced on stones when it is installed.

5.3.4 The geotextile and clean cover material must be stored securely if it is to be delivered and stockpiled on site prior to use, to prevent any mixing occurring with contaminated media.

5.3.5 The geotextile (a permeable synthetic textile sheet) should be of a suitable colour such as orange or white, such as Lotrak Alarm high visibility geotextile or Wrekin Multitrack NW 1000. The purpose of the geotextile would be to act as a barrier to prevent mixing of the imported clean soil and any contaminated ground beneath. It will also act as a warning device should future site users carry out any excavations.

5.3.6 The clean cover placed onto the geotextile should be a minimum thickness of 600 mm after firming, a sufficient thickness to allow vegetables and plants to grow. Where trees are planned please refer to section 5.4.

5.3.7 The imported clean topsoil should be accompanied by an analysis of its content to prove its suitability for the proposed end-use (no more than 6 months old). The source of the material should also be recorded. The certificate of analysis should be retained for record purposes. The suitability of the soil should be verified prior to it being brought on site. If as part of any landscaping plan, retaining walls or raised beds are considered, it is important to ensure that the encapsulation layer is present across the area.

5.3.8 For inspection and verification purposes, the installation of temporary plastic pipes in remediated areas is highly recommended, as illustrated in Figures 4.2 & 4.3 The pipes should be open ended and oriented vertically, with the base of the pipes sitting directly onto the surface of the geo-textile membrane. Remedial materials should then be appropriately installed surrounding the exterior of pipes. Pipes should be a minimum of 160mm in diameter to allow for visual inspection and measurements to take place. Once the Phase 4 Verification Report has

been approved by the local planning authority, the pipes should be removed, and the remaining holes backfilled with suitable materials.

5.3.9 The remedial works are to be periodically inspected and documented by a suitably qualified person (e.g. Environmental Scientist) as part of the Phase 3 Verification Report.

5.4 Tree Protection Areas

5.4.1 A number of trees are proposed on site, these areas are highlighted orange in Figure 4.1.

5.4.2 The roots of any existing trees should not be disturbed in order to maintain their health. Further details are given in the BSI Standards Publication 'Trees in Relation to Design, Demolition and Construction – BS 5837:2012'.

5.4.3 For any new trees proposed a minimum soil depth of 1m over an area that will support the tree's mature rooting volume requirements, as per guidance from Green Blue Urban Tree Species Soil Volume Guide.

5.5 Hardstanding Areas

5.5.1 Where *non-continuous* hardstanding is proposed on site it will be necessary to excavate existing soils/made ground to a minimum depth to accommodate the installation of the clean aggregate and surface finish. Figure 4.1 indicates the areas of non-continuous hardstanding (highlighted in yellow). The exposed soils should be covered with a high-visibility geotextile. An overlay of at least 100mm of compacted, clean sub-base or lean-mix concrete should then be added, (Figure 4.4). The proposed surfacing should then be placed above this layer, gravel should be of at least 150mm depth.

- Where the ground level requires modification, it may be necessary to remove some of the existing soil. In which case the material excavated from the site should be treated as waste and would have to be disposed of to a licensed waste management facility. Waste transfer notes should be retained for your records.

- The geotextile (a permeable synthetic textile sheet) should be of a suitable colour such as orange or white. The purpose of the geotextile will be to act as a warning device should future site users carry out any excavations. A layer of sand beneath the geotextile may be required to ensure that the barrier is not pierced on stones when it is installed.

- The remedial works are to be inspected and documented by a suitably qualified person (e.g. Environmental Scientist) as part of this report.

5.5.2 For inspection and verification purposes, the installation of temporary plastic pipes in remediated areas is highly recommended, as illustrated in Figure 4.3. The pipes should be open ended and oriented vertically, with the base of the pipes sitting directly onto the surface of the geo-textile membrane. Remedial materials should then be appropriately installed surrounding the exterior of pipes. Pipes should be a minimum of 160mm in diameter to allow for visual inspection and measurements to take place. Once the Phase 4 Verification Report has been approved by the local planning authority, the pipes should be removed, and the remaining holes backfilled with suitable materials.

5.5.3 If as part of any landscaping plan, retaining walls or raised beds are considered, it is important to ensure that the encapsulation layer is present across the area.

