



RIDGE

SPECIFICATION DOCUMENT

**2 Sunbury Lock House
Towpath
Waterside Drive
Walton on Thames
KT12 2JD**

Environment Agency

External & Internal Building Repair Works

10 November 2021

SPECIFICATION DOCUMENT

2 Sunbury Lock House

RIDGE



**2 SUNBURY LOCK HOUSE, TOWPATH, WATERSIDE DRIVE
WALTON ON THAMES, KT12 2JD**

INTERNAL & EXTERNAL REPAIR AND REFURBISHMENT WORKS

Environment Agency

10 November 2021

Prepared for

Environment Agency
Kings Meadow House
King's Meadow Road
Reading
Berkshire
RG1 8DQ

Prepared by

Ridge and Partners LLP
Beaumont House
59 High Street
Theale
Reading
RG7 5AL

Contact

Edd Straker BSc (Hons) MRICS
Senior Building Surveyor
07917 264 446
estraker@ridge.co.uk

Version Control

Date	10 November 2021
Originator Initials	ES
Checked	DP
Version	001

SPECIFICATION DOCUMENT

2 Sunbury Lock House

The logo for RIDGE, featuring the word "RIDGE" in white, uppercase, serif font, centered within a dark green rectangular background.

CONTENTS PAGE

Section 1 - Preliminaries and Materials & Workmanship

Section 2 - Preliminaries Breakdown

Section 3 - Schedule of Works

Section 4 - Contingency Sums

Section 5 - Collection Page

Section 6 - Form of Tender

Appendix A - Location Map (2 Sunbury Lock House & Surrounding Area)

Appendix B - Existing Photographs

Appendix C - Existing Layout & Site Reference Drawings

Appendix D - R&D Asbestos Survey Report (dated 26 March 2021)

Appendix E - Environment Agency, Constructing a Better Environment Safety, Health, Environment and Wellbeing, Code of Practice

Appendix F - Environment Agency Pre-Construction Information For Residential Properties

1. PRELIMINARIES

MATERIALS & WORKMANSHIP

2. PRELIMINARIES BREAKDOWN

PRELIMINARIES BREAKDOWN


Ref.	Description	£	p
2.0	PRELIMINARIES BREAKDOWN		
	Works Contract Procurement		
2.1	Compliance with tender rules		
2.2	Pricing		
2.3	Site Visit		
	Works Contract Establishment		
2.4	General Information		
2.5	Programme		
2.6	Health & Safety Information		
2.7	Management & Staff		
2.8	Temporary Services		
2.9	Temporary Security, Safety & Control		
2.10	Temporary Works		
	Works Contract Management		
2.11	Supervision, Cooperation & Coordination		
2.12	Progress & Operation		
2.13	Protection From		
2.14	Method & Sequence		
	Works Contract Verification		
2.15	Standards of Products & Executions		
2.16	Services Generally		
2.17	Quality Control		
	Works Contract Administration		
2.18	Use of Documents		

PRELIMINARIES BREAKDOWN

Ref.	Description	£	p
2.19	Documents Provided by Contractor, Subcontractors & Suppliers		
2.20	Subletting & Supply		
	Works Contract Completion		
2.21	Notification		
2.22	Completion Works		
2.23	Information		
	Other		
2.24	Insurance, Bonds, Warranties & Guarantees		
2.25	Site Clearance & Cleaning		
	NOTE: The above relates to the project specific preliminaries and are deemed to include all definitions, procedures, policies and works detailed in this document. Where no project specific preliminaries are confirmed during the tendering stage of the project the contractor pricing the works will price the above based on the JCT Minor Works Building Contract 2016 Edition executed as a deed.		
SECTION 2 - COSTED TOTAL (Excl VAT) £			

3. SCHEDULE OF WORKS PRICING DOCUMENT

SCHEDULE OF WORKS

Ref.	Description	£	p
3.0	SCHEDULE OF WORKS		
3.1	INTRODUCTION		
3.1.1	The contractor is to note that the proposed works forming this schedule are for external and internal repair and redecoration to various areas of the building forming 2 Sunbury Lock House.		
3.1.2	<p>The location of Sunbury Lock House is shown in the Google Maps image below, as well as in more detail in Appendix A.</p> 		
3.1.3	Location of works: 2 Sunbury Lock House, Towpath, Waterside Drive, Walton on Thames, KT12 2JD.		
3.1.4	<p>The Client will be: Environment Agency Address: Kings Meadow House, Kings Meadow Road, Reading, Berkshire, RH1 8DG.</p>		
3.1.5	<p>The Client Representative will be: Ridge & Partners LLP Address: Beaumont House, 59 High Street, Theale, Reading, Berkshire, RG7 5AL.</p> <p>The contractor is to note that existing layout drawings and a general site location drawing are provided in Appendix C.</p>		
3.2	GENERAL		
3.2.1	The schedule has been prepared in order for a detailed cost breakdown to be provided, to aid the assessment of the works and to assist with progress and payments.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.2.2	The contractor is to take responsibility for the schedule and is to ensure its completeness with regards to the proposed scope of works. No costs incurred by the contractor during the pricing of these works will be accepted by the Employer.		
3.2.3	The contractor should note that all items of work contained within this schedule have been described in reasonable detail, but the contractor shall consider them in conjunction with material manufacturers recommendations, and actual work on site. The contractor shall include in his price for everything that is necessary in order to allow him to carry out the works in the best manner whether specifically mentioned or not. If and where approximate quantities are stated, these are for guidance only and the contractor is to make their own assessment of the actual quantities required by visiting site prior to submitting their costed return.		
3.2.4	The contractor is responsible for checking all dimensions on site. Any alterations or amendments to those detailed in this document are to be confirmed in writing by Ridge & Partners LLP.		
3.2.5	Should there be any items of work which the contractor is unclear as to what is required, then the query should be raised to Ridge & Partners LLP for clarification, during the tender process.		
3.2.6	The contractor is to price the schedule boldly in black ink, or typed to facilitate the photocopying of priced copies.		
3.2.7	The contractor is to allow to price for each item individually where ever possible. Items should not be grouped together quoting lump sums prices.		
3.2.8	No qualifications or alterations of any kind are to be made by the contractor to this schedule of works without the written agreement by the CA (Ridge & Partners LLP) or Environment Agency.		
3.2.9	The contractor is to refer to the Preliminaries section of this document for all applicable standards of all products and materials described below. Strict adherence to the requirements are required at all times.		
3.2.10	The contractor is to refer to Materials and Workmanship clauses included with the Preliminaries section of this document for all applicable standards of all products and materials described below. Strict adherence to the requirements are required at all times.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.2.11	The contractor must examine this specification document, to ascertain all local conditions and restrictions, accessibility and visit site to ensure they have allowed for all necessary works (all labour, materials and equipment). No claims arising from the failure to do so, will be considered. The client will not be held responsible for any additional works claims which are deemed to be reasonably foreseeable which the contractor should have included for		
3.2.12	The contractor's attention is also drawn to the Appendices detailing additional information required to complete the works. The contractor must strictly adhere to the requirements of these sections at all times while completing the works.		
3.2.13	The contractor must notify Ridge & Partners LLP upon the discovery of any discrepancies, errors or omissions within the specification documents or the works required immediately.		
3.2.14	The contractor shall be responsible for ensuring all employees including sub-contractors fully understand and work in accordance with the site's rules and procedures. All contractors must wear company clothing, ID badges and have the correct PPE provisions.		
3.2.15	Allow to submit a detailed and site specific Pre-start Health & Safety Plan for the proposed works to Ridge & Partners LLP for comment and approval.		
3.2.16	The contractor is to allow for regularly removing waste materials from site (noting that there is limited access to the property, due to its location on an island in the River Thames. Where items are to be set aside, allow to record their condition and for safe and secure storage.		
3.2.17	The contractor is to leave the working areas clean and tidy upon at the end of the each working day.		
3.2.18	The contractor is to price for all works to be undertaken during "normal working hours" unless otherwise stated. Exact timings: to be confirmed, prior to works starting on site. No weekend or Bank Holiday works is permitted. No noisy works are permitted before 8.30am.		
3.2.19	Access to the site is only permitted for working on the proposed works.		
3.2.20	The contractor shall carry out the works without undue inconvenience and nuisance and without danger to building owners, occupants and visitors.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.2.21	When undertaking the specified works, they are to be in accordance with manufacturer's recommendations and guidelines.		
3.3	WORKS PROGRAMMING/ PHASING		
3.3.1	The works are to be undertaken in an unoccupied residential property. Therefore the contractor is to consider the use of the site as part of phasing the works.		
3.3.2	The contractor is to outline their proposals for programming the works below. A project programme must be provided with the tender.		
3.3.3	Prior to commencing works on site, the contractor must produce detailed plans for means of access, site compound, storage facilities, means of escape and evacuation routes from the building during the course of the works. This is to be issued to Ridge & Partners LLP and the Environment Agency for approval a minimum of two weeks prior to the commencement of works.		
3.3.4	The works are to be undertaken in strict accordance with all Statutory Consents and Conditions required by the local Building Control and Planning Department where necessary. The contractor shall be responsible for ensuring all works undertaken comply with current regulations and byelaws.		
3.3.5	The successful contractor is to undertake the works utilising trades persons and operatives who have the relevant experience, competence and technical skills required to achieve the applicable standards of all works, products and materials described below.		
3.3.6	The contractor is to make a reasonable allowance for the inspection, instruction and agreement of any works by Ridge & Partners LLP during the works as necessary to complete the works to the reasonable satisfaction of Ridge & Partners LLP.		
3.3.7	The contractor is to note that all electrical works that are required to be undertaken to the property, are to be carried out by the Environment Agency's Term Electrical Contractor, such as light fittings, sockets, wiring, bathroom and kitchen extraction etc. As a result, no electrical works have been allowed for in this Schedule of Works. However, where required, allow to liaise with the electrical company and the Environment Agency accordingly. Include to make good affected surfaces (walls, floors, ceilings, joinery etc.), if and where required.		
3.4	CONSTRUCTION (DESIGN AND MANAGEMENT REGULATIONS) 2015		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.4.1	The Construction (Design & Management) Regulations 2015 apply in full to these works. The contractor must comply with these regulations and ensure all required information is provided.		
3.4.2	Even though the building is unoccupied, the contractor must maintain safe access routes for all residents, visitors, deliveries and own workforce.		
3.5	REFURBISHMENT AND DEMOLITION ASBESTOS SURVEY		
3.5.1	The Environment Agency has provided an Asbestos Survey Report (dated 26 March 2021) by Amiantus Environmental Consultants Limited within Appendix D of this report. The report provides R&D information relating to the internal and external areas of the property. Should any asbestos containing materials be found, the contractor is to allow for the safe removal and disposal of all asbestos containing materials as detailed within the report that are identified within the proposed works area.		
3.5.2	The contractor is to note that the asbestos containing materials that were found in the external insulation soffit board, forming the rear kitchen extension (as stated in the report in Appendix D), have already been safely removed.		
3.5.3	Prior to the commencement of any works on site (including any site set up etc.), the contractor is to fully review the extent of Asbestos identified in the Survey Report provided within the Appendices. Where required the contractor is to employ a UKAS accredited Asbestos Surveying Specialist to undertake full Refurbishment and Demolition (R&D) inspection and survey the areas of the building not included in the Survey Report provided. This is to include for full testing of samples where applicable. Allow for all necessary asbestos air sampling, fibre identification, bulk sampling and bulk sample identification as required.		
3.5.4	The contractor is responsible for ensuring that all asbestos containing materials are correctly removed (if any are found to be present within the proposed working area), upon advice from the CA) from site by a UKAS accredited company with an approved Waste Carriers Licence and disposed of in accordance with current HSE and regulatory guidelines. Copies of disposal certificates are to be issued to Ridge & Partners LLP & the Environment Agency		
3.5.5	During the works the contractor is to give notice immediately of suspected asbestos-containing materials if discovered during the Works and avoid disturbing such materials. Statutory risk assessments and details of proposed methods for its safe removal are to be undertaken and submitted by the contractor.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.5.6	The contractor is to note that all work to be carried out in accordance with Health & Safety Executive (HSE) guidelines, including The Analysts' Guide (HSG248), Asbestos: The Survey Guide (HSG264) and the Control of Asbestos Regulations 2012.		
3.6	SITE MANAGEMENT & WELFARE		
3.6.1	The contractor is to submit proposals for site set up, site accommodation and welfare facilities which will be discussed and agreed at the pre-commencement meeting. Designated space maybe provided within the grounds of the site, depending on the extent of the facilities required by the contractor.		
3.6.2	The contractor is to provide all necessary barriers; safety signage and site security required to carry out the works. This must include adequate 1800mm timber hoarding and or "Heras" type fencing, double clipped, around any external works areas and site compounds. The property must remain secure at all times and once works are complete at the end of each day. All necessary lighting, warning and prohibition signs must be provided. The contractor is to ensure that no unauthorised access is permitted within the curtilage of the site or beyond the building secured entrances.		
3.6.3	The contractor is to provide all necessary facilities and on-site welfare facilities including WC's and a mess area for the duration of the works. The contractor is to ensure that these are well maintained for the duration of the works. The contractor must ensure that all existing service covers, footpaths and other surfaces are adequately protected from damage from the use of site facilities during the works.		
3.6.4	The contractor shall provide and maintain all necessary mechanical equipment, plant etc. of all descriptions required for the satisfactory completion of the works and remove all, as and when required, or when directed by Ridge & Partners LLP.		
3.6.5	Due to the nature of the site all operatives must respect the surrounding area and be respectful to neighbours and members of the public.		
3.6.6	The contractor is to allow for removal and safe disposal of all waste from site including skips, chutes and double polythene sheeting for all hazardous waste material in accordance with current Control of Asbestos Regulations 2012 and all Health & Safety legislation.		
3.6.7	The contractor is to allow for regularly removing waste materials from site.		

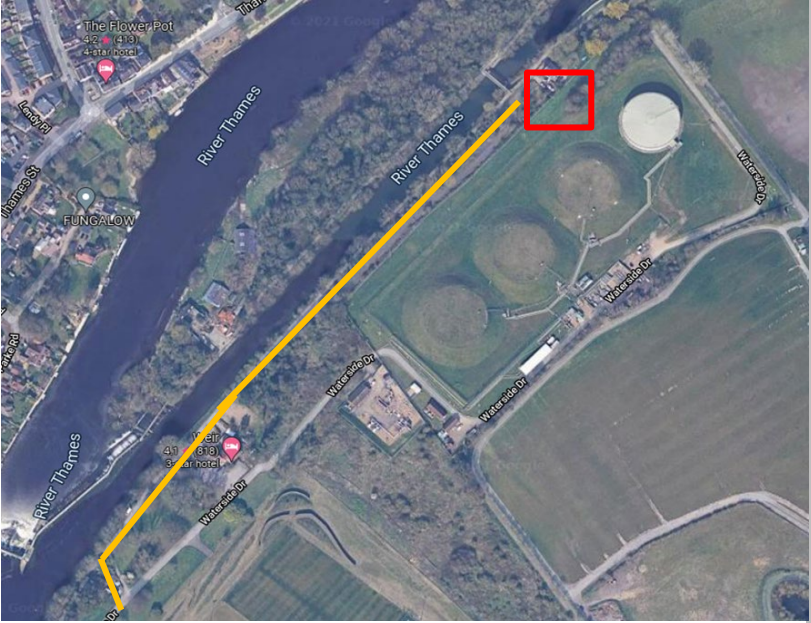
SCHEDULE OF WORKS

Ref.	Description	£	p
3.6.8	The contractor is to allow for an appointed site foreman to be on site at all times for the duration of the works. The site foreman must be able to communicate well with the client, all client representatives and member of the public and be available to liaise directly with them at all times. Contact details of the site foreman must be provided at the pre-contract meeting.		
3.6.9	The contractor shall be responsible for obtaining any required permission from the Local Authority, Client or other bodies for the positioning of any temporary facilities or structures outside the premises required for completing the works and ensuring all works undertaken comply with current regulations and byelaws.		
3.6.10	The contractor is to allow for all necessary protection to prevent surfaces and areas adjacent to the works from being damaged by the proposed works.		
3.6.11	The use of any electrical equipment is to be strictly controlled and steps are to be taken to ensure that leads are not long enough to touch the water. All equipment should be connected to lines to prevent their accidental dropping into water causing possible electric shocks etc.		
3.7	EXISTING SERVICES		
3.7.1	No disruption of services to the building shall be allowed without written consent from Ridge & Partners LLP or the Environment Agency and without adequate notice of the disruption being provided.		
3.7.2	Adequate protection of the existing services to the building will be required and any damage shall be made good to the satisfaction of Ridge & Partners LLP, the Environment Agency and the appropriate Statutory Authority, with the minimum of delay at the contractor's expense.		
3.7.3	The contractor is to ascertain for themselves the location of all services (which shall include gas, water, electricity, telecommunications services, fibre optic, drains (foul and surface), ducts, tubes, tunnels and the like, on and adjacent to the Site (underground and over ground)), that may be affected by the carrying out of the works and is to allow for all costs in connection with upholding, protecting and, if necessary, temporarily and / or permanently diverting and reinstating these services. All costs associated with works undertaken by Statutory / Service Utility Companies, including builder's work in connection, are to be allowed for by the contractor.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.7.4	All chambers, manholes, draw pits, plant and the like shall be adequately protected and any damage shall be made good at the contractor's expense.		
3.7.5	The contractor is note that the rising main is located in the cupboard under the kitchen sink.		
3.8	ACCESS & SCAFFOLDING		
3.8.1	The contractor is to provide all necessary access equipment required for completing the specified works. Any scaffolding and access equipment must be installed/ erected and maintained to current national standards. Where this is permitted the contractor is responsible for maintaining the access routes and providing all necessary barriers, signage etc. to maintain safe working routes for the occupants, visitors and site operatives. Upon completion all access routes to be thoroughly cleaned and reinstated to match the existing standard.		
3.8.2	Scaffolding must be installed / erected and maintained to current Building Regulations, NASCC and national standards.		
3.8.3	The contractor is to allow for safe access in order to carry out all elements of the works. The contractor is deemed to have allowed for all alterations and amendments to the scaffold design to allow works by different trades and operatives needed to complete the works.		
3.8.4	Any damage to existing structures arising as a result of scaffold assembly and the works will be made good at the expense of the contractor.		
3.8.5	The contractor must allow to supply continuous robust good quality clean debris netting to all scaffolding, where required.		
3.8.6	The contractor is to ensure that at all times, scaffolding / access provisions to undertake the works in no way reduces the security of the property. The contractor is to ensure that the scaffolding is suitably secured and protected from all persons, including any potential intruders at all times. All ladders are to be locked away at second lift level or above at the end of each working day.		
3.8.7	The scaffold at all times, should comply with the latest Building Regulations and requirements.		
3.8.8	The contractor must ensure that whilst erecting and dismantling scaffolding that noise is kept to a minimum.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.8.9	When painting and / or spray cleaning is being carried out in the vicinity of members of the public, the contractor is to display adequate warning notices.		
3.8.10	The contractor is to submit proposals for all high level access measures including risk assessments and method statements along with details of proposed specialist sub contractor. Risk assessments and method statement are to be reviewed and discussed with Ridge & Partners LLP prior to the works commencing on site. Any reasonably requested amendments to the submitted documents are to be made and subsequently included within the documents prior to works commencing.		
3.8.11	<p>It should be noted that, due to the location of 2 Sunbury Lock House, there is limited vehicle access to the property, via the towpath - see orange line on map below, (access via a Environment Agency key access gate). This may limit the type of plant and equipment etc. that can be carried to the property. The contractor is to visit site prior to works starting. Possible use of an Environment Agency barge boat may possibly be arranged following review (upon further clarity and confirmation from the Environment Agency).</p> 		
3.8.12	The contractor is to familiarise themselves with the Environment Agency, Constructing a Better Environment - Safety, Health, Environment and Wellbeing, Code of Practice prior to works starting on site. This document provides guidance on working methods around the water. This is provided within Appendix E.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.8.13	When working near or over the water, the contractor must undertake works in accordance with the rules and requirement stated by the Environment Agency, including buoyancy aid, of a tested and approved pattern, is to be worn by all personnel working over water.		
3.9	EXTERNAL FABRIC WORKS		
3.9.1	The contractor is to allow for undertaking the proposed works as detailed below. Various photographs have been provided in Appendix B as a guide, to show the areas of the building (where possible) more detail.		
3.9.2	The contractor is to allow to carefully remove and dispose the existing defective timber window from within the garage (left hand one, if looking at the rear elevation from the outside and is the window nearest the boiler within the garage), including the existing timber frame, glazing and cill. Allow to make good affected surfaces and leave ready to receive the new window.		
3.9.3	Following the removal of the existing garage window (as stated above), allow to supply and install new uPVC window casement and frame within the retained opening. Allow for new cill, sealed double glazing units, ironmongery, sealant, fixings etc. Allow to make good any internal and external affected surfaces. Colour: White. At tender stage, allow for the window to be openable. Style and design of window is to be confirmed by the Environment Agency.		
3.9.4	The contractor is to allow to carefully remove and dispose the existing defective timber window located within the front elevation. This is the window forming the basement (level with external hardstanding), to the left hand side of the main entrance door and access steps. Include to remove the existing timber frame, fixings, glazing and cill. Allow to make good affected surfaces and leave ready to receive the new window.		
3.9.5	Following the removal of the existing basement window (as stated above), allow to supply and install new uPVC window casement and frame within the retained opening. Allow for new cill, sealed double glazing units, ironmongery, sealant, fixings etc. Allow to make good any internal and external affected surfaces. Colour: White. At tender stage, allow for the window to be openable. Style and design of window is to be confirmed by the Environment Agency.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.9.6	The contractor is to carefully remove and dispose of the defective / blown glazed units to the window casements, where they are noted to be defective or have condensation present. Allow to install new replacement sections of glazing where required.		
3.9.7	The contractor is to allow to carefully remove and dispose the existing defective timber double garage vehicular doors, frame, fixings and associated ironmongery, located within the right hand elevation. Allow to make good any internal and external affected surfaces and leave ready to receive the new vehicular door.		
3.9.8	Following the removal of the existing garage door (as stated above), allow to supply and install hardwood solid timber double access doors and frame within the retained opening. Allow for new fixings, ironmongery, locks, bolts, sealant etc. Allow to make good any internal and external affected surfaces. New doors are to open outwards. Upon completion allow to prepare and decorate the new doors and frame, using suitable Dulux external grade paint or similar approved, 1 No. undercoat and 2 No. top coats. Colour: White. Style and design of door is to be confirmed by the Environment Agency		
3.9.9	Cost Option - The contractor is to supply and install a new HAG Seceuro coated aluminium roller external shutter door (or similar approved), within the garage door opening to the right hand elevation. New shutter to have powder coated finish. The new roller shutter is to be electrically (fob) and manually operated and to include all associated fixings, frames, casings, mechanisms etc. On completion leave in full working order. Allow to liaise with the Environment Agency's Electrical Term Contractor to ensure that all associated mechanical and electrical works, associated with the installation of the roller shutter are suitably completed. etc. Colour: White. Hag - info@hag.co.uk or 0800 072 3444. Cost.....	Cost Is Not To Be Carried Forward	Cost Is Not To Be Carried Forward
3.9.10	The contractor is to allow to carefully remove and dispose the existing main entrance door, frame, fixings and associated ironmongery, located within the front elevation. Allow to make good any internal and external affected surfaces and leave ready to receive the new door.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.9.11	Following the removal of the existing front elevation door (as stated above), allow to supply and install hardwood solid timber (6 panel) access door and frame within the retained opening. Allow for new fixings, ironmongery, sealant, central letter box, central door knocker, spy hole etc. Include for a new Yale lock with internal deadlock and additional 6 level mortice lock for additional security. Allow to make good any internal and external affected surfaces. New door is to open inwards. Upon completion allow to prepare and decorate the new doors and frame, using suitable Dulux external grade paint or similar approved, 1 No. undercoat and 2 No. top coats. Colour, style and design of door is to be confirmed by the Environment Agency.		
3.9.12	The contractor is note that the window and door replacement works are to be undertaken in strict accordance with manufacturer's specification, recommendations and guidelines. All works are to achieve Building Regulations and British Standards.		
3.9.13	The contractor is to clean and clear out all remaining debris, sediment and vegetation growth etc. from the rainwater goods. Leave rainwater goods free flowing.		
3.9.14	The contractor is to allow to undertake a detailed inspection to the existing rainwater goods. Allow to realign rainwater goods and leave in good condition and free flowing. Reseal any defective joints. In addition, include a Provisional Sum of £750.00 for isolated replacement sections of rainwater goods (size, profile and colour to match existing).		
3.9.15	The contractor is to allow to undertake a full inspection of the sections of timber shingle elevations. Allow a Provisional Sum of £1,500.00 to undertake isolated repairs and replacements to the timber shingles, fixings, detailing etc. All removal works to be undertaken piecemeal, meaning using hand held tools only. Any defective areas where replacement is required, is on a like for like basis, to match existing profile sizes and materials etc.		
3.9.16	The contractor is to repair and refix the loose section of flashing detail, between the rear brickwork elevation and the roof forming the kitchen extension. Where the existing flashing detail is missing / defective. Allow to supply and new lead flashing to match the remaining section, in terms of material, size, code thickness of lead, profile and detailing etc. Allow for suitable detailing and ensure a watertight finish throughout		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.9.17	The contractor is to supply and install a minimum of 100mm Rockwool Flexi slab (or similar approved) to the soffit forming the underside of the kitchen extension floor. The new insulation is to be installed in between the existing timber structure (allowing for 5 - 10mm larger than the opening, to ensure the insulation stays tightly compressed during the winter and summer months). Ensure a suitable ventilation gap is provided. Allow to install as per manufacturer's requirements and recommendations.		
3.9.18	The contractor is to supply and install a suitable Tyvek (or similar approved) vapour barrier layer to the timber frame forming the soffit of the underside of the kitchen extension floor. Allow to fix to existing timber frame in accordance with manufacturer's recommendations. Following this, allow to supply and install new 18mm plyboard soffit to the entire area, including all screw fixings and associated detailing. Upon completion, allow to prepare and decorate the newly formed soffit, using suitable Dulux external grade paint or similar approved, 1 No. undercoat and 2 No. top coats. Colour: White.		
3.9.19	The contractor is to carefully remove and dispose of the existing uPVC external waste pipework, serving the first floor bathroom, located on the right hand elevation. Allow to isolate all pipework etc. to enable to the works to be undertaken. Supply and install new uPVC pipework and connect into existing internal and external pipework. Make good all seals and joints, as well as surrounding surfaces. Install all new pipework in accordance with manufacturers recommendations and Building Regulations. Colour: Black.		
3.10	EXTERNAL AREA WORKS		
3.10.1	The contractor is to remove and dispose of the cracked and defective concrete surround to the downpipe outlet. This is located to the left hand side of the front elevation, at ground level. Allow to supply and install new concrete surround to match the style, size and profile of the existing one.		
3.10.2	The contractor is to note that the existing large tree and surrounding vegetation, located to the rear of the property, adjacent to the oil tank will be sufficiently cut back and/or removed by the Environment Agency, prior to the start of the works.		
3.10.3	The contractor is to note that the existing stacked timber and slates, which are located to the right hand side of the shed, are to be removed by the Environment Agency, prior to the start of the works.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.10.4	The contractor is to remove and dispose of the existing timber shed, located adjacent to the rear boundary fencing. Include to remove all items / debris from within the shed. Once the shed is removed allow to make good surrounding surfaces where required (including any concrete paving to match, if none is provided under the shed base).		
3.10.5	The contractor is to remove and dispose all debris from within the garden (notably to the rear of the site). This includes any pieces of timber, bins, rubbish, concrete slabs, metal, disused roll of mineral felt etc.		
3.10.6	The contractor is to remove and dispose of all weeds and vegetation growth to the hardstanding areas surrounding the property (front, left and rear paving / concrete areas and steps), including around the existing patio area and adjacent to the oil tank, as well as the loose gravel driveway to the right hand side of the property. Prepare surface and treat with sufficient weedkiller throughout.		
3.10.7	The contractor is to allow to pressure wash / clean all areas of retained paving and hardstanding around the property (including external steps and surrounds (using a non abrasive solution). This is to remove all areas of dirt build up and staining.		
3.10.8	The contractor is to clean and clear out all "Aco" style liner drainage within the demise and ensure they are left in a good condition and free flowing.		
3.10.9	The contractor is to remove and dispose of the concrete paving to the rear of the property. This is located within the brick perimeter section of hardstanding (see photographs in Appendix B). Include to remove base layer below. Leave ready for new external surface.		
3.10.10	<p>Once all of the paving is removed, the contractor is to form the new gravel hardstanding area. Colour of new gravel is to be Naturally Rounded Brown Decorative Stones (or similar approved). Include for:</p> <ul style="list-style-type: none"> a) Remove and dispose 120mm form the layer of top soil. b) Compact surface and leave ready to receive base layer. c) Install 100mm depth of MOT 1 Type aggregate. d) Compact aggregate layer and leave ready to receive base layer. e) Install weed resistant membrane (cut to size) on the aggerate. f) Install 20mm depth of gravel over the membrane. g) Spread newly installed gravel with a rake for even and full finish. 		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.10.11	The contractor is to allow for a full CCTV survey and flush through/clean of all drainage on site following completion of works and include for written report to be issued to CA. Allow to price for any subsequent works once report is provided.		
3.11	INTERNAL FABRIC WORKS		
3.11.1	Garage & Basement		
3.11.1.1	The contractor is to remove and dispose of the existing loose laid carpet / floor covering in the garage.		
3.11.1.2	The contractor is to remove and dispose of the existing pipework insulation to the surface mounted pipework installations within the garage and basement area.		
3.11.1.3	Following the removal of the pipework insulation (see item above), the contractor is to supply and install new Knauf mineral wool (or similar approved) pipework insulation where missing or removed. Allow to install new throughout out, including all joints and junctions. Ensure a full covering and correct diameter of the pipework is provided.		
3.11.1.4	The contractor is to ensure all the insulated pipework is labelled / identified, to establish which pipes are the hot and cold runs. Provide suitable method of labelling throughout.		
3.11.1.5	The contractor is to supply and install a new section of plasterboard to the ceiling, within the basement, adjacent to the door. This is to fill the existing hole in the ceiling that is noted to be present. Provide a neat and level finish with surrounding surfaces. Include to tape and joint and securely fix to surrounding surfaces. Decorate the small section of new plasterboard (colour: is to match surrounding surfaces).		
3.11.2	Main Roof Void		
3.11.2.1	The contractor is to note that access to the main roof void is available via 2 No. access hatches in the first floor landing.		
3.11.2.2	The contractor is to test and service the existing Nuaire positive input ventilation system located in the roof void, including the associated outlet in the ceiling at first floor level. Following testing provide certification to the Environment Agency for their information. If required the contractor is to allow to schedule costs for repairs. As possible costs for repairs are unknown at present, allow for the cost in the tender to be for inspection, servicing and testing only.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.2.3	The contractor is to relay the existing quilt installation within the main roof void to ensure a full and even covering. Where required allow to supply and install additional quilt insulation in order to meet the U-Value requirements of the current Building regulations. Install as per manufacturer's guidelines and recommendations. Ensure suitable ventilation gaps are provided to the eaves. Allow a Provisional Sum of £250.00.		
3.11.2.4	Remove remaining debris / past occupant's belongings etc. from the roof void and dispose.		
3.11.3	Kitchen Extension Roof Void		
3.11.3.1	The contractor is to note that access to the roof void within the kitchen extension, will be available as part of the specified ceiling works for the kitchen (see Ceiling Section).		
3.11.3.2	The contractor is to supply and install new Rockwool (or similar approved) quilt installation within the roof void forming the rear kitchen extension. At present there is no insulation provided. Allow to ensure a full and even covering throughout the roof void in order to meet the U-Value requirements of the current Building regulations where possible. Install as per manufacturer's guidelines and recommendations. Ensure suitable ventilation gaps are provided to the eaves.		
3.11.4	Floors		
3.11.4.1	The contractor is to allow to retain the existing carpet floor finishes within the ground floor, staircase and first floor of the property. Include to repair and fix any areas of loose carpet to ensure a suitable finish. Include to clean all surfaces. Where required install new gripper rods etc., to ensure a secure finish.		
3.11.4.2	Cost Option: The contractor is to carefully remove and dispose all of the existing carpet floor covering provided within the ground and first floors and the staircase, including all remaining adhesive, gripper rods etc. Prepare surfaces and leave ready for new covering. Allow to sweep, clear and clean the floor, in readiness for the new floor covering to be installed. Allow to supply and install new carpet throughout, to be laid in accordance with manufacturer's instructions, including all new fixings, gripper rods etc. Range, colour and style to be confirmed by Environment Agency. Cost.....	Cost Is Not To Be Carried Forward	Cost Is Not To Be Carried Forward