5.6 Remediation Timescale

5.6.1 It is expected that the scope of works should be completed at an early stage in the construction works.

5.6.2 This remediation strategy should be submitted to the Local Authority prior to construction commencement.

6 REPORTING OF UNEXPECTED CONTAMINATION

6.1.1 The Phase 2 investigation that has taken place on site have identified contamination within the underlying soil. This remediation strategy is aimed at breaking the source-pathway-receptor model and thus reducing risk.

6.1.2 Any contamination encountered during the course of construction which differs in type and/or quantity to that already identified on site must be reported in writing to the local planning authority. Development in areas of site affected by the unexpected contamination shall be suspended until a risk assessment has been carried out. Further sampling and analysis may be required.

7 VERIFICATION

7.1.1 To complete the phased process, a Verification Report documenting the successful implementation of the outlined works above shall be produced and submitted to the Local Authority.

7.1.2 Photo documentation should be taken regularly during the course of the remedial work for the Phase 4 Verification Report. Key stages of the development to be photographed may include when a site is cleared, when excavations and footings are open, when geo-textile membranes are laid, when imported materials are being added and installed, when the site is complete.

7.1.3 For inspection and verification purposes, the installation of temporary plastic pipes in remediated areas is highly recommended. The pipes should be open ended and oriented vertically, with the base of the pipes sitting directly onto the surface of the geo-textile membrane. Remedial materials should then be appropriately installed surrounding the exterior of pipes. Pipes should be a minimum of 160mm in diameter to allow for visual inspection and measurements to take place. Once the Phase 4 Verification Report has been approved by the local planning authority, the pipes should be removed, and the remaining holes backfilled with suitable materials.

7.1.4 It is paramount that all invoices, analysis certification, waste transfer notices and all other general documentation relating to the remedial process be kept for verification purposes.

7.1.5 A suitably qualified person from Wheal Jane Consultancy will monitor the progress of the remediation and conduct a site visit upon completion of all outlined works to ensure compliance has been achieved.

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

8.1.1 This report has assessed the in-situ simple capping method is the most effective method to remediate the site in terms of cost, practicability, sustainability and overall reduction of risk. The following criteria are recommended:

8.1.2 In the soft landscaped areas to break the contamination pathway, it is necessary to excavate the existing soils to a minimum depth of 600mm below the final surface level. A high visibility

geotextile is to be placed over the residual soils and overlain with 600mm of clean cover, in private gardens. These areas are highlighted green in Figure 4.1.

8.1.3 Tree Protection Areas are shown in Figure 4.1. A modified approach to remediation will be required in the areas identified. Appropriate measures will also be taken in area areas of proposed new planting.

8.1.4 In areas of non-continuous hardstanding around the properties the exposed soils should be covered with a high-visibility geotextile. An overlay of at least 100mm of clean compacted sub-base or lean-mix concrete should then be added. The proposed surfacing should then be placed above this layer (gravel should be at least 150mm depth).

8.1.5 Where the ground level requires modification, it may be necessary to remove some of the existing soil. In which case the material excavated from the site should be treated as waste and would have to be disposed of at a licensed waste management facility.

8.1.6 Photo documentation should be taken regularly during the course of the remedial work for the Phase 4 Verification Report. Key stages of the development to be photographed may include: when a site is cleared, when excavations and footings are open, when geo-textile membranes are laid, when imported materials are being added and installed, when the site is complete.

8.1.7 The proposed development is in an area where greater than 30% of properties are estimated to be above the UK Action Level for radon.

8.1.8 Long-term monitoring post-remedial works will not be required.

8.1.9 On completion of remedial works to the required standard, a Phase 4 Verification report must be obtained before the site can be deemed suitable for its intended use.

8.2 Recommendations

8.2.1 The use of in-situ simple capping system will break the contamination pathway between the soil and the site users.

8.2.2 Any soil removed from site should be disposed of at a licensed waste facility. Waste transfer notices should be kept. The materials should be handled in accordance with the Site Waste Management Plan.

8.2.3 Any soil imported to site should be certified for residential end use with certification to demonstrate it is of suitable composition.

8.2.4 If any unrecorded contamination is encountered during site clearance operations, assessment will be required by a suitably qualified and experienced environmental scientist to ascertain the best procedure for remediation.