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.4.3	The contractor is to carefully remove all of the existing floor covering from the ground floor toilet, including all adhesive, gripper rods, trims and associated surfaces etc. and dispose. Prepare surfaces and leave ready for new covering.		
3.11.4.4	The contractor is to carefully remove all of the existing vinyl floor covering from the kitchen including all residue adhesive, trims and associated surfaces etc. and dispose. It is understood to have asbestos containing materials present (see Appendix D). Please remove include accordance with regulations. Prepare surfaces and leave ready for new covering.		
3.11.4.5	The contractor is to carefully remove all of the existing carpet floor covering provided within the kitchen lobby area (adjacent to the external access staircase), including all remaining adhesive and associated surfaces and dispose. Prepare surfaces and leave ready for new covering.		
3.11.4.6	Following the safe and correct removal of the vinyl floor coverings (see items above), the contractor is to sweep, clear and clean the floor in the ground floor toilet, kitchen and kitchen lobby, in readiness for the new floor covering to be installed. Then allow to supply and install new Altro Wood vinyl sheet flooring. All joints to be welded. Where required allow for a latex levelling screed to be applied throughout. Provide mastic sealant to the edges, where the floor abuts the walls / surfaces. All works to be in accordance with manufacturer's recommendations and guidelines. Range, lay of timber effect pattern, colour and style to be confirmed by Environment Agency		
3.11.4.7	The contractor is to remove all of the existing carpet floor covering provided within the bathroom cupboard, including all remaining adhesive and associated surfaces and dispose. Prepare surfaces and leave ready for new covering / decoration.		
3.11.4.8	The contractor is to sand down, prepare, clean and decorate the existing timber floor within the bathroom and bathroom cupboard, including to install filler detail between the floor and the skirting / boxing. Allow for two coats of suitable Dulux (or similar approved) floor paint. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colours to be confirmed by the Environment Agency.		
3.11.5	Windows & Doors		
3.11.5.1	The contractor is to remove and dispose of the 1 No. cracked and defective glazed internal window pane (between the hallway and entrance lobby). Allow to supply and install new glazing to fit within the opening / frame. Allow to make good affected surfaces.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.5.2	The contractor is to remove and dispose of all window blinds and curtain rails etc. from the ground and first floor windows. Allow to fill / repair and make good any affected surfaces. Leave ready for redecoration.		
3.11.5.3	The contractor is to allow a Provisional Sum of £750.00 to overhaul the windows, including allowing to repair (or replace, if beyond repair) the catches, restrictors, handles, locks etc. Ensure all windows are left in a suitable working condition.		
3.11.5.4	The contractor is to carefully remove and dispose of the existing timber window cill forming the large kitchen window. Allow to make good surrounding surfaces. Following the specified internal plasterboard wall replacement works, allow to form new window reveal, and then supply and install new timber bull nosed window cill, including for all associated fixings and detailing. Leave ready for decoration.		
3.11.5.5	The contractor is to remove the coat hooks from the retained ground floor doors and dispose. Allow to make good affected surfaces.		
3.11.5.6	The contractor is to carefully remove and dispose of all of the existing timber doors (4 No. single and 1 No. double) within the first floor of the property. Include to remove all associated fixings and ironmongery etc. Allow to retain the existing timber frames and architraves. Allow to make good all surrounding surfaces where disturbed. Leave ready to receive new doors.		
3.11.5.7	Following the removal of the first floor timber doors (see item above), the contractor is to allow to supply and install new Howdens Pembrey Clear Pine 4 Panel Softwood (or similar approved) internal doors throughout the first floor (4 No. single and 1 No. double) with a decorated finish. All door and associated fittings are to be fitted in accordance with the manufacturer's recommendations and guidelines. All doors are to match their existing size and are to open in their existing direction. Include for polished chrome hinges and screw fixings.		
3.11.5.8	The contractor is to note that the existing ground floor doors of the property are to remain. As a result, allow a Provisional Sum of £500.00 to overhaul, repair, ease and adjust the retained timber doors and associated ironmongery, including door handles and rim locks etc. Ensure they are left in a suitable working condition, handles are secure and are able to open and close correctly within their frames.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.5.9	The contractor is to allow to supply and install 1 No. new Howdens Pembrey Clear Pine 4 Panel Softwood (or similar approved) internal door to the living room, where currently missing, with a decorated finish. All door and associated fittings are to be fitted in accordance with the manufacturer's recommendations and guidelines. Door is to match the existing size and is to open into the living room. Include for polished chrome hinges and screw fixings.		
3.11.5.10	The contractor is to allow to supply and install new Howdens Pembrey Clear Pine 4 Panel Softwood FD30 Fire Door (or similar approved), to the kitchen door frame, where currently missing, with a decorated finish. The door and associated fittings are to be fitted in accordance with the manufacturer's recommendations and guidelines. The door is to match the existing size and is to open in their existing direction. The new living room door is to open into the kitchen. Include for polished chrome hinges and screw fixings.		
3.11.5.11	The contractor is to supply and install new Smith & Locke Asker fire rated lever on rose door handles (pair) in polished chrome to the newly installed first floor doors (excluding the doors to the bathroom cupboard). The door handles and associated fittings, including the latch and backset sections within the frames are to be fitted in accordance with the manufacturer's recommendations and guidelines.		
3.11.5.12	The contractor is to supply and install new Smith & Locke Asker fire rated lever on rose door handles (pair) in polished chrome to the newly installed ground floor doors (kitchen & living room) only. The door handles and associated fittings, including the latch and backset sections within the frames are to be fitted in accordance with the manufacturer's recommendations and guidelines.		
3.11.5.13	The contractor is to supply and install new 30mm traditional classic disc knobs in polished chrome (from ScrewFix or similar approved) to the newly installed bathroom cupboard double doors. Allow to install in accordance with the manufacturer's recommendations and guidelines.		
3.11.5.14	The contractor is to remove and dispose of the existing door knob to the retained cupboard under the stairs door. Allow to supply and install new 30mm traditional classic disc knobs in polished chrome (from ScrewFix or similar approved). Allow to install in accordance with the manufacturer's recommendations and guidelines.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.5.15	The contractor is to remove and dispose of the existing door knob to the retained cupboard door (adjacent to the main entrance door). Allow to supply and install new 30mm traditional classic disc knobs in polished chrome (from ScrewFix or similar approved). Allow to install in accordance with the manufacturer's recommendations and guidelines.		
3.11.5.16	The contractor is to allow to supply and install a new Merriway (or similar approved) heavy duty magnetic door catch(s) to the timber door(s) forming the cupboard under the stairs, bathroom cupboard and cupboard adjacent to the main entrance door). The magnetic catches and associated fittings are to be fitted in accordance with the manufacturer's recommendations and guidelines.		
3.11.5.17	The contractor is to supply and install new Smith & Locke (or similar approved) standard thumbturn lock set 50mm for the bathroom door, in polished chrome. Make good affected surfaces and install as per manufacturer's guidelines and recommendations.		
3.11.5.18	The contractor is to supply and install new Smith & Locke (or similar approved) standard thumbturn lock set 50mm for the ground floor toilet door, in polished chrome. Make good affected surfaces and install as per manufacturer's guidelines and recommendations.		
3.11.6	Bathroom		
3.11.6.1	The contractor is to note that the existing sanitaryware is to remain (toilet, wash hand basin, bath and shower). Allow to check all existing pipework and connections etc., to ensure no leaks are present and the installations are working correctly. Following this, allow to thoroughly deep clean the retained sanitaryware and associated pipework, using a non abrasive solution.		
3.11.6.2	The contractor is to rake out all existing mastic sealant from around the retained sanitaryware etc. and supply and install new mastic around the sanitaryware. Make good affected surfaces. Colour White. Install as per manufacturer's guidelines.		
3.11.6.3	The contractor is to supply and install new rectangular mirror (500mm x 700mm) with bevelled edges and mirror screw fixings in each corner. Location of mirror is to be above the existing wash hand basin.		
3.11.6.4	The contractor is to supply and install a new chrome drain outlet retainer, plug and chain for the bath.		
3.11.6.5	The contractor is to supply and install a new chrome drain outlet retainer, plug and chain for the wash hand basin.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.6.6	The contractor is to carefully remove and dispose of the existing cold and hot taps to the wash hand basin, including all associated surfaces. Allow to supply install chrome taps to the retained wash hand basin, including all associated fixtures, fittings, seals and fixings etc. Install as per manufacturer's guidelines and recommendations. Range and style of taps is to be confirmed by the Environment Agency.		
3.11.6.7	The contractor is to carefully remove and dispose of the existing mixer tap and shower attachment to the bath, including all associated surfaces. Allow to supply install chrome mixer tap with shower connection to the retained bath, including all associated shower head and hose (not to be fixed to the wall), fixtures, fittings, seals and fixings etc. Install as per manufacturer's guidelines and recommendations. Range and style of mixer tap is to be confirmed by the Environment Agency.		
3.11.6.8	The contractor is to remove and dispose of the existing 1 No. toilet seat, including all associated fixings etc. Supply and install new duraplast soft-close toilet seat and lid. Include for all associated fixings. Size to correctly match that of the toilet. Colour: To match colour of toilet. Install as per manufacturer's guidelines and recommendations.		
3.11.6.9	Within the cupboard in the bathroom, the contractor is to allow to remove all existing dead leg pipework and any redundant pipework. Cap all pipework.		
3.11.7	Ground Floor Toilet		
3.11.7.1	The contractor is to remove and dispose of the existing 1 No. toilet seat, including all associated fixings etc. Supply and install new duraplast soft-close toilet seat and lid. Include for all associated fixings. Size to correctly match that of the toilet. Colour: To match colour of toilet. Install as per manufacturer's guidelines and recommendations.		
3.11.7.2	The contractor is to supply and install a new chrome drain outlet retainer, plug and chain for the wash hand basin.		
3.11.7.3	The contractor is to carefully remove and dispose of the existing cold and hot taps to the wash hand basin, including all associated surfaces. Allow to supply install chrome taps to the retained wash hand basin, including all associated fixtures, fittings, seals and fixings etc. Install as per manufacturer's guidelines and recommendations. Range and style of taps is to be confirmed by the Environment Agency.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.8	Staircase		
3.11.8.1	The contractor is to undertake timber repairs and re-strengthening works to the ground floor section of banisters / handrail / newell post, to ensure the existing timber structure is secure and stable with surrounding surfaces. Provide additional supports / bracing where required. The contractor is to note that any additional strengthening or bracing is to be concealed		
3.11.8.2	The contractor is to undertake timber repairs and re-strengthening works to the first floor section of banisters / handrail, to ensure the existing timber structure is secure and stable with surrounding surfaces, including where the existing handrail abuts the wall. Provide additional supports / bracing where required. The contractor is to note that any additional strengthening or bracing is to be concealed - allow to remove sections of plaster to the first floor wall (where required) to enable any new bracing to be installed, then allow to install new Thistle plaster and ensure a smooth finish with surrounding surfaces is provided, prior to redecoration.		
3.11.9	Kitchen Units & Surfaces		
3.11.9.1	The contractor is to allow to clean down and remove all grease and staining to all retained kitchen wall tiling, base units, cupboards and worksurfaces etc., using a non abrasive solution.		
3.11.9.2	The contractor is to allow to liaise with the Environment Agency's Term Electrical contractor within regards to any kitchen works.		
3.11.9.3	The contractor is to test and service the retained oven, hob and built in extract units. Allow to schedule and undertake any associated repairs (if required).		
3.11.9.4	The contractor is to carefully remove and dispose of the existing kitchen base unit and associated fixtures and fittings below the sink. Allow to retain the worksurface and sink where possible. Make good affected surfaces and leave ready for new. The contractor is to supply and install double new base unit, side panels, doors, shelving, kickboard and associated fixings to the unit housing the kitchen sink. Colour & style are to match the retained kitchen units.		
3.11.9.5	The contractor is to include for sealing all plinths, joints with the retained wall tiling, floor covering and around the sink with silicone. Colour: To be confirmed.		
3.11.10	Walls		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.10.1	The contractor is to remove and dispose of the existing remaining timber elevation shingles within the kitchen entrance lobby (note - part of this area has already been removed to enable some investigative works to be undertaken). Allow to retain the existing timber batons and the vapour barrier. Make good affected surfaces.		
3.11.10.2	Following the removal of the timber shingles in the kitchen entrance lobby (see item above), the contractor is to supply and install new 16mm MR plywood boarding to this area. Provide suitable screw fixings to ensure a secure finish and suitable detailing / mastic sealant around the retained surfaces. Supply and install new 100mm high timber square edge skirting to the plywood section. Leave ready for decoration.		
3.11.10.3	The contractor is to remove and dispose all of the existing wallpaper finish to the walls and ceiling, including all areas of peeling and defective wallpaper / plaster within the electrical cupboard (adjacent to the ground floor toilet. Allow to fill, repair and make good areas of cracking (where required). Then replaster all wall and ceiling surfaces with British Gypsum 3mm Thistle Multi-Finish top coat. Include to make good around the edges of the reveals, where they abut the other wall surfaces etc. Refix any shelving and supports (where required). Provide suitable detailing around the electrical installations. Leave ready for decoration		
3.11.10.4	The contractor is to carefully remove and dispose of all the existing wall tiling within the bathroom including all adhesive and trim detailing, as well as the tiling around and behind the retained radiator and sanitaryware. Where required allow to temporally cap off any services to enable tiling works to be undertaken. Once completed, reinstate / reconnect services, where required.		
3.11.10.5	Following the removal of the existing bathroom wall tiling (see item above), the contractor is to allow to make good all associated wall surfaces, prepare and leave smooth and ready for new tiling.		
3.11.10.6	The contractor is to supply and install new bathroom wall tiling to match the locations of the existing tiling. Ensure that the shower tray and the bath are tiled down onto and the toilet and wash hand basin are tiled behind. At present tiles are to comprise 600mm x 300mm rectangular semi-gloss white tiles fixed with white tile adhesive and grout (in brickwork course pattern). Include to supply and install new mastic (colour: white) around the sanitaryware and surrounding surfaces (where required). Ensure a watertight finish throughout. Final range and style of wall tiling is to be confirmed by the Environment Agency.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.10.7	The contractor is to carefully remove and dispose of the existing wall tiling forming the splashback in the ground floor toilet. Allow to make good all associated wall surfaces, prepare and leave smooth and ready for new tiling. Supply and install 1 No. new wall tile splashback, to be located behind the retained wash hand basin. Ensure that the tile abuts onto surrounding surfaces. At present tiles are to comprise 600mm x 300mm rectangular semi-gloss white tiles fixed with white tile adhesive and grout (final width of splashback is to match the width of the wash hand basin. Include to supply and install new mastic (colour: white) around surrounding surfaces (where required). Ensure a watertight finish throughout. Final range and style of wall tiling is to be confirmed by the Environment Agency		
3.11.10.8	Within the property, there are various areas of damp, blown and cracked plaster to the ground and first floor walls. Include an allowance for re-plastering a provisional amounted of 15 sqm (over and above the areas stated within the rest of this schedule of works). The contractor is to allow to hack off any damp or blown areas of plaster and allow for the Contract Administrator to inspect the damp areas prior to undertaking any plastering / plaster repairs. Include for making good walls, applying base coat and finishing with British Gypsum 3mm Thistle Multi-Finish top coat plaster. Include for removing areas of lining paper to areas where wallpaper has been applied. Exact locations are to be confirmed by the Ridge & Partners LLP and the Environment Agency.		
3.11.10.9	The contractor is to allow to clean, fill, repair and make good areas of cracking (where required) to the internal surfaces of each external window and door reveal within the property. Then replaster affected surfaces with British Gypsum 3mm Thistle Multi-Finish top coat plaster (where required). Include to make good around the edges of the reveals, where they abut the other wall surfaces, including the external windows and doors. Allow a provisional quantity of 2lm per window and door opening for pricing purposes.		
3.11.11	Kitchen Extension Walls		
3.11.11.1	In order to under the required / specified works to the internal plasterboard walls forming the kitchen extension, the contractor is to remove and dispose of the existing kitchen units within the extension area (worksurface, shelving and tall cupboard unit). Allow to make good any affected surfaces.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.11.2	The contractor is to carefully isolate and remove the existing radiator, to enable the proposed works be undertaken. Include to cap off pipework etc., where required. Allow to adapt and alter the position of the radiator pipework in the floor accordingly (to allow for the newly installed plasterboard wall). Then install the radiator in the new position and ensure the system is left in a suitable working condition, including all suitable fixings / supports etc.		
3.11.11.3	The contractor is to carefully remove and dispose of the existing plasterboard walls forming the existing kitchen extension area (full height). The purpose of this is to increase the thermal insulation to the walls of this part of the kitchen.		
3.11.11.4	Following the removal of the existing plasterboard wall surfaces (see item above), the contractor is to sweep, clean and clear the surfaces forming the wall structure and leave ready for new plasterboard.		
3.11.11.5	The contractor is to supply and install new Tyvek (or similar approved) vapour barrier to the existing timber frame and wall panelling. Allow to install around the timber frame to ensure a continuous membrane is created. Ensure any cut joints of the membrane are suitably overlapped to provide suitable coverage and protection. Allow to install and fix in accordance with manufacturer's recommendations and guidance.		
3.11.11.6	The contractor is to supply and install new 40mm Gyproc Thermaline Basic insulated plasterboard (or similar approved) to the existing timber frame, ensuring the air gap between the external timber panelling and the new insulated plasterboard is maintained. Include for all suitable fixings, tape & jointing and a Thistle plastered finish. Leave ready for decoration. This is to increase the thermal insulation within the kitchen extension area. All works are to be undertaken in accordance manufacturer's recommendations and guidance.		
3.11.11.7	The contractor is to form new plasterboard window reveals and timber window cill, around the new window opening, following the installation of the new insulated backed plasterboard walls. Include for all fixings, Thistle plaster finish and detailing etc.		
3.11.11.8	Following the installation of the new plasterboard wall surfaces, the contractor is to allow to supply and install new timber skirting boards throughout this area. The new skirting is to match the existing kitchen skirting in terms of size, profile, height etc. Leave ready for decoration.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.11.9	As part of the works, the contractor is to ensure the existing electrical installations are suitably altered and adapted, to allow for the new wall surfaces. Allow for the same positions. The contractor is to liaise direct with the Environment Agency's Term Electrical Contractor for these works. Allow to make good any affected surfaces following the re-positioning of the electrical sockets etc.		
3.11.12	Ceilings		
3.11.12.1	The contractor is to allow to liaise with the separate Environment Agency's Term Electrical Contractor, in relation to the existing electrical installations, prior to undertaking any works to the ceilings (removal , repairs, replastering etc.).		
3.11.12.2	In order to install the new quilt insulation in the ceiling void above the kitchen extension (see items of works within the Kitchen Extension Roof Void section), the contractor is to remove and dispose a section of the existing kitchen plasterboard ceiling, to enable these works to be undertaken.		
3.11.12.3	Once the insulation has been installed in the kitchen extension roof void (see item above and in the Kitchen Extension Roof Void section), the contractor is to supply and install new British Gypsum Gyproc plasterboard (or similar approved) to the affected area. New plasterboard to be correctly fitted to the existing / retained timber frame. Allow to securely fix, seal, tape and joint. Leave ready for plaster top coat. Install new insulated plasterboard in accordance with manufacturer's instructions and recommendations.		
3.11.12.4	Following the repair / replacement of the ceiling section in the kitchen extension, the contractor is to remove / scrape back and dispose of all the existing textured plastered ceiling finish within the kitchen. Allow to fill, repair and make good any defective areas of plasterboard ceiling (where required). Then allow to replaster all of the ceiling with British Gypsum 3mm Thistle Multi-Finish top coat. Include to make good around the edges of the ceiling and where the ceiling abuts with surrounding surfaces etc. Ensure all works to be in accordance with manufacturer's instructions and recommendations.		
3.11.12.5	The contractor is to remove / scrape back and dispose of the existing textured ceiling finish within the bathroom and the ceiling in the bathroom cupboard. Allow to fill, repair and make good any defective areas of plasterboard ceiling (where required). Then replaster all of the ceiling with British Gypsum 3mm Thistle Multi-Finish top coat. Include to make good around the edges of the ceiling and where it abuts any other surfaces etc.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.12.6	The contractor is to remove / scrape back and dispose of the existing textured ceiling finish within the entrance lobby area. Allow to fill, repair and make good any defective areas of plasterboard ceiling (where required). Then replaster all of the ceiling with British Gypsum 3mm Thistle Multi-Finish top coat. Include to make good around the edges of the ceiling and where it abuts any other surfaces etc.		
3.11.12.7	The contractor is to carefully remove and dispose of the existing plasterboard forming the skeeling section of the ceiling in Bedroom 2 (section of sloping ceiling adjacent to the left hand elevation). Include to remove all associated fixings etc. Allow to make good all surrounding surfaces where disturbed. Allow to inspect retained timber frame above. Leave ready to receive new insulated boarded ceiling (see item below)		
3.11.12.8	Following the removal of the existing plasterboard forming the skeeling section of the ceiling in Bedroom 2 (see item above), the contractor is to supply and install new British Gypsum Gyproc ThermaLine Basic (30mm) insulated backed plasterboard (or similar approved) to the affected area. New plasterboard to be correctly fitted to the existing / retained timber frame. Allow to securely fix, seal, tape and joint. Leave ready for plaster top coat finish. Install new insulated plasterboard in accordance with manufacturer's instructions and recommendations. This is to provide an increase in thermal insulation to the skeeling section of the ceiling in this bedroom		
3.11.12.9	Following the replacement of the skeeling section of the ceiling within Bedroom 2 (see item above), the contractor is to remove / scrape back and dispose of all the existing plastered ceiling finish within this room. Allow to fill, repair and make good any defective areas of plasterboard ceiling and infill cracking (where required). Then allow to replaster all of the ceiling and the newly formed skeeling, with British Gypsum 3mm Thistle Multi-Finish top coat. Include to make good around the edges of the ceiling and where the main ceiling abuts the skeeling, as well as any other surfaces etc. Ensure all works to be in accordance with manufacturer's instructions and recommendations.		
3.11.12.10	The contractor is to carefully remove and dispose of the existing plasterboard forming the skeeling section of the ceiling in Bedroom 3 (section of sloping ceiling adjacent to the right hand elevation). Include to remove all associated fixings etc. Allow to make good all surrounding surfaces where disturbed. Allow to inspect retained timber frame above. Leave ready to receive new boarded ceiling (see item below).		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.12.11	Following the removal of the existing plasterboard forming the skeling section of the ceiling in Bedroom 3 (see item above), the contractor is to supply and install new British Gypsum Gyproc ThermaLine Basic (30mm) insulated backed plasterboard (or similar approved) to the affected area. New plasterboard to be correctly fitted to the existing / retained timber frame. Allow to securely fix, seal, tape and joint. Leave ready for plaster top coat finish. Install new insulated plasterboard in accordance with manufacturer's instructions and recommendations. This is to provide an increase in thermal insulation to the skeling section of the ceiling in this bedroom		
3.11.12.12	Following the replacement of the skeling section of the ceiling within Bedroom 3, the contractor is to remove / scrape back and dispose of all the existing plastered ceiling finish within this room. Allow to fill, repair and make good any defective areas of plasterboard ceiling and infill cracking (where required). Then allow to replaster all of the ceiling and the newly formed skeling, with British Gypsum 3mm Thistle Multi-Finish top coat. Include to make good around the edges of the ceiling and where the main ceiling abuts the skeling, as well as any other surfaces etc. Ensure all works to be in accordance with manufacturer's instructions and recommendations.		
3.11.12.13	Within the property, there are various areas of damp, blown and cracked plaster to the ground and first floor ceilings. Include an allowance for re-plastering a provisional amounted of 5 sqm (over and above the areas stated within the rest of this schedule of works). The contractor is to allow to hack off any damp or blown areas of plaster and allow for the Contract Administrator to inspect the damp areas prior to undertaking any plastering / plaster repairs. Include for making good ceilings, applying base coat and finishing with British Gypsum 3mm Thistle Multi-Finish top coat plaster. Include for removing areas of lining paper to areas where wallpaper has been applied. Exact locations are to be confirmed by the Ridge & Partners LLP and the Environment Agency.		
3.11.13	Mechanical Ventilation Extracts		
3.11.13.1	The contractor is to note that the all the mechanical ventilation extracts within the property are to be replaced as part of the Environment Agency's Term Electrical Contractor's proposed works. The contractor is to allow to liaise with the separate Electrical Contractor, in relation to the replacement of the existing mechanical ventilation extracts within the property (kitchen and bathroom). Allow to make good affected surfaces around the proposed locations of the extracts, prior to and after their installation.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.14	Chimney Flues		
3.11.14.1	The contractor is to supply and install a new chimney draught excluder from Chimneysheep.co.uk (or similar approved). Ensure the new draught excluder is correctly sized and installed within the chimney opening of Bedroom 1.		
3.11.14.2	The contractor is to sweep, clean and clear the remaining debris from the wood burner, including the flue (full height), located in the living room.		
3.11.14.3	The contractor is to service the existing wood burner in the living room, to ensure it is in a good and serviceable condition.		
3.11.15	Decoration		
3.11.15.1	The contractor is to note that the redecoration is only to be undertaken to the ground and first floor areas. No redecoration is required to the garage or basement.		
3.11.15.2	Prior to decorating, the contractor is to allow to protect surfaces, floor finishes and all fixtures and fittings, allow to take down light fittings, switches & the like prior to decorating.		
3.11.15.3	The contractor is to inspect all of the areas of lining paper to the walls and ceiling (where provided). Ensure all the paper is suitably secured to surrounding surfaces. Include for any repairs where required. Leave ready for decoration.		
3.11.15.4	The contractor is to allow to suitably prepare all previously decorated wall and ceiling surfaces with sugar soap solution, rinsed with clean water and allow to dry. Fully rub down all surfaces to remove any loose coverings and repair. Include for fill all areas of cracking etc. Allow to prepare and leave ready for redecoration.		
3.11.15.5	The contractor is to allow to prepare and decorate all internal walls, and boxing (excluding kitchen and bathroom). Allow to prepare walls in line with the paint manufacturers guidelines and apply Dulux Trade Vinyl Matt including all necessary base coats. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.15.6	The contractor is to allow to prepare and decorate all of the wall panelling and associated surfaces. Allow to prepare surfaces in line with the paint manufacturers guidelines and apply Dulux Trade Vinyl Matt including all necessary base coats. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.7	The contractor is to allow to prepare and decorate all internal ceilings (excluding kitchen and bathroom). Allow to prepare the ceilings in line with the paint manufacturers guidelines and apply Dulux Trade Vinyl Matt including all necessary base coats. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.8	In the bathroom, the contractor is to allow to prepare and decorate the bathroom walls, boxing and ceiling. Allow to prepare walls in line with the paint manufacturers guidelines and apply Dulux Trade Mouldshield Fungicidal Eggshell, Bathroom paint including all necessary base coats. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.9	In the kitchen, the contractor is to allow to prepare and decorate the kitchen walls, boxing and ceiling. Allow to prepare walls in line with the paint manufacturers guidelines and apply Dulux Trade Mouldshield Fungicidal Eggshell Kitchen paint, including all necessary base coats. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.10	The contractor is to allow to prepare and decorate new and existing joinery (skirtings, joinery, window cills / boards etc.) with two coats of Dulux Satin paint (or similar approved). Include for all preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.11	The contractor is to allow to prepare and decorate all newly installed and retained timber doors, frames and linings with two coats of Dulux paint (or similar approved). Include for all preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.12	The contractor is to allow to decorate all previously decorated and retained pipework etc., where visible to the ground and first floors. Include for all preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.15.13	The contractor is to allow to prepare and decorate the exposed area of plaster insert around the living room fireplace. Allow to prepare and repair surfaces (fill any cracks etc.) in line with the paint manufacturers guidelines and apply Dulux Trade Emulsion Matt including all necessary base coats. Include for all undercoat and preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.14	The contractor is to allow to prepare and redecorate the previously decorated radiators and associated pipework with two coats of Dulux radiator paint (or similar approved). Include for all preparation works as required and recommended by the manufacturer. Colour to be confirmed by the Environment Agency.		
3.11.15.15	Where any affected surfaces have been altered or stripped out in accordance with the electrical works (liaise with the Environment Agency's Term Contractor), allow to make good all surfaces and to leave the area in a fully completed condition, including any decoration to match.		
3.11.16	Hot & Cold Water Tank & Pump System		
3.11.16.1	The contractor is to undertake a detailed inspection of the existing cold and hot water system in the property and the associated hot water cylinder and pump in the bathroom cupboard. This is to establish the suitability and condition of the existing system, prior to undertaking any remedial works. This includes the size of the existing incoming water supply / main.		
3.11.16.2	The contractor is to report all findings to Ridge and Partners and to the Environment Agency, to enable a decision to be made as to what remedial works are to be undertaken.		
3.11.16.3	The contractor is to allow to undertake a full test and service of the existing Worcester boiler, located in the garage. Allow to price for any repairs or remedial works, if they become apparent following the servicing.		
3.11.16.4	The contractor is to allow to undertake a dynamic water pressure and flow rate test of the existing installations. Allow to confirm the existing water pressure (bar) and the flow rate (litre / second) at the nearest outlet source.		
3.11.16.5	The contractor is to check and clean through the existing pipework to check for any limescale build up etc. Allow to flush through the system.		