8.2.5 It is recommended that a copy of this report should be sent to the regulating authority before any works are commenced.

8.2.6 Health and safety requirements for the development of the site should include:

- In dry and dusty weather conditions, the site may require damping down to avoid excessive dust. Minimum PPE requirements should include dust masks, boots and gloves.
- It would also be considered prudent to complete a site induction/toolbox talk concerning elevated heavy metals and precautions to protect site workers and the public.

8.2.7 All workers on site should have access to hand-washing facilities. Current HSE guidelines must be adhered to with regards to working on this site.

9 REFERENCES

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9.1.9 Contaminated Land: Applications in Real Environments (CL:AIRE) (2012) A Pragmatic Approach to Ground Gas Risk Assessment. Research Bulletin 17

9.1.10 Contaminated Land: Applications in Real Environments (CL:AIRE) (2016) CAR SOIL: Control of Asbestos Regulations 2012. Interpretation for Managing and Working with Asbestos in Soil and Construction and Demolition Materials.

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9.1.19 Great Britain. Environmental Damage (Prevention and Remediation) Regulations (2009). London, The Stationery Office

9.1.20 Great Britain. The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015. London, The Stationery Office

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9.1.23 Land Quality Press, 2009. The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment (2nd Edition). Replaced by Land Quality Press (2015) The LQM/CIEH Suitable 4 Use Levels for Human Health Risk Assessment (2nd Edition). Nottingham, Land Quality Press

9.1.24 Middleton, D.R.S. et al., 2017. Arsenic in residential soil and household dust in Cornwall, south west England: Potential human exposure and the influence of historical mining. The Royal Society of Chemistry – Environmental Science Processes and Impacts, vol. 19, p 517-527.

9.1.25 Royal Institution of Chartered Surveyors (RICS) (2012) Japanese Knotweed and Residential Property. Coventry, RICS

9.1.26 UK Water Industry Research (2010) Guidance for the Selection of Water Supply Pipes to be Use in Brownfield Sites: Report 10/WM/03/2

10 NOTES

10.1.1 This report is concerned solely with the property, as defined by this report, or parts thereof examined.

10.1.2 The report should not be used in connection with adjacent properties.

10.1.3 The information in the Groundsure EnviroInsight and GeoInsight reports, which have been used in compiling this Phase 1 Desk Study report, is derived from a number of statutory and non-statutory sources. While every effort is made by the supplier to ensure accuracy, the supplier cannot guarantee the accuracy or completeness of such information or data, nor to identify all the factors that may be relevant.

10.1.4 The conclusions and recommendations relate to the type and extent of development outlined in this report for this specific property only and should not be taken as suitable for any other form or extent of development on this property without further consultation with Wheal Jane Consultancy.