SCHEDULE OF WORKS

Ref.	Description	£	p
3.11.16.6	The contractor is to note that to undertake the specified works they are to liaise with the Term electrical company and the Environment Agency accordingly, where required.		
3.11.16.7	Please note the items in the Cost Options below are not an exhaustive list and the contractor is responsible for installing the new system, in line with current regulations, manufacturer's guideline and recommendations and best practice. If required, the contractor is to liaise with Ridge & Partners' Mechanical Engineers.		
3.11.16.8	<u>Option 1 (cost is not to be carried forward)</u>		
a	If the flow rate and the water pressure (ideally 2 bar or more) are deemed to be sufficient , and the water can come direct from the mains (suitably sized), then the contractor is to allow to undertake the following:	Noted	Noted
b	Drain and empty the existing cold water tank, located in the roof void. Allow to remove the cold water tank and all associated pipework. Make good all affected surfaces.	Noted	Noted
c	Drain and empty the existing insulated vented hot water cylinder, located in the bathroom cupboard. Allow to remove the cylinder and all associated pipework. Make good all affected surfaces.	Noted	Noted
d	Supply and install a new 210 litre Megaflo hot water cylinder (or similar approved) and locate in the bathroom cupboard. Allow to include all associated fixtures, fittings, pipework and installations etc. Allow to modify and amend the existing timber shelving in the cupboard. All works to be undertaken in accordance with all regulations, manufacturer's guidelines and recommendations and Best Practice etc.	Noted	Noted
e	Supply and install new insulation to all associated pipework serving the system.	Noted	Noted
f	Supply and install new zinc or magnetic water conditioner treatment unit to the newly installed system on the incoming main. All works to be undertaken in accordance with all regulations, manufacturer's guidelines and recommendations etc.	Noted	Noted
g	Remove the existing booster pump, located in the bathroom cupboard, and all associated pipework & wiring etc. Make good affected surfaces and connect through the pipework to serve the shower.	Noted	Noted
h	Upon completion of the installations, allow to test and certify and leave in a suitable working condition.	Noted	Noted

SCHEDULE OF WORKS

Ref.	Description	£	p
i	Cost for Option 1	Noted	Noted
3.11.16.9	<u>Option 2 (cost is not to be carried forward)</u>		
a	If the flow rate and the water pressure (ideally 2 bar or more) are deemed to be insufficient , then the contractor is to allow to undertake the following:	Noted	Noted
b	Drain and empty the cold water tank, located in the roof void. Allow to remove the tank and associated pipework. Following this, allow to supply and install new plastic cold water tank (suitably sized), including all associated pipework, ball valve, lid, insulation etc. Make good all affected surfaces.	Noted	Noted
c	Drain and empty the existing insulated vented hot water cylinder, located in the bathroom cupboard. Allow to remove the cylinder and all associated pipework. Make good all affected surfaces.	Noted	Noted
d	Supply and install a new 210 litre vented hot water cylinder (or similar approved) and locate in the bathroom cupboard. Allow to include all associated fixtures, fittings, pipework and installations etc. Allow to modify and amend the existing timber shelving in the cupboard. All works to be undertaken in accordance with all regulations, manufacturer's guidelines and recommendations and Best Practice etc.	Noted	Noted
e	Allow to inspect, check all remaining areas of pipework that are serving the new installations. Include to replace any defective sections or joints. Ensure no water leaks are present.	Noted	Noted
f	Supply and install new insulation to all associated pipework serving the system.	Noted	Noted
g	Supply and install new zinc or magnetic water conditioner treatment unit to the newly installed system and the incoming main. All works to be undertaken in accordance with all regulations, manufacturer's guidelines and recommendations etc.	Noted	Noted
h	Remove the existing booster pump, located in the bathroom cupboard, and all associated pipework & wiring etc. Make good affected surfaces.	Noted	Noted
i	Supply and install new booster pump to serve the shower and located in the bathroom cupboard (to the rear). Include for all associated pipework & wiring as well as anti-vibration mounts etc. Make good affected surfaces. All works to be undertaken in accordance with all regulations, manufacturer's guidelines and recommendations and Best Practice etc.	Noted	Noted

SCHEDULE OF WORKS

Ref.	Description	£	p
j	Upon completion of the installations, allow to test and certify and leave in a suitable working condition.	Noted	Noted
k	Cost for Option 2	Noted	Noted
3.12	CLEANING & COMPLETION		
3.12.1	The contractor is to leave the property clear, debris free and tidy on completion of the works, to the satisfaction of Ridge & Partners LLP, including the removal of all debris, materials plant and equipment etc., ready for inspection and handover.		
3.12.2	The contractor is to clean all the window and door glazing and frames internally and externally throughout.		
3.12.3	Allow for providing all necessary installation certification and warranties for all materials and installations included within the works. All certification and testing must be undertaken by a nationally qualified specialist.		
3.12.4	The contractor is to provide and ensure Health and Safety File and Building Manual for the works has been issued for comment 1 week prior to completion. The Health and Safety File is to include all O&M information for the works. Where required, allow to liaise with the Environment Agency's chosen electrical Term Contractor, to ensure all the correct information is provided		
3.12.5	Upon completion ensure that 2 No. A4 sized paper copies of the Health and Safety file and as built drawings are provided to Ridge & Partners LLP for issue to the Environment Agency one week after Practical Completion. A full and completed electrical copy is also to be provided.		
3.12.6	The contractor is to ensure that upon completion of the works, all the insurance backed guarantees covering the external works, including the installation and workmanship etc., are to be handed to Ridge & Partners LLP and included within the O&M Manuals for the works.		
SECTION 3 - COSTED TOTAL (Excl VAT) £			

4. CONTINGENCY SUM

SPECIFICATION DOCUMENT

2 Sunbury Lock House



CONTINGENCY SUM

Ref.	Description	£	p
4.0	CONTINGENCY SUM		
4.1	The contractor is to allow a Contingency Sum of 10% of the total value of the Preliminary Breakdown & Schedule of Measured Works (Sections 2.0 & 3.0) only , as described within this specification document. This is for works of an unforeseen nature. All such works to be executed under written instructions from the Ridge & Partners LLP or the Environment Agency.		
SECTION 4 - COSTED TOTAL (Excel VAT) £			

SPECIFICATION DOCUMENT

2 Sunbury Lock House



COLLECTION PAGE

Ref.	Description	£	p
5.0	COLLECTION PAGE		
5.1	PREMIMINARIES		
5.2	MATERIALS & WORKMANSHIP		
5.3	SCHEDULE OF WORKS		
5.4	CONTINGENCY SUM (10%)		
	SUB TOTAL		
5.5	MAIN CONTRACTOR OVERHEADS & PROFIT		
	Add a percentage to cover all Main Contractor overheads and profits based on the value of this tender Submission. The percentage is to allow for all adjustments to the net value of work (including Main Contractor Discount). No other adjustments shall apply.		
	Insert Percentage.....		
	TOTAL		
	Contractor :		
	Address :		
		
		
		
		
	Date :		
TOTAL PRICED SUBMISSION (Excl VAT) £			

6. FORM OF TENDER

2 Sunbury Lock House

FORM OF TENDER

Tender For: External & Internal Building Repair Works at 2 Sunbury Lock House

TENDER RETURNS ARE TO BE ISSUED TO:

To: Kathryn Forster
Environment Agency
Kings Meadow House
King's Meadow Road
Reading
Berkshire
RG1 8DQ

From:
.....
.....
.....
.....

We have examined the following documents:

- Specification & Pricing Document
- All appendices included within the Specification & Pricing Document
- All drawings listed in the Specification & Pricing Document

We offer to carry out the whole of the Works described in accordance with the documents referred to above;

for the sum of £ (in words)
£ (in figures) exclusive of any VAT chargeable

within weeks from acceptance of our tender, comprising a period of:

..... weeks from acceptance to the Date of Possession and
..... weeks from the Date of Possession to the Date for Completion.

For the purposes of the warranties and guarantee requirements mentioned in the Specification & Pricing Document, We have reviewed the contents of the Specification & Pricing Document and accept, without amendment the wording set out in the appendices

We enclose our fully priced document in the separate envelope provided and marked with our name.

We agree that if any obvious errors in pricing or errors in arithmetic are discovered in the priced document before acceptance of this offer, they shall be dealt with in accordance with the Alternative 2 procedure set out in the

2 Sunbury Lock House

FORM OF TENDER

Tender For: External & Internal Building Repair Works at 2 Sunbury Lock House

latest JCT Practice Note.

We undertake in the event of your acceptance to execute with you a formal contract embodying all the conditions and terms contained in this offer within 21 days of being required to do so by the Employer.

This tender remains open for acceptance for 90 days from the latest date fixed for the submission of tenders.

We confirm that this tender is submitted at our expense and agree that the Employer need not necessarily accept the lowest or any other tender.

I/We confirm the following Principle Domestic Sub Contractors will be employed on this project. I/We confirm their sub contract tenders have been used within our tender and, where necessary, all these domestic sub contractors have accepted the wording of

Our list of proposed sub-contractors are;

.....

.....

.....

.....

.....

.....

.....

.....

Certificate of Bona Fide Tender

The essence of selective tendering is that the client shall receive bona fide competitive tenders from all those tendering. In recognition of the principle, I certify that this is a bona fide tender, intended to be competitive, and that we have not fixed or adjusted the amount of the tender by or under or in accordance with any agreement or arrangement with any other person. I also certify that we have not done and we undertake that will not do at any time before the hour and date specified for return of this tender any of the following acts:-

2 Sunbury Lock House

FORM OF TENDER

Tender For: External & Internal Building Repair Works at 2 Sunbury Lock House

- a. Communication to a person other than the person calling for those tenders the amount or approximate amount of the proposed tender, except where the disclosure, in confidence, of the approximate amount of the tender was necessary to obtain insurance premium quotations required for the preparation of the tender.
- b. entering into any agreement or arrangement with any other person that he shall refrain from tendering or as to the amount of any tender to be submitted.
- c. offering or paying or giving or agreeing to pay or give any sum of money or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender for the said work any act or thing or sort described above.

In this certificate the word "person" includes any person any body or association, corporate or unincorporate and "any agreement or arrangement" includes any such transaction, formal or informal, and whether legally binding or not.

Signed by or on behalf of :

Signature :
duly authorised to sign

Position :

Date :

Note: The completed Form of Tender together with the information requested must be received at the above address no later than the agreed time and date set out in the tender invitation.

APPENDIX A

Location Plan of 2 Sunbury Lock House

APPENDIX A - LOCATION MAP (2 SUNBURY LOCK HOUSE)

RIDGE

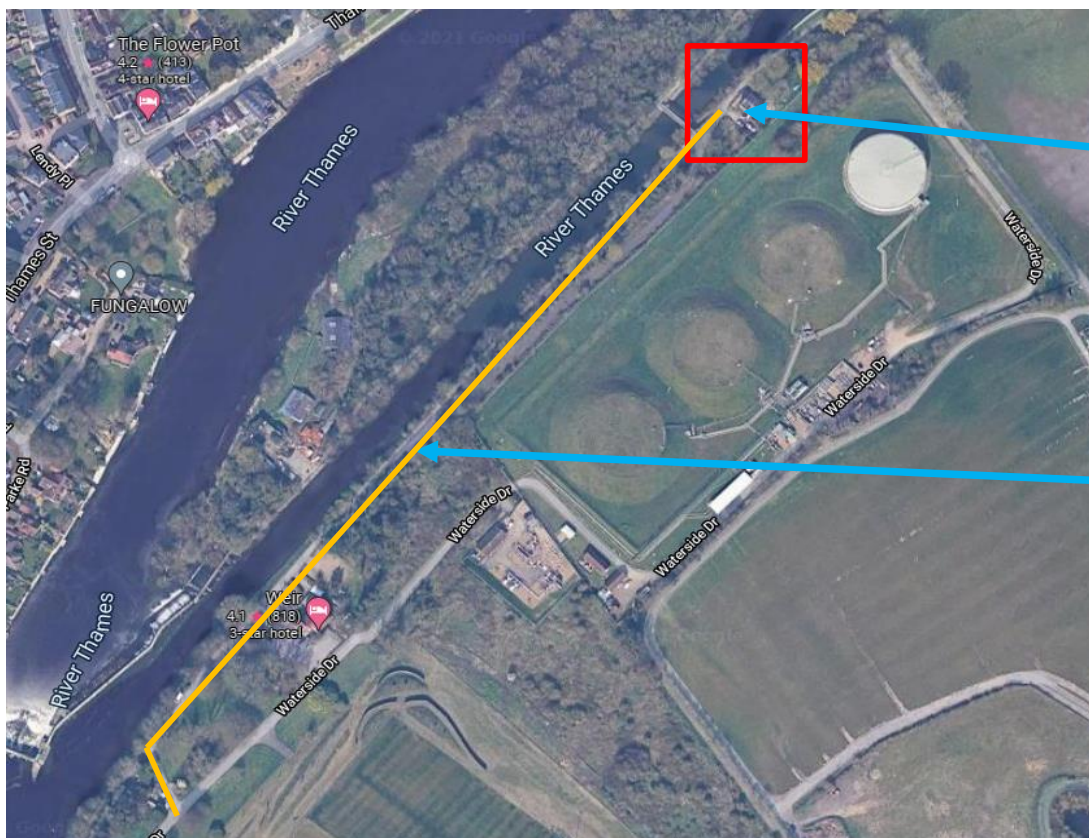
Appendix A

Location Map of Marsh Lock House, the Weir and the Access Bridge from Mill Lane



1 Sunbury
Lock
House

2 Sunbury
Lock
House



2 Sunbury
Lock
House

Access Path To
2 Sunbury Lock
House

APPENDIX B

Existing Selection of Initial Site Inspection Photographs (23.03.21)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Bathroom (1)



Bathroom (2)



Bathroom (3)



Bedroom 1 (1)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Bedroom 1 (2)



Bedroom 1 (3)



Bedroom 2 (1)



Bedroom 2 (2)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Bedroom 2 (3)



Bedroom 2 (4)



Bedroom 2 (5)



Bedroom 3 (1)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Bedroom 3 (2)



Bedroom 3 (3)



Bedroom 3 (4)



Bedroom 3 (5)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Dining Room (1)



Dining Room (2)



Dining Room (3)



Dining Room (4)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Entrance Lobby (1)



Entrance Lobby (2)



Entrance Lobby (3)



Entrance Lobby (4)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Entrance Lobby (5)



Entrance Lobby (6)



Entrance Lobby (7)



Entrance Lobby (8)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

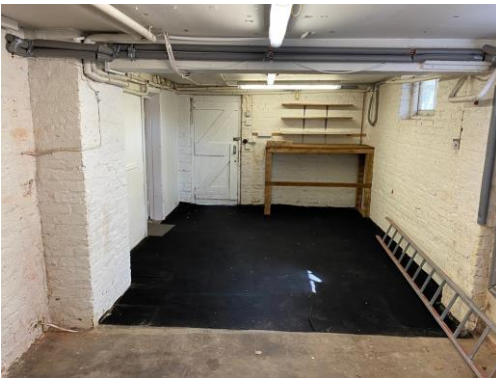
RIDGE



Entrance Lobby (9)



Front Elevation



Garage (1)



Garage (2)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Kitchen (1)



Kitchen (2)



Kitchen (3)



Kitchen (4)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Left Hand Side Elevation (1)



Left Hand Side Elevation (2)



Left Hand Side Elevation (3)



Living Room (1)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Living Room (2)



Living Room (3)



Rear Elevation (1)



Rear Elevation (2)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Rear Elevation (3)



Rear Elevation (4)



Rear Extension Roof (1)



Rear Extension Roof (2)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Rear Extension Roof (3)



Right Hand Side Elevation (1)



Right Hand Side Elevation (2)



Right Hand Side Elevation (3)

Existing Supporting Photographs

2 Sunbury Lock House (23.03.21)

RIDGE



Right Hand Side Elevation (4)



Staircase (1)



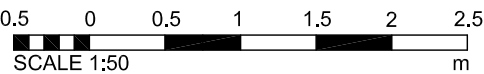
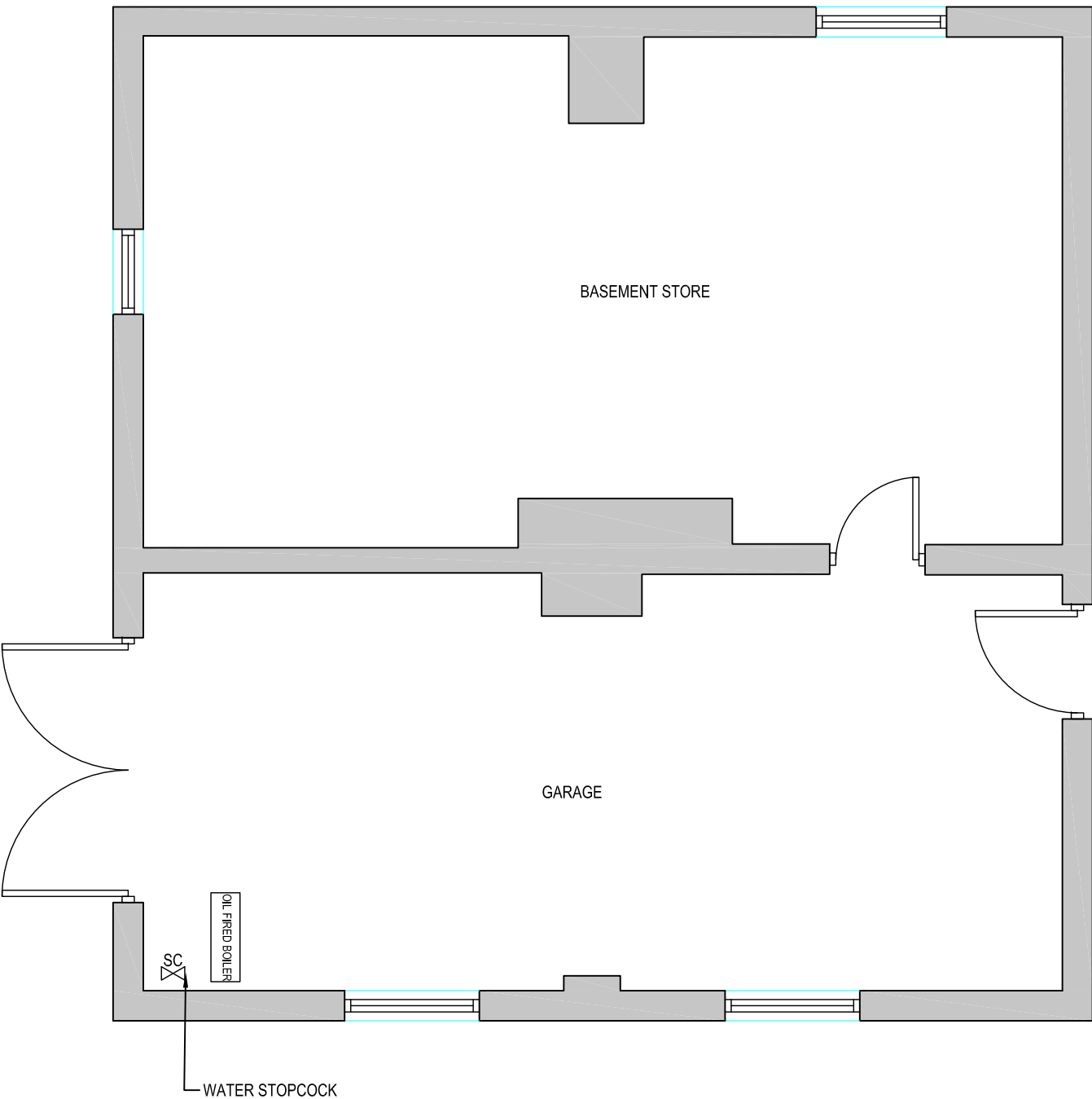
Staircase (2)



Staircase (3)

APPENDIX C

Existing Layout & Site Reference Drawings



DISCLAIMER NOTES:

- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL
- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
- THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATOR'S INFORMATIONS BEING ALTERED BY OTHERS
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORKS
- THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT
- THE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY" INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS, WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ORIGINATOR. THOSE RELYING ON THE "RECORD" OR "AS BUILT" DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

CDM REGULATIONS 2015
SIGNIFICANT OR NON-OBVIOUS RISKS AND RISKS WHICH ARE DIFFICULT TO MANAGE ARE IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CDM HAZARD REGISTER.



-	-	--/--/----	--	--
REV	DESCRIPTION	DATE	BY	CHKD

ORIGINATOR:

RIDGE

PROPERTY & CONSTRUCTION CONSULTANTS

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088
FAX: 01993 815001
WWW.RIDGE.CO.UK

CLIENT:

Environment Agency

CONTRACTOR CLIENT:

PROJECT:

2 Sunbury Lock House
Condition and Measured Survey

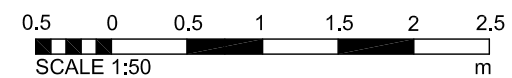
TITLE:

2 Sunbury Lock House
Basement Floor Plan

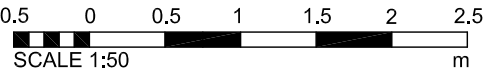
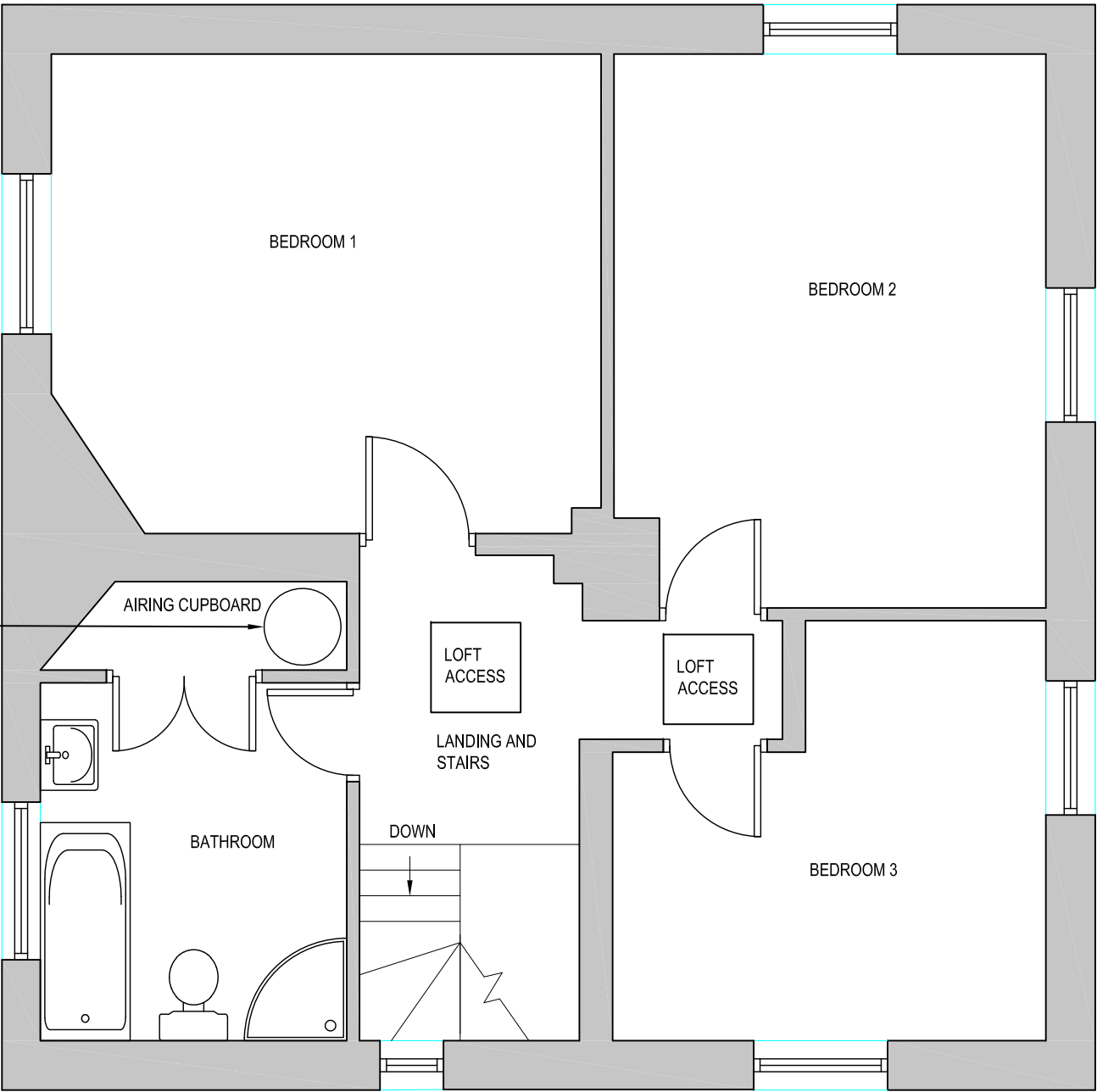
DRAWN BY:	JC	SCALE:	1:50	@	A3
CHECKED BY:	ES	DATE:	19/04/2021		

STATUS: INFORMATION

DRAWING No: -							
JOB No:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
014851	RDG	XX	B1	PL	B	0002	-



JOB No:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5014851	RDG	XX	B1	PL	B	0003	-



DISCLAIMER NOTES:

- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL.
- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
- THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATOR'S INFORMATIONS BEING ALTERED BY OTHERS
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORKS
- THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT
- THE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY" INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS, WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ORIGINATOR. THOSE RELYING ON THE "RECORD" OR "AS BUILT" DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

CDM REGULATIONS 2015
SIGNIFICANT OR NON-OBVIOUS RISKS AND RISKS WHICH ARE DIFFICULT TO MANAGE ARE IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CDM HAZARD REGISTER.



-	-	--/--/----	--	--	--
REV	DESCRIPTION	DATE	BY	CHKD	

ORIGINATOR:

RIDGE

PROPERTY & CONSTRUCTION CONSULTANTS

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088
FAX: 01993 815001
WWW.RIDGE.CO.UK

CLIENT:

Environment Agency

CONTRACTOR CLIENT:

PROJECT:

2 Sunbury Lock House
Condition and Measured Survey

TITLE:

2 Sunbury Lock House
First Floor Plan

DRAWN BY:	JC	SCALE:	1:50	@	A3
CHECKED BY:	ES	DATE:	19/04/2021		

STATUS:

INFORMATION

DRAWING No: -

JOB No:	ORIG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
\$014851	RDG	XX	B1	PL	B	0004	-

KEY



LOCK HOUSE



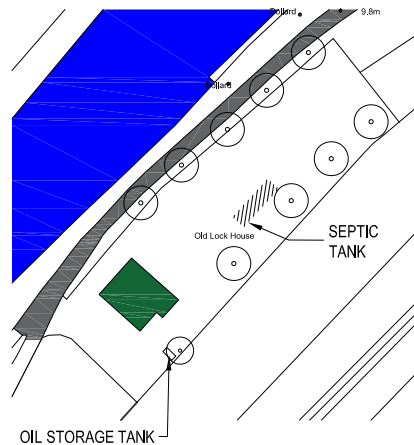
ACCESS ROUTE TO LOCK HOUSE



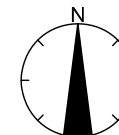
RIVER THAMES



TREES



(c) Crown Copyright and Database Rights 2020 OS 100060020



10 0 10 20 30 40 50
SCALE 1:1250 m

DISCLAIMER NOTES:

- THIS DOCUMENT IS COPYRIGHT OF THE ORIGINATOR AND MUST BE TREATED AS CONFIDENTIAL
- THIS DOCUMENT MUST NOT BE ALTERED, REPRODUCED OR DISTRIBUTED WITHOUT PRIOR WRITTEN CONSENT OF THE ORIGINATOR
- THIS DOCUMENT MUST NOT BE ALTERED - THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR ANY DISCREPANCIES ARISING AS A RESULT OF THE ORIGINATOR'S INFORMATIONS BEING ALTERED BY OTHERS
- ANY DISCREPANCY MUST BE REPORTED TO THE ORIGINATOR
- DO NOT SCALE THIS DOCUMENT - USE FIGURED DIMENSIONS ONLY
- ALL DIMENSIONS MUST BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY RELATED WORKS
- THIS DOCUMENT MUST BE READ IN CONJUNCTION WITH ALL SUPPORTING DOCUMENTS PRODUCED BY THE ORIGINATOR AND OTHER PROJECT DISCIPLINES
- THE ORIGINATOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES - THIS MUST BE TREATED AS INDICATIVE ONLY
- USERS OF THIS DOCUMENT ARE RESPONSIBLE FOR CHECKING WHICH REVISION IS CURRENT
- THE DOCUMENT STATUS "INFORMATION" OR "PRELIMINARY" INDICATES THAT THIS DRAWING IS FOR REFERENCE PURPOSES ONLY - THE ORIGINATOR WILL ACCEPT NO RESPONSIBILITY FOR THE COMPLETENESS OF INFORMATION UNDER THIS STATUS
- THE DOCUMENT STATUS "RECORD" OR "AS BUILT" HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS, WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, THE ORIGINATOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THIS "RECORD" OR "AS BUILT" DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT OF INCORRECT INFORMATION PROVIDED TO THE ORIGINATOR; THOSE RELYING ON THE "RECORD" OR "AS BUILT" DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY

DRAWING NOTES:

CDM REGULATIONS 2015
SIGNIFICANT OR NON-OBVIOUS RISKS AND RISKS WHICH ARE DIFFICULT TO MANAGE ARE IDENTIFIED ON THIS DRAWING USING THE FOLLOWING SYMBOL IDENTIFIED TO THE RIGHT WITH BRIEF ACCOMPANYING TEXT. FOR FURTHER DETAILS OF THE RISKS IDENTIFIED BY DESIGNERS, REFERENCE SHOULD BE MADE TO CDM HAZARD REGISTER.



-	-	--/--	--	--
REV	DESCRIPTION	DATE	BY	CHKD

ORIGINATOR:

RIDGE
PROPERTY & CONSTRUCTION CONSULTANTS

BEAUMONT HOUSE
59 HIGH STREET
THEALE
READING, RG7 5AL

TEL: 0118 932 3088
FAX: 01993 815001
WWW.RIDGE.CO.UK

CLIENT:

Environment Agency

IN ASSOCIATION WITH:

PROJECT:

Condition and Measured Survey

TITLE:

2 Sunbury Lock - Site Plan

DRAWN BY:	JC	SCALE:	1:1250	@	A4
CHECKED BY:	ES	DATE:	19/04/2021		

STATUS:

INFORMATION

DRAWING No: -

JOB No:	ORG:	ZONE:	LEVEL:	TYPE:	ROLE:	NUMBER:	REV:
5014851	RDG	XX	ST	PL	B	0001	-

APPENDIX D

R&D Asbestos Survey Report (26.03.21)



Pre-Refurbishment & Demolition Asbestos Survey for Environment Agency

SITE:

2 Sunbury Lock House
Towpath
Waterside Drive
Walton on Thames
KT12 2JD



Survey Report by:

Dudley Firkins

Amiantus Environmental Consultants Ltd.