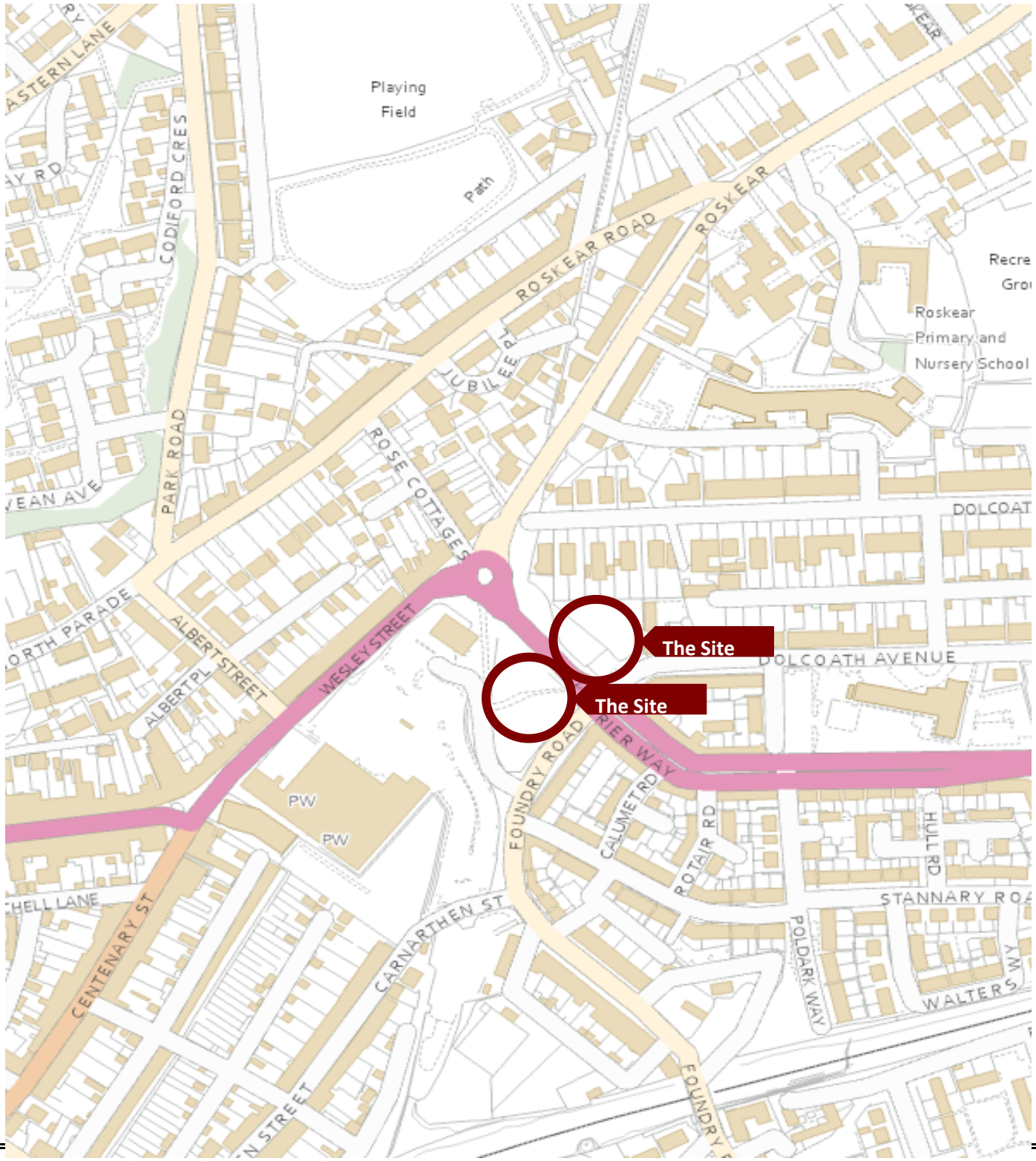
10.1.5 This report is confidential to the client, the client's legal and professional advisors, and may not be reproduced or distributed without our permission other than to directly facilitate the sale or development of the property concerned.

10.1.6 We have no liability toward any person not party to commissioning this report.

10.1.7 Unless otherwise expressly stated, nothing in this report shall create or confer any rights or other benefits pursuant to the Contracts (Rights of Third Parties) Act 1999 in favour of any person other than the person commissioning this report.

10.1.8 This report is not an asbestos inspection that may fall within the control of Control of Asbestos Regulations 2006.

FIGURES:



Title: **Site Location Plan**

Project: **Kerrier Way**

Client: **Mei Loci**

Report Title: **Phase 3 Remediation Strategy**

Date: **18/10/2023** Ref: **21817** Figure: **2.1**

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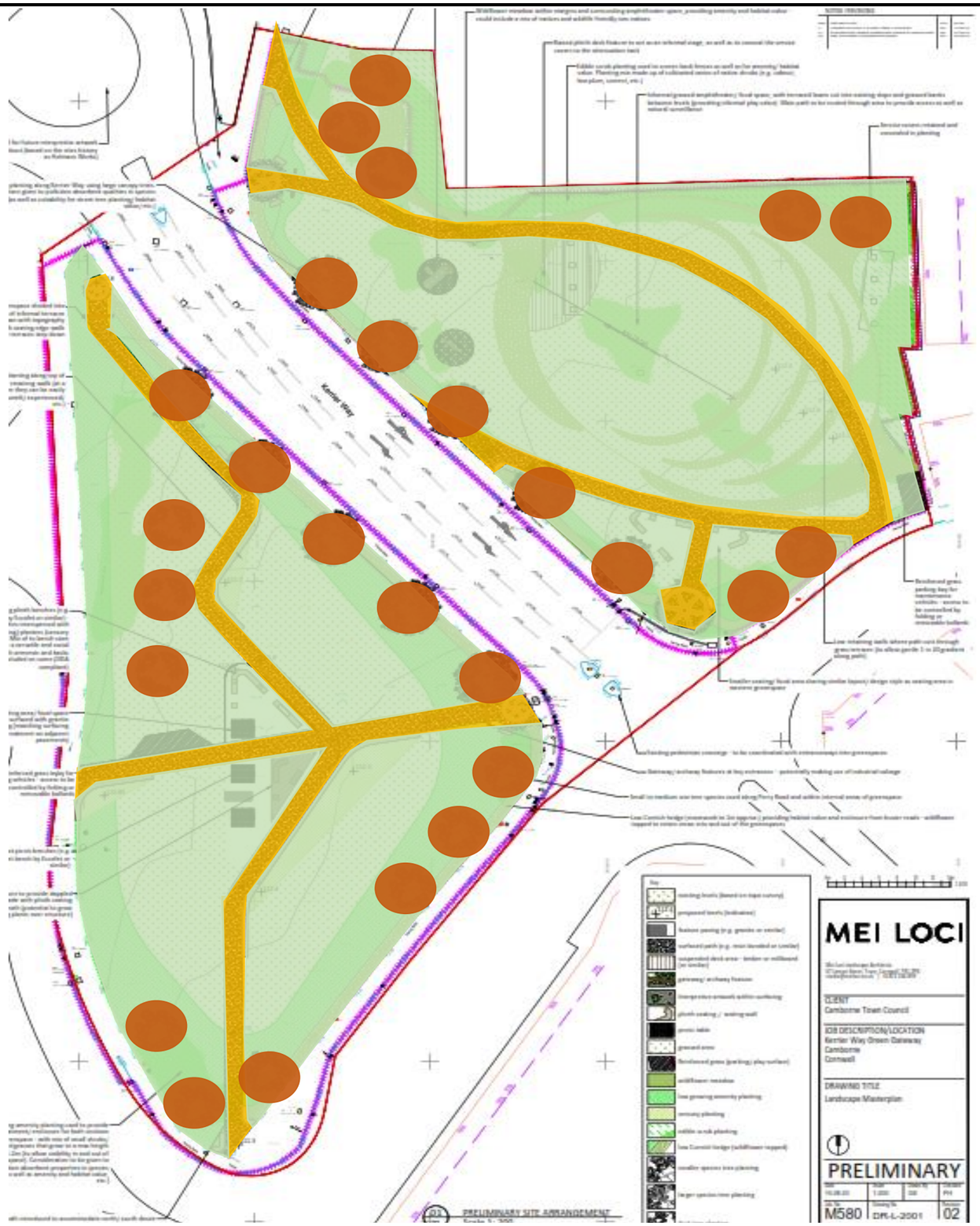
Title:	**Proposed Development Plan**
Project:	**Kerrier Way**
Ref:	**21817**
Client:	**Mei Loci**
Date:	18/10/2023
Scale:	NTS
Drawn by:	
Revision:	A
Figure:	2.2
Report Title:	Phase 3 Remediation Strategy



N

Legend:

Exisiting Highway	No Remediation Required
	Tree Protection Required
	Non-Continuous Hardstanding Remediation Required
	Soft Landscaping/Cornish Wall Remediation Required
	Site Boundary