Unit 3 - Sycamore Court

North Leigh Business Park

North Leigh

Oxfordshire, OX29 6SW

email: admin@amiantus.co.uk

TEL: 01993 868899

Contents:



Contents

1. Executive Summary [Conclusions and actions]
2. Contract Review
3. Introduction - Purpose, Aims and Objectives
4. Desk Top Review and Survey Planning
5. Survey Method
6. Exclusions and Caveats
7. Sampling and Analysis
8. Survey Results - Interpretation
9. Recommendations

APPENDICES - Survey Results

Appendix 1 - Asbestos Register - Results

Appendix 2 - Survey Data Sheet

Appendix 3 - Non Asbestos Materials Register

Appendix 4 - Analysis Certificates

Appendix 5 - Plans

1.0 Executive Summary:



Asbestos containing materials identified during the Pre-Refurbishment & Demolition Asbestos Survey and the specific areas are categorised below in order according to the initial Material Risk Assessment made by Amiantus.

HIGH RISK MATERIALS - SCORES 10+

Asbestos in poor condition, or asbestos debris/contamination has been identified within the following areas listed in the table below. It is recommended that risk assessment (s) are undertaken to ensure that Regulation 4, Regulation 10, Regulation 11, and Regulation 16 of the Control of Asbestos Regulations 2012 are complied with.

Building	Floor	Room	Item	Material	Risk assessment Score	Recommendations
----------	-------	------	------	----------	-----------------------	-----------------

There were no results found.

MEDIUM RISK MATERIALS - SCORES 7-9

Asbestos containing materials, which are unsealed or damaged, have been identified within the following areas listed in the table below. It is recommended that remedial work to seal or remove these materials is undertaken as a priority and that air monitoring is carried out within adjacent areas in order to assess airborne fibre levels.

Building	Floor	Room	Item	Material	Risk assessment Score	Recommendations
2 Sunbury Lock House	External	External Elevations E01	Board	Insulation board	MEDIUM (7)	D - Manage and re-inspect

1.0 Executive Summary:



LOW RISK MATERIALS - SCORES 1-6

Asbestos Containing Materials have been identified which are in good condition, A management policy and plan need to be implemented to manage these materials safely. The materials require labelling and the condition of these materials re-inspected at 6 monthly intervals.

Building	Floor	Room	Item	Material	Risk assessment Score	Recommendations
2 Sunbury Lock House	Ground	Kitchen G01	Floor Tile and Bitumen Adhesive	Thermoplastic	VERY LOW (3)	D - Manage and re-inspect

1.0 Executive Summary:



PRESUMED ASBESTOS/NO ACCESS AREA

Asbestos Containing Materials have been presumed as being present to the following areas where access could not be gained. A management policy and plan needs to identify that these areas require inspection once access can be provided. These areas require re-inspection for accessibility at 6 monthly intervals.

Building	Floor	Room/Area	Recommendation
2 Sunbury Lock House	External	External Elevations E01	E - Inspection required
2 Sunbury Lock House	External	External Elevations E01	E - Inspection required

Building Notes:

Internal notes: All internal areas including accessible voids were inspected.

External notes: All external areas have been inspected.

2.0 Contract Review:



Name & Address of Client:	Environment Agency - Kings Meadow House, Kings Meadow Road, Reading		
Client Contact:	Kathryn Forster		
Name & Address of Site:	2 Sunbury Lock House, Towpath, Waterside Drive, Walton on Thames		
Type of Survey:	Refurbishment & Demolition survey (MA only)		
Date of Survey:	23 Mar 2021		
Report Revision Number:	1		
TEAMS internal job number:	J004313		
Lead Surveyor[s]:	Dudley Firkins	Signature:	
Technically reviewed by:	Roy Pearce	Signature:	
Report issue date:	26 Mar 2021		

3.0 Introduction/Objectives:



Amiantus received an order of confirmation to undertake a Pre-Refurbishment & Demolition Asbestos Survey from Environment Agency. This order has been accepted on the basis of the original quotation and our terms and conditions of business.

The order relates to a Pre-Refurbishment & Demolition Asbestos Survey of:

2 Sunbury Lock House
Towpath
Waterside Drive
Walton on Thames
KT12 2JD

The survey was carried out by Dudley Firkins.

The Type of survey selected / requested by the client was a Pre-Refurbishment & Demolition Asbestos Survey.

The reason for selecting this survey is to enable the client to identify asbestos in his premises so that it can be removed prior to major refurbishment

This survey was carried out in accordance with documented in house procedures, which are based on the HSE Guidance document HSG 264.

3.1 Purpose of Survey

The purpose of this Major Refurbishment & Demolition Survey is to help the duty holder identify asbestos in these premises, prior to major refurbishment & demolition. It provides sufficient information to help the tendering process for removal works prior to any work starting. However it is strongly recommended that any asbestos removal should be undertaken against a detailed specification. We further recommend the appointed removal contractor should attend the site to confirm for themselves the quantities and location of asbestos to be removed, prior to costing.

3.2 Aim of Survey

The aim of the survey was to;

1. Locate and record the location, extent, and product type as far as reasonably practicable of known or presumed ACM's.
2. Inspect and record information on the accessibility, condition and surface treatment of know or presumed ACM's
3. Determine and record the asbestos type based on sampling or by making a presumption based on product type and appearance
4. Locate all ACM's within the fabric of the building prior to refurbishment & demolition.

3.0 Introduction/Objectives(Cont):

- Type of Survey



3.3 Type of Survey – Pre-Refurbishment Asbestos Survey

The purpose of this major refurbishment survey & demolition is to identify ACM's to be removed prior to any major refurbishment & demolition work being carried out. This type of survey is used to locate and describe as far as is reasonably practicable all ACM's in the whole building if major refurbishment or demolition is planned.

Major refurbishment & demolition surveys are intended to locate all asbestos within the building. It is a disruptive, fully intrusive survey that involves destructive inspection techniques that penetrate the building structure extensively. This involves breaking into floors, through walls, into wall voids ceilings, cladding, boxing, as necessary to gain access to all areas, including the inner fabric of the building. A full sampling programme is undertaken to identify possible ACM's and estimate their quantities.

The survey is designed to be used to help the tendering process, and should be used to start generating a specification for tendering the removal of ACM's from the building prior to major refurbishment or demolition.

Whilst all asbestos materials have been identified as far as is reasonably practicable, some asbestos materials may remain unidentified buried within the fabric of the building during the survey. Asbestos shuttering buried within concrete slabs, asbestos hidden by structural supports, asbestos hidden behind other asbestos products, and building structures which are unsafe to fully access are potential locations.

It must be presumed that asbestos may remain unidentified to these type of areas and if suspect materials are uncovered during major refurbishment then samples should be taken for analysis.

4.0 Desk Top Review and Survey Planning:



4.1 Details of information requested from the Duty Holder by Amiantus in order to carry out a desk top review and plan the survey in accordance with HSG 264 were recorded on our pre-survey questionnaire, along with details of all the information that were provided by Kathryn Forster on behalf of the client.

The Information provided was assessed during the desktop review and a survey plan, and risk assessment was produced for the survey of:

2 Sunbury Lock House
Towpath
Waterside Drive
Walton on Thames
KT12 2JD

The survey was carried out to all internal areas including accessible voids and external areas.

Where information was provided regarding the presence of known or presumed asbestos materials then this has been validated during the course of the survey, and recorded within this report.

Detailed drawings were not provided by the client at the time of the survey.

5.0 Survey Method



5.1 This survey has been undertaken in accordance with HSG264 and Amiantus in house procedures.

5.2 Clients of Amiantus that have signed our terms and conditions are deemed to have agreed, and accepted, our surveying approach, our sampling strategy, and our standard planning, surveying and reporting format unless they have made specific requests to the contrary.

5.3 The information provided by the client or their representative are recorded in the planning document and has been used to define the scope of the survey.

5.4 Photographs of suspected ACM's will be taken at the time of the survey unless the client expressly requests otherwise. Sampling points and suspected ACM's will not be identified with labels unless the client expressly requests otherwise.

5.5 All fibrous materials and item will be included in the survey unless, in the surveyors professional opinion, these items can be excluded (eg. Wood, wallpaper, man-made mineral fibre). Samples of all thermoplastic floor coverings will be taken unless, in the surveyors professional opinion, such items can be excluded. All textured coatings and novel bituminous will be sampled.

5.6 Areas that could not be accessed were presumed to have ACM's present until proven otherwise. Each area requiring further inspection is documented within the Executive summary (Inaccessible areas). Inaccessible areas are also shown on the plan drawings (Appendix 5)

5.7 Materials that could not be accessed and in the surveyors opinion can be dismissed will be presumed to be ACM unless proven otherwise. Materials that are not sampled but, in the surveyors opinion, have a similar appearance, location and function as a previously sampled material will be strongly presumed to be similar to the sampled material.

5.8 The quantity of samples taken may have been minimised by using 'strongly presumed' as defined above. Materials that are 'strongly presumed' to be similar to a material that has already been sampled will be recorded in the comments section of the survey and referenced against the original sampled material.

5.9 Our surveyor has made every attempt to avoid causing damage during the management surveys whilst attempting to identify possible ACM's. Minor repairs will be made and any areas accessed will be left in a safe condition.

5.10 Intrusive damage that is required to gain access to an area/location that is within the scope of the survey has been agreed with the client or the clients representative. Any remedial action will be put in place before such action is attempted. If remedial action cannot be arranged, no attempt to access the area will be made and the reasons recorded. The area/location will be presumed to have ACM's present until proven otherwise.

5.11 Non fibrous materials and item known not to contain asbestos (eg Breeze block, plaster, plasterboard plastics and non textured paints) will be excluded from the survey unless the surveyor suspects that these materials have been contaminated with asbestos from other sources or specifically requested by the client.

5.12 Older electrical equipment, which cannot be shown to contain ACM's, has been presumed to have ACM's present unless, in the surveyors professional opinion, such items can be excluded.

6.0 Exclusions and Caveats:



6.1 Where a survey is carried out under the guidance of the owner of the property or his representative then the survey will be as per his instructions and guidance at that time.

6.2 Every effort has been made to identify all asbestos materials so far as was reasonably practical to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

6.3 Survey techniques used involved trained and experienced surveyors using the combined approach with regard to visual examination and necessary bulk sampling. It is always possible after a survey that asbestos based materials of one sort or another may remain in the property or area covered by that survey, this could be due to various reasons.

6.4 Materials may be hidden or obscured by other items or cover finishes i.e. paint over boarding disguising etc. Where this is the case then its detection will be impaired. Asbestos may well be hidden as part of the structure to a building and not visible until the structure is dismantled at a later date.

6.5 Debris from previous asbestos removal projects may well be present in some areas: general asbestos debris does not form part of this survey, however all good intentions are made for its discovery. Where an area has been previously stripped of asbestos i.e. plant rooms, ducts etc. and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its introduction, most notably would be the control of asbestos at work regulation (1987) laying down certain enforceable guidelines. Asbestos removal prior to this regulation would not be of today's standard and therefore debris may be present below new coverings.

6.6 This survey will detail all areas accessed and all samples taken, where an area is not covered by this survey it will be due to No Access for one reason or other i.e. working operatives, sensitive location or just simply no access. It may have been necessary for the limits of the surveyor's authority to be confirmed prior to the survey.

6.7 Access for the survey may be restricted for many reasons beyond our control such as height, inconvenience to others, immovable obstacles or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is given. Our operatives have a duty of care under the Health and Safety at Work act (1974) for both themselves and others.

6.8 In a building where asbestos has been located and it is clear that not all areas have been investigated, any material that is found to be suspicious and not detailed as part of this survey should be treated with caution and sampled accordingly. Asbestos materials existing within areas not specifically covered by this report are therefore outside the scope of the survey.

6.9 Where areas have been designated as 'no access' or 'restricted access', unless further inspection/sampling proves otherwise, the presumption has been made that these structures/areas contain asbestos materials.

6.10 It is recommended that further intrusive inspection and sampling be carried out where site refurbishment, maintenance, or similar may disturb Asbestos Containing Materials that have remained inaccessible during this survey, this should be a refurbishment/demolition survey as described in HSG 264.

6.11 This report does not include investigations into land contamination associated with asbestos or any other contaminant.

6.0 Exclusions and Caveats (Cont):



6.12 Textured Coatings such as “Artex” may contain a trace quantity of Chrysotile asbestos. Due to this low asbestos content, applications of this product may be non-homogenous and may elicit both positive and negative samples. Where both positive and negative samples are obtained the client should presume that the textured coating contains Chrysotile throughout even though a non-detected result has been obtained.

6.13 Due to the inconsistency of the fibre content in vinyl floor material and its low percentage (generally less than 2% by volume) random sampling only, was carried out to establish the possible presence of asbestos in vinyl flooring. A more comprehensive sampling strategy would have to be implemented to establish the exact extent of asbestos based vinyl flooring. However, unless the material is subjected to vigorous abrasive action or fire, the possibility of fibre release will be minimal due to the matrix of the material.

6.14 Amiantus Environmental Consultants cannot accept any liability for loss, injury, damage or penalty issues due to errors or omissions within this report. Amiantus Environmental Consultants cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the nature and necessity of sampling for asbestos some damage is unavoidable and will be limited to just that necessary for the taking of the sample.

7.0 Sampling and Analysis:



7.1 The object of bulk sampling is to identify the nature and extent of any visible ACM.

7.2 Bulk sampling is undertaken inline with the recognised safe procedures in order to cause minimal possible nuisance and potential risk to health of the building occupants and visitors. Bulk samples are taken in accordance with documented in house procedures, following guidelines detailed in HSG264 'The Survey Guide' and HSG248 'The Analyst Guide'. The quantity of samples taken will be minimised by using 'strongly presumed'. Materials that are 'strongly presumed' to be similar to a material that has already been sampled will be recorded in the comments section of the survey record and referenced against the original sampled material.

7.3 Bulk samples are returned to the appointed bulk analysis laboratory with the appropriate sample / report reference number. Where appropriate; a label will be left on site adjacent to the sample location.

7.4 The label will indicate the sample number and the date taken. This label can be used along with the report for cross reference purposes.

7.5 Bulk sample analysis is carried out in accordance with HSE document HSG 248 'The Analysts Guide' and Amiantus documented in-house methods. Samples are examined under a low magnification stereomicroscope and the fibres teased apart. The fibres are then mounted in liquids of known refractive indices and examined under high magnification using polarised light and dispersion staining in accordance with HSG 248 'The Analysts Guide'.

7.6 The bulk sample description and analysis results can be found in Appendix 4 of this report – The analysis certificate.

Key to Analysis Results:

Chrysotile - White Asbestos

Amosite - Brown Asbestos

Crocidolite - Blue Asbestos

Tremolite - Rare Asbestos

Actinolite - Rare Asbestos

Anthophyllite - Rare Asbestos

8.0 Survey Results - Interpretation:



Survey Results

The results of the survey inspections and sampling undertaken are recorded on the enclosed Survey Data Sheets (appendix 2), Asbestos Register (appendix 1) and Non-Asbestos Material Register (appendix 3). Where asbestos containing material have been identified or presumed to be present then a Material Assessment Algorithm has been calculated as detailed in HSG 264 and reproduced in the table below:

Within the survey data sheets the individual scores in brackets, for each sample variable, are added together to form the final material risk assessment algorithm score.

8.0 Survey Results - Interpretation (cont):



Material Risk Assessment Algorithm

Product type [or debris from product]

Score	Examples of scores
1	Asbestos reinforced composites [plastics, resins, mastics, roofing felts, vinyl floor tiles, semi- rigid paint, decorative finishes and asbestos cement etc]
2	Asbestos insulating board, mill boards, other low-density boards, textiles, gaskets, ropes and woven materials and asbestos paper.
3	Thermal insulation [e.g. pipe and boiler lagging], sprayed asbestos, loose asbestos, asbestos mattresses and packing.

Extent of damage/deterioration

Score	Examples of scores
0	Good condition: no visible damage
1	Low damage: a few scratches or surface marks, broken edges on boards or tiles, etc.
2	Moderate damage: significant breakage of materials or several small areas where material has been damaged exposing fibrous edges.
3	High damage or deterioration of materials, sprays and thermal insulation. Visible asbestos contamination by debris or residues.

Surface treatment

Score	Examples of scores
0	Composite materials containing asbestos, reinforced plastics, resins, vinyl tiles
1	Enclosed sprays or insulation, AIB [with exposed face encapsulated], cement sheets, etc.
2	Unsealed AIB, encapsulated insulation and sprays.
3	Unsealed insulation and sprays.

Asbestos Type

Score	Examples of scores
1	Chrysotile
2	Amphibole asbestos (excluding Crocidolite)
3	Crocidolite

Material Risk Assessment Score

Risk Category	Risk	Score Range	Fibre release potential
A	HIGH	10 and above	High risk with a high potential to release fibres if disturbed
B	MEDIUM	Between 7 and 9	Medium risk with a medium potential to release fibres if disturbed
C	LOW	Between 5 and 6	Low risk with and having low potential to release fibres if disturbed
D	VERY LOW	4 and below	Very low risk with and having very low potential to release fibres if disturbed

Appendix 1 - Asbestos Register



Building	Floor	Location /Room	S,P,SP,AS Sample No	Product Type	Condition	Surface Treatment	Asbestos Type	Quantity	Accessibility	Material Score	Recommendation	Additional Comments
2 Sunbury Lock House	Ground	Kitchen G01, Floor Tile and Bitumen Adhesive to floor	S DF000825	Thermoplastic	Low Damage	Completely Sealed	Chrysotile	15m²	Occasionally likely to be disturbed	3	D - Manage and re-inspect	Asbestos floor tiles to floor below timber and modern lino. The bitumen adhesive is NON Asbestos.
2 Sunbury Lock House	External	External Elevations E01, No Access to soffits	P Visual	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inspection required	No Access due to height.
2 Sunbury Lock House	External	External Elevations E01, No Access to roof tiles	P Visual	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inspection required	No access due to height.
2 Sunbury Lock House	External	External Elevations E01, Board to porch ceiling	S DF000828	Insulation board	Low Damage	Surface Sealed	Chrysotile + Crocidolite	3m²	Occasionally likely to be disturbed	7	D - Manage and re-inspect	Asbestos Insulating Board (AIB) to rear porch ceiling and soffit.

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample


Appendix 2 – Survey Data Sheets




Service Type	Refurbishment & Demolition survey		
Report Revision Number	1	Surveyors	Dudley Firkins
TEAMS Job Number	J004313	Survey Date	23 Mar 2021 to 24 Mar 2021
Site Address:	2 Sunbury Lock House Towpath Waterside Drive Walton on Thames KT12 2JD	Bulk Analysis Laboratory	Asbestos Laboratory Services
		Sample Analysis Date	25 Mar 2021

Survey Data Sheets



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Bedroom 101	No materials to the lath and plaster and solid walls, timber flooring (void checked) and plasterboard ceiling of the bedroom were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Upvc window, timber panel to wall below window.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	No Asbestos Detected (0)
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Bedroom 102	Textured Coating to ceiling	12m²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	DF000823 (S)	Textured Coating (1)	Surface Sealed (1)	Low Damage (1)	Occasionally likely to be disturbed
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	Non Asbestos textured coating to plasterboard.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Bedroom 103	No materials to the lath and plaster, plasterboard and solid walls, timber flooring (void checked) and plasterboard ceiling of the bedroom were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Upvc windows.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Landing 104	No materials to the lath and plaster, plasterboard and solid walls, timber flooring and lath and plaster ceiling of the landing were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Upvc windows.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	No Asbestos Detected (0)
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Bathroom 105	Textured Coating to ceiling	6m²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	DF000824 (S)	Textured Coating (1)	Surface Sealed (1)	Low Damage (1)	Occasionally likely to be disturbed
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	Non Asbestos textured coating to plasterboard.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Roof Void 106	No materials to the roof void were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. MMMF insulation, modern lining to underside of roof. Polystyrene to back of hatch.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis	
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	1st Floor	N/A	
	Building	Room	Item	Quantity		
	2 Sunbury Lock House	Roof Void 107	No materials to the roof void were suspected of containing asbestos	N/A	Accessibility	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition		
	Visual (P)	N/A	N/A	N/A		
	Material Risk Score					
	N/A					
Recommended action	No further action required					
Surveyor comments	No Suspect Materials. MMMF insulation, modern lining to underside of roof. Polystyrene to back of hatch. Plastic water tanks.					


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	Chrysotile (1)
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Kitchen G01	Floor Tile and Bitumen Adhesive to floor	15m²	Accessibility
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	
	DF000825 (S)	Thermoplastic (1)	Completely Sealed (0)	Low Damage (1)	
	Material Risk Score				
3					
Recommended action	D - Manage and re-inspect				
Surveyor comments	Asbestos floor tiles to floor below timber and modern lino. The bitumen adhesive is NON Asbestos.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	No Asbestos Detected (0)
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Kitchen G01	Textured Coating to ceiling	15m²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	DF000826 (S)	Textured Coating (1)	Surface Sealed (1)	Low Damage (1)	Occasionally likely to be disturbed
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	Non Asbestos textured coating to plasterboard.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis	
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	N/A	
	Building	Room	Item	Quantity		
	2 Sunbury Lock House	Lobby G02	No materials to the upvc walls, solid flooring and plastic ceiling of the lobby were suspected of containing asbestos	N/A		
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility	
	Visual (P)	N/A	N/A	N/A	N/A	
	Material Risk Score					
	N/A					
	Recommended action	No further action required				
	Surveyor comments	No Suspect Materials.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Lounge G03	No materials to the solid and lath and plaster walls, timber flooring and lath and plaster ceiling of the lounge were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Modern wood burner and flue pipe. Metal plate to chimney. Upvc window.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Hallway G04	No materials to the solid and lath and plaster walls, timber flooring and lath and plaster ceiling of the hallway were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Timber boxing, timber panel above door to underside of stairs. Upvc window.				

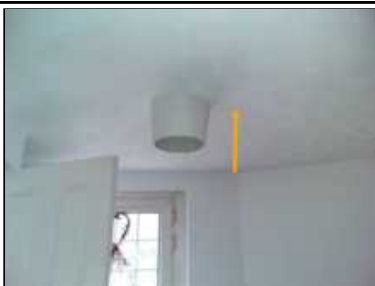
KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Living Room G05	No materials to the solid walls, timber flooring and lath and plaster ceiling of the living room were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Upvc windows.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	No Asbestos Detected (0)
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Entrance Lobby and Cupboard G06	Textured Coating to ceiling	5m²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	DF000827 (S)	Textured Coating (1)	Surface Sealed (1)	Low Damage (1)	Occasionally likely to be disturbed
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	Non Asbestos textured coating to lath and plaster. Continues into electrical cupboard.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis	
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	N/A	
	Building	Room	Item	Quantity		
	2 Sunbury Lock House	Entrance Lobby and Cupboard G06	No materials to the modern electrics were suspected of containing asbestos	N/A	Accessibility	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition		
	Visual (P)	N/A	N/A	N/A		
	Material Risk Score					
	N/A					
Recommended action	No further action required					
Surveyor comments	No Suspect Materials.					


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Ground Floor	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Toilet G07	No materials to the solid and plasterboard walls, timber flooring and plasterboard ceiling of the toilet were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. Ceramic cistern, upvc window.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Z-Sub Level 1	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Store Z101	No materials to the solid walls, solid flooring and plasterboard ceiling of the store were suspected of containing asbestos	N/A	Accessibility
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	
	Visual (P)	N/A	N/A	N/A	
	Material Risk Score				
	N/A				
	Recommended action	No further action required			
	Surveyor comments	No Suspect Materials. MMMF within ceiling void, foam insulation to pipework, modern boiler and flue.			


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	Z-Sub Level 1	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	Room Z102	No materials to the solid, fibreboard and timber walls, solid flooring and plasterboard ceiling of the room were suspected of containing asbestos	N/A	Accessibility
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	
	Visual (P)	N/A	N/A	N/A	
	Material Risk Score				
	N/A				
Recommended action	No further action required				
Surveyor comments	No Suspect Materials. MMMF within ceiling void, lath and plaster above plasterboard ceiling.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	External	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	External Elevations E01	No Access to soffits	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	Inspection required				
Surveyor comments	No Access due to height.				


	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	External	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	External Elevations E01	No Access to roof tiles	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
	Material Risk Score				
	N/A				
Recommended action	Inspection required				
Surveyor comments	No access due to height.				


KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Survey Data Sheets (cont)



	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	External	Chrysotile + Crocidolite (3)
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	External Elevations E01	Board to porch ceiling	3m ²	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	DF000828 (S)	Insulation board (2)	Surface Sealed (1)	Low Damage (1)	Occasionally likely to be disturbed
Material Risk Score					
7					
Recommended action		D - Manage and re-inspect			
Surveyor comments		Asbestos Insulating Board (AIB) to rear porch ceiling and soffit.			

	Survey Date:	Lead Surveyor	Survey Type	Floor	Analysis
	23 Mar 2021 to 24 Mar 2021	Dudley Firkins	Refurbishment & Demolition survey	External	N/A
	Building	Room	Item	Quantity	
	2 Sunbury Lock House	External Elevations E01	No materials to the windows were suspected of containing asbestos	N/A	
	Sample No (S,SP,P,As)	Product Type	Surface Treatment	Condition	Accessibility
	Visual (P)	N/A	N/A	N/A	N/A
Material Risk Score					
N/A					
Recommended action		No further action required			
Surveyor comments		No Suspect Materials. Upvc windows with modern sealant.			

KEY:

S – Sampled, P – Presumed, SP – Strongly Presumed, AS – Cross reference to former sample

Appendix 3 - Areas Surveyed



Building	Floor	Room No:	Room Type	Item
2 Sunbury Lock House	1st Floor	101	Bedroom	No samples taken.
2 Sunbury Lock House	1st Floor	102	Bedroom	Sample taken. Upvc windows.
2 Sunbury Lock House	1st Floor	103	Bedroom	No samples taken.
2 Sunbury Lock House	1st Floor	104	Landing	No samples taken.
2 Sunbury Lock House	1st Floor	105	Bathroom	Sample taken. Void checked behind plastic bath panel. Upvc window, foam insulated cylinder.
2 Sunbury Lock House	1st Floor	106	Roof Void	No samples taken.
2 Sunbury Lock House	1st Floor	107	Roof Void	No samples taken.
2 Sunbury Lock House	Ground Floor	G01	Kitchen	Samples taken.
2 Sunbury Lock House	Ground Floor	G02	Lobby	No samples taken.
2 Sunbury Lock House	Ground Floor	G03	Lounge	No samples taken.
2 Sunbury Lock House	Ground Floor	G04	Hallway	No samples taken.
2 Sunbury Lock House	Ground Floor	G05	Living Room	No samples taken.
2 Sunbury Lock House	Ground Floor	G06	Entrance Lobby and Cupboard	Sample taken. Upvc window.
2 Sunbury Lock House	Ground Floor	G07	Toilet	No samples taken.
2 Sunbury Lock House	Z-Sub Level 1	Z101	Store	No samples taken.

Appendix 3 - Areas Surveyed (cont)



Building	Floor	Room No:	Room Type	Item
2 Sunbury Lock House	Z-Sub Level 1	Z102	Room	No samples taken.
2 Sunbury Lock House	External	E01	External Elevations	Sample taken. Timber tiles to walls of rear section, plastic and metal rainwater goods, timber ceiling to front porch, upvc windows with modern sealant. No visible damp proof course.

Appendix 4 – Sample Certificates



CERTIFICATE OF ANALYSIS FOR ASBESTOS FIBRES

Report Number: ALS/J050829


Client	Amiantus (Oxford)	Attention	Roy Pearce
Client Address	Sycamore Court, North Leigh Business Park, North Leigh, Witney, Oxfordshire, OX29 6SW		
Site Address	2 Sunbury Lock House, Towpath, Waterside Drive, Walton on Thames, KT12 2JD		
Site Ref	J004313	No. of Samples	6


Date Received	25/03/2021	Date of Analysis	25/03/2021	Report Issue Date	25/03/2021
----------------------	------------	-------------------------	------------	--------------------------	------------

Samples of material(s) [detailed below] have been examined to determine the presence of asbestos fibres, using Polarised Light Microscopy together with dispersion staining based on the HSE's guidance document HSG248 and Asbestos Laboratory Services' documented method. If samples have been delivered to the laboratory, the site address and sample location is reported as provided by the client. Reported results apply to samples as received. Asbestos Laboratory Services are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances, Asbestos Laboratory Services cannot be held responsible for the interpretation of the results shown. Opinions and interpretations are outside the scope of the UKAS accreditation.

All entries under 'Fibre Type Detected' that contain (*) indicate that the sample was found to be deviating from policies defined in document TPS63 (UKAS Policy on Deviating Samples). As a result, the test result(s) may be invalid. The Determination of Asbestos Content Report shall not be reproduced except in full, without written approval of the laboratory. V2, or subsequent "V" numbers, after the report number signifies that the original certificate (or previous amended certificate) has been replaced. All samples will be retained for a minimum of six months.

Lab Ref	Client Sample Number	Sample Location	Sample Description	Fibre Type Detected
BS218755	DF000823	1st Floor, Bedroom, to ceiling	Textured Coating	N.A.D.I.S
BS218756	DF000824	1st Floor, Bathroom, to ceiling	Textured Coating	N.A.D.I.S
BS218757	DF000825	Ground Floor, Kitchen, to floor	Floor Tile and Bitumen Adhesive	Chrysotile - in Tile Only
BS218758	DF000826	Ground Floor, Kitchen, to ceiling	Textured Coating	N.A.D.I.S
BS218759	DF000827	Ground Floor, Entrance Lobby and Cupboard, to ceiling	Textured Coating	N.A.D.I.S

Analysed By	Jack Wood
Analyst Signatory	

Approved By	Craig Morrish
Approver Signatory	

CERTIFICATE OF ANALYSIS FOR ASBESTOS FIBRES

Report Number: ALS/J050829

Client	Amiantus (Oxford)	Attention	Roy Pearce
Client Address	Sycamore Court, North Leigh Business Park, North Leigh, Witney, Oxfordshire, OX29 6SW		
Site Address	2 Sunbury Lock House, Towpath, Waterside Drive, Walton on Thames, KT12 2JD		
Site Ref	J004313	No. of Samples	6

Date Received	25/03/2021	Date of Analysis	25/03/2021	Report Issue Date	25/03/2021
----------------------	------------	-------------------------	------------	--------------------------	------------

Samples of material(s) [detailed below] have been examined to determine the presence of asbestos fibres, using Polarised Light Microscopy together with dispersion staining based on the HSE's guidance document HSG248 and Asbestos Laboratory Services' documented method. If samples have been delivered to the laboratory, the site address and sample location is reported as provided by the client. Reported results apply to samples as received. Asbestos Laboratory Services are not responsible for the accuracy or competence of the sampling by third parties. Under these circumstances, Asbestos Laboratory Services cannot be held responsible for the interpretation of the results shown. Opinions and interpretations are outside the scope of the UKAS accreditation.

All entries under 'Fibre Type Detected' that contain (*) indicate that the sample was found to be deviating from policies defined in document TPS63 (UKAS Policy on Deviating Samples). As a result, the test result(s) may be invalid. The Determination of Asbestos Content Report shall not be reproduced except in full, without written approval of the laboratory. V2, or subsequent "V" numbers, after the report number signifies that the original certificate (or previous amended certificate) has been replaced. All samples will be retained for a minimum of six months.

Lab Ref	Client Sample Number	Sample Location	Sample Description	Fibre Type Detected
BS218760	DF000828	External, External Elevations, to porch ceiling	Board	Chrysotile + Crocidolite


Fibre Type Detected Key


N.A.D.I.S = No Asbestos Detected in Sample

Chrysotile = White Asbestos; Amosite = Brown Asbestos; Crocidolite = Blue Asbestos; Actinolite, Anthophyllite & Tremolite = Rare Asbestos Types

Details of Amendment(s) to Previous Certificate:

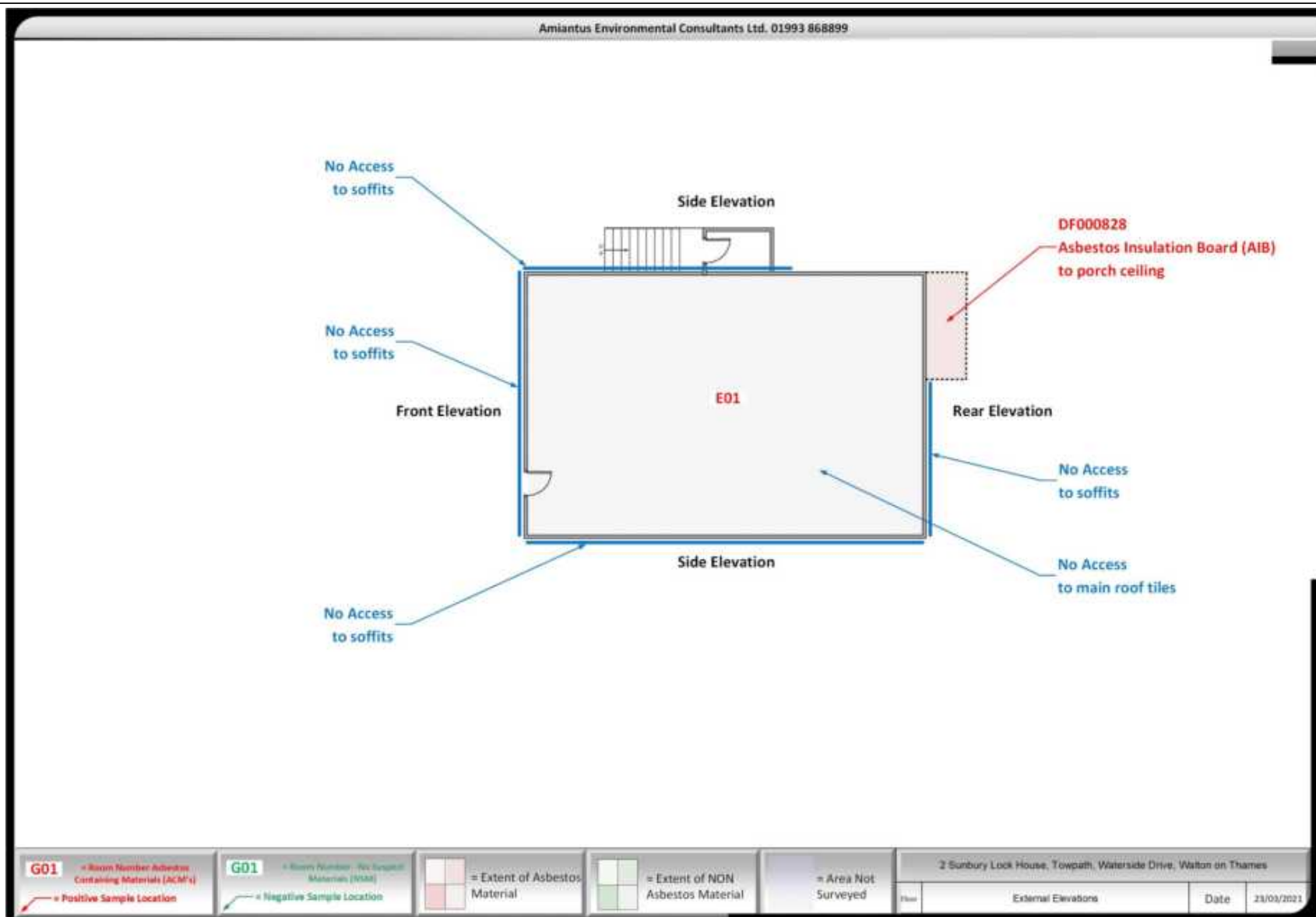
Details of Deviating Samples:

Analysed By	Jack Wood
Analyst Signatory	

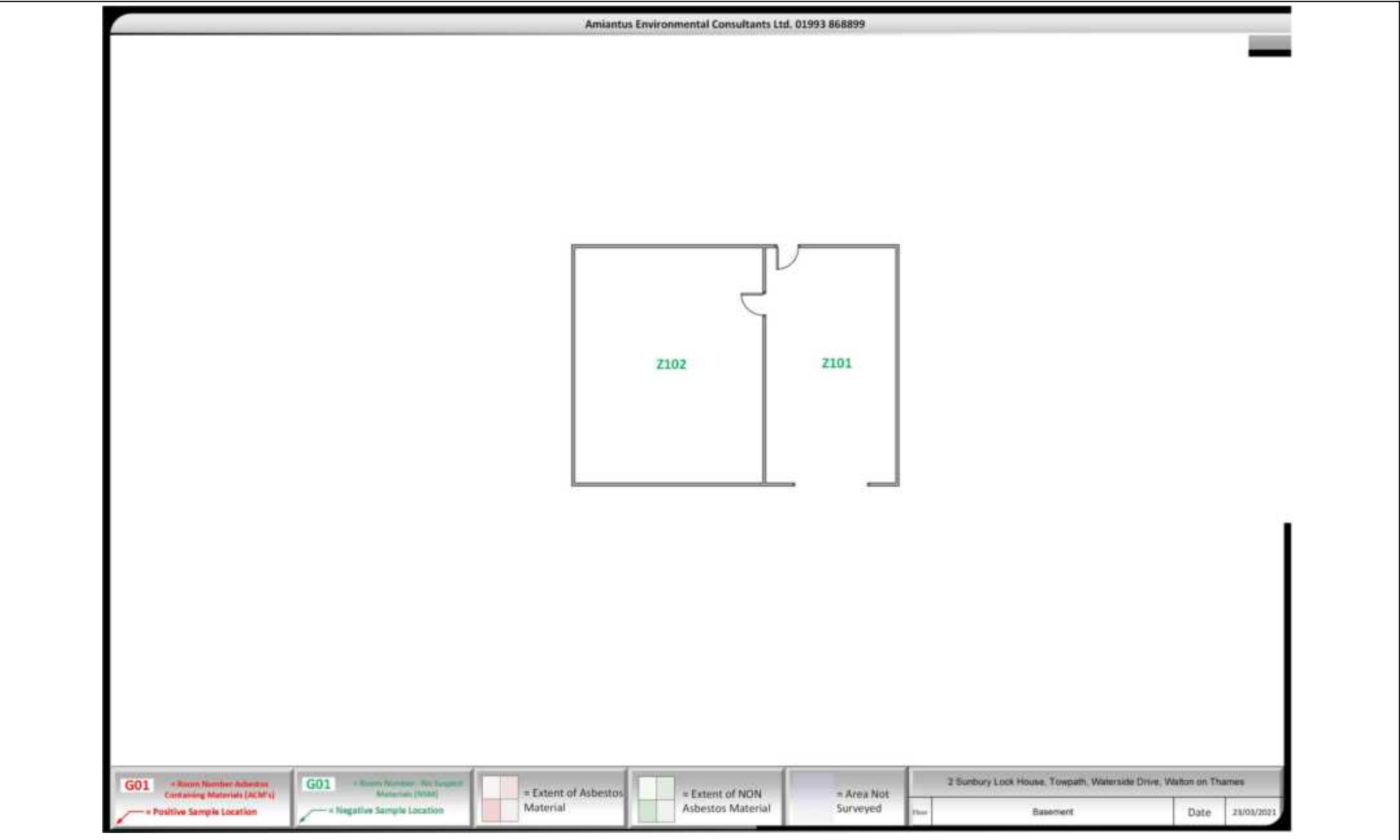
Approved By	Craig Morrish
Approver Signatory	

Appendix 5 – Plans

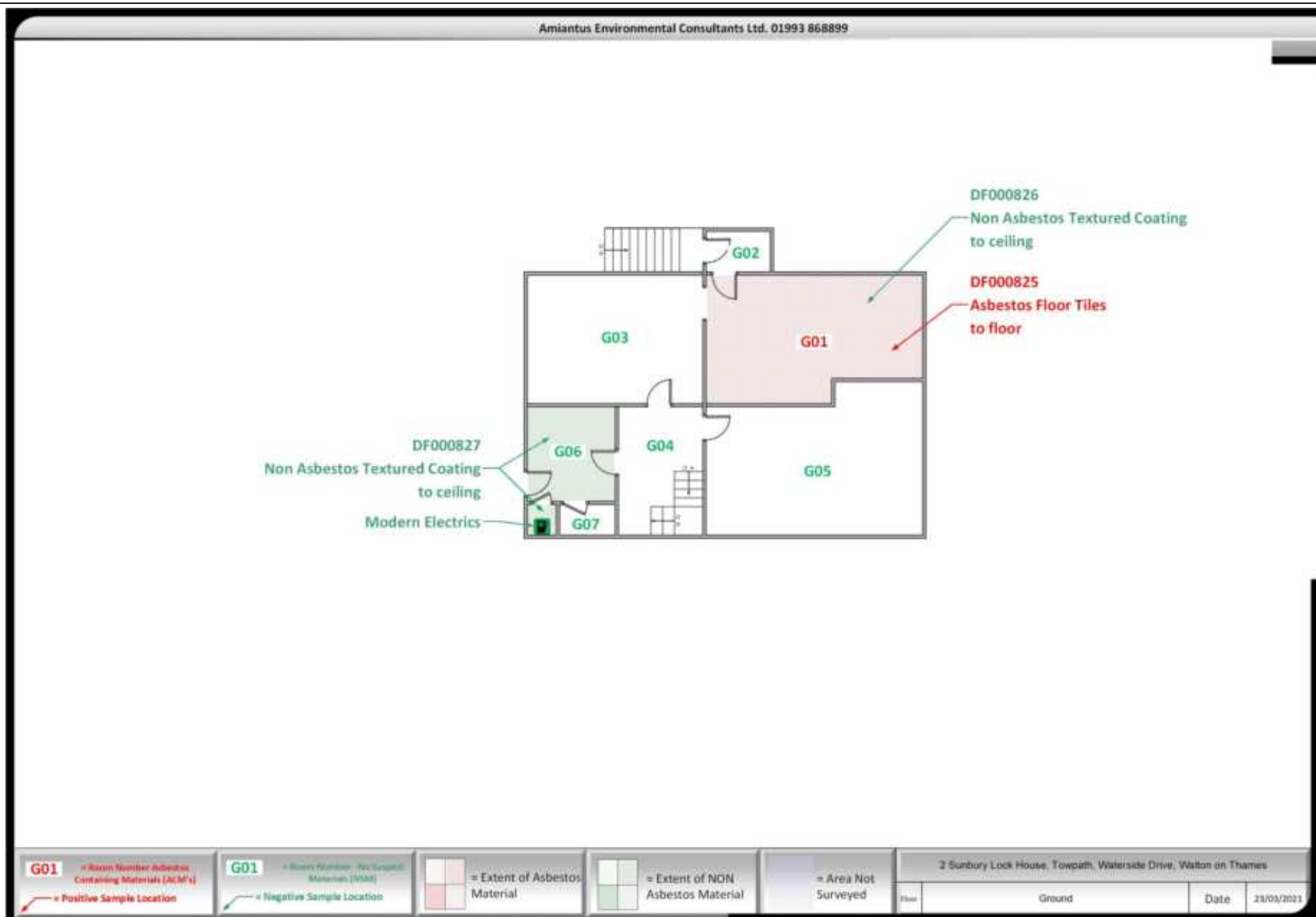




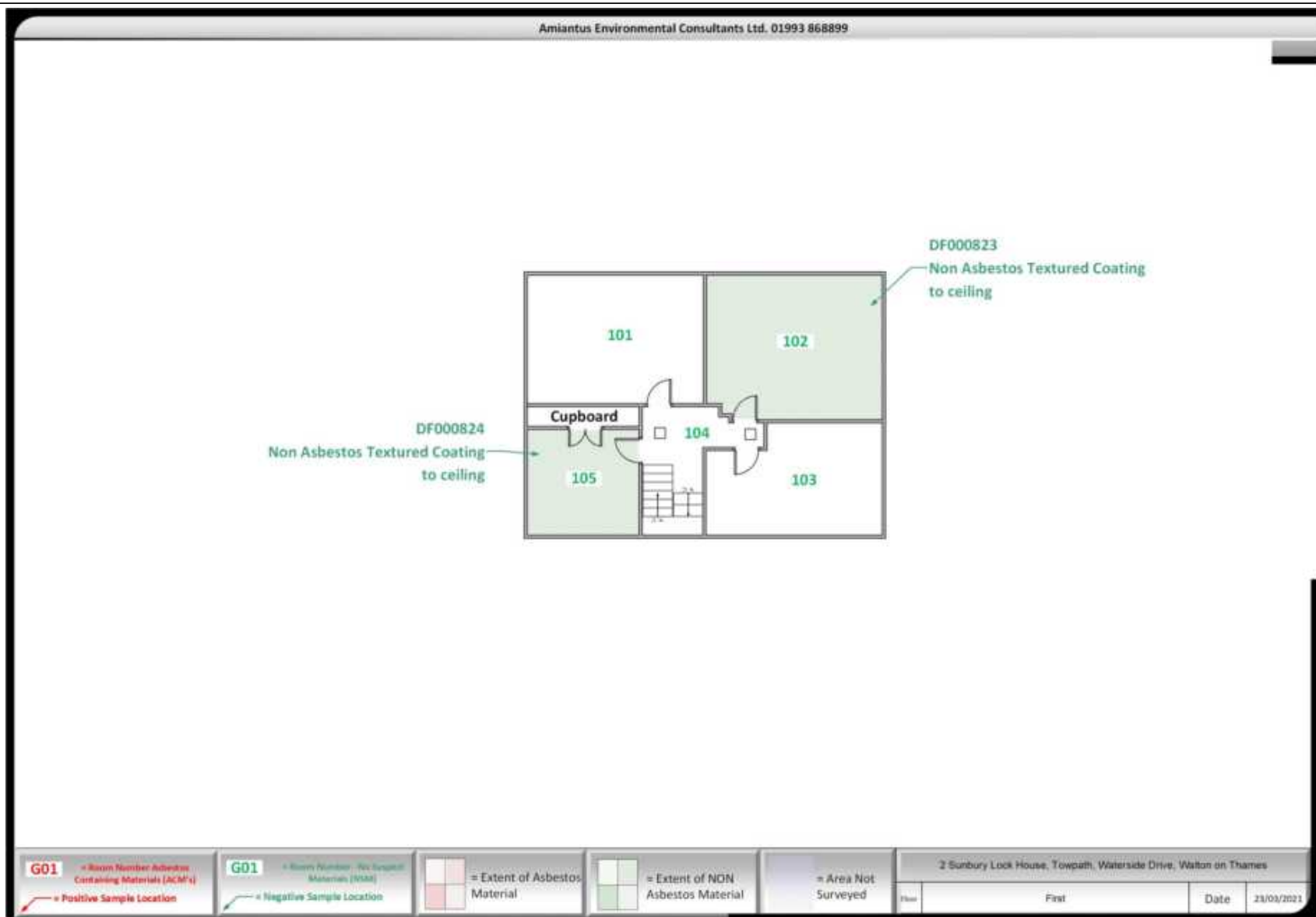
Client: Environment Agency
 Site: 2 Sunbury Lock House
 Floor: External
 UPRN No: N/A



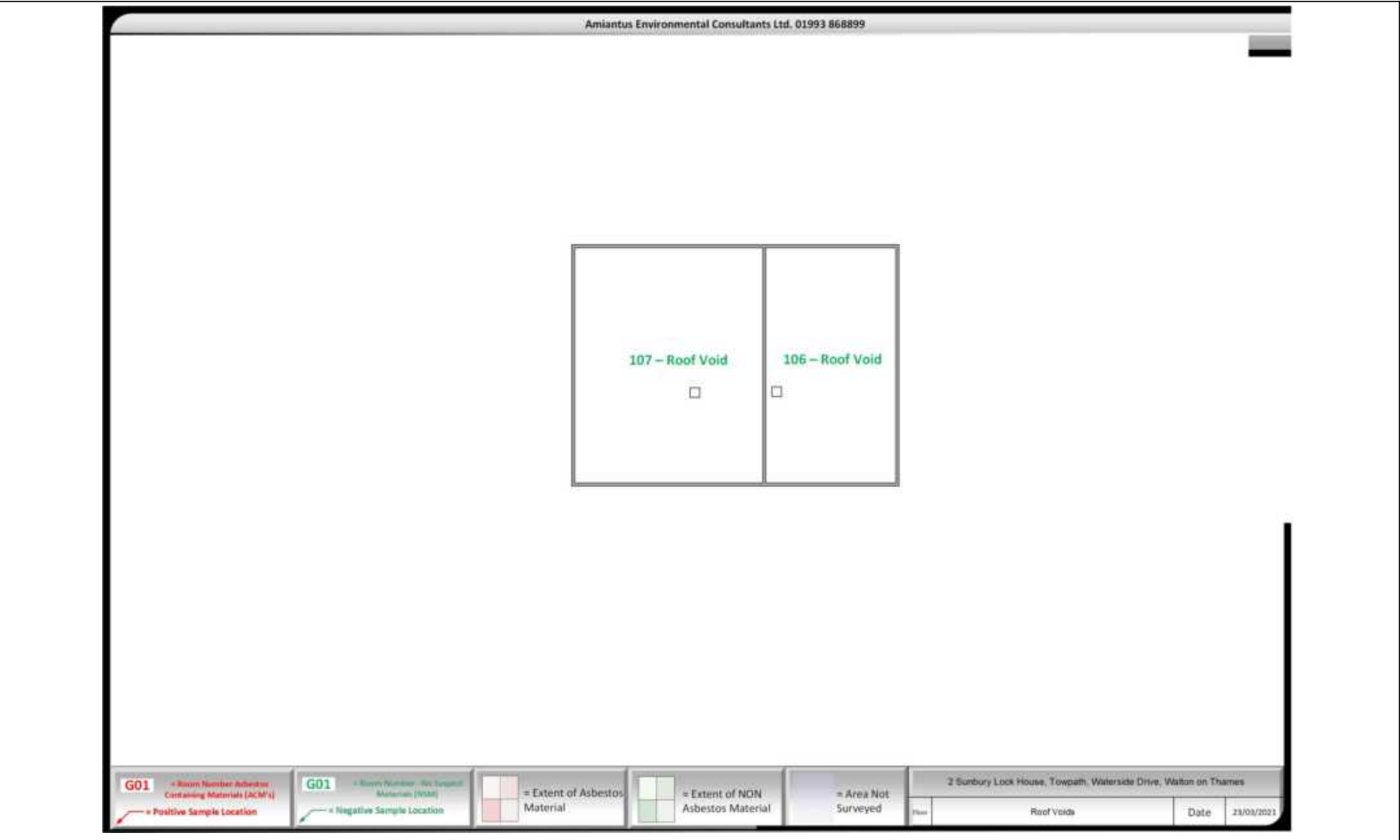
Client: Environment Agency
Site: 2 Sunbury Lock House
Floor: Z-Sub Level 1
UPRN No: N/A



Client: Environment Agency
 Site: 2 Sunbury Lock House
 Floor: Ground Floor
 UPRN No: N/A



Client: Environment Agency
 Site: 2 Sunbury Lock House
 Floor: 1st Floor
 UPRN No: N/A



9.0 Recommendations:



9.1 To comply with and ensure that the requirements of section 2 & 3 of the Health and Safety at Work Act (as amended) 1974, the Management of Health and Safety at Work Regulations 1999, the Control of Asbestos Regulations 2012 and the Control of Substances Hazardous to Health 2002 are met, the following recommendations should be implemented:

9.2 Undertake suitable and sufficient Risk Assessments of identified asbestos containing materials against normal occupation and maintenance operations, in compliance with Regulations 3 of the Management of Health & Safety at Work Regulations 1999 and Regulation 6 of the Control of Asbestos Regulations 2012.

9.3 The findings of the survey be brought to the attention of those persons who are likely to come in contact with asbestos, in compliance with Section 2 and 3 of the Health and Safety at Work Act (as amended) 1974 and Regulation 10 of the Control of Asbestos Regulations 2012.

9.4 Implement an Asbestos Management Policy, Plan and review process in compliance Regulation 4 of the Control of Asbestos Regulations 2012.

9.5 Instigate regular inspections, to record and update details of retained asbestos containing materials.

9.6 Review the arrangement under the management plan in accordance with regulation 4 of the CAR 2012.

9.7 During the course of the survey it may not have been possible to access all areas of the site. Details of areas requiring further access are identified within the Data Sheets of this report. In accordance with HSG 264, asbestos has been presumed to be present within these areas and should be treated accordingly until further inspection and analysis of building fabric and services proves otherwise.

9.8 Where asbestos debris or asbestos in poor condition has been found it is recommended that access is restricted and or controlled to these areas in accordance with Regulation 11 and Regulation 16 of the Control of Asbestos Regulations 2012.

9.9 If we have identified asbestos materials in poor condition, it is recommended that air monitoring is carried out within a number of areas where asbestos materials have been identified in order to assess airborne fibre levels within adjacent occupied areas in relation to the clearance indicator, as documented by HSG 248 the Analyst Guide.

9.10 All identified asbestos to be appropriately identified and subject to risk assessment, management, and re-inspection.

9.11 Site specific recommendations in respect to the location and condition of asbestos materials identified during the course of this inspection are detailed in the Survey Data Sheets and Asbestos register. In considering the management of asbestos materials identified to date, these recommendations should be taken into consideration.

9.12 In accordance with the Control of Asbestos Regulations 2012 the removal of ACM's fall into one of the three categories below:

Licensed Asbestos Removal

Is defined as any work, which is undertaken on a friable asbestos product or which is likely to exceed the control limit of 0.1f/cm³. A licensed asbestos removal contractor must undertake this work and a 14-day notice must be given to the HSE prior to the commencement of the work.

Notifiable Non Licensed Works

If work on an ACM causes the deterioration of the matrix material in which the asbestos fibres are firmly linked, then these works are Notifiable Non Licensed Work (NNLW). Work of this type does not require an asbestos removal licence, but the company undertaking the work must have the following:

- Notification of the work to the relevant enforcing authority prior to the work commencing.
- Medical examinations to assess each worker's state of health to be carried out, before any possible – exposure to asbestos. Then re-examinations every three years.
- Insurance for working with asbestos containing materials.
- A register of work to be kept by the employer for each employee exposed to asbestos.

Non Notifiable Non Licensed work

-Non-Licensed Works Is defined as any work, which involves short, non-continuous maintenance activities, during which only nonfriable materials are removed. It can also involve the removal of non-friable materials for refurbishment purposes. However, work of this type is only applicable where the matrix material in which the asbestos fibres are firmly linked remains intact.

- If a non-licensed contractor is appointed to undertake the removal works on the above materials, the following points must be adhered to:
- All operatives undertaking work on the material must have asbestos awareness training and practical asbestos training.

9.13 It is recommended that further intrusive investigations and sampling be carried out in accordance with HSG.264, where any major refurbishment, maintenance, installation or similar activity may expose asbestos materials that have remained inaccessible during the survey. This should be as a refurbishment/demolition survey as documented in HSG264.

9.14 The findings of this report should not be solely relied upon in obtaining costs for proposed asbestos abatement work. Any proposed abatement/removal of the asbestos should be undertaken against a detailed specification.

APPENDIX E

Environment Agency, Constructing a Better Environment
Safety, Health, Environment and Wellbeing, Code of Practice



Constructing a Better Environment

Safety, Health, Environment and Wellbeing
(SHEW)

Code of Practice (CoP)

May 2018

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 1 of 42

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 2 of 42

Document status

This is a controlled document.

Issue authority

Author	Owner	Issue authority
Environment Agency Construction Safety, Health & Wellbeing Team	Environment Agency Construction Safety, Health & Wellbeing Team	Environment Agency Deputy Director Health, Safety and Wellbeing

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 3 of 42

Contents

1.0 Section One – Introduction

- 1.1 Scope
- 1.2 EA Core Values and Commitment
- 1.3 EA Environmental Commitment
- 1.4 EA HSE&Q Management Systems
- 1.5 Safety, Health, Environment and Wellbeing Forums and Groups
- 1.6 Supplier Development Review
- 1.7 SHEW CoP Review

2.0 Section Two – General (*applicable to all projects/sites*)

- 2.1 Considerate Constructors Scheme (CCS)
- 2.2 Socially and Community Conscious Employer
- 2.3 Overarching Sustainability Requirements and behaviours
- 2.4 Health Surveillance/Monitoring
- 2.5 Occupational Health/Hygiene Promotion
- 2.6 Welfare
- 2.7 Welfare on short duration or transient sites
- 2.8 Travel
- 2.9 Construction Phase Plan (CPP)
- 2.10 Environmental Action Plan (EAP)
- 2.11 Materials and Equipment
- 2.12 Plant – Operational Impact and Air Quality
- 2.13 Portable Appliances
- 2.14 Fire
- 2.15 Management of Change
- 2.16 Accident, Incident and Near Miss Notification and Investigation
- 2.17 Materials Management/Resource Efficiency
- 2.18 Waste
- 2.19 Carbon Management
- 2.20 Climate Change Risk and Adaption
- 2.21 Timber
- 2.22 EA HS&E Compliance Assurance Team

3.0 Section Three – Principal Designer and Designers

- 3.1 Construction (Design and Management) Regulations 2015 (CDM 2015)
 - 3.1.1 Principal Designer (PD)
 - 3.1.2 Designers
- 3.2 Competence
- 3.3 Design Risk Assessments and Buildability Statements
- 3.4 Design criteria – Red Amber Green (RAG) List
- 3.5 Public Safety Risk Assessment (PRSA)
- 3.6 Traffic and pedestrian management
- 3.7 Breaking Ground
- 3.8 Working near Overhead Cables
- 3.9 Work at Height
- 3.10 Temporary Works Design
- 3.11 Working close to or over water
- 3.12 Designer Compliance
- 3.13 Pollution Prevention Planning & Provision
- 3.14 Resource Management

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 4 of 42

4.0 Section Four – Principal Contractor and Contractors

- 4.1 Construction (Design and Management) Regulations 2015 (CDM 2015)
 - 4.1.1 Principal Contractor (PC)
- 4.2 Competence
 - 4.2.1 Management/Supervision
 - 4.2.2 Operative
- 4.3 Project/Public Interface
- 4.4 Site Induction
- 4.5 Briefings and Toolbox Talks
- 4.6 Site H&S Signage and Security
- 4.7 Housekeeping
- 4.8 Welfare – Shower Facilities
- 4.9 Personal Protective Equipment (PPE)
- 4.10 Respiratory Protective Equipment
- 4.11 Risk Assessment and Method Statement
- 4.12 Method Statement Briefings
- 4.13 Control of Substances Hazardous to Health, (COSHH)
- 4.14 Permits
- 4.15 Hand Arm Vibration (HAV)
- 4.16 Lone Working
- 4.17 Working Close to or Over Water
- 4.18 Use of Mats near Water
- 4.19 Compressed Air Diving
- 4.20 Ground Penetration
- 4.21 Working near Overhead Cables
- 4.22 Working at Height
- 4.23 Confined Space
- 4.24 Temporary Works
- 4.25 Site Plant and Equipment
- 4.26 Traffic Management Plan, (TMP)
- 4.27 Emergency Arrangements
- 4.28 Health & Safety Related Accident/Incident
- 4.29 Environmental Compliance
- 4.30 Resource Management
- 4.31 Pollution Prevention
- 4.32 Invasive and Non-native species
- 4.33 Environmental Incidents
- 4.34 Contractor Health, Safety and Environmental Monitoring

- Appendix A Accident/Incident Reporting
 - Appendix A.1 Health and Safety Incident and Near Miss Reporting Procedure
 - Appendix A.2 Environmental Incident and Near Miss Reporting Procedure
- Appendix B Accident/Incident Information Required
- Appendix C Plant Working Near Water Control Zone
- Appendix D Plant Operation Safe Zone
- Appendix E Reducing Unintended Movement of Plant

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 5 of 42

Section One

1. Introduction

1.1 Scope

The Environment Agency, (EA) recognises the key role we play delivering construction activities as defined in the Construction (Design and Management) Regulations 2015, (CDM).

We will act on our health, safety and wellbeing values: the belief that all harm can be prevented, and working here will improve health and wellbeing. We also put the environment at the heart of everything we do. E:Mission is our environmental plan (to 2020) and outlines the objectives and targets that we are aiming to achieve as part of this commitment.

The EA accepts the roles of Client, and in some cases Principal Contractor, Contractor, Principal Designer and Designer under CDM 2015, and will take reasonable steps to ensure those appointed have the skills, knowledge and experience to carry out the work in a way that secures safety, health, environment and wellbeing. We will also ensure whenever possible that all Principal Designers comply with their duties in regulations 11 and 12, and Principal Contractors comply with their duties in regulations 12 to 14.

This Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP) has been developed in consultation with our supply chain partners to set out expected standards for Safety, Health, Environment and Wellbeing, (SHEW) that will be applied to all design and construction work we procure and deliver.

We will make suitable arrangements for managing a project and maintaining and reviewing these arrangements throughout, so the project is carried out in a way that manages the SHEW risks. Our Client ethos and expectations regarding behaviours and standards will be presented to all people visiting and working on our sites via our Common Site Induction video

Planning is vitally important and adequate time should be allowed for all duty holders to discharge their responsibilities with respect to SHEW requirements.

Construction has been identified as a significant sustainability risk area for both our internal operations and our supply chain. Our suppliers will play a significant part in helping us to achieve our e:Mission and sustainability objectives.

We have an Environmental Management System (EMS) that is certified to ISO14001:2015 standards. As part of this, we take a full lifecycle approach to the identification and management of the significant environmental risks and opportunities in our procurement activities. We require all suppliers to embrace and adopt the same approach and reduce the environmental and social impact of this framework over its full lifecycle in addition to fully realising any benefits or opportunities that may exist. The supplier must ensure that impacts identified are reduced to benefit the environment and society, and that they are not passed on to another lifecycle stage. This includes considering and reducing those impacts that lie outside of the supplier's direct operation and impact on both the EA as a customer and on the supplier's supply chain.

This code of practice, together with specific references to safety, health, wellbeing and the environment in tender and other documents, if followed should ensure projects consistently achieve the highest, and where possible, industry leading standards above and beyond legal compliance.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 6 of 42

This Code of Practice states the EA's:

- a) Commitment to safety, health, environment and wellbeing
- b) Expectations of framework partners and other suppliers in respect of their health, safety, environmental, and welfare performance;
- c) Arrangements for suppliers to report incidents and statistics used in benchmarking our overall performance.
- d) Arrangements for assuring that the standards are being applied in practice, and defining any corrective actions required.