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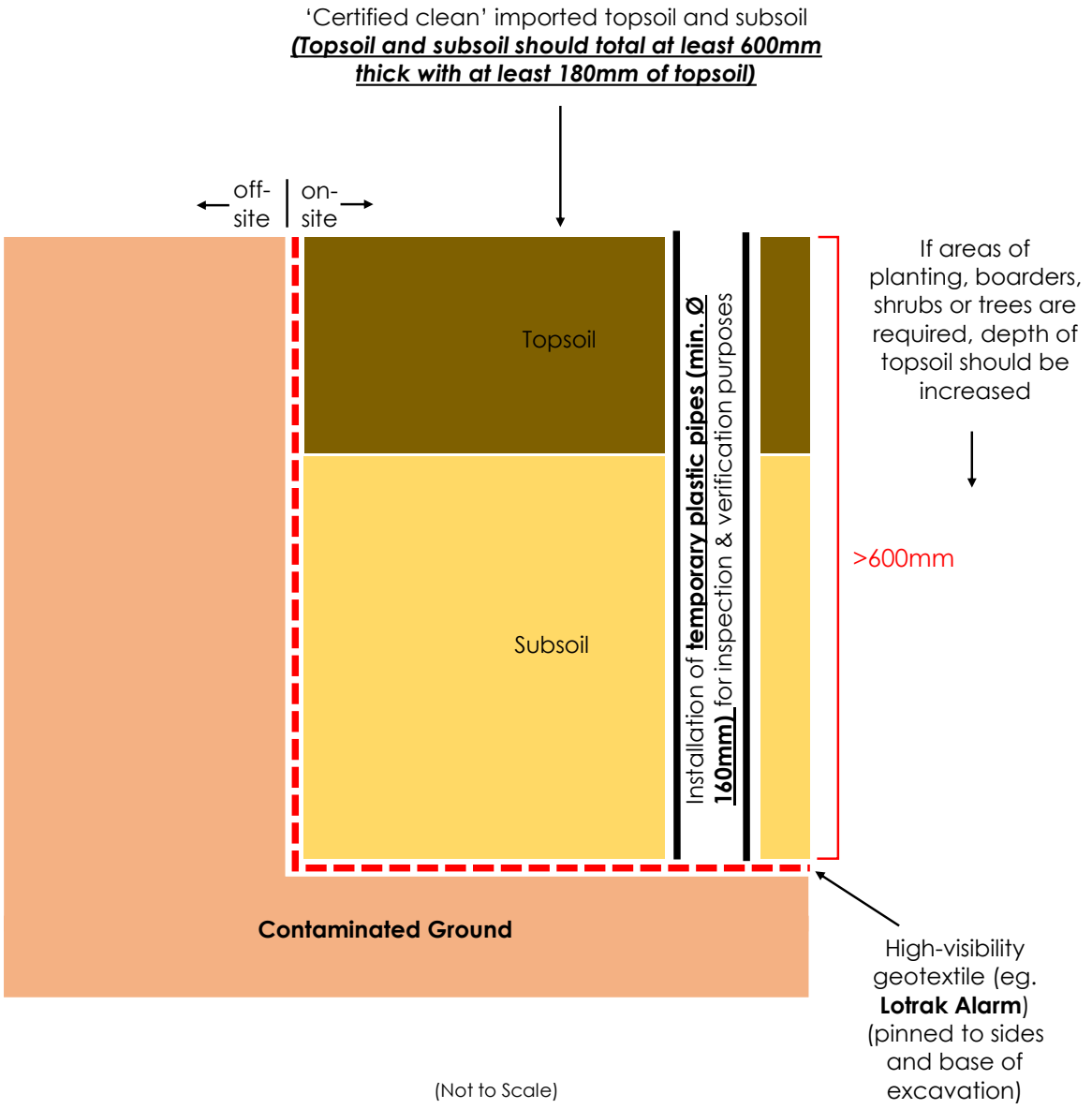
Title:	**Proposed Development Plan**
Project:	**Kerrier Way**
Ref:	**21817**
Client:	**Mei Loci**
Date:	18/10/2023
Scale:	NTS
Drawn by:	WJC
Revision:	A
Figure:	4.1
Report Title:	Phase 3 Remediation

Private Gardens & Soft Landscaping



Title: **Soft Landscaping**

Project: **Kerrier Way**

Client: **Mei Loci**

Report Title: **Phase 3 Remediation Strategy**

Scale: **Not to Scale**

Date: **18/10/2023** Ref: **21817** Figure: **4.2**

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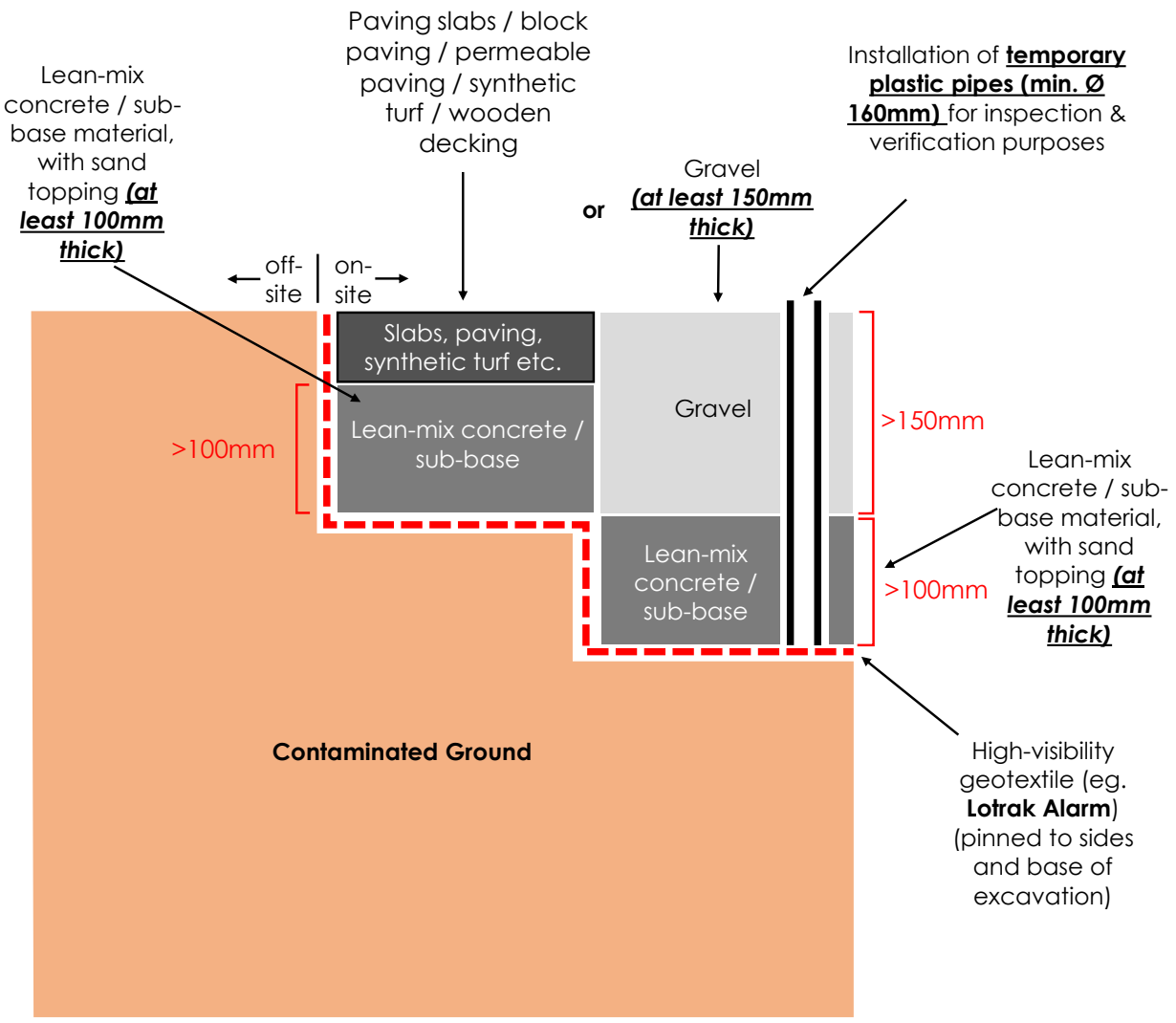
Non-Continuous Hardstanding



(Not to Scale)