A working group is reviewing initiatives and improvements related to wellbeing at work, and the findings will be included in the updates to this document accordingly.

1.2 Environment Agency HSW Values and Commitment

The graphic features a background of green grass and a blue sky with clouds. At the top left is a blue and orange 'Safe and well' logo. At the top right is the Environment Agency logo, which includes a stylized green tree icon and the text 'Environment Agency'. Below the logos, the main text reads: 'We act on the belief that all harm can be prevented. Working here will improve health and wellbeing.' Underneath this, it says 'As an Environment Agency employee, I will:'. This is followed by nine icons in rounded rectangular boxes, arranged in three rows of three. Each icon represents a value: a lightbulb for 'Take the initiative to make this a safe, healthy and well place'; an eye for 'Look out for others and thank those that challenge me'; a heart with a checkmark for 'My wellbeing, health and safety are all equally important'; a thumbs up for 'Be competent & confident'; a speech bubble with a circular arrow for 'Plan effectively and respond properly when risks change'; a hand with a stop sign for 'Stop if I feel I am putting myself or others at risk'; a person with a book for 'Learn when things go wrong'; an ear for 'Take time to share with, listen to and learn from others'; and a ribbon award for 'Encourage & recognise those that make this a better place to work'. At the bottom left is a signature of Sir James Bevan, and at the bottom right is a signature of Emma Howard Boyd.

Safe and well

Environment Agency

**We act on the belief that all harm can be prevented.
Working here will improve health and wellbeing.**

As an Environment Agency employee, I will:

- Take the initiative to make this a safe, healthy and well place
- Look out for others and thank those that challenge me
- My wellbeing, health and safety are all equally important
- Be competent & confident
- Plan effectively and respond properly when risks change
- Stop if I feel I am putting myself or others at risk
- Learn when things go wrong
- Take time to share with, listen to and learn from others
- Encourage & recognise those that make this a better place to work

J.D. Bevan
Sir James Bevan
Chief Executive

Emma Howard Boyd
Emma Howard Boyd
Chair

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 7 of 42

1.3 Environment Agency Environmental Commitment

V1 November 2016



Our commitment to the environment

We're committed to creating a better place and providing a cleaner, healthier environment and it's our duty to lead others to be as good as they can be.

We need to understand the risks and opportunities we face, as well as the impact we have on the environment through others, such as our suppliers and customers.

We will:

-  continually improve our environmental performance;
-  ensure compliance with legislation and the requirements of international standards such as ISO14001;
-  monitor, review and learn, measuring our efficiency to build on positive behaviour, prevent pollution and reduce environmental damage;
-  identify opportunities and risks to understand our environmental impact and positively inform the decisions we make;
-  give colleagues the opportunity to give us their views and help us innovate;
-  understand the life cycle of our highest risk activities and services, working with customers to identify their environmental needs, and with suppliers to be resilient and transparent in our purchasing while influencing others to improve their own performance;
-  recognise the impact of global environmental challenges such as climate change, land and water use and quality, and the availability of resources so we continue to protect and enhance the environment.


Sir James Bevan
Chief Executive


Emma Howard Boyd
Chair

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 8 of 42

1.4 EA SHE&Q Management Systems

Our management systems for quality and environment are accredited to ISO's 9001 and 14001 respectively, and our H&S management system aligns with the requirements of ISO 45001

1.5 Health, Safety, Environment and Wellbeing Forums and Groups

Forums and Groups will be established where this is considered to be a benefit to the framework community for the sharing of information, innovation, best practice and learning to allow collective work to solve common problems and improve performance. Representatives from supply chain partners including Principal Contractors, Principal Designers and Designers will be invited to lead and attend framework meetings, along with representatives from the Area Operations teams and other EA colleagues involved in procuring and managing construction work.

1.6 Supplier Development Review

SHEW performance will feed into framework level supplier development. This will include compliance with the standards and expectations set out in this document.

The EA will review its own performance against compliance of the SHEW Code of Practice.

1.7 SHEW CoP Review

This document will be subject to a periodic review by the EA and supported by supply chain partners.

The EA reserves the right to amend this document, in consultation with representatives of our key framework partners, as and when appropriate.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 9 of 42

Section Two

2. General

(Applicable to all projects/sites)

2.1 Considerate Constructors Scheme (CCS)

Environment Agency construction projects longer than six weeks **and** with potential to have a significant impact on the public, e.g. near schools, recreation areas, and residential areas will register with the Considerate Constructors Scheme. Projects that meet this criteria wishing to opt out of CCS will do so only with dispensation from Environment Agency's SHEW (Construction) Senior Business Partner. There must be reasonable grounds for exemption, (such as works within a restricted access site where there will be minimal impact on public and other businesses).

CCS posters must be displayed on all public site information boards and additional banners erected where they are clearly visible to the public.

Findings from CCS audits must be promptly copied into the project team and the Environment Agency's Senior Health, Safety and Wellbeing Business Partner.

2.2 Socially Aware and Community Conscious Employer

Contractors and Designers are expected to:

- Use local employment and local training initiatives where appropriate and practicable;
- Look for opportunities to enhance community benefits
- Encourage a diverse supply base that includes local Small and Medium Enterprises, social enterprises and the Voluntary in the Community Sector.
- Develop and integrate modern apprenticeship opportunities and encourage the consideration of diversity and equality in our decisions. Demonstrate compliance with the Equality Act 2010 through the work delivered. Projects and community engagement should be inclusive and accessible for all. The Environment Agency "[Access for All Design Guidance](#)" is available to support this approach.
- Adopt a policy of equal opportunities to encourage a diverse workforce;
- Offer training and development to all staff, including the client to meet individual, project and company needs.

2.3 Overarching Sustainability Requirements and behaviours

We expect our Suppliers to understand their supply chains and ensure that this approach is embedded throughout them. All suppliers will:

- Ensure that that all supplier staff working on our behalf are aware of and are trained and competent to deliver the sustainability requirements laid out in this schedule.
- Engage with us and the wider industry to share best practice, innovation and lesson learned; improve and develop best practice sustainability standards and support trials of innovative products and materials.
- Help achieve, and where possible exceed, our e:Mission and sustainability targets where they are relevant to this Framework. This includes any changes or amendments to these targets during the life of the contract.
- Work towards having a relevant Environment Management System (EMS) accredited by UKAS to the standard of ISO14001:2015 or equivalent within 2 years of contract award. A staged approach to this standard will be acceptable for Small and Medium Enterprises (SMEs).

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 10 of 42

- Engage in, attend and implement training or events that you are invited to by the EA. This may include but is not limited to workshops, webinars, toolbox talks, audits and training. The Contractor may be invited to take part in our supplier development programme.
- Sign up to the [Supply Chain Sustainability School](#)
- Adopt a lifecycle approach to the identification and management of environmental and social risks;

2.4 Health Surveillance/Monitoring

Risk assessments (including Designer's) and method statements should have full regard for managing health risks associated with the work. For activities that pose a significant health risk, suitable control measures should be in place, and appropriate remedial actions identified.

Organisation arrangements should be in place for access to occupational health for surveillance and referrals related to work related medical issues. Health checks should be made available for direct employees, and should include audiometry, spirometry, HAVs assessment, etc. as appropriate and depending on the exposure to the health risks.

A health surveillance programme should be available to employees exposed to significant health hazards associated with their work activities, (vibration, noise, dust, asbestos, lead, COSHH substances, etc.).

For activities that pose a significant health risk suitable controls measure should be in place, and appropriate remedial action identified, (such as control of trigger times, PPE, RPE, etc.).

2.5 Occupational Health/Hygiene Promotion

A health promotion programme should be in place, (e.g. monthly health awareness theme, participation in campaigns, active management of health issues on site, etc.).

Where appropriate occupational hygiene assessments will be in place to determine the nature and magnitude of exposure to health risks associated with the foreseeable work activities and substances present on sites.

2.6 Welfare

In addition to legislative welfare requirements, construction sites will have:

- Housekeeping to a high standard for all welfare facilities, (e.g. regular inspection and cleaning programme);
- A skin care safety board, (e.g. DEB or similar) complete with a 'protect, cleanse, restore' system on site;
- A separate sun barrier cream dispenser to at least factor 15 and at least 4 star UVA protection readily available at all times.

2.7 Welfare on Short Duration or Transient Sites

A transient site/project, (construction or other work related activity) is either where short duration work, (e.g. up to one week) is carried out at one or many locations, or is of a longer duration carried out while moving over a continuous geographical area (e.g. linear grass cutting operations or embankment routine maintenance, etc.). Suitable arrangements for drinking water, hand cleaning, access to hot water and sun-cream (where relevant) should be established. Also, shelter/shade from the elements, be it wind, rain or sun, and this can be a structure or a vehicle.

Only if it is specified in the Construction Phase Plan would it be appropriate to make arrangements to use facilities provided by the owner of existing premises in which the work is being undertaken,

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 11 of 42

local public facilities or the facilities of local businesses. Clear documented agreement should be made with the provider of the facilities; it should not be assumed that local commercial premises can be used without their agreement. Workers should be made aware of the agreed welfare arrangements and conditions to use the facilities and informed of their location.

In all cases the standards of CDM 2015 Schedule 2 must be provided or made available.

Facilities must be:

- Readily accessible to the worksite, (e.g. within a 10-minute walk or drive);
- Open at all relevant times and be at no cost to the workers;
- Of an acceptable standard in terms of cleanliness, (e.g. regular cleaning programme established) and have hand-washing facilities.

2.8 Travel

The adverse effects on the environment related to travel can be significant. Every effort must be made to reduce the air quality and emissions impact caused from delivery and travel linked to construction work, including from the supply chain. It is anticipated that no flights will be required to be undertaken by suppliers in delivering construction work on behalf of the EA, but if this unavoidable then dispensation from the relevant Environment Agency Project Executive f is required.

2.9 Construction Phase Plan (CPP)

Where appointed, Principal Contractors (PC) must provide a CPP to the Principal Designer (PD) or CDM Advisor as applicable prior to the start of the construction phase. Sufficient time, (ideally 10 working days) must be allocated to review the suitability of the CPP, and advise the Client whether it is sufficiently developed to allow construction to commence. The principles of the Principal Designer SHE 'Stop - Go' Checklist should also be considered and implemented as appropriate throughout the design phase.

For single-contractor projects, the contractor must provide a CPP to the Client for review.

Work, including site set-up, mobilisation and advanced works can only commence on site once the Client has given authorisation in writing.

Construction Phase Plans should be subject to regular review during the lifecycle of the project and in response to significant change.

2.10 Environmental Action Plan (EAP)

The EAP forms part of the contract documents issued to the contractor for adherence to during the construction works. IT summarises the actions required to be implemented, and sets out specific objectives and targets defining the way in which environmental risks need to be addressed. It also details roles and responsibilities of those involved in the proposal, and applies to temporary and permanent works.

The EAP is usually created by the National Environment Assessment Service (NEAS) when there are environmental aspects on or around the construction site. On smaller schemes the local Fisheries Biodiversity and Geomorphology team (FBG) will provide relevant information on environmental risks. NEAS are responsible for agreeing any changes to the EAP and for signing off, or agreeing to sign off the actions. The Principal Contractor in liaison with the Client are responsible for advising NEAS on any changes to method statements or the planned construction work as these may result in changes to the EAP or additional consultation with statutory consultees. NEAS will assess the significance of these changes and determine the appropriate course of action.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 12 of 42

The requirement for an EAP will depend on the size of the scheme and associated environmental risks, but it is the contractor's responsibility for ensuring the EAP commitments are delivered.

2.11 Materials and Equipment

Materials and equipment must be suitable for the task and used in accordance with manufacturer's/supplier's instructions, including testing and calibration as necessary. Adequate, appropriate training must be provided to the user, including awareness of a relevant risk assessment as well as the provision of specific PPE as necessary.

Materials and equipment, when not in use, must be stored safely. Safe stacking methods should always be adopted and good access/egress must be maintained. Segregation and clear signage should be in place where necessary. Handling should be carried out by mechanical means where possible to avoid manual handling injuries. Loading and unloading activities should only be carried out by authorised personnel in compliance with LOLER requirements.

2.12 Plant – Operational Impact and Air Quality

When selecting and using plant consideration must be made to minimise environmental impact from emissions. This includes carbon as well as local air quality impacts of nitrogen dioxide, sulphur dioxide and particulate matter emissions. All plant provided for use in an area where legal local air emission standards are in place must as a minimum meet that standard. Low carbon fuel or alternative fuel should also be considered.

In addition, all plant will be properly maintained to ensure continued operation at the most efficient levels.

We encourage innovation and technology that results in reduced emissions and air pollutants where this does not affect operational, safety or cost requirements.

2.13 Portable Appliances

All portable appliances on site should be included in a Portable Appliance Test (PAT) register. Appliances should be tested by a competent person in accordance with legislation and manufacturer's instruction. A label or sticker should be clearly visible on the appliance that identifies the last test date, and/or the next test due date.

2.14 Fire

Suitable safe systems of work must be implemented via risk assessment of hot work activities. As a minimum requirement, this would include awareness training of the action to take in an emergency. A Muster Point should be established for evacuation purposes, and fire extinguishers appropriate for the task must be kept readily available for all hot work activities. Each extinguisher must have an in-date service sticker attached, and there should be evidence the operatives know how to use them. A risk assessment should identify when appropriate flame retardant PPE, (coveralls, hi-vis jacket or vest, etc.) should be worn for hot work activities.

Fire risk should be assessed and controlled, with specific reference to site accommodation, welfare facilities and fuel storage. A documented procedure for the action to take in a fire emergency, including an emergency evacuation exercise schedule and the location of a suitable muster point. Everyone operating out of the facility must be made aware of the procedure. There should also be evidence that the fixed equipment has been tested for safety.

2.15 Management of Change

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 13 of 42

During the construction phase of a project, changes often occur for a variety of reasons. Our experience is that an inappropriate response to change can result in teams or individuals deviating from the agreed safe system of work. For example weather conditions, ground conditions, availability of plant and equipment, failure or faults in work equipment, availability of sufficient competent people, or the realisation that the planned and agreed safe system is not workable can generate changes. Often for good intention, teams or individuals decide to proceed with a work activity outside of agreed and documented risk assessments which significantly increases risk and can result in an accident if there is no effective review of the risks and control measures.

Recognising our experience from numerous safety critical incidents where agreed safe systems of work were not followed after a change, the EA fully supports and encourages work to be paused on site to allow for the risks to be re-assessed and alternative safe system of work to be documented, agreed and briefed.

All operatives must be briefed on the requirement to pause work and inform their supervisor/manager when there are changes that have an impact on their ability to follow a planned safe system of work, or if they are concerned that the activities are unsafe.

There may be a need to involve others in the review of risks and methods of work, such as the PD and/or the EA PM, etc. The work activity should only recommence when risks have been reassessed, appropriate system of work agreed and briefed to those undertaking the work. The relevant risk assessment and method statement must be updated and a record maintained.

The action to take when a significant change occurs must be emphasized during site induction and then re-enforced via regular briefings and toolbox talks. Line managers must encourage and support this culture through reacting positively when teams pause work and report issues with systems of work and changes to them.

2.16 Accident/Incident and Near Miss Notification and Review

All accidents and incidents must be reviewed to identify the possible root cause and actions to implement to prevent a recurrence. They must be reported in accordance with the criteria in Appendix A of this document:

Health and Safety incidents and near misses should be reported by following the guidance procedure in Appendix A.1 of this document.

Environmental incidents and near misses should be reported by following the guidance procedure in Appendix A.2 of this document.

Note: Environment Agency Area Operations teams will follow their own reporting procedures:
<http://intranet.ea.gov/peoplematters/help/62918.aspx>

A copy of the EA incident and near miss reporting procedures shall be displayed in a prominent position in the site office and in the welfare accommodation, (Appendix A.1 and A.2). The reporting of Injuries, Diseases and Dangerous Occurrence Regulations, (RIDDOR) should be complied with when applicable.

All accidents and incidents must be reviewed to identify the root cause and actions to implement to prevent a recurrence. Initial reports for such incidents must be followed by a written report using the form in Appendix B, or a comparable form containing this information.

2.17 Materials Management/Resource Efficiency

Contractors and Designers will:

- Use Site Waste Management Plans effectively on all schemes.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 14 of 42

- Take advantage of opportunities for standardisation, prefabrication, off-site manufacture and locally sourced materials. As prefabrication or off site manufacture can be a dichotomy with locally sourced materials.
- Encourage innovation of cost-effective low carbon solutions.
- Prioritise, as far as practicable, energy efficiency initiatives on site and in design, such as connection to the grid, insulated cabins, fuel efficient plant and vehicles, low carbon concrete.
- Use information available from the Environment Agency's Procurement Sustainability Risk Assessments for each project.
- Adopt a zero-waste approach.
- Specify, design, source and prioritise materials and products from recycled or renewable sources, and avoid virgin, and as far as practicable, finite resources.
- Use on-site borrow pits where appropriate to win material with subsequent habitat creation.
- Use the [CL:AIRE register of materials](#) to source material and to offer excess material
- Use available design tools to maximise resource efficiency, e.g. '[WRAP Designing out Waste Tool for Civils Projects](#)' and the [Construction Carbon Calculator](#) during options design and construction stages to identify, investigate and implement carbon reduction opportunities.
- Make the best use of available materials, minimise the volume of materials required, minimise wasted materials (i.e. adopt a zero waste principle and design for passive/efficient operation).
- Seek to use materials that can be sourced locally and reduce the carbon impact of transportation.
- Be compliant with relevant Government Buying Standards, providing evidence of compliance when requested. This is to include the use of environmentally preferable chemical products where they exist (e.g. low-VOC paints).

2.18 Waste

Site Waste Management Plans (SWMP) must be used effectively on all sites, and a zero approach to waste must be adopted. The SWMP must be reviewed throughout the project to ensure it is current and takes into account any changes in design and construction.

The 'waste hierarchy' should be implemented through effective materials/Waste Management Plans to maximise opportunities for re-use/recycling, and to minimise waste sent to landfill. Re-use should be considered across the Framework and from within the wider supply chain.

2.19 Carbon Management

The reduction in carbon should be a serious consideration for all aspects of a construction project and suppliers must:

- Support delivery of the EA's E:mission targets on lifecycle carbon;
- Design, construct and operate assets, developing the lowest impact solutions over their full lifecycle;
- Create innovative low cost solutions that use natural resources wisely and reduce consumption by using materials efficiently across all supply chains to reduce waste, carbon and water use and consider and reduce the embodied impacts;
- Use ERIC, (carbon planning/accounting tool) to identify and deliver low carbon solutions and review the tool periodically;
- Prioritise, as far as practicable energy efficiency initiatives on site and in design, such as connection to the grid, insulated cabins, fuel efficient plant and vehicles, low carbon concrete.

2.20 Climate Change Risk and Adaption

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 15 of 42

Suppliers should consider the impact of extreme weather events and a changing climate on the delivery of construction work. When requested to, suppliers should be able to provide evidence of the impacts of climate resilience and how the impacts have been considered within their organisation, (i.e. supply chain premises and site operations). To help contractors assess this, a Business Resilience Health Check, (or similar applicable tool) may be used:
<http://www.businessresiliencehealthcheck.co.uk/>

Suppliers may be required to produce supply chain maps for key and/or vulnerable materials as part of this Framework, and may be selected to work with the Agency as part of its work to help understand where the risks currently are for its key and/or vulnerable materials.

2.21 Timber

Timber must be specified, sourced and purchased from legal and sustainable sources, with an audit trail from forest to end use in accordance with the [Environment Agency's timber purchasing requirements](#). Recycled timber should be considered and used ahead of virgin timber where appropriate.

All potential purchases of tropical hardwood, regardless of size and value, must receive Environment Agency internal approval via a business case authorised by the Sustainable Commercial Advisor and the Director of Operational Services FCRM before it can be purchased.

2.22 Environment Agency SHEW Assurance

HS&E audits of construction projects will be undertaken by a representative of the EA Construction Safety, Health, Environment & Wellbeing, (SHEW) Team. Findings will be communicated to those directly involved with the project, with a handshake on key findings and actions on the day. Following peer review, a final report will be issued confirming remedial actions assigned as necessary. Actions from an audit must be closed out in accordance with the agreed timescale by the relevant Duty Holder.

Where an auditor deems an unsafe act or condition to be of significant concern, (e.g. serious injury potential or significant environmental harm) they will have the authority to stop the work activity and notify senior management. The work will not re-commence until the auditor is satisfied that the deficiencies have been adequately addressed.

Section Three

3. Principal Designer and Designers

Health, Safety and Environment

Health and Safety Specific

3.1 Construction (Design and Management) Regulations 2015 (CDM 2015)

3.1.1 Principal Designer (PD)

In liaison with the Client, Principal Contractor, Designers and Contractors the Principal Designer has an important role in influencing how the risks to health, safety and the environment should be

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 16 of 42

managed and incorporated into the wider management of a project. The Principal Designer's role involves effective communication and coordination of the work of others in the project team to ensure that significant and foreseeable risks are managed throughout the design process.

3.1.2 Designers

Designers include architects, architectural technologists, consulting engineers, MEICA officers and advisors, landscape architects, quantity surveyors, interior designers, temporary work engineers, chartered surveyors, technicians or anyone who specifies or alters a design. They can include others if they carry out design work, such as Principal Contractors, and specialist contractors, e.g. an engineering contractor providing design, procurement and construction management services. Where Clients become actively involved in designing in relation to their project, they may also be considered to be designers.

3.2 Competence

The competency of a PD and of Designers must meet the requirements set by the Consultants Health & Safety Forum. This includes: training, qualifications (e.g. relevant degree), experience, supervision, etc.

Designers must have a technical knowledge of the construction industry relevant to the project they are assigned to. Also, the understanding and skills to support the management and co-ordination of the pre-construction phase, including any design work carried out after construction begins.

Each designer shall ensure arrangements are in place to assess the competency of professional and supervisory staff against the requirements of their company's safety, health and environmental management systems. This condition applies to permanent and temporary works.

3.3 Design Risk Assessments and Buildability Statements

All designers need to address their design risks; site wide and task specific. They will ensure that all foreseeable risks are identified and those which cannot be eliminated are mitigated by design options to reduce the risks. Suitable controls must be identified by the designer for any residual risks. These residual risks or mitigation requiring specific controls, or which may be unusual or not immediately apparent to the contractor shall be clearly identified. As a minimum, this will involve effective use of SHE boxes on drawings.

Occupational health issues must be given consideration, as well as safety issues, both in terms of the "buildability" of the design, and also in terms of the ongoing use and maintenance of the asset. For any COSHH substances specified as part of a design a Material Safety Data Sheet, (MSDS) must be made available to identify the specific health risks the substance poses.

A task specific 'buildability' statement will be provided by each designer, that identifies the assumptions made in their design, the anticipated controls and demonstrates that the risks incurred by their design can be managed appropriately. This does not dictate methods of work to a contractor, only demonstrates that the designer has complied with their obligations.

Hazard maps must also be produced by the designer for WEM delivered works. Other contractors and designers for other frameworks will be expected to comply by end of December 2018.

Designers must liaise on a regular basis with the Principal Designer to discuss their design risk assessments, buildability statements and hazard maps.

Designers will ensure that:

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 17 of 42

- a) Hazard information which may be relevant to safety during the construction phase, for example underground or overhead services, lifting operations, traffic management etc. are identified for inclusion in the pre-construction information. Also, historical information such as previous land uses.
- b) Hazard information which may be relevant to health during the construction phase, for example processes creating noise, dust, vibration or use of COSHH substances, etc. are identified for inclusion in the pre-construction information. Also, historical site information such as burial sites, abattoirs, tanneries which may have chemicals and pathogens. . Also railway land may have residues of heavy metals, asbestos, etc.
- c) Hazard information which may be relevant to operators or maintainers of the asset, for example confined spaces, mechanical systems etc. are identified for inclusion in the health and safety file.
- d) Hazard information which may be relevant to demolition or dismantling of the asset, for example structural principles, stored energy etc. are identified for inclusion in the health and safety file.
- e) Detailed consideration, in conjunction with the Principal Contractor or site operator, for welfare requirements appropriate to the location and work activity.
- f) For any changes in design, including on-site changes, a review of the design risks will be undertaken, involving the Principal Designer in the review process before implementation.
- g) They highlight need for temporary works that will be foreseeably be required to construct their design

3.4 Design criteria – Red Amber Green (RAG) List

Designers will use [the Red Amber Green \(RAG\) list](#) when considering options in both design and construction phases. Where work is to be contracted outside the framework, they will ensure that the organisations used also comply with the RAG list requirements.

Designs which require sign off for Amber or Red items need to be identified early and justification provided by the designer, in conjunction with the Principal Designer to allow sign off by the designated person.

The principles of the Principal Designer SHE 'Stop - Go' Checklist should also be considered and implemented as appropriate throughout the design phase.

3.5 Public Safety Risk Assessment (PSRA)

Where formally identified in consultation with the EA Area Lead PSRA Assessor, Designers are required to complete a PSRA for all new and existing EA assets, including assets for which the EA has assumed ownership where work is being proposed. The PSRA will be completed in accordance with the following procedure.

Designers are required to complete the PSRA in compliance with the format in Operational Instruction 733_11 and the Designers' PSRA Assessor will be provided with training by the EA, equivalent to the R79 PSRA training course. Designers' organisations are responsible for ensuring the competency of their design teams. For example, the EA operate a three-year competency review on internal PSRA Assessors that includes a peer review by an Area Lead PSRA Assessor.

Completed PSRA deliverables are required:

1. At the end of appraisal, (included in any detailed design tender information).
2. At the end of detailed design, (prior to construction commencement) or
3. For design and build, completed prior to construction of any individual asset.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 18 of 42

The Designer's PSRA Assessor is expected to liaise with the local Area Lead PSRA Assessor, (via the senior user) during the design development and prior to any deliverable. The Designer PSRA is signed off by the EA Senior Assessor. When nearing completion of the work on the asset, the local Area and Designer's PSRA Assessors should carry out a final review of the works to identify any additional requirements and instigate work prior to handover in conjunction with the Client. A copy of the final completed signed off PSRA should be held in the asset Health and Safety File.

Further information/guidance related to Public Safety Risk Assessment of assets in the water environment - Recreation, water, and land access can be found at: <http://intranet.ea.gov/handlers/GetDocumentById.ashx?id=8648>

3.6 Traffic and pedestrian management

Designers must identify in their designs the assumed access and egress routes to and from sites, with due consideration to the assumed plant to be used including deliveries of materials.

Designers must outline in their design on-site traffic management assumptions on drawings with regards to access points, compound locations, plant and vehicle movements, pedestrian movements, any space constraints, ground bearing capacities, culverts, cattle grids, bridge weight capacities and height/width restrictions, etc.

3.7 Ground Penetration

Designers' must be competent to recognise, manage and control the risks to avoid underground services. This would include training which provides sufficient awareness to inform decision making on application of the risk control hierarchy with adequate consideration for controlling risks by, design changes, service diversion and isolation. Competence can be demonstrated through completion of the 'Best Practice in Avoiding Underground Services' (BPAUS) training or equivalent training on 'Avoiding Services and Utility Plant'.

Designers must ensure that so far as reasonably practical scheme designs minimise the potential for contact with underground services, structures, obstructions, and features such as ephemeral streams which are none of the foregoing and are not archaeological, but can introduce unexpected flows, voids, instability, etc. Others may be caverns, swallow holes, or old workings/ mines. Reference should be made to CIRIA guides [C681](#) and [C754](#), and to 'Dealing with munitions in marine sediments' published by The Crown Estate.

Designers must use adequate information regarding the presence of services and structures during design and construction, and only use justified assumptions. To inform decision making at design and appraisal, adequate information on the presence and location of underground services will be provided through application of PAS 128:2014, Specification for underground utility detection, verification and location. A desktop search of statutory utility supplier services information, (Survey Category Type D) must be available at Gateway 1, (or earlier as part of appraisal) to inform early decision making, by indicating the relative risk of options and, where practicable, elimination of those risks.

Service plans and drawings should be viewed beforehand, but these should not be considered as conclusive evidence that no services are in the excavation location, (e.g. service drawings rarely show connections to properties). An onsite walkover survey should also be undertaken. Prior to any intrusive construction work or investigation, (site investigation, archaeology, etc.) a specification and scope of on-site services must be prepared for those undertaking the investigation.

Projects will be subject to an on-site services survey compliant to PAS 128 stages A-D carried out by a competent supplier. The requirement for Survey type B using GPR can be risk assessed

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 19 of 42

out where this is deemed not reasonably practicable. This decision must be recorded and approved by the Client and Lead Designer. Surveys can be commissioned by framework suppliers or directly by the Environment Agency. Service searches and on-site surveys must be included in the project programme for completion in sufficient time for review prior to any intrusive works on site.

3.8 Working near Overhead Cables

Consideration must be given at the design phase to eliminate the potential to come into contact with overhead cables, in particular power lines, (e.g. consider diversion, isolation and/or the use of physical controls such as 'goal posts', etc.).

All overhead services crossing or adjacent to the works area and access routes should be clearly highlighted on Designer's hazard maps, so that the Principal Contractor or Contractor for single-contractor projects is made aware if the potential exists.

Where applicable all designs must be prepared in accordance with the HSE Guidance Note GS6 – 'Avoiding danger from overhead power lines'.

3.9 Work at Height

When designs include temporary work platforms, access ways, excavations, etc., stairway systems will be prioritised over ladders.

When designing structures that require operation, use or maintenance at height, then the design must ensure documented application of the principles of prevention when determining preventative measures. Specifically:

- Avoiding working at height, for example designs that permit lowering something to ground level allowing for use, maintenance or cleaning.
- Designs that eliminate access to fragile surfaces
- Provision of fixed guard rails to eliminate falls from height and appropriate means of access not involving ladders.
- Use of collective equipment such as external advance guard rails
- Provision of anchorage points and systems for work positioning and fall arrest
- Minimise the distance or consequences of a fall from height

3.10 Temporary Works Design

Temporary works (TW) are the parts of a construction project needed to enable the permanent works to be built. Usually the TW are removed after use (e.g. access scaffolds, props, shoring, excavation support, falsework and formwork, etc.). It is important that the same degree of care and attention is given to the design of the TW as to the design of the permanent works. The principles of BS5975 Code of Practice for temporary works procedures and the permissible stress design of falsework, must be applied to the design, installation, alteration and removal.

The TW Designer (TWD) should have undertaken TW training and have experience appropriate to the associated hazards and risks. TW designs shall comply with requirements for design risk assessments, buildability statements and RAG List in the same manner as for permanent works. A temporary works schedule should be produced early in the project to identify information and surveys required and included in the CPP

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 20 of 42

The TWD must liaise on a regular basis with the Principal Designer to discuss the design risk assessments, buildability statements and RAG List.

Particular consideration should be given to:

- Stability requirements, lateral restraint and wind uplift on untied decking components;
- Designing TW that can be erected, inspected and dismantled safely, including how striking will be achieved;
- Selecting adequate foundations or providing information to ensure adequate foundations are used;
- Ensuring 'Working Drawings' and not 'Preliminary Drawings' are provided for the construction phase.
- Providing relevant information to the person fulfilling the role of Temporary Works Coordinator (TWC) and Temporary Works Supervisor (TWS), so that associated tasks can be completed safely

TW design checks will be carried out according to the complexity and category of the temporary works. On completion of the design check, a certificate (or similar method of verification) will be issued confirming that the design complies with the requirements of the design brief, outlining the standards/technical literature used and the constraints or loading conditions imposed. The certificate will identify the drawings/sketches, specification, and methodology that are part of the design and signed by the TWD. The TWC will be responsible for the arrangement of TW design approvals prior to construction.

Refer to the enclosed link for information regarding TW design check categories: ([The management of temporary works in the construction industry](#))

3.11 Working Close to or Over Water

Designers must consider implications of working close to or over water caused by their design, and apply principles of prevention to decisions to control risks. Designers must also take into consideration the requirements set out in Appendix C of this SHEW CoP re. 'Control Zone'.

Environment Specific

3.13 Designer Compliance

Designers will ensure:

- a) They demonstrate application of principles of prevention in their design decision making process and compliance with the Environment Agency RAG List.
- b) Delivery of the actions assigned to them in the Environmental Action Plan (EAP), (environmental risk assessment) and will work with the Environmental Clerk of Works (or others) to ensure this is done effectively and that actions are completed and signed off.
- c) That environmentally sensitive areas are located and segregated to protect them from harm. These areas must be clearly marked on drawings, Hazard Maps and included in site rules.
- d) They avoid impact to the environment by planning and managing their activities appropriately, and by maximising environmental opportunities.
- e) Suitable information is provided on environmental risks associated with any design
- f) Any seeds or plants selected for planting schemes must comply with local *provenance standards stipulated by Flora Locale* or other competent authorities such as Natural England or the Forestry Commission and must not include non-native species particularly those listed within [Schedule 9, Wildlife & Countryside Act 1981](#)
- g) Projects are surveyed for invasive non-native animals and plants listed on [Schedule 9, Wildlife & Countryside Act 1981](#), such as Japanese knotweed and giant hogweed. Guidance on identification of these species is available from the [Non-Native Species Secretariat](#).

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 21 of 42

3.14 Pollution Prevention Planning & Provision

Designers must engage with local EA Environment Officers to make use of their local knowledge and expertise in planning and undertaking works in or near to watercourses. They must also minimise in-channel works as far as practicable and implement suitable mitigation measures where required, considering active spawning seasons and other restrictions on the sites.

Designers must also consider the pollution risks associated with the design (e.g. in situ concrete/use of grout) as part of the designer's risk assessment process.

3.15 Resource Management

Designers must use:

- The Environment Agency carbon accounting tool 'ERIC' during design to reduce carbon of the proposed solution. A copy will be sent to the contractor to update during construction.
- The [CL:AIRE register of materials](#) to help identify required and excess materials for schemes.
- Site Waste Management Plan effectively, to identify the design actions that have reduced waste and the predicted waste types to help the Contractor plan for effective waste management.
- Design low carbon, resource and waste solutions, taking account the lifecycle of the scheme.
- The Environment Agency guidance "*Alternative hardwood timbers for use in marine & freshwater construction*" when specifying and designing the required performance for any hardwood timber element.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 22 of 42

Section Four

4. Principal Contractor and Contractors

Health, Safety and Environment

Health, Safety and Wellbeing Specific

4.1 Construction (Design and Management) Regulations 2015 (CDM 2015)

4.1.1 Principal Contractor (PC)

The PC is expected to take care in the selection and supervision of subcontractors. Particular attention should be given to assessing the competence and experience of labour only subcontractor personnel and of plant operators.

The PC must plan, manage and monitor the construction phase and coordinate matters relating to health and safety during the construction phase to ensure that, so far as is reasonably practicable, construction work is carried out without risks to health or safety.

The Environment Agency will hold the PC accountable for the performance of their supply chain in meeting these standards during the construction phase of the project.

4.2 Competence

4.2.1 Management/Supervision

Each Framework Partner and CDM duty holder is responsible for strictly ensuring the competence, including physical capability, of each organisation, team and individual to carry out their undertaking.

The EA also require the following minimum standards:

a) Anyone acting as:

- Site Manager and/or any person in control of the site
- Engineering and Construction Contract (ECC) Site Supervisors
- Area Operations team members supervising works

Must hold as a minimum a current CITB Site Management Safety Training Scheme (SMSTS) or IOSH Managing Safely in Construction qualification.

Exceptions to this requirement require dispensation from the Environment Agency's SHEW (Construction) Senior Business Partner.

b) Everyone acting in the roles described above, must have attended CIRIA's 'Environmental Good Practice on Site' training or CITB 'Site Environmental Awareness Training Scheme' within the last five years. Contractors may wish to provide comparable in-house environmental training. This must be approved by the Environment Agency's Senior Health, Safety and Wellbeing Business Partner

c) All supervisors whether employed by the Principal Contractor or their supply chain will be expected to hold the CITB Site Supervisors Safety Training Scheme (SSSTS) qualification and the CITB/CIRIA environmental awareness training or an approved equivalent training course, (e.g. contractor's own internal course). For site investigation activities, supervisors can hold an

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 23 of 42

alternative qualification such as the IOSH 'Safe Supervision of Geotechnical Sites' qualification, in lieu of SSSTS.

d) Each Contractor will ensure that arrangements are in place to assess the competency of professional and supervisory staff against the requirements of their own company's safety, health and environmental management systems.

e) All sites must have suitable first aid provision, based on the outcome of a first aid needs assessment which will be identified in the Construction Phase Plan. This will include provision of sufficient first aid equipment, facilities and personnel. As a minimum sites must have at least one First Aider qualified to 'Emergency First Aid at Work'. Arrangements must be made for is suitable cover in the event of absence of the First Aider from site.

4.2.2 Operative

Everyone working on site, including visiting workers, shall have suitable evidence of competency to fulfil their role, (e.g. Construction Skills Certification Scheme (CSCS) card, or [partner card scheme](#) schemes.). The card held must relate to the occupation and activity undertaken on site – right card for the job.

This does not apply in the case of:

- Infrequent visitors who have been inducted and are escorted at all times.
- Any person with a statutory right, for example the emergency services (Police, Ambulance, Fire), HSE Inspectors, or Environment Agency Officers undertaking their legal duties.

All plant operators shall be trained and certified to Lantra, CSCS partner card scheme, such as Construction Plant Certification Scheme (CPCS), Association of Lorry loader Manufacturers and Importers (ALLMI), International Powered Access Federation (IPAF) standards. The National Plant Operators Registration Scheme (NPORS) standard is now acceptable, provided that the card carries a CSCS logo and vocational qualification t can be demonstrated to achieve competent operator status within two years of receiving a trained operator card. This mirrors the requirements of the CPCS scheme with respect to trained and competent operator cards.

An NPORS card which does not have a CSCS logo could still be accepted under certain conditions as a supplementary card to an operative's main trade. For example, if a steel erector holds a relevant CSCS card for their main occupation i.e. Steel Erector, but holds a supplementary card to operate plant and equipment as part of their job i.e. an NPORS card for a Mobile Elevating Work Platform then this is acceptable.

Operatives carrying out vehicle marshal duties whilst on site must have attended a recognised vehicle marshal training course or an alternative approved by the Environment Agency's Senior Health, Safety and Wellbeing Business Partner.

If ground investigation works involve drilling, then the competency requirements of BS EN 22475: Part 2 recommendations should be followed. The British Drilling Association (BDA) provides information and clarification on the competency requirements of drilling operatives. For more information visit: www.britishdrillingassociation.co.uk

In particular Lead Drillers should be competent to the 'National Vocational Qualification', (NVQ) level 2 – 'Land Drilling', or equivalent, (RCF, QCF, etc.). They should also hold a 'Construction Skills Certification Scheme' (CSCS) Blue Skilled Worker card confirming 'Lead Driller' on the reverse of the card.

Support Operatives should be competent to the NVQ level 2 – 'Drilling Support Operative', or equivalent, (Vocational qualification). *Note: All Support Operatives should be registered onto a scheme and then be fully compliant within two years.*

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 24 of 42

4.3 Project/Public Interface

Risks to the public must be assessed and suitably managed on all sites. There must be specific management controls where construction work is adjacent to or affects public highways, footpaths and bridleways. This should include a specific risk assessment, and where appropriate compliance with conditions specified in the licence issued by the relevant highway authority. The Environment Agency's 'Hostile Sites Register' should also be referred to.

Every effort must be made during the planning and management of activities to reduce the impact on the public and the impression of a 'considerate constructor' should be given at all times. This includes reducing noise, dust and vehicle/plant movements as far as reasonable.

Construction teams should seek to engage with the community and respond promptly to complaints (relating to on and off-site activities), put things right and seek feedback.

4.4 Site Induction

All persons on an EA construction site must also receive a site health, safety and environmental, (HSE) induction. A common Client site induction video has been developed that must form an introduction to all site inductions. It sends a clear message to all people visiting and working on our projects of our Client ethos and expectations. A more detailed Principal Contractor/Contractor site induction will follow. Inductions must be carried out before being allowed to undertake a work activity. The site specific induction should include site hazards and risks, site rules (such as PPE requirements), emergency action and the accident/incident reporting procedure. Inductions must also include information regarding the EA Core Values, SHEW Code of Practice, key items from the Environmental Action Plan (EAP) and what this means in respect of individual health, safety and environmental performance and behaviour.

Visitors to the site should be escorted at all times, and receive an HSE induction albeit not so detailed as the operatives' induction, (e.g. site rules, PPE requirements, action to take in an emergency, etc.).

4.5 Briefings and Toolbox Talks

A daily briefing should be given by site management (e.g. roles named at 4.2.1 as Management/Supervision) to the workforce (including sub-contractors) prior to them commencing work activities to ensure they have a good understanding of the tasks and associated hazards, risks and precautions. Further briefings should be carried out during the day if there are any significant changes that could affect the work activity, (update to risk assessment or method statement, changes in climate conditions, accident/incident on site, etc.). There needs to be due regard to transient/migrant labour and tailor the materials, briefing and understanding checks accordingly to ensure comprehension. A mechanism should be established to confirm a good understanding of the briefing by the audience, (e.g. a questions and answer session after the briefing). If there are any doubts, issues or concerns related to the briefing, then the works should be delayed until safety can be assured to an acceptable level.

A toolbox talk should be given to the workforce, (including sub-contractors) at regular intervals, (e.g. at least weekly for projects of more than 30 days). The talk should be on one or more health, safety, wellbeing and/or environmental topics, and should be relevant to the work activities on site.

Records of briefings and toolbox talks should be maintained and be readily available for audit purposes.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 25 of 42

4.6 Site H&S Signage and Security

Appropriate H&S signs must be displayed at the site entrance to warn of the hazard potential and specific site requirements, such as PPE, speed limit, etc.

Key H&S documentation in accordance with legislative and company requirements, (e.g. H&S Law poster, F10 when applicable, Liability Insurance Certificates, emergency information, the Environment Agency H&S and Environmental Incident Reporting Procedure posters, Core Values, etc.) should be displayed where it is clearly visible to the workforce, (e.g. site office and welfare area).

Effective security must be established around the project perimeter and work area, (e.g. double clipped Heras fencing) to prevent any unauthorised entry.

4.7 Housekeeping

A good standard of housekeeping must be established on site at the earliest opportunity and maintained throughout the project duration. Methods must be in place to collect rubbish/redundant materials, and suitable containers positioned in strategic places. Adequate, appropriate means for materials and waste storage, and where necessary segregation arrangements must be maintained in accordance with the Site Waste Management Plan, (SWMP).

4.8 Welfare – Shower Facilities

Shower facilities will be provided in line with legislative requirements, based on risk assessment. On projects employing more than four people and lasting more than 30 days the contractor will consult site staff whether they wish to have these facilities and record the fact. The inclusion of showers would need to be agreed before the Construction Phase Plan is submitted for review by the Principal Designer. Otherwise shower facilities need not be provided under this Code of Practice.

4.9 Personal Protective Equipment (PPE)

Everyone on an Environment Agency projects will wear as a minimum on site:

- Long trousers of a suitable kind
- Safety boots with steel toe cap and midsole protection
- Appropriate head protection, (e.g. safety helmet)
- High visibility vest or jacket
- Suitable hand protection appropriate for the task
- Suitable safety eye protection

Note: In certain conditions, (e.g. when raining) eye protection may itself be considered hazardous, but as a minimum light eye protection must be worn on site unless a specific risk assessment identifies the conditions that remove the requirement.

The task risk assessments and site rules will determine any additional PPE requirements.

Suitable, well maintained life jackets must be provided for persons working or visiting within 3m of the vicinity of deep water, and personnel must be trained in their use, to ensure they are worn correctly.

Flame retardant clothing must be worn when excavating within 500mm of a known live electric or gas main, unless this requirement is risk assessed out.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 26 of 42

A sufficient quantity and variety of PPE, such as gloves, safety glasses, high visibility clothing, lifejackets, hearing protection and hard hats must be available on site to ensure the immediate replacement of damaged or lost items and to provide for visitors attending site.

4.10 Respiratory Protective Equipment

Contractors should avoid work activities that create hazardous dust or fumes. When this cannot be avoided, suitable control measures must be implemented to protect anyone near the exposure location. Suitable extraction/ventilation should be installed as necessary to reduce the level of exposure. When controls cannot eliminate the exposure potential, then Respiratory Protective Equipment, (RPE) must be provided. A risk assessment should be carried out to identify the type of RPE (respirators or breathing apparatus) required and the findings recorded.

Adequate, appropriate training, (including fitting, use, maintenance, replacement and disposal) must be provided to the wearer of the RPE and records maintained. Respirators or face masks must be to the FFP3 standard as a minimum and the wearer must undergo face fit testing. This training should be repeated annually and if the wearer loses/gains significant weight and/or grows facial hair.

4.11 Risk Assessment and Method Statement

The PC is ultimately responsible for safety, health and environmental management on site during construction. Risk assessments and method statements must be produced in a style, language and level of detail suitable for the employees who will be working in accordance with them.

All operatives must be briefed on the hazards, risks and precautions related to their work activity. Further briefings should be carried out as the work progresses. In particular, when hazards and risks increase, such as the introduction to site of plant/machinery, other contracting companies, extreme weather conditions or on any significant change to the content of a risk assessment or method statement.

Construction Phase Plans must include a schedule of risk assessments and method statements for significant activities during construction.. The schedules must be updated when changes occur on site or new hazards/activities come to light. Revised schedules must be forwarded to the Client, Principal Designer, the Site Supervisor and where relevant to the Environmental Clerk of Works for environmental risks.

The Client, or where appropriate the Site Supervisor or Environmental Clerk of Works acting on their behalf, will periodically review arrangements for the identification and management of risk. They may comment upon and offer suggestions regarding risk assessments, method statements and permits, but the Principal Contractor or Contractor for single-contractor projects retains ultimate responsibility and may choose to accept or not accept any suggestions made.

If reviewers are concerned that the documented systems will lead to undue risk, they will advise the contractor of their concerns and inform the Client, Principal Designer, and Environment Agency Construction SHEW Team. Appropriate remedial action should be agreed and taken before the associated work activity takes place.

4.12 Method Statement Briefings

Operatives undertaking physical work will be briefed on the related method statement. Method statements will be debriefed ('brief back') to operatives before the second use of that method to ensure that staff have:

- a) Understood the method statement.
- b) Any defects in the method statement discovered during the first period of use can be raised and remedied before work continues.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 27 of 42

c) Any changes to the method of works can be added to the method statement and re-briefed to the operatives before starting works.

4.13 Control of Substances Hazardous to Health, (COSHH)

COSHH covers substances that are hazardous to health and they can take many forms, including: chemicals, products containing chemicals, fumes, dusts, vapours, mists, nanotechnology, gases and asphyxiating gases, biological agents, and include banned substances such as Triclosan (floor adhesive).

All substances must be purchased from reputable suppliers, and be used, stored and disposed of in accordance with the supplier/manufacture's recommendation and the Site Waste Management Plan (SWMP). Someone with the relevant competency should complete a COSHH assessment using details taken from the substance's Material Safety Data Sheet (MSDS). Prior to use the user of the substance should be made aware of the COSHH assessment and the MSDS and both documents should be kept readily available at the job site.

When selecting products due consideration should be given to the relative health risks arising from their application and use. Preference should be given to specifying non-hazardous or least hazardous products to reduce the risk of harm to health.

4.14 Permits

A permit system should be implemented to control hazardous activities whenever there is a significant risk, (typical examples include Hot Work, Working at Height, Confined Space, Excavations, Electrical, etc.). This would also include 'live' structures, e.g. a pumping station where equipment could start up automatically. The arrangements must be clear and properly implemented, so that all concerned fully understand its purpose, their roles and responsibilities, and the various related forms. Evidence should be available that those issuing a permit and those receiving a permit have received adequate, appropriate awareness training in the permit system should be operated (as a minimum a toolbox talk or briefing). The importance of adhering to the permit system must be communicated to all concerned and permit violations must be avoided.

Specific named individuals responsible for issuing a permit must be identified in the Construction Phase Plan along with the procedure for obtaining and closing the permit.

4.15 Hand Arm Vibration (HAV)

Contractors must assess and identify measures to eliminate or reduce risks from exposure to HAV so that employees are protected from risks to their health. Equipment with the potential to cause HAV must be provided by a reputable supplier. The exposure time limit for continuous use must be documented, and the user made fully aware of the hazard, risks and precautions. The time limitation details should be specified on a tag on the equipment, usually provided by the supplier. Reducing the time spent operating the equipment or finding an alternative method of doing the work should be considered in preference to providing additional, specific PPE.

4.16 Lone Working

The Environment Agency would not normally expect contractors, designers or visitors to undertake any lone working except where the risk involved is no greater than for a member of the public in a non-construction environment, (e.g. very low risk activities, whilst travelling to sites, inspecting completed works from a public access, etc.). The potential for lone working must be identified in a risk assessment and appropriate precautions implemented. In all instances where

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 28 of 42

contractors elect to undertake lone working, suitable documented arrangements including monitoring and emergency arrangements must be in place.

4.17 Working close to or over water

The Principal Contractor and Contractors must ensure, where possible, they prevent personnel falling into water. Principles of prevention should be applied:

- Avoiding working next to or over water,
- Provision of fixed edge protection to eliminate falls into water,
- Provision of systems for work positioning and fall arrest

If someone did fall into the water they must be prevented from drowning, and so a suitable means of recovery must be provided.

PPE appropriate to the activity and environment must be considered during the planning stage and identified in the associated risk assessment e.g.:

- Lifejacket to BS EN 396
- Harness to BS EN 361
- Approved Buoyancy Aid (min. 8.2kg buoyancy)
- Safety head protection with chin strap
- Whistle or other means of giving audible alarm
- Buoyant safety lines/lifebuoys (where considered necessary)

For activities near the water's edge, especially for plant and equipment, a proportionate and site-specific assessment of ground conditions, particularly the bank, berm and channel side, including taking account of any signs of repair to these areas, should be undertaken. The assessment should be recorded.

Pontoons and similar floating work platforms should be suitably buoyant and stable, and must be provided with edge protection or other arrangements sufficient to prevent persons working on the platform from falling into water. Pontoons and floating plant must be suitably sized to ensure that no crush zones are created between plant and edge protection or other fixed objects. If this is not reasonably practicable, then exclusion zones preventing access to crush zones must be implemented.

An emergency exercise/drill for water rescue should be carried out and recorded whenever the work activity includes a significant risk of drowning. These should be completed within the first week of site set up or other appropriate timescale identified and agreed in the Construction Phase Plan.

Principal Contractors or Contractor for single-contractor projects must also take into consideration the requirements set out in Appendix C of this SHEW CoP re. 'Control Zone'.

4.18 Use of Mats Near Water

All contractors will ensure that where any item of ride on plant is to be used on mats within one machine width of a water body, stream or river the risk of sliding towards the water will be assessed, documented and controlled. This will include an assessment of the maximum allowable load, (tracked and wheeled).

Additional distance rules apply to the use of machine mats. When proposing to use machine mats consideration must be given to risk controls specified in the EA Operational Instruction [898 11](#). Further information/guidance can be found at:

http://ams.ea.gov/ams_root/2011/851_900/898_11.pdf

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 29 of 42

4.19 Compressed Air Diving

Diving operations undertaken on behalf of the Environment Agency must meet certain minimum standards, these include:

- A minimum 5-person team
- The use of surface supplied diving equipment
- Compliance with the HSE ACoP L104 diving projects inland/inshore
- Diving contractors to be full members of the Association of Diving Contractors (ADC)
- To be aware of and eliminate or effectively control the risks from differential pressure.

When planning a diving operation, or where it is reasonably foreseeable that a diving operation is likely to be required at some stage of a project, then representatives of the contractor and the Environment Agency will often have to coordinate arrangements to facilitate a safe dive. Formal isolation of flow control structures in particular is something which is often required and should be considered.

Where the Environment Agency is directly appointing a diving contractor, the Quick Guide [‘How to use a diving contractor’ 612_08](#) must be followed. The Environment Agency’s Diving Contract Coordinator (DCC) will review the contractor’s competence and proposed plans for the diving operation.

Where a supplier is appointing the diving contractor, the Environment Agency’s DCC may be able to assist. It should be stressed that their role is not to approve a contractor’s diving RAMS etc under these circumstances, but they often have local knowledge that could assist a diving contractor.

Planning and timing of diving operations is vitally important and adequate time should be allowed for all duty holders to discharge their responsibilities.

4.20 Ground Penetration

Ground penetration activities must be carried out in accordance with HSE guidance document HSG47 - ‘Avoiding danger from underground services’.

Before breaking ground, checks must be carried out that there are no underground services, (electricity, gas, water, telecommunication, etc.) that will be damaged during the work activity. Service plans/drawings should be viewed beforehand, but these should not be considered as conclusive evidence that no services are in the excavation location.

PAS 128:2014 Specification for underground utility detection, verification and location must be applied to projects that foreseeably involve ground penetration. This is to provide a high degree of confidence of presence and position of underground services to inform the application of the risk management hierarchy to avoid service strikes. This can be commissioned by framework suppliers or directly by the Environment Agency. Service searches and on-site surveys must be included in the project programme for completion in sufficient time for review prior to any intrusive works on site.

PAS 128 Survey Category Type B requires geophysical detection, by electromagnetic and Ground Penetrating Radar surveys, to obtain greater positional accuracy for the services present. The requirement for GPR can be risk assessed out where this is deemed not reasonably practicable. This decision must be recorded and approved by the Client and lead Designer.

Electromagnetic service detection equipment, such as Cable Avoidance Tools (CAT), can only be used by competent people. Competence can be demonstrated through completion of Energy & Utility Skills Register (EUSR) or equivalent approved training on utility avoidance (use of locating equipment and

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 30 of 42

techniques). The effectiveness of the CAT should first be confirmed by use on known live services. CAT's must have a current calibration certificate and a data logging facility which records how the detection equipment was used. Monitoring of usage data must be done to confirm these important detection tools are being used appropriately and to provide an opportunity for management intervention where equipment is not utilised properly. A signal generator must always be used in conjunction with the CAT to allow detection of pot ended electricity cables and telemetry.

As specified in PAS 128 Survey Type A, on-site verification through intrusive inspection must be undertaken to confirm the position of known services. This may be achieved through strategically positioned vacuum excavation, hand dug trial pitting or visual inspection within a utility chamber. When reasonably practicable construction teams should use soil picks and vacuum excavation, or other minimal risk techniques. Where this is not practicable hand-digging techniques should be applied using non-conductive or insulated tools.

Site managers and construction teams must be able to recognise and manage the risk to safely detect and avoid services. This includes capability to interpret utility drawings, use locating equipment and safe digging techniques. Competence can be demonstrated through completion of EUSR or equivalent approved training on safe digging techniques.

Flame retardant PPE, (in particular jacket and trousers) must be worn when excavating within 500mm of a known live electric or gas main unless risk assessed out. If the wearing of flame retardant PPE is not deemed necessary, it should still be kept readily available in case the risk changes.

4.21 Working Near to Overhead Cables

All construction related activities near an overhead cable, in particular power lines, should be carried out in accordance with the HSE Guidance Note GS6 – 'Avoiding danger from overhead power lines'.

Consideration must be given at the design and construction phases to eliminate the potential to come into contact with overhead power lines, (e.g. diversion, isolation and/or the use of 'goal posts', etc.).

When 'goal posts' are implemented, they must have adequate clearance from the overhead services, and warning signs should be in place where vehicles and plant pass under or parallel to the services.

4.22 Working at Height

The use of working at height equipment must be captured on a risk assessment, and the hazards, risks and precautions shared with the user prior to use.

Mobile towers should only be erected and inspected by appropriately trained personnel.

Scaffold should be assembled to a generally recognised standard configuration, e.g. National Access and Scaffolding Confederation (NASC) Technical Guidance TG20 for tube and fitting scaffolds or similar guidance from manufacturers of system scaffolds. Non-standard configurations must be subject to temporary works design and compliant with the European standard for scaffolding: BS EN 12811

A 'Scafftag', (plastic card inside a holder) should be placed in a prominent position on scaffold or mobile tower with relevant details, including the date of the last seven-day inspection. This is in addition to the scaffold inspection register which should be included in the CPP or other site documentation system.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 31 of 42

When constructing temporary work platforms, access ways, excavations, etc. a stairway system will be prioritised over ladders.

Mobile Elevated Working Platform (MEWP) will only be sourced from a reputable supplier, and will be operated by someone with the CPCS or IPAF standard training and in accordance with manufacturer's instructions. An emergency rescue plan must be established for any MEWP operation.

Podium steps should be prioritised over 'A' frame steps or ladders whenever possible. They should be inspected by the user prior to use, and included in a regular documented inspection programme.

The use of a ladder on site will be avoided whenever possible. If this is unavoidable then the ladder must have a unique identification mark or 'Ladder Tag' that corresponds with a Ladder Register and a regular documented ladder inspection programme implemented. Where ladders can't be avoided they shall only be used as means of access, not as a working platform.

4.23 Confined Space

A confined space is a place which is substantially enclosed (though not always entirely) and where serious injury can occur from hazardous substances or conditions within the space or nearby (e.g. oxygen deficient, toxic or explosive atmospheres, high temperatures, drowning or entrapment). Whenever possible entry into a confined space should be avoided and only considered when all other options have been eliminated. Consideration must be given as to whether the work location and/or work environment constitutes a 'statutory' confined space. If it does, then the confined space activities must be carried out in accordance with the Confined Space Regulations and HSE guidance document INDG258: 'Safe Work in Confined Spaces'. There must also be evidence available that persons undertaking work in a confined space have the adequate training, equipment, supervision and authorization to enter.

4.24 Temporary Works

Temporary works (TW) are the parts of a construction related project that are needed to enable the permanent works to be built. Usually the TW are removed after use, (e.g. access scaffolds, props, shoring, excavation support, falsework, formwork, configurable floating platforms, access and haul routes, etc.). The principles of BS5975 Code of practice for temporary works procedures and the permissible stress design of falsework, must be applied to the design, installation, alteration and removal.

It is very important that the same degree of care and attention is given to the construction of the TW as to the construction of the permanent works. Any plant, materials or equipment used in the construction of TW must be installed in accordance with the manufacturer's instructions.

The management of TW requires the involvement of individuals with specific responsibilities. They include the Temporary Works Designer (TWD), Temporary Works Co-ordinator (TWC) and the Temporary Works Supervisor (TWS). The appointments must be made in writing. Their responsibilities are:

Temporary Works Co-ordinator (TWC):

- Co-ordinates the TW design, selection of equipment, appointment of contractors, supervision of work and checks completion.
- Ensures a TW register is in place and kept up to date. The register should include the category of TW and dates of the design approval.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 32 of 42

- Responsible for the TW risk assessment, that a safe system of work and method statement, which includes how all the hazards are to be managed prior to installation, is developed.
- Ensures “Working Drawings” not “Preliminary” TW drawings are used for authorisation to install TW.
- Provides authorisation on the loading and removal of TW. A Permit to Load should be issued before use/access to any TW platform.

Temporary Works Designer (TWD):

- Engages with the Permanent Works Designer and Principal Designer on TW information. A Temporary Works schedule should be produced early in the project to identify information and surveys required.
- Completes a design brief and risk analysis.
- Reviews TW designs, calculations, specifications and information.
- Undertakes TW designs and design reviews proportional to the complexity and category of the TW involved.
- Completes design certification to authorise TW designs.

Temporary Works Supervisor (TWS):

- Ensures that the TW risk assessment and method statement for the installation and removal of TW are briefed, read and understood by those doing the work.
- Ensures that the TW are installed in accordance with the TW design, agreed methodology and safe systems of work.
- Ensures “Working Drawings” not “Preliminary” TW drawings are used for installing TW.
- Ensures regular safety checks on TW are completed.

Individuals appointed in the management of TW must have relevant skills, knowledge and experience to discharge their roles effectively. The following link to the Temporary Works Forum website provides further information (refer to link: [Twf information sheet no 2](#))

4.25 Site Plant and Equipment

All plant and equipment on site must comply with the Provision and Use of Work Equipment Regulations and be:

- Sourced from a reputable supplier
- Operated only by someone with adequate, appropriate training
- Operated and maintained in accordance with manufacturer’s instructions.

Plant must be inspected after delivery for any obvious defects. Particular attention should be made to the condition of hydraulic systems and hoses. Damaged hoses must be replaced, and all plant inspections must be recorded. All work equipment must be inspected by the user prior to use for any damage or wear and tear that may result in not being fit for purpose. A more formal inspection must be carried out at least weekly and must be recorded.

People and plant interface is of prime concern to the Environment Agency and construction teams must ensure adequate segregation between plant/vehicles and pedestrians. Appropriate arrangements must be in place to prevent persons being put at risk from operated plant. All task specific risk assessments must detail the safety control measures for keeping people safe when there is a legitimate need to work near plant. Whenever practicable pedestrian access to site must be by an alternative means other than via plant or vehicle access points. Pedestrian walkways,

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 33 of 42

with appropriate barrier protection, should be established wherever reasonably practicable, (especially in the site office and compound areas).

In terms of plant and machinery movement, a hierarchy of control measures should be implemented, as follows:

- Total segregation of plant and people
- Eliminate the need for reversing
- Providing segregated reversing/turning areas
- Providing trained Vehicle Marshal

If drivers/operators lose sight of the Vehicle Marshal they must stop all movements immediately. Suitable communication arrangements must be implemented to ensure operators of plant are aware of any persons wishing to be in close proximity to the machine, (e.g. 'thumbs-up', 'say hello and wave goodbye').

All operatives, supervisors and other persons on site (including archaeological teams) must stay outside of the danger zone of excavators when they are operating (see example diagram in Appendix D). Arrangements should be that a person is not allowed to encroach inside the RED zone area until the machine has been hydraulically isolated. Everyone is expected to follow these arrangements, or alternatives with similar controls. The Construction Plant Association (www.cpa.uk.net) has published a guidance document entitled 'Reducing Unintended Movement of Plant - and managing exposure to consequential risks'. Appendix E of this document provides examples of secondary isolation devices which provide further controls to manage the risk of the unintended movement of plant.