Title: **Non-Continuous Hardstanding**

Project: **Kerrier Way**

Client: **Mei Loci**

Report Title: **Phase 3 Remediation Strategy**

Scale: **Not to Scale**

Date: **18/10/2023** Ref: **21817** Figure: **4.3**

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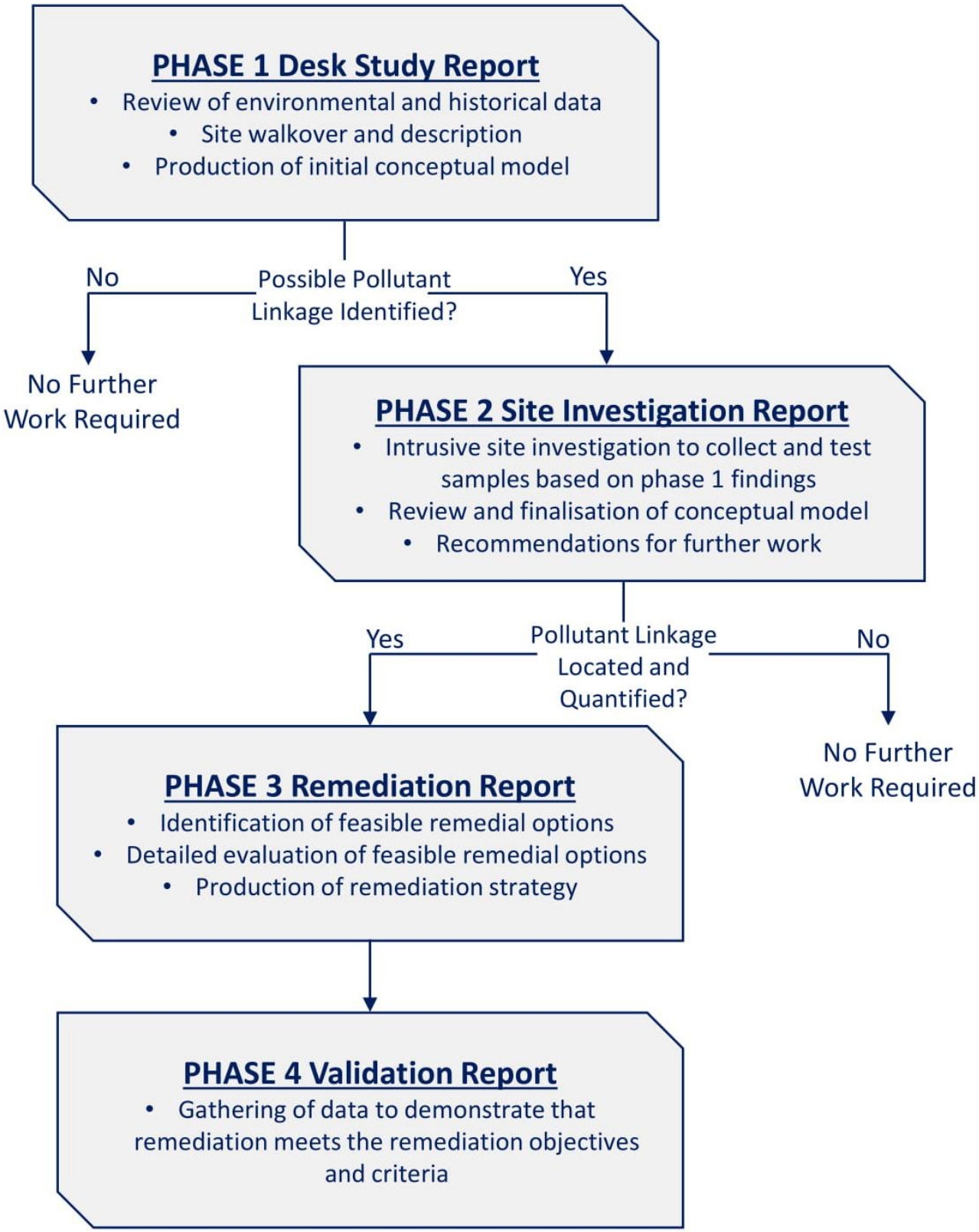
The Phased Approach to Land Contamination

As set out in Contaminated Land Report 11 - Model Procedures for the Management of Land Contamination. Environment Agency Guidelines



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APPENDIX B

Architect Information

APPENDIX C

No Mechanical and Electrical Engineer Information

APPENDIX D

Structural and Civil Engineer Information

APPENDIX E

Employer Documents – No Additional Information

APPENDIX F

Programme – Included in ITT

APPENDIX G

Surveys

APPENDIX H

Contractor Designed Portion Information – Refer to preliminaries.

APPENDIX I

Planning Information

APPENDIX J

Funding Requirements – Included in ITT

APPENDIX K

Warranties – Included in ITT

APPENDIX L

Non Completion Damages – Refer to preliminaries

APPENDIX M

Amendments to Contract – Refer to preliminaries

APPENDIX N

Queries – Included in ITT

APPENDIX O

Specific Drawings – No additional information

APPENDIX P

Photographs – No additional information

APPENDIX Q

Mood Boards – No additional information

APPENDIX R

Quality Questions – Included in ITT