Dumpers of 4T or above used on the highway as part of our projects will have proximity sensors or an alternative means of eliminating blind spots fitted as standard. A Vehicle Collision Avoidance System (VCAS) should be fitted unless there is a risk assessment which identifies that these controls are not necessary.

By the end of 2018, 360 excavators over 6T must be fitted with seat-belt interlock devices to isolate hydraulics when not engaged (this is to allow for a phased upgrade

Recognising that a range of technology is now available for all construction plant, driver aids should be fitted to eliminate the potential for blind spots during operation, to ensure 360 visibility. Assessment and installation of upgrades must be completed by the end of 2019. In the interim period, alternative site risk management arrangements must be in place.

Seat belts, where fitted on plant/vehicles, must be worn all the times the vehicle is occupied, - without exception.

All plant operators shall be trained and certified to Lantra or CPCS standards. NPORS standard is acceptable provided that vocational qualification can be demonstrated to achieve competent operator status. More specific CSCS partner scheme cards are also acceptable, such as ALLMI for lorry loaders and IPAF for MEWPs

4.26 Traffic Management Plan, (TMP)

Principal Contractors or Contractor for single-contractor projects should ensure a Traffic Management Plan (TMP) is created for the project, unless the Client or Environment Agency Construction Safety Health and Environment Business Partner agrees that one is not required.

The TMP should identify the specific controls related to highway activities and people/plant interface at the point of work. Consideration must also be given to the precautions required to protect pedestrians, including designated walkways on site and in the compound area.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 34 of 42

The TMP should be referenced in the Construction Phase Plan prior to commencement of work on site, be displayed on site during construction and referenced in the site induction. It should be regularly reviewed and updated whenever vehicle routes or movement conditions change. All associated operatives must be briefed on the content of the updated TMP and records maintained of the briefing.

4.27 Emergency Arrangements

When work is in progress, framework partners and CDM duty holders will ensure there are effective arrangements for managing safety, health or environmental emergency incidents. Emergency practice drills for fire, evacuation, water rescue, confined space rescue, harness recovery, etc. will be required within two weeks from commencement of work on site or other period as agreed in the Construction Phase Plan.

4.28 Health and Safety Related Accident/Incident

All accidents and incidents must be reported in accordance with the guidance in Appendix A, and process flow charts in Appendices A.1 and A.2 of this document. The Health and Safety Incident and Near Miss reporting procedure poster (Appendix A.1) shall be displayed in a prominent position in the site office and in the welfare accommodation.

Note: Environment Agency Area Operations teams will follow their own reporting procedures:

<http://intranet.ea.gov/peoplesmatters/help/62918.aspx>

All HSE reportable injuries, occupational diseases and dangerous occurrences plus any other lost time incidents, property damage greater than 50k or near misses with a potential to result in a fatality must be reported by the Contractor at the earliest opportunity to the ECC Project Manager, Site Supervisor and Client. The Reporting of Injuries, Diseases and Dangerous Occurrence Regulations (RIDDOR) should be complied with when appropriate.

All accidents and incidents resulting in or having the potential for significant harm must be investigated to identify the root cause and actions to prevent a recurrence. Initial reports for such incidents must be followed by a written report using the form in Appendix B, or a comparable form containing this information. Contractors are required to investigate their own accidents and incidents; the depth and detail of the investigation must be proportionate to the severity or potential severity of the event. The accident investigation should consider the guidance contained in the HSE publication HSG 245, 'Investigating Accidents and Incidents'.

A final and comprehensive investigation report must be provided by the Contractor to the Client Construction SHEW Team, and where relevant the ECC PM, within 14 days. Any deviation from this must be reported to and agreed with the Client and/or Senior Health, Safety and Wellbeing Business Partner.

Environment Specific

4.29 Environmental Compliance

Whilst undertaking their work activities contractors must:

- Avoid adverse impact to the environment by planning and managing their activities appropriately and by maximising environmental opportunities.
- Ensure inductions contain relevant site specific environmental information and rules.
- Where relevant, contribute to the Environmental Impact Assessment (EIA) process as agreed with the Client to minimise environmental damage through careful design and

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 35 of 42

construction methodology, including protective or remedial actions where damage is unavoidable.

- d) Deliver the actions assigned to them in the Environmental Action Plan, (Environmental risk assessment) and work with the Environmental Clerk of Works, or others to ensure this is done effectively and that actions are completed and signed off.
- e) Locate sensitive areas and segregate or protect them from harm. These areas must be clearly marked on drawings, site rules and included in the induction.
- f) Not store materials under the canopy or within the sensitive root zone of trees and will erect tree protection fencing in areas of high risk, such as traffic routes.

Any changes to works that could increase environmental risk must be discussed with the Client or Environmental Clerk of Works.

4.30 Resource Management

Contractors must:

- Take actions to reduce carbon through construction, including consideration of eco-cabins, dual generators and efficient plant.
- Use the [CL:AIRE register of materials](#) to help identify required and excess materials required for schemes.
- Utilise Site Waste Management Plans effectively on all schemes to record Duty of Care information as well as account for the waste removed.
- Work with the supply chain to reduce packaging waste associated with deliveries to the project

Contractors will ensure all timber (permanent and temporary works) purchased either directly or via sub-contractors will comply with the [Environment Agency's timber purchasing requirements](#). We expect relevant documentary evidence to confirm the source and sustainability of the timber purchased on our projects to be provided upon request.

4.31 Pollution Prevention

Contractors must engage with local Environment Agency Environment Officers to make use of their local knowledge and expertise in planning and undertaking works in or near to water bodies, including watercourses, marine, estuaries, boreholes, groundwater, reservoirs, etc.

Before starting works, contractors must ensure site drainage, pathways, watercourses and groundwater source protection zones have been identified. This information, together with site specific measures to prevent spread of pollution, must be included in the site environmental emergency plan or site pack, (following Environment Agency Pollution Prevention Guidance Note 21). This will include actions to be taken in the event of silt, concrete and other chemical incidents where these risks exist.

Particular attention should be given where risks such as grout/concrete and silt exist on the site formal site specific arrangements including mitigation checks, communications lines and emergency actions must be developed and operatives must be trained in these. This should include a suitable arrangement for wash out of equipment, taking best practice into account to avoid pollution. Actions to take in the event of changes that could occur on site should also be identified.

Suitable pollution prevention measures, (e.g. 'nappies') should be put in place under attachments, parked plant or static equipment, (e.g. generator, pump) whenever there is a risk of fluid leaks or spillages, especially during refuelling operations or within 10m of a watercourse.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 36 of 42

Evidence must be readily available that operatives have received training in the use of spill kits within the previous six-month period. Where works are anticipated to last more than 30 days or are being carried out in an environmentally sensitive site, where the risk of spills have the potential for significant impact, a mock exercise for each risk will be undertaken. This will be within 2 weeks of starting on site, unless otherwise defined in the CPP or Site Pack.

Spill kits must be appropriate to the risk and amount of fuel and oils on site, and located to be readily available should there be a spillage. Suitable PPE, (such as goggles and impermeable gauntlet gloves) must be included in the spill kits.

Suitable provision must be provided on site for storage of hazardous waste, (e.g. following a spill) prior to its removal from site by a licensed carrier.

Contractors must minimise in-channel works as far as practicable and implement suitable mitigation measures where required, considering active spawning seasons and other restrictions on the site.

Maintenance of site plant will be done in a way to minimise the environmental risk, with appropriate control measures in place.

All hydraulic oils supplied in plant under this Code of Practice must be defined as "Readily Biodegradable" and meet OECD 301B. Exceptions to this for specialist plant must be justified and the pollution risk assessed and approved in writing by the Environment Agency appointed person discharging the Client's duties.

4.32 Biosecurity and Invasive and Non-native species

Diseases, parasites and invasive non-native species can cause serious harm to the environment and our economy. Good biosecurity is essential to reduce the risk that we spread these damaging organisms.

Contractors must:

- Ensure that all clothing/PPE, plant and equipment will comply with the Check, Clean, Dry approach specifically following the guidance for [Biosecurity in the Field](#). The non-native species secretariat [website](#) has a variety of resources including identification sheets that may assist you.
 - **Check** - Check your plant, equipment and clothing for living organisms. Pay particular attention to areas that are damp or hard to inspect.
 - **Clean** - Clean and wash all plant, equipment, footwear and clothes thoroughly, preferably with hot water. If you do come across any organisms, leave them at the location where you found them.
 - **Dry** - Dry all plant, equipment and clothing - some species can live for many days in moist conditions. Make sure you don't transfer them elsewhere.
- Any waste or soil containing propagules of invasive non-native species must either be managed appropriately on site, or taken to an appropriate waste facility. Invasive non-native plant material should be managed in accordance with [Treatment and disposal of invasive non-native plants: RPS 178 - GOV.UK](#)

Invasive non-native flora species (e.g. Japanese Knotweed, Himalayan Balsam, Giant Hogweed, etc.) in the work locations will be identified and managed. Excavation of affected areas should not be undertaken without prior advice and guidance from the Environment Agency.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 37 of 42

The American Signal Crayfish, '*Dikerogammarus villosus*' and '*Dikerogammarus haemobaphes*', sometimes known as 'killer shrimps' are invasive non-native species. If either of these species are identified at the work location the Environment Agency should be notified at the earliest opportunity for advice and guidance.

If invasive non-native species are present, they must not be spread. All sites will follow the [relevant bio-security advice](#) with site specific arrangements formally documented, briefed to staff and followed.

4.33 Environmental Incidents

The following explains the approach for all projects delivered by external contractors, (Environment Agency Area Operations teams will follow their own reporting procedures):

All environmental incidents and significant near misses must be reported to the Environment Agency Incident Hotline 0800 80 70 60 at the earliest opportunity, and then to the Client, Construction SHE Team, and where relevant, the ECC Project Manager, Site Supervisor and Environment Agency NEAS Officer.

Environmental incidents and near misses should be reported by following the guidance procedure in Appendix A.2 of this document.

The Environmental Incident and Near Miss reporting procedure poster, (Appendix A.2) shall be displayed in a prominent position in the site office and in the welfare accommodation.

4.34 Contractor Health, Safety and Environmental Monitoring

For supplier delivered works the following requirements apply:

All projects lasting between 7 and 30 days will be inspected by the Contractor's own competent management staff and the findings recorded.

Projects lasting for 30 days or more must be inspected by the Contractor's own competent HS&E Advisor twice per calendar month, with at least one visit being for the purposes of an inspection which will be recorded.

Following each recorded inspection, and within four working days of the visit, the HS&E Advisor's report will be provided to the following as appropriate:

- Client
- Principal Designer
- ECC Project Manager
- Site Supervisor

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 38 of 42

Appendix A – Accident/Incident Reporting (*background information*)

Reporting by all individuals working and visiting construction sites is encouraged. Reporting should be made in the first instance to site supervision who will then decide whether to notify the Client. The ethos is that incidents that having significant consequences or potentially significant should be reported up.

1. All incidents identified below must be reported to the Client Manager and where relevant the ECC Project Manager at the first opportunity after the event:

- 1.1 All HSE reportable incidents, (including fatalities) specified injuries, injuries resulting in over 7 day's absence, dangerous occurrences and diseases or include over £50k worth of property damage.

- 1.2 All injuries or incidents, which are not reportable to the HSE, but:

- Require medical treatment by a recognised medical practitioner or a nurse, or
- In the case of people at work, result in an absence of up to 7 days, or
- Result in £10k-50k property damage.

- 1.3 Significant near misses. If a Contractor is unsure as to whether an incident is reportable to the EA the Contractor should consult with the Client.

Note: Environment Agency Area Operations teams will follow their own reporting procedures:

<http://intranet.ea.gov/peoplematters/help/62918.aspx>

Health and Safety incidents and near misses should be reported by following the guidance procedure in Appendix **A.1** of this document.

Environmental incidents and near misses should be reported by following the guidance procedure in Appendix **A.2** of this document.

2. Using the template in **Appendix B** of this document will ensure that all the information required in the first instance is provided to the EA. Contractors should use the template to provide as much information as possible, and can provide subsequent revisions of the template as more information becomes available.
3. Contractors are required to investigate their own accidents and incidents; the depth and detail of the investigation must be proportionate to the incident severity or potential severity.
4. Investigation reports should reach the Client and EA SHEW team by no later than 14 days following the accident or incident; any deviation from this must be reported to and agreed with the Client and/or Construction Safety Health and Environment Manager.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 39 of 42

Appendix A.1 – Health and Safety Incident and Near Miss Reporting

Safe and well



Notice to contractors

Health and safety incident and near miss reporting procedure



Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 40 of 42

Appendix A.2 – Environmental Incident and Near Miss Reporting



Notice to contractors

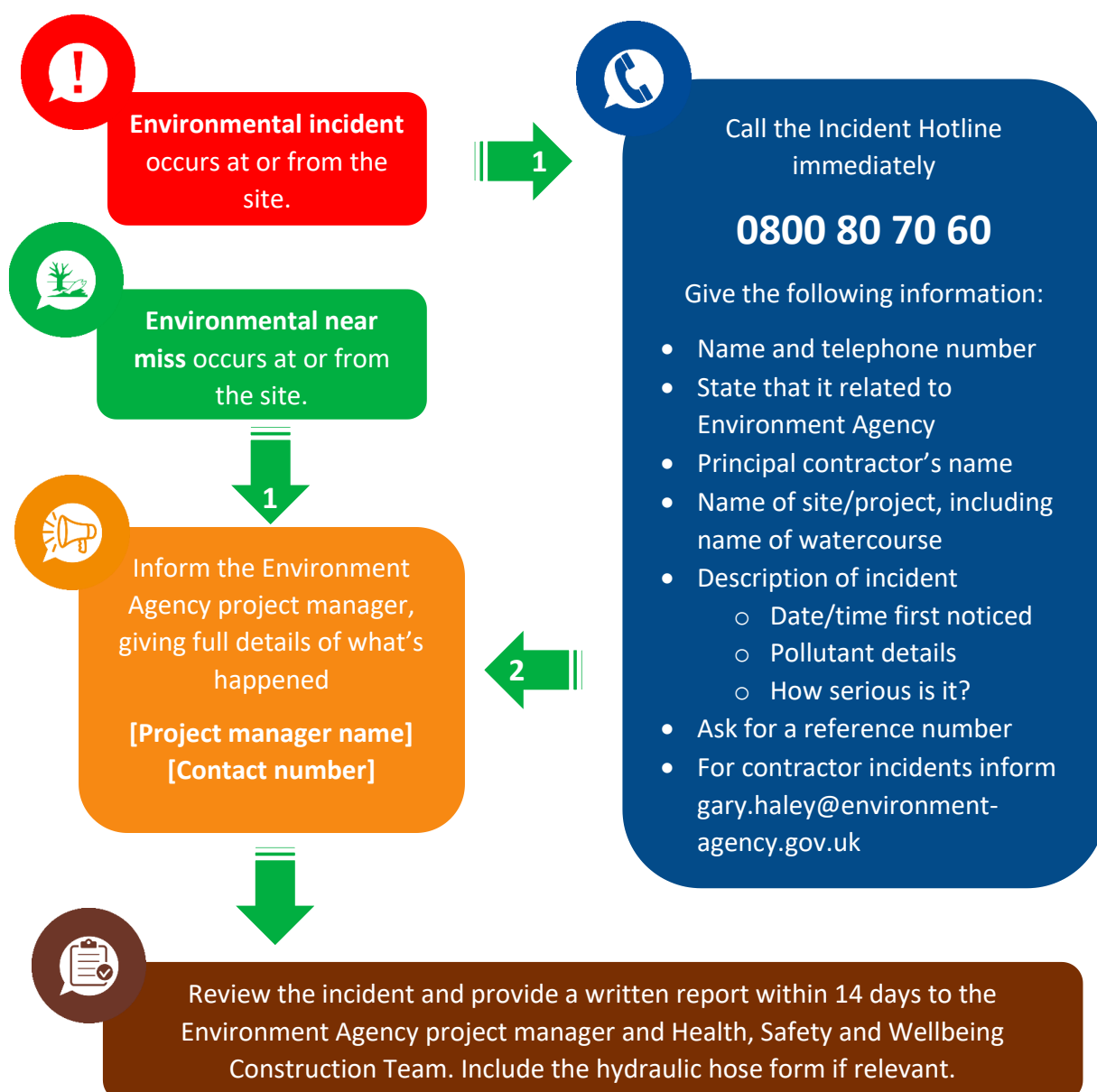


Environmental incident and near miss reporting procedure

What is an environment incident?

- Damage to the natural environment
- Pollution
- Risks to wildlife
- Fish in distress

A near miss is a situation where any of the above **could** have happened.



Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 41 of 42

Appendix B – Accident/Incident Information Required



Project Title & Address of site				
Name of main contractor or PC		Name(s) of injured		
Date of incident		Employer of the injured person(s)		
Time of incident		Who were they? (contractor, member of the public, etc.)		
Reported to the EA PM by		Date and time		
Injury/Incident details				
		✓ or n/a	Type/Comment	
Estimated Severity (Check with EA PM for definitions)	HSE Reportable			
	Medical Attention Required (more than first aid)			
	Near Miss (serious or serious potential outcome)			
	Environmental Incident		NIRS Ref:	
Part and site of body injured or Environment affected			Type of injury or DO classification	
Immediate cause of injury				

Investigation details			
Who is undertaking the investigation?	Name: Title: Contact No.:	When will the investigation report be provided to the EA PM?	Incident facts confirmed: Interim report: <i>(if applicable)</i> Final report:

Appendix C – Plant Working Near Water Control Zone

Why do we need a control zone?

We have had two fatalities linked directly to plant entering the watercourse. We have had several significant near misses where plant has slipped into a watercourse when undertaking maintenance work. It is important to ensure we have robust controls when working in this high-risk area.

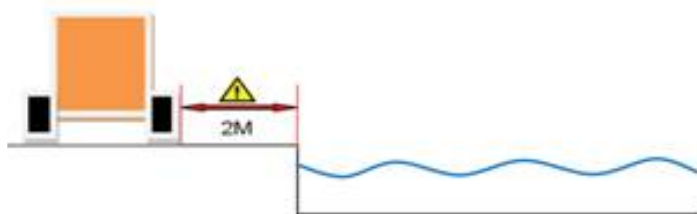
What is the control zone?

The control zone is an area within which plant may operate, but where additional controls are required. Typically, it is a strip of land measured horizontally from the top of the bank away from the watercourse, (see example diagrams below). It should be a minimum of 2m, but if ground conditions are poor or change it may be necessary to have a wider control zone.

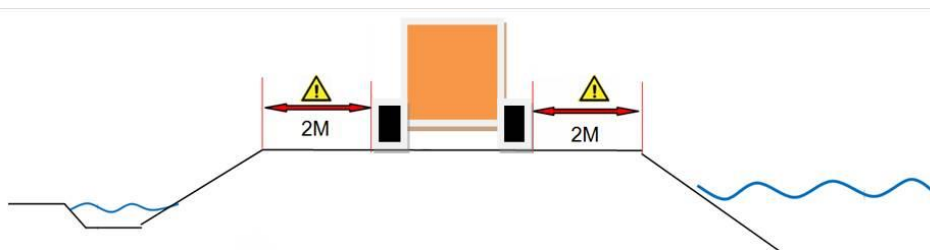
Additional controls include:

- Documented assessment of ground conditions;
- Ensuring the machine chosen is the best possible option;
- RAMS with specific control measures/Safe System of Work
- Edge demarcation

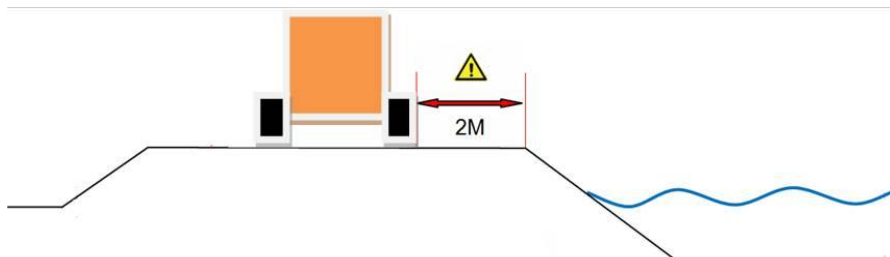
Example 1



Example 2



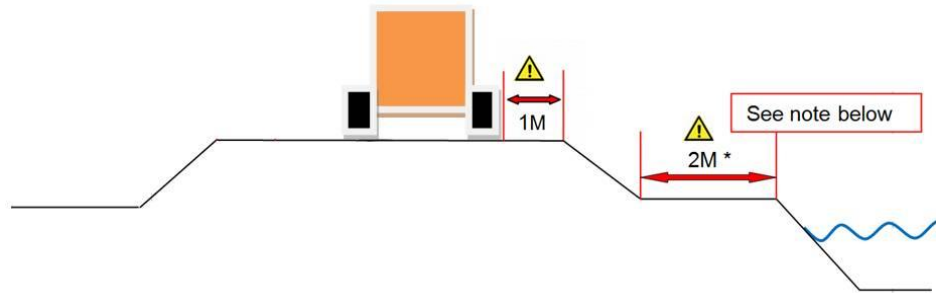
Example 3



Example 4

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 43 of 42

Example Note



When ride on plant is operated on embankments adjacent to water where there is a berm between the work area and the water, consideration must be given to the width of the berm, the height of the bank and the size and weight of the plant to be used. If the berm is less than 2m wide, the control zone on the embankment must be adopted as per example 2.

Appendix D – Plant Operation Safe Zone

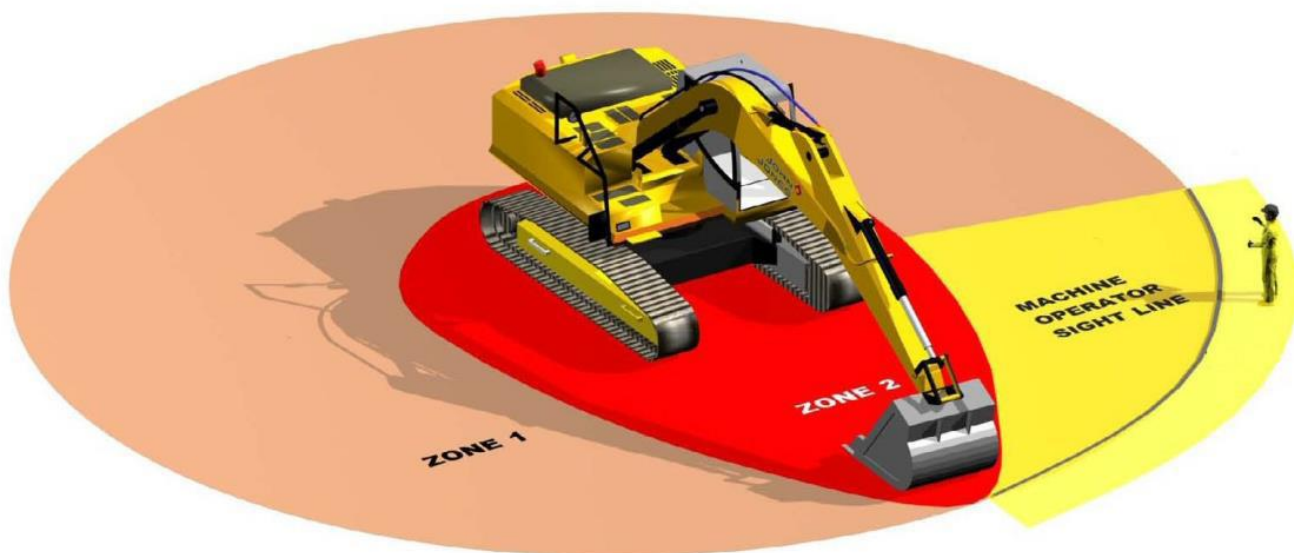
As a general rule, there should be no one in the plant operating area unless they are authorised to be there.

The planning process should ensure that each item of plant has a designated 'Plant Safe Zone' as shown in the example below, (*courtesy of Highways England*). The aim of a safe zone is to ensure that persons in the vicinity of plant can identify the zones which should not be entered unless the machine's power source is isolated (**Zone 2**) and those which may be entered once the plant operator has indicated that it is safe to do so (**Zone 1**).

The dimensions and positions of the zones will be decided by individual risk assessment and will vary with the type, size, reach and number of machines operating within a given area. Account should be taken of attachments and long loads.

Plant Safe Zone example

Title						
Safety, health environment and wellbeing code of practice						
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 44 of 42



Appendix E – Reducing Unintended Movement of Plant

Care should be taken in the selection of additional measures to prevent unintended movement of plant, as not all guarantee success; some may only reduce the probability of occurrence.

The following provides examples of what should be considered when operating plant in the vicinity of people:

Operator Clothing

Plant operators should be provided with short 'bomber-style' jackets with elasticated cuffs to reduce the risk of coat skirts and cuffs becoming entangled with controls.

White Noise/Audible Movement Alarm

As soon as the item of plant starts moving, an audible alarm sounds which alerts all persons in the area that the machine is moving and that they are potentially in the danger zone.

Reversing Camera

Provides the operator with an image of the area behind the machine to avoid collisions with people and other machines when reversing.

Quick Hitch Attachment/Detachment Alarm

An alarm mounted on the exterior of the machine sounds when the operator is either attaching or detaching a bucket or attachment to the quick hitch. This system alerts anyone in the potential danger zone of what is happening.

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 45 of 42

Quick Hitch Coupler Alert Safety System

A console in the cab guides the operator step-by-step through every stage of a bucket detachment or attachment in line with the manufacturer's specific procedure. This prevents the operator taking short cuts when carrying out this task and also prompts the operator to carry out the required safety checks.

Secondary Isolation Devices

Additional to the control isolating, (dead man) lever and help to prevent operators from making inadvertent movements of their machine whilst getting in or out of the cab, even with the isolating lever placed in the engaged position. Examples of such devices are:

- **Seat belt monitoring**

The machine's systems do not become operational until the seatbelt is fastened. A green beacon mounted on the outside of the when the isolating lever is engaged and the seat belt fastened.

- **Enabling control**

Another device on the market operates over three safety levels:

1. The operator is required to fasten his lap-belt - preferably a high visibility seatbelt which can be easily seen by supervisors/ site managers;
2. Safety lever required to be in the active position, preventing the operator from leaving their cab;
3. Additional button fitted in the cab and once the first two requirements have been successfully completed, will illuminate allowing operator to press the button and activate the machine's hydraulic system. This allows the machine to become operational.

- **Operator presence sensing**

A new system - currently under development - senses that the operator is sitting in the seat and isolates the machine controls if they attempt to stand up.

Proximity Sensing Systems

Senses the presence of people in the vicinity of the machine and alerts the machine operator if a pre-set zone is breached. This system relies on people wearing transponder units and will not sense the presence of casual bystanders who are not wearing transponder units.

Handheld Remote Cut-off

Allows a banksman or slinger/signaller with a hand-held wireless control to stop the machine remotely. Once the control has been activated and the machine stopped, it cannot be restarted until the control is reset.

(Taken from the Construction Plant-hire Association Reference document No. CPA 1701 www.cpa.uk.net)

Title	Safety, health environment and wellbeing code of practice					
No.	677_15	Status	Version 3	Issue date	30/05/2018	Page 46 of 42

APPENDIX F

Environment Agency Standard Pre-Construction Information (see separate document)

STANDARD PRE-CONSTRUCTION INFORMATION FOR RESIDENTIAL PROPERTIES

Author Kathryn Forster and Jenni Bridgens

Date January 2018

Version 2.0

Address	2 Sunbury Lock House Towpath Waterside Drive Walton-on-Thames KT12 2JD	
Description of works	Void Work – Repair, Refurbishment and Upgrade	
Intended use of building	Residential	
Timing and dates	July – September 2021	
Key Personnel (if applicable)	Name	Contact Details
Client:	Environment Agency Pat Salbany Kings Meadow House Kings Meadow Road Reading RG1 8DQ	
Designer:	Ridge	
Contractor:	TBC	
Principal Designer:	Ridge	
Principal Contractor:	TBC	
Tenant/occupier:	Vacant	
Client requirements		
The Environment Agency's Core Health and Safety values are: All of us have the right to remain healthy and injury free at work. We are all vital to improving health and safety and we will:		

- prevent all injuries and occupational illnesses;
- all be responsible for health and safety;
- always check and learn from what we are doing;
- challenge and respond to challenge.

Remember health and safety is a way of life both at home and at work.

“Constructing a better environment” applies to all works to residential properties. In all instances the principal contractor and contractor’s performance will be expected to meet or exceed the minimum standards required under the appropriate legislation.

Competence and training

The Client has very specific competence and training requirements as detailed in “Safety is Paramount constructing a better environment”. The PC must ensure these are adhered to.

All operatives must hold a current CSCS card.

All supervisors must hold a current SMSTS or SSSTS or CSCS gold card.

Specific and relevant current qualifications must be held by those undertaking such tasks as erecting scaffolding (PASMA or NASC), or operating MEWP.

1. The PC must ensure they are familiar with and adhere to the guidance in the RAG list.
2. The CPP must contain explicit acknowledgement of receipt of the PCI
3. The CPP will be checked before work is authorised.
4. An approved stop-go form must have been provided by the Client before work is deemed authorised to start on site.

Site and building plans attached

Site access plan	Yes
Site services plan	Yes
Floor plans	Yes

Site access hazards

Narrow or restricted access road	Yes
Limitations to parking	Yes
Limitations for turning vehicles	Yes
Limitations for larger vehicle access	Yes

Significant services

Adjacent land use hazards (example schools, railway lines, busy roads, waterways)


The river is close to the access road and directly opposite the house and driveway

Ground conditions that may impact on safe working

Ground at rear slopes away and the rear of the house is three storeys high

High level structures that may impact on safe working

Large mature trees close to house

Survey documentation attached		
 Pre-Refurbishment & Demolition Asbes	Asbestos survey 200	Yes
Permits or permissions required		
Standard EA permission to work. Hot Works Permit		
Welfare arrangements		
On site welfare available – The house is vacant so facilities within the property can be used for the duration of the contract – it is the contractors responsibility to manage works and ensure these welfare facilities remain available to staff during the time that the kitchen and bathroom are refurbished. Contractors to provide DEB board in accordance with SHECOP		
Fire/emergency arrangements		
Residential property so no marked exit routes or formal arrangements. Please note exit routes on site. Nearest hospital		
Kingston Hospital Galsworthy Road Kingston Upon Thames Surrey KT2 7QB Tel: 020 8546 7711	St Peters Hospital Guildford Road Chertsey Surrey KT16 0PZ Tel: 01932 872000	
A full first aid kit is to be provided by the contractor whilst works are being carried out on site including a trained first aider as part of the workforce The contractor is responsible for arranging the site to provide safe exit in event of a fire		
Hazards particular to this property		
Asbestos floor tiles beneath the lino and hardboard finish to the kitchen – low risk Asbestos containing boarding to ceiling beneath kitchen overhang extension to rear of property – medium risk Asbestos to the kitchen extension to the rear will be removed prior to works commencing on site		